Networking Academy

Aluna: Adriely da Silva e Silva

Packet Tracer - Configuração básica do switch e do dispositivo final

Tabela de Endereçamento

Dispositivo	Interface	Endereço IP	Máscara de sub-rede
[[S1Name]]	VLAN 1	[[S1Add]]	255.255.255.0
[[S2Name]]	VLAN 1	[[S2Add]]	255.255.255.0
[[PC1Name]]	NIC	[[PC1Add]]	255.255.255.0
[[PC2Name]]	NIC	[[PC2Add]]	255.255.255.0

Objetivos

- Configurar nomes de host e endereços IP em dois switches Cisco Internetwork Operating System (IOS) pela interface de linha de comando (CLI).
- Usar comandos do Cisco IOS para especificar ou limitar o acesso às configurações de dispositivo.
- Usar os comandos IOS para salvar a configuração em execução.
- Configurar dois dispositivos host com endereços IP.
- Verificar a conectividade entre os dois dispositivos finais de PC.

Cenário

Como um técnico de LAN recém-contratado, o gerente de redes pediu que você demonstrasse sua habilidade para configurar uma pequena LAN. Suas tarefas incluem definir as configurações iniciais em dois switches com Cisco IOS e configurar parâmetros de endereço IP nos dispositivos host para fornecer conectividade completa. Você usará dois switches e dois hosts/PCs em uma rede cabeada e ligada.

Instruções

Configure os dispositivos para atender aos requisitos abaixo.

Requisitos

- Use uma conexão de console para acessar cada switch.
- Nomeie os switches como **[[S1Name]]** e **[[S2Name]]**.
- Use a senha **[[LinePW]]** para todas as linhas.
- Use a senha secreta **[[SecretPW]]**.
- Criptografa todas as senhas em texto simples.
- Configure um banner de mensagem do dia (MOTD) apropriado.

- Configure o endereçamento de todos os dispositivos de acordo com a Tabela de endereços.
- Salve suas configurações.
- Verifique a conectividade entre todos os dispositivos.

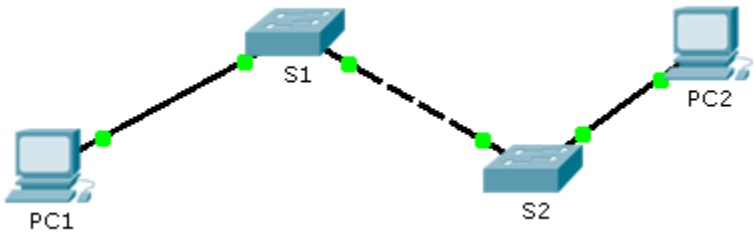
Nota: Clique em **Verificar resultados** para ver seu progresso. Clique em **Redefinir atividade** para gerar um novo conjunto de requisitos. Se você clicar nessa opção antes de concluir a atividade, todas as configurações serão perdidas.

