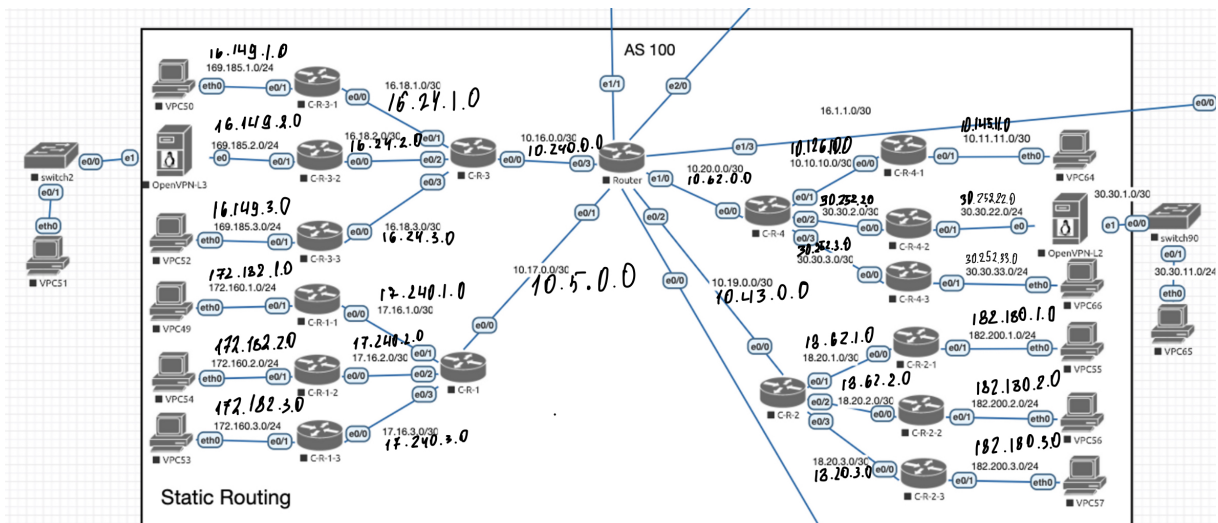




Практика 2, статическая маршрутизация



▼ Main-Router

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	trunk	trunk	trunk	-	-	-
E0/1	10.17.0.0/30	10.5.0.2/30	LMyslivets-C-R-1	255.255.255.252	4	2
E0/2	10.19.0.0/30	10.43.0.2/30	LMyslivets-C-R-2	255.255.255.252	4	2
E0/3	10.16.0.0/30	10.240.0.2/30	LMyslivets-C-R-3	255.255.255.252	4	2
E1/0	10.20.0.0/30	10.62.0.2/30	LMyslivets-C-R-4	255.255.255.252	4	2
E1/1	17.1.0/30	17.209.1.1/30	C-RIP-1 eBGP	255.255.255.252	4	2
E1/2	-	-	Useless-Int	-	-	-
E1/3	16.1.0/30	16.209.1.1/30	C-IBGP-102 eBGP	255.255.255.252	4	2
E2/0	14.1.0/30	14.209.1.1/30	M-OSPF-10 eBGP	255.255.255.252	4	2
E2/1	-	-	Useless-Int	-	-	-
E2/2	-	-	Useless-Int	-	-	-
E2/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t

int e0/1
descr "LMyslivets-C-R-1"
ip addr 10.5.0.2 255.255.255.252
no shutdown

```

```

int e0/2
descr "LMyslivets-C-R-2"
ip addr 10.43.0.2 255.255.255.252
no shutdown

int e0/3
descr "LMyslivets-C-R-3"
ip addr 10.240.0.2 255.255.255.252
no shutdown

int e1/0
descr "LMyslivets-C-R-4"
ip addr 10.62.0.2 255.255.255.252
no shutdown

int e1/1
descr "C-RIP-1 eBGP"
ip addr 17.209.1.1 255.255.255.252
no shutdown

int e1/3
descr "C-iBGP-102 eBGP"
ip addr 16.209.1.1 255.255.255.252
no shutdown

int e2/0
descr "M-OSPF-10 eBGP"
ip addr 14.209.1.1 255.255.255.252
no shutdown

end
write

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t
# C-R-1-1
ip route 17.240.1.0 255.255.255.252 10.5.0.1
# VPC-49
ip route 172.182.1.0 255.255.255.0 10.5.0.1
# C-R-1-2
ip route 17.240.2.0 255.255.255.252 10.5.0.1
# VPC-54
ip route 172.182.2.0 255.255.255.0 10.5.0.1
# C-R-1-3
ip route 17.240.3.0 255.255.255.252 10.5.0.1
# VPC-53
ip route 172.182.3.0 255.255.255.0 10.5.0.1

