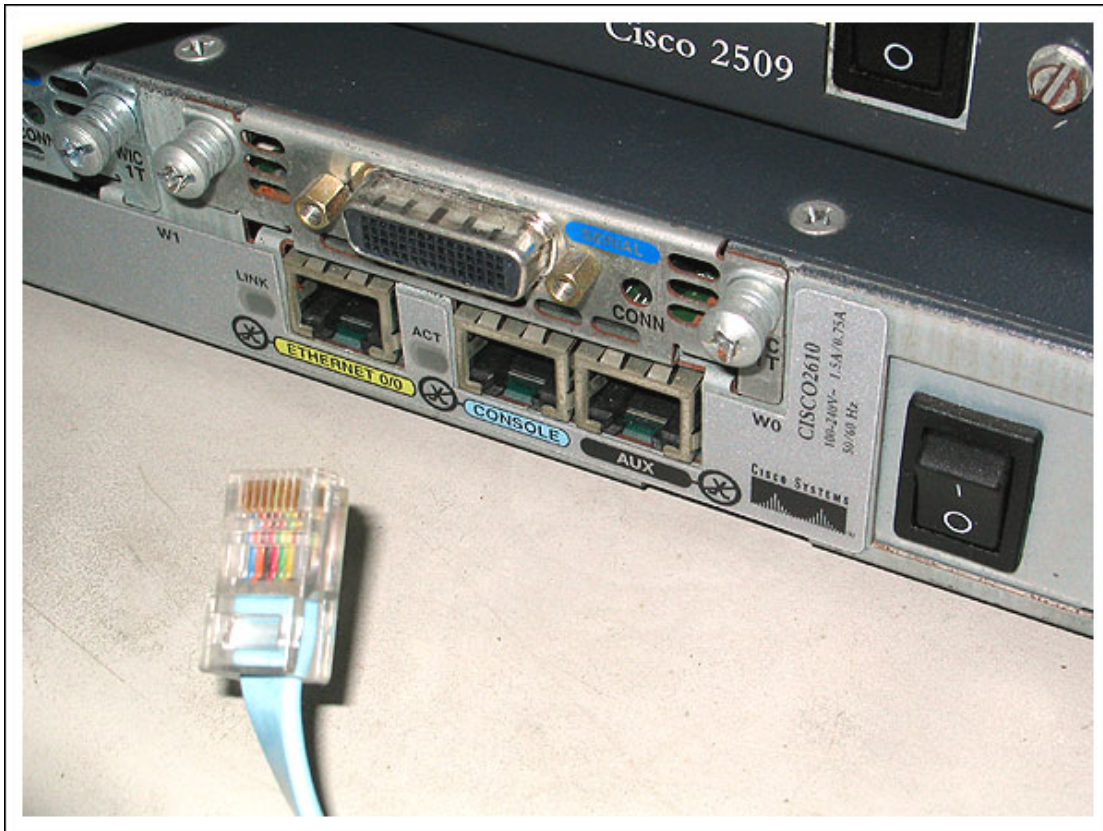


Cisco 1600/1700/2600/3600 Series Password Recovery

1. 以終端機或是執行終端機模擬程式的個人電腦，經由 Console Port 連接至 Router。



2. 鍵入 show version 並記錄所設定的 **configuration register**；通常為 0x2102 或 0x102。

```
cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
[Icons]
0 babbles, 0 late collision, 0 deferred
34 lost carrier, 0 no carrier
0 output buffer failures, 0 output buffers swapped out
Router#sh ver
Cisco Internetwork Operating System Software
IOS (tm) 3600 Software (C3640-I-M), Version 12.0(13), RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Tue 05-Sep-00 22:55 by linda
Image text-base: 0x60008918, data-base: 0x60684000

ROM: System Bootstrap, Version 11.1(20)AA2, EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)

Router uptime is 2 hours, 22 minutes
System restarted by power-on
System image file is "flash:c3640-i-mz.120-13"

cisco 3640 (R4700) processor (revision 0x00) with 49152K/16384K bytes of memory.

Processor board ID 26746215
R4700 processor, Implementation 33, Revision 1.0
Bridging software.
X.25 software, Version 3.0.0.
2 Ethernet/IEEE 802.3 interface(s)
2 Serial network interface(s)
8 Low-speed serial(sync/async) network interface(s)
32 terminal line(s)
DRAM configuration is 64 bits wide with parity disabled.
