**FW Version:** 4.7.0.3

**Published Date:** 2018-05-02

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## Content:

## Revision History and System Requirement:

| Firmware Version | Date | Model Hardware | History |
|---|---|---|---|
| 4.7.0.3 | 02 May 2017 | DWC-2000/Ax | 1. Support new APs<br>2. Captive portal optimization<br>3. Improving stability of controller GUI access (LSH project critical error issue) |
| 4.6.0.2 | 20 Nov 2017 | DWC-2000/Ax | Support new AP<br>Bug fixes and enhancement<br>Update v4502 Problem fixed item. |
| 4.5.0.2 | 08 Dec 2016 | DWC-2000/A1 | Bug fixes and enhancement |
| 4.4.0.3 | 20 May 2015 | DWC-2000/A1 | Bug fixes and enhancement |
|  |  |  |  |

## Firmware Details:

| Image Version | HW | MD5 Checksum |
|---|---|---|
| DWC-2000_Ax_FW4.7.0.3_WW | Ax | 74520ddd51a0c17289cce801b61adffc |
|  |  |  |

## Important Notes:

1. GNU/Linux Bash Shell vulnerability (CVE-2014-6271)

We have evaluated this vulnerability. DWC-1000 and DWC-2000 are **not** vulnerable to this since these devices do not expose the shell interface through CLI nor WEB interface (including CGI).

Reference website:

http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2014-6271

http://seclists.org/oss-sec/2014/q3/650

https://blogs.akamai.com/2014/09/environment-bashing.html

2. SRTP Memory Leak (CVE-2014-3513)

We have evaluated this vulnerability. DWC-1000 and DWC-2000 are **not** vulnerable to this since these devices do not support SRTP and based on OpenSSL 1.0.x versions.

Reference website:
http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2014-3513

3. Build option no-ssl3 is incomplete (CVE-2014-3568)

We have evaluated this vulnerability. DWC-1000 and DWC-2000 are **not** vulnerable to this since the existing code base, we do not configure build option to no-ssl3.

Reference website:

http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2014-3568

## Notes for Configuration Auto-Backup/Restore in USB Storage:

D-Link DWC Unified Controller support configuration backup or restore automatically while a USB drive is inserted. Following information instructs what condition will perform backup/restore.

1. The configuration will be automatically backed up to the USB drive as soon as the USB drive is inserted. The back name has format <Model Name>_<Serial Number>.cfg provided this USB drive doesn't have a backup configuration file from a DWC already present.

2. The system LED on the DWC blinks 3X in amber to indicate a backup operation has started.

3. The configuration in the USB drive can be updated if the user manually clicks 'Save Settings' in any GUI page and provided the Model Number and the Serial Number of the DWC matches with the file already present in the USB drive.

4. In case of reboot, the DWC checks for the presence of configuration file (with format ModelName_SerialNumber.cfg). If found, the configuration from the USB drive is restored on the DWC. If a configuration file with the correct format is present in both connected USB drives, the configuration from the first USB drive will be used to restore the DWC.

5. The USB drive can have only one configuration with the above mentioned format for each model name.

6. If the USB drive is plugged in to the DWC which is in factory default state, then during reboot, no backup is taken since no custom configuration file exists in the DWC by that time. The custom configuration is stored on the USB drive once the user clicks Save Settings in any GUI page.

## Upgrading Instructions:

### Upgrading by using Web-UI

For detailed installation and upgrade instructions, please refer to the Firmware Upgrades chapter in the *DWC-2000 User Manual ver. 1.00.*

## New Features:

| Firmware Version | New Features |
|---|---|
|  |  |

| | |
|---|---|
| 4.7.0.3 | Support DWL-6620APS and DWL-7620AP |
| 4.6.0.2 | 1.  Support 3610AP/6610AP_B1<br>2.  Human Readable Log for AP Lost Management<br>3.  Sync MAC authentication and CP attribute with DWS<br>4.  Dynamic language packs support<br>5.  Facebook Wi-Fi support<br>6. Firmware naming change to Ax<br>7. Restricting A2 HW to downgrade any firmware < v4602<br>(Cut-in Rev A2 due to EOL of eMMC, and v4602 supports new eMMC) |
| 4.5.0.2 | 1. DWL-8710AP Support<br>2. Multiple LDAP SSID Mapping Enhancement<br>3. Hotspot enhancement changes<br>4. AP firmware upgrade enhancement.<br>5. New Dashboard and Wizard feature set. |
| 4.4.0.3 | 1. Re-name FW 4.4.0.2_B701 to v4403.<br>50977 - DHCP class B support needed to be added .<br>51044 - Multicast to unicast and dhcp to unicast support for AP profile radio<br>51049 - Session Time Out support for captive portal users (local user db)<br>51053 - Billing and Temp Users GUI optimization in DWC-2k |

