Table of Contents

Password Recovery Procedure for the Catalyst Layer 2 Fixed Configuration and 3550 Series Switches

Introduction

This document describes the password recovery procedure for the Cisco Catalyst Layer 2 fixed configuration switches 2900/3500XL, 2940 and 2950/2955 and the Catalyst Layer 3 fixed configuration 3550 switches.

Before You Begin

Conventions

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

Prerequisites

There are no specific prerequisites for this document.

Step−by−Step Procedure

Follow the password recovery procedure below.

1. Attach a terminal or PC with terminal emulation (for example, Hyper Terminal) to the console port of the switch.

   Use the following terminal settings:

   ◆ Bits per second (baud): 9600
   ◆ Data bits: 8
   ◆ Parity: None
   ◆ Stop bits: 1
   ◆ Flow Control: Xon/Xoff

   Note: For additional information on cabling and connecting a terminal to the console port, refer to Connecting a Terminal to the Console Port on Catalyst Switches.
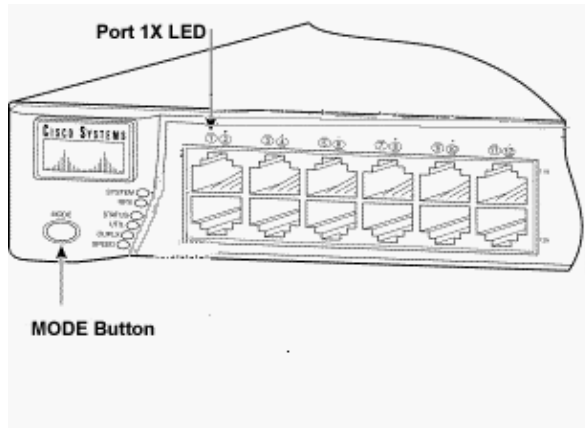2. Unplug the power cable.
3. Hold down the mode button located on the left side of the front panel, while reconnecting the power cable to the switch.

   For 2900/3500XL and 3550 series switches: Release the mode button after the LED above **Port 1x**

goes out.

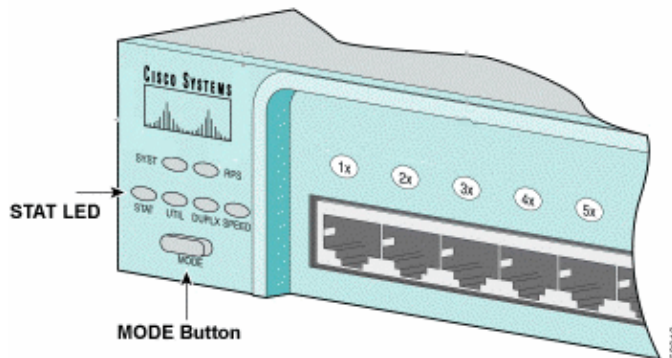**Note:** LED position may vary slightly depending on the model.

Catalyst 3524XL

For 2940 and 2950 series switches: Release the mode button after the **STAT** LED goes out.

Note: LED position may vary slightly depending on the model.

Catalyst 2950−24

For 2955 series switches only: The Catalyst 2955 series switches do not use an external mode button for password recovery. Instead the switch boot loader uses the break−key detection to stop the automatic boot sequence for the password recovery purposes. The break sequence is determined by the terminal application and operating system used. Hyperterm running on Windows 2000 uses **Ctrl + Break**. On a workstation running UNIX, **Ctrl−C** is the break key. For more information, refer to Standard Break Key Sequence Combinations During Password Recovery.

The example below uses Hyperterm to break into *switch:* mode on a 2955.

```
C2955 Boot Loader (C2955-HBOOT-M) Version 12.1(0.0.514), CISCO DEVELOPMENT TEST
VERSION
Compiled Fri 13-Dec-02 17:38 by madison
WS-C2955T-12 starting...
Base ethernet MAC Address: 00:0b:be:b6:ee:00
Xmodem file system is available.
Initializing Flash...
```

```
flashfs[0]: 19 files, 2 directories
flashfs[0]: 0 orphaned files, 0 orphaned directories
flashfs[0]: Total bytes: 7741440
flashfs[0]: Bytes used: 4510720
flashfs[0]: Bytes available: 3230720
flashfs[0]: flashfs fsck took 7 seconds.
...done initializing flash.
Boot Sector Filesystem (bs:) installed, fsid: 3
Parameter Block Filesystem (pb:) installed, fsid: 4

*** The system will autoboot in 15 seconds ***
Send break character to prevent autobooting.


!--- Wait until you see this message before
!--- you issue the break sequence.
!--- Ctrl+Break is entered using Hyperterm.


The system has been interrupted prior to initializing the
The system has been interrupted prior to initializing the
the flash filesystem, and finish loading the operating
system software:

flash_init
load_helper
bootswitch:
```

