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UT 10.1
LINUX: NETWORKING ACTIVITIES

Computer Systems
CFGS DAW

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Nomenclature

Throughout this unit different symbols will be used to distinguish important elements within the content. These symbols are:

 Importante

 Atención

 Interesante

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UD10. LINUX: NETWORKING

1. Exercise 1

You have to indicate which commands you must use to carry out the following instructions. If there is a command that is not in the Aules documentation, you have the task of looking for it

1. Display information for all network interfaces:

```
$ ip addr show
```

2. Display information for a specific network interface:

```
$ ip addr show eth0
```

3. Assign an IP address to a network interface:

```
$ sudo ip addr add 192.168.1.100/24 dev eth0
```

4. Remove an IP address from a network interface:

```
$ sudo ip addr del 192.168.1.100/24 dev eth0
```

5. Set a static route:

```
$ sudo ip route add default via 192.168.1.1
```

6. Show the current routes:

```
$ ip route show
```

7. Ping a host

```
$ ping www.google.com
```

8. Specify the number of packets to send:

```
$ ping -c 4 www.google.com
```

9. Specify the packet size:

```
$ ping -s 500 www.google.com
```

10. Perform a continuous ping:

```
$ ping www.google.com
```

11. Display detailed information for each packet:

```
$ ping -D www.google.com
```

2. Exercise 2

You have to indicate which commands you must use to carry out the following instructions. If there is a command that is not in the Aules documentation, you have the task of looking for it

1. Start an ssh session with a specific user and remote host:

```
$ ssh username@hostname
```

2. Specify a different port than the default (22):

```
$ ssh -p portnumber username@hostname
```

3. Start an ssh session with a private key:

```
$ ssh -i privatekeyfile username@hostname
```

4. Run a command on a remote server and exit immediately after:

```
$ ssh username@hostname command
```

3. Exercise 3

You have to indicate which commands you must use to carry out the following instructions. If there is a command that is not in the Aules documentation, you have the task of looking for it

1. Connect to a remote server:

```
$ sftp username@hostname
```

2. Download a file from the remote server:

```
sftp> get remote-file local-file
```

3. Load a file in the remote server:

```
sftp> put local-file remote-file
```

4. List the file in the remote folder:

```
sftp> ls
```

5. Navigate the remote folder “computer-systems-remote”:

```
sftp> cd computer-systems-remote
```

6. Exit the connection to the remote server:

```
sftp> exit
```