Procedimento de recuperação de senha para os Catalyst 6500/6000 Series Switches que executam o Cisco IOS System Software

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# **Introduction**

Este documento descreve como recuperar uma senha nos Catalyst 6500/6000 Series Switches e nos Cisco 7600 Series Routers que executam o Cisco IOS® System Software.

# **Prerequisites**

### **Requirements**

Não existem requisitos específicos para este documento.

### **Componentes Utilizados**

Este documento se aplica aos sistemas baseados no Supervisor 1, Supervisor 2, Supervisor 720 e Sistema de Comutação Virtual (VSS - Virtual Switching System) 1440. Para sistemas baseados no Supervisor 720, este documento se aplica quando executa o Cisco IOS Software Release 12.2(17)SX ou posterior. Se o Supervisor 720 executar uma versão anterior a esta, consulte o Procedimento de Recuperação de Senha para o Catalyst 6500 com Supervisor 720 Executando o Software do Sistema Cisco IOS anteriores a 12.2(17)SX.

**Observação:** o software suportado para sistemas baseados no Virtual Switching System (VSS) 1440 é o Cisco IOS® Software Release 12.2(33)SXH1 ou posterior.

## **Background**

A sequência de inicialização é diferente no Catalyst 6500/6000 e no Cisco 7600 que executam o Cisco IOS System Software do que no Cisco 7200 Series Router porque o hardware é diferente. Depois de desligar e desligar a caixa, o processador do switch (SP) é inicializado primeiro. Após um curto período de tempo (aproximadamente 25 a 60 segundos), ele transfere a propriedade do console para o processador de rota (RP (MSFC)). O RP continua carregando a imagem do software em pacote. É crucial que você pressione **Ctrl-brk** logo após a controladora de armazenamento entregar o controle do console ao RP. Se você enviar a sequência de interrupção muito cedo, acabará no ROMMON da controladora de armazenamento, que não é onde deveria estar. Envie a sequência de interrupção depois de ver esta mensagem no console:

00:00:03: OIR-6-CONSOLE: Changing console ownership to route processor

Após este ponto, a recuperação da senha é feita da mesma maneira que em um roteador normal.

**Observação:** desse ponto em diante, o Switch Catalyst 6000 Series que executa o Cisco IOS System Software é conhecido como roteador.

### **Conventions**

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

# Procedimento Passo a Passo

O switch é configurado como um roteador devido ao sistema operacional que é executado no switch. O procedimento de recuperação de senha segue as mesmas etapas de um Cisco 7200 Series Router, exceto que você precisa esperar aproximadamente 25 a 60 segundos mais antes de iniciar a sequência de interrupção.

1. Conecte um terminal ou PC com emulação de terminal à porta de console do roteador. Utilize estas configurações de terminal:

9600 baud rate No parity 8 data bits 1 stop bit No flow control

As especificações do cabo do console necessário estão descritas no documento Especificações do cabo. As instruções sobre como se conectar à porta do console estão no <u>Guia de Instalação do Módulo</u>. A seção <u>Conexão à porta de console</u>—<u>Somente Supervisor</u> <u>Engine</u> fornece informações úteis.

- Se você ainda tem acesso ao roteador, emita o comando show version e registre a definição do registro de configuração. Geralmente é 0x2102 ou 0x102. Clique aqui para ver a saída de um comando show version.
- 3. Se você não tiver acesso ao roteador (devido a um login perdido ou a uma senha TACACS), seu registro de configuração será definido como 0x2102.
- 4. Desligue o roteador e ligue-o novamente com a ajuda do botão liga/desliga.
- 5. Cuidado: a sequência de interrupção deve ser iniciada somente após o RP ganhar o controle da porta de console.Pressione Break no teclado do terminal logo após o RP ganhar o controle da porta do console. No Catalyst 6000 que executa o Cisco IOS Software, o SP é inicializado primeiro. Depois de inicializar, ele transfere o controle para o RP. Depois que o RP ganhar controle, inicie a sequência de interrupção. O RP ganha controle da porta de

console quando você vê esta mensagem. (Não inicie a seqüência de break até ver esta mensagem):

00:00:03: %OIR-6-CONSOLE: Changing console ownership to route processor

A partir desse ponto, o procedimento de recuperação de senha é o mesmo que para qualquer outro roteador. Se a sequência de interrupção não funcionar, consulte as <u>Combinações de Sequência de Teclas de Interrupção Padrão Durante a Recuperação de</u> <u>Senha</u> para obter outras combinações de teclas.

