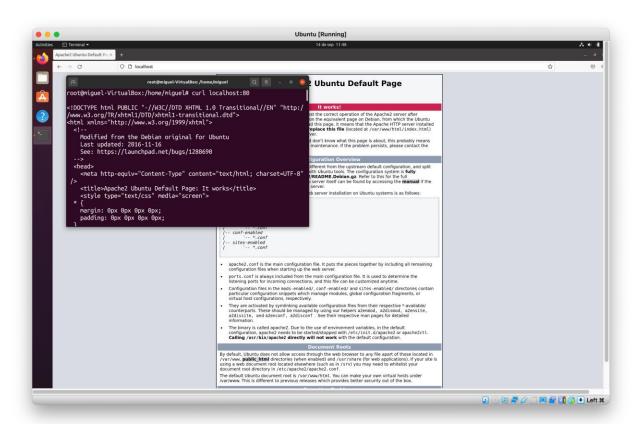# Arquitectura de Servicios de Red

Práctica 3
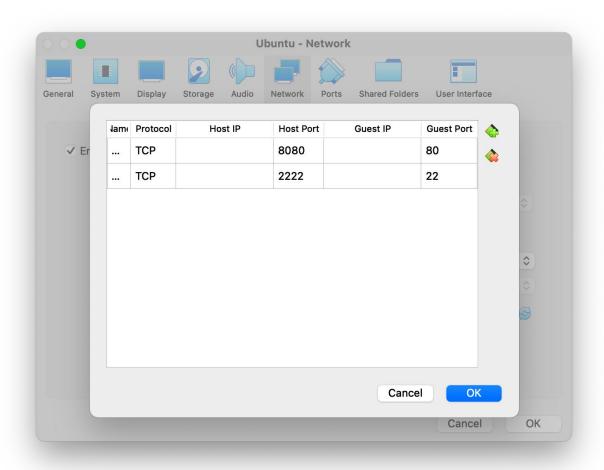
Miguel Oleo Blanco
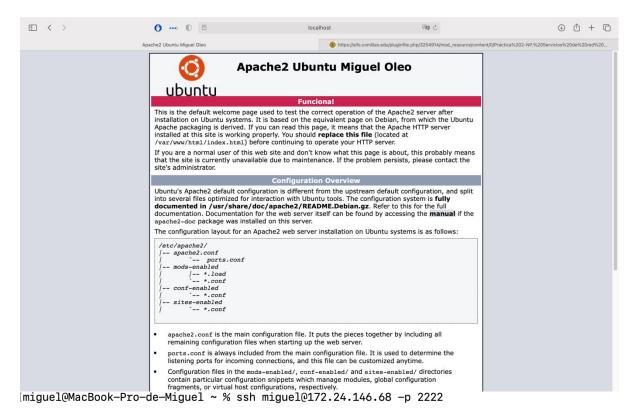
```
miguel@miguel-VirtualBox:~$ service --status-all|grep ssh
 [ + ]  ssh
miguel@miguel-VirtualBox:~$ service ssh status
● ssh.service - OpenBSD Secure Shell server
     Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
     Active: active (running) since Mon 2021-09-13 16:53:13 CEST; 15min ago
       Docs: man:sshd(8)
             man:sshd_config(5)
   Main PID: 5504 (sshd)
      Tasks: 1 (limit: 7020)
     Memory: 1.0M
     CGroup: /system.slice/ssh.service
             └─5504 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

sep 13 16:53:13 miguel-VirtualBox systemd[1]: Starting OpenBSD Secure Shell server...
sep 13 16:53:13 miguel-VirtualBox sshd[5504]: Server listening on 0.0.0.0 port 22.
sep 13 16:53:13 miguel-VirtualBox sshd[5504]: Server listening on :: port 22.
sep 13 16:53:13 miguel-VirtualBox systemd[1]: Started OpenBSD Secure Shell server.
miguel@miguel-VirtualBox:~$ service apache2 status
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
     Active: active (running) since Mon 2021-09-13 16:52:32 CEST; 17min ago
       Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 3787 (apache2)
      Tasks: 55 (limit: 7020)
     Memory: 4.9M
     CGroup: /system.slice/apache2.service
             ├─3787 /usr/sbin/apache2 -k start
             ├─3788 /usr/sbin/apache2 -k start
             └─3789 /usr/sbin/apache2 -k start
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <!--

          +odified from the Debian original for Ubuntu
    Last updated: 2016-11-16
    See: https://launchpad.net/bugs/1288690
  -->
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
    <title>Apache2 Ubuntu Default Page: It works</title>
    <style type="text/css" media="screen">
  * {
    margin: 0px 0px 0px 0px;
    padding: 0px 0px 0px 0px;
  }

  body, html {
    padding: 3px 3px 3px 3px;

    background-color: #D8DBE2;

    font-family: Verdana, sans-serif;
    font-size: 11pt;
    text-align: center;
  }

  div.main_page {
    position: relative;
    display: table;

    width: 800px;

    margin-bottom: 3px;
    margin-left: auto;
    margin-right: auto;
    padding: 0px 0px 0px 0px;

    border-width: 2px;
    border-color: #212738;
    border-style: solid;

    background-color: #FFFFFF;

    text-align: center;
  }

  div.page_header {
    height: 99px;
    width: 100%;

    background-color: #F5F6F7;
  }

  div.page_header span {
    margin: 15px 0px 0px 50px;

    font-size: 180%;
    font-weight: bold;
  }

  div.page_header img {
    margin: 3px 0px 0px 40px;
```

