1. Basic Introduction

1.1 What is WordPress?

- WordPress first saw the light of day on May 27, 2003. The founders are Matt Mullenweg and Mike Little.
- WordPress can be referred to as an online, open source site building tool based on PHP and MySQL programming languages. In more advanced terms it is called a content management system (CMS).
- When WordPress was first launched it had several users but over time grew into the biggest and most popular CMS in the world. Today, WordPress is powering over 75 million websites.
- Research carried out in 2020 shows that this content management system is used by more than 26% of the 10 million best-ranking sites.

1.2 Why is WordPress so popular?

A mixture of several factors should be taken into account. The general viewpoint is that WordPress is a simple blogging tool, however, it is much more than that.

Due to the fact that WordPress is free and an open source project, it allows anyone to improve and edit its code according to one's liking. It also features thousands of free plugins, themes, widgets, and other tools.

All these features allow you to create any type of website, starting from simple blogs, personal websites or portfolios, ranging to e-shops, knowledge bases or job boards.

Another factor is that WordPress is completely free and supports all hosting platforms with PHP and MySQL. On top of that, this CMS is constantly updated with new versions that improve security, include new features and improve overall performance.

Last, but not least, WordPress has a huge community with dedicated forums and discussions all over the internet. The amount of data that is available and thousands of WordPress tutorials also make WordPress one of the easiest to use content management systems out there.

1.3 What is a CMS?

A content management system or CMS for short is an application with the ability to create, modify and publish digital content. In most cases, it also supports multiple users, allowing them to work in collaboration.

For example, in WordPress it is possible to create several administrative users, each one having different privileges. Content management systems also include text and

formatting features, the ability to upload videos, photos, audio, maps or even your own code.

A content management system consists of two major components:

- A content management application (CMA). The CMA can be referred to as the graphical user interface (GUI) that lets a user create, modify, remove and publish content without ever needing to have knowledge of HTML or programming languages.
- A content delivery application (CDA). The CDA is responsible for the back-end services that manage and deliver content after it is in the CMA.

Other features worth mentioning are:

- SEO-friendly URLs
- Online support and communities
- User/group functions
- · Various templates and designs
- Installation wizards and upgrades/updates

The three most popular content management systems in the world are WordPress, Joomla, and Drupal.

1.4 WordPress.com vs. WordPress.org

WordPress.com and WordPress.org are two ways of hosting a WordPress site.

The thing that varies with these two methods is the actual host. By using WordPress.org, you may download the script free of charge and host it yourself on a local machine or with a hosting provider.

On the other hand, WordPress.com takes care of all that by hosting the site for you. You don't have to manage a web server, pay for hosting or download software, however, ads are shown on your site.

Both WordPress.org and WordPress.com have certain pros and cons.

If you are not interested in having your own hosting or managing a web server, then WordPress.com may be the way to go.

It is free and can be quickly set up. You will also have various features and options for your site's customization.

However, it comes with downsides. Your website will include WordPress.com in the URL and you will not be able to upload custom themes or plugins.

The ability to edit or modify PHP code behind your site will also not be possible.

Using a self-hosted version from WordPress.org provides more flexibility and control over your site. You will be able to use your own domain name, upload themes, plugins and install them.

You will also have access to your WordPress files, database, and code, meaning that you will be able to modify it according to your liking. The most popular and powerful WordPress sites are self-hosted, as it provides greater flexibility and the ability to implement custom functionality, code, and designs.

Last but not least, in case WordPress is not the CMS for you, having your own hosting account will allow you to test other content management systems such as Drupal or Joomla.

This WordPress tutorial will focus on the self-hosted WordPress version.

1.5 What is Hosting?

Web hosting is a service that allows organizations and individuals to post a website or web page onto the Internet. A web host, or web hosting service provider, is a business that provides the technologies and services needed for the website or webpage to be viewed in the Internet. Websites are hosted, or stored, on special computers called servers. When Internet users want to view your website, all they need to do is type your website address or domain into their browser. Their computer will then connect to your server and your webpages will be delivered to them through the browser.

Most hosting companies require that you own your domain in order to host with them. If you do not have a domain, the hosting companies will help you purchase one.

Here are some features you should be expecting from your hosting provider:

Email Accounts:

As mentioned earlier, most hosting providers require users to have their own domain name. With a domain name (e.g. www.yourwebsite.com) and email account features provided by your hosting company, you can create domain email accounts (e.g. yourname@yourwebsite.com).

FTP Access

The use of FTP lets you upload files from your local computer to your web server. If you build your website using your own HTML files, you can transfer the files from your computer to the web server through FTP, allowing your website to be accessed through the internet.

WordPress Support

WordPress is an online website creation tool. It is a powerful blogging and website content management system, which is a convenient way to create and manage website. WordPress powers over 25% of websites on the internet. Most hosting providers will tell you right away if their plans are WordPress-compatible or not. The simple requirements for hosting your WordPress websites include: PHP version 7 or greater; MySQL version 5.6 or greater.