- 6. Digite confreg 0x2142 no prompt ROMMON 1> para inicializar a partir da flash sem carregar a configuração.
- 7. Digite **reset no prompt rommon 2>.**O roteador é reinicializado. No entanto, ele ignora a configuração salva.
- 8. Digite no depois de cada pergunta da configuração ou pressione Ctrl-C para pular o procedimento inicial de configuração.
- 9. Digite enable no prompt Router>. Você está no modo enable e vê o prompt Router#.
- 10. **Importante:** Emita os comandos **configure memory** ou **copy start running** para copiar a RAM não volátil (NVRAM) na memória. Não emita o comando configure terminal.
- 11. Emita o comando write terminal ou show running.Os comandos show running e write terminal apresentam a configuração do roteador. Nessa configuração, você vê em todas as interfaces o comando **shutdown**. Isso significa que todas as interfaces estão desligadas no momento.Você vê as senhas no formato criptografado ou não criptografado.
- 12. Emita o comando **configure terminal** para entrar no modo de configuração global e fazer as alterações.O prompt agora é hostname(config)#.
- 13. Emita o comando **enable secret** < *senha* > *no modo de configuração global para alterar a* senha **enable**.
- Emita o comando config-register 0x2102 ou o valor registrado na Etapa 2 em modo de configuração global (Router(config)#) para redefinir o valor da configuração para seu valor original.
- 15. Altere as senhas do terminal virtual, se presentes:

```
Router(config)#line vty 0 4
Router(config-line)#password cisco
Router(config-line)#^Z
Router#
```

16. Emita o comando no shutdown em todas as interfaces que estão normalmente em uso. Emita um comando show ip interface brief para ver uma lista de interfaces e seu status atual. Você deve estar em modo de habilitação (Roteador#) para executar o comando show ip interface brief. Aqui está um exemplo de uma interface:

```
Router#show ip interface brief
Interface
                        IP-Address OK? Method Status
                                                                      Prol
Vlan1
                        172.17.10.10 YES TFTP administratively down dow
                       10.1.1.1 YES TFTP administratively down dow
Vlan10
GigabitEthernet1/1
                       unassigned
                                      YES unset administratively down dow
                                      YES TFTP administratively down dow
GigabitEthernet1/2
                       unassigned
                      unassigned
unassigned
                                      YES TFTP administratively down dow
GigabitEthernet2/1
GigabitEthernet2/2
                                       YES TFTP administratively down dow
FastEthernet3/1
                        172.16.84.110 YES TFTP administratively down dow
<snip>...
```

```
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastEthernet 3/1
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)# <do other interfaces as necessary...>
```

- 17. Pressione Ctrl-Z para sair do modo de configuração.O prompt agora é hostname#.
- 18. Emita os comandos write memory ou copy running startup para confirmar as alterações.

