

D-Link

Firmware Version: 4.00.064 Boot Code Version: 1.00.005 MIB Version: 4.00.008 D-View Module Version: 4.0.0.13 Published: Feb. 02, 2015

These release notes include important information about D-Link switch 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 <u>Revision History and System Requirement</u> for detailed firmware and hardware matrix.
- If the switch is powered on, you can check the hardware version by typing "show switch" command via Telnet 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 <u>Upgrade Instructions</u> for the correct firmware upgrade procedure.

For more detailed information regarding our switch products, please refer to <u>Related</u> <u>Documentation</u>.

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

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Revision History and Syste	em Requiremen	it:	
Firmware Version	Date	Model	Hardware Version
Runtime: v4.00.064 Boot: 1.00.005	02-Feb15	DGS-1210-28	C1
Runtime: v4.00.063 Boot: 1.00.005	29-Jan15	DGS-1210-28	C1
Runtime: v4.00.062 Boot: 1.00.005	22-Jan15	DGS-1210-28	C1
Runtime: v4.00.060 Boot: 1.00.005	22-Jan15	DGS-1210-28	C1
Runtime: v4.00.B055 Boot: 1.00.005	04-Sep14	DGS-1210-28	C1
Runtime: v4.00.B053 Boot: 1.00.005	13-Aug19	DGS-1210-28	C1
Runtime: v4.00.B052 Boot: 1.00.005	13-Aug14	DGS-1210-28	C1
Runtime: v4.00.B046 Boot: 1.00.005	08-May14	DGS-1210-28	C1
Runtime: v4.00.B045 Boot: 1.00.005	08-May14	DGS-1210-28	C1
Runtime: v4.00.B039 Boot: 1.00.005	06-Feb14	DGS-1210-28	C1
Runtime: v4.00.012 Boot: 1.00.005	08- Aug13	DGS-1210-28	C1

Upgrade Instructions:

D-Link Smart Switches support firmware upgrade via TFTP server. You can download the firmware from D-Link web site <u>http://tsd.dlink.com.tw</u>, 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 (via Telnet)

1. Make sure the network connection between the switch and PC is active.

2. Use software that supports telnet, for example, HyperTerminal or Telnet command in Microsoft Windows, to connect to the switch. If you are using Telnet command, type the command followed by the switch IP address, eg. *telnet* 10.90.90.90.

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3. The logon prompt will appear.

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The switch will prompt the user to enter his/her username and password. It should be noted that upon the initial connection, both the default user name and password are **admin**. To upgrade the switch firmware, execute the following command:

Command	Function
download{firmware_fromTFTP	Download firmware file from the TFTP server to the switch.
tftp://ip-address/filename cfg_fromTFTP	
tftp://ip-address/filename}	

When completing firmware upgrade, the following messages will pop up.

Device will reboot after firmware upgraded successfully Image upgraded successfully

4. Execute the following command to check the firmware version and switch's information.

Command	Function
show switch	Display the information of current firmware and boot version.

Example:

1. DGS-1210-28:

Command: download firmware_fromTFTP tftp://10.90.90.91 DGS-1210-28-C1-4-00-012hex Device will reboot after firmware upgraded successfully Image upgraded successfully

2. **DGS-1210-28:**

Command: show switch	
DGS-1210-28> show switch	
System name	:
System Contact	:
System Location	:
System up time	: 0 days, 0 hrs, 36 min, 56 secs
System Time	: 01/01/2013 01:01:55
System hardware version	: C1
System firmware version	: 4.00.012
System boot version	: 1.00.005
System serial number	: 1MB1733K0000A
MAC Address	: 00-87-87-AB-88-77



Upgrade using Web-UI

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- 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 password when prompted. The password is **admin** by default.
- 4. To update switch's firmware or configuration file, select **Tools > Firmware Backup & Upgrade** from the banner.

