

How to Recover a Lost Password on a Cisco Switch

David Davis

So you lost the password on your Cisco switch. Maybe the old administrator left or maybe you just haven't used this switch in a while and don't recall the password. No matter what the case, you need to change the password on the switch so you can create a new password. How do you do this on a Cisco switch? It is a little more difficult than a Cisco router. One important difference between resetting the password on a Cisco switch vs. a router is that you don't use configuration registers to reset the password on the switch. Let me show you how it's done.

I want to point out that this article is based on a Cisco Catalyst 2900, 3500XL, 2940, 2950, 2955, and 3550 switches. If you have another model of Cisco Catalyst switch, see the link concerning general Cisco password recovery at the bottom of this article.

To recover a password on a Cisco switch, you will have to be connected to the console port of the Cisco switch using 9600 baud, 8 bits, no parity, 1 stop bit, and xon/xoff flow control. I recommend using Hyperterminal that comes with Windows XP to do this.

Once you are connected and see something on the terminal window when you press enter, **unplug the power cable**. Next, **hold down the mode button** on the front, as seen in the photo below, and **connect the power cable**.

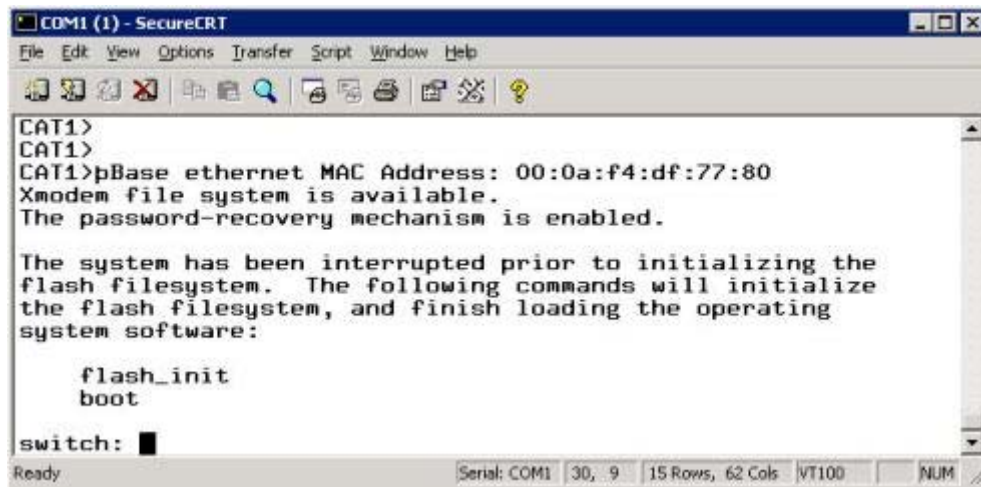


On a 2900, 3500XL or 3550 (like the one shown) release the mode button after the 1x port LED goes out. On a 2940 or 2950 switch release the mode button after the stat light goes out. On a 2955, press the break key (ctrl-break on Windows) when you see the message that the switch will autoboot.

You should now see something like this (taken from a 3550 switch):

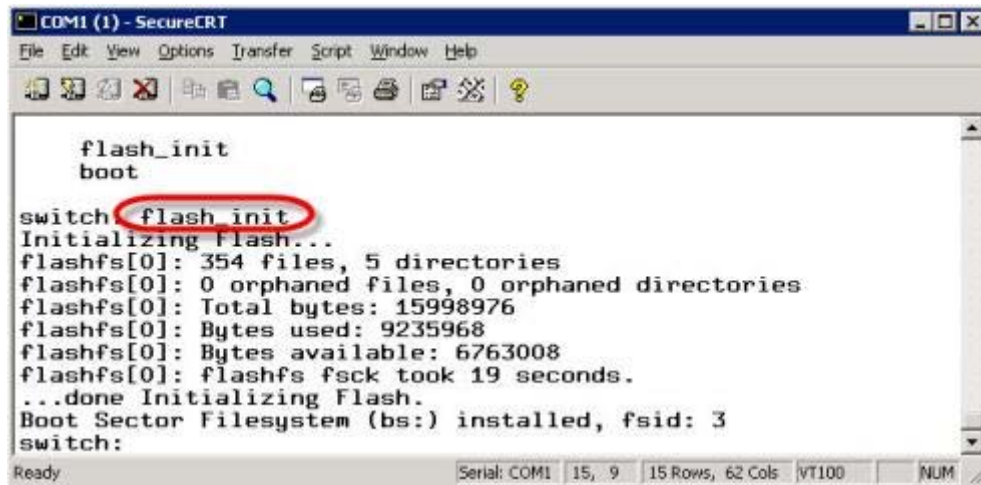
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Notice that it says that **the password-recovery mechanism is enabled**.

