

Aluno: Beatriz Vidal Freire - P8 de Informática

IFCE Campus Fortaleza

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

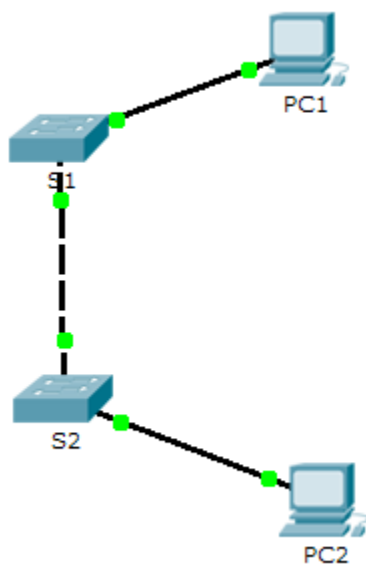
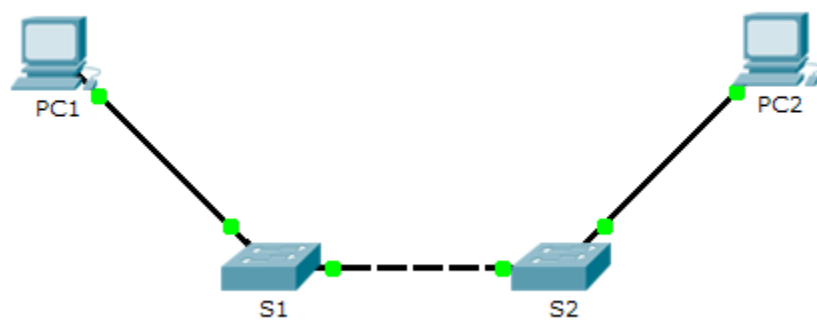
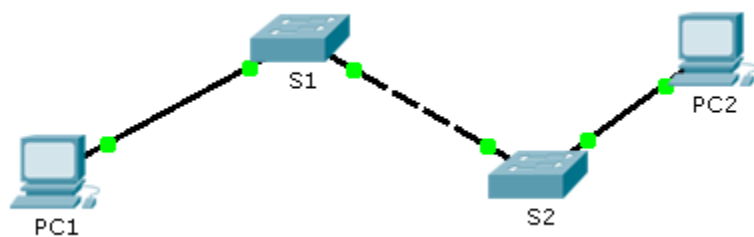
Nota: Clique em **Verificar resultados** para ver seu progresso. Clique em **Redefinir atividade** para gerar um novo conjunto de requisitos. Se você clicar nessa opção antes de concluir a atividade, todas as configurações serão perdidas.

ID: [[indexNames]][[indexPWs]][[indexAddrs]][[indexTopos]]

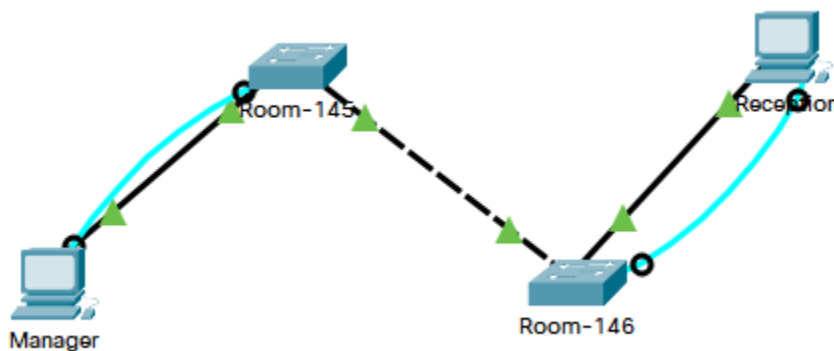
Dispositivo	Interface	Endereço	Máscara de sub-Rede
Room-145	VLAN 1	172.16.5.35	255.255.255.0
Room-146	VLAN 1	172.16.5.40	255.255.255.0
Manager	NIC	172.16.5.50	255.255.255.0
Reception	NIC	172.16.5.60	255.255.255.0

Dispositivo	Interface	Endereço	Máscara de sub-Rede
ASw-1	VLAN 1	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

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-02	NIC	10.10.10.5	255.255.255.0



Requisitos:



Primeiro exemplo 100% completo: ID: 1110

```
S2(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
```

```
S1(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)#
```

```
Room-145(config)#enable secret C9WrE
Room-145(config)#
```

```
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)#
% Invalid input detected at '^' marker.

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-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-145#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Room-145#show star
Room-145#show startup-config
Using 1296 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-146#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Room-146#show startup-
Room-146#show startup-config
Using 1298 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 manager -> 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=77ms 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 = 77ms, Average = 19ms
```

PT Activity: 01:35:36

Packet Tracer - Configuração básica do switch e do dispositivo final

Tabela de endereçamento

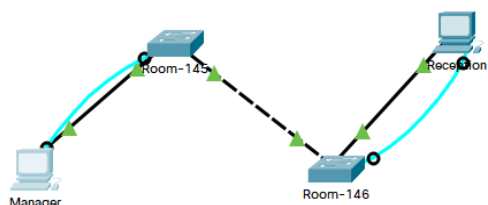
Dispositivo	Interface	Endereço IP	Máscara de
Room-145	VLAN 1	172.16.5.35	255.255.255.0
Room-146	VLAN 1	172.16.5.40	255.255.255.0
Manager	NIC	172.16.5.50	255.255.255.0
Reception	NIC	172.16.5.60	255.255.255.0

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 do IOS para salvar a configuração atual.
- Configurar dois dispositivos host com endereços IP.
- Verificar a conectividade entre os dois dispositivos finais de PC.