## Problems Fixed:

| Firmware Version | Problems Fixed |
|---|---|
| 4.7.0.3 | 1. Wrong display of Expiration Date and Time on Frontdesk page. (DEUR20170131000013/ HQ20170202000026). SPR #59620<br>2. RADIUS attributes (Calling-Station-Id and Called-Station-Id) are not included for Captive Portal authentication. (Works fine for MAC authentication and WPA2/-Enterprise)<br>3. The problematic AP profile gives wrong SSID assignment after system reboot. (DEUR20170111000006/ HQ20170113000006) (DWC-1000/A1/B1 only) SPR #52908<br>4. Cannot remove DNS Hostname Mapping via either the GUI or CLI interface (DI20170219000001/ HQ20170220000001) SPR #61971<br>5. (When no VPN license) Throwing "Bad Parameter" error message when using Manage Dashboard options. (DEUR20170707000003/ HQ20170710000008) (DWC-1000 only) SPR #61724 |

6. When using billing users in batch generation, system pops up wrong "error message" due to the mismacth of calculation of max users in backend. (DEUR20170414000001/ HQ20170414000008) (DWC-1000 only) SPR #60528

7. Not able to upload the image for **WLAN Visualization** (DI20170717000001/ HQ20170717000005) SPR #61707

8. Fix of IRAN country code issue

9. Fix of UAE country code issue (IMA20170810000001/ HQ20170811000001)

10. System shows strange error message "Operation Failed" when setup **Email Log Configuration** (DEUR20170412000001/ HQ20170412000014) (DWC-1000/C1) SPR #60506

11. Wrong Airtime Fairness warning message when trying to enable AP Client QoS Mode globally (DEUR20170530000005/ HQ20170602000025) SPR#61311

12. When setup **IP ACL Rule Configuration**, there is no **IP** option within the **Protocol** dropdown list. (DEUR20170622000007/ HQ20170623000005) (DWC-2000) SPR#61414

13. FB WiFi issue SPR#60907

14. Error message when adding VLANs to LACP (SPR#62454)

15. DHCP NACK Issue (DEUR20171005000005/ HQ20171006000012) SPR #63495

16. **Web UI Management** feature which is not existing in DWC-2000 but available in DWC-1000C1 (DWC-2000 only) SPR #63352

17. Cannot access the Web UI using Firefox (DI20170803000001/ HQ20170803000006) SPR #62221

18. 172.17.17.17/16 not configurable (DEUR20170907000001/ HQ20170907000002) (DWC-1000) SPR#62490

19. You cannot add /24 network address via WEB GUI (DI20171004000006/ HQ20171005000002) SPR# 62525

20. Critical Issue of License Activation (DEUR20171206000002/ HQ20171207000002) SPR #62859

21. Roll in the fix of 4.6.0.2Q012T test build for DWC-2000 hang-up issue (DI20170116000007/ HQ20170117000004) SPR #62911

22. DWL-6610APE management issue. Not allow WPA2+TKIP setup (DEUR20171222000001/ HQ20171227000004) SPR #62995

23. DHQ CP Login issue (General fixes/optimizations and LDAP Auth flow changes)

24. LSH project critical error issue, system pop-up error msg when accessing GUI page "A critical error encountered while web page", a reboot needed to have it back (HQ20180125000010) SPR #63234

25. LAG issue (Link Aggregation static mode) with DGS-3420 (DI20171006000001/ HQ20171006000013) SPR #62539

26. Configure default route on CLI (DEUR20171027000004/ HQ20171027000010) (DWC-1000 C1 only) SPR #62631

27. Config backup/restore via DV7 issue (DI20171012000001/ HQ20171013000009) SPR #63406

28. DWC-1000 config issue with update (from 4.4.1.3B201C_B1_WW to 4.6.1.1), (DEUR20171123000005/ HQ20171124000005) SPR #62776

29. DWC-2000 the expired temporary users within DB are not automatically deleted. (DEUR20171109000003/ HQ20171110000004) SPR #62720

30. To have TLS on/off (Maintenance»Logs Settings»Remote Logs) for DWC-1000 A1/B1/C1 only, (DUSA20180117000001/ HQ20180117000002) SPR# 63169"

31. Adding the warning message whenever a reset to factory default is needed during firmware downgrade process. (DI20180119000003/ HQ20180131000007) SPR# 63265

