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How To Install PHP On Linux

Sat, 04/07/2007 - 03:12 — Richard Laffers

This tutorial explains the installation of PHP 5, bundled with Apache and MySQL server on a Linux machine. The tutorial was written primarily for SuSE 9.2, 9.3, 10.0 & 10.1, but most of the steps ought to be valid for all Linux-like operating systems.

We will set up PHP as a shared module, being loaded into Apache2 dynamically during the server startup. These instructions are known to work for PHP versions: **5.0.4 through 5.2.1**.

Prerequisites

At this point Apache web server must be installed. If you want MySQL support in PHP, MySQL server also must have been installed prior to the next steps.

Download Source

Get the source from <http://www.php.net/downloads.php> . At the time of writing this tutorial the best available version was 5.2.1 ([php-5.2.1.tar.gz](#)).

Unpack, Configure, Compile

Go to the directory whith the downloaded file and enter:

```
# tar -xzf php-5.2.1.tar.gz
# cd php-5.2.1
# ./configure --prefix=/usr/local/php --with-apxs2=/usr/local/apache2/bin/apxs
--with-mysql=/usr/local/mysql
```

The configuration options ought to be self-explaining; `--prefix` specifies the location where PHP is to be installed, `--with-apxs2` with correct path pointing to `bin/apxs` in the Apache installation directory is mandatory for the installer to work. Since PHP 5, you need to explicitly bundle PHP with MySQL by `--with-mysql` directive (make sure you specified path to where MySQL is installed on your system).

There are many other options which turn on additional features. For all available configuration options and their default values type `./configure --help`.

Tip: If you are performing an upgrade, you may want to copy `config.nice` from the old PHP installation directory (if available) to where you unpacked the new PHP tarball file. Run `./config.nice` instead of `./configure`. This way all the previous configure options will be applied to the new installation effortlessly.

Once you entered `./configure` with all the options you need, compile and install the software:

```
# make
# make install
```

Edit Httpd.conf

All necessary changes to `httpd.conf` (Apache configuration file) should have already been made automatically during the installation, so usually you need not do anything. Nevertheless, check that following lines were added to the `httpd.conf` file:

```
LoadModule php5_module modules/libphp5.so
```

```
AddType application/x-httpd-php .php
```

If not, add them manually.

Create Php.ini File

Importantly, you have to create a `php.ini` configuration file. Choose one of the pre-made files (preferably `php.ini-recommended`) residing inside the `php-5.2.1/` directory (it's the folder to which the downloaded archive was extracted). Copy the file to the `lib/` directory in the PHP installation directory.

```
# cp php-5.2.1/php.ini-recommended /usr/local/php/lib/php.ini
```

If you need to, edit the `php.ini` file:

```
# vi /usr/local/php/lib/php.ini
```

However, the default settings should work for everyone in most cases.

Restart Apache Server

After everything is set up, restart Apache:

```
# /usr/local/bin/apachectl restart
```

Further Reading

[PHP Manual](#)

Do you have an idea how to make these instructions better? Did you run into any problems or have any tips? You are welcome to share your experience in the comments.

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Comments

» Posted on *Tue, 04/04/2006 - 13:37* — Virgil

Thanks for the information ... Help me very much.

[reply](#)

» Posted on *Fri, 05/05/2006 - 07:36* — Helen McCarthy

This is great!! Thanks, a lot.

Helen

[reply](#)

» Posted on *Tue, 06/06/2006 - 00:49* — exkludge

Bravo! This is a very good and valuable source of information... thank you!

