

Paulo Victor Souza Rodrigues — P8 de Informática

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]].
- Criptografe 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.

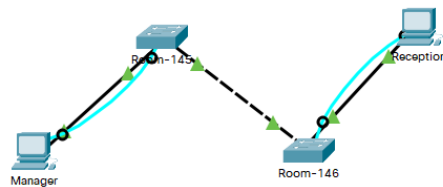
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- Salve suas configurações.
- Verifique a conectividade entre todos os dispositivos.

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



```

Manager
Physical Config Desktop Programming
Terminal
Switch>enable
Switch#config
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#host
% Incomplete command.
Switch(config)#hostname Room-145
Room-145(config)#line console 0
Room-145(config-line)#password SubRu
Room-145(config-line)#exit
Room-145(config)#line vty 0 15
Room-145(config-line)#password SubRu
Room-145(config-line)#login
Room-145(config-line)#exit
Room-145(config)#enable secret C5WtE
Room-145(config)#service password-encryption
Room-145(config)#banner motd "Acesso sem autorizacao e proibido"
Room-145(config)#interface vlan 1
Room-145(config-if)#ip address 172.16.5.35
% Incomplete command.
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-if)#copy running-config startup-config
^
% Invalid input detected at '^' marker.

Room-145(config-if)#~Z
Room-145#
%SYS-5-CONFIG_I: Configured from console by console

Room-145#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Room-145#
  
```

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Reception

Physical Config Desktop Programming

Terminal

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

Switch>enable
Switch#configure
Configuring from terminal, memory, or network [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 SubRu
Room-146(config-line)#login
Room-146(config-line)#
Room-146(config-line)#exit
Room-146(config)#line vty 0 15
Room-146(config-line)#password SubRu
Room-146(config-line)#login
Room-146(config-line)#exit
Room-146(config)#enable secret C5WzE
Room-146(config)#service password-encryption
Room-146(config)#banner motd "Acesso nao autorizado sem autenticacao"
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-if)#^Z
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#
Room-146#
```

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Manager

Physical Config Desktop Programming

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.16.5.60

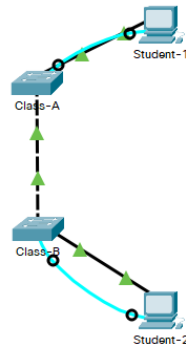
Pinging 172.16.5.60 with 32 bytes of data:

Reply from 172.16.5.60: bytes=32 time=585ms 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 = 585ms, Average = 146ms

C:\>|
```

Dispositivo	Interface	Endereço	Máscara de sub-Rede
Class-A	VLAN 1	172.16.5.35	255.255.255.0
Class-B	VLAN 1	172.16.5.40	255.255.255.0
Student-1	NIC	172.16.5.50	255.255.255.0
Student-2	NIC	172.16.5.60	255.255.255.0



Student-1

Physical Config Desktop Programming

Terminal

```

%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname Class-A
Class-A(config)#line console 0
Class-A(config-line)#password 8ubRu
Class-A(config-line)#login
Class-A(config-line)#exit
Class-A(config)#line vty 0 15
Class-A(config-line)#password 8ubRu
Class-A(config-line)#login
Class-A(config-line)#exit
Class-A(config)#enable secret C5WtE
Class-A(config)#service password-encryption
Class-A(config)#banner motd "Nao permitido sem autenticacao"
Class-A(config)#interface vlan 1
Class-A(config-if)#ip address 172.16.5.35 255.255.255.0
Class-A(config-if)#no shutdown

Class-A(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

Class-A(config-if)#^Z
Class-A#
%SYS-5-CONFIG_I: Configured from console by console

Class-A#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Class-A#
  
```

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Student-2

Physical Config Desktop Programming

Terminal

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname Class-B
Class-B(config)#line console 0
Class-B(config-line)#password 8ubRu
Class-B(config-line)#login
Class-B(config-line)#exit
Class-B(config)#line vty 0 15
Class-B(config-line)#password 8ubRu
Class-B(config-line)#login
Class-B(config-line)#exit
Class-B(config)#enable secret C$WzE
Class-B(config)#service password-encryption
Class-B(config)#banner motd "Autenticacao por senha requerida"
Class-B(config)#interface vlan 1
Class-B(config-if)#ip address 172.16.5.40
% Incomplete command.
Class-B(config-if)#ip address 172.16.5.40 255.255.255.0
Class-B(config-if)#no shutdown

Class-B(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

Class-B(config-if)#^Z
Class-B#
%SYS-5-CONFIG_I: Configured from console by console

