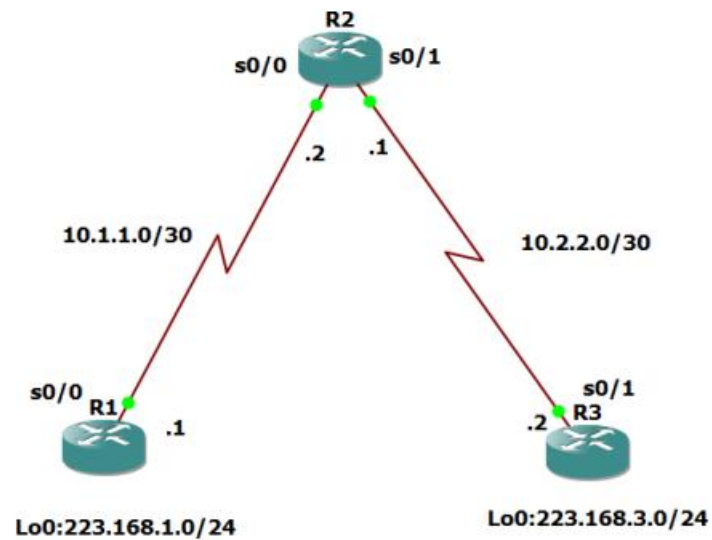


Secure management plan



Objectives: Secure management access. – Configure enhanced username password security. – Enable AAA RADIUS authentication. – Enable secure remote management

Router 1

```
interface Loopback 0
ip address 223.168.1.1 255.255.255.0
exit
interface Serial0/0/0
ip address 10.1.1.1 255.255.255.252
no shutdown
exit
end
```

Router R2

```
interface Serial0/0/0
ip address 10.1.1.2 255.255.255.252
no shutdown
exit
interface Serial0/0/1
ip address 10.2.2.1 255.255.255.252
no shutdown
exit
```

end

Router R3

interface Loopback0

ip address 223.168.3.1 255.255.255.0

exit

interface Serial0/0/1

ip address 10.2.2.2 255.255.255.252

no shutdown

exit

end

Step 2: Configure static routes.

R1(config)# ip route 0.0.0.0 0.0.0.0 10.1.1.2

R3(config)# ip route 0.0.0.0 0.0.0.0 10.2.2.1

R2(config)# ip route 223.168.1.0 255.255.255.0 10.1.1.1

R2(config)# ip route 223.168.3.0 255.255.255.0 10.2.2.2

foreach address { 223.168.1.1 10.1.1.1 10.1.1.2 10.2.2.1 10.2.2.2 223.168.3.1} {ping \$address}

. R1(config)# security passwords min-length 10

2. Configure the enable secret encrypted password on both routers.

R1(config)# enable secret class12345.

R1(config)# line console 0

R1(config-line) # password ciscoconpass

R1(config-line) # exec-timeout 5 0

R1(config-line) # login

R1(config-line) # logging synchronous

R1(config-line) #

Exit

R1(config)# line vty 0 4

R1(config-line) # password ciscovtypass

R1(config-line) # exec-timeout 5 0

R1(config-line) # login

```
R1(config-line) # exit
R1(config)# line aux 0
R1(config-line) # no exec
R1(config-line) # end
R1(Config)# service password-encryption
. R1(config)# username Shivam secret class12345
R1(config)# username Shivam secret class5432
```

```
R1(config)# line console 0
R1(config-line) # login local
R1(config-line) # exit
R1(config)# line vty 0 4
R1(config-line) # login local
R1(config-line) # end
```