UPGRADE GUIDE

S3900 Series Switches FSOS V0169 Software Upgrade Guide

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



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Caution:

Software version V1.5.6, V1.5.8 upgrade to V1.6.9, you must use the software upgrade tool -cv_156 to 169.exe.

Software version V16.2 upgrade to V1.6.9, you must use the software upgrade tool -cv_162 to169.exe.

Please note that upgrading the above software version to V1.6.9 without using the upgrade tool will result in a loss of configuration.

1. V1.6.5, V1.6.7 Upgraded to V1.6.9

1.1 Upgrade Preparation

• To avoid problems in the upgrade process, it is recommended to backup the configuration of the switch to the computer first.

• If TFTP is used, please prepare TFTP server first, and the image to be upgraded should be placed in the working directory of TFTP server.

1.2 Stand-alone Upgrade

• Directly upgrade image to V1.6.9

1.3 Upgrade in Stacking Mode

• When the multiple devices are stacking, it is necessary to upgrade the image of all the devices that comprise the stacking.

(1) Save the current configuration of the switch into the startup configuration file to avoid losing the configuration.

Example commands as follows:

Switch# copy running - config startup - config Startup configuration file name: up.cfg Flash programming started. Flash programming is completed. Success. Switch#

(2) Upgrade the image of all devices in the stack by operating the master switch through CLI/WEB.

CLI operation as follows:

Please pay attention to the red part below. To upgrade each device in the stacking, you need to specify the unit id of the device in the stacking.

Use the following commands in sequence to upgrade the stack members:

Switch#copy tftp file Copy to which unit: <1-6>: 1 TFTP server IP address: 192.168.20.10 Choose file type: 1. config; 2. image: 2 Source file name: test.bin Destination file name: test.bin

//The unit id of the specified device to be upgraded

WEB: This upgrade step is the same as for the stand-alone upgrade. Please note that the drop-down menu with the red circle needs to explicitly specify the unit id of the upgraded device.

	File Management	evice Management > File Management			s	tacking Unit : 1 v
	File List Total: 6					\sim
Route Management		File Name	File Type	Status	Modify Time	Size (bytes)
	0	\$3900-48T4S-MR-V0164.bin	Image	Inactive	2019-05-08 02:28:55	19425748
7 CoS	0	test.bix	Image	Active	2019-05-14 07:04:12	19704276
						509
	Conv Tune	HTTP likead			X Close	6259
	copy type					6259
	File Type	Image V				2424
	Source File Name	选择文件未选择任何文件				
	Destination File Name	S3900-48T4S-MR-V0164.bin *				
	Note: During firmware upload, th	e switch may not respond to commands for a couple of minutes.				
			Apply Revert			
			rappy north			



(3) After completing the image upgrade, you need to set up the image uploaded to the switch as the boot image.

NOTE: All units need to set a new boot image. The following example is to set the boot image of uinit 2 to imge 69.bin Switch (config) # boot system 2: config: image169.bin

(4) Restart all stacking switches.

NOTE: Ensure master switches restart first. That way you can ensure that the master doesn't change.

2. V1.6.2 Upgraded to V1.6.9

NOTE: Upgrade with the tool ct_162 to169.exe.

2.1 Upgrade Preparation

- To avoid problems in the upgrade process, it is recommended to backup the configuration of the switch to the computer first.
- TFTP server is required. Please prepare TFTP server on PC and start it.
- The configuration file conversion tool ct_l 62 tol69.exe is required, please put the tool file into the working directory of TFTP server.

• Ensure the switch to be upgraded is accessible through Telnet. The configuration file conversion tool retrieves information about the switch through Telnet.

• If you use TFTP to upgrade image, firstly put image to be upgraded in the working directory of TFTP server.

2.2 Stand-alone Upgrade

(1) Confirm that Telnet can access the switch and TFTP server has started.

(2) Delete the backup image on the switch.

Console#delete file name backupimage.bin

(3) Upload the new image to the switch.

Users can choose by themselves.

(4) Run the configuration file conversion tool cv_162 to169.exe on PC.

% Configuration file com	version tool	na zateriost muzan - na - i		×
Convert Configuration This tool is used to conv version 1.5.6 to configur	file ert the boot configuration file of ation file of version 1.6.9	Note Note: 1. Please make sure the tftp server is opened in your PC. 2. Please make sure this tool is in the working directory of tftp server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will copy the converted configuration file to switch.		
Convert parameters		Telnet output		
Conversion connection: old version: New version:	TFTP 1.5.6 1.6.9			1

Click on the convert configuration file option in the function menu.

