

day 4 alc ccna with DM VPN

static routes:

```
ip route 201.0.0.0 255.255.255.0 200.0.0.2
```

since the are STUB:

```
ip route 0.0.0.0 0.0.0.0 200.0.0.2
```

rip:

```
router rip
```

```
version 2
```

```
network 200.0.0.0
```

```
network 10.0.0.0
```

```
network 172.16.0.0
```

eigrp:

```
router eigrp 1001
```

```
no auto-summary
```

```
network 200.0.0.0
```

```
network 10.0.0.0
```

```
network 172.16.0.0
```

ospf:

```
router ospf 1
```

```
network 200.0.0.0 0.0.0.255 area 0
```

```
network 10.0.0.0 0.255.255.255 area 0
```

```
network 172.16.0.0 0.0.255.255 area 0
```

BGP:

BGP:

```
router bgp 1001
```

```
neighbor 200.0.0.2 remote-as 2002
```

```
network 200.0.0.0 mask 255.255.255.0
```

```
network 10.0.0.0 mask 255.0.0.0
```

```
network 172.16.0.0 mask 255.255.0.0
```

generic script to be pasted to everybody!

paste to all routers:

```
enable
```

```
config t
```

```
hostname fs
```

```
no ip domain-lookup
```

```
no logging console
```

```
alias exec bp show ip int brief | ex una
```

```
alias exec sr show ip route
```

```
alias exec sp show ip protocols
```

```
line cons 0
```

```
no login
```

```
exec-timeout 0 0
```

```
line vty 0 14
```

```
no login
```

```
exec-timeout 0 0
```

```
end
```

day 4 a/c ccna with DM VPN

task0: SUPER SARAP BUHAY COMMANDS: INGAT(3 HOURS!)

```
config t
  alias exec bp show ip int brief | ex una
  alias exec sr show ip route
  alias exec sp show ip protocols
  alias exec d1 disco 1
  ip host r1 200.0.0.1
  ip host pa 192.168.69.11
  ip host ws 201.0.0.21
  ip host fs 201.0.0.22
  ip host px 203.0.0.31
  ip host r3 202.0.0.2
:type errors = lunch = scott burger 1, x 3!=9
```

task1: CORRECTLY SETTING THE IP ADDRESS:

```
r1:
config t
int se 1/0
  ip add 200.0.0.1 255.255.255.0
  no shut
int fa 0/0
  ip add 192.168.69.1 255.255.255.0
  no shut
  exit
router eigrp 100
  no auto-summary
  network 200.0.0.0
  network 192.168.69.0
end
*****
```

```
R2:
config t
  int se 1/1
  no ip add
  int se 1/0
  ip add 200.0.0.2 255.255.255.0
  no shut
  int fa 0/1
  ip add 202.0.0.1 255.255.255.0
  no shut
  int fa 0/0
  ip add 201.0.0.1 255.255.255.0
  no shut
  exit
router eigrp 100
  network 200.0.0.0
  network 202.0.0.0
  network 201.0.0.0
end
```

```
*****R3*****
```

```
config t
int se 1/0
```

day 4 alc ccna with DM VPN

```
no ip add
int fa 0/1
ip add 202.0.0.2 255.255.255.0
no shut
int fa 0/0
ip add 203.0.0.1 255.255.255.0
no shut
exit
router eigrp 100
network 202.0.0.0
network 203.0.0.0
end
```

TASK2: giving ip address to clients:

```
pa:
config t
int fa 0/0
ip add 192.168.69.11 255.255.255.0
no shut
exit
ip route 0.0.0.0 0.0.0.0 192.168.69.1
```

```
WS:
config t
int fa 0/0
ip add 201.0.0.21 255.255.255.0
no shut
exit
ip route 0.0.0.0 0.0.0.0 201.0.0.1
```

```
FS:
config t
int fa 0/0
ip add 201.0.0.22 255.255.255.0
no shut
exit
ip route 0.0.0.0 0.0.0.0 201.0.0.1
```

```
PX:
config t
int fa 0/0
ip add 203.0.0.31 255.255.255.0
no shut
exit
ip route 0.0.0.0 0.0.0.0 203.0.0.1
```

```
*****
*****
```

```
SITE1-R1:
CONFIG T
crypto isakmp policy 1
authentication pre-share
crypto isakmp key cisco address 200.0.0.2
```

