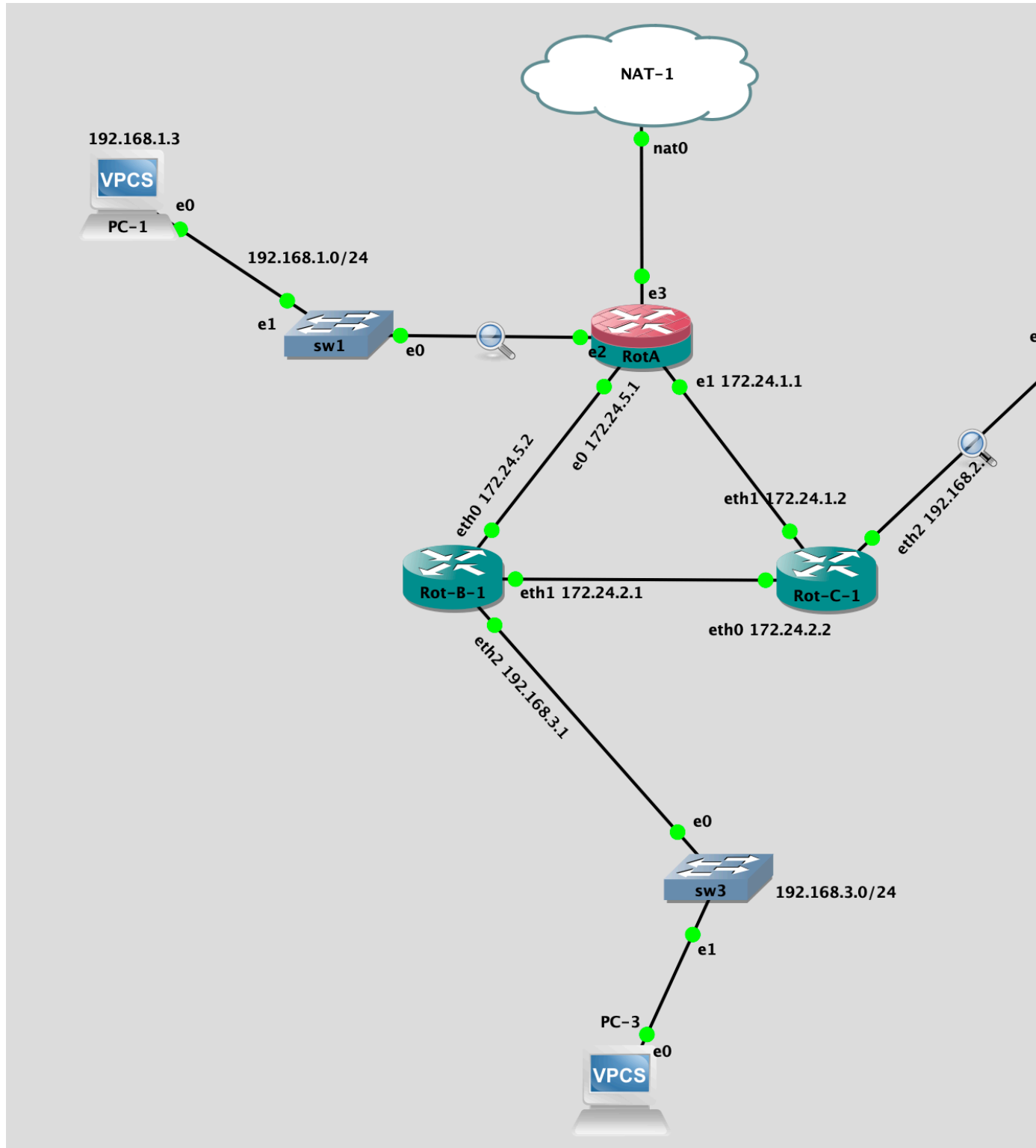


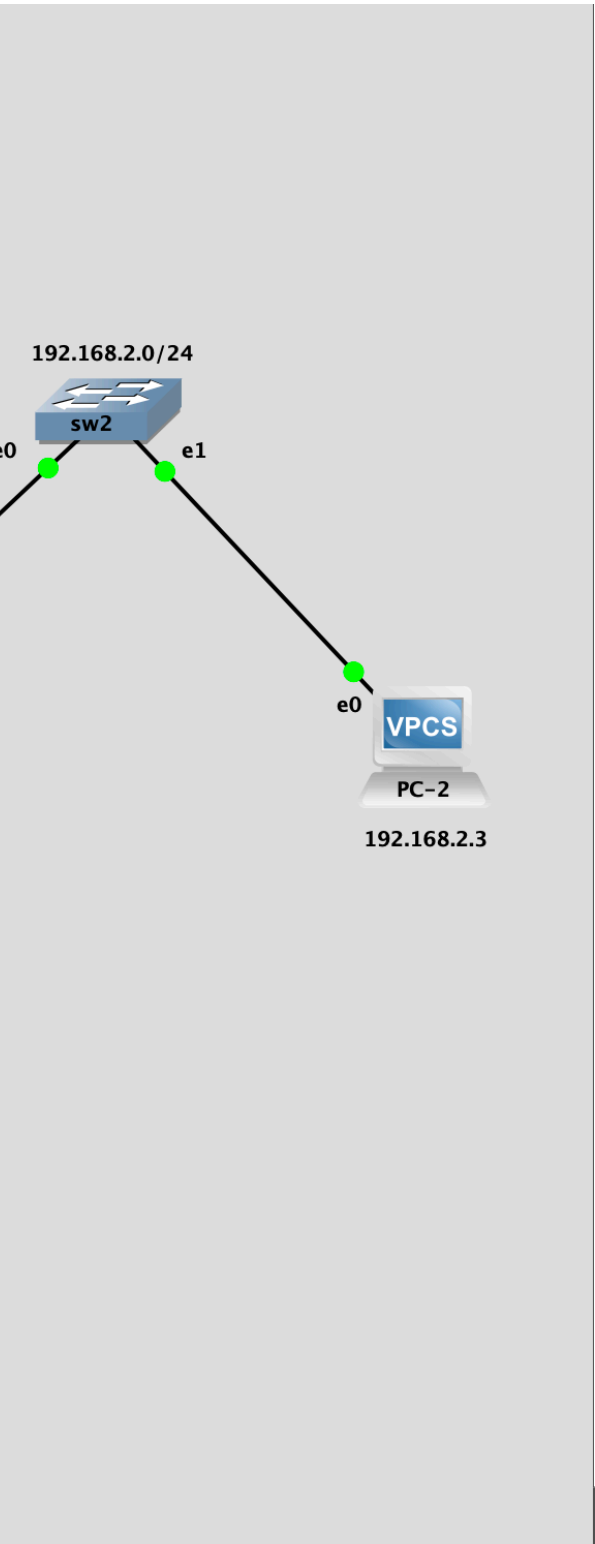
# LAB3 - OSPF

domingo, 8 de setembro de 2019

21:13



Configurações. ROTA:



Para ativar o protocolo OSPF:

```
#vim /etc/quagga/daemons
```

```
ospfd=yes
```

```
bgpd=no
```

```
#telnet localhost 2604
```

```
ROTA> enable
```

```
ROTA# configure terminal
```

```
ROTA(config)# log file /var/log/quagga/ospfd.log
```

```
ROTA(config)# router ospf
```

```
ROTA(config-router)# network 192.168.1.0/24
```

```
ROTA(config-router)# network 172.24.5.0/24
```

```
ROTA(config-router)# network 172.24.1.0/24
```

```
ROTA(config-router)# exit
```

```
ROTA(config)#do wr
```

```
ROTA(config)#q
```