Time Elapsed: 01:35:36 Completion: 100%*

☐ Top ☐ Dock



Packet Tracer - Configuração básica do switch e do dispositivo final

Cisco Packet Tracer - C:\Users\bruno\Desktop\IFCE\sor2\PT\2.9.1 Packet Tracer - Basic Switch a...

File Edit Options View Tools Extensions Window Help

Activity Results Time Elapsed: 01:38:46

Congratulations Guest! You completed the activity.

Overall Feedback **Assessment Items** Connectivity Tests

Expand/Collapse All Show Incorrect Items

Assessment Items	Status
Network	
Manager	
Ports	
FastEthernet0	
IP Address	Correct
Subnet Mask	Correct
Reception	
Ports	
FastEthernet0	
IP Address	Correct
Subnet Mask	Correct
Room-145	
Banner MOTD	Correct
Console Line	
Password	Correct
Enable Secret	Correct
Host Name	Correct
Ports	
Vlan1	
IP Address	Correct
Port Status	Correct
Subnet Mask	Correct
Service Password Encryption	Correct
Startup Config	Correct
VTY Lines	
VTY Line 0	
Password	Correct
Room-146	
Banner MOTD	Correct
Console Line	
Password	Correct

Score	: 100/100
Item Count	: 24/24

Component	Items/Total	Score
Basic Security Configuration	10/10	14/14
Configuration Management	2/2	4/4
Hostname Configuration	2/2	2/2
IPv4 Host Address Configuration	10/10	70/70
Connectivity		
Connectivity Tests	6/6	10/10

Close

Exemplo 2 100% completo: ID: 2101


```
ASw-2#show startup-config
Using 1281 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$SaNwC5v8zEgCJlbT5gY8.
```

```
Packet Tracer PC Command Line 1.0
C:\>ping 128.107.20.25

Pinging 128.107.20.25 with 32 bytes of data:

Reply from 128.107.20.25: bytes=32 time=10ms TTL=128
Reply from 128.107.20.25: bytes=32 time<1ms TTL=128
Reply from 128.107.20.25: bytes=32 time<1ms TTL=128
Reply from 128.107.20.25: bytes=32 time<1ms TTL=128

Ping statistics for 128.107.20.25:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms
```

PT Activity: 00:40:36

Packet Tracer - Configuração básica do switch e do dispositivo final

Tabela de endereçamento

Dispositivo	Interface	Endereço IP	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

Objetivos

- Configurar nomes de host e endereços IP em dois switches Cisco Internetwork Operating System

Time Elapsed: 00:40:36

Completion: 100%*

☐ Top ☐ Dock

<

1/1

>

Packet Tracer - Configuração básica do switch e do dispositivo final

Cisco Packet Tracer - C:\Users\bruno\Desktop\IFCE\sor2\PT\2.9.1 Packet Tracer - Basic Switch and End Device Configuration.pka

File Edit Options View Tools Extensions Window Help

Activity Results Time Elapsed: 00:41:09

Congratulations Guest! You completed the activity.

Overall Feedback **Assessment Items** Connectivity Tests

Expand/Collapse All Show Incorrect Items

Assessment Items	Status	Points	Component
Network			
ASw-1			
Banner MOTD	Correct	2	Basic Se
Console Line		0	Other
Password	Correct	1	Basic Se
Enable Secret	Correct	2	Basic Se
Host Name	Correct	1	Hostnan
Ports			
Vlan1			
IP Address	Correct	7	IPv4 Ho:
Port Status	Correct	5	IPv4 Ho:
Subnet Mask	Correct	7	IPv4 Ho:
Service Password Encryption	Correct	1	Basic Se
Startup Config	Correct	2	Configur
VTY Lines		0	Other
VTY Line 0		0	Other
Password	Correct	1	Basic Se
ASw-2			
Banner MOTD	Correct	2	Basic Se
Console Line		0	Other
Password	Correct	1	Basic Se
Enable Secret	Correct	2	Basic Se
Host Name	Correct	1	Hostnan
Ports			
Vlan1			
IP Address	Correct	7	IPv4 Ho:
Port Status	Correct	5	IPv4 Ho:
Subnet Mask	Correct	7	IPv4 Ho:
Service Password Encryption	Correct	1	Basic Se
Startup Config	Correct	2	Configur

