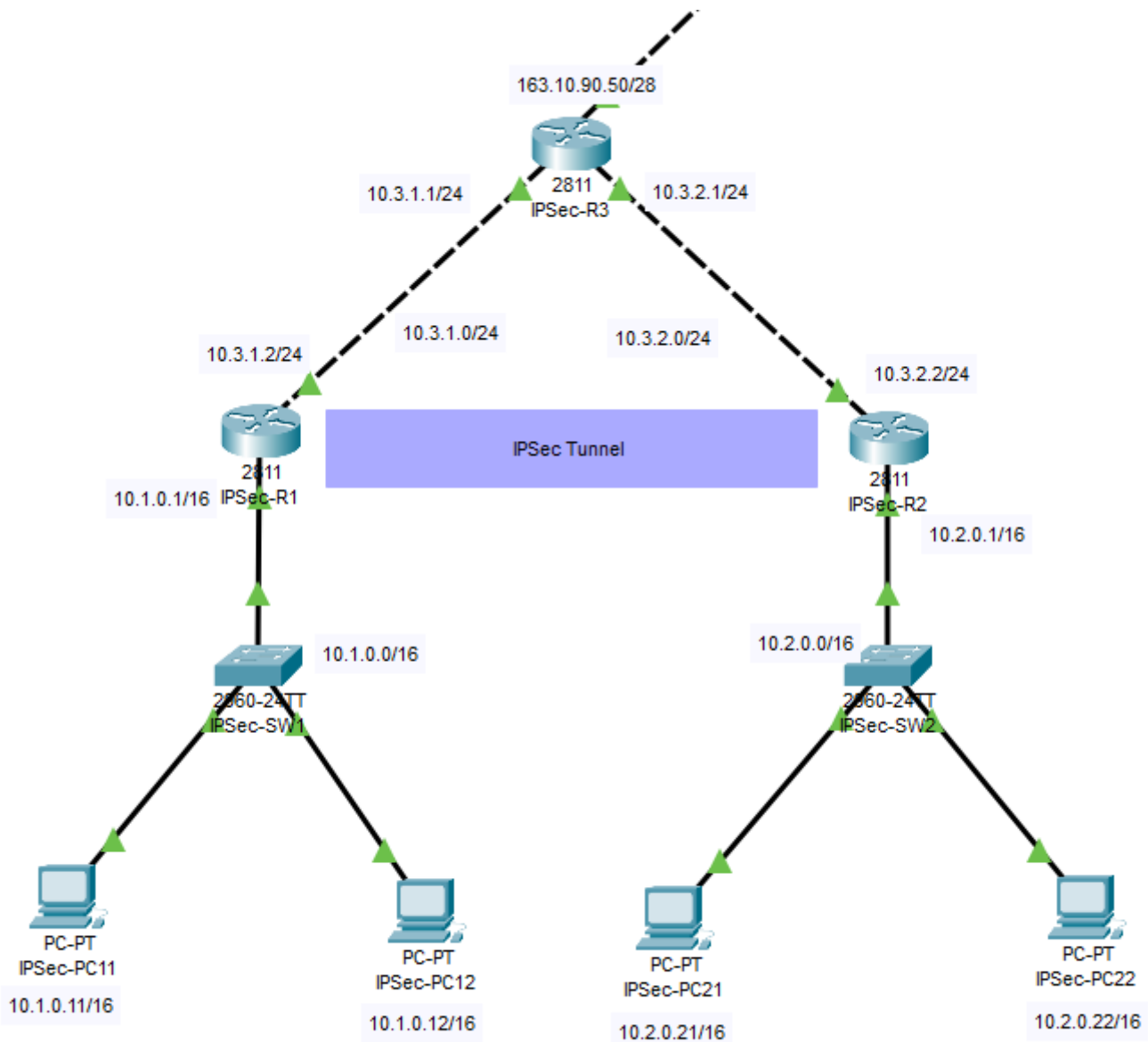


# IPSec Cisco

## Requirements

- You should have connectivity between the two routers you are going to make the tunnel

## Configuration



## ACL

IPSec-R1

```
R1(config)#access-list 100 permit ip 10.1.0.0 0.0.255.255 10.2.0.0 0.0.255.255
```

IPSec-R2

```
R2(config)#access-list 100 permit ip 10.2.0.0 0.0.255.255 10.1.0.0 0.0.255.255
```

## ISAKMP polity (PHASE1) ISAKMP key

IPSec-R1

```
IPSec-R1(config)#crypto isakmp polity 10
                    encryption aes 256
                    authentication pre-share
                    group 5
```

```
IPSec-R1(config)#crypto isakmp key <secret_pass> address 10.3.2.2
```

IPSec-R2

```
IPSec-R2(config)#crypto isakmp polity 10
                    encryption aes 256
                    authentication pre-share
                    group 5
```

```
IPSec-R2(config)#crypto isakmp key <secret_pass> address 10.3.1.2
```

## IPSec transform set (PHASE2)

IPSec-R1 & IPSec-R2

```
IPSec-R1(config)#crypto ipsec transform-set <name> esp-aes 256 esp-sha-hmac
```

## Crypto map (tie it together)

IPSec-R1

```
IPSec-R1(config)#crypto map <name> 10 ipsec-isakmp
    set peer 10.3.2.2
    set pfs group5
    set security-association lifetime seconds 900
    set transform-set <name-of-the-transform-set-created-previously>
    match address <number-of-access-list-created-previously>
```

## IPSec-R2

```
IPSec-R2(config)#crypto map <name> 10 ipsec-isakmp
    set peer 10.3.1.2
    set pfs group5
    set security-association lifetime seconds 900
    set transform-set <name-of-the-transform-set-created-previously>
    match address <number-of-access-list-created-previously>
```

## Assign crypto map to WAN interface

### IPSec-R1

```
IPSec-R1(config)#interface FastEthernet 0/0
    crypto map <name-of-the-crypto-map>
```

### IPSec-R2

```
IPSec-R2(config)#interface FastEthernet 0/0
    crypto map <name-of-the-crypto-map>
```