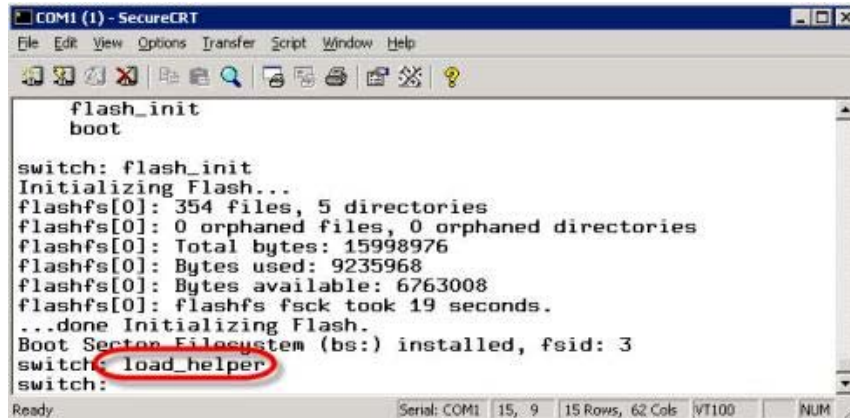
At the switch: prompt, type **flash_init** and press enter. You should see something like this (at least on a 3550):



Now type **load_helper** and press enter. You should see something like this:

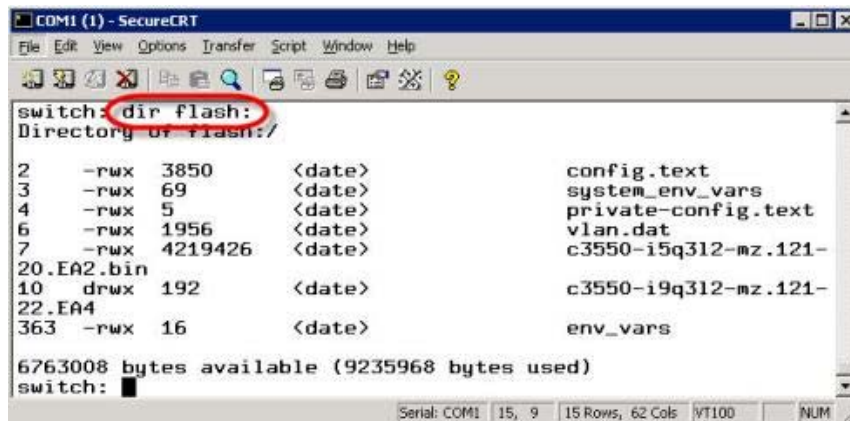
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```
COM1 (1) - SecureCRT
File Edit View Options Transfer Script Window Help
flash_init
boot
switch: flash_init
Initializing Flash...
flashfs[0]: 354 files, 5 directories
flashfs[0]: 0 orphaned files, 0 orphaned directories
flashfs[0]: Total bytes: 15998976
flashfs[0]: Bytes used: 9235968
flashfs[0]: Bytes available: 6763008
flashfs[0]: flashfs fsck took 19 seconds.
...done Initializing Flash.
Boot Sector Filesystem (bs:) installed, fsid: 3
switch: load_helper
switch:
```

Now type **dir flash:** and press enter. You should see something like this:

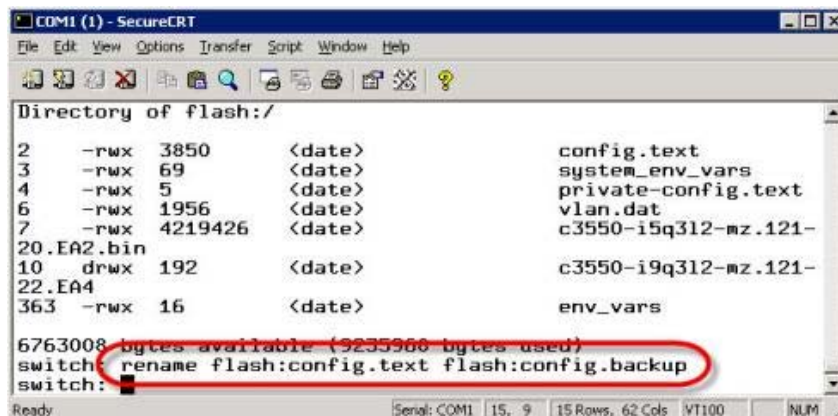


```
COM1 (1) - SecureCRT
File Edit View Options Transfer Script Window Help
switch: dir flash:
Directory of flash:/
 2  -rwx 3850  <date>      config.text
 3  -rwx  69  <date>      system_env_vars
 4  -rwx  5   <date>      private-config.text
 6  -rwx 1956 <date>      vlan.dat
 7  -rwx 4219426 <date>    c3550-i5q312-mz.121-
20.EA2.bin
10  drwx 192  <date>      c3550-i9q312-mz.121-
22.EA4
363 -rwx 16   <date>      env_vars