# C-R-2-1
ip route 18.62.1.0 255.255.255.252 10.43.0.1

```

```

# VPC-55
ip route 182.180.1.0 255.255.255.252 10.43.0.1
# C-R-2-2
ip route 18.62.2.0 255.255.255.252 10.43.0.1
# VPC-56
ip route 182.180.2.0 255.255.255.252 10.43.0.1
# C-R-2-3
ip route 18.62.3.0 255.255.255.252 10.43.0.1
# VPC-57
ip route 182.180.3.0 255.255.255.252 10.43.0.1

# C-R-3-1
ip route 16.24.1.0 255.255.255.252 10.240.0.1
# VPC-50
ip route 169.149.1.0 255.255.255.252 10.240.0.1
# C-R-3-2
ip route 16.24.2.0 255.255.255.252 10.240.0.1
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 10.240.0.1
# C-R-3-3
ip route 16.24.3.0 255.255.255.252 10.240.0.1
# VPC-52
ip route 169.149.3.0 255.255.255.252 10.240.0.1

# C-R-4-1
ip route 10.126.10.0 255.255.255.252 10.62.0.1
# VPC-64
ip route 10.145.11.0 255.255.255.252 10.62.0.1
# C-R-4-2
ip route 30.252.2.0 255.255.255.252 10.62.0.1
#Open-VPN-L2
ip route 30.252.22.0 255.255.255.252 10.62.0.1
# C-R-4-3
ip route 30.252.3.0 255.255.255.252 10.62.0.1
# VPC-66
ip route 30.252.33.0 255.255.255.252 10.62.0.1
end
write

```

▼ C-R-4

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	10.20.0.0/30	10.62.0.1/30	LMyslivets-Main-Router	255.255.255.252	4	2
E0/1	10.10.10.0/30	10.126.10.2/30	LMyslivets-C-R-4-1	255.255.255.252	4	2
E0/2	30.30.2.0/30	30.252.2.2/30	LMyslivets-C-R-4-2	255.255.255.252	4	2
E0/3	30.30.3.0/30	30.252.3.2/30	LMyslivets-C-R-4-3	255.255.255.252	4	2

▼ Конфиг

```

ena
conf t
hostname LMyshivets-C-R-4
int e0/0
descr "LMyshivets-Main-Router"
ip add 10.62.0.1 255.255.255.252
no shutdown

int e0/1
descr "LMyshivets-C-R-4-1"
ip add 10.126.10.2 255.255.255.252
no shutdown

int e0/2
descr "LMyshivets-C-R-4-2"
ip add 30.252.2.2 255.255.255.252
no shutdown

int e0/3
descr "LMyshivets-C-R-4-3"
ip add 30.252.3.2 255.255.255.252
no shutdown

end
write

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t
#VPC-64
ip route 10.145.11.0 255.255.255.252 10.126.10.1
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 30.252.2.1
#VPC-66
ip route 30.252.33.0 255.255.255.252 30.252.3.1

#C-R-1
ip route 10.5.0.0 255.255.255.252 10.62.0.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 10.62.0.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 10.62.0.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 10.62.0.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 10.62.0.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 10.62.0.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 10.62.0.2

#C-R-2

```

```

ip route 10.43.0.0 255.255.255.252 10.62.0.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 10.62.0.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 10.62.0.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 10.62.0.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 10.62.0.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 10.62.0.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 10.62.0.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 10.62.0.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 10.62.0.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 10.62.0.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 10.62.0.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 10.62.0.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 10.62.0.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 10.62.0.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 10.62.0.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 10.62.0.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 10.62.0.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 10.62.0.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 10.62.0.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 10.62.0.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 10.62.0.2

end
write

```

▼ C-R-4-1

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	10.10.10.0/30	10.126.10.1/30	LMyslivets-C-R-4	255.255.255.252	4	2
E0/1	10.11.11.0/30	10.145.11.2/30	LMyslivets-VPC-64	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-4-1
int e0/0
descr "LMyslivets-C-R-4"
ip addr 10.126.10.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-64"
ip addr 10.145.11.2 255.255.255.252
no shutdown

end
write

```

▼ VPC-64

```

ip 10.145.11.1 255.255.255.252 10.145.11.2
save

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t

#Main-Router
ip route 10.62.0.0 255.255.255.252 10.126.10.2

#C-R-4-2
ip route 30.252.2.0 255.255.255.252 10.126.10.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 10.126.10.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 10.126.10.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 10.126.10.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 10.126.10.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 10.126.10.2

```

```

#VPC-49
ip route 172.182.1.0 255.255.255.252 10.126.10.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 10.126.10.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 10.126.10.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 10.126.10.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 10.126.10.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 10.126.10.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 10.126.10.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 10.126.10.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 10.126.10.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 10.126.10.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 10.126.10.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 10.126.10.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 10.126.10.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 10.126.10.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 10.126.10.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 10.126.10.2
#OpenVPN-L3
ip route 169.149.2.0 255.255.255.252 10.126.10.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 10.126.10.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 10.126.10.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 10.126.10.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 10.126.10.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 10.126.10.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 10.126.10.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 10.126.10.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 10.126.10.2
#Vlan-70