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	Rese	t				
🚬 DES	Rese	t Syste	m			
Ē	Rebo	ot Dev	ice			
÷)	Confi	guratio	n Backu	ıр & F	Resto	
÷)	Firmv	vare B	ackup &	Upgi	rade	v

5. Two methods can be selected : HTTP or TFTP

Firmware Backup and Upgrade		 Eafeguard
R STTP		
Backup firmware to file :	Backup	
Upgrade firmware from file (Browse)	
	(upgrade)	
TFTP Server IP Address		
TETP File Name		
Backup firmware to file :	flackup	
Upgrade firmware from file :	Upgrade	

- 6. Select **HTTP** to upgrade the firmware to or from your local drive of PC.
 - a. Click **Browse** to browse your inventories for a saved firmware file
 - b. Click Upgrade after selecting the firmware file you want to restore
 - c. Click **OK** to continue with firmware upgrade

	ne browser conr	ection will I	ne disconne	ected	
🌏 a	nd please do no	t apply oth	er changes	when up	oading.
Re	aconnect to the	device later	when uploa	ading con	npletes.

d. Click **OK** to continue with firmware upgrade





e. Wait until the "Firmware Upgrade Successful" message pops up and login again after device boots up.



- 7. Select **TFTP** to upgrade the firmware to or from a remote TFTP server.
 - a. Enter the name of the firmware file located on the TFTP server
 - b. Click Upgrade after selecting the firmware file you want to restore
 - c. Click **OK** to continue with firmware upgrade

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?	The browser connection will be disconnected, and please do not apply other changes when uploading. Reconnect to the device later when uploading completes.

d. Wait until the firmware upgrade ends and login again after device boots up.



Upgrade using D-Link Network Assistant

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1. Connect a workstation installed with java SE runtime environment to any switch port of the



device

2. Execute D-Link Network Assistant

D D-	Link Netv	vork Assistant									- 🗆 ×
	• C	ommon Adv	ranced								
I S)evice Settings	Time Settings	SNMP	Firmwa: Upgrad	re Bi e I	ackup or Restore	Reboot	C Reset			
Dev	ice List	Alarms(0)									
De	evice Li	st					Ø R	efres Scarch			۹,
	Status	Model Name	Product Type	Device Name	MAC	IP∨4	IP∨6	Device Time	Interface	FW Version	HW Version
					The netv	vork is discor	nnected				

3. Click Refresh button to search target switch



4. Single click the icon of the column to choose the target switch

	D-	Link Netv	vork Assistant								- 🗆 ×
		- C	ommon Adv	anced							
link	DS	evice ettings	Time Settings	SNMP	Firmware Upgrade	Backup or Restore	F	eboot	Reset		
III IK IG	Dev	ice List	Alarms(0)								
	De	evice Li	st					\mathcal{O} Refires	Search		
		Status	Model Name	Product Type	Device Name	MAC	IPv4	IP∨6	Device Time	Interface	FW Version
			DGS-1210-28	Switch		00:08:37:12:28:00	10.90.90.9	0	2013/1/1 上午 12:40	:06 Port 9	4.00.010

5. Click Firmware Upgrade button

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6. Select PC IP address is used to connect the target switch, then click Browse button and select the firmware file (Model name_HW ver._FW ver. .hex) on your local hard drive.



7. Click the checkbox and click "Submit" button to start firmware upgrade.

	'P	10.90.90.80	Fian	ware File D:'Sn	nart5\DGS-1210-28-C1-4-	-00-011.hex
App	ly to All Devic	es				
isSuj	Model Name		MAC	IPv4	Serial N umber	
Yes	DGS-1210-28		00:08:37:12:28:00	10.90.90.90	QBDGS12102800	
						Authentication
Notif	ication				1	
Notif Wa wa yo	ication aming : Do not di recoverable damag ur devices may reb I understand the r	sconnect the ne e to the device coot. isks	twork or close this pro s may result. Please no	gram during the upgra te that during the upgra	de process; ade process,	Password

8. Once the message changed to success, click "Close" button to complete and exit the firmware dlink green



upg	rade					
Firm w	are Upgrade					×
1 Fin	nware Upgrade			2 Confirm Summary		
Resul	t				Search	٩
Result	Model Name	MAC	IPv4	Details		
	DGS-1210-28	00:01:02:03:04:05	10.90.90.90	Command has been succesfully	rexecuted: {0}	
						Close

