Vlan

En

Config t

Vlan 10

Name a

Exit

Vlan 20

Name b

Exit

Int fa0/1

Switchport mode access

Switchport access vlan 10

Exit

Int fa0/2

Switchport mode access

Switchport access vlan 10

Exit

Int fa0/3

Switchport mode access

Switchport access vlan 20

Exit

Int fa0/4

Switchport mode access

Switchport access vlan 20

Exit

Dhcp

Router 0

En

Config t

Int gig0/0

Ip add 192.168.1.1 255.255.255.0

No shut

Ip dhcp pool net1

Network 192.168.1.1 255.255.255.0

Default-router 192.168.1.1

Exit

Enable dhcp from pcs

Int gig0/1

Ip add 192.168.2.1 255.255.255.0

No shut

Ip dhcp pool net1

Network 192.168.2.1 255.255.255.0

Default-router 192.168.2.1

Exit

Enable dhcp on pcs

Routing internet protocol

Router 0

En

Config t

Int gig0/0

Ip add 192.168.1.1 255.255.255.0

No shut

Exit

Int se0/3/0

Ip add 192.168.4.1 255.255.255.0

Clock rate 64000

Exit

Router 1

En

Config t

Int gig0/0

Ip add 192.168.2.1 255.255.255.0

No shut

Exit

Int se0/3/0

Ip add 192.168.4.2 255.255.255.0

exit

Int se0/3/1

Ip add 192.168.5.1 255.255.255.0

Clock rate 64000

Exit

Router 2

En

Config t

Int gig0/0

Ip add 192.168.3.1 255.255.255.0

No shut

Exit

Int se0/3/0

Ip add 192.168.5.2 255.255.255.0

Exit

Router 0

Router rip

Network 192.168.1.0

Network 192.168.4.0

Router 1

Router rip

Network 192.168.2.0

Network 192.168.4.0

Network 192.168.5.0

Router 2

Router rip

Network 192.168.3.0

Network 192.168.5.0

Static config

Router 0

En

Config t

Int gig0/0

Ip add 192.168.1.1 255.255.255.0

No shut

Exit

Int se0/3/0

Ip add 192.168.3.1 255.255.255.0

No shut

Clock rate 64000

Exit

Ip route 192.168.2.0 255.255.255.0 192.168.3.1

Exit

Router 1

En

Config t

Int gig0/0

Ip add 192.168.2.1 255.255.255.0

No shut

Exit

Int se0/3/0

Ip add 192.168.3.2 255.255.255.0

No shut

Exit

Ip route 192.168.1.0 255.255.255.0 192.168.3.2

Exit

default config

Router 0

En

Config t

Int gig0/0

Ip add 192.168.1.1 255.255.255.0

No shut

Exit

Int gig0/1

Ip add 192.168.3.1 255.255.255.0

No shut

Exit

Ip route 0.0.0.0 0.0.0.0 192.168.3.2

Exit

Router 1

En

Config t

Int gig0/0

Ip add 192.168.2.1 255.255.255.0

No shut

Exit

Int gig0/1

Ip add 192.168.3.2 255.255.255.0

No shut

Exit

Ip route 0.0.0.0 0.0.0.0 192.168.3.1

Exit

Static config

Router 0

En

Config t

Int gig0/0

Ip add 192.168.1.1 255.255.255.0

No shut

Exit

Int se0/3/0

Ip add 203.0.113.1

No shut

Clock rate 64000

Exit

Int gig0/0

Ip nat inside

Exit

Int se0/3/0

Ip nat outside

Exit

Ip nat inside source static 192.168.1.2 255.255.255.0 203.0.113.5

Ip nat inside source static 192.168.1.3 255.255.255.0 203.0.113.6

Exit

Sh ip nat translations

Sh ip nat statistics

Router 1

Int se0/3/0

Ip add 203.0.113.2

No shut

Exit

Ip route 192.168.1.0 255.255.255.0 203.0.113.1

Dynamic:

Router 0

Ip nat pool PUBLIC\_POOL 203.0.113.5 203.0.113.15 netmask 255.255.255.0

Access-list 1 permit 192.168.1.0 0.0.0.255

Ip nat source list 1 pool PUBLIC\_POOL

Int gig0/0

Ip nat inside

Exit

Int se0/3/0

Ip nat outside

Exit

Router 1:

Int se0/3/0

Ip add 203.0.113.2

No shut

Exit

Ip route 192.168.1.0 255.255.255.0 203.0.113.1

Nat overload:

R0:

Access-list permit 192.168.1.0 0.0.0.255

Ip nat source list 1 int se0/3/0 overload

Int gig0/0

Ip nat inside

Exit

Int se0/3/0

Ip nat outside

Exit

Router 1:

Int se0/3/0

Ip add 203.0.113.2

No shut

Exit

Ip route 192.168.1.0 255.255.255.0 203.0.113.1

Sh ip nat translations

Sh ip nat statistics

Subnetting

Router

En

Config t

Int gig0/0

Ip add 192.168.10.1 255.255.255.128

Exit

Int gig0/1

ip add 192.168.10.131 255.255.255.128

subnet1

ip: 192.168.10.2 255.255.255.128

subnet2

ip: 192.168.10.135 255.255.255.128