```



```
ip route 10.190.70.0 255.255.255.0 10.126.10.2

end
write
```

▼ C-R-4-2

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	30.30.2.0/30	30.252.2.1/30	LMyslivets-C-R-4	255.255.255.252	4	2
E0/1	30.30.22.0/24	30.252.22.2/24	OpenVPN-L2	255.255.255.0	256	254
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```
en
conf t
hostname LMyslivets-C-R-4-2
int e0/0
descr "LMyslivets-C-R-4"
ip addr 30.252.2.1 255.255.255.252
no shutdown

int e0/1
descr "OpenVPN-L2"
ip addr 30.252.22.2 255.255.255.252
no shutdown

end
write
```

▼ OpenVPN-L2

```
nano /etc/network/interfaces
```

```
# The primary network interface
allow-hotplug ens3
iface ens3 inet static
address 30.252.22.1
netmask 255.255.255.252
network 30.252.22.0
broadcast 30.252.22.3
gateway 30.252.22.2
dns-nameserver 30.252.22.2
```

▼ Конфигурация маршрутизации между конечными узлами

```
en
conf t
```

```

#Main-Router
ip route 10.62.0.0 255.255.255.252 30.252.2.2

#C-R-4-1
ip route 10.126.10.0 255.255.255.252 30.252.2.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 30.252.2.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 30.252.2.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 30.252.3.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 30.252.2.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 30.252.2.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 30.252.2.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 30.252.2.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 30.252.2.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 30.252.2.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 30.252.2.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 30.252.2.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 30.252.2.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 30.252.2.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 30.252.2.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 30.252.2.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 30.252.2.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 30.252.2.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 30.252.2.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 30.252.2.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 30.252.2.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 30.252.2.2
#OpenVPN-L3
ip route 169.149.2.0 255.255.255.252 30.252.2.2
#C-R-3-3

```

```

ip route 16.24.3.0 255.255.255.252 30.252.2.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 30.252.2.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 30.252.2.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 30.252.2.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 30.252.2.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 30.252.2.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 30.252.2.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 30.252.2.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 30.252.2.2

end
write

```

▼ C-R-4-3

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	30.30.3.0/30	30.252.3.1/30	LMyslivets-C-R-4	255.255.255.252	4	2
E0/1	30.30.33.0/30	30.252.33.2/30	LMyslivets-VPC-66	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-4-3
int e0/0
descr "LMyslivets-C-R-4"
ip addr 30.252.3.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-66"
ip addr 30.252.33.2 255.255.255.252
no shutdown

end
write

```

▼ VPC-66

```
ip 30.252.33.1 255.255.255.252 30.252.33.2
save
```

▼ Конфигурация маршрутизации между конечными узлами

```
en
conf t

#Main-Router
ip route 10.62.0.0 255.255.255.252 30.252.3.2

#C-R-4-1
ip route 10.126.10.0 255.255.255.252 30.252.3.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 30.252.3.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 30.252.3.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 30.252.3.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 30.252.3.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 30.252.3.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 30.252.3.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 30.252.3.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 30.252.3.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 30.252.3.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 30.252.3.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 30.252.3.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 30.252.3.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 30.252.3.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 30.252.3.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 30.252.3.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 30.252.3.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 30.252.3.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 30.252.3.2
```

```

#C-R-3-1
ip route 16.24.1.0 255.255.255.252 30.252.3.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 30.252.3.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 30.252.3.2
#OpenVPN-L3
ip route 169.149.2.0 255.255.255.252 30.252.3.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 30.252.3.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 30.252.3.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 30.252.3.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 30.252.3.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 30.252.3.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 30.252.3.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 30.252.3.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 30.252.3.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 30.252.3.2

end
write

```

▼ C-R-3

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	10.16.0.0/30	10.240.0.1/30	LMyslivets-Main-Router	255.255.255.252	4	2
E0/1	16.18.1.0/30	16.24.1.2/30	OpenVPN-L3	255.255.255.252	4	2
E0/2	16.18.2.0/30	16.24.2.2/30	LMyslivets-C-R-3-1	255.255.255.252	4	2
E0/3	16.18.3.0/30	16.24.3.2/30	LMyslivets-C-R-3-1	255.255.255.252	4	2

▼ Конфиг

```

ena
conf t
hostname LMyslivets-C-R-3

int e0/0
descr "LMyslivets-Main-Router"
ip add 10.240.0.1 255.255.255.252