125K bytes of non-volatile configuration memory.
8192K bytes of processor board System flash (Read/Write)

Configuration register is 0x2102

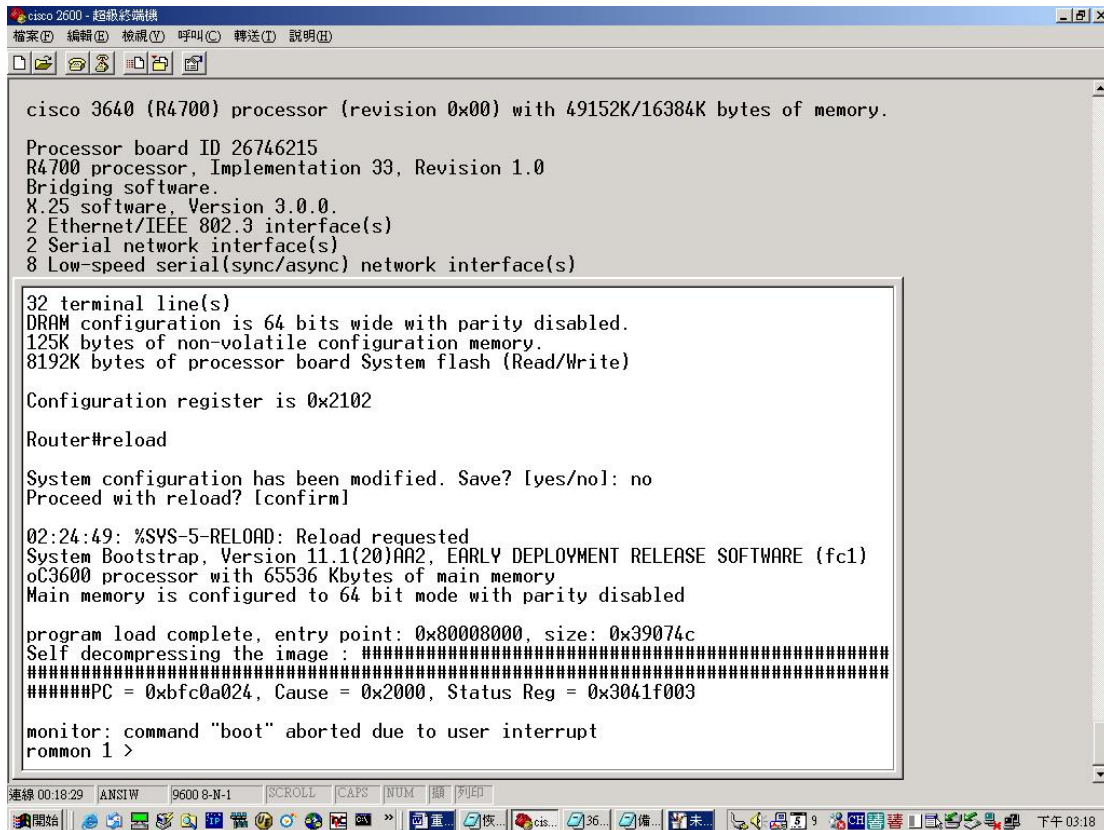
Router#
```

連線 00:16:50 ANSIW 9600 8-N-1 [SCROLL] [CAPS] [NUM] [關] [列印]

3.將 Router 電源關閉後，重新開機。

4.在重新開機後 60 秒內，由終端機按下 Break 鍵。

5.此時會出現 ROMMON>的提示符號。



```
cisco 3640 (R4700) processor (revision 0x00) with 49152K/16384K bytes of memory.
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32 terminal line(s)
DRAM configuration is 64 bits wide with parity disabled.
125K bytes of non-volatile configuration memory.
8192K bytes of processor board System flash (Read/Write)

Configuration register is 0x2102
Router#reload

System configuration has been modified. Save? [yes/no]: no
Proceed with reload? [confirm]

02:24:49: %SYS-5-RELOAD: Reload requested
System Bootstrap, Version 11.1(20)AA2, EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)
oC3600 processor with 65536 Kbytes of main memory
Main memory is configured to 64 bit mode with parity disabled

program load complete, entry point: 0x80008000, size: 0x39074c
Self decompressing the image : #####
#####PC = 0xbfc0a024, Cause = 0x2000, Status Reg = 0x3041f003

monitor: command "boot" aborted due to user interrupt
rommon 1 >
```

