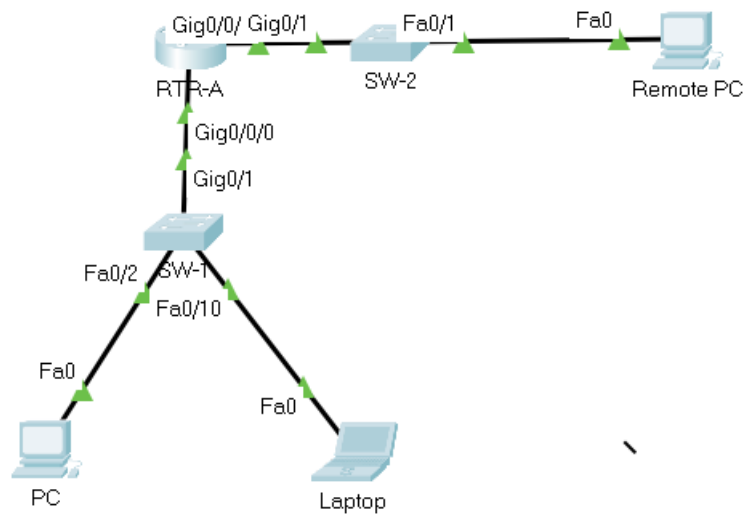


## Secure Network Devices



### For Router(RTR-A):

Router>en

Router#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#do sh ip int brief

Interface	IP-Address	OK?	Method	Status	Protocol
GigabitEthernet0/0/0	192.168.1.1	YES	manual	up	up
GigabitEthernet0/0/1	192.168.2.1	YES	manual	up	up
Vlan1	unassigned	YES	unset	administratively down	down

Router(config)#hostname RTR-A

RTR-A(config)#service password-encryption

RTR-A(config)#security

RTR-A(config)#security passwords

RTR-A(config)#security passwords min-length

RTR-A(config)#security passwords min-length 10

RTR-A(config)#line console 0

RTR-A(config-line)#password @Cons1234!

RTR-A(config-line)#exec-timeout 7

```
RTR-A(config-line)#exit
RTR-A(config)#enable secret @Cons1234!
RTR-A(config)#banner motd $Authorized Personnel Only!$
RTR-A(config)#username NETadmin secret LogAdmin!9
RTR-A(config)#line vty 0 15
RTR-A(config-line)#exit
```

```
RTR-A(config)#service password-encryption
RTR-A(config)#login block-for 45 ?
    attempts Set max number of fail attempts
RTR-A(config)#login block-for 45 attempts 3 ?
    within Watch period for fail attempts
RTR-A(config)#login block-for 45 attempts 3 within 100
RTR-A(config)#no ip domain-lookup
RTR-A(config)#ip domain-name security.com
RTR-A(config)#crypto key generate rsa
```

```
How many bits in the modulus [512]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]
```

```
RTR-A(config)#line vty 0 15
*Mar 1 10:47:16.350: %SSH-5-ENABLED: SSH 1.99 has been enabled
RTR-A(config-line)#transport input ssh
```

```
RTR-A(config)#line vty 0 15
RTR-A(config-line)#login local
RTR-A(config-line)#exec-timeout 7
RTR-A(config-line)#
```

## **For Switch(SW1):**

```
Switch>en
```

```
Switch#conf t
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Switch(config)#hostname SW1
```

```
SW1(config)#ip default-gateway 192.168.1.1
```

```
SW1(config)#enable secret @Cons1234!
```

```
SW1(config)#username NETadmin secret LogAdmin!9
```

```
SW1(config)#line vty 0 15
```

```
SW1(config-line)#transport input ssh
```

```
SW1(config-line)#exec-timeout 7
```

```
SW1(config-line)#login local
```

```
SW1(config-line)#exit
```

```
SW-1(config)#int range f0/1
```

```
SW-1(config-if-range)#sh
```

```
SW-1(config-if-range)#exit
```

```
SW-1(config)#int range f0/3-9
```

```
SW-1(config-if-range)#sh
```

```
SW-1(config-if-range)#exit
```

```
SW-1(config)#int range f0/11-24
```

```
SW-1(config-if-range)#sh
```

```
SW-1(config-if-range)#exit
```

```
SW-1(config)#int g0/2
```

```
SW-1(config-if)#sh
```

```
SW-1(config-if)#exit
```

```
SW-1(config)#no ip domain-lookup
```

```
SW-1(config)#ip domain-name security.com
```

```
SW-1(config)#int vlan 1
```

```
SW-1(config-if)#ip address 192.168.1.254 255.255.255.0
```

```
SW-1(config-if)#no sh
```

```
SW-1(config-if)#exit
```

```
SW-1(config)#crypto key generate rsa
```

```
How many bits in the modulus [512]: 1024
```

```
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]
```

```
SW-1(config)#do wr m
```

```
Building configuration...
```

```
[OK]
```

**Packet file : 16.5.1 Secure network devices**