ROT-B-1:

```
set protocol ospf parameter router-id 1.1.1.1
```

```
set protocol ospf area 0 network 1.1.1.1/32
```

```
set protocol ospf area 0 network 192.168.3.0/24
```

```
set protocol ospf area 0 network 172.24.5.0/24
```

```
set protocol ospf area 0 network 172.24.2.0/24
```

- area 0  
area 0  
area 0

```
set protocol ospf area 0 network 172.24.2.0/24
commit
save
Verificar:
run sh ip ospf route
```

```

[vyos@vyos# run sh ip ospf neigh
Neighbor ID Pri State Dead Time Address Interface
[3.3.3.3 1 Full/DR 36.701s 172.24.2.2 eth1
192.168.1.1 1 Full/DR 36.118s 172.24.5.1 eth0
[edit]
vyos@vyos# run sh ip ospf route
===== OSPF network routing table =====
N 172.24.1.0/24 [20] area: 0.0.0.0
via 172.24.2.2, eth1
via 172.24.5.1, eth0
N 172.24.2.0/24 [10] area: 0.0.0.0
[ directly attached to eth1
N 172.24.5.0/24 [10] area: 0.0.0.0
directly attached to eth0
N 192.168.1.0/24 [20] area: 0.0.0.0
via 172.24.5.1, eth0
N 192.168.2.0/24 [20] area: 0.0.0.0
via 172.24.2.2, eth1
N 192.168.3.0/24 [10] area: 0.0.0.0
directly attached to eth2

===== OSPF router routing table =====

===== OSPF external routing table =====

[edit]
vyos@vyos#
```

=====

7 5000 — 106×28

Interface	RXmtL	RqstL	DBsmL
:172.24.2.1	0	0	0
:172.24.5.2	0	0	0

=====

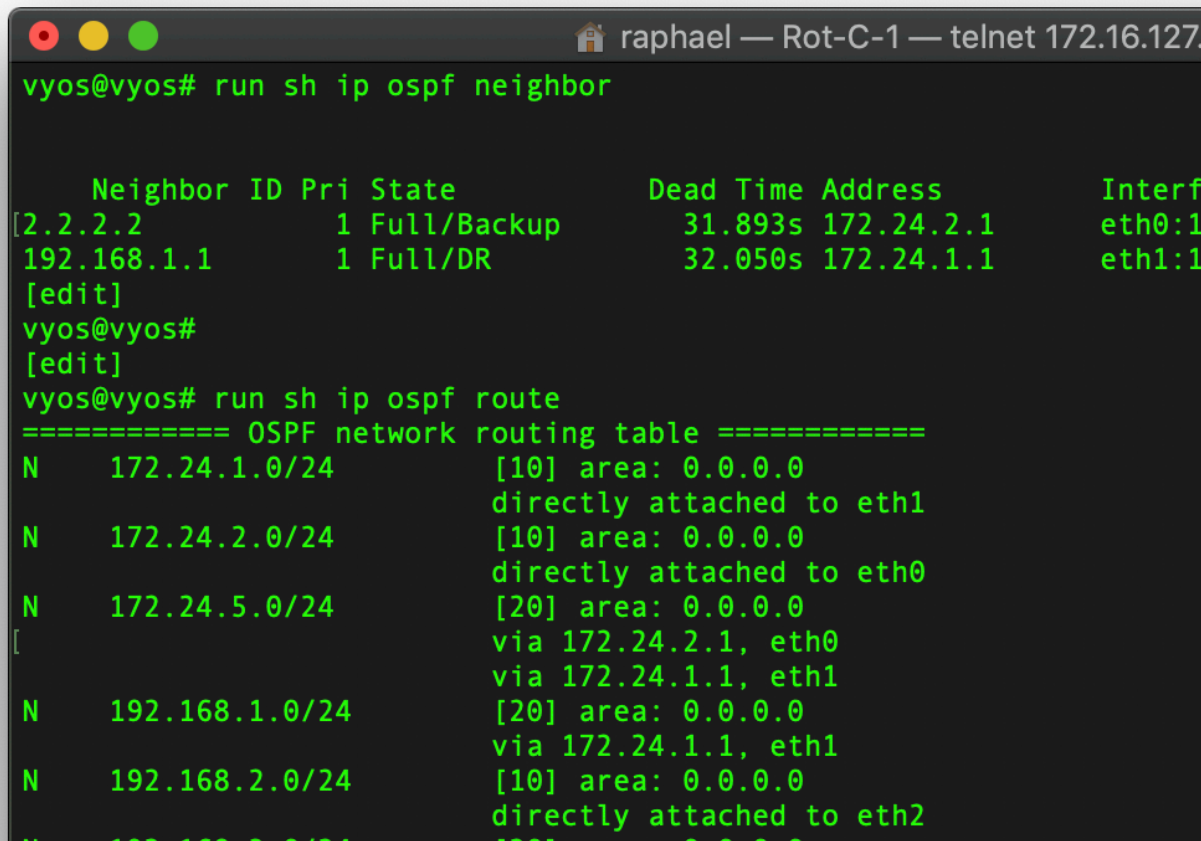
## ROT-C-1:

```
set protocol ospf parameter router-id 2.2.2.2
set protocol ospf area 0 network 2.2.2.2/32
set protocol ospf area 0 network 192.168.2.0/24
set protocol ospf area 0 network 172.24.1.0/24
set protocol ospf area 0 network 172.24.2.0/24
commit
```