#### Saída de exemplo

O exemplo aqui mostra um procedimento real de recuperação de senha. Este exemplo é criado com a ajuda de um switch Catalyst 6000 Series. Comece com os comandos **show version** e **show module** para ver quais componentes são usados neste exemplo.

```
Press RETURN to get started.
Router>enable
Password:
Router#show version
Cisco Internetwork Operating System Software
IOS (tm) c6sup1_rp Software (c6sup1_rp-JSV-M), Version 12.1(6)E, EARLY DEPLOYME)
TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support
Copyright (c) 1986-2001 by cisco Systems, Inc.
Compiled Sat 17-Mar-01 00:14 by eaarmas
Image text-base: 0x60020950, data-base: 0x6165E000
ROM: System Bootstrap, Version 12.0(3)XE, RELEASE SOFTWARE
BOOTFLASH: MSFC Software (C6MSFC-BOOT-M), Version 12.1(6)E, EARLY DEPLOYMENT RE)
Router uptime is 14 minutes
System returned to ROM by power-on (SP by reload)
System image file is "sup-bootflash:c6sup11-jsv-mz.121-6.E"
Cisco Catalyst 6000 (R5000) processor with 114688K/16384K bytes of memory.
Processor board ID SAD04281AF6
R5000 CPU at 200Mhz, Implementation 35, Rev 2.1, 512KB L2 Cache
Last reset from power-on
Bridging software.
X.25 software, Version 3.0.0.
SuperLAT software (copyright 1990 by Meridian Technology Corp).
TN3270 Emulation software.
24 Ethernet/IEEE 802.3 interface(s)
2 Virtual Ethernet/IEEE 802.3 interface(s)
48 FastEthernet/IEEE 802.3 interface(s)
4 Gigabit Ethernet/IEEE 802.3 interface(s)
381K bytes of non-volatile configuration memory.
4096K bytes of packet SRAM memory.
16384K bytes of Flash internal SIMM (Sector size 256K).
Configuration register is 0x2102
Router#
Router#show module
Slot Ports Card Type
                                                 Model
                                                                      Serial Number
1
     2
        Cat 6000 sup 1 Enhanced QoS (active)
                                                 WS-X6K-SUP1A-2GE
                                                                      SAD043301JS

        2
        Cat 6000 sup 1 Enhanced QoS (standby)
        WS-X6K-SUP1A-2GE

        48
        9 port 10/100 mb RJ45
        WS-X6348-RJ-45

2
                                                                      SAD03510114
   48 48 port 10/100 mb RJ45
                                                                      SAD04230FB6
3
                                                 WS-X6024-10FL-MT
   24 24 port 10baseFL
                                                                     SAD03413322
 6
Slot MAC addresses
                                     Hw Fw
                                                        Sw
____ _____
   00d0.c0d2.5540 to 00d0.c0d2.5541 3.2 unknown
                                                      6.1(0.105)OR
1
 2
   00d0.bcf1.9bb8 to 00d0.bcf1.9bb9 3.2 unknown 6.1(0.105)OR
```

3	0002.7ef1.36e0	to 0002.7ef1.370f	1.1 5.3(1)	1999- 6.1(0.105)OR
6	0040.9738.5338	to 00d0 9738 534f	0,206,5,3(1)	1999 - 6 1(0 105) OR

00d0.9738.5338 to 00d0.9738.534f 0.206 5.3(1) 1999- 6.1(0.105)OR

#### Router# Router#**reload** Proceed with reload? [confirm]

!--- Here you turn off the power and then turn it back on. !--- Here it is done with a reload instead of a hard power-cycle. 00:15:28: %SYS-SP-3-LOGGER\_FLUSHING: System pausing to ensure console debugging. 00:15:27: %C6KPWR-SP-4-DISABLED: power to module in slot 2 set off (admin reque) 00:15:28: %C6KPWR-SP-4-DISABLED: power to module in slot 3 set off (admin reque) 00:15:28: %C6KPWR-SP-4-DISABLED: power to module in slot 6 set off (admin reque) 00:15:28: %OIR-SP-6-CONSOLE: Changing console ownership to switch processor 00:15:28: %SYS-SP-3-LOGGER\_FLUSHED: System was paused for 00:00:00 to ensure co. 00:15:30: %SYS-SP-3-LOGGER\_FLUSHING: System pausing to ensure console debugging. \*\*\* \*\*\* --- SHUTDOWN NOW --- \*\*\* 00:15:30: %SYS-SP-5-RELOAD: Reload requested 00:15:30: %OIR-SP-6-CONSOLE: Changing console ownership to switch processor 00:15:30: %SYS-SP-3-LOGGER\_FLUSHED: System was paused for 00:00:00 to ensure co. 00:15:31: %OIR-SP-6-REMCARD: Card removed from slot 1, interfaces disabled !--- First, the switch processor comes up. System Bootstrap, Version 5.3(1) Copyright (c) 1994-1999 by cisco Systems, Inc. c6k\_sup1 processor with 65536 Kbytes of main memory Autoboot executing command: "boot bootflash:c6sup11-Restricted Rights Legend Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c) of the Commercial Computer Software - Restricted Rights clause at FAR sec. 52.227-19 and subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS sec. 252.227-7013. Cisco Systems, Inc. 170 West Tasman Drive San Jose, California 95134-1706 Cisco Internetwork Operating System Software IOS (TM) c6sup1\_sp Software (c6sup1\_sp-SPV-M), Version 12.1(6)E, EARLY DEPLOYME) TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support Copyright (c) 1986-2001 by cisco Systems, Inc. Compiled Sat 17-Mar-01 00:52 by eaarmas Image text-base: 0x60020950, database: 0x605FC000 Start as Primary processor 00:00:03: %SYS-3-LOGGER\_FLUSHING: System pausing to ensure console debugging ou. 00:00:03: %OIR-6-CONSOLE: Changing console ownership to route processor