4. Issue the **flash_init** command.

```
switch: flash_init
Initializing Flash...
flashfs[0]: 143 files, 4 directories
flashfs[0]: 0 orphaned files, 0 orphaned directories
flashfs[0]: Total bytes: 3612672
flashfs[0]: Bytes used: 2729472
flashfs[0]: Bytes available: 883200
flashfs[0]: flashfs fsck took 86 seconds
....done Initializing Flash.
Boot Sector Filesystem (bs:) installed, fsid: 3
Parameter Block Filesystem (pb:) installed, fsid: 4
switch:

!--- This output is from a 2900XL switch. Output from a
!--- 3500XL, 3550 or 2950 will vary slightly.
```

5. Issue the **load_helper** command.

```
switch: load_helper
switch:
```

6. Issue the **dir flash:** command.

   Note: Make sure to type a colon ":" after the **dir flash**.

   The switch file system is displayed:

```
switch: dir flash:
Directory of flash:/
2    -rwx  1803357  <date>            c3500xl-c3h2s-mz.120-5.WC7.bin

!--- This is the current version of software.

4    -rwx  1131     <date>            config.text
```

```
!--- This is the configuration file.

5    -rwx  109      <date>              info
6    -rwx  389      <date>              env_vars
7    drwx  640      <date>              html
18   -rwx  109      <date>              info.ver
403968 bytes available (3208704 bytes used)
switch:

!--- This output is from a 3500XL switch. Output from a 2900XL,
!--- 2950 or 3550 will vary slightly.
```

7. Type **rename flash:config.text flash:config.old** to rename the configuration file.

```
switch: rename flash:config.text flash:config.old
switch:

!--- The config.text file contains the password
!--- definition.
```

8. Issue the **boot** command to boot the system.

```
switch: boot
Loading "flash:c3500xl-c3h2s-mz.120-5.WC7.bin"...############################
#############################################################################
##################################################################
File "flash:c3500xl-c3h2s-mz.120-5.WC7.bin" uncompressed and installed, entry po
int: 0x3000
executing...

!--- Output suppressed.
!--- This output is from a 3500XL switch. Output from a 2900XL, 2950 or 3550
!--- will vary slightly.
```

9. Enter "**n**" at the prompt to abort the initial configuration dialog.

```
--- System Configuration Dialog ---
At any point you may enter a question mark '?' for help.
Use ctrl-c to abort configuration dialog at any prompt.
Default settings are in square brackets '[]'.
Continue with configuration dialog? [yes/no]: n

!--- Type "n" for no.

Press RETURN to get started.

!--- Press Return or Enter.

Switch>

!--- The Switch> prompt is displayed.
```

10. At the switch prompt, type **en** to enter enable mode.

```
Switch>en
Switch#
```

11. Type **rename flash:config.old flash:config.text** to rename the configuration file with its original name.

```
Switch#rename flash:config.old flash:config.text
Destination filename [config.text]
```

```
                   !--- Press Return or Enter.


         Switch#
```
12. Copy the configuration file into memory.

```
         Switch#copy flash:config.text system:running-config
         Destination filename [running-config]?

         !--- Press Return or Enter.


         1131 bytes copied in 0.760 secs
         Switch#
```

The configuration file is now reloaded.
13. Change the password.

```
         Switch#configure terminal
         Switch(config)#no enable secret

         !--- This step is necessary if the switch had an enable secret
         !--- password.

         Switch(config)#enable password Cisco
         Switch#(config)#^Z

         !--- Use Ctrl-Z.
```

14. Write the running configuration to the configuration file with the **write memory** command.

```
         Switch#write memory
         Building configuration...
         [OK]
         Switch#
```

Related Information

- **LAN Product Support**
- **LAN Switching Technology Support**
- **Technical Support – Cisco Systems**