74 Configuration file convers	ion tool			- 0	×
Function					
Introduction This tool is used to convert the boot configuration file of version 1.5.6 to configuration file of version 1.6.9		Note Note: 1. Please make sure the 2. Please make sure thi 3. Please copy running	t tftp server is opened in your PC. s tool is in the working directory of tftp server. config to startup config in switch before begin convert.		
	% Configuration file conve Switch Device Unit ID:	rsion tool — — X	converted configuration file to switch.		
Convert parameters Conversion connection: TF Iold version: 1.5 New version: 1.6	Switch Device IP: TFTP Server IP: TF Converted configuration file 5 Switch Device Unit ID 5 Switch Device IP TFTP Server IP Coverted configuration file	192.168.1.191 192.168.1.53 	Telnet output		
					¥

Switch device Unit ID:

In the standalone mode, normally the unit id of the switch is 1, it can be obtained by comparing the mac address with the show system and show ip interface commands.

In Stacking mode, the different switches have different unit ids.

Switch Device IP: the IP of the switch.

TFTP Server IP: the IP ofTFTP server

Converted configuration file:

After the conversion tool converts the v1.5.6 configuration to the new configuration, the new configuration file name is uploaded to the switch.

After filling in the information, click convert to start the conversion. It prints a pass when it's done.

74 Configuration file conversion tool		\times
Function		
Introduction	Note	
This tool is used to convert the boot configuration file of version 1.5.6 to configuration file of version 1.6.9	Note: 1. Please make sure the tip server is opened in your PC. 2. Please make sure this tool is in the working directory of tip server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will copy the converted configuration file to switch.	
Convert parameters	Telnet output	_
Conversion connection: TFTP old version: 1.5.6 New version: 1.6.9	Eth 1/31 Down 1 0 Auto 1000BASE-T None Eth 1/32 Down 1 0 Auto 1000BASE-T None Eth 1/33 Down 1 0 Auto 1000BASE-T None Eth 1/34 Down 1 0 Auto 1000BASE-T None Eth 1/36 Down 1 0 Auto 1000BASE-T None Eth 1/37 Down 1 0 Auto 1000BASE-T None Eth 1/38 Down 1 0 Auto 1000BASE-T None Eth 1/38 Down 1 0 Auto 1000BASE-T None Eth 1/38 Down 1 0 Auto 1000BASE-T None Eth 1/40 Down 1 0 None 1000BASE-T None Eth 1/44 Down 1 0 IOFALI 1000BASE-T None Eth 1/46 Down 1 0 IOFALI 1000BASE-T None Eth 1/46 Down 1 0 IOFALI 1000BASE-T None Eth 1/46 Down 2 0 Auto 1000BASE-T None Eth 1/46 Down 2 0 Auto 1000BASE-T None Eth 1/46 Down 2 </td <td></td>	



(5) Set the configuration file uploaded by the configuration file conversion tool to the switch as the boot file.

Console(config)#boot system config: new.cfg

(6) Set the uploaded new image as the boot file.

Console(config)#boot system opcode: image169.bin

(7) Restart the switch.

(8) Delete the backup image on the switch.

Console#delete file name backupimage.bin

(9) Upload the new backup image to the switch.

2.3 Upgrade in Stacking Mode

When the multiple devices are stacking, it is necessary to upgrade the image of all the devices that comprise the stacking.

(1) Save the current configuration of the switch into the startup configuration file to avoid losing the configuration.

Example commands as follows:

Switch#copy running-config startup-config Startup configuration file name: up.cfg Flash programming started. Flash programming completed. Success. Switch#

(2) Delete the backup image on the switch.

Delete the backup image on all stacking devices in turn.

The following example is to delete the backup image of unit2.

Console#delete file unit 2 name backupimage.bin

(3) Upgrade image on all the devices in the stack by operating the master switch.

CLI operation as follows: Please pay attention to the red part below. To upgrade each device in the stacking, you need to specify the unit id of the device in the stacking.