1.5.1Different Types of Web Hosting

There are four main types of web hosting:

- Shared hosting
- VPS (virtual private server) hosting
- Dedicated hosting
- Cloud hosting

Reseller hosting and WordPress hosting are also specific types of hosting that fall within these categories. We'll cover all six types of web hosting as we continue.

Shared Hosting

Shared hosting is the most basic type of web hosting. It's cost-effective and the best choice for small or entry-level websites. As the name implies, websites using shared hosting will be sharing resources with other websites on a singular server. That's how shared hosting remains so cheap. By splitting resources, it's less cost for the web host. As such, each website on the server will have a limited amount of resources as defined by their specific hosting plan. The nature of sharing a server with other websites has its drawbacks. If another website on your server has a traffic spike, it can potentially cause performance issues with your site. These situations are out of your control. So while shared hosting is a great option if you want to save some money, it definitely won't deliver the most high-quality web hosting experience for you or your website visitors.

Who is Shared Hosting For?

Shared hosting is a great choice for beginners and smaller websites. It's cost-effective and doesn't require lots of technical knowledge to get started. shared web hosting is

recommented to websites that are on a tight budget. Bloggers and small business owners who have simple websites are great candidates for shared hosting. Any website that doesn't require too much on-site interaction or lots of resources will be fine with this hosting type. If you're not expecting more than 10,000 or 20,000 monthly visits to your website, you can save some money by selecting a shared web hosting plan.

Shared web hosting pros:

- Most cost-effective type of web hosting.
- Easy to set up.
- No technical knowledge required.
- Great for beginners and small websites.

Shared web hosting cons:

- Sharing server resources with other websites.
- Performance issues are out of your control.
- Slower loading times and lower uptime rates.
- Not scalable.

VPS Hosting

VPS stands for "virtual private server." This hosting type is a step above shared web hosting. When a website outgrows their shared plan, it's common for owners to upgrade to a VPS. With a virtual private server, your website will still be sharing a single server with other websites. However, the number of websites you'll be sharing it with is significantly lower. The main server is split into multiple virtual servers—hence the name. These virtual servers can be customized by individual websites. Even though the main server is shared with other sites, your website will have dedicated resources with a VPS.

For those of you who want to run custom configurations to your server, you can get optional root access with your VPS hosting plan. You site will generally perform better since you aren't sharing resources. This means you'll benefit from faster loading times and higher uptime rates. You won't have to worry about another website causing your

site to crash. Most websites do not need a dedicated server (we'll get to that next). But a VPS gives you some of the benefits of dedicated hosting at a fraction of the price.

Who is VPS Hosting For?

VPS hosting is best for small or medium-sized businesses that can't afford to have unexpected downtime on their website. It's a great option for website owners who have outgrown the resources of a shared hosting plan. A virtual private server can benefit website owners who are tech-savvy and want to make custom changes to their server configuration. Websites with large files like videos and images should consider a VPS. Interactive websites with complex files will perform better on a VPS as opposed to a shared server.

VPS hosting pros:

- Dedicated server resources.
- Ability to make custom configurations to your server.
- Higher uptime rates and faster loading speeds.
- More cost-effective than a dedicated server.

VPS hosting cons:

- Sharing the main server with other websites.
- Not as easy to set up as a shared server.
- Still has limitations in terms of what you can control.

WordPress Hosting

WordPress hosting optimizes for WordPress as your content management system. You'll normally see two different types of WordPress hosting offered by providers.

- Shared WordPress hosting
- Managed WordPress hosting

Shared WordPress hosting works the same way as regular shared hosting, except WordPress might be pre-installed.

Managed WordPress hosting provides added benefits like enhanced security, server caching, staging, and faster loading speeds.

The best WordPress hosting plans come with one-click WordPress installations as well.

WordPress hosting usually has added security that's specifically designed for websites that are running on WordPress. Since WordPress is the most commonly used CMS across the globe, those websites are a higher risk for cyber crime. So that added security is definitely a great benefit.

Who is WordPress Hosting For?

This isn't rocket science. WordPress hosting is for WordPress users. If you want your hosting to be optimized for your WordPress site, then you should look into this type of web hosting.

WordPress hosting pros:

- Optimized for WordPress.
- WordPress pre-installed or one-click installations.
- Enhanced security for WordPress sites.

WordPress hosting cons:

- Less control and flexibility.
- Updates aren't always smooth.
- Sharing resources with other WordPress sites.

The speed and security is the best part of WP Engine. They offer managed WordPress hosting services, so everything is handled at the server level.

Dedicated Hosting

Dedicated servers are the top of the line in web hosting. As the name implies, you'll have a dedicated server that belongs to you, and you alone. This is the most expensive type of web hosting, but it comes with added benefits. Since you won't be

sharing resources or anything else with other websites, your site will operate at peak performance. Websites being hosted on a dedicated server have complete technical control over the server settings. You choose the software, configurations, and anything else you need. If you get a dedicated server, you should expect extremely high uptime rates and lightning fast loading speeds. You won't have to worry about traffic from other websites impacting your performance.

Who is Dedicated Hosting For?