!--- The RP now has control of the console. !--- This is when you send the break sequence. System Bootstrap, Version 12.0(3)XE, RELEASE SOFTWARE Copyright (c) 1998 by cisco Systems, Inc. \*\*\* Address Error (Load/Fetch) Exception \*\*\* Access address = 0x5e PC = 0x5e, Cause = 0x10, Status Reg = 0x3040d003 ROM Monitor Can Not Recover From Exception A Board Reset Is Issued \*\*\* Software NMI \*\*\* PC = 0xbfc0b6b0, SP = 0x00002a90 Cat6k-MSFC platform with 131072 Kbytes of main System received an abort due to Break Key \*\*\* signal= 0x3, code= 0x0, context= 0x6049ed68 PC = 0x601011ac, Cause = 0x20, Status Reg = 0x34008002 !--- You are now in ROMMON mode on the RP. Continue the password !--- recovery procedure just as on any router. Changing the configuration !--- register from 0x2102 to 0x2142 causes the router to ignore the existing !--- configuration. You want it to be ignored because it has passwords that you do not !--- know. rommon 1 > confreg 0x2142

You must reset or power cycle for new config to take effect rommon 2 > reset

System Bootstrap, Version 12.0(3)XE, RELEASE SOFTWARE Copyright (c) 1998 by cisco Systems, Inc. Cat6k-MSFC platform with 131072 Kbytes of main memory

Attempt to download 'sup-bootflash:c6sup11-jsv-mz.121-6.E' ... okay Starting download of 'sup-bootflash:c6sup11-jsv-mz.121-6.E': 8722810 bytes!!!!!! Chksum: Verified! 

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Rights clause at FAR sec. 52.227-19 and subparagraph
(c) (1) (ii) of the Rights in Technical Data and Computer
Software clause at DFARS sec. 252.227-7013.

Cisco Systems, Inc. 170 West Tasman Drive San Jose, California 95134-1706

Cisco Internetwork Operating System Software IOS (TM) c6sup1\_RP Software (c6sup1\_rp-JSV-M), Version 12.1(6)E, EARLY DEPLOYME) TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support Copyright (c) 1986-2001 by Cisco Systems, Inc. Compiled Sat 17-Mar-01 00:14 by eaarmas Image text-base: 0x60020950, database: 0x6165E000

Cisco Catalyst 6000 (R5000) processor with 114688K/16384K bytes of memory. Processor board ID SAD04281AF6 R5000 CPU at 200Mhz, Implementation 35, Rev 2.1, 512KB L2 Cache Last reset from power-on Bridging software. X.25 software, Version 3.0.0. SuperLAT software (copyright 1990 by Meridian Technology Corp). TN3270 Emulation software. 24 Ethernet/IEEE 802.3 interface(s) 1 Virtual Ethernet/IEEE 802.3 interface(s) 48 FastEthernet/IEEE 802.3 interface(s) 4 Gigabit Ethernet/IEEE 802.3 interface(s) 381K bytes of nonvolatile configuration memory. 4096K bytes of packet SRAM memory.

16384K bytes of Flash internal SIMM (Sector size 256K).

