Firmware Version: V1.50.018
Prom Code Version: V1.00.006
Published: 2013/4/10

These release notes include important information about D-Link DGS-3420 series firmware revisions. Please verify that these release notes are correct for your switch:

- If you are installing a new switch, please check the hardware version on the device label; make sure that your switch meets the system requirement of this firmware version. Please refer to Revision History and System Requirement for detailed firmware and hardware matrix.
- If the switch is powered on, you can check the hardware version by typing "show switch" command or by checking the device information page on the web graphic user interface.
- If you plan to upgrade to the new firmware release, please refer to the Upgrade Instructions for the correct firmware upgrade procedure.

For more detailed information regarding DGS-3420 series products, please refer to Related Documentation.

You can also download the switch firmware, D-View modules and technical documentation from http://tsd.dlink.com.tw.

Content:

Revision History and System Requirement

Firmware Version	Date	Model	Hardware Version
Runtime: v1.00.023 Prom: v 1.00.006	2011/7/7	DGS-3420-28TC	A1
		DGS-3420-28SC	A1
		DGS-3420-26SC	A1
		DGS-3420-28PC	A1
		DGS-3420-52T	A1
		DGS-3420-52P	A1
Runtime: v1.00.024 Prom: v 1.00.006	2011/10/7(A1) 2011/12/6(A2)	DGS-3420-28TC	A1, A2
		DGS-3420-28SC	A1, A2
		DGS-3420-26SC	A1, A2
		DGS-3420-28PC	A1, A2
		DGS-3420-52T	A1, A2
		DGS-3420-52P	A1, A2
Runtime: v1.50.017 Prom: v 1.00.006	2012/12/12	DGS-3420-28TC	A1, A2
		DGS-3420-28SC	A1, A2
		DGS-3420-26SC	A1, A2
		DGS-3420-28PC	A1, A2
		DGS-3420-52T	A1, A2
		DGS-3420-52P	A1, A2
Runtime: v1.50.018 Prom: v 1.00.006	2013/4/10	DGS-3420-28TC	A1, A2
		DGS-3420-28SC	A1, A2
		DGS-3420-26SC	A1, A2
		DGS-3420-28PC	A1, A2
		DGS-3420-52T	A1, A2
		DGS-3420-52P	A1, A2

Upgrade Instructions:

D-Link switches support firmware upgrade via TFTP server. You can download the firmware from D-Link web site http://tsd.dlink.com.tw, and copy the downloaded firmware to the TFTP server folder. Please make sure that the TFTP server is accessible from the switch via networks.

Upgrade using CLI (serial port)

Connect a workstation to the switch console port and run any terminal program that can emulate a VT-100 terminal. The switch serial port default settings are as follows:

- Baud rate: **115200**
- Data bits: **8**
- Parity: **None**
- Stop bits: **1**

The switch will prompt the user to enter his/her username and password. It should be noted that upon the initial connection, there is no username and password by default.

To upgrade the switch firmware, execute the following commands:

Command	Function

download [firmware_from_TFTP [<ipaddr> | <ipv6addr>] src_file <path_filename 64> {[unit <unit_id> | all]} {dest_file <pathname 64>}	Download firmware file from the TFTP server to the switch.
config firmware image {unit <unit_id>} <path_filename 64> boot_up	Change the boot up image file.
show boot_file	Display the information of current boot image and configuration.
reboot	Reboot the switch.

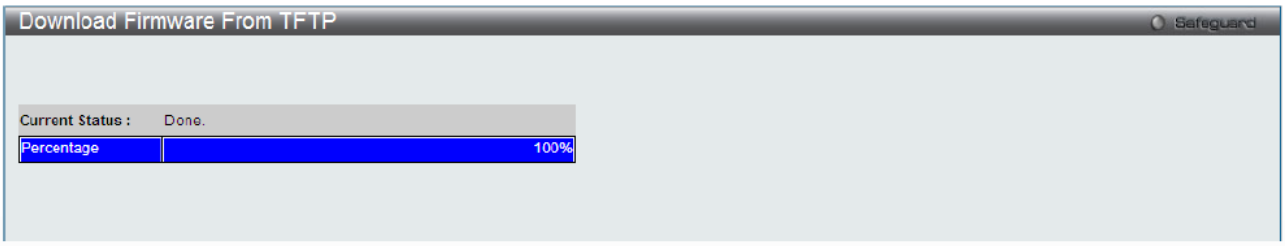
Example:

```
DGS-3420-28TC:15# download firmware_from_TFTP 10.53.13.201 src_file c:\ DGS-3420_Series_FW_1.00.023.had dest_file   c:\ DGS-3420_Series_FW_1.00.023.had
Command: download firmware_from_TFTP 10.53.13.201 src_file c:\ DGS-3420_Series_FW_1.00.023.had dest_file c:\ DGS-3420_Series_FW_1.00.023.had

Connecting to server.....Done.
Download firmware.....Done.   Do not power off!
Upload file to FLASH.....Done.

DGS-3420-28TC:15# config firmware c:\ DGS-3420_Series_FW_1.00.023.had boot_up
Command: config firmware c:\ DGS-3420_Series_FW_1.00.023.had boot_up

Success.

DGS-3420-28TC:15# show boot_file
Command: show boot_file
---------------------------------------------------
 Unit ID : 1
 Boot up firmware image : C:\DGS-3420_Series_FW_1.00.023.had
 Boot up configuration file: C:\STARTUP.CFG
 ---------------------------------------------------

DGS-3420-28TC:15# reboot
Command: reboot
Are you sure you want to proceed with the system reboot? (y|n) y
Please wait, the switch is rebooting...
```