day 4 a/c ccna with DM VPN

```
!  
crypto ipsec transform-set strong esp-3des esp-sha-hmac  
!  
crypto map vpn 16 ipsec-isakmp  
  set peer 200.0.0.2  
  set transform-set strong  
  match address 101  
!  
interface Tunnel1  
  description vpn-GRE TUNNEL TO r2  
  ip address 172.21.0.1 255.255.0.0  
  tunnel source 200.0.0.1  
  tunnel destination 200.0.0.2  
!  
interface serial 1/0  
  ip address 200.0.0.1 255.255.255.0  
  ip virtual-reassembly  
  crypto map vpn  
  no shut  
!  
interface fastE 0/0  
  ip address 192.168.69.1 255.255.255.0  
  no shut  
!  
router eigrp 100  
  network 172.21.0.0  
  network 192.168.69.0  
  no auto-summary  
!  
ip forward-protocol nd  
ip route 0.0.0.0 0.0.0.0 se 1/0  
!  
access-list 101 permit gre host 200.0.0.1 host 200.0.0.2  
!
```

```
*****  
*****
```

```
SITE1-R2:  
CONFIG T  
crypto isakmp policy 1  
  authentication pre-share  
crypto isakmp key cisco address 200.0.0.1  
!  
crypto ipsec transform-set strong esp-3des esp-sha-hmac  
!  
crypto map vpn 16 ipsec-isakmp  
  set peer 200.0.0.1  
  set transform-set strong  
  match address 102  
!  
interface Tunnel1
```

day 4 alc ccna with DM VPN

```
description vpn-GRE TUNNEL TO r1
ip address 172.21.0.2 255.255.0.0
tunnel source 200.0.0.2
tunnel destination 200.0.0.1
!
interface serial 1/0
ip address 200.0.0.2 255.255.255.0
ip virtual-reassembly
crypto map vpn
no shut
!
interface fastE 0/0
ip address 192.168.88.1 255.255.255.0
no shut
!
router eigrp 100
network 172.21.0.0
network 192.168.88.0
no auto-summary
!
ip forward-protocol nd
ip route 0.0.0.0 0.0.0.0 se 1/0
!
access-list 102 permit gre host 200.0.0.2 host 200.0.0.1
!
```

```
*****
*****
```

```
pa:
config t
int fa 0/0
ip add 192.168.69.11 255.255.255.0
no shut
exit
ip route 0.0.0.0 0.0.0.0 192.168.69.1
```

```
ws:
config t
int fa 0/0
ip add 192.168.88.11 255.255.255.0
no shut
exit
ip route 0.0.0.0 0.0.0.0 192.168.88.1
```

```
*****
*****
*****
```

```
paste to all routers:
enable
```

day 4 alc ccna with DM VPN

```
config t
  no ip domain-lookup
  no logging console
  alias exec bp show ip int brief | ex una
  alias exec sr show ip route
  alias exec sp show ip protocols
  alias exec sn sh ip nat trans
  line cons 0
    no login
    exec-timeout 0 0
  line vty 0 14
    no login
    exec-timeout 0 0
end
```

```
t1:
config t
  int fa 0/0
    no shut
    ip add dhcp
end
```

```
R1:
config t
  int fa 0/0
    no shut
    ip add 192.168.1.11 255.255.255.0
  int fa 0/1
    no shut
    ip add 192.168.11.1 255.255.255.0
```

```
p1:
config t
  int fa 0/0
    no shut
    ip add 192.168.11.10 255.255.255.0
    ip route 0.0.0.0 0.0.0.0 192.168.11.1
```


```
R2:
config t
  int fa 0/0
    no shut
    ip add 192.168.1.12 255.255.255.0
  int fa 0/1
    no shut
    ip add 192.168.12.1 255.255.255.0
```

```
p2:
```

day 4 alc ccna with DM VPN

```
config t
  int fa 0/0
  no shut
  ip add 192.168.12.10 255.255.255.0
  ip route 0.0.0.0 0.0.0.0 192.168.12.1
```

R3:

```
config t
  int fa 0/0
  no shut
  ip add 192.168.1.13 255.255.255.0
  int fa 0/1
  no shut
  ip add 192.168.13.1 255.255.255.0
```

p3:

```
config t
  int fa 0/0
  no shut
  ip add 192.168.13.10 255.255.255.0
  ip route 0.0.0.0 0.0.0.0 192.168.13.1
```

R4:

```
config t
  int fa 0/0
  no shut
  ip add 192.168.1.14 255.255.255.0
  int fa 0/1
  no shut
  ip add 192.168.14.1 255.255.255.0
```

p4:

```
config t
  int fa 0/0
  no shut
  ip add 192.168.14.10 255.255.255.0
  ip route 0.0.0.0 0.0.0.0 192.168.14.1
```

```
config t
  ip host p1 192.168.11.10
  ip host p2 192.168.12.10
  ip host p3 192.168.13.10
  ip host p4 192.168.14.10
  ip host 69 69.0.0.1
```