New Features:

Firmware Version	New Features
V4.00.064	N/A
V4.00.063	N/A
V4.00.062	N/A
V4.00.060	N/A
V4.00.B055	N/A
V4.00.B053	N/A



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V4.00.B052	N/A
V4.00.B046	N/A
V4.00.B045	N/A
V4.00.B039	N/A
V4.00.012	First Release

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 from 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
V4.00.064	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.063	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.062	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.060	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.B055	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.B053	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.B052	DGS-1210-28-CX-4_00_008.mib	N/A

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V4.00.B046	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.B045	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.B039	DGS-1210-28-CX-4_00_008.mib	N/A
V4.00.012	DGS-1210-28-CX-4_00_008.mib	First Release



Firmware Version	D-View Module File	New Features
V4.00.064	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.063	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.062	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.060	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.B055	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.B053	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.B052	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.B046	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.B045	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.B039	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	N/A
V4.00.012	DV_DGS-1210-28_V4.0.0.13_FW_v4.00.012.exe	First Release

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.

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Firmware Version	Changes
V4.00.064	N/A
V4.00.062	N/A
V4.00.061	N/A
V4.00.060	N/A
V4.00.B055	N/A
V4.00.B053	N/A
V4.00.B052	N/A
V4.00.B046	N/A
V4.00.B045	N/A
V4.00.B039	N/A
V4.00.012	First Release

Problem Fixed:

Firmware Version	Problems Fixed
V4.00.064	1. Fix IPv6 TFTP Fw backup fail
V4.00.063	1. Fix config backup page at DE language issue.
V4.00.062	1. Fix Multilanguage DE issue.
V4.00.060	1. Fix Multilanguage DE issue.
V4.00.B055	1. Fix incorrect model on SSL certificate.
V4.00.B053	1. [DGC20140801000004-Taiwan] DGS-1210-28 can't show the specific igmp group.
V4.00.B052	1. OpenSSL before 0.9.8za, which allows man-in-the-middle attack, and consequently hijack sessions or obtain sensitive information.



V4.00.B046	1. [DUSA20140530000002-Canada] DGS 1210-28P will not forward LLDP multicast mac address.
V4.00.B045	1. STP edge default value must change to "True".
V4.00.B039	 Add New default MAC (B0C5540 ~ B0C5547) for ASV. [DBG13120389] There are some packet loss when sends IPV6_CTRL1.str and IPV6_CTRL2.str.
V4.00.012	First Release

* D-Link tracking number is enclosed in ()





Known Issues:

Firmware Version	Issues	Workaround
V4 00 012	N/A	None
1.00.012		None
	 The DUT Voice VLAN dynamic untag member does not follow Voice VLAN ID to forward fit OUI packets.Please refer to attach file, Voice VLAN ID is 3, the fit OUI packets still use VID2 to forward packets not VID3. D-Link: This issue can note limitation. 	
	 The DUT Unknow multicast filter enable will cause IPv6 control packets (NS, RS) be drop by DUT that does not fit D-Link request. 	
	D-Link: Note can list this issue to be known issue.	
	 "The DUT DHCP Server screen cannot drop incorrect DHCPv6 server packets (not fit white list IPv6 address), the DUT still can get IPv6 address from incorrect DHCPv6 server. 	
	D-Link: keep this issue and does not need to modify in this stage."	
V4.00.012	 The DUT LLDP Management IPv4 Address will be auto deleted after control PC topology change to another interface of the DUT. 	V4.00.012
	D-Link: Note Fix next version (2013/11).	
	 The DUT LLDP Management IPv4 Address will be auto deleted after set IPv6 management address type via IPv4 address. 	
	D-Link: Agree next version (2013/11) to fix this issue.	
	 The DUT SmartBinding black list just can display one entry (IPv4 or IPv6) when this black entry exist IPv4 and IPv6 address. 	
	D-Link: Does not need to modify.	
	 "The DUT SmartBinding Auto Scan binding entry result IPv4 still keep entry after binding entry finish, that different with IPv6. 	
	D-Link: Fix in next version (2013/11), and modify ""Bound"" wording to ""Yes""."	

