Practical 8B

Aim: Implement VRF

lo 0: 1.1.1.1/24
lo 1: 11.11.11.11/24
lo 0: 2.2.2.2/24
lo 1: 22.22.22.22/24

R1
R2

.1
.2
192.168.12.0/24

.1
.2
192.168.55.0/24
int tunnel 1
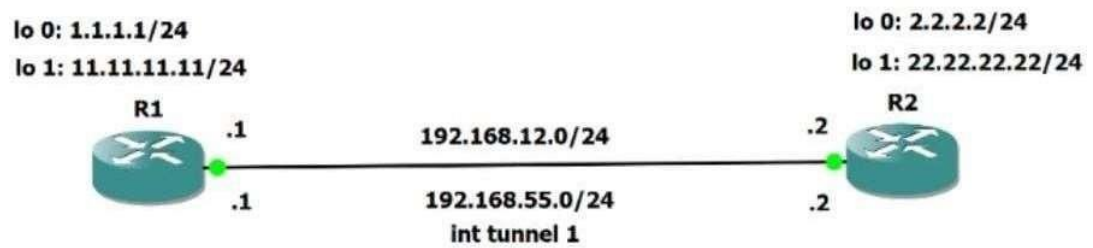
Configure R1/Dahanu:
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#hostname R1
R1(config)#int fa0/0
R1(config-if)#ip add 192.168.12.1 255.255.255.0
R1(config-if)#no shut
R1(config-if)#exit
*Jun 24 11:39:17.951: %ENTITY_ALARM-6-INFO: CLEAR INFO Fa0/0 Physical Port Administrative State Down
*Jun 24 11:39:18.951: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R1(config-if)#exit
R1(config)#ip vrf R1
R1(config-vrf)#exit
R1(config)#int lo0
R1(config-if)#int lo0
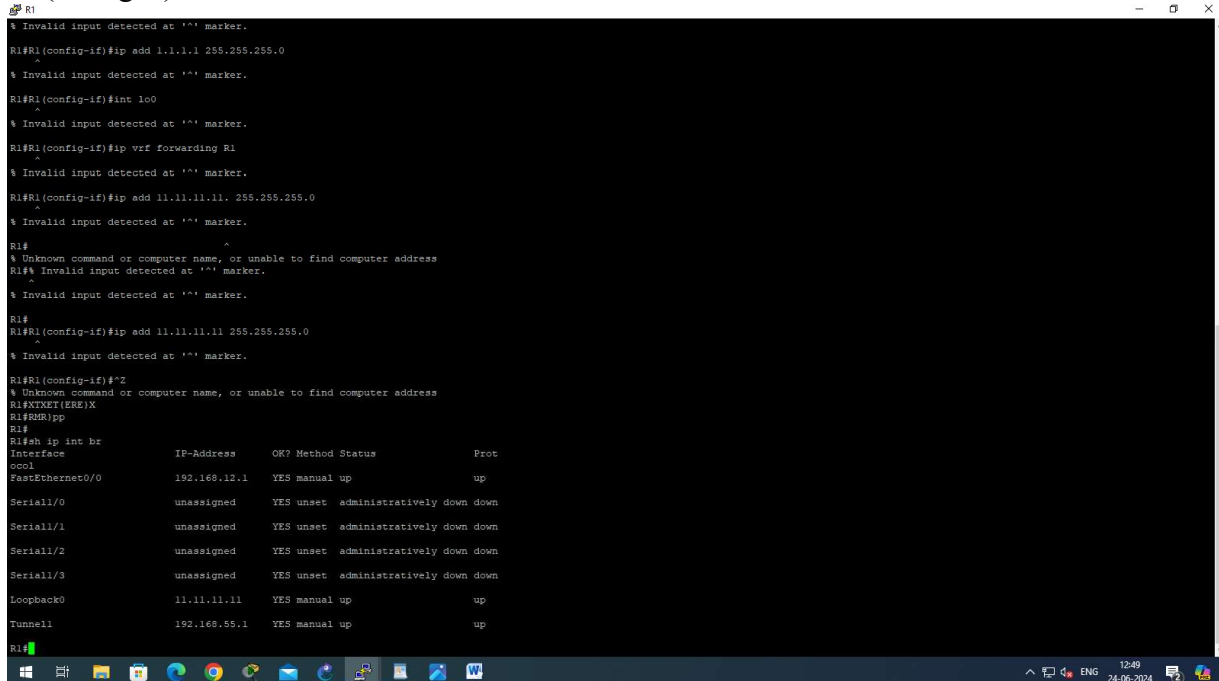R1(config-if)#ip vrf forwarding R1
R1(config-if)#ip add 1.1.1.1 255.255.255.0
R1(config-if)#int lo0
R1(config-if)#ip vrf forwarding R1
R1(config-if)#ip add 11.11.11.11 255.255.255.0
R1(config-if)#^Z

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% Invalid input detected at '^' marker.

R1#R1(config-if)#ip add 1.1.1.1 255.255.255.0
         ^
% Invalid input detected at '^' marker.

R1#R1(config-if)#int lo0
         ^
% Invalid input detected at '^' marker.

R1#R1(config-if)#ip vrf forwarding R1
         ^
% Invalid input detected at '^' marker.

R1#R1(config-if)#ip add 11.11.11.11. 255.255.255.0
         ^
% Invalid input detected at '^' marker.

