

S3910 Series Switches Software Upgrade Guide

Models: S3910-24TS; S3910-48TS

Contents

1. Explanation.....	1
2. Upgrade File.....	1
3. TFTP Server Setup.....	1
4. Upgrade Steps.....	2
4.1 Upgrade Under the Main Program.....	2
4.1.1 Network Topology.....	2
4.1.2 Configuration Steps.....	2
4.1.3 Functional Verification.....	3
4.2 Upgrade in Uboot Mode.....	4
4.2.1 Network Topology.....	4
4.2.2 Configuration Steps.....	4
4.2.3 Functional Verification.....	6

1. Explanation

When new features are added or the original performance needs to be optimized and the current running version is lagging behind, the device needs to be upgraded. At this time, you need to load the higher version of the system software, upgrade through the CLI interface, WEB interface, and restart the device to achieve.

Precautions

- This version requires: 512 MB of memory space and 256 MB of Flash space.
- In the process of upgrading and downgrading, please pay attention to the prompt information output during the operation. If it fails, please save the log information and contact FS Network Technical Support.
- During the upgrade and downgrade process, there will be a prompt message not allowing restart. Once such a prompt message appears, please do not power off, do not reset the system, and do not insert or remove any modules.
- After the upgrade and downgrade are complete, run the show version command to view the current version number of the device to confirm the upgrade is successful.

2. Upgrade File

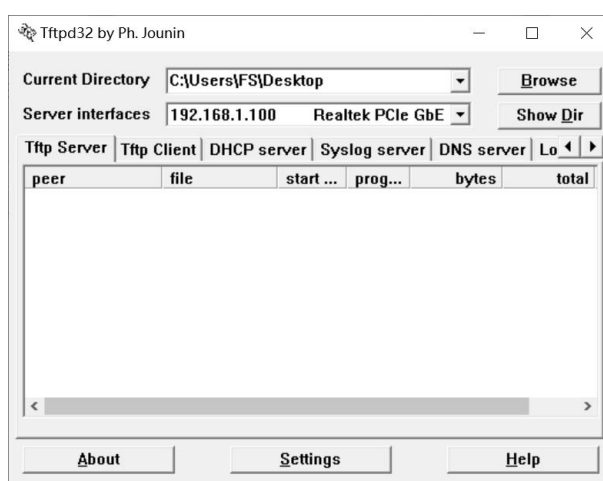
To upgrade the device to this version or downgrade to this version, you need to use the following upgrade file.

Applicable Products	Upgrade File	
	【 Upgrade File 】	S3910_FSOS11.4(1)B70P1_install.bin
S3910-24TS	【 File Description 】	System installation package
S3910-48TS	【 File Size 】	75475433 bytes
	【 MD5 Value 】	a0af188fa338201a3b0d58a654e3ffef

3. TFTP Server Setup

Use software TFTP on local PC

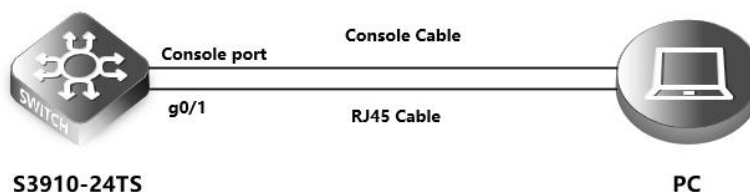
Specify the folder where the version file is located and the IP address of the TFTP server



4. Upgrade Steps

4.1 Upgrade Under the Main Program

4.1.1 Network Topology



4.1.2 Configuration Steps

Set the IP address of the console port of the switch

S3910>enable	----->Enter privileged mode
S3910#configure terminal	----->Enter global configuration mode
S3910(config)#interface vlan 1	----->Enter vlan 1 interface
S3910(config-if)#ip address 192.168.1.200 255.255.255.0	----->Set management ip on vlan 1 interface
S3910(config-if)#exit	----->Return to global configuration mode

Set the computer IP address, and confirm that the computer can ping the switch, and the switch can also ping the computer