```

```

no shutdown

int e0/1
descr "LMyslivets-C-R-3-1"
ip add 16.24.1.2 255.255.255.252
no shutdown

int e0/2
descr "LMyslivets-C-R-3-2"
ip add 16.24.2.2 255.255.255.252
no shutdown

int e0/3
descr "LMyslivets-C-R-3-3"
ip add 16.24.3.2 255.255.255.252
no shutdown

end
write

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t
#VPC-50
ip route 169.149.1.0 255.255.255.252 16.24.1.1
#OpenVPN-L3
ip route 169.149.2.0 255.255.255.252 16.24.2.1
#VPC-52
ip route 169.149.3.0 255.255.255.252 16.24.3.1

#C-R-1
ip route 10.5.0.0 255.255.255.252 10.240.0.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 10.240.0.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 10.240.0.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 10.240.0.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 10.240.0.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 10.240.0.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 10.240.0.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 10.240.0.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 10.240.0.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 10.240.0.2
#C-R-2-2

```

```

ip route 18.62.2.0 255.255.255.252 10.240.0.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 10.240.0.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 10.240.0.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 10.240.0.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 10.240.0.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 10.240.0.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 10.240.0.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 10.240.0.2
#Open-VPN-L2
ip route 30.252.22.0 255.255.255.252 10.240.0.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 10.240.0.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 10.240.0.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 10.240.0.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 10.240.0.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 10.240.0.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 10.240.0.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 10.240.0.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 10.240.0.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 10.240.0.2

end
wr

```

▼ C-R-3-1

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	16.18.1.0/30	16.24.1.1/30	LMyslivets-C-R-3	255.255.255.252	4	2
E0/1	169.185.1.0/30	169.149.1.2/30	LMyslivets-VPC-50	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```
en
conf t
hostname LMyshivets-C-R-3-1
int e0/0
descr "LMyshivets-C-R-3"
ip addr 16.24.1.1 255.255.255.252
no shutdown

int e0/1
descr "LMyshivets-VPC-50"
ip addr 169.149.1.2 255.255.255.252
no shutdown

end
write
```

▼ VPC-50

```
ip 169.149.1.1 255.255.255.252 169.149.1.2
save
```

▼ Конфигурация маршрутизации между конечными узлами

```
en
conf t

#Main-Router
ip route 10.240.0.0 255.255.255.252 16.24.1.2

#C-R-3-2
ip route 16.24.2.0 255.255.255.252 16.24.1.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 16.24.1.2
#OpenVPN-L3
ip route 169.149.2.0 255.255.255.252 16.24.1.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 16.24.1.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 16.24.1.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 16.24.1.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 16.24.1.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 16.24.1.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 16.24.1.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 16.24.1.2
#VPC-53
```



```

ip route 172.182.3.0 255.255.255.252 16.24.1.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 16.24.1.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 16.24.1.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 16.24.1.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 16.24.1.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 16.24.1.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 16.24.1.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 16.24.1.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 16.24.1.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 16.24.1.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 16.24.1.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 16.24.1.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 16.24.1.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 16.24.1.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 16.24.1.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 16.24.1.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 16.24.1.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 16.24.1.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 16.24.1.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 16.24.1.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 16.24.1.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 16.24.1.2

end
write

```

▼ C-R-3-2

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	16.18.2.0/30	16.24.2.1/30	LMyslivets-C-R-3	255.255.255.252	4	2
E0/1	169.185.2.0/30	169.149.2.2/30	OpenVPN-L3	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-3-2
int e0/0
descr "LMyslivets-C-R-3"
ip addr 16.24.2.1 255.255.255.252
no shutdown

int e0/1
descr "OpenVPN-L3"
ip addr 169.149.2.2 255.255.255.252
no shutdown

end
write

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t

#Main-Router
ip route 10.240.0.0 255.255.255.252 16.24.2.2

#C-R-3-1
ip route 16.24.1.0 255.255.255.252 16.24.2.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 16.24.2.2
#VPV-50
ip route 169.149.1.0 255.255.255.252 16.24.2.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 16.24.2.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 16.24.2.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 16.24.2.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 16.24.2.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 16.24.2.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 16.24.2.2

```

```

#C-R-1-3
ip route 17.240.3.0 255.255.255.252 16.24.2.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 16.24.2.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 16.24.2.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 16.24.2.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 16.24.2.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 16.24.2.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 16.24.2.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 16.24.2.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 16.24.2.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 16.24.2.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 16.24.2.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 16.24.2.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 16.24.2.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 16.24.2.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 16.24.2.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 16.24.2.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 16.24.2.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 16.24.2.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 16.24.2.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 16.24.2.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 16.24.2.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 16.24.2.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 16.24.2.2

end
write