6.在 ROMMON>下鍵入 confreg 0x42 由 Flash 來開機，或鍵入 confreg 0x41 由 ROMs 來開機；建議設定為 0x42。

```

cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
boot          boot up an external process
break         set/show/clear the breakpoint
confreg       configuration register utility
cont          continue executing a downloaded image
context       display the context of a loaded image
cookie        display contents of cookie PROM in hex
dev           list the device table
dir           list files in file system
dis           disassemble instruction stream
dnld         serial download a program module

frame         print out a selected stack frame
help          monitor builtin command help
history       monitor command history
meminfo       main memory information
repeat        repeat a monitor command
reset         system reset
set           display the monitor variables
stack         produce a stack trace
sync          write monitor environment to NVRAM
sysret        print out info from last system return
unalias       unset an alias
unset         unset a monitor variable
xmodem        x/ymodem image download
rommon 4 > 0x42

monitor: command "0x42" not found
rommon 5 > o/r 0x42

monitor: command "o/r" not found
rommon 6 > confreg 0x42

You must reset or power cycle for new config to take effect
rommon 7 >

```

7. 在 ROMMON> 下鍵入 reset，讓 Router 重新暖開機。

```

cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
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) 3600 Software (C3640-I-M), Version 12.0(13), RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Tue 05-Sep-00 22:55 by linda
Image text-base: 0x60008918, data-base: 0x600684000

cisco 3640 (R4700) processor (revision 0x00) with 49152K/16384K bytes of memory.

Processor board ID 26746215
R4700 processor, Implementation 33, Revision 1.0
Bridging software.
K.25 software, Version 3.0.0.
2 Ethernet/IEEE 802.3 interface(s)
2 Serial network interface(s)
8 Low-speed serial(sync/async) network interface(s)
32 terminal line(s)
DRAM configuration is 64 bits wide with parity disabled.
125K bytes of non-volatile configuration memory.
8192K bytes of processor board System flash (Read/Write)

--- System Configuration Dialog ---

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

```

8. 在 Router 重新開機後，對 Router 所詢問的所有問題均回答 no；若有誤回答 yes 時，可以按 Ctrl-C 來中斷初始設定。


```
cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
[Icons]
00:00:07: %LINK-3-UPDOWN: Interface Serial3/1, changed state to down
00:00:07: %LINK-3-UPDOWN: Interface Serial3/2, changed state to down
00:00:07: %LINK-3-UPDOWN: Interface Serial3/3, changed state to down
00:00:07: %LINK-3-UPDOWN: Interface Serial3/4, changed state to down
00:00:07: %LINK-3-UPDOWN: Interface Serial3/5, changed state to down
00:00:07: %LINK-3-UPDOWN: Interface Serial3/6, changed state to down
00:00:07: %LINK-3-UPDOWN: Interface Serial3/7, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/0, changed state to up
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/1, changed state to up
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/1, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/2, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/3, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/4, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/5, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/6, changed state to down
00:00:08: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/7, changed state to down
00:01:17: %SYS-5-RESTART: System restarted --
Cisco Internetwork Operating System Software
IOS (tm) 3600 Software (C3640-I-M), Version 12.0(13), RELEASE SOFTWARE_
連線 00:29:05 ANSIV 9600 8-N-1 SCROLL CAPS NUM 顯示 列印
```

9. 在 Router> 提示符號下鍵入 enable，此時將會進入 enable mode 並出現 Router# 的提示符號。

```
cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
[Icons]
Cisco Internetwork Operating System Software
IOS (tm) 3600 Software (C3640-I-M), Version 12.0(13), RELEASE SOFTWARE (fc1)
Copyright (c) 1986-2000 by cisco Systems, Inc.
Compiled Tue 05-Sep-00 22:55 by linda
00:01:19: %LINK-5-CHANGED: Interface Ethernet0/0, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial0/0, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Ethernet0/1, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial0/1, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/0, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/1, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/2, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/3, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/4, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/5, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/6, changed state to administratively down
00:01:19: %LINK-5-CHANGED: Interface Serial3/7, changed state to administratively down
00:01:20: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/0, changed state to down
00:01:20: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/1, changed state to down
Router>enable
Router#
連線 00:29:48 ANSIV 9600 8-N-1 SCROLL CAPS NUM 顯示 列印
```

10. 鍵入 config mem，將 NVRAM 中的設定複製到記憶體中。

```
cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
[Icons]
shutdown
!
interface Serial3/6
no ip address
no ip directed-broadcast
shutdown
!
interface Serial3/7
no ip address
no ip directed-broadcast

shutdown
!
ip classless
ip route 0.0.0.0 0.0.0.0 172.16.254.254
ip route 163.21.12.0 255.255.255.0 163.21.12.253
!
line con 0
password cisco
login
transport input none
line 33 48
line 65 80
line aux 0
line vty 0 4
password cisco
login
!
end

Router#wr mem
Building configuration...
[OK]
Router#_
```

