Radius-tacacs

```
Router$conf t
Enter configuration commands, one per line.
aaa new-model
Router (config) #radius-server host 192.168.1.2 key cisco
aaa authentication login AAA group radius
Router (config) #line vty 0 4
Router (confia-line) #login authentication AAA
Router (config-line) $exit
cmd: telnet 192.168.1.1 (router ki ip)
```

IPsec vpn tunnel

In global config R1

```
license boot module c1900 technology-package securityk9
copy run start
reload
```

Accesslist

```
R1(config)# access-list 100 permit ip 192.168.1.0 0.0.255 192.168.3.0 0.0.0.255
R3(config)# access-list 100 permit ip 192.168.3.0 0.0.255 192.168.1.0 0.0.0.255
```

Implement policy (in r1 and r3 global config)

```
crypto isakmp policy 10
r1(config-isakmp)#encryption aes 256
authentication pre-share
group 5
exit

r1(config)#crypto isakmp key secretkey address 209.165.200.1  (other router address)
r3(config)#crypto isakmp key secretkey address 209.165.100.1  (other router address)

r1(config)#crypto ipsec transform-set R1->R3 esp-aes 256 esp-sha-hmac
r3(config)#crypto ipsec transform-set R3->R1 esp-aes 256 esp-sha-hmac

r1(config)# crypto map IPSEC-MAP 10 ipsec-isakmp
r3(config-crypto-map)#set peer 209.165.200.1
set pfs group5
set security-association lifetime seconds 86400
set transform-set R1->R3
match address 100
exit

r3(config)# crypto map IPSEC-MAP 10 ipsec-isakmp
```

```
set peer 209.165.100.1
set pfs group5
set security-association lifetime seconds 86400
set transform-set R3->R1
match address 100
Exit
```

Both r1 and r3

```
r1(config) int g0/0
crypto map IPSEC-MAP
```