Dedicated hosting plans are typically reserved for enterprise-level websites. These servers are intended for websites that have high volumes of traffic. It is not recommended to use a dedicated server unless your site was getting upwards of 100,000 monthly visits.

Large ecommerce sites and enterprises should consider a dedicated hosting plan because they can have complete control over the functions of their server. Sites that require the highest levels of security, such as websites that store financial data or medical information would benefit from a dedicated server.

Dedicated servers come with varying management levels. You can look for a hosting provider that will manage your server for you, or you can manage it on your own. The downside of managing the server on your own is that you'll be responsible for installing updates and monitoring everything for glitches or errors.

Only consider a dedicated server if you can afford it. In most cases, a dedicated hosting plan will be out of your price range, especially if you are starting a new website. These servers can cost up to \$2,000 per month.

Dedicated hosting pros:

- Complete control over the server.
- Not sharing resources with any other websites.
- High security.
- Fast load times, high uptimes, and optimal performance.

Dedicated hosting cons:

- Most expensive type of web hosting.
- Requires technical knowledge.
- You are responsible for everything.

Cloud Hosting

Cloud hosting is a newer type of web hosting. It can best be described as a hybrid version of a VPS, but more cost-effective. Cloud hosting plans come with multiple remote servers. Each server has different responsibilities. If one of the servers is compromised or has a problem, the other servers on the network will take over those responsibilities and pick up the slack.

With cloud servers, your website will have higher uptime rates and won't have as much unexpected downtime due to server errors. Your site will remain fluid and perform at a high level.

The best part about cloud web hosting is scalability.

With traditional hosting, there is always a constant dilemma between server resources and price. You don't want to overpay for a plan with resources that you'll never use, but at the same time, you don't want to exceed the resources of a lesser plan and negatively affect the performance of your website.

Unless you know exactly how many page views your site will get per month, then this is nearly impossible to predict. But website traffic is never an exact science. At times, you'll experience spikes or surges to your site—which is great news. You just need to make sure your plan can accommodate that traffic. That's why cloud hosting is the ultimate solution to this dilemma. The best cloud hosting plans allow you to scale your resources on-demand. You pay for what you use, and you can always adjust these resources within your admin dashboard.

Who is Cloud Hosting For?

Cloud hosting is the best option for medium and large business websites that are growing at a rapid rate. If your website traffic is unpredictable and you're planning on it

scaling at a steady rate in the coming months or years, then you should consider a cloud hosting plan.

Any website with more than 50,000 monthly page visits could consider a cloud plan. Websites that have outgrown their shared plan and need to upgrade could seek cloud hosting as an alternative option to a VPS.

Cloud hosting pros:

- High security.
- Scale resources on demand.
- Less unexpected downtime.

Cloud hosting cons:

- Pricing isn't always fixed.
- Unpredictable traffic can increase costs.
- Limited customization.

Reseller Hosting

Reseller hosting is definitely not for everyone. If you're building a small website from scratch or just looking to host a website on your own, then this will not be the best option for you. But if you want to sell web hosting to other sites, then you should look into reseller hosting plans. Reseller hosting is basically white label web hosting. You buy hosting from a provider and then resell those services to your clients.

As the reseller, you get to choose the pricing options for your clients. Since you'll be paying wholesale rates to the provider, then you have the opportunity to make substantial profit margins.

Who is Reseller Hosting For?

For the most part, reseller hosting is for agencies, web designers, and web developers. These are people who already have clients in this space, so they can just add web hosting to the services that they currently offer.

You can make it easy on your clients by allowing them to get all of their website needs in one place, as opposed to finding a web hosting plan on their own.

One of the best parts about being a reseller is sustainability. If you design a website for someone, they won't necessarily need your services forever. But if you can get those clients to buy web hosting services from you, then you'll benefit from a steady monthly income for the lifetime of that website.

Reseller hosting pros:

- Set uncapped prices to your clients.
- Get recurring and sustainable income.
- Improve your existing services.

Reseller hosting cons:

- Need lots of clients to make it worth your time and effort.
- If something goes wrong, your clients will turn to you.

1.6 What is domain?

A domain name is your website name. A domain name is the address where Internet users can access your website. A domain name is used for finding and identifying computers on the Internet. Computers use IP addresses, which are a series of number. However, it is difficult for humans to remember strings of numbers. Because of this, domain names were developed and used to identify entities on the Internet rather than using IP addresses.

A domain name can be any combination of letters and numbers, and it can be used in combination of the various domain name extensions, such as .com, .net and more.

The domain name must be registered before you can use it. Every domain name is unique. No two websites can have the same domain name. If someone types in www.yourdomain.com, it will go to your website and no one else's.

The price of a domain name typically runs between \$15-25 per year.