save

Verificar:

```
run sh ip ospf route
```



```

    raphael — Rot-C-1 — telnet 172.16.127.1
vyos@vyos# run sh ip ospf neighbor

Neighbor ID Pri State          Dead Time Address      Interf
[2.2.2.2      1 Full/Backup 31.893s 172.24.2.1    eth0:1
192.168.1.1   1 Full/DR     32.050s 172.24.1.1    eth1:1
[edit]
vyos@vyos#
[edit]
vyos@vyos# run sh ip ospf route
===== OSPF network routing table =====
N    172.24.1.0/24      [10] area: 0.0.0.0
      directly attached to eth1
N    172.24.2.0/24      [10] area: 0.0.0.0
      directly attached to eth0
N    172.24.5.0/24      [20] area: 0.0.0.0
      via 172.24.2.1, eth0
      via 172.24.1.1, eth1
N    192.168.1.0/24     [20] area: 0.0.0.0
      via 172.24.1.1, eth1
N    192.168.2.0/24     [10] area: 0.0.0.0
      directly attached to eth2
N    192.168.3.0/24     [20] area: 0.0.0.0
      via 172.24.1.1, eth1
```

147 5002 — 115×31

ace	RXmtL	RqstL	DBsmL	
72.24.2.2	0	0	0	]
72.24.1.2	0	0	0	
				]



```

N 192.168.3.0/24 [20] area: 0.0.0.0
via 172.24.2.1, eth0

===== OSPF router routing table =====

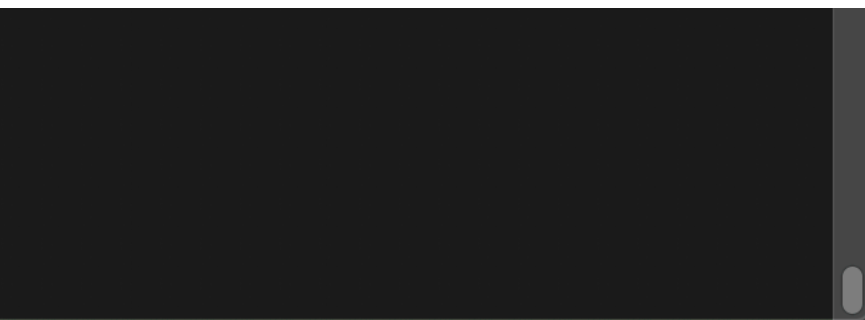
===== OSPF external routing table =====


[edit]
vyos@vyos# █