```

▼ OpenVPN-L3

```
nano /etc/network/interfaces
```

```
# The primary network interface
allow-hotplug ens3
iface ens3 inet static
address 169.149.2.1
netmask 255.255.255.252
network 169.149.2.0
broadcast 169.149.2.3
gateway 169.149.2.2
dns-servername 169.149.2.2
```

▼ C-R-3-3

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	16.18.3.0/30	16.24.3.1/30	LMyslivets-C-R-3	255.255.255.252	4	2
E0/1	169.185.3.0/30	169.149.3.2/30	LMyslivets-VPC-52	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```
en
conf t
hostname LMyslivets-C-R-3-3
int e0/0
descr "LMyslivets-C-R-3"
ip addr 16.24.3.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-52"
ip addr 169.149.3.2 255.255.255.252
no shutdown

end
write
```

▼ Конфигурация между конечными узлами

```
en
conf t

#Main-Router
ip route 10.240.0.0 255.255.255.252 16.24.3.2

#C-R-3-1
ip route 16.24.1.0 255.255.255.252 16.24.3.2
```

```

#VPV-50
ip route 169.149.1.0 255.255.255.252 16.24.3.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 16.24.3.2
#OpenVPN-L3
ip route 169.149.2.0 255.255.255.252 16.24.3.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 16.24.3.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 16.24.3.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 16.24.3.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 16.24.3.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 16.24.3.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 16.24.3.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 16.24.3.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 16.24.3.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 16.24.3.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 16.24.3.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 16.24.3.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 16.24.3.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 16.24.3.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 16.24.3.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 16.24.3.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 16.24.3.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 16.24.3.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 16.24.3.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 16.24.3.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 16.24.3.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 16.24.3.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 16.24.3.2

```

```
#Vlan-20
ip route 10.190.20.0 255.255.255.0 16.24.3.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 16.24.3.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 16.24.3.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 16.24.3.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 16.24.3.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 16.24.3.2

end
write
```

▼ VPC-52

```
ip 169.149.3.1 255.255.255.252 169.149.3.2
save
```

▼ C-R-2

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	10.19.0.0/30	10.43.0.1/30	LMyslivets-Main-Router	255.255.255.252	4	2
E0/1	18.20.1.0/30	18.62.1.2/30	LMyslivets-C-R-2-1	255.255.255.252	4	2
E0/2	18.20.2.0/30	18.62.2.2/30	LMyslivets-C-R-2-2	255.255.255.252	4	2
E0/3	18.20.3.0/30	18.62.3.2/30	LMyslivets-C-R-2-3	255.255.255.252	4	2

▼ Конфиг

```
ena
conf t
hostname LMyslivets-C-R-2

int e0/0
descr "LMyslivets-Main-Router"
ip add 10.43.0.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-C-R-2-1"
ip add 18.62.1.2 255.255.255.252
no shutdown

int e0/2
```

```

descr "LMyslivets-C-R-2-2"
ip add 18.62.2.2 255.255.255.252
no shutdown

int e0/3
descr "LMyslivets-C-R-2-3"
ip add 18.62.3.2 255.255.255.252
no shutdown

end
write

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t
#VPC-55
ip route 182.180.1.0 255.255.255.252 18.62.1.1
#VPC-56
ip route 182.180.2.0 255.255.255.252 18.62.2.1
#VPC-57
ip route 182.180.3.0 255.255.255.252 18.62.3.1

#C-R-1
ip route 10.5.0.0 255.255.255.252 10.43.0.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 10.43.0.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 10.43.0.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 10.43.0.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 10.43.0.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 10.43.0.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 10.43.0.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 10.43.0.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 10.43.0.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 10.43.0.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 10.43.0.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 10.43.0.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 10.43.0.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 10.43.0.2

```

```

#C-R-4
ip route 10.62.0.0 255.255.255.252 10.43.0.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 10.43.0.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 10.43.0.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 10.43.0.2
#Open-VPN-L2
ip route 30.252.22.0 255.255.255.252 10.43.0.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 10.43.0.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 10.43.0.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 10.43.0.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 10.43.0.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 10.43.0.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 10.43.0.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 10.43.0.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 10.43.0.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 10.43.0.2

end
write

```

▼ C-R-2-1

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	18.20.1.0/30	18.62.1.1/30	LMyslivets-C-R-2	255.255.255.252	4	2
E0/1	182.200.1.0/30	182.180.1.2/30	LMyslivets-VPC-55	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-2-1
int e0/0
descr "LMyslivets-C-R-2"

```



```

ip addr 18.62.1.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-55"
ip addr 182.180.1.2 255.255.255.252
no shutdown

end
write

```

▼ VPC-55

```

ip 182.180.1.1 255.255.255.252 182.180.1.2
save

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t

#Main-Router
ip route 10.43.0.0 255.255.255.252 18.62.1.2

#C-R-2-2
ip route 18.62.2.0 255.255.255.252 18.62.1.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 18.62.1.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 18.62.1.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 18.62.1.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 18.62.1.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 18.62.1.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 18.62.1.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 18.62.1.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 18.62.1.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 18.62.1.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 18.62.1.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 18.62.1.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 18.62.1.2
#VPC-50

