

## Firewall (firewalld - practical examples)

- The firewalld has multiple zone, to get a list of all zones

```
firewall-cmd --get-zones
```

- To get a list of active zones

```
firewall-cmd --get-active-zones
```

- To get firewall rules for public zone

```
firewall-cmd --zone=public --list-all
```

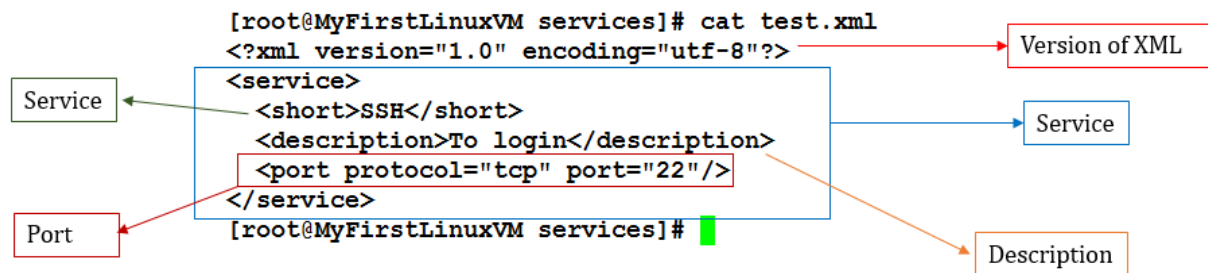
OR

```
firewall-cmd --list-all
```

- All services are pre-defined by firewalld. What if you want to add a 3<sup>rd</sup> party service

```
/usr/lib/firewalld/services/allservices.xml
```

Simply cp any .xml file and change the service and port number



- To add a service (http)

```
firewall-cmd --add-service=http
```

- To remove a service

```
firewall-cmd --remove-service=http
```

- To reload the firewalld configuration

```
firewall-cmd --reload
```

- To add or remove a service permanently

```
firewall-cmd --add-service=http --permanent
```

```
firewall-cmd --remove-service=http --permanent
```

- To add a service that is not pre-defined by firewalld

```
/usr/lib/firewalld/services/allservices.xml
```

Simply cp any .xml file SERVICENAME.xml and change the service and port number

```
systemctl restart firewalld
```

```
firewall-cmd --get-services (to verify new service)
```

```
firewall-cmd --add-service=SERVICENAME
```

- To add a port

```
firewall-cmd --add-port=1110/tcp
```

- To remove a port

```
firewall-cmd --remove-port=1110/tcp
```

- To reject incoming traffic from an IP address

```
firewall-cmd --add-rich-rule='rule family="ipv4" source address="192.168.0.25" reject'
```

- To block and unblock ICMP incoming traffic

```
firewall-cmd --add-icmp-block-inversion
```

```
firewall-cmd --remove-icmp-block-inversion
```

- To block outgoing traffic to a specific website/IP address

```
host -t a www.anywebsite.com = find IP address
```

```
firewall-cmd --direct --add-rule ipv4 filter OUTPUT 0 -d  
192.168.1.0 -j DROP
```