

Welcome Cyber#1

Reader: reader.codaisseur.com

Slack: codaisseur-school.slack.com

Discord: <https://discord.gg/qyehPh>

Linux firewall

IPtables





Main entrance
10.110.0.9



Exit -> internet
(10.110.0.9)

Main entrance
10.110.0.9

```
(kali㉿kali)-[~]
```

```
$ sudo iptables -L -v
```

```
Chain INPUT (policy ACCEPT 0 packets, 0 bytes)
```

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

```
Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
```

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

```
Chain OUTPUT (policy ACCEPT 0 packets, 0 bytes)
```

pkts	bytes	target	prot	opt	in	out	source	destination
------	-------	--------	------	-----	----	-----	--------	-------------

Chains...

- **Input**
- **Forward**
- **Output**

Input...

Incoming connections

Forward...

Like a router

Output...

**ntp
icmp,
http,
updates?**

Chain end...

```
(kali㉿kali)-[~]
└─$ sudo iptables -F -v
Chain INPUT (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target      prot opt in      out     source      destination

Chain FORWARD (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target      prot opt in      out     source      destination

Chain OUTPUT (policy ACCEPT 0 packets, 0 bytes)
pkts bytes target      prot opt in      out     source      destination
```

Chains end...

iptables --policy INPUT DROP

Chains end...

```
(kaliⓈkali)-[~]  
$ sudo iptables -L  
Chain INPUT (policy DROP)  
target      prot opt source
```

```
Chain FORWARD (policy ACCEPT)  
target      prot opt source
```

```
Chain OUTPUT (policy ACCEPT)  
target      prot opt source
```

destination

destination

destination


What? Rules?

Rules...

Chain **Source**

iptables -A INPUT -s 10.110.0.3 -j DROP

What to do



```
graph TD; Chain[Chain] --> INPUT[INPUT]; Source[Source] --> IP[10.110.0.3]; WhatToDo[What to do] --> Action[-j DROP];
```


Rules...

protocol

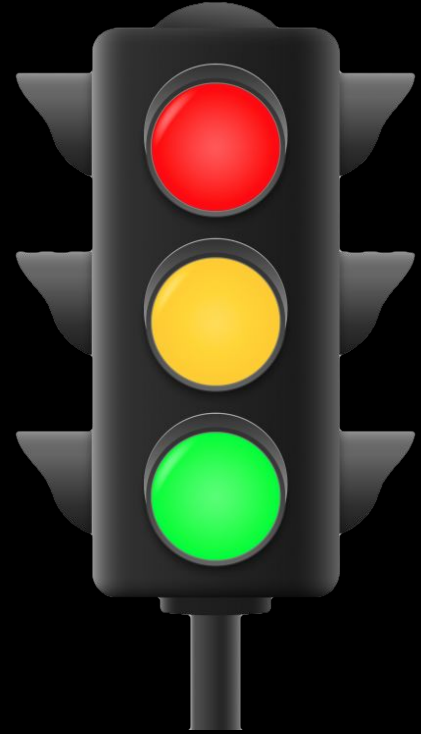
What port



iptables -A INPUT -p tcp --dport ssh -s 10.110.0.3 -j DROP

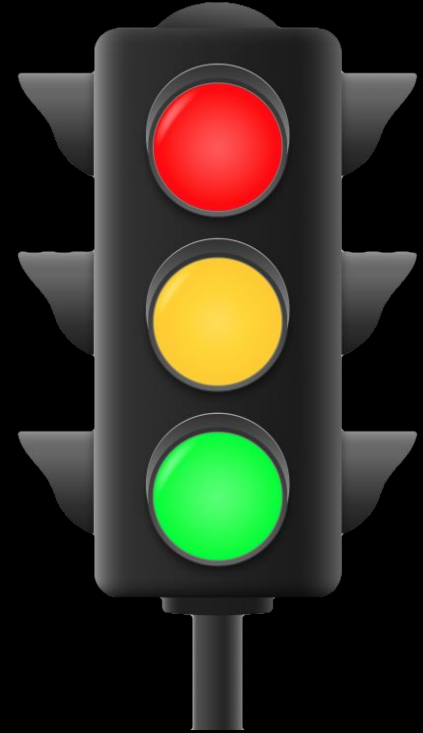
Careful...

SSH?



Careful...

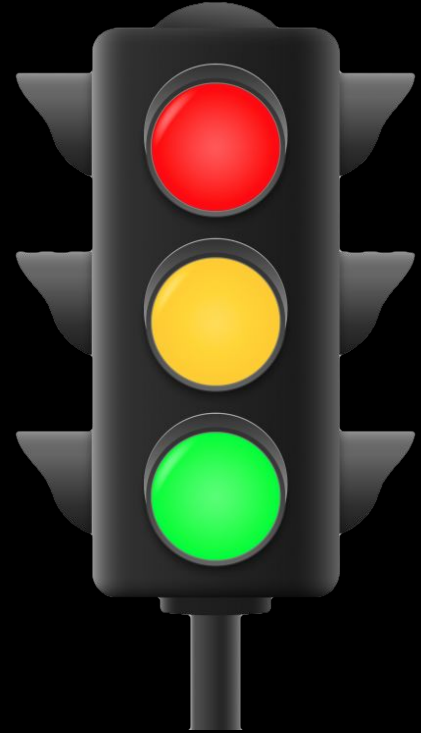
2-way traffic!



