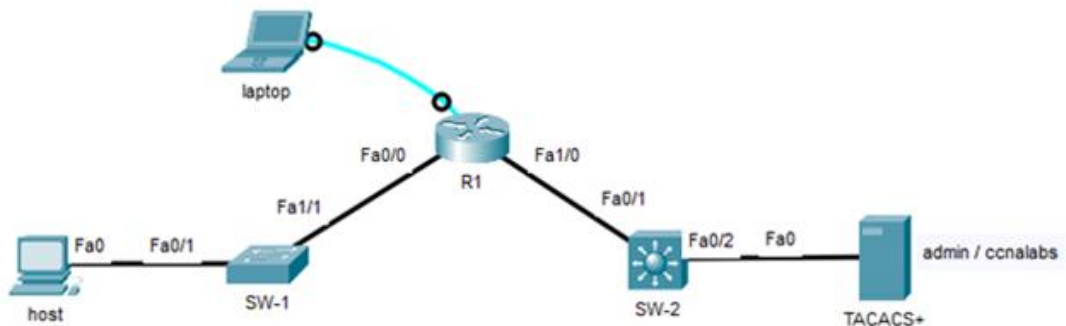


# TACACS+

## Lab Summary

Configure TACACS+ on R1 to forward authentication requests for access to R1.

**Figure 1** Lab Topology



## Lab Configuration

Start Packet Tracer File: **tacacs+.pkt**

Step 1: Click *R1* icon and select *CLI* folder.

Step 2: Enter global configuration mode

```
R1 > enable  
Password: cisco  
R1# configure terminal
```

Step 3: Configure local username *admin* with highest security privilege level 15 and secret password *ccnalabs*. This backup method is used when TACACS+ server is not available.

```
R1(config)# username admin privilege 15 secret ccnalabs
```

Step 4: Enable AAA security model on R1.

```
R1(config)# aaa new-model
```

Step 5: Configure R1 to forward requests for access to TACACS+ server.  
Encrypt TACACS+ packets with preshared key *cisco*.

```
R1(config)# tacacs-server host 192.168.3.1 key cisco
```

Step 6: Configure user login configuration where group refers to all servers and local authentication as backup.

```
R1(config)# aaa authentication login default group tacacs+ local
```

Step 7: Enable privileged EXEC mode access and use privilege level of local account for security authorization level.

```
R1(config)# aaa authorization exec default group tacacs+ local
```

Step 8: Enable default VTY 0 4 lines with TACACS+ server authentication.

```
R1(config)# line vty 0 4  
R1(config-line)# login authentication default
```

Step 9: Enable login security to the local console port with TACACS+ server authentication.

```
R1(config-line)# line console 0  
R1(config-line)# login authentication default  
R1(config-line)# end  
R1# copy running-config startup-config  
R1# exit
```

Step 10: Verify Lab

TACACS Server Account:

Username: admin      Password: ccnalabs

Start a Telnet session from host-1 to R1 and verify there is remote access and security authentication.

```
c:/> telnet 192.168.1.3  
Username: admin  
Password: ccnalabs  
R1> enable  
Password: cisconet  
R1# exit
```

[Connection to 192.168.1.3 closed by foreign host]

Click *Laptop* icon and select the *Desktop* folder. Select *Terminal* icon and verify the terminal settings are correct on the Laptop and click OK.

## Cisco Default Terminal Settings

- 9600 bps
- 8 data bits
- no parity
- 1 stop bit
- no flow control

Login to the local console port of R1 with the following credentials.

Username: **admin**

Password: **ccnalabs**

R1> **enable**

Password: **cisconet**

R1# **exit**