2. Installing WordPress

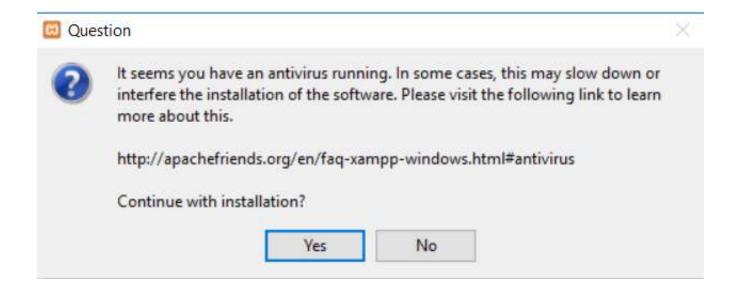
2.1 Installing WordPress on local server

Step 1: Download and install XAMPP on your computer

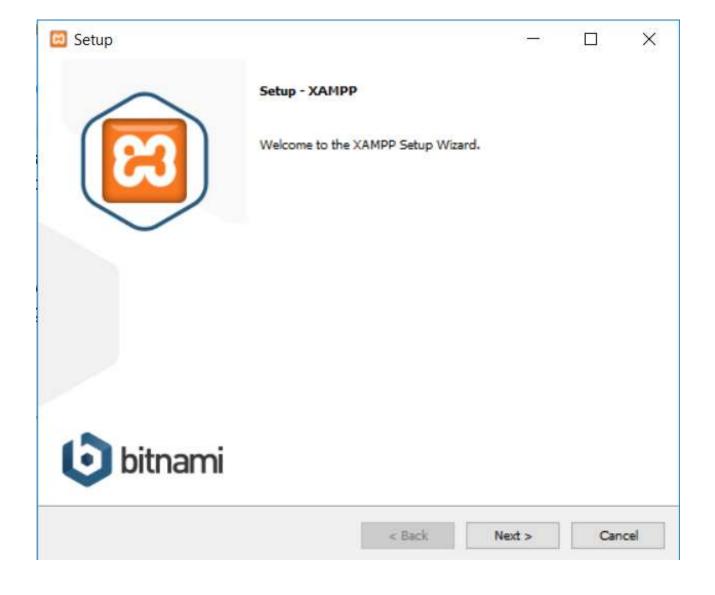
The first step on your way to install WordPress locally is to download and install the XAMPP software. You can download the Windows installer file <u>from Apache Friends</u>. It's a big file, about 110 MB, so it might take a minute or so depending on your connection:



Once the download finishes, run the file you downloaded to launch the XAMPP installer. If you're running antivirus software, you might get a warning like this:



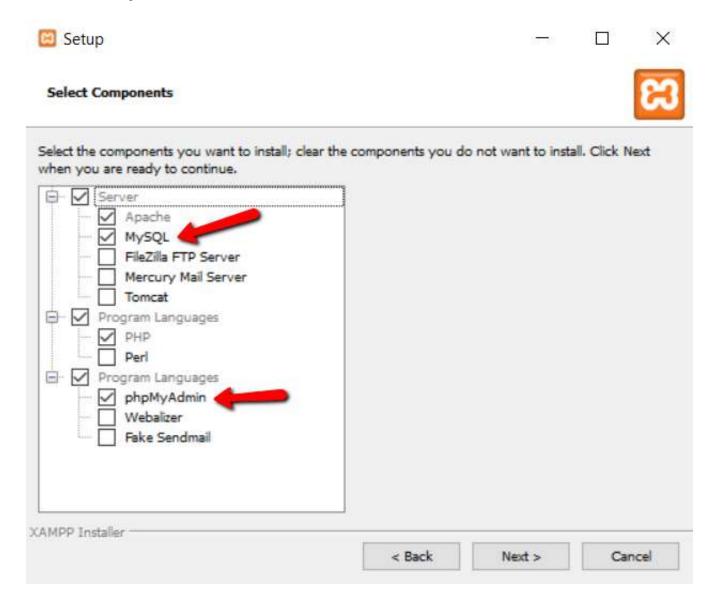
Just click **Yes** to continue. Depending on your Windows configuration, you might also get a prompt about User Account Control (UAC). Just continue through that prompt as well. Once you get through all of the prompts, you should see the standard installer screen:



Just click **Next** to continue.

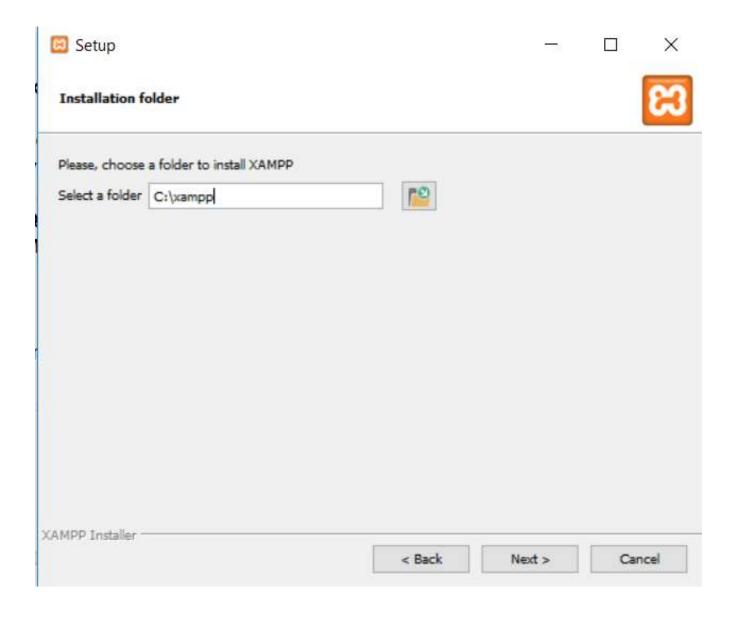
On the next screen, you can choose which components to install. To install XAMPP and WordPress, you do not need all of the components. In addition to the required components, all you need are:

- MySQL
- PHPMyAdmin

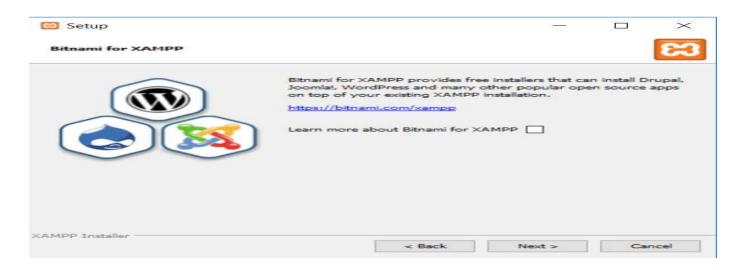


Again, this is all that's needed to install WordPress locally. Uncheck everything else and click **Next.**

You can now select which folder to install XAMPP in. I always leave it as the default:



On the next screen, you'll get a prompt asking you to install **Bitnami for XAMPP.** You do **not** need this to install XAMPP and WordPress, so just uncheck the box:

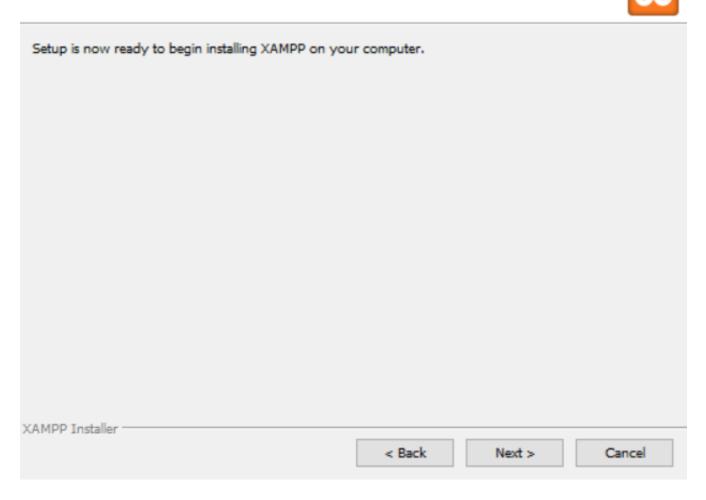


Once you click Next, you're ready to run the install:





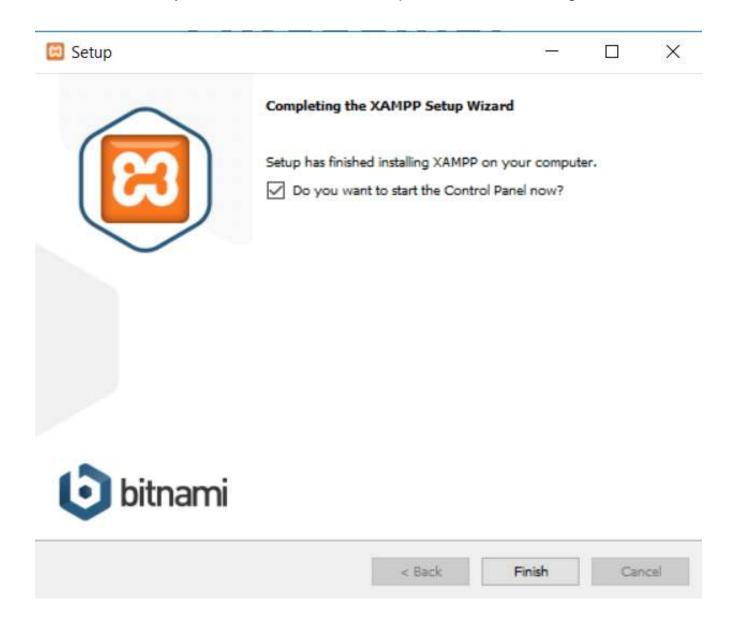
Ready to Install



The install process might take a few minutes:



Once it finishes, you can launch the control panel to start working with XAMPP:

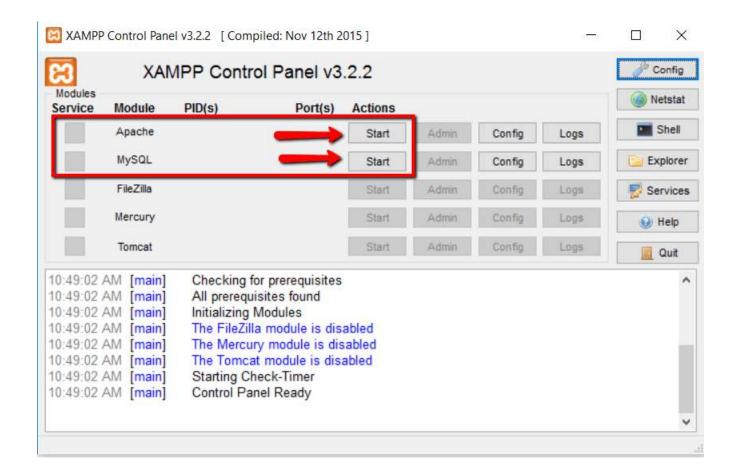


Step 2: Start the modules and test your server

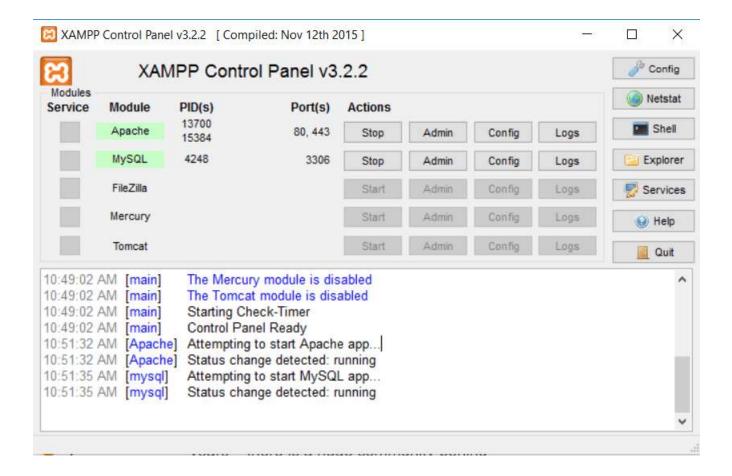
To install XAMPP and WordPress properly, you'll need to run two modules:

- Apache
- MySQL

You can start both modules from the XAMPP control panel:



Once you launch them, you should see their status turn to green:



And now you should be able to test that your local server is working by going to http://localhost/ in your web browser of choice:



Welcome to XAMPP for Windows 5.6.30

You have successfully installed XAMPP on this system! Now you can start using Apache, MariaDB, PHP and other compon find more info in the FAQs section or check the HOW-TO Guides for getting started with PHP applications.

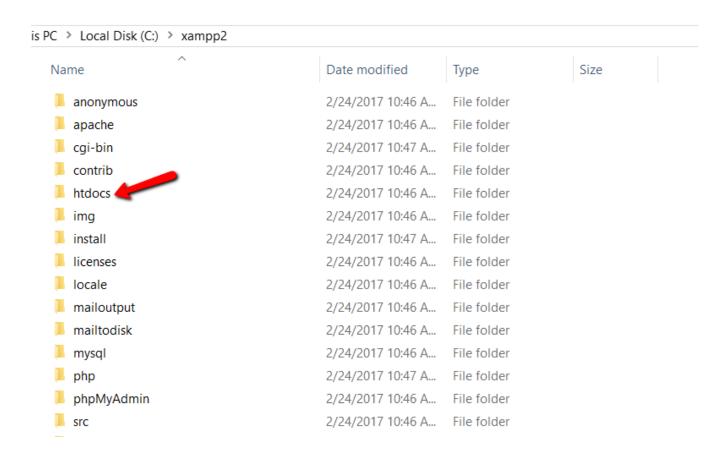
Start the XAMPP Control Panel to check the server status.

If all went well, you now have a functioning XAMPP server on your Windows PC! But now it's time to install XAMPP **and** WordPress. So here's how to get a WordPress site up and running on XAMPP.

Step 3: Add the WordPress files

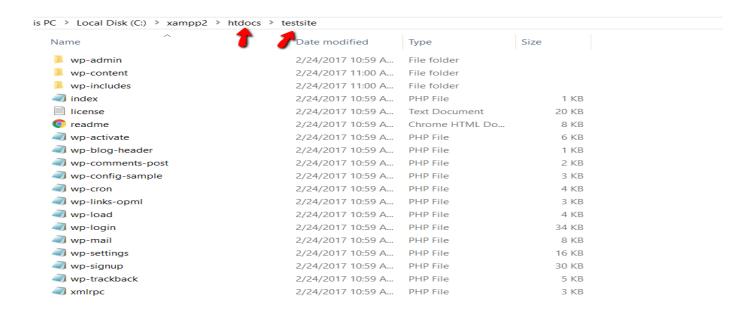
If you've ever manually installed WordPress, the rest of the process should feel pretty familiar. First, you need to <u>go to wordpress.org</u> and download the latest version of WordPress.

Then, in Windows, navigate to the folder where you installed XAMPP. For me, that's C://xampp. It should be something similar for you. Then, in that folder, find the **htdocs** subfolder:



In **htdocs**, create a new folder for your test site. This folder name will become the subname used to access your site. For example, if you make the folder testsite, you'll access your site by going to http://localhost/testsite.