Score : 100/100

Item Count : 24/24

Component	Items/Total	Score
Basic Security Configuration	10/10	14/14
Configuration Management	2/2	4/4
Hostname Configuration	2/2	2/2
IPv4 Host Address Configuration	10/10	70/70

Connectivity

Connectivity Tests	6/6	10/10
--------------------	-----	-------

Close

Exemplo 3 100% completo: ID: 2020

switch 1 pelo computador 1

```
Switch(config)#hostname ASw-1
ASw-1(config)#line console 0
ASw-1(config-line)#password R4Xe3
ASw-1(config-line)#login
ASw-1(config-line)#exit
ASw-1(config)#line vty 0 15
ASw-1(config-line)#password R4Xe3
ASw-1(config-line)#login
ASw-1(config-line)#exit
ASw-1(config)#enable secret C4aJa
ASw-1(config)#exit
ASw-1#
%SYS-5-CONFIG_I: Configured from console by console
config terminal
Enter configuration commands, one per line. End with CNTL/Z.
ASw-1(config)#service password-e
ASw-1(config)#service password-encryption
ASw-1(config)#banner motd "Apenas pessoas autorizadas. Acesso restrito!"
ASw-1(config)#interface vlan 1
ASw-1(config-if)#ip address 10.10.10.100 255.255.255.0
ASw-1(config-if)#no shutdown

ASw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
exit
ASw-1(config)#exit
ASw-1#
%SYS-5-CONFIG_I: Configured from console by console

ASw-1#copy running-config star
ASw-1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
```

switch 2 pelo computador 2

```
Switch(config)#hostname ASw-2
ASw-2(config)#line vty 0 15
ASw-2(config-line)#password R4Xe3
ASw-2(config-line)#login
ASw-2(config-line)#exit
ASw-2(config)#line console 0
ASw-2(config-line)#password R4Xe3
ASw-2(config-line)#login
ASw-2(config-line)#exit
ASw-2(config)#enable secret C4aJa
ASw-2(config)#service pas
ASw-2(config)#service password-encryption
ASw-2(config)#banner motd "Apenas pessoas autorizadas!! Acesso restrito."
ASw-2(config)#interface vlan 1
ASw-2(config-if)#ip address 10.10.10.150 255.255.255.0
ASw-2(config-if)#no shutdown

ASw-2(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

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

ASw-2(config-if)#exit
ASw-2(config)#exit
ASw-2#
%SYS-5-CONFIG_I: Configured from console by console

ASw-2#copy running-config st
ASw-2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
ASw-2#
```

Teste de conexão

```
Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.4

Pinging 10.10.10.4 with 32 bytes of data:

Reply from 10.10.10.4: bytes=32 time<1ms TTL=128
Reply from 10.10.10.4: bytes=32 time<1ms TTL=128
Reply from 10.10.10.4: bytes=32 time<1ms TTL=128
Reply from 10.10.10.4: bytes=32 time<1ms TTL=128

Ping statistics for 10.10.10.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```

PT Activity: 00:13:25

Packet Tracer - Configuração básica do switch e do dispositivo final

Tabela de endereçamento

Dispositivo	Interface	Endereço IP	Máscara de s
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-02	NIC	10.10.10.5	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

Time Elapsed: 00:13:25

Completion: 100%*

☐ Top ☐ Dock

<

1/1

>

Packet Tracer - Configuração básica do switch e do dispositivo final

Cisco Packet Tracer - C:\Users\bruno\Desktop\IFCE\sor2\PT\2.9.1 Packet Tracer - Basic Switch and End Device ...

File Edit Options View Tools Extensions Window Help

Activity Results Time Elapsed: 00:14:08

Congratulations Guest! You completed the activity.

Overall Feedback **Assessment Items** Connectivity Tests

Expand/Collapse All Show Incorrect Items

Assessment Items	Status	Points
Network		
ASw-1		
Banner MOTD	Correct	2
Console Line		0
Password	Correct	1
Enable Secret	Correct	2
Host Name	Correct	1
Ports		
Vlan1		
IP Address	Correct	7
Port Status	Correct	5
Subnet Mask	Correct	7
Service Password Encryption	Correct	1
Startup Config	Correct	2
VTY Lines		0
VTY Line 0		0
Password	Correct	1
ASw-2		
Banner MOTD	Correct	2
Console Line		0
Password	Correct	1
Enable Secret	Correct	2
Host Name	Correct	1
Ports		
Vlan1		
IP Address	Correct	7
Port Status	Correct	5
Subnet Mask	Correct	7
Service Password Encryption	Correct	1
Startup Config	Correct	2

Component	Items/Total	Score
Basic Security Configuration	10/10	14/14
Configuration Management	2/2	4/4
Hostname Configuration	2/2	2/2
IPv4 Host Address Configuration	10/10	70/70
Connectivity		
Connectivity Tests	6/6	10/10

Close