

Install Apache

sudo apt update

sudo apt install apache2

sudo systemctl status apache2

```
aaronkilik@tecmint ~ $ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
  Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor prese
  Active: active (running) since Mon 2017-09-04 10:05:51 EAT; 4h 8min ago
    Process: 3030 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=
    Process: 1182 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SU
      Main PID: 1395 (apache2)
        Tasks: 7 (limit: 512)
       CGroup: /system.slice/apache2.service
               ├─1395 /usr/sbin/apache2 -k start
               ├─3037 /usr/sbin/apache2 -k start
               ├─3038 /usr/sbin/apache2 -k start
               ├─3039 /usr/sbin/apache2 -k start
               ├─3040 /usr/sbin/apache2 -k start
               ├─3041 /usr/sbin/apache2 -k start
               ├─4232 /usr/sbin/apache2 -k start

Sep 04 10:05:39 tecmint systemd[1]: Starting The Apache HTTP Server...
Sep 04 10:05:50 tecmint apachectl[1182]: AH00558: apache2: Could not reliably
Sep 04 10:05:51 tecmint systemd[1]: Started The Apache HTTP Server.
Sep 04 10:10:43 tecmint systemd[1]: Reloading The Apache HTTP Server.
Sep 04 10:10:43 tecmint apachectl[3030]: AH00558: apache2: Could not reliably
Sep 04 10:10:43 tecmint systemd[1]: Reloaded The Apache HTTP Server.
Lines 1-22/22 (END)
```

Install Apache

`sudo ufw app list`

Output
Available applications:
Apache
Apache Full
Apache Secure
OpenSSH

`sudo ufw allow in "Apache"`

`sudo ufw status`

Install Apache

http://your_server_ip

http://10.0.1.21

http://localhost

http://127.0.0.1



Apache2 Ubuntu Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at /var/www/html/index.html) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in /usr/share/doc/apache2/README.Debian.gz**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the apache2-doc package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|   '-- ports.conf
|-- mods-enabled
|   '-- *.load
|       '-- *.conf
|-- conf-enabled
|   '-- *.conf
|-- sites-enabled
    '-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for

Install MySQL

```
sudo apt install mysql-server
```

```
sudo mysql_secure_installation
```

Install PHP

```
sudo apt install php libapache2-mod-php php-mysql
```

*если нужна конкретная версия — пишем с учетом версии,
например php7.1*

```
php -v
```

```
OutputPHP 7.4.3 (cli) (built: Mar 26 2020 20:24:23) (NTS)
Copyright (c) The PHP Group
Zend Engine v3.4.0, Copyright (c) Zend Technologies
    with Zend OPcache v7.4.3, Copyright (c), by Zend
Technologies
```

Enable PHP in Apache

`apt-get install libapache2-mod-phpX.X`

нужна конкретная версия — пишем с учетом версии, например `php7.1`

`sudo a2enmod phpX.X`

`sudo service apache2 reload`

`LoadModule phpX_module /path/to/mods-available/libphpX.so`

`ln -s /path/to/mods-available/libphpX.so /path/to/mods-enabled/libphpX.so`

`sudo service apache2 reload`

`X` — меняем на версию!

Test PHP in Apache

nano /var/www/your_domain/info.php

```
<?php  
• phpinfo();  
• ?>
```

PHP Version 7.4.3	
System	Linux sassy-starfish 5.4.0-26-generic #30-Ubuntu SMP Mon Apr 20 16:58:30 UTC 2020 x86_64
Build Date	Mar 26 2020 20:24:23
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.4/apache2
Loaded Configuration File	/etc/php/7.4/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.4/apache2/conf.d
Additional .ini files parsed	/etc/php/7.4/apache2/conf.d/10-mysqlind.ini, /etc/php/7.4/apache2/conf.d/10-opcache.ini, /etc/php/7.4/apache2/conf.d/10-pdo.ini, /etc/php/7.4/apache2/conf.d/20-calendar.ini, /etc/php/7.4/apache2/conf.d/20-ctype.ini, /etc/php/7.4/apache2/conf.d/20-ext.ini, /etc/php/7.4/apache2/conf.d/20-ftp.ini, /etc/php/7.4/apache2/conf.d/20-gettext.ini, /etc/php/7.4/apache2/conf.d/20-iconv.ini, /etc/php/7.4/apache2/conf.d/20-json.ini, /etc/php/7.4/apache2/conf.d/20-mysqli.ini, /etc/php/7.4/apache2/conf.d/20-pdo_mysql.ini, /etc/php/7.4/apache2/conf.d/20-phar.ini, /etc/php/7.4/apache2/conf.d/20-posix.ini, /etc/php/7.4/apache2/conf.d/20-readline.ini, /etc/php/7.4/apache2/conf.d/20-shmop.ini, /etc/php/7.4/apache2/conf.d/20-sockets.ini, /etc/php/7.4/apache2/conf.d/20-sysvmsg.ini, /etc/php/7.4/apache2/conf.d/20-sysvsem.ini, /etc/php/7.4/apache2/conf.d/20-sysvshm.ini, /etc/php/7.4/apache2/conf.d/20-tokenizer.ini
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	API320190902.NTS
PHP Extension Build	API20190902.NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib.*, string.rot13, string.toupper, string.tolower, string.strip_tags, convert.*, consumed, dechunk, convert.iconv.*
This program makes use of the Zend Scripting Language Engine: Zend Engine v3.4.0, Copyright (c) Zend Technologies with Zend OPcache v7.4.3, Copyright (c), by Zend Technologies	
	

