Procedimiento de recuperación de contraseña para switches Catalyst 6500/6000 Series que ejecutan el software del sistema Cisco IOS

Contenido

Introducción

Este documento explica cómo recuperar una contraseña en los switches Catalyst 6500/6000 Series y los routers Cisco 7600 Series que funcionan con el software del sistema Cisco IOS®.

Prerequisites

Requirements

No hay requisitos específicos para este documento.

Componentes Utilizados

Este documento se aplica a los sistemas basados en Supervisor 1, Supervisor 2, Supervisor 720 y Virtual Switching System (VSS) 1440. Para los sistemas basados en Supervisor 720, este documento se aplica cuando ejecuta Cisco IOS Software Release12.2(17)SX o posterior. Si su Supervisor 720 ejecuta una versión anterior a esta, consulte Procedimiento de Recuperación de Contraseña para Catalyst 6500 con Supervisor 720 que ejecuta Cisco IOS System Software antes de 12.2(17)SX.

Nota: El software compatible con los sistemas basados en Virtual Switching System (VSS) 1440 es Cisco IOS® Software Release 12.2(33)SXH1 o posterior.

Background

La secuencia de inicio es diferente en Catalyst 6500/6000 y Cisco 7600 que ejecutan Cisco IOS System Software que en Cisco 7200 Series Router porque el hardware es diferente. Después de apagar y encender la caja, el procesador del switch (SP) se inicia primero. Después de un breve período de tiempo (aproximadamente de 25 a 60 segundos), transfiere la propiedad de la consola al procesador de routing (RP (MSFC)). El RP continúa cargando la imagen de software agrupada. Es crucial que presione **Ctrl-brk** justo después de que el SP ceda el control de la consola al RP. Si envía la secuencia de interrupción demasiado pronto, termina en el ROMMON del SP, que no es donde debería estar. Envíe la secuencia de interrupción después de ver este mensaje en la consola:

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

Después de este punto, la recuperación de contraseña es similar a un router normal.

Nota: A partir de este punto, el Catalyst 6000 Series Switch que ejecuta Cisco IOS System Software se denomina router.

Convenciones

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

Procedimiento Paso a Paso

El switch se configura como un router debido al sistema operativo que se ejecuta en el switch. El procedimiento de recuperación de contraseña sigue los mismos pasos que un Cisco 7200 Series Router, excepto que debe esperar aproximadamente de 25 a 60 segundos más antes de iniciar la secuencia de interrupción.

1. Conecte un terminal o una PC con emulación de terminal al puerto de consola del router. Use estas configuraciones de terminal:
   ```
   9600 baud rate
   No parity
   8 data bits
   1 stop bit
   No flow control
   ```
   Las especificaciones para el cable de la consola requerido se describen en el documento Especificaciones del cable. Las instrucciones sobre cómo conectarse al puerto de la consola están en la Guía de Instalación del Módulo. La sección Conexión con el Puerto de la Consola - Sólo Supervisor Engine proporciona información útil.
2. Si aún tiene acceso al router, ejecute el comando show version y grabe la configuración del registro de la configuración. En general es 0x2102 o 0x102. Haga clic aquí para ver el resultado de un comando show version.
3. Si no tiene acceso al router (debido a una pérdida de login o contraseña TACACS), su registro de configuración se establece en 0x2102.
4. Apague el router y vuelva a encenderlo con la ayuda del interruptor de alimentación.
5. **Precaución:** La secuencia de interrupción sólo debe iniciarse después de que el RP obtenga el control del puerto de la consola.Presione **Break** en el teclado del terminal justo después de que el RP obtenga el control del puerto de la consola. En el Catalyst 6000 que ejecuta Cisco IOS Software, el SP se inicia primero. Después de arrancar, pasa el control al RP. Después de que el RP obtiene el control, inicie la secuencia de interrupción. El RP obtiene el

control del puerto de la consola cuando ve este mensaje. (No iniciar la secuencia de interrupción hasta ver este mensaje):

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

A partir de este punto, el procedimiento de recuperación de contraseña es el mismo que para cualquier otro router. Si la secuencia de interrupción no funciona, consulte Combinaciones de Secuencias Estándar de Teclas de Interrupción Durante la Recuperación de Contraseña para ver otras combinaciones de teclas.