Use the following commands in sequence to upgrade the stack members:

Switch#copy tftp file Copy to which unit: <1-6>: 1 TFTP server IP address: 192.168.20.10 Choose file type: 1. config; 2. image: 2 Source file name: test.bin Destination file name: test.bin

//The unit id of the specified device to be upgraded

WEB: This upgrade step is the same as for the stand-alone upgrade. Please note that the drop-down menu with the red circle needs to explicitly specify the unit id of the upgraded device.

	File Management Dev	ice Management > File Management			(Stacking Unit:
System Information	File List Total 6					\smile
		File Name	File Type	Status	Modify Time	Size (bytes
	0	\$3900-48T4S-MR-V0164.bin	Image	Inactive	2019-05-08 02:28:55	19425748
	0	test.bix	Image	Active	2019-05-14 07:04:12	19704276
						509
	Conv Type	HTTP linked			X Close	6259
	sopj tipe	in apon				6259
	File Type	Image v				2424
	Source File Name	选择文件 未选择任何文件				2424
	Destination File Name	S3900-48T4S-MR-V0164.bin *				
	Note: During firmware upload, the	switch may not respond to commands for a couple of minutes.				
			Annie Revert			
			hopy never			



(4) Run configuration file conversion tool cv_162 to169.exe on PC.

74 Configuration file conversion tool	X
Convert Configuration file This tool is used to convert the boot configuration file of version 1.5.6 to configuration file of version 1.6.9	Note Note: 1. Please make sure the tftp server is opened in your PC. 2. Please make sure this tool is in the working directory of tftp server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will copy the converted configuration file to switch.
Convert parameters Conversion connection: TFTP old version: 1.5.6 New version: 1.6.9	Teinet output

Click on the convert configuration file option in the function menu.

74 Configuration file convers	sion tool			-	×
Introduction This tool is used to convert version 1.5.6 to configuratic	the boot configuration file of n file of version 1.6.9	Note Note: 1. Please make sure the 2. Please make sure this 3. Please copy running of	tftp server is opened in your PC. tool is in the working directory of tftp server. config to startup config in switch before begin convert.		
	Configuration file conversion Switch Device Unit ID: 1	tool — — X	converted configuration file to switch.		
Conversion connection: TF old version: 1. New version: 1.	Switch Device IP: 19, TFTP Server IP: 19, TFTP Converted configuratoin file: 5.6 Switch Device Unit ID 5.5 Switch Device IP TFTP Server IP Coverted configuration file	2.168.1.191 2.168.1.53	Telnet output		2
		Covert			

Switch device Unit ID:

In the standalone mode, normally the unit id of the switch is 1, it can be obtained by comparing the mac address with the show system and show ip interface commands.

In the Stacking mode, different switches have different unit ids.



Switch Device IP: the id of the switch

TFTP server IP: the IP of TFTP server

Converted configuration file:

After the conversion tool converts the v1.5.6 configuration to the new configuration, the new configuration file name is uploaded to the switch.

After filling in the information, click convert to start the conversion. It prints a pass when it's done.



(5) Set the configuration file uploaded by the configuration file conversion tool to the switch as the boot file.

(6) Set the image uploaded to the switch as the boot image.

NOTE: All units need to set a new boot image.

The following example is to set the boot image of uinit 2 to imge169.bin

Switch(config)#boot system 2: config: image169.bin

(7) Restart all stacking switches.

NOTE: Ensure master switches start first. That way you can ensure that the master doesn't change.

(8) After startup, operate the master switch and save the current configuration to the startup file.

This will update the startup file for all stack units, consistent with the master.

Switch#copy running-config startup-config Startup configuration file name: abc.cfg Flash programming started. Flash programming completed. Synchronizing to Unit 2. Flash programming started. Flash programming completed. Success. Switch#

(9) Remove the old images of all stacking switches, refer to step 2.

(10) Upload the new image to all stacking switches as backup image, refer to step 3.



3. V1.5.6, V1.5.8 Upgraded to V1.6.9

NOTE: Upgrade with the tool ct_162 to169.exe.

3.1 Upgrade Preparation

- To avoid problems in the upgrade process, it is recommended to backup the configuration of the switch to the computer first.
- TFTP server is required. Please prepare TFTP server on PC and open it.
- The configuration file conversion tool ct_156 to169.exe is required, please put the tool file into the working directory of TFTP server.

• Ensure the switch to be upgraded is accessible through Telnet. The configuration file conversion tool retrieves information about the switch through Telnet.