6763008 bytes available (9235968 bytes used)
switch: █
```

The config.text file is what stores the administrative password that is keeping you from logging into the router. To get rid of this file, use this command:

rename flash:config.text flash:config.backup

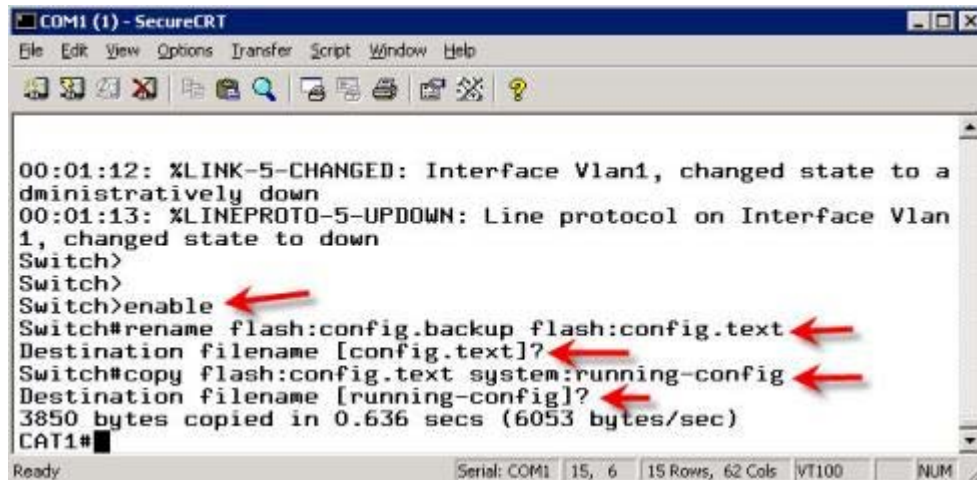


```
COM1 (1) - SecureCRT
File Edit View Options Transfer Script Window Help
Directory of flash:/
 2  -rwx 3850  <date>      config.text
 3  -rwx  69  <date>      system_env_vars
 4  -rwx  5   <date>      private-config.text
 6  -rwx 1956 <date>      vlan.dat
 7  -rwx 4219426 <date>    c3550-i5q312-mz.121-
20.EA2.bin
10  drwx 192  <date>      c3550-i9q312-mz.121-
22.EA4
363 -rwx 16   <date>      env_vars

6763008 bytes available (9235968 bytes used)
switch: rename flash:config.text flash:config.backup
switch: █
```


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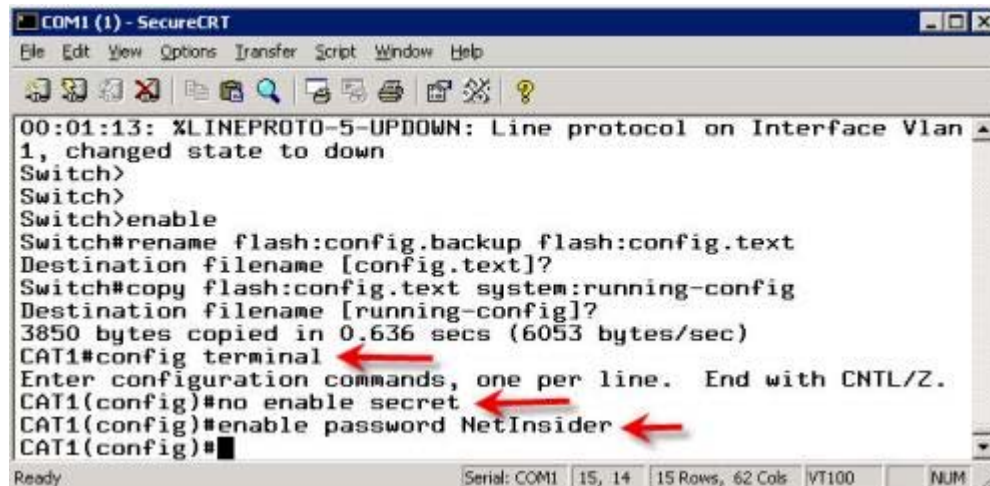


```
COM1 (1) - SecureCRT
File Edit View Options Transfer Script Window Help
00:01:12: %LINK-5-CHANGED: Interface Vlan1, changed state to a
dministratively down
00:01:13: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan
1, changed state to down
Switch>
Switch>
Switch>enable
Switch#rename flash:config.backup flash:config.text
Destination filename [config.text]?
Switch#copy flash:config.text system:running-config
Destination filename [running-config]?
3850 bytes copied in 0.636 secs (6053 bytes/sec)
CAT1#
```

After each command, you will be prompted to confirm the name of the destination file. Do this by pressing enter each time.

Go into global configuration mode by typing **config terminal**. Next type **no enable secret**.

Now you can reset your enable password to whatever password you want. In the example below, we used the **enable password NetInsider** to set the password to **NetInsider**.



```
COM1 (1) - SecureCRT
File Edit View Options Transfer Script Window Help
00:01:13: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan
1, changed state to down
Switch>
Switch>
Switch>enable
Switch#rename flash:config.backup flash:config.text
Destination filename [config.text]?
Switch#copy flash:config.text system:running-config
Destination filename [running-config]?
3850 bytes copied in 0.636 secs (6053 bytes/sec)
CAT1#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
CAT1(config)#no enable secret
CAT1(config)#enable password NetInsider
CAT1(config)#
```

Exit out of global (1) configuration using the **exit** command and save your configuration with the **copy running-config startup-config** command. You will be prompted to confirm the name of the destination file. Press enter.

You have successfully reconfigured your switch's enable password using the password recovery procedure. Even better, you were able to do this while preserving the entire switch configuration.