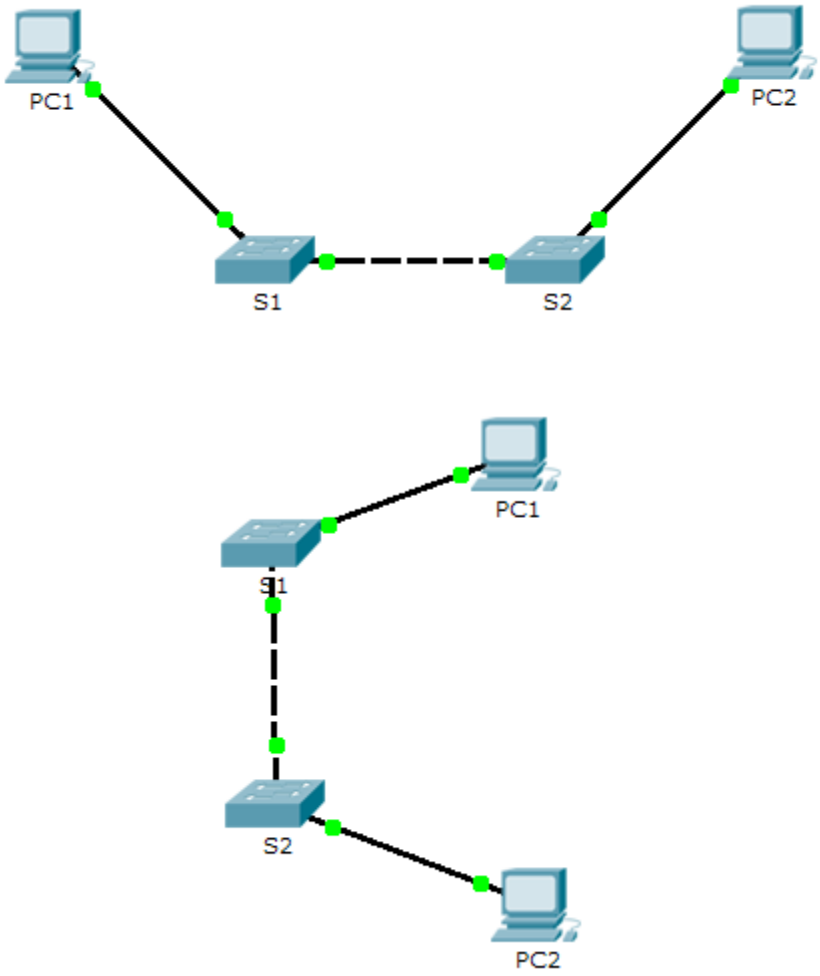
ID: [[indexNames]][[indexPWs]][[indexAdds]][[indexTopos]]

Dispositivo	Interface	Endereço	Máscara de sub-Rede
Room-145	VLAN 1	172.16.5.35	255.255.255.0
Room-146	VLAN 1	172.16.5.40	255.255.255.0
Manager	NIC	172.16.5.50	255.255.255.0
Reception	NIC	172.16.5.60	255.255.255.0

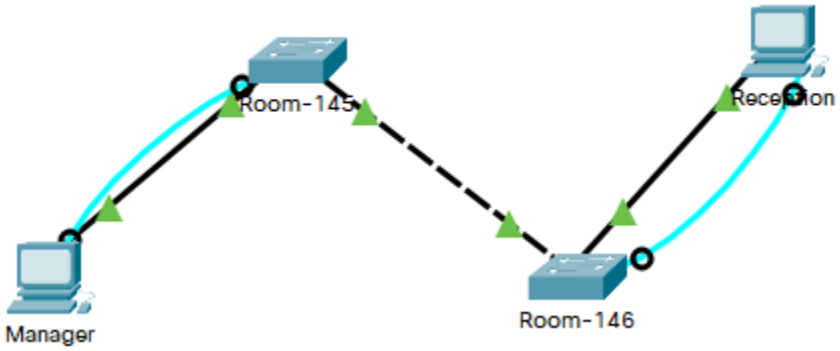
Dispositivo	Interface	Endereço	Máscara de sub-Rede
ASw-1	VLAN 1	10.10.10.100	255.255.255.0
ASw-2	VLAN 1	10.10.10.150	255.255.255.0
User-01	NIC	10.10.10.4	255.255.255.0
User-01	NIC	10.10.10.5	255.255.255.0

Dispositivo	Interface	Endereço	Máscara de sub-Rede
Class-A	VLAN 1	128.107.20.10	255.255.255.0
Class-B	VLAN 1	128.107.20.15	255.255.255.0
Student-1	NIC	128.107.20.25	255.255.255.0
Student-2	NIC	128.107.20.30	255.255.255.0





Requisitos:



Primeiro exemplo 100% completo - ID: 1110

Manager | Room-145

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname Room-145
Room-145(config)#line console 0
Room-145(config-line)#password 8ubRu
Room-145(config-line)#login
Room-145(config-line)#exit
Room-145(config)#line vty 0 15
Room-145(config-line)#password 8ubRu
Room-145(config-line)#login
Room-145(config-line)#exit
Room-145(config)#enable secret C9WrE
```

```
Room-145(config)#interface vlan 1
Room-145(config-if)#ip address 172.16.5.35 255.255.255.0
Room-145(config-if)#no shutdown

Room-145(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
```

```
Room-145(config)#service password-encryption
Room-145(config)#exit
Room-145#
%SYS-5-CONFIG_I: Configured from console by console

Room-145#show running-config
Building configuration...

Current configuration : 1223 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Room-145
!
enable secret 5 $1$mERr$SaNwwC5v8zEgCJlbT5gY8.
!
```

```
Room-145#
Room-145#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Room-145(config)#banner motd #Mensagem de teste#
Room-145(config)#exit
Room-145#
%SYS-5-CONFIG_I: Configured from console by console

Room-145#exit
```

```
Room-145#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Room-145#show startup-config
Using 1255 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Room-145
!
enable secret 5 $1$mERr$SaNwwC5v8zEgCJlbT5gY8.
!
```

Reception | Room-146

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname Room-146
Room-146(config)#line console 0
Room-146(config-line)#password 8ubRu
Room-146(config-line)#login
Room-146(config-line)#exit
Room-146(config)#line vty 0 15
Room-146(config-line)#password 8ubRu
Room-146(config-line)#login
Room-146(config-line)#exit
Room-146(config)#enable secret C9WrE
```

```
Room-146(config)#interface vlan 1
Room-146(config-if)#ip address 172.16.5.40 255.255.255.0
Room-146(config-if)#no shutdown

Room-146(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
```

```
Room-146(config)#service password-encryption
Room-146(config)#exit
Room-146#
%SYS-5-CONFIG_I: Configured from console by console

Room-146#show running-config
Building configuration...

Current configuration : 1223 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Room-146
!
enable secret 5 $1$mERr$SaNwwC5v8zEgCJlbT5gY8.
!
```

```
Room-146#
Room-146#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Room-146(config)# banner motd #Mensagem de teste#
Room-146(config)#exit
Room-146#
%SYS-5-CONFIG_I: Configured from console by console
```

```
Room-146#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Room-146#show startup-config
Using 1255 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Room-146
!
enable secret 5 $1$mERr$SaNwwC5v8zEgCJlbT5gY8.
!
```

Testando conectividade manger -> reception

```
C:\>ping 172.16.5.60

Pinging 172.16.5.60 with 32 bytes of data:

Reply from 172.16.5.60: bytes=32 time=15ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128

Ping statistics for 172.16.5.60:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 15ms, Average = 3ms
```

Assessment Items	Status	Points	Component(s)	Fe
Network				
Manager				
Ports				
FastEthernet0				
IP Address	Correct	8	IPv4 Host Addr...	
Subnet Mask	Correct	8	IPv4 Host Addr...	
Reception				
Ports				
FastEthernet0				
IP Address	Correct	8	IPv4 Host Addr...	
Subnet Mask	Correct	8	IPv4 Host Addr...	
Room-145				
Banner MOTD	Correct	2	Basic Security ...	
Console Line		0	Other	
Password	Correct	1	Basic Security ...	
Enable Secret	Correct	2	Basic Security ...	
Host Name	Correct	1	Hostname Confi...	
Ports				
Vlan1				
IP Address	Correct	7	IPv4 Host Addr...	
Port Status	Correct	5	IPv4 Host Addr...	
Subnet Mask	Correct	7	IPv4 Host Addr...	
Service Password Encryption	Correct	1	Basic Security ...	
Startup Config	Correct	2	Configuration M...	
VTY Lines		0	Other	
VTY Line 0		0	Other	
Password	Correct	1	Basic Security ...	
Room-146				
Banner MOTD	Correct	2	Basic Security ...	
Console Line		0	Other	
Password	Correct	1	Basic Security ...	
Enable Secret	Correct	2	Basic Security ...	