```

## Captura do PING:

Apply a display filter ... <⌘/>				
No.	Time	Source	Destination	Protocol
1	0.000000	192.168.1.1	224.0.0.5	OSPF
2	6.347349	192.168.2.3	192.168.1.3	ICMP
3	6.347441	192.168.1.3	192.168.2.3	ICMP
4	7.350821	192.168.2.3	192.168.1.3	ICMP
5	7.350877	192.168.1.3	192.168.2.3	ICMP
6	8.352988	192.168.2.3	192.168.1.3	ICMP
7	8.353033	192.168.1.3	192.168.2.3	ICMP
8	9.355190	192.168.2.3	192.168.1.3	ICMP
9	9.355249	192.168.1.3	192.168.2.3	ICMP
10	10.001358	192.168.1.1	224.0.0.5	OSPF
11	10.357345	192.168.2.3	192.168.1.3	ICMP
12	10.357396	192.168.1.3	192.168.2.3	ICMP
13	11.352379	Vmware_fd:69:a6	Private_66:68:00	ARP
14	11.352523	Private_66:68:00	Vmware_fd:69:a6	ARP
15	11.799189	172.16.123.1	172.16.123.255	UDP



				<input type="text" value="Expression..."/>		+		
Protocol	Length	Info						
PF	78	Hello Packet						
MP	98	Echo (ping) request	id=0x84ab, seq=1/256,					
MP	98	Echo (ping) reply	id=0x84ab, seq=1/256,					
MP	98	Echo (ping) request	id=0x85ab, seq=2/512,					
MP	98	Echo (ping) reply	id=0x85ab, seq=2/512,					
MP	98	Echo (ping) request	id=0x86ab, seq=3/768,					
MP	98	Echo (ping) reply	id=0x86ab, seq=3/768,					
MP	98	Echo (ping) request	id=0x87ab, seq=4/1024,					
MP	98	Echo (ping) reply	id=0x87ab, seq=4/1024,					
PF	78	Hello Packet						
MP	98	Echo (ping) request	id=0x88ab, seq=5/1280,					
MP	98	Echo (ping) reply	id=0x88ab, seq=5/1280,					
P	60	Who has 192.168.1.3? Tell 192.168.1.1						
P	60	192.168.1.3 is at 00:50:79:66:68:00						
P	86	57621 → 57621 Len=44						

- ▶ Frame 2: 98 bytes on wire (784 bits), 98 bytes captured (784 bits)
- ▶ Ethernet II, Src: Vmware\_fd:69:a6 (00:0c:29:fd:69:a6), Dst: Private
- ▶ Internet Protocol Version 4, Src: 192.168.2.3, Dst: 192.168.1.3
- ▶ Internet Control Message Protocol

0000	00 50 79 66 68 00 00 0c	29 fd 69 a6 08 00 45 00	·Pyfh···
0010	00 54 ab 84 00 00 3e 01	4c ce c0 a8 02 03 c0 a8	·T····>·
0020	01 03 08 00 9b 5f 84 ab	00 01 08 09 0a 0b 0c 0d	····_··
0030	0e 0f 10 11 12 13 14 15	16 17 18 19 1a 1b 1c 1d	·····
0040	1e 1f 20 21 22 23 24 25	26 27 28 29 2a 2b 2c 2d	·· !"#\$%
0050	2e 2f 30 31 32 33 34 35	36 37 38 39 3a 3b 3c 3d	·/012345
0060	3e 3f		>?



wireshark\_-\_20190908223142\_GLI7IT.pcapng

) on interface 0  
te\_66:68:00 (00:50:79:66:68:00)

) · i · · · E ·  
L · · · · ·  
· · · · ·  
· · · · ·  
&' ( ) \* + , -  
6789 : ; < =

● Packets: 15 · Displayed: 15 (100.0%) · Dropped: 0 (0.0%) ● Profile: Default