

執行Cisco IOS系統軟體的Catalyst 6500/6000系列交換器的密碼復原程式

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簡介

本檔案介紹如何在執行Cisco IOS®系統軟體的Catalyst 6500/6000系列交換器和Cisco 7600系列路由器上復原密碼。

必要條件

需求

本文件沒有特定需求。

採用元件

本文檔適用於基於Supervisor 1、Supervisor 2、Supervisor 720和虛擬交換系統(VSS)1440的系統。對於基於Supervisor 720的系統，本文檔在運行Cisco IOS軟體版本12.2(17)SX或更高版本時適用。如果您的Supervisor 720執行的版本早於此版本，請參閱[搭載Supervisor 720且執行12.2\(17\)SX之前Cisco IOS系統軟體的Catalyst 6500的密碼復原程式](#)。

注意：基於虛擬交換系統(VSS)1440的系統支援的軟體是Cisco IOS®軟體版本12.2(33)SXH1或更高版本。

背景

由於硬體不同，因此執行Cisco IOS系統軟體的Catalyst 6500/6000和Cisco 7600上的開機順序與Cisco 7200系列路由器不同。重新通電後，交換機處理器(SP)首先啟動。在很短的時間內（大約25到60秒），它將控制檯所有權轉移到路由處理器(RP(MSFC))。RP繼續載入捆綁的軟體映像。在SP將控制檯控制權交給RP之後，您立即按Ctrl-brk至關重要。如果您傳送中斷序列太快，則最終會

進入SP的ROMMON，而不是您應該處於的位置。在主控台上看到以下訊息後，傳送中斷順序：

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

在此之後，口令恢復與普通路由器相同。

註：從此，運行Cisco IOS系統軟體的Catalyst 6000系列交換機稱為路由器。

慣例

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

逐步程序

由於交換機上運行的作業系統，該交換機被配置為路由器。密碼復原程式與Cisco 7200系列路由器執行的步驟相同，只不過您必須再等待約25至60秒才能開始break順序。

1. 將終端機或具有終端模擬的PC連線到路由器的控制檯埠。使用以下終端機設定：

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

[電纜規格](#)檔案中介绍了所需的控制檯電纜規格。[模組安裝指南](#)中提供了有關如何連線到控制檯埠的說明。[連線到控制檯埠 — Supervisor引擎](#)部分提供了有用的資訊。

2. 如果仍然可以訪問路由器，請發出show version命令，並記錄配置暫存器的設定。它通常為0x2102或0x102。按一下[此處](#)檢視show version命令的輸出。
3. 如果您無法訪問路由器（由於登入或TACACS密碼丟失），您的配置暫存器設定為0x2102。
4. 關閉路由器，然後在電源開關的幫助下重新開啟。
5. **注意：**只有在RP獲得控制檯埠的控制權後，才能啟動Break序列。在RP獲得控制檯埠的控制權後，立即按終端鍵盤上的Break。在執行Cisco IOS軟體的Catalyst 6000上，SP首先啟動。引導後，它將控制權交給RP。RP獲得控制後，啟動中斷順序。當您看到此訊息時，RP會取得主控台連線埠的控制。（在看到以下消息之前不要啟動中斷順序）：

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

從此以後，口令恢復過程與任何其他路由器相同。如果Break按鍵順序不起作用，請參閱[密碼復原期間的標準Break按鍵順序組合](#)以瞭解其他按鍵組合。
6. 在rommon 1>提示符下鍵入confreg 0x2142，以便在不載入配置的情況下從快閃記憶體啟動。
7. 在rommon 2>提示符下鍵入reset。路由器重新啟動。但是，它會忽略儲存的配置。
8. 在每個設定問題後鍵入no，或按Ctrl-C跳過初始設定過程。
9. 在Router>提示時鍵入enable。您處於enable模式並看到Router#提示。
10. **重要事項：**發出configure memory或copy start running命令，將非易失性RAM(NVRAM)複製到記憶體中。不要發出configure terminal命令。
11. 發出write terminal或show running命令。show running和write terminal命令顯示路由器的配置。在此配置中，您將在所有介面下看到shutdown命令。這意味著所有介面當前均已關閉。您會看到加密或未加密格式的密碼。
12. 發出configure terminal命令以進入全域性配置模式並進行更改。現在提示符為hostname(config)#。
13. 在全域性配置模式下發出enable secret <password>命令以更改啟用密碼。
14. 發出config-register 0x2102命令，或是在全域性配置模式下步驟2中記錄的值(Router(config)#)，將配置值設回其原始值。

15. 更改虛擬終端密碼 (如果存在) :

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

16. 在正常使用的每個介面上發出no shutdown命令。發出show ip interface brief命令以檢視介面及其當前狀態的清單。您必須處於啟用模式(Router#)才能執行show ip interface brief命令。以下是一個介面的範例 :

```
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. 按Ctrl-z離開配置模式。提示符現在為hostname#。

18. 發出write memory或copy running startup命令以提交更改。

輸出示例

此處的示例顯示了實際的密碼恢復過程。此範例是在Catalyst 6000系列交換器的幫助下建立的。從show version和show module命令開始，檢視此示例中使用的元件。

```
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 : #####] 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 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 : #####]

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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
```

Interface	IP-Address	OK?	Method	Status	Pro
Vlan1	172.17.10.10	YES	TFTP	administratively down	down
Vlan10	10.1.1.1	YES	TFTP	administratively down	down
GigabitEthernet1/1	unassigned	YES	unset	administratively down	down
GigabitEthernet1/2	unassigned	YES	TFTP	administratively down	down
GigabitEthernet2/1	unassigned	YES	TFTP	administratively down	down
GigabitEthernet2/2	unassigned	YES	TFTP	administratively down	down
FastEthernet3/1	172.16.84.110	YES	TFTP	administratively down	down

```
<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.
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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 (**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>**

[相關資訊](#)

- [LAN 交換支援頁面](#)
- [LAN 產品支援頁面](#)
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