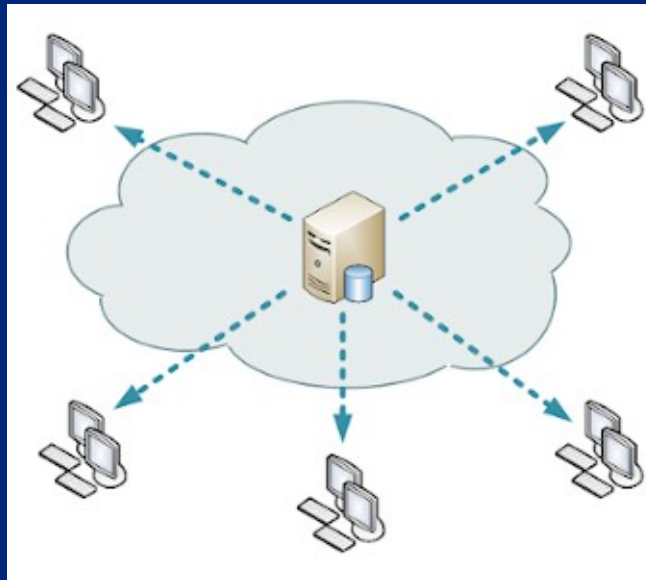


# ARCHITETTURA DEL WEB

(monolitico)



Marina Ribaud, [marina.ribaud@unige.it](mailto:marina.ribaud@unige.it)

# Client

2

- **Il browser**
  - Invia richieste HTTP verso server remoti
  - Riceve e visualizza le risposte
  - HTML, CSS, JavaScript sono linguaggi lato-client
- Potete usare Chrome, Firefox, Opera, Safari, Brave, ecc.

# Internet

3

- Usando i **protocolli di comunicazione** della rete internet (HTTP, TCP, IP) le richieste HTTP fatte dai browser raggiungono i server specificati nelle URL

# Server

4

- Macchine always-on sulle quali sono attivi server ~~HTTP~~ / HTTPS, in ascolto sulle porte 80 / 443
- Gestiscono le richieste e inoltrano le risposte ai client
- Useremo **Apache**

# Server

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- Le pagine ritornate ai client possono essere
  - **file statici** salvati sul file system del server (ad esempio file .html, .css, .js)
  - **script eseguiti sul server** che generano output HTML in modo dinamico
  - Useremo **PHP** (file .php)