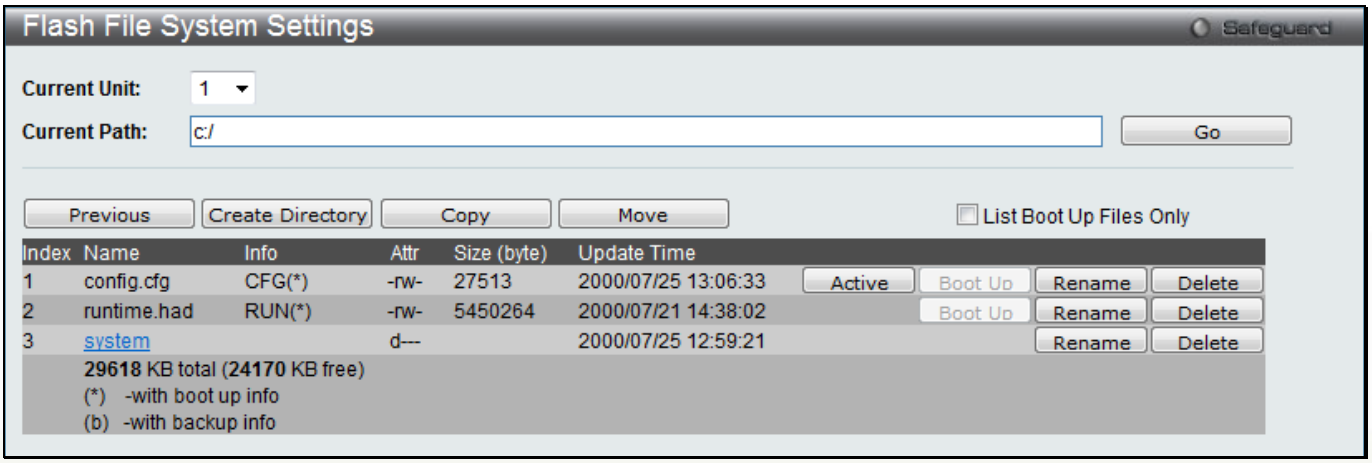
Upgrading by using Web-UI

1. Connect a workstation installed with java SE runtime environment to any switch port of the device.
2. Open the web browser from the workstation and enter the IP address of the switch. The switch's default IP address is 10.90.90.90.
3. Enter administrator's username and password when prompted. It should be noted that the username and password are blank by default.
4. To update switch's firmware or configuration file, select ***Tools > Download Firmware*** from the banner.
5. Use the drop-down menu to select a unit for receiving the firmware. Select **All** for all units.
6. Enter the TFTP Server IP address.

7. Enter the name of the firmware file located on the TFTP server.
8. Enter the destination path and the desired file name.
9. Tick the check box to set it as a boot up file.
10. Click "***Download***" button.
11. Wait until the "Current Status" displays "Done" and the "Percentage" shows "100%".



11. To select the boot up image used for next reboot, click ***Network Application > Flash File System Settings*** in the function tree and then click the ***C:*** drive name. When you see the files list, click corresponding "***Boot Up***" button to specify the firmware that will be used for next and subsequent boot up.



12. To reboot the switch, select ***Tools > Reboot System*** from the banner.
13. Select "***Yes***" and click "***Reboot***" button to reboot the switch.

New Features

Firmware	New Features

Version	
V1.00.023	First release, please refer to datasheet and manual for detail function supported
V1.00.024	None
V1.50.017	1. Support configurable DHCP server option 2. Policy route support "route_preference [default | pbr]" command 3. Weighted Random Early Detection 4. Bandwidth control minimum granularity down to 8Kbps 5. Support null route redistribute to dynamic routing protocol 6. Storm control support to configure per packet type threshold on same port 7. Support advanced power saving (LED Shut-off/ Port Shut-off/ System Hibernation) 8. IMPB v3.95 9. Support show DDM TX/RX power 10. Support IPv6 route longer than 64bit prefix 11. Selective Q-in-Q 12. Secure FTP server for IPv4 13. Support unicast NLB 14. DSCP to CoS mapping 15. Support public key for SSH authentication 16. Support to set accounting server IP address 17. Support enable/disable IP directed broadcast 18. Support response of broadcast SNMP Get packet 19. Support DHCPv6 Server Screening 20. Support to select IPIF as the source address for TFTP/Telnet/Tacacs/Radius 21. DHCP relay per port 22. VRRP 23. LBD v4.05 24. IPv6 Route Redistribution for RIPng 25. Support packet counter for stacking port 26. TACACS+ accounting for command logging 28. Support storm control log/trap for drop mode 29. IGMP authentication support "auth_accounting", "auth only" or "accounting only" states 30. Alarm port output 31. Support DEM-CB700S 32. Support to disable a trunk member port 33. Support SSL intermediate CA certificate 34. ERPS enlarge to 12 rings (instances) 35. Enhance the information of "show ports <portlist> media_type" command 36. DHCP client support option 12 37. SNTPv6 38. DHCPv6 Prefix Delegation 39. DNSv6 40. Support Framed-IP-Address Radius attribute 41. Enlarge PoE maximum power limit to 760W for DGS-3420-28PC 42. Support 802.3az Energy-Efficient Ethernet (Hardware version B1 and later)
V1.50.018	None