• If you use TFTP to upgrade image, firstly put the image to be upgraded in the working directory of TFTP server.

3.2 Stand-alone Upgrade

(1) Confirm that Telnet can access the switch and TFTP server has started.

(2) Delete the backup image on the switch.

Console#delete file name backupimage.bin

(3) Upload the new image to the switch.

Users can choose by themselves.

(4) Run configuration file conversion tool cv_156 to169.exe on PC.

	74 Configuration file conversion tool Function		-	×
-	Convert Configuration file This tool is used to convert the boot configuration file of version 1.5.6 to configuration file of version 1.6.9	Note Note: 1. Please make sure the tftp server is opened in your PC. 2. Please make sure this tool is in the working directory of tftp server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will copy the converted configuration file to switch.		
	Convert parameters Conversion connection: TFTP old version: 1.5.6 New version: 1.6.9	Teinet output		
				*

Click on the convert configuration file option in the function menu.

74 Configuration file cor	version tool		- 🗆 X
Introduction This tool is used to convert the boot configuration file of version 1.5.6 to configuration file of version 1.6.9 % Configuration file conversion to		Note Note: 1. Please make sure this tool is in the working directory of tftp server. 2. Please copy running config to startup config in switch before begin conditional startup config in switch before begin conditional startup configuration file to switch. tool —	vert.
Convert parameters Conversion connection: old version: New version:	Switch Device Unit ID: 1 Switch Device IP: 19 TFTP Server IP: 19 TFTP Converted configuration file: 1.5.6 Switch Device Unit ID 1.6.9 Switch Device IP TFTP Server IP Coverted configuration file	2.168.1.191 Telnet output Covert	<u></u>

Switch Device Unit ID:

In the standalone mode, normally the unit id of the switch is 1, it can be obtained by comparing the mac address with the show system and show ip interface commands.

In Stacking mode, the different switches have different unit ids.

Switch Device IP: the IP of the switch

TFTP Server IP: the IP of TFTP server

Converted configuration file:

After the conversion tool converts the v1.5.6 configuration to the new configuration, the new configuration file name is uploaded to the switch.

After filling in the information, click convert to start the conversion. It prints a pass when it's done.

74 Configuration file conversion tool	>
Function	
Introduction This tool is used to convert the boot configuration file of version 1.5.6 to configuration file of version 1.6.9	Note Note: 1. Please make sure the thp server is opened in your PC. 2. Please make sure this tool is in the working directory of thp server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will copy the converted configuration file to switch.
Convert parameters Conversion connection: TFTP old version: 1.5.6 New version: 1.6.9	Telest cutput Eth 1/31 Down 0 Auto 10008ASE-T None Eth 1/32 Down 1 0 Auto 10008ASE-T None Eth 1/33 Down 1 0 Auto 10008ASE-T None Eth 1/33 Down 1 0 Auto 10008ASE-T None Eth 1/35 Down 1 0 Auto 10008ASE-T None Eth 1/37 Down 1 0 Auto 10008ASE-T None Eth 1/38 Down 1 0 Auto 10008ASE-T None Eth 1/38 Down 1 0 Auto 10008ASE-T None Eth 1/38 Down 1 0 Down 10008ASE-T None Eth 1/43 Down 1 0 Down 10008ASE-T None Eth 1/44 Down 1 0 Auto 10008ASE-T None Eth 1/44 Down 2 0 Down 1 0 Dotfull 1008ASE STP None Eth 1/48 Down 2 0 Lotofull 1008ASE STP None 10008ASE-T None 10008ASE-T None



(5) Set the configuration file uploaded by the configuration file conversion tool to the switch as the boot file.

Console(config)#boot system config: new.cfg

(6) Set the uploaded new image as the boot file.

Console(config)#boot system opcode: image169.bin

(7) Restart the switch.

(8) Delete the backup image on the switch.

Console#delete file name backupimage.bin

(9) Upload the new backup image to the switch.

3.3 Upgrade in Stacking Mode

When the multiple devices are stacking, it is necessary to upgrade the image of all the devices that comprise the stacking.

(1) Save the current configuration of the switch into the startup configuration file to avoid losing the configuration.

Example commands as follows: Switch#copy running-config startup-config Startup configuration file name: up.cfg Flash programming started. Flash programming completed. Success. Switch#

(2) Delete the backup image on the switch.