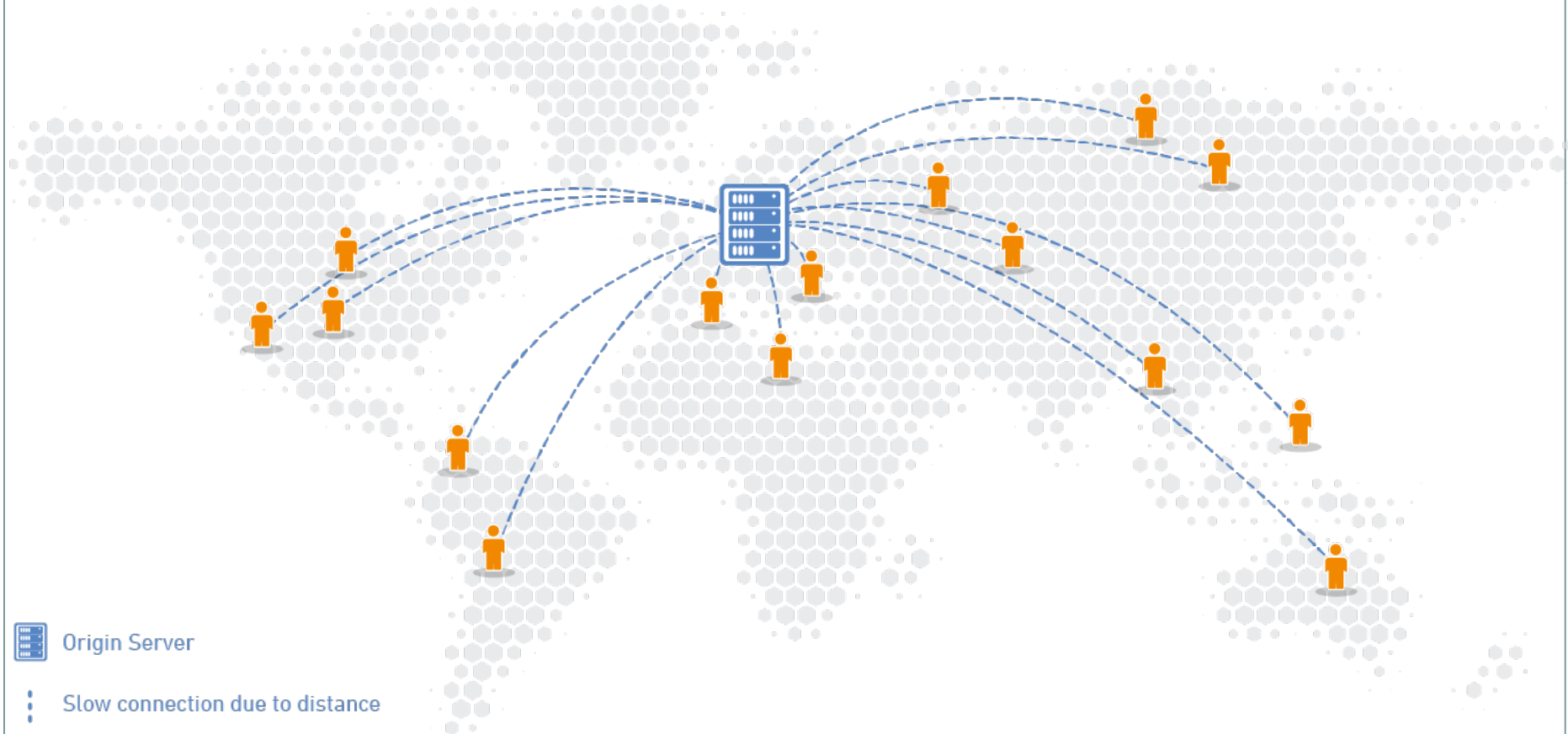
# Database

6

- Le **pagine dinamiche** molto spesso sono generate **interrogando un database** che costituisce il back-end dell'applicazione web
- Useremo **MySQL / MariaDB**