Cameo: Modified "Bound" wording to "Yes" in ver.4.00.010

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- When delete IPv6 trust host, the DUT does not pop-up warning message, but IPv4 trust host support it.
- 9. "The DUT Static MAC auto learning disable interface still can forward packets to other interface even does not create static MAC. (via ASV default OUI MAC address)After confirm with D-Link Shan, he agree this behavior when forward fit OUI packets to disable auto learning interface at currect state, but still need note to D-Lab Bug System and test report. "

Cameo: Won't fix. (Maximum support 156 VLAN Groups)

- "The DUT Voice VLAN Voice device already be update by other auto detect interface, but the VLAN settings still keep before member. Test Step:
 - 1. Create VLAN ID 4000.
 - 2. Enable Voice VLAN VID 4000.
 - 3. enable all ports auto detect funciton of Voice VLAN.
 - 4. Use LLDP packets forward fit Voice VLAN ID info to port24.
 - 5. Port24 create dynamic member to Voice VLAN.
 - 6. Use the same LLDP forward fit Voice VLAN ID info to Port28.
 - Voice VLAN device list info already be update, but Voice VLAN still keep port24 and Port28 dynamic member."
- 11. Sometimes the DUT STP P2P Function fast change port state does not valid after uplug and plug interface.
- 12. Follow D-Link test plan, the DUT default settings ping respond need to <= 1 ms, but our DUT cannot fit this request.
- 13. When change DUT IP settings from Static to BOOTP, the DUT always forward 2 BOOTP request at the same times. The DUT just forward one BOOTP reqest after save config then reboot.
- 14. "The DUT VLAN Based Loopback detection will cause DUT cannot respond when uplink loop topology. Test Step:
 - 1. Create VLAN ID 256.



2. Control PC connect to 256 VLAN member.

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- 3. Enable LBD VLAN mode support VID 1~255 and enable all ports LBD function.
- 4. Use port1 (include VID 1~255) uplink to loop topology.
- 5. The DUT no respond, we must remove loop topology, the DUT just can reply normally."

Franny(2013/07/31) : The number of supported LBD VLAN depends on hardware STG table entries and . If table is full, the switch will not handle the additional loopback VLANs. For DGS-1210-28, LDB will use 8 STG.

Therefor, the issue belongs to H/W limitation.

 "The DUT LBD cannot block all ports loop interface after uplink all ports loop after about 10 mins. Port1 connect to port2, port3 connect to port4.... Port23 connect to control PC, Port24 connect to DHCPv4/v6 server.

The DUT will loop after about 10 mins, the DUT console interface will display error message and loop packets is ICMPv6 (RA) Multicast packets."Franny(2013/07/31) : The number of supported LBD VLAN depends on hardware STG table entries and . If table is full, the switch will not handle the additional loopback VLANs. For DGS-1210-28, LDB will use 8 STG.

Therefor, the issue belongs to H/W limitation.

- "The DUT Auto Sureillance VLAN default OUI does not fit D-Link ASV Spec 1.3.
 D-Link Surveillance Device range should support 28-10-7B-00-00-00 ~ 28-10-7B-2F-FF-FF, but test result 28-10-7B-30-00-00 still can join to dynamic member."
- 17. The DUT exist Head of Line blocking issue via Jumbo Frame packets.

Franny(2013/07/31) : The issue belongs to H/W limitation.

18. The DUT Mirror Function Target Port always get packets with Tag info from Source port TX even all ports belong to Untag and forward Untag packets to test.

(PS: Mirror RX funciton does not exist this issue)

Franny(2013/07/31) : The issue belongs to H/W limitation.

19. The DUT Voice VLAN and ASV dynamic member

ingress rule still follow original VLAN member rule not Voice or ASV VLAN.

Franny: We recommed use IFP ("Redirect port = voice VLAN member" + "G_L3SW_CHANGE_L2_FIELDS = 3'd1") + Add Deivce MAC in FDB to confirm if the solution can solve the issue or not.

Therefor, we are waiting for Cameo reply

Related Documentation:

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- DGS-1210-28 Series User Manual
- DGS-1210-28 Series Getting Started Guide