Delete the backup image on all stacking devices in turn.

The following example is to delete the backup image of unit2.

Console#delete file unit 2 name backupimage.bin

(3) Upgrade image on all the devices in the stack by operating the master switch.

CLI operation as follows:

Please pay attention to the red part below. To upgrade each device in the stacking, you need to specify the unit id of the device in the stacking.

Use the following commands in sequence to upgrade the stack members: Switch#copy tftp file Copy to which unit: <1-6>: 1 //The unit id of the specified device to be upgraded TFTP server IP address: 192.168.20.10 Choose file type: 1. config; 2. image: 2 Source file name: test.bin Destination file name: test.bin

WEB: This upgrade step is the same as for the stand-alone upgrade. Please note that the drop-down menu with the red circle needs to explicitly specify the unit id of the upgraded device.

						-
	File Management	Device Management > File Management			(Stacking Unit
System Information	File List Total: 6					\smile
E Route Management		File Name	File Type	Status	Modify Time	Size (bytes
	8	S3900-48T4S-MR-V0164.bin	Image	Inactive	2019-05-08 02:28:55	19425748
♥ CoS	0	test.bix	Image	Active	2019-05-14 07:04:12	19704276
¥ Gos ♥ Security						509
Device Management	Com: Time	UTTR Linkard			X Close	6259
> SNMP	copy type	HTP option				6259
 RMON Cluster 	File Type	Image •				2424
> DNS	Source File Name	选择文件 未选择任何文件				
> DHCP	Destination File Name	8 S3900-48T4S-MR-V0164.bin •				
> OAM		0				
 Time Setting 	Note: During trmware up	icad, the switch may not respond to commands for a couple of minutes				
➤ Event Log			Apply Revert			
File Management						
Pina						



(4) Run configuration file conversion tool cv_156 to169.exe on PC.

7	Configuration file conversion tool		-	×	
	Convert Configuration file	Note Note: 1. Please make sure the tifp server is opened in your PC. 2. Please make sure this tool is in the working directory of tifp server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will copy the converted configuration file to switch.			
	Convert parameters Conversion connection: TFTP Old version: 1.5.6 New version: 1.6.9	Telnet output			

Click on the convert configuration file option in the function menu.

74 Configuration file convers	ion tool	-	×
Introduction This tool is used to convert t version 1.5.6 to configuratio	the boot configuration file of n file of version 1.6.9 74 Configuration file conver	Note Note: 1. Please make sure the tfp server is opened in your PC. 2. Please make sure this tool is in the working directory of tfp server. 3. Please copy running config to startup config in switch before begin convert. 4. This tool will const the configuration file to switch.	_
Convert parameters Conversion connection: TF old version: 1.3 New version: 1.4	Switch Device Unit ID: Switch Device IP: TFIP Server IP: TFIP Server IP: 5.6 Switch Device Unit ID 5.9 Switch Device IP TFIP Server IP Coverted configuration file	1 192.168.1.191 192.168.1.53 Covert	

Switch Device Unit ID:

In the standalone mode, normally the unit id of the switch is 1, it can be obtained by comparing the mac address with the show system and show ip interface commands.

In Stacking mode, the different switches have different unit ids.

Switch Device IP: the IP of the switch

TFTP Server IP: the IP of TFTP server



Converted configuration file:

After the conversion tool converts the v1.5.6 configuration to the new configuration, the new configuration file name is uploaded to the switch.

After filling in the information, click convert to start the conversion. It prints a pass when it's done.



(5) Set the configuration file uploaded by the configuration file conversion tool to the switch as the boot file.

(6) Set the image uploaded to the switch as the boot image.

NOTE: All units need to set a new boot image.

The following example is to set the boot image of uinit 2 to imge169.bin

Switch(config)#boot system 2: config: image169.bin

(7) Restart all stacking switches.

NOTE: Ensure master switches start first. That way you can ensure that the master doesn't change.

(8) After startup, operate the master switch and save the current configuration to the startup file.

This will update the startup file for all stack units, consistent with the master.

Switch#copy running-config startup-config Startup configuration file name: abc.cfg Flash programming started. Flash programming completed. Synchronizing to Unit 2. Flash programming started. Flash programming completed. Success Switch#

(9) Remove the old images of all stacking switches, refer to step 2.

(10) Upload the new image to all stacking switches as backup image, refer to step 3.



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