# **Linux for PHP Developers**





## **Quick Reference**

#### **Ubuntu Documentation**

- Ubuntu Server Guide <a href="https://help.ubuntu.com/16.04/serverguide">https://help.ubuntu.com/16.04/serverguide</a>
- Apache2 <a href="https://help.ubuntu.com/16.04/serverguide/httpd.html">https://help.ubuntu.com/16.04/serverguide/httpd.html</a>
- MySQL https://help.ubuntu.com/16.04/serverguide/mysql.html
- PHP <a href="https://help.ubuntu.com/16.04/serverguide/php.html">https://help.ubuntu.com/16.04/serverguide/php.html</a>
- Ubuntu Community Help Wiki <a href="https://help.ubuntu.com/community">https://help.ubuntu.com/community</a>
- SSH <a href="https://help.ubuntu.com/community/SSH">https://help.ubuntu.com/community/SSH</a>
- Lost Password <a href="https://help.ubuntu.com/community/LostPassword">https://help.ubuntu.com/community/LostPassword</a>

#### **Forwarded Ports**

Name	Host Port	Guest Port
Apache	8080	80
MySQL	9306	3306
SSH	2222	22
MailCatcher	1080	1080

#### **Hosts Files**

- Mac /etc/hosts
- Windows %SystemRoot%\system32\drivers\etc\hosts

### Commands

#### Files and Directories

- cd directory change a directory
- mkdir directory create a directory
- rmdir directory remove a directory
- touch file create an empty file or update an existing file's modification date
- mv move a file
- rm remove a file
- cp copy a file

- pwd show the name of the current working directory
- ls list the directory contents
- 1s -la verbosely display the file and directory information
- find directory search for files in a directory hierarchy
- cat concatenate the files and display
- head display the beginning of a file
- tail display the end of a file
- less page through the contents of a file
- grep display lines matching a pattern

```
grep -i text - case insensitive search for text
grep -Ri text directory - recursively search directories for text
```

• nano filename - small text editor

```
ctrl+g - help
ctrl+k - cut line
ctrl+u - paste line
ctrl+v - next page
ctrl+y - previous page
ctrl+w - search
ctrl+x - exit
```

• sudoedit filename – edit a file as root

#### **Users and Permissions**

- id display the user and group information
- usermod -a -G groupname username add a user to a group
- chown change the file owner and group
- chmod change the permissions of a file
- **sudo** *command* run programs with the privileges of another user
- $\bullet$  Su use the shell of another user (substitute user identity)

exit to leave

• adduser – add the Linux user

#### Session and Shell

- logout gracefully close the connection
- exit terminate the current process
- ssh OpenSSH SSH client for remote logins

```
ssh -p2222 username@sandbox.dev – connect to sandbox.dev as the username on port 2222
```

• ssh-keygen -t rsa -C "user@example.com" - generate the SSH public and private key

## System

- man command read the manual for a command
- getent get entries from the name service switch libraries

```
getent group groupname – show the users in a group
```

apt-get remove package – remove a particular package

- ps aux report a snapshot of the currently running processes
- apt-get APT package handling utility

```
apt-get update - resynchronize the package indexes
apt-get upgrade - install the newest versions of all installed packages
apt-get install package - install a particular package
```

• mount – mount a file system

```
mount /dev/cdrom /media/cdrom - mount a CD-ROM drive to /media/cdrom
```

• service servicename start/stop/restart/reload - manage services, such as

```
apache2
mysql
sshd
mailcatcher
```

- reboot reboot the computer
- shutdown shut down the operating system

```
shutdown -h now
```

## **Apache**

- a2ensite/a2dissite enable/disable Apache2 sites
- a2enmod/a2dismod enable/disable Apache2 modules

#### **PHP**

- phpenmod/phpdismod enable/disable PHP modules
- phpquery get information on PHP module configuration

## MySQL

• mysql -uUSER -pPASSWORD DATABASE - connect to the MySQL database

#### Network

- wget URL download a file
- curl URL perform an HTTP request, including a download

#### **Directories**

- /dev device files
- /etc system configuration

```
/etc/apache2
/etc/mysql
/etc/php/7.0
/etc/ssh
```

- /home user home directories
- /media mount points/media/cdrom/media/sf\_sandbox
- /tmp temporary files
- /var variable data

/var/log – log files