6. Escriba confreg 0x2142 cuando aparezca el mensaje rommon 1> para reiniciar desde Flash sin cargar la configuración.
7. Escriba **reset cuando aparezca la indicación rommon 2>.**El router se reinicia. Sin embargo, ignora la configuración guardada.
8. Escriba no luego de cada pregunta de configuración, o presione Ctrl-C para saltear el procedimiento de configuración inicial.
9. Escriba enable cuando aparezca la indicación Router>.Está en el modo **enable** y verá el mensaje `Router#`.
10. **Importante:** Ejecute los comandos **configure memory** o **copy start running** para copiar la memoria RAM no volátil (NVRAM) en la memoria. No ejecute el comando configure terminal.
11. Ejecute el comando write terminal o show running.Los comandos show running y write terminal muestran la configuración del router. En esta configuración, puede ver en todas las interfaces el comando **shutdown**. Esto significa que todas las interfaces están actualmente cerradas.Las contraseñas se muestran en formato cifrado o sin cifrar.
12. Ejecute el comando **configure terminal** para ingresar al modo de configuración global y realizar los cambios.El mensaje ahora es hostname(config)#.
13. Ejecute el comando **enable secret** ***< password >*** en el modo de configuración global para cambiar la **contraseña de habilitación**.
14. Ejecute el comando config-register 0x2102 o el valor registrado en el Paso 2 en el modo de configuración global (Router(config)#) para restablecer el valor de configuración a su valor original.
15. Cambie las contraseñas del terminal virtual, si las hay:

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

16. Ejecute el comando **no shutdown** en cada interfaz que se esté utilizando normalmente. Ejecute un comando **show ip interface brief** para ver una lista de interfaces y su estado actual. Para ejecutar el comando show ip interface brief, debe estar en modo habilitar (Router#). Aquí tiene un ejemplo para una interfaz:

```
Router#show ip interface brief
Interface                  IP-Address      OK? Method Status                Prol
Vlan1                      172.17.10.10    YES TFTP   administratively down dow
Vlan10                     10.1.1.1        YES TFTP   administratively down dow
GigabitEthernet1/1         unassigned      YES unset  administratively down dow
GigabitEthernet1/2         unassigned      YES TFTP   administratively down dow
GigabitEthernet2/1         unassigned      YES TFTP   administratively down dow
GigabitEthernet2/2         unassigned      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. Presione Ctrl-z para salir del modo de configuración.El mensaje ahora es hostname#.
18. Ejecute los comandos **write memory** o **copy running startup** para confirmar los cambios.

Ejemplo de Salida

El ejemplo aquí muestra un procedimiento de recuperación de contraseña real. Este ejemplo se crea con la ayuda de un switch Catalyst serie 6000. Empiece con los comandos **show version** y **show module** para ver qué componentes se utilizan en este ejemplo.

```
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     2   Cat 6000 sup 1 Enhanced QoS (standby)     WS-X6K-SUP1A-2GE     SAD03510114
 3    48   48 port 10/100 mb RJ45                    WS-X6348-RJ-45       SAD04230FB6
 6    24   24 port 10baseFL                          WS-X6024-10FL-MT     SAD03413322

Slot MAC addresses                       Hw    Fw           Sw
---- ---------------------------------- ----- ------------ ----------
```

```
 1   00d0.c0d2.5540 to 00d0.c0d2.5541   3.2   unknown      6.1(0.105)OR
 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   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-
jsv-mz.121-6.E" Self decompressing the image : ##################################################]
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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
memory Self decompressing the image : ##################################################] ***
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


Self decompressing the image : ##################################################]

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!
Self decompressing the image : ##################################################]

               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_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: l2 flush entry installed 00:02:13: L3-MGR: l3 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
Interface                  IP-Address      OK? Method Status                Prol
Vlan1                      172.17.10.10    YES TFTP   administratively down dow
Vlan10                     10.1.1.1        YES TFTP   administratively down dow
GigabitEthernet1/1         unassigned      YES unset  administratively down dow
GigabitEthernet1/2         unassigned      YES TFTP   administratively down dow
GigabitEthernet2/1         unassigned      YES TFTP   administratively down dow
GigabitEthernet2/2         unassigned      YES TFTP   administratively down dow
FastEthernet3/1            172.16.84.110   YES TFTP   administratively down dow
<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
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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.
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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
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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.
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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>
```

Información Relacionada

- Página de Soporte de LAN Switching
- Páginas de Soporte de Productos de LAN
- Soporte de Producto para Switches de ATM y Catalyst de LAN
- Soporte Técnico - Cisco Systems