Class-B#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Class-B#
```

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Student-1

Physical Config Desktop Programming

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.16.5.60

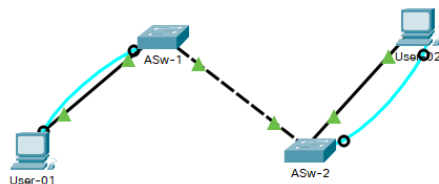
Pinging 172.16.5.60 with 32 bytes of data:

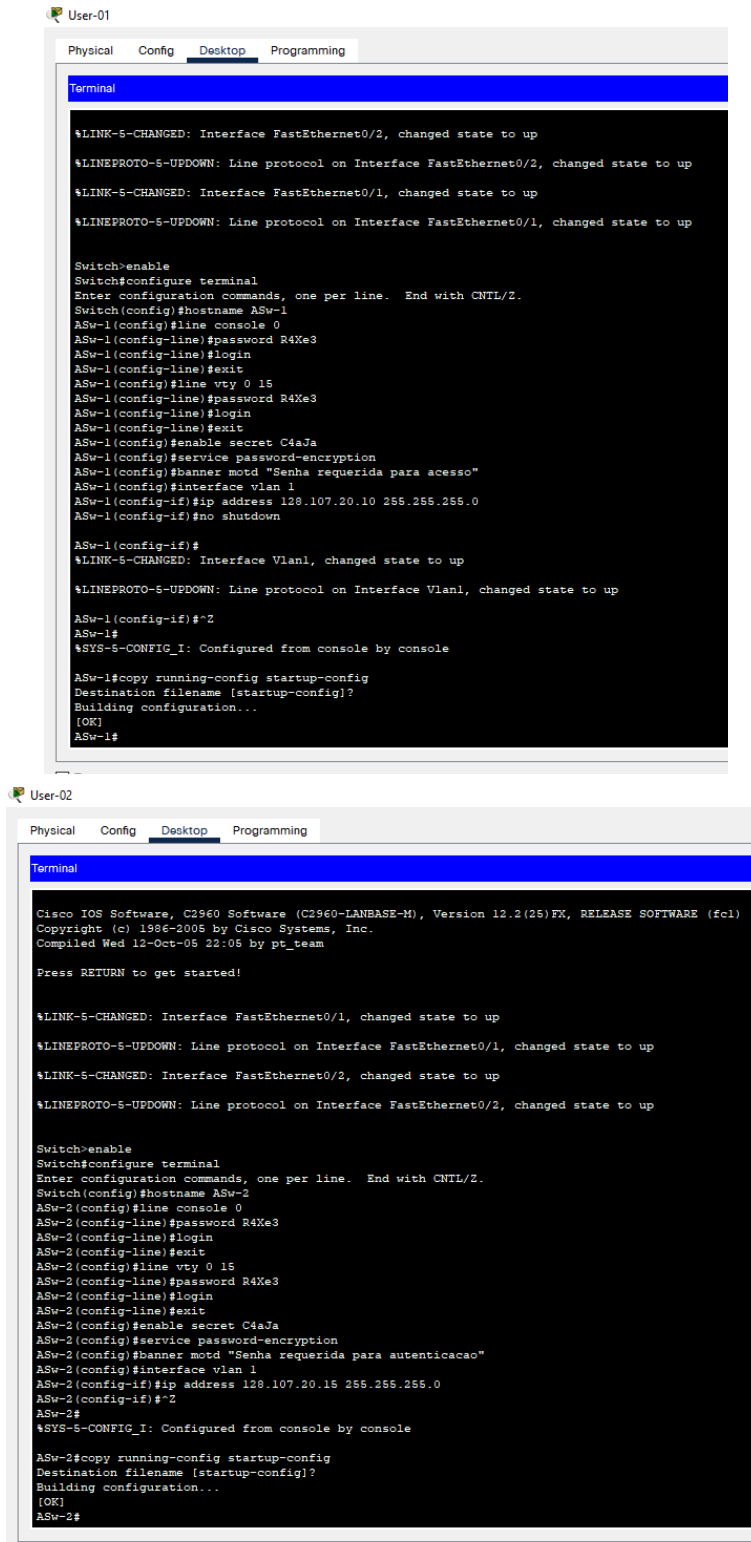
Reply from 172.16.5.60: bytes=32 time=1085ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128

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 = 1085ms, Average = 271ms

C:\>
```

Dispositivo	Interface	Endereço	Máscara de sub-Rede
ASw-1	VLAN 1	128.107.20.10	255.255.255.0
ASw-2	VLAN 1	128.107.20.15	255.255.255.0
User-01	NIC	128.107.20.25	255.255.255.0
User-02	NIC	128.107.20.30	255.255.255.0





User-01

Physical Config Desktop Programming

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 128.107.20.30

Pinging 128.107.20.30 with 32 bytes of data:

Reply from 128.107.20.30: bytes=32 time=20ms TTL=128
Reply from 128.107.20.30: bytes=32 time=3ms TTL=128
Reply from 128.107.20.30: bytes=32 time<1ms TTL=128
Reply from 128.107.20.30: bytes=32 time=1ms TTL=128

Ping statistics for 128.107.20.30:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 20ms, Average = 6ms

C:\>
```