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: n

!--- The router ignores the saved configuration and enters !--- the initial configuration mode. Press RETURN to get started! 00:00:03: %SYS-3-LOGGER\_FLUSHED: System was paused for 00:00:00 to ensure conso. 00:00:04: %C6KPWR-4-PSINSERTED: power supply inserted in slot 1. 00:00:04: %C6KPWR-4-PSOK: power supply 1 turned on. 00:02:08: %SYS-SP-5-RESTART: System restarted -- Cisco Internetwork Operating System Software IOS (TM) c6sup1\_SP Software (c6sup1\_sp-SPV-M), Version 12.1(6)E, EARLY DEPLOYME) TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support Copyright (c) 1986-2001 by cisco Systems, Inc. Compiled Sat 17-Mar-01 00:52 by eaarmas 00:02:13: L3-MGR: 12 flush entry installed 00:02:13: L3-MGR: 13 flush entry installed 00:02:14: %SYS-5-RESTART: System restarted -- Cisco Internetwork Operating System Software IOS (TM) c6sup1\_RP Software (c6sup1\_rp-JSV-M), Version 12.1(6)E, EARLY DEPLOYME) TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support Copyright (c) 1986-2001 by Cisco Systems, Inc. Compiled Sat 17-Mar-01 00:14 by eaarmas 00:02:17: %C6KPWR-SP-4-DISABLED: power to module in slot 1 set off (admin reque) 00:02:18: %C6KPWR-SP-4-ENABLED: power to module in slot 3 set on 00:02:18: %C6KPWR-SP-4-ENABLED: power to module in slot 6 set on 00:02:28: sm\_set\_moduleFwVersion: nonexistent module (1) 00:02:38: %SNMP-5-MODULETRAP: Module 1 [Up] Trap 00:02:38: %OIR-SP-6-INSCARD: Card inserted in slot 1, interfaces are now online 00:02:56: %SNMP-5-MODULETRAP: Module 6 [Up] Trap 00:02:56: %OIR-SP-6-INSCARD: Card inserted in slot 6, interfaces are now online 00:02:59: SP: SENDING INLINE\_POWER\_DAUGHTERCARD\_MSG SCP MSG 00:02:59: %SNMP-5-MODULETRAP: Module 3 [Up] Trap 00:02:59: %OIR-SP-6-INSCARD: Card inserted in slot 3, interfaces are now online Router>enable Router#

!--- You go right into privilege mode without needing a password. !--- At this point, the configuration running-config is a default configuration !--- with all the ports administratively down (shutdown). Router#copy startup-config running-config Destination filename [running-config]? press enter> !--- This pulls in the original configuration. Since you are already in privilege !--- mode, the passwords in this configuration do not affect you. 4864 bytes copied in 2.48 secs (2432 bytes/sec) Router#configure terminal Enter configuration commands, one per line. End with CNTL/Z. Router(config)#enable secret < password > [Choose a strong password with at least one capital letter, one number, and one special character.]

!--- Overwrite the password that you do not know. This is your new enable password. Router(config) #^Z Router# Router#show ip interface brief IP-Address OK? Method Status Prol Interface 172.17.10.10 YES TFTP administratively down dow Vlan1 YES TFTP administratively down dow Vlan10 10.1.1.1 IO.I.I.ITES IFFFadministratively down dowunassignedYES unsetadministratively down dowunassignedYES TFTPadministratively down dowunassignedYES TFTPadministratively down dowunassignedYES TFTPadministratively down dow GigabitEthernet1/1 GigabitEthernet1/2 GigabitEthernet2/1 GigabitEthernet2/2 172.16.84.110 YES TFTP administratively down dow FastEthernet3/1 <snip>...

!--- Issue the no shut command on all interfaces that you want to bring up.

