

# S3900 Series Switches FSOS Software Upgrade Guide

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Models: S3900-48T4S; S3900-24T4S; S3900-24F4S

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## 1. Introduction

Since the V1.7.2 version of the software upgrades SSH and SSL to the latest one, a large number of new files have been added, making the size of the new version exceed the size limit of the 1.7.1 version of the software. Therefore, it is not possible to directly upgrade from version V.1.7.1 to version V1.7.2. You need to use an UPGRADE version as a transition, first upgrade to the UPGRADE version, and then use the UPGRADE version to upgrade to the V1.7.2.

## 2. Upgrade Steps

The following takes S3900-48T4S as an example to illustrate the specific steps:

1. Delete the backup image file S3900-48T4S-BR-V0171.bin of version V1.7.1 on the device.
2. Upgrade the UPGRADE version file S3900-48T4S-UPGRADE.bin to the device.
3. Use S3900-48T4S-UPGRADE.bin to start the device.
4. Delete the main image file S3900-48T4S-MR-V0171.bin of version V1.7.1 on the device.
5. Upgrade the main image file S3900-48T4S-MR-V0172.bin of version V1.7.2 to the device.
6. Use S3900-48T4S-MR-V0172.bin to start the device.
7. Delete the UPGRADE version file S3900-48T4S-UPGRADE.bin on the device.
8. Upgrade the backup image file S3900-48T4S-BR-V0172.bin of version V1.7.2 to the device.

## 3. Upgrade example

The following is the upgrade process record of S3900-48T4S.

```
Switch#dir
```

```
Unit 1:
```

File Name	Type	Status	Size	Modified
S3900-48T4S-BR-V0171.bin	Image	InActive	20326868	2021-04-02 08:03:40
S3900-48T4S-MR-V0171.bin	Image	Active	20326868	2021-04-02 08:06:13
Factory_Default_Config.cfg	Config	InActive	496	2020-12-11 09:06:32
startup1.cfg	Config	Active	2379	2020-12-11 09:06:43

```
Flash size: 128 MB
```

```
Switch#copy running-config startup-config
```

```
Startup configuration file name: startup1.cfg
```

```
Flash programming started.
```

```
Flash programming completed.
```

```
Success.
```

```
Switch#delete file name S3900-48T4S-BR-V0171.bin
```

```
Switch#dir
```

```
Unit 1:
```

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0171.bin	Image	Active	20326868	2021-04-02 08:06:13

```
Factory_Default_Config.cfg      Config InActive      496 2020-12-11 09:06:32
startup1.cfg                    Config Active        2382 2021-03-30 06:52:18
```

```
Flash size: 128 MB
```

```
Switch#copy tftp file
Copy to which unit: <1-6>: 1
TFTP server IP address: 192.168.12.11
Choose file type:
 1. config; 2. image: 2
Source file name: S3900-48T4S-UPGRADE.bin
Destination file name: S3900-48T4S-UPGRADE.bin
Flash programming started.
Flash programming completed.
Switch#dir
```

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0171.bin	Image	Active	20326868	2021-04-02 08:06:13
S3900-48T4S-UPGRADE.bin	Image	InActive	20326868	2020-12-11 09:14:17
Factory_Default_Config.cfg	Config	InActive	496	2020-12-11 09:06:32
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

```
Flash size: 128 MB
```

```
Switch#configure terminal
Switch(config)#boot system image:S3900-48T4S-UPGRADE.bin
Switch(config)#end
Switch#dir
```

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0171.bin	Image	InActive	20326868	2021-04-02 08:06:13
S3900-48T4S-UPGRADE.bin	Image	Active	20326868	2020-12-11 09:14:17
Factory_Default_Config.cfg	Config	InActive	496	2020-12-11 09:06:32
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

```
Flash size: 128 MB
```

```
Switch#reboot
System will be restarted. Continue <y/n>? y
Switch#
```

U-Boot 2015.0.Tws-1.4 (Nov 04 2019 - 14:24:31)

```
DRAM: 512 MiB
NAND: Micron MT29F1G08ABADA, NAND: chipsize 128 MiB
Net: bcmiproc_eth-0
Hit CTRL+B to stop autoboot: 0
```

Loading flash:/S3900-48T4S-UPGRADE.bin ...

Starting kernel ...

Start to initialize SW...

/

do not need to convert /flash/.fs/startup1.cfg

/

Starting chip driver init ...

Finished chip driver init ...

Assigned Unit ID:[1]

Setting init mode began ...

Setting init mode end ...

Starting init mode ...