```

```

ip route 169.149.1.0 255.255.255.252 18.62.1.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 18.62.1.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 18.62.1.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 18.62.1.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 18.62.1.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 18.62.1.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 18.62.1.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 18.62.1.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 18.62.1.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 18.62.1.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 18.62.1.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 18.62.1.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 18.62.1.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 18.62.1.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 18.62.1.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 18.62.1.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 18.62.1.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 18.62.1.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 18.62.1.2

end
write

```

▼ C-R-2-2

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	18.20.2.0/30	18.62.2.1/30	LMyslivets-C-R-2	255.255.255.252	4	2
E0/1	182.200.2.0/30	182.180.2.2/30	LMyslivets-VPC-56	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyshivets-C-R-2-2
int e0/0
descr "LMyshivets-C-R-2"
ip addr 18.62.2.1 255.255.255.252
no shutdown

int e0/1
descr "LMyshivets-VPC-56"
ip addr 182.180.2.2 255.255.255.252
no shutdown

end
write

```

▼ VPC-56

```

ip 182.180.2.1 255.255.255.252 182.180.2.2
save

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t

#Main-Router
ip route 10.43.0.0 255.255.255.252 18.62.2.2

#C-R-2-1
ip route 18.62.1.0 255.255.255.252 18.62.2.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 18.62.2.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 18.62.2.2
#VPC-57
ip route 16.180.3.0 255.255.255.252 18.62.2.2

#C-R-1
ip route 10.5.0.0 255.255.255.252 18.62.2.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 18.62.2.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 18.62.2.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 18.62.2.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 18.62.2.2

```

```

#C-R-1-3
ip route 17.240.3.0 255.255.255.252 18.62.2.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 18.62.2.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 18.62.2.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 18.62.2.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 18.62.2.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 18.62.2.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 18.62.2.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 18.62.2.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 18.62.2.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 18.62.2.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 18.62.2.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 18.62.2.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 18.62.2.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 18.62.2.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 18.62.2.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 18.62.2.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 18.62.2.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 18.62.2.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 18.62.2.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 18.62.2.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 18.62.2.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 18.62.2.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 18.62.2.2

end
write

```

▼ C-R-2-3

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	18.20.3.0/30	18.62.3.1/30	LMyslivets-C-R-2	255.255.255.252	4	2
E0/1	182.200.3.0/30	182.180.3.2/30	LMyslivets-VPC-57	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-2-3
int e0/0
descr "LMyslivets-C-R-2"
ip addr 18.62.3.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-57"
ip addr 182.180.3.2 255.255.255.252
no shutdown

end
write

```

▼ VPC-57

```

ip 182.180.3.1 255.255.255.252 182.180.3.2
save

```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t

#Main-Router
ip route 10.43.0.0 255.255.255.252 18.62.3.2

#C-R-2-1
ip route 18.62.1.0 255.255.255.252 18.62.3.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 18.62.3.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 18.62.3.2
#VPC-56
ip route 16.180.2.0 255.255.255.252 18.62.3.2

#C-R-1

```

```

ip route 10.5.0.0 255.255.255.252 18.62.3.2
#C-R-1-1
ip route 17.240.1.0 255.255.255.252 18.62.3.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 18.62.3.2
#C-R-1-2
ip route 17.240.2.0 255.255.255.252 18.62.3.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 18.62.3.2
#C-R-1-3
ip route 17.240.3.0 255.255.255.252 18.62.3.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 18.62.3.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 18.62.3.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 18.62.3.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 18.62.3.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 18.62.3.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 18.62.3.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 18.62.3.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 18.62.3.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 18.62.3.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 18.62.3.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 18.62.3.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 18.62.3.2
#OpenVPN-L2
ip route 30.252.22.0 255.255.255.252 18.62.3.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 18.62.3.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 18.62.3.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 18.62.3.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 18.62.3.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 18.62.3.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 18.62.3.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 18.62.3.2

```

```
#Vlan-60
ip route 10.190.60.0 255.255.255.0 18.62.3.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 18.62.3.2
end
write
```

▼ C-R-1

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	10.17.0.0/30	10.5.0.1/30	LMyslivets-Main-Router	255.255.255.252	4	2
E0/1	17.16.1.0/30	17.240.1.2/30	LMyslivets-C-R-1-1	255.255.255.252	4	2
E0/2	17.16.2.0/30	17.240.2.2/30	LMyslivets-C-R-1-1	255.255.255.252	4	2
E0/3	17.16.3.0/30	17.240.3.2/30	LMyslivets-C-R-1-1	255.255.255.252	4	2

▼ Конфиг