11. 鍵入 wr term，顯示 Router 的設定。

```
cisco 2600 - 超級終端機
檔案(F) 編輯(E) 檢視(V) 呼叫(C) 轉送(T) 說明(H)
[Icons]
line 65 80
line aux 0
line vty 0 4
password cisco
login
!
end

Router#wr term
Building configuration...

Current configuration:
!
version 12.0
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Router
!
enable password 12345
!
ip subnet-zero
!
!
!
interface Ethernet0/0
ip address 163.21.12.254 255.255.255.0
no ip directed-broadcast
shutdown
!
interface Serial0/0
no ip address
--More-- _
```

如果設定中有 enable secret xxxx 時：

鍵入 config term 來設定。

鍵入 enable secret password 。

鍵入 Ctrl-Z 離開 。

如果設定中沒有 enable secret xxxx 時：

鍵入 config term 來設定 。

鍵入 enable password password 。

鍵入 Ctrl-Z 離開 。

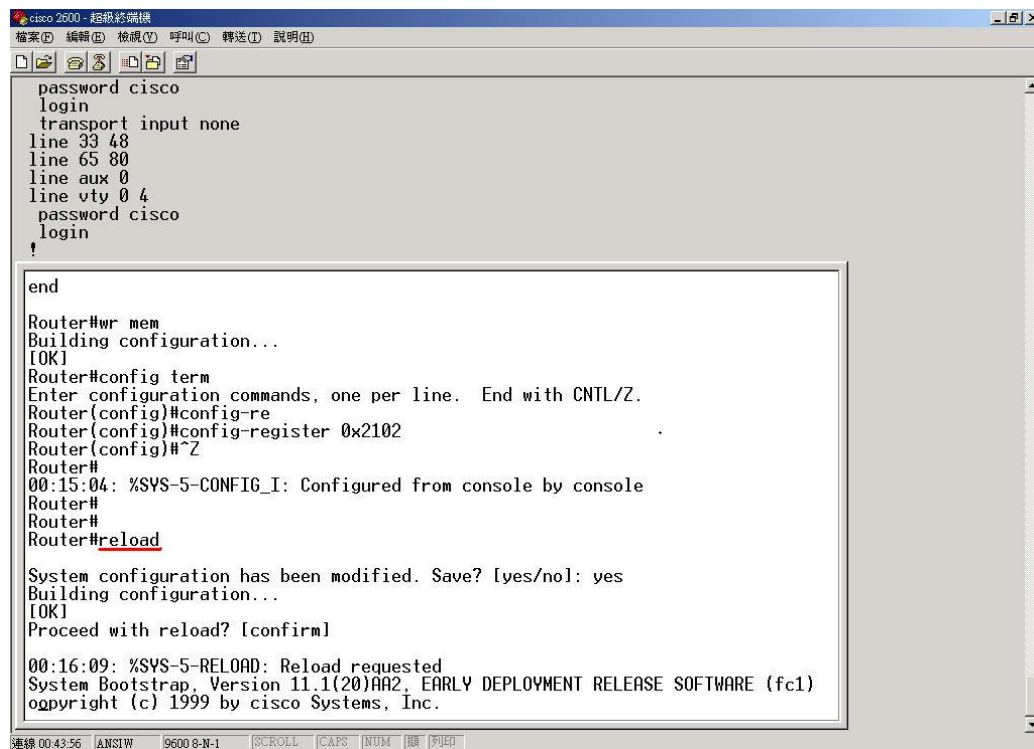
12. 鍵入 write mem 將設定寫入 NVRAM 。

13. 鍵入 config term 。

14. 鍵入 config-register 0x2102 或是在步驟 2 所記錄的數值 。

15. 鍵入 Ctrl-Z 跳離 。

16. 鍵入 reload 重新開啟 Router 。



```
password cisco
login
transport input none
line 33 48
line 65 80
line aux 0
line vty 0 4
password cisco
login
!
end
Router#wr mem
Building configuration...
[OK]
Router#config term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#config-re
Router(config)#config-register 0x2102
Router(config)#Z
Router#
00:15:04: %SYS-5-CONFIG_I: Configured from console by console
Router#
Router#
Router#reload
System configuration has been modified. Save? [yes/no]: yes
Building configuration...
[OK]
Proceed with reload? [confirm]
00:16:09: %SYS-5-RELOAD: Reload requested
System Bootstrap, Version 11.1(20)AA2, EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)
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```