VirtualHost

```
sudo mkdir /var/www/your_domain
```

```
sudo chown -R $USER:$USER /var/www/your_domain
```

```
cp /etc/apache2/sites-available/000-default.conf /etc/apache2/sites-available/your_domain.conf
```

```
sudo nano /etc/apache2/sites-available/your_domain.conf
```

```
<VirtualHost *:80>
    ServerName your_domain
    ServerAlias www.your_domain
    ServerAdmin webmaster@localhost
    DocumentRoot /var/www/your_domain
    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

```
sudo a2ensite your_domain
```

```
sudo a2dissite 000-default
```

```
sudo apache2ctl configtest
```

```
sudo systemctl reload apache2
```

.htaccess

Директивы файла .htaccess действуют для каталога, в котором размещён такой файл, и для всех его подкаталогов.

Если вы желаете с помощью .htaccess изменить настройки для сайта в целом, его следует размещать в корневом каталоге сайта ~/ваш_домен/docs.

При сохранении такого файла в кодировке UTF-8 в нём не должно присутствовать BOM-сигнатуры.

Перенаправление с HTTP на HTTPS и обратно

Для работы перенаправления на сайте должен быть установлен
действительный SSL-сертификат.

Перенаправить запросы на https://domain.ru

RewriteEngine on

RewriteCond %{ENV:HTTPS} !on

RewriteRule ^.*\$ https:// %{HTTP_HOST}%{REQUEST_URI} [L,R=301]

Ограничение доступа к сайту по IP

Запретить доступ к сайту с IP-адресов 123.4.5.6 и 123.5.4.3

Order Allow,Deny

Allow from all

Deny from 123.4.5.6 123.5.4.3

Install Nginx

```
sudo apt update
```

```
sudo apt install nginx
```

- systemctl status nginx

```
$ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
  Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: ena
  Active: active (running) since Thu 2020-08-27 02:52:58 PDT; 1min 11s ago
    Docs: man:nginx(8)
   Main PID: 205264 (nginx)
     Tasks: 9 (limit: 4960)
    Memory: 9.3M
      CGroup: /system.slice/nginx.service
              ├─205264 nginx: master process /usr/sbin/nginx -g daemon on; master_pr
              ├─205265 nginx: worker process
              ├─205266 nginx: worker process
              ├─205267 nginx: worker process
              ├─205268 nginx: worker process
              ├─205269 nginx: worker process
              ├─205270 nginx: worker process
              ├─205271 nginx: worker process
              └─205272 nginx: worker process

Ağu 27 02:52:58 kaleinfo systemd[1]: Starting A high performance web server and a r
Ağu 27 02:52:58 kaleinfo systemd[1]: Started A high performance web server and a re
```

Install Nginx

```
sudo ufw app list
```

Output
Available applications:
Nginx Full
Nginx HTTP
Nginx HTTPS
OpenSSH

```
sudo ufw allow 'Nginx HTTP'
```

```
sudo ufw status
```

Install Nginx

`http://your_server_ip`

`http://10.0.1.21`

`http://localhost`

`http://127.0.0.1`

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

VirtualHost

```
sudo mkdir /var/www/your_domain
```

```
sudo chown -R $USER:$USER /var/www/your_domain
```

```
sudo chmod -R 755 /var/www/your_domain
```

```
sudo nano /etc/nginx/sites-available/your_domain
```

```
server {
    listen 80;
    listen [::]:80;

    root /var/www/your_domain/html;
    index index.html index.htm index.nginx-debian.html;

    server_name your_domain www.your_domain;

    location / {
        try_files $uri $uri/ =404;
    }
}
```

```
sudo ln -s /etc/nginx/sites-available/your_domain /etc/nginx/sites-enabled/
```

```
sudo nginx -t
```

```
sudo systemctl restart nginx
```

Install Php

sudo add-apt-repository universe

sudo apt install php-fpm php-mysql

sudo nano /etc/nginx/sites-available/example.com

```
server {
    listen 80;
    root /var/www/html;
    index index.php index.html index.htm index.nginx-debian.html;
    server_name example.com;

    location / {
        try_files $uri $uri/ =404;
    }

    location ~ \.php$ {
        include snippets/fastcgi-php.conf;
        fastcgi_pass unix:/var/run/php/php7.2-fpm.sock;
    }

    location ~ \.ht {
        deny all;
    }
}
```