R1#                                    ^
% Unknown command or computer name, or unable to find computer address
R1#% Invalid input detected at '^' marker.
         ^
% Invalid input detected at '^' marker.

R1#
R1#R1(config-if)#ip add 11.11.11.11 255.255.255.0
         ^
% Invalid input detected at '^' marker.

R1#R1(config-if)#^Z
% Unknown command or computer name, or unable to find computer address
R1#XTXET{ERE}X
R1#RMR}pp
R1#
R1#sh ip int br
Interface          IP-Address      OK? Method Status                Prot
ocol
FastEthernet0/0    192.168.12.1    YES manual up                    up

Serial1/0          unassigned      YES unset  administratively down down

Serial1/1          unassigned      YES unset  administratively down down

Serial1/2          unassigned      YES unset  administratively down down

Serial1/3          unassigned      YES unset  administratively down down

Loopback0          11.11.11.11     YES manual up                    up

Tunnel1            192.168.55.1    YES manual up                    up

R1#
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Configure R2/Virar:

R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#hostname R2
R2(config)#int fa0/0
R2(config-if)#ip add 192.168.12.2 255.255.255.0
R2(config-if)#no shut

R2(config-if)#
*Jun 24 11:41:01.651: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
R2(config-if)#
*Jun 24 11:41:01.651: %ENTITY_ALARM-6-INFO: CLEAR INFO Fa0/0 Physical Port Administrative
State Down
*Jun 24 11:41:02.651: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
R2(config-if)#exit
R2(config)#ip vrf R2
R2(config-vrf)#exit
R2(config)#int lo0
R2(config-if)#ip
*Jun 24 11:41:26.487: %LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed
state to up
R2(config-if)#ip vrf forwarding R2
R2(config-if)#ip add 2.2.2.2 255.255.255.0
R2(config-if)#int lo0
R2(config-if)#int lo0
R2(config-if)#ip vrf forwarding R2
R2(config-if)#ip add 22.22.22.22 255.255.255.0
R2(config-if)#^Z

Configure VRF on R1/Dahanu:
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#int tunnel 1
R1(config-if)#t
*Jun 24 11:44:54.823: %LINEPROTO-5-UPDOWN: Line protocol on Interface Tunnel1, changed state
to down
R1(config-if)#tunnel source fa0/0
R1(config-if)#tunnel destination 192.168.12.2
R1(config-if)#ip v

*Jun 24 11:45:20.927: %LINEPROTO-5-UPDOWN: Line protocol on Interface Tunnel1, changed state to up
R1(config-if)#ip vrf forwarding R1
R1(config-if)#ip add 192.168.55.1 255.255.255.0
R1(config-if)#^Z

Configure VRF on R2/Virar:

R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#int tunnel 1
R2(config-if)#tunnel source fa0/0
R2(config-if)#tunnel destination 192.168.12.1
R2(config-if)#ip vrf forwarding R2
R2(config-if)#ip add 192.168.55.2 255.255.255.0
R2(config-if)#^Z

Configure VRF on R1/Dahanu:

R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#router eigrp 12
R1(config-router)#no auto-summary
R1(config-router)#address-family ipv4 vrf R1
R1(config-router-af)#network 1.1.1.0
R1(config-router-af)#network 11.11.11.0
R1(config-router-af)#network 192.168.55.0
R1(config-router-af)#autonomous-system 12
R1(config-router-af)#^Z

Configure EIGRP on R2/Virar
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#router eigrp 12
R2(config-router)#no auto-summary
R2(config-router)#address-family ipv4 vrf R2
R2(config-router-af)#network 2.2.2.0
R2(config-router-af)#network 22.22.22.0
R2(config-router-af)#network 192.168.55.0
R2(config-router-af)#autonomous-system 12
R2(config-router-af)#^Z
*Jun 24 11:50:26.371: %SYS-5-CONFIG_I: Configured from console by console

```
R2#R2(config-if)#tunnel source fa0/0
           ^
% Invalid input detected at '^' marker.

R2#R2(config-if)#tunnel destination 192.168.12.1
           ^
% Invalid input detected at '^' marker.

R2#R2(config-if)#ip vrf
           ^
% Invalid input detected at '^' marker.

R2#$O-5-UPDOWN: Line protocol on Interface Tunnel1, changed state to up
*Jun 24 11:44:44.451: %LINEPROTO-5-UPDOWN: Line protocol on Interface Tunnel1, c
^hanged state to up
           ^
% Invalid input detected at '^' marker.

R2#R2(config-if)#ip vrf forwarding R2
           ^
% Invalid input detected at '^' marker.

R2#R2(config-if)#ip add 192.168.55.2 255.255.255.0
           ^
% Invalid input detected at '^' marker.

R2#R2(config-if)#^Z
% Unknown command or computer name, or unable to find computer address
R2#
R2#ping vrf virar 11.11.11.11

% IP routing table virar does not exist
R2#X{E'z}
R2#sh ip int br
Interface              IP-Address      OK? Method Status                Prot
ocol
FastEthernet0/0        192.168.12.2    YES manual up                    up

Serial1/0              unassigned      YES unset  administratively down down

Serial1/1              unassigned      YES unset  administratively down down

Serial1/2              unassigned      YES unset  administratively down down

Serial1/3              unassigned      YES unset  administratively down down

Loopback0              22.22.22.22     YES manual up                    up

Tunnel1                192.168.55.2    YES manual up                    up

R2#
```