```
ena
conf t
hostname LMyslivets-C-R-1

int e0/0
descr "LMyslivets-Main-Router"
ip add 10.5.0.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-C-R-1-1"
ip add 17.240.1.2 255.255.255.252
no shutdown

int e0/2
descr "LMyslivets-C-R-1-2"
ip add 17.240.2.2 255.255.255.252
no shutdown

int e0/3
descr "LMyslivets-C-R-1-3"
ip add 17.240.3.2 255.255.255.252
no shutdown

end
write
```

▼ Конфигурация маршрутизации между конечными узлами

```
en
conf t
```

```

#VPC-49
ip route 172.182.1.0 255.255.255.252 17.240.1.1
#VPC-54
ip route 172.182.2.0 255.255.255.252 17.240.2.1
#VPC-53
ip route 172.182.3.0 255.255.255.252 17.240.3.1

#C-R-2
ip route 10.43.0.0 255.255.255.252 10.5.0.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 10.5.0.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 10.5.0.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 10.5.0.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 10.5.0.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 10.5.0.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 10.5.0.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 10.5.0.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 10.5.0.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 10.5.0.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 10.5.0.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 10.5.0.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 10.5.0.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 10.5.0.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 10.5.0.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 10.5.0.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 10.5.0.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 10.5.0.2
#Open-VPN-L2
ip route 30.252.22.0 255.255.255.252 10.5.0.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 10.5.0.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 10.5.0.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 10.5.0.2

```



```
#Vlan-20
ip route 10.190.20.0 255.255.255.0 10.5.0.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 10.5.0.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 10.5.0.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 10.5.0.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 10.5.0.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 10.5.0.2
end
write
```

▼ C-R-1-1

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	17.16.1.0/30	17.240.1.1/30	LMyslivets-C-R-1	255.255.255.252	4	2
E0/1	172.160.1.0/30	172.182.1.2/30	LMyslivets-VPC-49	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```
en
conf t
hostname LMyslivets-C-R-1-1
int e0/0
descr "LMyslivets-C-R-1"
ip addr 17.240.1.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-49"
ip addr 172.182.1.2 255.255.255.252
no shutdown

end
write
```

▼ VPC-49

```
ip 172.182.1.1 255.255.255.252 172.182.1.2
save
```

▼ Конфигурация маршрутизации между конечными узлами

```

en
conf t
#Main-Router
ip route 10.5.0.0 255.255.255.252 17.240.1.2

#C-R-1-2
ip route 172.240.2.0 255.255.255.252 17.240.1.2
#C-R-1-3
ip route 172.240.3.0 255.255.255.252 17.240.1.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 17.240.1.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 17.240.1.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 17.240.1.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 17.240.1.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 17.240.1.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 17.240.1.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 17.240.1.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 17.240.1.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 17.240.1.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 17.240.1.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 17.240.1.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 17.240.1.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 17.240.1.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 17.240.1.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 17.240.1.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 17.240.1.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 17.240.1.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 17.240.1.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 17.240.1.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 17.240.1.2
#Open-VPN-L2

```

```

ip route 30.252.22.0 255.255.255.252 17.240.1.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 17.240.1.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 17.240.1.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 17.240.1.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 17.240.1.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 17.240.1.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 17.240.1.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 17.240.1.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 17.240.1.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 17.240.1.2

end
write

```

▼ C-R-1-2

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	17.16.2.0/30	17.240.2.1/30	LMyslivets-C-R-1	255.255.255.252	4	2
E0/1	172.160.2.0/30	172.182.2.2/30	LMyslivets-VPC-54	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-1-2
int e0/0
descr "LMyslivets-C-R-2"
ip addr 17.240.2.1 255.255.255.252
no shutdown

int e0/1
descr "LMyslivets-VPC-54"
ip addr 172.182.2.2 255.255.255.252
no shutdown

end
write

```

▼ VPC-54

```
ip 172.182.2.1 255.255.255.252 172.182.2.2
save
```

▼ Конфигурация маршрутизации между конечными узлами

```
en
conf t
#Main-Router
ip route 10.5.0.0 255.255.255.252 17.240.2.2

#C-R-1-1
ip route 172.240.1.0 255.255.255.252 17.240.2.2
#C-R-1-3
ip route 172.240.3.0 255.255.255.252 17.240.2.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 17.240.2.2
#VPC-53
ip route 172.182.3.0 255.255.255.252 17.240.2.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 17.240.2.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 17.240.2.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 17.240.2.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 17.240.2.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 17.240.2.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 17.240.2.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 17.240.2.2

#C-R-3
ip route 10.240.0.0 255.255.255.252 17.240.2.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 17.240.2.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 17.240.2.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 17.240.2.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 17.240.2.2
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 17.240.2.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 17.240.2.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 17.240.2.2
```