Once you create the folder, extract the WordPress .zip file you downloaded from wordpress.org into it:

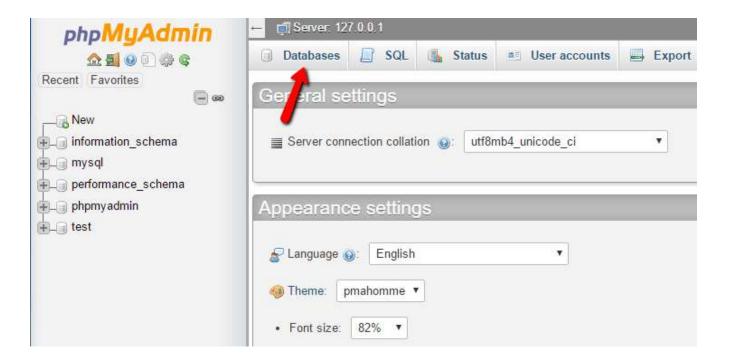


Step 4: Create a database for WordPress

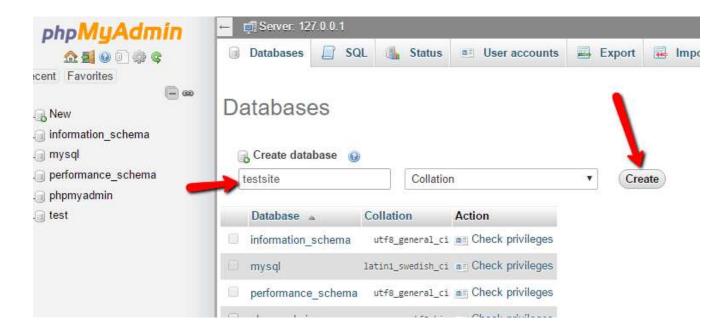
Next, you need to create a MySQL database for your WordPress install. To do that, launch PHPMyAdmin from your XAMPP control panel:



Then click on **Databases** at the top:



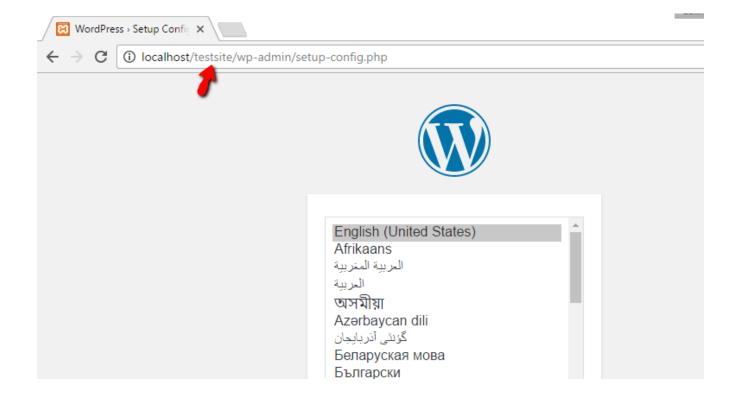
And enter a name for your database and click **Create**. Your name can be anything – just remember it because you'll need it for the next step:



Unlike installing WordPress on a live web server, when you install XAMPP and WordPress, you don't need to worry about creating a database user.

Step 5: Install WordPress locally via the on-screen installer

When you visit your test site, you should see the normal WordPress installer. Remember, your test site is just http://localhost/FOLDERNAME:



The only step where this process will differ from a normal install is the database details. When you get to the database details, enter them like this:

- Database Name = Name of the database you created in PHPMyAdmin
- Username = "root"
- Password = leave blank

Below you should ent	er your database connection d	letails. If you're not sure about these, contact your host.
Database Name	testsite	The name of the database you want to use with WordPress.
Username	root	Your database username.
Password		Your database password.
Database Host	localhost	You should be able to get this info from your web host, if localhost doesn't work.
Table Prefix	wp_	If you want to run multiple WordPress installations in a single database, change this.
Submit		

Then finish the rest of the WordPress install process like normal.

Once you complete the process, you should see your brand new WordPress install running perfectly on your local host:



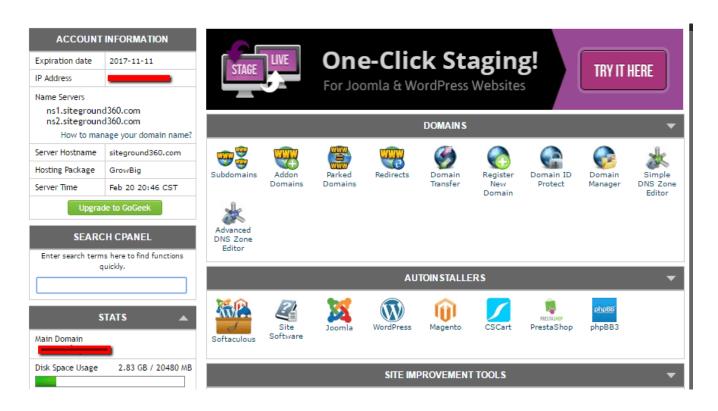
2.1.Install Wordpress on server

Step 1:Choose a host that comes with WordPress pre-installed

The easiest way to install WordPress is to just pick a host that does it for you. Nowadays, many WordPress-specific hosts will let you choose to have WordPress pre-installed. That means once you sign up for hosting, you can jump straight into your WordPress site. The whole question of "how to install WordPress" is irrelevant in such a case!