Segundo exemplo 100% completo - ID: 2021

User-01 | ASw-1

```
ASw-1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ASw-1#show startup-config
Using 1253 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname ASw-1
!
enable secret 5 $1$mERr$uj9Jma9yMOo4m80CGAhoP1
!
```

User-02 | ASw-02

```
ASw-2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ASw-2#show startup-config
Using 1253 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname ASw-2
!
enable secret 5 $1$mERr$uj9Jma9yMOo4m80CGAhoP1
!
```

Testando conectividade user-01 -> user-02

```
C:\> ping 10.10.10.150

Pinging 10.10.10.150 with 32 bytes of data:

Reply from 10.10.10.150: bytes=32 time<1ms TTL=255
Reply from 10.10.10.150: bytes=32 time<1ms TTL=255
Reply from 10.10.10.150: bytes=32 time<1ms TTL=255
Reply from 10.10.10.150: bytes=32 time<1ms TTL=255

Ping statistics for 10.10.10.150:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Cisco Packet Tracer - C:\Users\rgrv8\OneDrive\Documentos\2.9.1 Packet Tracer - Basic Switch and End Device Configuration.pka

File Edit Options View Tools Extensions Window Help

Activity Results

Congratulations Guest! You completed the activity.

Overall Feedback | Assessment Items | Connectivity Tests

Expand/Collapse All | Show Incorrect Items

Assessment Items	Status	Points	Component(s)	Feedback
Network				
ASw-1				
Banner MOTD	Correct	2	Basic Security ...	
Console Line		0	Other	
Password	Correct	1	Basic Security ...	
Enable Secret	Correct	2	Basic Security ...	
Host Name	Correct	1	Hostname Confi...	
Ports				
Vlan1				
IP Address	Correct	7	IPv4 Host Addr...	
Port Status	Correct	5	IPv4 Host Addr...	
Subnet Mask	Correct	7	IPv4 Host Addr...	
Service Password Encryption	Correct	1	Basic Security ...	
Startup Config	Correct	2	Configuration M...	
VTY Lines		0	Other	
VTY Line 0		0	Other	
Password	Correct	1	Basic Security ...	
ASw-2				
Banner MOTD	Correct	2	Basic Security ...	
Console Line		0	Other	
Password	Correct	1	Basic Security ...	
Enable Secret	Correct	2	Basic Security ...	
Host Name	Correct	1	Hostname Confi...	
Ports				
Vlan1				
IP Address	Correct	7	IPv4 Host Addr...	
Port Status	Correct	5	IPv4 Host Addr...	
Subnet Mask	Correct	7	IPv4 Host Addr...	
Service Password Encryption	Correct	1	Basic Security ...	
Startup Config	Correct	2	Configuration M...	
VTY Lines		0	Other	
VTY Line 0		0	Other	

Terceiro exemplo 100% completo - ID: 0000

Class-A | Student-1

```
Class-A#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Class-A#show startup-config
Using 1244 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Class-A
!
enable secret 5 $1$mERr$3VSsmT5sO0ky2/3RzW2XS1
!
```

Class-B | Student-2

```
Class-B#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Class-B#show startup-config
Using 1244 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Class-B
!
enable secret 5 $1$mERr$3VSsmT5sO0ky2/3RzW2XS1
!
```

Testando conectividade student-1 -> student-2

```
C:\>ping 128.107.20.15

Pinging 128.107.20.15 with 32 bytes of data:

Reply from 128.107.20.15: bytes=32 time<1ms TTL=255
Reply from 128.107.20.15: bytes=32 time<1ms TTL=255
Reply from 128.107.20.15: bytes=32 time<1ms TTL=255
Reply from 128.107.20.15: bytes=32 time<1ms TTL=255

Ping statistics for 128.107.20.15:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```