Changes of MIB & D-View Module

The new features of MIB file are also included in the corresponding D-View module. Please download the D-View module on http://tsd.dlink.com.tw. For detailed changes of MIB content, please refer to the modification history in each MIB file.

Firmware Version	MIB File	New Features
V1.00.023	First release, please refer to datasheet for detail MIB supported	
V1.00.024	None	
V1.50.017	Genmgmt.mib	1. Support total number of ARP entries 2. Port utilization by percentage 3. Support to respond a broadcast SNMP GET packet
	wred.mib	Weighted Random Early Detection
	SFTPServer.mib	Secure FTP server for IPv4
	Rfc2787.mib	VRRP
	Equipment.mib	1. Support advanced power saving 2. Support 802.3az Energy-Efficient Ethernet (Hardware version B1 and later)
	QoS.mib	1. Bandwidth control minimum granularity down to 8Kbps 2. DSCP to CoS mapping
	ddm.mib	Support show DDM TX/RX power
	QinQ.mib	Support selective Q-in-Q
	L3mgmt.mib	1. IPv6 Route Redistribution 2. IP directed broadcast
	L2mgmt.mib	IGMP authentication support auth & accounting, auth only or accounting only
	PktStormCtrl.mib	1. Support configure per packet type threshold on same port 2. Support storm control log/trap for drop mode
	IPMacBind.mib	IMPB v3.95
	Filter.mib	DHCPv6 Server Screening
	AAC.mib	1. Support to set accounting server IP address 2. Support command accounting
	LBD.mib	LBD v4.05
	SSH.mib	Support public key for SSH authentication
	DHCPRelay.mib	DHCP relay per port
	DHCPServer.mib	Support configurable DHCP server option
	NLB.mib	Support unicast NLB
	policyRoute.mib	Policy route support to choose the priority of route table or PBR
	SrcIPIf.mib	Support to select IPIF as the source address for TFTP/Telnet/Tacacs/Radius
V1.50.018	None	

Changes of Command Line Interface

The section below only shows command line changes that may bring backward compatibility issues with configuration settings for previous version of firmware.

Any new feature commands that do not have backward compatibility issues are not included in the below section.

Firmware Version	Changes
V1.00.023	First release
V1.00.024	None
V1.50.017	None
V1.50.018	None

Problem Fixed

Firmware Version	Problems
V1.00.023	First release
V1.00.024	1. Modify CPU GPIO pin setting on DGS-3420-28SC/28TC/52T 2. Modify RTC trickle register to reduce charging time
V1.50.017	1. When setting "config multicast vlan_filtering_mode", the outputs of "show config effective" and "show config modified" are incorrect. (DUSA20120628000003) 2. When using a SSH vulnerability tool (Rubyinstaller), DGS-3420 will be rebooted automatically(DI20121012000005) 3. After enabling LACP and traffic segmentation, ARP packets will be forwarded even if the port is not in traffic segmentation forward list (DRU20121015000004) 4. When connecting TFTP server from Mgmt interface and normal interface at the same time, download firmware from TFTP will be failed. (DI20120622000007) 5. When typing "config stp mst_config_id name PGS1 revision_level", DGS-3420 will be rebooted automatically (DRU20120523000009) 6. CPU high because of DHCP relay packet was looped on ingress port (DEUR20121023000007) 7. IPTV froze because of some multicast packets are dropped (DEUR20121023000007) 8. DGS-3420 doesn't insert option 82 in unicast DHCP request (DEUR20121023000007) 9. DGS-3420 doesn't transmit DHCP release packet when enabling DHCP relay (DEUR20121023000007) 10. DGS-3420 will drop double tagged IGMP query packet on untagged port (DEUR20121023000007)
V1.50.018	Fix the software bug which will encounter test failure result when processing the test program in production line.

* D-Link tracking number is enclosed in ()

Known Issues

Firmware Version	Issues	Workaround
V1.00.023	None	
V1.00.024	None	

V1.50.017	None	
V1.50.018	None	

Related Documentation

- DGS-3420 Series Web UI Reference Guide Release 1.5
- DGS-3420 Series CLI Reference Guide Release 1.5
- DGS 3420_Series_FW_HW Installation Guide 1.5