[reply](#)

» Posted on *Tue, 06/06/2006 - 03:36* — Hans

I hv followed every steps from this how-to. I got mysql, apache and php installed. BUT, why my php script dosnt work? Even phpinfo()

shows nothing. Only html can be shown. :(

reply

» Posted on *Tue, 06/06/2006 - 07:59* — Richard Laffers

I would first make sure that .php extension is registered in your httpd.conf - you must have

```
LoadModule php5_module modules/libphp5.so
AddType application/x-httpd-php .php
```

somewhere in it. Also, check apache error log to see if any errors/warnings are generated during starting of the server.

reply

» Posted on *Tue, 06/06/2006 - 06:07* — PowerEdge

This is very nice tut, but doesn't really help when you just want to upgrade your php 4.4 to 5.x ... as apache2 is by default in SUSE installed under /etc/apache2 and there is neither bin nor apxs folder ... same is for MySQL. Could you please address this issue for default SUSE installation paths for both Apache2 and MySQL servers .. thanks :)

reply

» Posted *1 month ago* — Richard Laffers

I'm afraid you will have to uninstall both PHP and Apache first (using YaST) to start from scratch. Then follow my [MySQL](#), [Apache](#) and [PHP](#) tutorials.

reply

» Posted *6 days ago* — Y2Beck

A+ article for simple startups. I was having trouble all day installing the "Big 3" until I came across this article. Good documentation as well. PLEASE let us know if you are going to work on an advanced article focusing on optimalization and security for small, medium and big installs!!!

reply

» Posted on *Tue, 06/06/2006 - 21:52* — Richard Laffers

Thanks. I haven't much experience with server optimalization, however, I would recommend studying this:

http://httpd.apache.org/docs/2.2/misc/security_tips.html

<http://httpd.apache.org/docs/2.2/misc/perf-tuning.html>

Also, it is possible to specify 'Resource limits' in php.ini. MySQL distribution contains pre-made configuration files for small/medium/large/huge servers. Hope this helps.

reply

» Posted on *Tue, 06/06/2006 - 08:05* — Petrov

You, my friend, are a legend :) Thank you so much for helping make this task MUCH easier! This is the first time I've compiled from source rather than using RPM's and it actually worked! Cheers!

reply

» Posted 11 months ago — Valter

I'm totally new with Linux, but this is what I've got from php.net :

"MySQL is not enabled by default, nor is the MySQL library bundled with PHP. Read this FAQ for details on why. Use the --with-mysql[=DIR] configure option to include MySQL support. You can download headers and libraries fromMySQL."

[reply](#)

» Posted 9 months ago — DxJaK

No problems with the installation , but when I want to open say <http://localhost/hello.php> firefox & konqueror want to save the file. Have you got any suggestions??

[reply](#)

» Posted 9 months ago — Richard Ladders

Make sure that the following line has been added in httpd.conf: `AddType application/x-httpd-php .php`

[reply](#)

» Posted 7 months ago — John

Great instructions for all three apps (Apache, PHP, & MySQL). All were successfully loaded up and running. I'm able to call PHP scripts fm my HTML files. However, passing variables fm HTML to PHP is unsuccessful. Any thoughts?

[reply](#)

» Posted 7 months ago — Anonymous

The variables are passed to \$_POST and \$_GET superglobal arrays. Look for them in those.

[reply](#)

» Posted 6 months ago — Jason

Thanks for the great tutorial. I've leased dedicated servers before, but recently set up my own suse home server, and woah, its a whole new ball game when you have to set everything up! Thanks for the concise instructions. Im relatively new to linux administration, but I found this guide very easy to follow. Have you thought about putting up a paypal donation button? :)

[reply](#)

» Posted 6 months ago — Richard Ladders

I'm glad you find this guide useful. As for the donations, the real gratitude should be directed towards the MySQL, Apache and PHP developers. :-)

[reply](#)

» Posted 6 months ago — SteveMac

For confirmation, I have just installed the three key apps onto SuSE 10.0. The versions used were: mySQL: 5.0.27 Apache: 2.2.3 PHP: 5.2.0 Which proves that the tutorials still work with some later versions. (The only thing I needed to add was the curses/termcap for mySQL compilation, and the libxml2-devel for PHP compilation. This was done using the yast2 software management utility and the distribution CD. Thanks for all the help.

Steve

[reply](#)

» Posted *5 months ago* — [ieee488](#)

Any articles on how to add phpMyAdmin to the mix? MySQL, Apache2, and PHP5 are working, but I keep getting #2002 - The server is not responding (or the local MySQL server's socket is not correctly configured) which appears to be a common problem.

[reply](#)

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