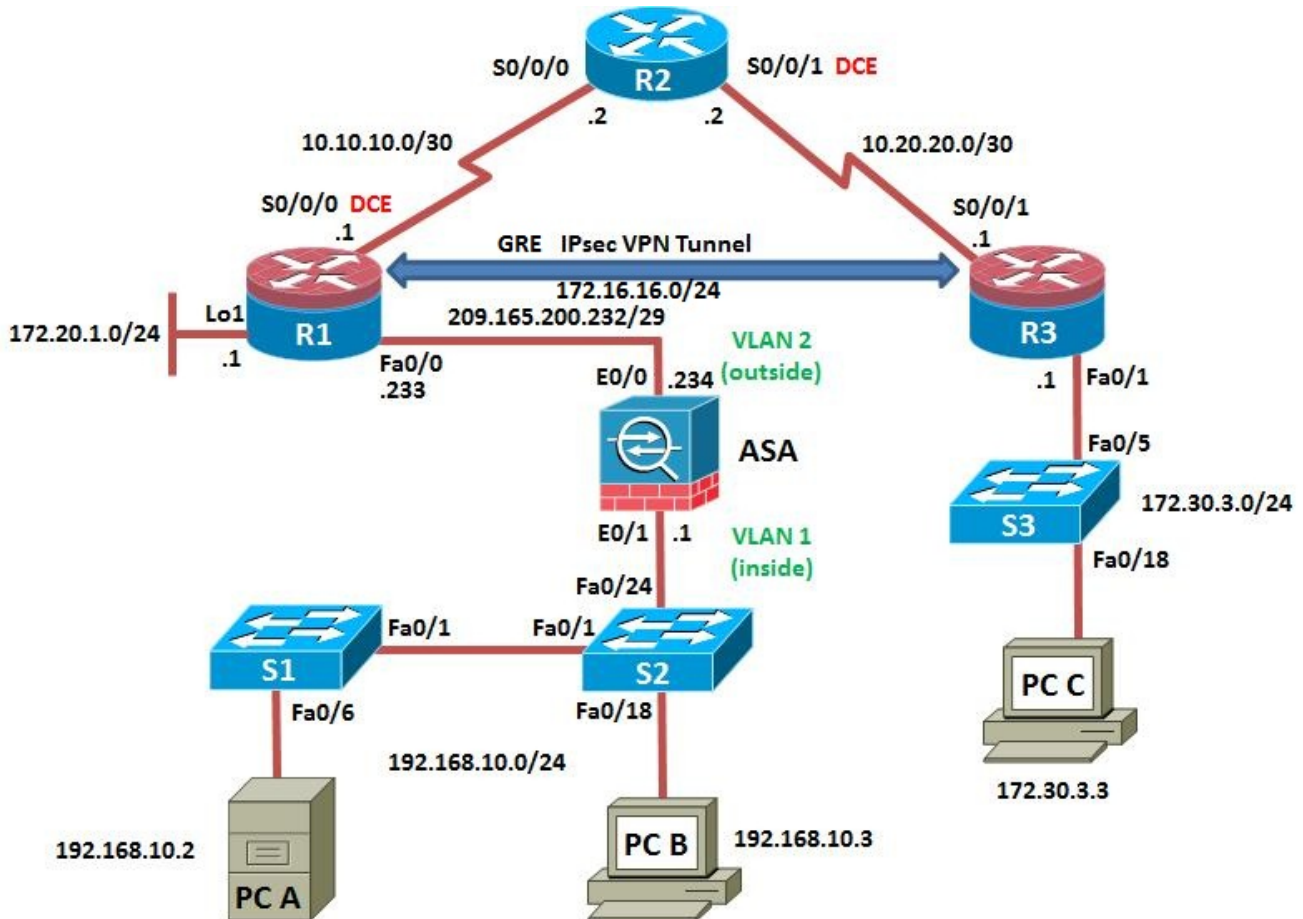


CCNA Security

## Skills-Based Assessment Academy Student Training

Topology



IP Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway	Switch Port
R1	FA0/0	209.165.200.233	255.255.255.248	N/A	ASA E0/0
	S0/0/0 (DCE)	10.10.10.1	255.255.255.252	N/A	N/A
	Loopback 1	172.20.1.1	255.255.255.0	N/A	N/A
R2	S0/0/0	10.10.10.2	255.255.255.252	N/A	N/A
	S0/0/1 (DCE)	10.20.20.2	255.255.255.252	N/A	N/A
R3	FA0/1	172.30.3.1	255.255.255.0	N/A	S3 FA0/5

Device	Interface	IP Address	Subnet Mask	Default Gateway	Switch Port
	S0/0/1	10.20.20.1	255.255.255.252	N/A	N/A
ASA	VLAN 1 (E0/1)	192.168.10.1	255.255.255.0	NA	S2 FA0/24
ASA	VLAN 2 (E0/0)	209.165.200.234	255.255.255.248	NA	R1 FA0/0
PC-A	NIC	192.168.10.2	255.255.255.0	192.168.10.1	S1 FA0/6
PC-B	NIC	192.168.10.3	255.255.255.0	192.168.10.1	S2 FA0/18
PC-C	NIC	172.30.3.3	255.255.255.0	172.30.3.1	S3 FA0/18

**Network cabled as shown in the topology.**

## Objectives

### Part 1: Configure Basic Device Settings

### Part 2: Secure Network Switch 3

- Configure port security and disable unused ports.

### Part 3: Configure a Secure GRE Tunnel between R1 and R3

- Configure the GRE Tunnel and use network 172.16.16.0/24
- Configure EIGRP AS1 over Tunnel and include networks of Router1's loopback 1 and Router's 3 fa0/0
- Specify the pre-shared VPN key cisco123
- Test the Secure GRE Tunnel

### Part 4: Configure ASA Basic Settings and Firewall

- Configure basic settings, passwords
- Configure the inside and outside VLAN interfaces.
- Configure port address translation (PAT) for the inside network.
- Configure a DHCP server for the inside network.
- Configure a static default route for the ASA.
- Verify address translation and firewall functionality

### Part 5: Configure Secure Router Administrative Access on R1

- Configure SSH server on R1 and configure only SSH access on the incoming vty lines

**Grade 3 :part 1,2,3**

**Grade 4 : part 1,2,3,4**

**Grade 5 : part 1,2,3,4,5**

**Basic Device Settings:** Router R2 is preconfigured:

*Router R1*

```
hostname R1
interface Loopback1
ip address 172.20.1.1 255.255.255.0
!
interface FastEthernet0/0
ip address 209.165.200.233 255.255.255.248
no shutdown

interface Serial0/0/0
ip address 10.10.10.1 255.255.255.252
no shutdown

ip route 0.0.0.0 0.0.0.0 Serial0/0/0
```

*Router R3*

```
hostname R3

interface FastEthernet0/1
ip address 172.30.3.1 255.255.255.0
no shutdown

interface Serial0/0/1
ip address 10.20.20.1 255.255.255.252
no shutdown

ip route 0.0.0.0 0.0.0.0 Serial0/0/1
```