32. Lost configuration after downgrade firmware. (DI20180119000003/ HQ20180214000007) SPR #63351

33. WLAN Visualization image issue, the uploaded file size is zero. (DEUR20180228000006/ HQ20180305000016) SPR# 63462

34. WLAN clients can directly access the Internet without being redirected to the Captive Portal (DEUR20180305000004/ HQ20180307000009) (fix for DWC-1000/C1 only) SPR# 63498

35. DBG17030351 TCP SYN scan, closed port should not be detected (DWC-2000 v4602)

36. DBG17030352 UDP port scan, no ports should respond to UDP port scan. (DWC-2000 v4602)

37. DBG17040046 TCP-FIN scan, no ports should respond to TCP-FIN scan. (DWC-2000 v4602)

38. POP3 authentication server should accept the FQDN name with more than 15 characters. (DI20170320000001/ HQ20170320000005) SPR #60276

39. DWC-1000 - WLAN Wizard only supports A/B/G/N not AC

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| | (DEUR20170127000002/ HQ20170202000013) SPR #59495 |
| | 40. Incorrect warning message in peer device when try to start manual power adjustment. (DI20170228000003/ HQ20170301000025) SPR #60210 |
| | 41. DWL-6700AP status is not changing to standalone from managed mode. (HQ20170517000004) SPR #60943 |
| | 42. In customized captive portal page, the login successful page shows **Password Change** option wrongly, it shouldn't be available since it was disabled. (DEUR20170717000004/ HQ20170718000008) SPR #63334 |
| 4.6.0.2 | 1. DWC-2000_WDS_Incorrect WDS status info for the WDS link between two DWL-8610AP [continuous case from DBG16090029] DBG16090122 |
| | 2. Captive Portal issues from DHQ setup    HQ20160627000021 |
| | 3. Unable to add 625 users from CSV only 624 are added DBG16110376 |
| | 4. LAN client cannot access Internet when default gateway is DWC HQ20160831000011 |
| | 5. httpd upgrade, ldap changes & logging changes for issues observed in customer setup  HQ20160822000012 |
| | 6. Need to allow space character in SSID profile configuration from both SSID profiles and ap profile SSID pages HQ20161220000011 |
| | 7. [DLAB] Unable to get the value for OID "wsManagedAPRadioBandwidth" when radio bandwidth is 80 MHz HQ20160722000011 |
| | 8. Unable to disassociate clients from SNMP browser with OID "wsAssociatedClientDisassocaiteAction" HQ20160705000002 |
| | 9. SLA content is not coming properly in mobile phone HQ20160831000014 |
| | 10. QoS issues in DWC GUI pages HQ20160707000003 |
| | 11. Validation checks for importing invalid files mac authentication in wizard dashboard    DBG16080297 |
| | 12. Incorrect error message when we add 65th AP profile DBG16080306 |
| | 13. User DB invalid csv file import issues    DBG16080158 |
| | 14. DWC-2000_webUI_DWC show the incorrect info in QoS page when Radio is off DBG16090024 |
| | 15. [DLAB] Unable to manage APs from 34 to 64th AP profiles when max AP profiles are configured in the device |

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|---|---|
| | 16. [DLAB]unable to configure IP ACL rule with IP address of last octet '0'<br>17. [WebGUI] Status Bar shows Operation Failed When we edit & save SSID    HQ20160621000015<br>18. Authorzie.net error mapping if any issue in configuration of billing profiles HQ20160825000010<br>19. When added an ACL rule with L4 port http then when edit it is showing as wwwDBG16110379, HQ20161116000010 |
| 4.5.0.2 | 1. Unable to delete/deactivate the licenses through CLI HQ20130426000004<br>2. OpenSSL Vulnerability Change Cipher<br>3. Device is vulnerable to SQL injection attack for cookie.<br>4. Not able to perform trace route or ping functionality of ipV6 addresses from diagnostics page HQ20141104000020<br>5. Need enable 80Mhz for Mexico<br>6. WLAN IP address display 10.90.90.90<br>7. Observed critical error after STA pass captive portal Login in IE11 browser(DWC-1000) HQ20150204000014<br>8. Unable to open the GUI/frontdesk page of DWC-2000 device when it is connected to DSR device in NAT mode HQ20150324000017<br>9. Observed critical error in the IE 11 browser when user refreshes CP window.<br>10. Eliminate the double quote for WPA/WPA2 key in the "print ticket" of DWC-1000 device HQ20150518000017<br>11. Observed critical error in discovered ap page when we add large ip range HQ20150804000021<br>12. WEP security mode is not persisting after reboot for the default vap ssid's in dwc-2k<br>13. Upper level channels are not displaying in 5GHz radio for all countries.<br>14. When changing the radio Primary Channel from lower to upper then bandwidth is also getting effected from 40 to 20 HQ20150907000008<br>15. IN CLI and in status dashboard memory utilization values should have unit MB not KB HQ20150930000015<br>16. Enable redirect functionality not working on mobile devices when CP type as SLA HQ20151006000015<br>17. DWC-2000: Device is vulnerable to CSRF attack.<br>18. Channels list in managed ap page, in status managed ap page |