C:\Users\FS>ping 192.168.1.200

Ping 192.168.1.200 with 32 bytes of data:

Reply from 192.168.1.200: Byte=32 Time=3ms TTL=64

Reply from 192.168.1.200: Byte=32 Time=2ms TTL=64

Reply from 192.168.1.200: Byte=32 Time=2ms TTL=64

Reply from 192.168.1.200: Byte=32 Time=2ms TTL=64

Ping statistics of 192.168.1.200:

Packet: Sent = 4, Received = 4, Lost = 0 (0% lost),

Estimated time of round trip (in milliseconds):

Shortest = 2ms, longest = 3ms, average = 2ms

S3910#ping 192.168.1.100

Sending 5, 100-byte ICMP Echoes to 192.168.1.100, timeout is 2 seconds:

< press Ctrl+C to break >

!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/2 ms.

NOTE: The firewall function of the computer must be turned off, and the anti-virus software must be exited, otherwise the upgrade may not succeed

Put the tftp software (tftp software can be downloaded from the Internet) and the new software version into the same directory.

Start the tftp tool and execute the following commands on the switch, the device will be automatically upgraded:

S3910#**upgrade download tftp://192.168.1.100/S3910_FSOS11.4(1)B70P1_install.bin**

Upgrade the device must be auto-reset after finish, are you sure upgrading now?[Y/N]y

The following prompt indicates that the upgrade was successful:

```
*Jul 13 16:38:59: %UPGRADE-6-INFO:
*Jul 13 16:38:59: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 10%
*Jul 13 16:38:59: %UPGRADE-6-INFO:
*Jul 13 16:39:04: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 20%
*Jul 13 16:39:04: %UPGRADE-6-INFO:
*Jul 13 16:39:07: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 30%
*Jul 13 16:39:07: %UPGRADE-6-INFO:
*Jul 13 16:39:08: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 40%
*Jul 13 16:39:08: %UPGRADE-6-INFO:
*Jul 13 16:40:21: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 50%
*Jul 13 16:40:21: %UPGRADE-6-INFO:

Upgrade info [OK]
      Rootfs version[1.0.0.eefb500f->1.0.0.3e33691f]
*Jul 13 16:40:21: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 80%
*Jul 13 16:40:21: %UPGRADE-6-INFO:
Reload system to take effect!
*Jul 13 16:40:21: %UPGRADE-6-INFO: [Slot 0]:
*Jul 13 16:40:21: %UPGRADE-6-INFO: Upgrade info [OK]
*Jul 13 16:40:21: %UPGRADE-6-INFO:      Rootfs version[1.0.0.eefb500f->1.0.0.3e33691f]
*Jul 13 16:40:21: %UPGRADE-6-INFO:
*Jul 13 16:40:21: %UPGRADE-6-INFO: [Slot 0]:Reload system to take effect!
*Jul 13 16:40:21: %UPGRADE-6-INFO:
*Jul 13 16:40:21: %UPGRADE-6-INFO: [Slot 0]:Upgrade processing is 100%
*Jul 13 16:40:21: %UPGRADE-6-INFO: System is reloading due to upgrade.
*Jul 13 16:40:23: %UPGRADE-6-INFO: Auto-sync box config synchronization, Please wait for a moment....
*Jul 13 16:40:23: %UPGRADE-6-INFO: [Slot 0]
*Jul 13 16:40:23: %UPGRADE-6-INFO:      status:      SUCCESS
*Jul 13 16:40:23: %DP-3-RESET_DEV: Reset device 1 due to upgrade package.
*Jul 13 16:40:23: %DP-3-MACHINE_RESTART: MACHINE_RESTART.

SysRq : Resettin
```

Restart the switch

```
S3910#reload ----->Restart the switch to take effect
Reload system?(Y/N) y
```

