# Cheat-Sheet: Apache2 Web Server - Debian GNU/Linux

**Servidor Web (apache2)**
eth0:
  IP estática: 10.10.10.10/8
  Gateway: 10.10.10.1
  DNS: 1.1.1.1, 8.8.8.8
**Paquete servidor Web:**
apache2
**Ficheiros de configuración:**
/etc/apache2/* → conf*, mods*, sites* → available, enabled
/etc/apache2/{apache2.conf,ports.conf,envvars}
**Ficheiros logs:**
/var/log/syslog || /var/lib/journal (journalctl)
/var/log/apache2/*
**Directivas**
→https://httpd.apache.org/docs/current/es/mod/directives.html
→ DocumentRoot
→ Listen
→ VirtualHost → ServerName, ServerAlias
→ ServerSignature
→ ErrorLog → LogFormat
→ Options argumento
→ Include, Require
→ AllowOverride (.htaccess)
**Seccións** → https://httpd.apache.org/docs/2.4/sections.html

User → www-data
Group→ www-data

**debian → Instalar apache2**

**Configuración de rede en tempo real:**
# pkill NetworkManager \
  && ip addr add 10.10.10.10/8 dev eth0 \
  && ip route add default via 10.10.10.1 dev eth0 \
  && echo -e 'nameserver 1.1.1.1\nnameserver 8.8.8.8' > /etc/resolv.conf

**Comprobar a configuración de rede:**
# ip addr show eth0 \
  && ip route \
  && cat /etc/resolv.conf

**Paquete debian: isc-dhcp-server - Instalación**
# apt update \
  && apt -y install apache2

**Ver accións posibles do servidor:**
# /etc/init.d/apache2 #Premer Enter
Usage: apache2 {start|stop|graceful-stop|restart|reload|force-reload}

**Comprobar estado servidor:**
# /etc/init.d/apache2 status || systemctl status apache2

**Configuración servidor en /etc/apache2/**

**Táboa. Seccións**

| Prioridade/Alcance | | Sección | Aplicación | Exemplo |
|---|---|---|---|---|
| **-** | **+** | Directory, .htaccess (Alternemente) L | FileSystem | <Directory /var/www/html/prioridade> (ruta absoluta do sistema de ficheiros ¹) |
| | | Files | | |
| **+** | **-** | Location | DocumentRoot | <Location /prioridade> (ruta relativa ao DocumentRoot ²) |
| | | VirtualHost | | |

**Exemplo1**  Listen ports.conf
Listen 80
Listen 3800
Listen 10.10.10.10:4300
Listen 10.10.10.10:4443 http

**Exemplo2**  DocumentRoot 000-default.conf
<VirtualHost *:80>
ServerAdmin webmaster@localhost
DocumentRoot /var/www/html
ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>

**Exemplo3**  VirtualHost empresa1.conf
#Configuración virtualhost: empresa1
<VirtualHost *:80>
DocumentRoot /var/www/empresa1/
ServerName www.empresa1.com
ServerAlias empresa1.com empresa1.es www.empresa1.es
</VirtualHost>

# mkdir /var/www/empresa1
# echo 'empresa1 contido' > /var/www/empresa1/index.html
# chown -R www-data: /var/www/empresa1
# chmod 700 /var/www/empresa1
# chmod 400 /var/www/empresa1/index.html
# a2ensite empresa1

**Exemplo4**  HTTP Basic conf-available security.conf
...
<Directory /var/www/html/auth-empresa>
AllowOverride Authconfig
</Directory>

Ficheiro contrasinais web.htpasswd
Ficheiro .htaccess

# htpasswd -c /etc/apache2/web.htpasswd nome_usuario
# mkdir /var/www/html/auth-empresa
# cat /var/www/html/auth-empresa/.htaccess
AuthType Basic
AuthName "Web con Autenticacion Basic"
AuthBasicProvider file
AuthUserFile /etc/apache2/web.htpasswd
##Require valid-user
Require user nome_usuario
# echo 'S3c3eT contido' > /var/www/html/auth-empresa/secret.txt
# chown -R www-data. /var/www/html/auth-empresa
# chmod 400 /var/www/html/auth-empresa/.htaccess

**Exemplo7**  https default-ssl.conf
<IfModule mod_ssl.c>
<VirtualHost _default_:443>
ServerAdmin webmaster@localhost
DocumentRoot /var/www/html
ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined
SSLEngine on
SSLCertificateFile /etc/ssl/certs/ssl-cert-snakeoil.pem
SSLCertificateKeyFile /etc/ssl/private/ssl-cert-snakeoil.key
<FilesMatch "\.(?:cgi|shtml|phtml|php)$">
SSLOptions +StdEnvVars
</FilesMatch>
<Directory /usr/lib/cgi-bin>
SSLOptions +StdEnvVars
</Directory>
</VirtualHost>
</IfModule>

# a2ensite default-ssl
# a2enmod ssl
# /etc/init.d/apache2 restart || systemctl apache2 restart

# tail -f /var/log/syslog || journalctl -f -u apache2
...
Oct 22 17:27:37 kali systemd[1]: Starting The Apache HTTP Server...
Oct 22 17:27:37 kali apachectl[58476]: AH00557: apache2: apr_sockaddr_info_get() failed for kali
Oct 22 17:27:37 kali apachectl[58476]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.0.1. Set the 'ServerName' directive globally to suppress this message
Oct 22 17:27:37 kali systemd[1]: Started The Apache HTTP Server.

# tail -f /var/log/apache2/access.log
...

# tail -f /var/log/apache2/error.log
...

**Servidor Web**

**Exemplo5b**  Control de acceso Require, <RequireAll>
<VirtualHost *:80>
Alias /cartafol-controlado "/var/www/control/cartafol-controlado/"
<Directory "/var/www/control/cartafol-controlado/">
#Order deny,allow
#Deny from all
#Allow from IP_permiso_concedido
Allow from 192.168.120.101
Require ip 192.168.120.101
</Directory>
DocumentRoot /var/www/control/cartafol-controlado/
ServerName www.empresa.local
ServerAlias empresa.local
</VirtualHost>

# mkdir -p /var/www/control/cartafol-controlado
# echo 'Contido control' > /var/www/control/cartafol-controlado/control.txt
# a2ensite controlIP

**Exemplo5a**  Control de acceso Order, deny, allow
<VirtualHost *:80>
Alias /cartafol-controlado "/var/www/control/cartafol-controlado/"
<Directory "/var/www/control/cartafol-controlado/">
Order deny,allow
Deny from all
#Allow from IP_permiso_concedido
Allow from 192.168.120.101
</Directory>
DocumentRoot /var/www/control/cartafol-controlado/
ServerName www.empresa.local
ServerAlias empresa.local
</VirtualHost>

# mkdir -p /var/www/control/cartafol-controlado
# echo 'Contido control' > /var/www/control/cartafol-controlado/control.txt
# a2ensite controlIP

**Exemplo6**  Prioridades Seccións / Directivas Directory, Location conf-available/security.conf
# mkdir /var/www/html/prioridade
# echo 'Contido f1.txt' > /var/www/html/prioridade/f1.txt
# a2ensite controlIP

...
<Directory /var/www/html/prioridade>
Options -Indexes
</Directory >
<Location /prioridade>
Options +Indexes
</Location >

**Iniciar servidor:**
# /etc/init.d/apachd2 start || systemctl start apache2

**Recargar configuración servidor:**
# /etc/init.d/apache2 reload || systemctl reload apache2

**Comprobar estado servidor:**
# /etc/init.d/apache2 status || systemctl status apache2