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|---|---|
| | channel list pages are different from ap profile radio page HQ20150701000015 |
| | 19. User is able to add the ip address in the DHCP pool which is alredy configured in the DHCP reserved IP page HQ20150810000022 |
| | 20. license activation page is not working in Localization branch |
| | 21. Able to save diff serv policy with diff serv class which doesn't have a match selector HQ20141110000017 |
| | 22. Need to apply the patch for Multiple Vulnerabilities#CVE-2015-3195 |
| | 23. Wireless configuration is not persisting some time |
| | 24. Unable to open DWC-1000 GUI pages when device is behind NAT with Port forwarding Rule HQ20151221000015 |
| | 25. Force roaming option is getting disabled after reboot for managed ap entry added in valid access points page HQ20160106000002 |
| | 26. Static key is being used for SSH Communication. |
| | 27. critical error in managed ap page HQ20151216000013 |
| | 28. Ignore Broadcast option need to be removed from cli for ssid configuration |
| | 29. When both the radio of peermanaged ap is off then channel is not getting updated in master HQ20160201000019 |
| | 30. Need to add test build patch for the "High CPU utilization issue" |
| | 31. Observed 500 Internal Server error with customer configuration file HQ20160127000016 |
| | 32. Able to configure CP type [SLA/Permanent/Temporary] for the Control VLAN from CLI HQ20160201000014 |
| | 33. Spelling mistake in pay pal configuration page. HQ20160218000017 |
| | 34. LAN related logs are not coming in DWC-2000 HQ20160126000017 |
| | 35. Need to add port 443 for remote management and ssl vpn |
| | 36. SSL/TLS use of weak RC4 cipher-CVE-2013-2566 |
| | 37. DWC-2000 M2 : Increase the MAC Auth database limit to 2048 |
| | 38. Cavium glibc "Skeleton Key" Vulnerability Notification – CVE 2015-7547 |
| | 39. The managed APs location information will be incorrectly overwritten. DBG14070102 |
| | [DWC] WDS link status and statistics pages are showing incorrect radio modes for the WDS connection in DWC-2000 DBG15100075 |
| 4.4.0.3 | 1. [HQ20150409000007]    Channel information incorrect on Managed AP page |

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|---|---|
| | 2. [HQ20150127000021]　Auto Channel in 5G not work properly[DUSA20150122000002-USA]<br>3. [HQ20150323000013]　Authorize.net for paid SLA isn't working for client installation[DUSA20150320000003-Canada]<br>4. [HQ20150402000018]　Firmware problem<br>5. [HQ20150407000016]　Unable to delete some users from DB[DRU20150406000005-Middle East]<br>6. [HQ20150409000010]　We can add new vlan id to poll list via MIB browser (wsL2DiscoveryVlanRowStatus), even this vlan id not existed on clan list.<br>7. [HQ20150410000004]　Does DWC-2000 support QoS Differentiated Services? |
| | |

## Tracking Issues:

| Firmware Version | Tracking Issues (The potential fix has not been confirmed by customer or OBU) |
|---|---|
| N/A | N/A |
| | |

## Known Issues:

| Firmware Version | Known Issues |
|---|---|
| 4.7.0.3 | DBG18040416 AP profile can't be applied properly when setup up to 34 SSIDs, and causes connection failed. |
| 4.6.0.2 | DBG17030308 Security scan - http access with the Password in plain-text<br>DBG17030351 Security scan - TCP Syn scan fail<br>DBG17030352 Security scan - UDP port scan fail<br>DBG17040046 DWC-2000 response the TCP-FIN this kind of probe packet for all listening ports.<br>DBG17030332 Client is not able to redirect properly due to m.facebook.com is imposing HSTS mechanism |
| 4.5.0.2 | DBG16120072-Cannot form cluster after uploading the customer's settings.<br>DBG16120077-The WiFi-channel won't follow what we set in the controller.<br>DBG16120024-DWC-2000_CLI_Vlan setup via CLI not work<br>DBG16110379-DWC-2000_IP-ACL_The service of the IP-ACL issue |

| | DBG16110376-Cannot add user through CSV |
| | DBG16110307-The incorrect WEB UI of DWC-2000 |
| | DBG16110292-difference in alert message usage and actual usage left for temp CP |
| | |
| | |

## Related Documentation:

- DWC-2000 User Manual ver.1.00
- DWC-2000 CLI Reference Guide ver. 1.00