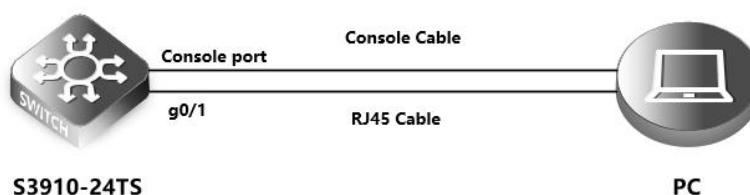
After restart, confirm whether the switch is successfully upgraded

4.1.3 Functional Verification

Confirm whether the version is the upgraded version by show version

4.2 Upgrade in Uboot Mode

4.2.1 Network Topology



4.2.2 Configuration Steps

Restart the device

When the Ctrl+C prompt appears, press the CTRL and C keys simultaneously on the keyboard to enter the bootloader menu

```
Boot 1.2.28-0c4a1bf (Feb 09 2017 - 17:14:53)
```

```
I2C: ready
DRAM: 508 MiB
NAND: (ONFI), chipsize 512 MiB
In: serial
Out: serial
Err: serial
Unlocking L2 Cache ...Done
arm_clk=1000MHz, axi_clk=400MHz, apb_clk=100MHz, arm_periph_clk=500MHz
SETMAC: Setmac operation was performed at 2020-02-28 15:24:58 (version: 11.0)
Press Ctrl+C to enter Boot Menu
Net: eth-0
Entering simple UI....
```

```
===== BootLoader Menu("Ctrl+Z" to upper level) =====
```

```
TOP menu items.
```

```
*****
```

- 0. Tftp utilities.
- 1. XModem utilities.
- 2. Run main.
- 3. SetMac utilities.
- 4. Scattered utilities.
- 5. Set Module Serial

```
*****
```

After entering the bootloader menu, click the red reminder below to enter the address configuration menu

```
===== BootLoader Menu("Ctrl+Z" to upper level) =====
```

```
TOP menu items.
```

```
*****
```

- 0. Tftp utilities.
- 1. XModem utilities.

2. Run main.
3. SetMac utilities.
4. Scattered utilities.
5. Set Module Serial

Press a key to run the command: 0

===== BootLoader Menu("Ctrl+Z" to upper level) =====

Tftp utilities.

0. Upgrade bootloader.
1. Upgrade kernel and rootfs by install package.
2. Down to memory and jump to run.

Press a key to run the command: 1

Under the menu, follow the prompts to enter the switch device address, execute the pc address, and the file name to be upgraded

Plz enter the Local IP[:]: 192.168.1.200	-----Switch address
Plz enter the Remote IP[:]: 192.168.1.100	-----PC address
Plz enter the Filename[:]: S3910_FSOS11.4(1)B42_install.bin	----- Upgrade bin file

Follow the prompts to select Y to continue to the next step

Determined to upgrade? [Y/N]: Y

Upgrading, keep power on and wait please ...

Upgrading boot ...

After successful upgrade, automatically return to the bootloader menu interface, press ctrl+z to exit the menu item to restart

===== BootLoader Menu("Ctrl+Z" to upper level) =====

Tftp utilities.

0. Upgrade bootloader.
1. Upgrade kernel and rootfs by install package.
2. Down to memory and jump to run.

Press a key to run the command:

===== BootLoader Menu("Ctrl+Z" to upper level) =====

TOP menu items.

0. Tftp utilities.
1. XModem utilities.
2. Run main.
3. SetMac utilities.
4. Scattered utilities.
5. Set Module Serial

Press a key to run the command: 2

Unmounting UBIFS volume kernel!

4.2.3 Functional Verification

Confirm whether the version is the upgraded version by show version

S3910#show version

System description : FS 10G Ethernet Switch(S3910-24T4S) By FS Networks

System start time : 2020-07-13 16:38:39

System uptime : 0:00:04:31

System hardware version : 1.31

System software version : S3910_FSOS 11.4(1)B70P1

System patch number : NA

System serial number : G1PT3MT001131

System boot version : 1.2.28

Module information:

Slot 0 : S3910-24T4S

Hardware version : 1.31

Boot version : 1.2

Software version : S3910_FSOS 11.4(1)B70P1

Serial number : G1PT3MT001131