Step 2: How to install WordPress via cPanel and autoinstallers

cPanel is the dashboard that most web hosts give their customers. When you sign up for hosting, your host should provide you with login details for cPanel. And for most hosts, the cPanel interface looks something like this:

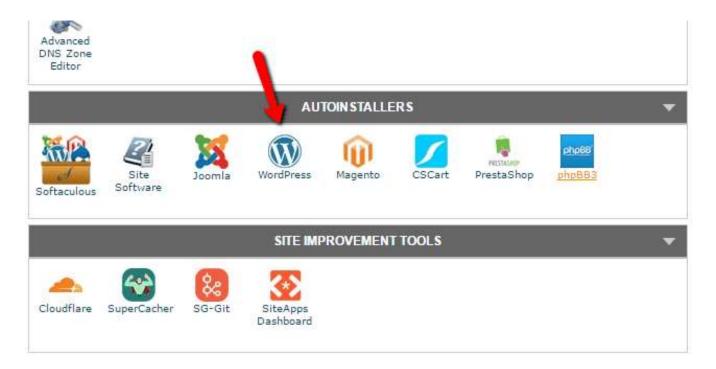


In your cPanel interface, your host should give you something called an autoinstaller. Autoinstallers basically automate the full WordPress install process. So instead of needing to do everything manually, you just input some basic information, click a button, and the autoinstaller installs WordPress for you.

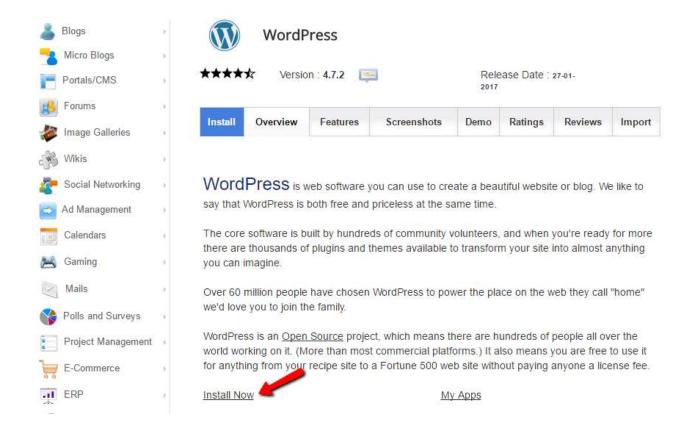
There are a few different autoinstallers you might encounter:

- Softaculous
- Fantastico
- QuickInstall
- MOJO Marketplace

And while there might be a few minor interface differences, all of the autoinstallers more or less function the same. o get started, find the link to the WordPress autoinstaller in cPanel and give it a click:



On the next screen, you should see an Install Now link (no matter which autoinstaller you're using). Just give that another click:



Next, you'll need to enter details for your WordPress install. Again, this interface should generally look the same no matter which autoinstaller you're using.

First, fill in the protocol and domain name where you want to install WordPress:



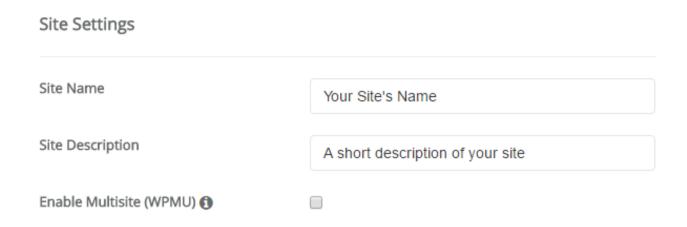
For Protocol, if you're using an SSL certificate, you should choose HTTPS. Otherwise, you should choose HTTP. Unless you purposefully installed an SSL Certificate, the default is HTTP.

Next, choose the directory in which you want to install WordPress. For 99% of situations, you should leave this field blank. Leaving it empty means WordPress will

be installed at your main domain. That is, if your domain is YOURDOMAIN.com, then WordPress will be installed at YOURDOMAIN.com rather than something like YOURDOMAIN.com/mywpsite.

In Directory The directory is relative to your domain and should not exist. e.g. To install at http://mydomain/dir/ just type dir. To install only in http://mydomain/ leave this empty. Leave empty for most situations

A bit further down, you need to enter your Site Settings. These are just the default values for your site's name and description. You can always change them later from the WordPress interface:



Do not enable WordPress Multisite unless you're specifically trying to create a multisite network.

You'll also need to create login credentials for your WordPress account. You'll use this username/password combination to log into your WordPress dashboard after installation, so make sure that you remember it:

Admin Account



Depending on the specific auto installer that you're using, you might see a few other options as well. You can safely ignore these. That is, it's fine to leave anything not mentioned here.

Once you've filled out everything, make sure to click Install at the bottom of the screen. It might take a minute or so to run. Then, you should get a confirmation. You can log into your brand new WordPress install by going to YOURDOMAIN.com/wp-admin.