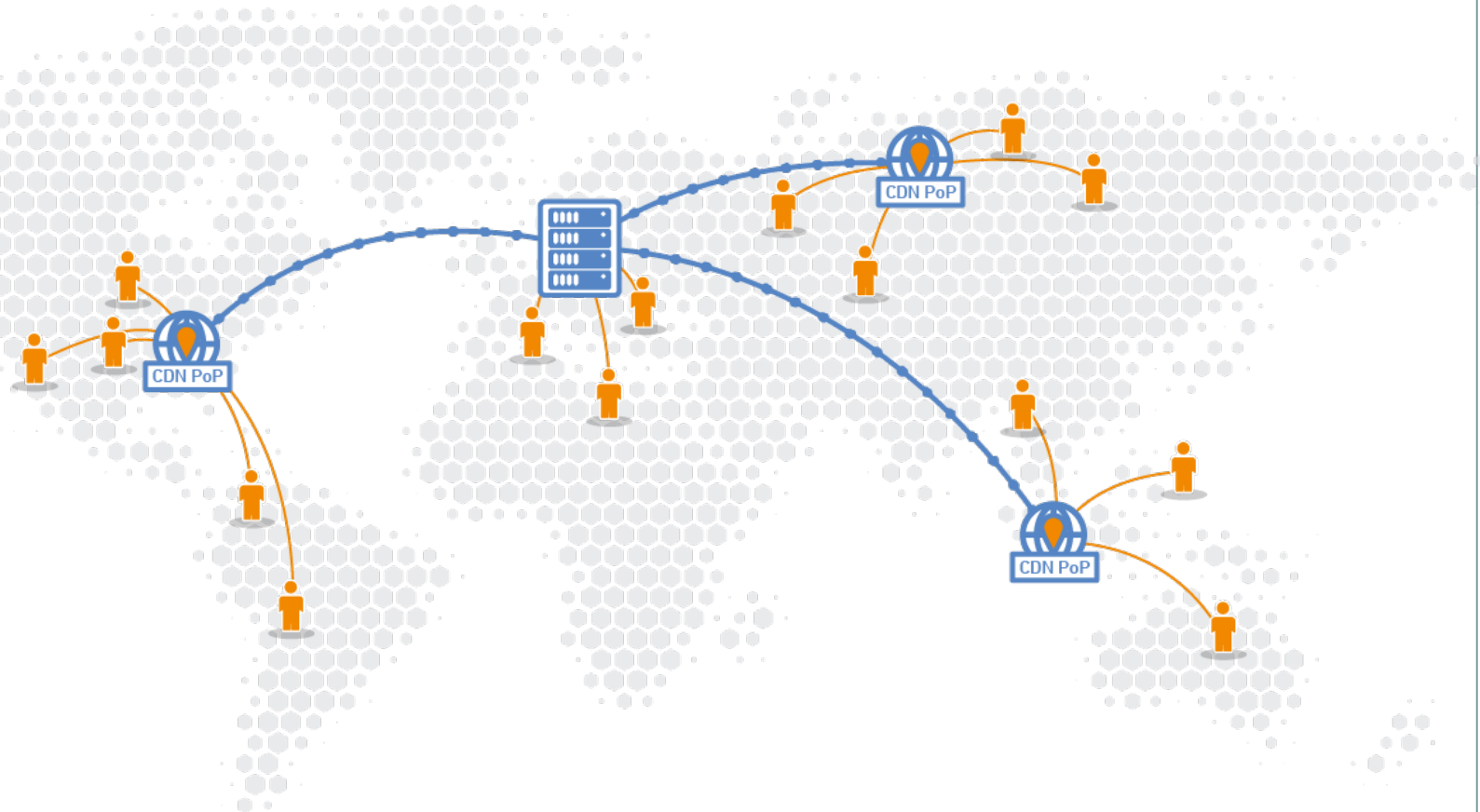
# Le cose sono più complicate

7



# Le cose sono più complicate

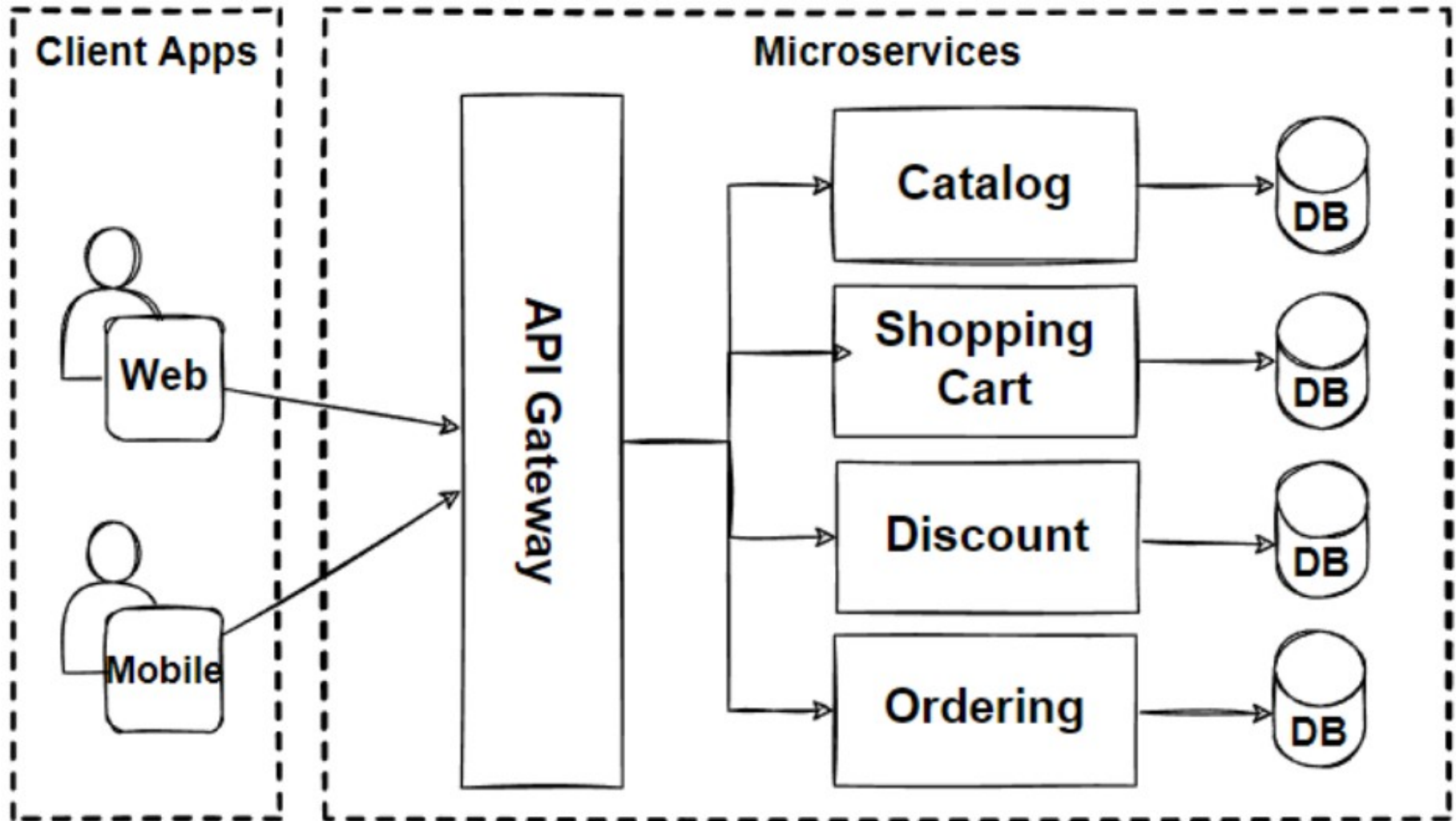
8





# Le cose sono più complicate

9



# Software per la parte server

10

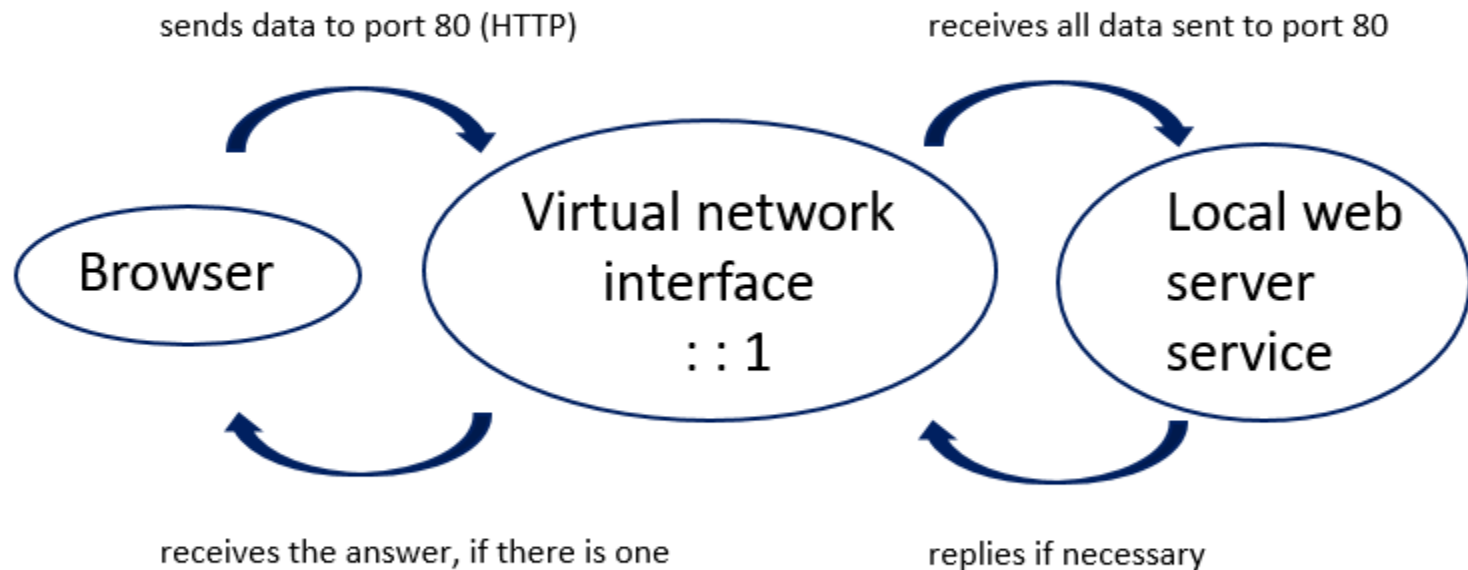
- XAMPP o LAMP (per Linux)
- Per l'interazione con il database useremo phpmyadmin

# Dopo l'installazione

11

Localhost → ::1

http://localhost



Services and programs communicate within the local computer via this interface.