```

#C-R-4-1
ip route 10.126.10.0 255.255.255.252 17.240.2.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 17.240.2.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 17.240.2.2
#Open-VPN-L2
ip route 30.252.22.0 255.255.255.252 17.240.2.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 17.240.2.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 17.240.2.2
#Vlan-10
ip route 10.190.10.0 255.255.255.0 17.240.2.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 17.240.2.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 17.240.2.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 17.240.2.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 17.240.2.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 17.240.2.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 17.240.2.2

end
write

```

▼ C-R-1-3

▼ Таблица

Интерфейс	Шаблонный IP	IP	Описания	Маска	Количество адресов	Количество хостов
E0/0	17.16.3.0/30	17.240.3.1/30	LMyslivets-C-R-1	255.255.255.252	4	2
E0/1	172.160.3.0/30	172.182.3.2/30	LMyslivets-VPC-53	255.255.255.252	4	2
E0/2	-	-	Useless-Int	-	-	-
E0/3	-	-	Useless-Int	-	-	-

▼ Конфиг

```

en
conf t
hostname LMyslivets-C-R-1-3
int e0/0
descr "LMyslivets-C-R-2"
ip addr 17.240.3.1 255.255.255.252
no shutdown

int e0/1

```

```
descr "LMyslivets-VPC-53"
ip addr 172.182.3.2 255.255.255.252
no shutdown

end
write
```

▼ VPC-53

```
ip 172.182.3.1 255.255.255.252 172.182.3.2
save
```

▼ Конфигурация маршрутизации между конечными узлами

```
en
conf t
#Main-Router
ip route 10.5.0.0 255.255.255.252 17.240.3.2

#C-R-1-1
ip route 172.240.1.0 255.255.255.252 17.240.3.2
#C-R-1-2
ip route 172.240.2.0 255.255.255.252 17.240.3.2
#VPC-49
ip route 172.182.1.0 255.255.255.252 17.240.3.2
#VPC-54
ip route 172.182.2.0 255.255.255.252 17.240.3.2

#C-R-2
ip route 10.43.0.0 255.255.255.252 17.240.3.2
#C-R-2-1
ip route 18.62.1.0 255.255.255.252 17.240.3.2
#VPC-55
ip route 182.180.1.0 255.255.255.252 17.240.3.2
#C-R-2-2
ip route 18.62.2.0 255.255.255.252 17.240.3.2
#VPC-56
ip route 182.180.2.0 255.255.255.252 17.240.3.2
#C-R-2-3
ip route 18.62.3.0 255.255.255.252 17.240.3.2
#VPC-57
ip route 182.180.3.0 255.255.255.252 17.240.3.2


#C-R-3
ip route 10.240.0.0 255.255.255.252 17.240.3.2
#C-R-3-1
ip route 16.24.1.0 255.255.255.252 17.240.3.2
#VPC-50
ip route 169.149.1.0 255.255.255.252 17.240.3.2
#C-R-3-2
ip route 16.24.2.0 255.255.255.252 17.240.3.2
#Open-VPN-L3
ip route 169.149.2.0 255.255.255.252 17.240.3.2
```

```
#C-R-3-3
ip route 16.24.3.0 255.255.255.252 17.240.3.2
#VPC-52
ip route 169.149.3.0 255.255.255.252 17.240.3.2

#C-R-4
ip route 10.62.0.0 255.255.255.252 17.240.3.2
#C-R-4-1
ip route 10.126.10.0 255.255.255.252 17.240.3.2
#VPC-64
ip route 10.145.11.0 255.255.255.252 17.240.3.2
#C-R-4-2
ip route 30.252.2.0 255.255.255.252 17.240.3.2
#Open-VPN-L2
ip route 30.252.22.0 255.255.255.252 17.240.3.2
#C-R-4-3
ip route 30.252.3.0 255.255.255.252 17.240.3.2
#VPC-66
ip route 30.252.33.0 255.255.255.252 17.240.3.2

#Vlan-10
ip route 10.190.10.0 255.255.255.0 17.240.3.2
#Vlan-20
ip route 10.190.20.0 255.255.255.0 17.240.3.2
#Vlan-30
ip route 10.190.30.0 255.255.255.0 17.240.3.2
#Vlan-40
ip route 10.190.40.0 255.255.255.0 17.240.3.2
#Vlan-50
ip route 10.190.50.0 255.255.255.0 17.240.3.2
#Vlan-60
ip route 10.190.60.0 255.255.255.0 17.240.3.2
#Vlan-70
ip route 10.190.70.0 255.255.255.0 17.240.3.2
end
write
```

 Network БББО-01-21 (КБ-2) Myslivets Leonid 19 Лабораторная-2 МИРЭА-2023

 Вопросы к сдаче