Activities   Terminal ▾   14 de sep 11:48

Apache2 Ubuntu Default Pa ×

← → C   localhost

root@miguel-VirtualBox: /home/miguel

```
root@miguel-VirtualBox:/home/miguel# curl localhost:80

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http:/
/www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <!--
    Modified from the Debian original for Ubuntu
    Last updated: 2016-11-16
    See: https://launchpad.net/bugs/1288690
  -->
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8"
 />
    <title>Apache2 Ubuntu Default Page: It works</title>
    <style type="text/css" media="screen">
  * {
    margin: 0px 0px 0px 0px;
    padding: 0px 0px 0px 0px;
  }
```

2 Ubuntu Default Page

It works!

...st the correct operation of the Apache2 server after
...on the equivalent page on Debian, from which the Ubuntu
...d this page, it means that the Apache HTTP server installed
...**replace this file** (located at /var/www/html/index.html
...ver.
...d don't know what this page is about, this probably means
...maintenance. If the problem persists, please contact the

...figuration Overview

...different from the upstream default configuration, and split
...with Ubuntu tools. The configuration system is **fully**
/README.Debian.gz. Refer to this for the full
...server itself can be found by accessing the **manual** if the
...server.
...eb server installation on Ubuntu systems is as follows:

```
/        -- *.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 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.

The default Ubuntu document root is /var/www/html. You can make your own virtual hosts under /var/www. This is different from previous releases which provides better security out of the box.

Left ⌘

Ubuntu - Network

General System Display Storage Audio Network Ports Shared Folders User Interface

Name	Protocol	Host IP	Host Port	Guest IP	Guest Port
...	TCP		8080		80
...	TCP		2222		22

Cancel   OK

Cancel   OK

Apache2 Ubuntu Miguel Oleo

Funciona!

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 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.

```
[miguel@MacBook-Pro-de-Miguel ~ % ssh miguel@172.24.146.68 -p 2222

The authenticity of host '[172.24.146.68]:2222 ([172.24.146.68]:2222)' can't be established.
ECDSA key fingerprint is SHA256:QXRZt6V1YHymX6Dyv3wGqJ/R+0OsnF22js7PilDQg4A.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[172.24.146.68]:2222' (ECDSA) to the list of known hosts.
[miguel@172.24.146.68's password:
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-34-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

13 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Wed Sep 15 10:57:08 2021 from 127.0.0.1
[miguel@miguel-VirtualBox:~$ sudo su
```