Finished init mode ...

Starting master mode ...

Load certification : Starting

Load certification : Finished

Finished master mode ...

Performing startup preparation ...

.....  
.....  
.....

CLI preparation has been completed

Notifying preparation complete

Starting platform preparation ...

Finished platform preparation ...

Platform startup ...

Platform ready ...

---- Press ENTER to start CLI session ----

---- Master preemption

## User Access Verification

Username: admin

Password:

CLI session with the S3900-48T4S is opened.

To end the CLI session, enter [Exit].

Switch#dir

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0171.bin	Image	InActive	20326868	2021-04-02 08:06:13
S3900-48T4S-UPGRADE.bin	Image	Active	20326868	2020-12-11 09:14:17
Factory_Default_Config.cfg	Config	InActive	496	2020-12-11 09:06:32
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

Flash size: 128 MB

Switch#delete file name S3900-48T4S-MR-V0171.bin

Switch#copy tftp file

Copy to which unit: &lt;1-6&gt;: 1

TFTP server IP address: 192.168.12.11

Choose file type:

1. config; 2. image: 2

Source file name: S3900-48T4S-MR-V0172.bin

Destination file name: S3900-48T4S-MR-V0172.bin

Flash programming started.

Flash programming completed.

Success.

Switch#dir

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0172.bin	Image	InActive	21187028	2021-03-30 06:57:54
S3900-48T4S-UPGRADE.bin	Image	Active	20326868	2020-12-11 09:14:17
Factory_Default_Config.cfg	Config	InActive	496	2020-12-11 09:06:32
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

Flash size: 128 MB

Switch#configure terminal

Switch(config)#boot system image:S3900-48T4S-MR-V0172.bin

Switch(config)#end

Switch#dir

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0172.bin	Image	Active	21187028	2021-03-30 06:57:54
S3900-48T4S-UPGRADE.bin	Image	InActive	20326868	2020-12-11 09:14:17
Factory_Default_Config.cfg	Config	InActive	496	2020-12-11 09:06:32
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

Flash size: 128 MB

Switch#reboot

System will be restarted. Continue &lt;y/n&gt;? y

Switch#

U-Boot 2015.0.Tws-1.4 (Nov 04 2019 - 14:24:31)

DRAM: 512 MiB

NAND: Micron MT29F1G08ABADA, NAND: chipsize 128 MiB

Net: bcmiproc\_eth-0

Hit CTRL+B to stop autoboot: 0

Loading flash:/S3900-48T4S-MR-V0172.bin ...

Starting kernel ...

Start to initialize SW...

/

do not need to convert /flash/.fs/startup1.cfg

/

Starting chip driver init ...

Finished chip driver init ...

Assigned Unit ID:[1]

Setting init mode began ...

Setting init mode end ...

Starting init mode ...

Finished init mode ...

Starting master mode ...

Load certification : Starting

Load certification : Finished

Finished master mode .....

Performing startup preparation ...

.....

.....

.....

 CLI preparation has been completed

Notifying preparation complete

Starting platform preparation ...

Finished platform preparation ...

Platform startup ...

Platform ready ...

---- Press ENTER to start CLI session ----

---- Master preemption

User Access Verification

Username: admin

Password:

CLI session with the S3900-48T4S is opened.

To end the CLI session, enter [Exit].

Switch#dir

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-MR-V0172.bin	Image	Active	21187028	2021-03-30 06:57:54
S3900-48T4S-UPGRADE.bin	Image	InActive	20326868	2020-12-11 09:14:17
Factory_Default_Config.cfg	Config	InActive	317	2021-03-29 09:10:05
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

Flash size: 128 MB

Switch#delete file name S3900-48T4S-UPGRADE.bin

Switch#copy tftp file

Copy to which unit: <1-6>: 1

TFTP server IP address: 192.168.12.11

Choose file type:

1. config; 2. image: 2

Source file name: S3900-48T4S-MR-V0172.bin

Destination file name: S3900-48T4S-BR-V0172.bin

Flash programming started.

Flash programming completed.

Success.

Switch#dir

Unit 1:

File Name	Type	Status	Size	Modified
S3900-48T4S-BR-V0172.bin	Image	InActive	21187028	2021-03-29 09:13:03
S3900-48T4S-MR-V0172.bin	Image	Active	21187028	2021-03-30 06:57:54
Factory_Default_Config.cfg	Config	InActive	317	2021-03-29 09:10:05
startup1.cfg	Config	Active	2382	2021-03-30 06:52:18

Flash size: 128 MB

Switch#



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