day 4 alc ccna with DM VPN


```
r1: internet share:
config t
  int fa 0/0
  ip nat outside
  int fa 0/1
  ip nat inside
  !
  no ip access-list extended NAT
  ip access-list extended NAT
    deny ip 192.168.11.0 0.0.0.255 192.168.12.0 0.0.0.255
    deny ip 192.168.11.0 0.0.0.255 192.168.13.0 0.0.0.255
    deny ip 192.168.11.0 0.0.0.255 192.168.14.0 0.0.0.255
    deny eigrp any any
    permit ip any any
  exit
  route-map POLNAT 10
  match ip address NAT
  exit
  ip nat inside source route-map POLNAT interface FastEthernet0/0 overload
Router eigrp 100
  network 192.168.11.0
  network 192.168.1.0
```

```
R2:
config t
  int fa 0/0
  ip nat outside
  int fa 0/1
  ip nat inside
  !
  no ip access-list extended NAT
  ip access-list extended NAT
    deny ip 192.168.12.0 0.0.0.255 192.168.11.0 0.0.0.255
    deny ip 192.168.12.0 0.0.0.255 192.168.13.0 0.0.0.255
    deny ip 192.168.12.0 0.0.0.255 192.168.14.0 0.0.0.255
    deny eigrp any any
    permit ip any any
  exit
  route-map POLNAT 10
  match ip address NAT
  exit
  ip nat inside source route-map POLNAT interface FastEthernet0/0 overload
Router eigrp 100
  network 192.168.12.0
  network 192.168.1.0
```


day 4 alc ccna with DM VPN

```
*****
*****
*****
```

STATIC ROUTES TO SIMULATE INTERNET:

```
internet:
config t
 ip route 192.168.11.0 255.255.255.0 192.168.1.11
 ip route 192.168.12.0 255.255.255.0 192.168.1.12
 ip route 192.168.13.0 255.255.255.0 192.168.1.13
 ip route 192.168.14.0 255.255.255.0 192.168.1.14
```

```
all
config t
 ip route 0.0.0.0 0.0.0.0 192.168.1.1
```

```
*****
*****
```

```
*****
```

```
R3:
config t
 int fa 0/0
 ip nat outside
 int fa 0/1
 ip nat inside
 !
 no ip access-list extended NAT
 ip access-list extended NAT
 deny ip 192.168.13.0 0.0.0.255 192.168.11.0 0.0.0.255
 deny ip 192.168.13.0 0.0.0.255 192.168.12.0 0.0.0.255
 deny ip 192.168.13.0 0.0.0.255 192.168.14.0 0.0.0.255
 deny eigrp any any
 permit ip any any
 exit
 route-map POLNAT 10
 match ip address NAT
 exit
 ip nat inside source route-map POLNAT interface FastEthernet0/0 overload
 Router eigrp 100
 network 192.168.13.0
 network 192.168.1.0
```

```
*****
*****
*****
```

R4:

day 4 alc ccna with DM VPN

```
config t
  int fa 0/0
    ip nat outside
  int fa 0/1
    ip nat inside
  !
  no ip access-list extended NAT
  ip access-list extended NAT
    deny ip 192.168.14.0 0.0.0.255 192.168.11.0 0.0.0.255
    deny ip 192.168.14.0 0.0.0.255 192.168.12.0 0.0.0.255
    deny ip 192.168.14.0 0.0.0.255 192.168.13.0 0.0.0.255
    deny eigrp any any
    permit ip any any
  exit
  route-map POLNAT 10
    match ip address NAT
  exit
  ip nat inside source route-map POLNAT interface FastEthernet0/0 overload
  Router eigrp 100
    network 192.168.14.0
    network 192.168.1.0
```

```
*****
*****
*****
*****
```

```
SITE1-R1:HQ!
CONFIG T
crypto isakmp policy 1
  authentication pre-share
crypto isakmp key cisco address 192.168.1.12
crypto isakmp key cisco address 192.168.1.13
crypto isakmp key cisco address 192.168.1.14
!
crypto ipsec transform-set strong esp-3des esp-sha-hmac
!
crypto map vpn 16 ipsec-isakmp
  set peer 200.0.0.2
  set transform-set strong
  match address 101
!
interface Tunnel1
  description vpn-GRE TUNNEL TO r2
  ip address 172.21.0.1 255.255.0.0
  tunnel source 200.0.0.1
  tunnel destination 200.0.0.2
!
interface serial 1/0
  ip address 200.0.0.1 255.255.255.0
  ip virtual-reassembly
  crypto map vpn
```

day 4 alc ccna with DM VPN

```
no shut
!
interface fastE 0/0
ip address 192.168.69.1 255.255.255.0
no shut
!
router eigrp 100
network 172.21.0.0
network 192.168.69.0
no auto-summary
!
ip forward-protocol nd
ip route 0.0.0.0 0.0.0.0 se 1/0
!
access-list 101 permit gre host 200.0.0.1 host 200.0.0.2
```