# Interfaccia di loopback

12

- La comunicazione client-server avviene mediante l'interfaccia di **loopback**
  - interfaccia virtuale completamente implementata attraverso il sistema operativo
  - sui sistemi Unix-Linux l'interfaccia si chiama **lo**, i dettagli si vedono con il comando **ifconfig**
  - su Windows il comando è **ipconfig**

# Dopo l'installazione

13

localhost

Gmail YouTube Maps

## Apache2 Ubuntu Default Page

ubuntu

**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
```

**http://localhost**

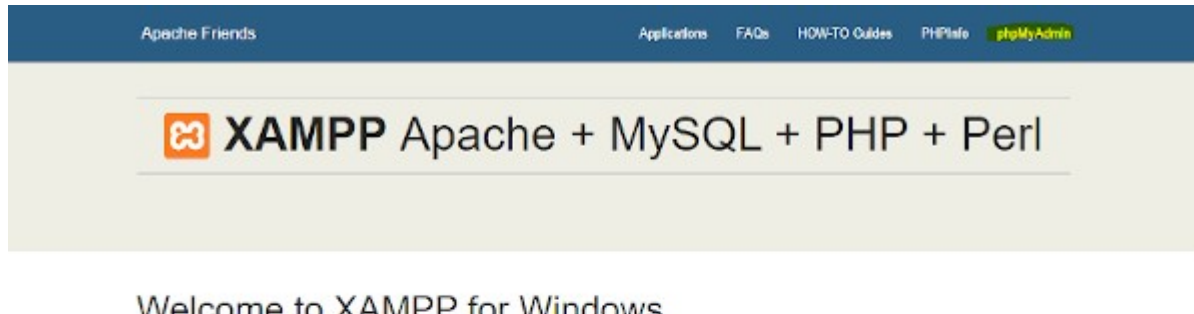
- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations, respectively.
- They are activated by symlinking available configuration files from their respective `*-available/` counterparts. These should be managed by using our helpers `a2enmod`, `a2dismod`, `a2ensite`, `a2dissite`, and `a2enconf`, `a2disconf`. See their respective man pages for detailed information.
- The binary is called `apache2`. Due to the use of environment variables, in the default configuration, `apache2` needs to be started/stopped with `/etc/init.d/apache2` or `apache2ctl`. **Calling `/usr/bin/apache2` directly will not work** with the default configuration.

### Document Roots

By default, Ubuntu does not allow access through the web browser to *any* file apart of those located in `/var/www`, **public\_html** directories (when enabled) and `/usr/share` (for web applications). If your site is using a web document root located elsewhere (such as in `/srv`) you may need to whitelist your document root directory in `/etc/apache2/apache2.conf`.

# Dopo l'installazione

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## Welcome to XAMPP for Windows

You have successfully installed XAMPP on this system! Now you can find more info in the FAQs section or check the HOW-TO Guides for getting started.

Start the XAMPP Control Panel to check the server status.

### Community

XAMPP has been around for more than 10 years – there is a huge community adding yourself to the Mailing List, and liking us on Facebook, following

### Contribute to XAMPP translation at translate

Can you help translate XAMPP for other community members? We need you! We have set up a site, [translate.apachefriends.org](http://translate.apachefriends.org), where users can contribute

### Install applications on XAMPP using Bitnami

Apache Friends and Bitnami are cooperating to make dozens of open source packaged applications include Wordpress, Drupal, Joomla! and dozens

The screenshot shows the XAMPP Control Panel window. At the top, it says 'XAMPP Control Panel'. Below this is a table with columns: 'Modules', 'Service', 'Module', 'PID(s)', 'Port(s)', and 'Actions'. The 'Apache' module is highlighted in green. To the right of the table are buttons for 'Stop', 'Admin', 'Config', and 'Logs'. Below the table are buttons for 'Start', 'Admin', 'Config', and 'Logs' for each of the other modules (MySQL, FileZilla, Mercury, Tomcat). On the far right, there are buttons for 'Config', 'Netstat', 'Shell', 'Explorer', 'Services', 'Help', and 'Quit'. At the bottom, there is a log window showing the following messages:  
6:34:28 PM [main] XAMPP Installation Directory: "e:\xampp\  
6:34:28 PM [main] Checking for prerequisites  
6:34:28 PM [main] All prerequisites found  
6:34:28 PM [main] Initializing Modules  
6:34:29 PM [main] Starting Check-Timer  
6:34:29 PM [main] Control Panel Ready  
6:58:48 PM [Apache] Attempting to start Apache app...  
6:58:48 PM [Apache] Status change detected: running