Router**#configure terminal** Enter configuration commands, one per line. End with CNTL/Z. Router(config)**#interface fastEthernet 3/1** Router(config-if)**#no shutdown** Router(config-if)**#exit** 

!--- Overwrite the virtual terminal passwords. Router(config)#line vty 0 4
Router(config-line)#password cisco
Router(config-line)#^Z
Router#

!--- Restore the configuration register to its normal state so that it !--- no longer ignores the stored configuration file. Router#show version Cisco Internetwork Operating System Software IOS (tm) c6sup1\_rp Software (c6sup1\_rp-JSV-M), Version 12.1(6)E, EARLY DEPLOYME) TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support Copyright (c) 1986-2001 by cisco Systems, Inc. Compiled Sat 17-Mar-01 00:14 by eaarmas Image text-base: 0x60020950, data-base: 0x6165E000

ROM: System Bootstrap, Version 12.0(3)XE, RELEASE SOFTWARE BOOTFLASH: MSFC Software (C6MSFC-BOOT-M), Version 12.1(6)E, EARLY DEPLOYMENT RE)

Router uptime is 7 minutes System returned to ROM by power-on (SP by reload) System image file is "sup-bootflash:c6sup11-jsv-mz.121-6.E"

Cisco Catalyst 6000 (R5000) processor with 114688K/16384K bytes of memory. Processor board ID SAD04281AF6 R5000 CPU at 200Mhz, Implementation 35, Rev 2.1, 512KB L2 Cache Last reset from power-on Bridging software. X.25 software, Version 3.0.0. SuperLAT software (copyright 1990 by Meridian Technology Corp). TN3270 Emulation software. 24 Ethernet/IEEE 802.3 interface(s) 2 Virtual Ethernet/IEEE 802.3 interface(s) 48 FastEthernet/IEEE 802.3 interface(s) 4 Gigabit Ethernet/IEEE 802.3 interface(s) 381K bytes of non-volatile configuration memory.

4096K bytes of packet SRAM memory. 16384K bytes of Flash internal SIMM (Sector size 256K). Configuration register is 0x2142 Router#configure terminal Enter configuration commands, one per line. End with CNTL/Z. Router(config) #config-register 0x2102 Router(config)#**^Z** Router# !--- Verify that the configuration register is changed for the next reload. Router#show version Cisco Internetwork Operating System Software IOS (tm) c6sup1\_rp Software (c6sup1\_rp-JSV-M), Version 12.1(6)E, EARLY DEPLOYME) TAC Support: http://www.cisco.com/cgi-bin/ibld/view.pl?i=support Copyright (c) 1986-2001 by cisco Systems, Inc. Compiled Sat 17-Mar-01 00:14 by eaarmas Image text-base: 0x60020950, data-base: 0x6165E000 ROM: System Bootstrap, Version 12.0(3)XE, RELEASE SOFTWARE BOOTFLASH: MSFC Software (C6MSFC-BOOT-M), Version 12.1(6)E, EARLY DEPLOYMENT RE) Router uptime is 8 minutes System returned to ROM by power-on (SP by reload) System image file is "sup-bootflash:c6sup11-jsv-mz.121-6.E" Cisco Catalyst 6000 (R5000) processor with 114688K/16384K bytes of memory. Processor board ID SAD04281AF6 R5000 CPU at 200Mhz, Implementation 35, Rev 2.1, 512KB L2 Cache Last reset from power-on Bridging software. X.25 software, Version 3.0.0. SuperLAT software (copyright 1990 by Meridian Technology Corp). TN3270 Emulation software. 24 Ethernet/IEEE 802.3 interface(s) 2 Virtual Ethernet/IEEE 802.3 interface(s) 48 FastEthernet/IEEE 802.3 interface(s) 4 Gigabit Ethernet/IEEE 802.3 interface(s) 381K bytes of non-volatile configuration memory. 4096K bytes of packet SRAM memory. 16384K bytes of Flash internal SIMM (Sector size 256K). Configuration register is 0x2142 (will be 0x2102 at next reload) Router# Router#copy running-config startup-config Destination filename [startup-config]? <press enter> Building configuration... [OK] Router#

!--- Optional: If you want to test that the router !--- operates properly and that you have changed !--- the passwords, then reload and test. Router#reload Proceed with reload? [confirm] <press enter>

## Informações Relacionadas

- Página de suporte da switching de LAN
- Páginas de Suporte de Produtos de LAN
- Suporte aos produtos de switches LAN e ATM do Catalyst
- <u>Suporte Técnico Cisco Systems</u>