Careful...

SSH?

**Set to default
= 10 mins**



BREAK

Saving...

```
sudo sh -c "iptables-save >  
/etc/iptables.rules"
```

Saving...

```
sudo sh -c "iptables-apply <  
/etc/iptables.rules"
```

Saving...

```
sudo sh -c "iptables-restore <  
/etc/iptables.rules"
```

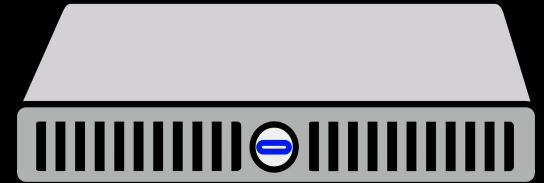
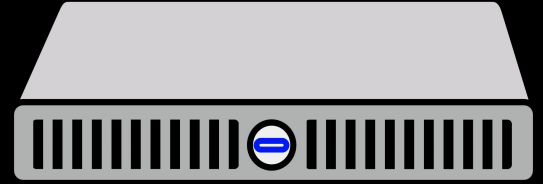

help...

<https://help.ubuntu.com/community/IptablesHowTo>

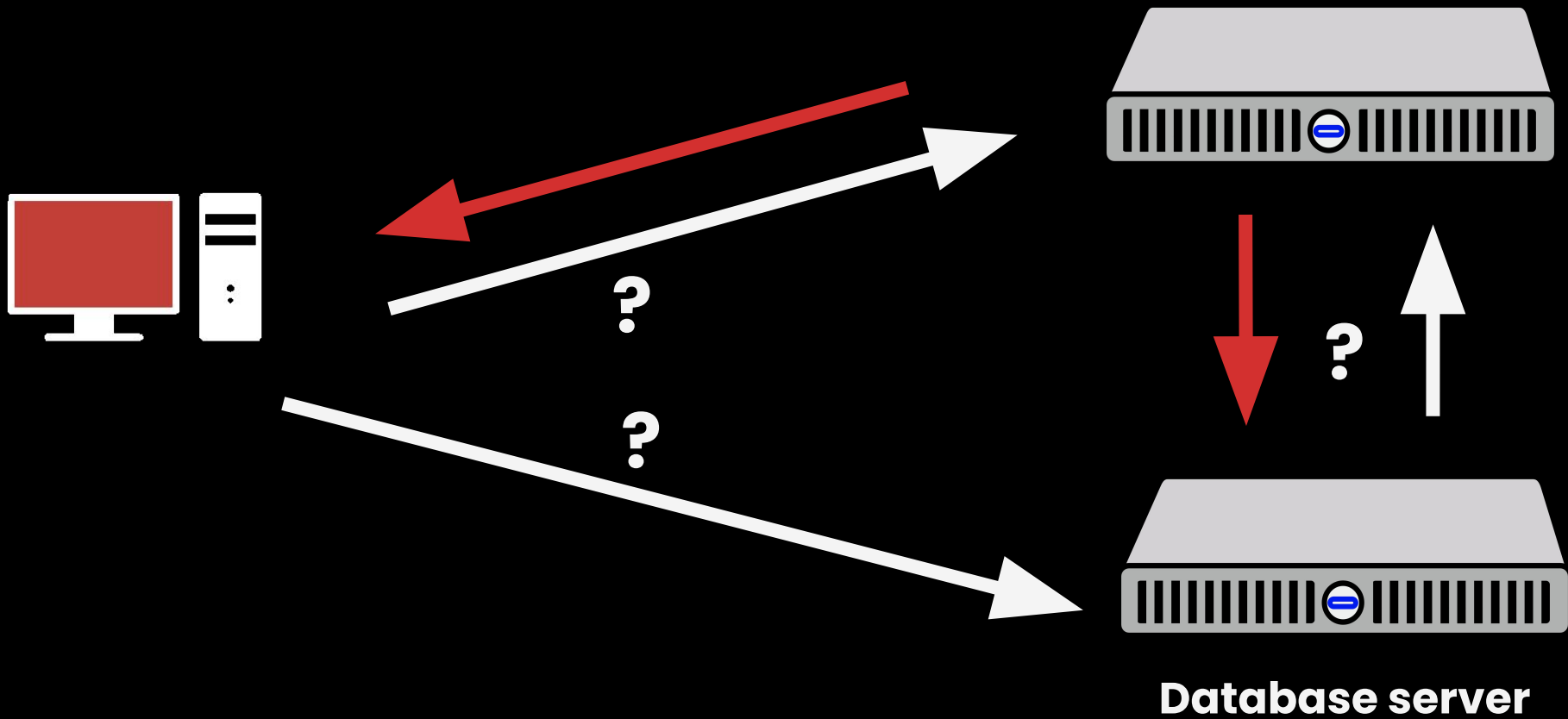
FUN!



2 servers...



Traffic...



Steps...

Phase 1: Planning

Phase 2: Execute

Phase 3: Test

Steps...

Phase 1: Planning → What traffic?

Phase 2: Execute → Implement!
→ SSH?

Phase 3: Test → Test-tEst-tesT

Teams...

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Shangram, Raj, Camilia

Yvonne, Prawesh, Ximena,
Tjitze, Bozana, **Filipe**

boxes...

alpha-web.codaisseur.academy
alpha-db.codaisseur.academy

beta-web.codaisseur.academy
beta-db.codaisseur.academy

