## **DWC-2000 Firmware Release Notes**



FW Version: 4.7.5.1

Published Date: 2021-02-01

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# **Revision History and System Requirement:**

Firmware Version	Date	Model Hardware	History
4.7.5.1	01 Feb 2021	DWC-2000/Ax	1. New features and bug fixes
4.7.4.2	29 May 2020	DWC-2000/Ax	<ol> <li>Support DWL-X8630AP, DWL-8720AP, DWL-6720AP</li> <li>New features and bug fixes</li> </ol>
4.7.2.1	16 Apr 2019	DWC-2000/Ax	3. New features
4.7.1.1	18 Dec 2018	DWC-2000/Ax	1. Support DWL-8620AP
4.7.0.3	02 May 2018	DWC-2000/Ax	<ol> <li>Support new APs</li> <li>Captive portal optimization</li> <li>Improving stability of controller GUI access (LSH project critical error issue)</li> </ol>
4.6.0.2	20 Nov 2017	DWC-2000/Ax	Support new AP Bug fixes and enhancement 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:

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Image Version	HW	MD5 Checksum
DWC-2000_Ax_FW4.7.5.1_WW		bec4236bb199f86813ed3ae40ca2f83c

# 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.

 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:**

Firmwa	New Features			
re				
Version				
	1. Changeable Captive Portal IP			
	2. Schedule reboot			
4.7.5.1	3. Application Overview (only works with DWL-6620/7620/8620/6720/8720AP)			
4.7.5.1	4. Scheduler per SSID (only works with			
	DWL-6620/7620/8620/6720/8720/X8630AP)			
	5. Fast roaming (only works with DWL-6620/7620/8620/6720/8720AP/X8630AP)			
	1. Support DWL-X8630AP, DWL-8720AP, DWL-6720AP			
	2. SLA enhancement			
	3. SLA Option for CP Permanent User			
4.7.4.2	4. Users per captive portal group: DWC-2000/500, DWC-1000C1/250 & Users			
	generated per billing profile: DWC-2000/1024, DWC-1000C1/512			
	5. AP Grouping			
	6. Delete expired users SPR# 64972 (To add manually delete option on GUI)			



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		7. GUI display enhancement
		8. Local MAC DB enhancement, Local MAC Auth DB grouping and MAC address
		masking, Password for MAC Auth
		9. Forced Login option and Multi Login number limit
		10. CP Sessions page refinement (SPR #65334)
		11. Replacing MD5 hash with SHA512 for Authorize.net users
		12. Default Password change
		=======================================
		<ul> <li>Social login for Google, Line &amp; Weibo (SNR v1.06)*</li> </ul>
		<ul> <li>Need to add support for Maximum clients limit per SSID*</li> </ul>
		Note: New features (*) need changes on AP, it's not supported on all DWL AP formal
		releases yet, only work with test releases as below.
		a. DWL-6600AP/3600AP: upgrade_4_2_0_15B003C.tar
		Link: https://www.dropbox.com/s/kn2bh17utfrck8k/upgrade 4 2 0 15B003C.tar?
		<u>dl=0</u>
		Md5sum: fc5ac52342197123d01621667d53e962
		b. DWL-8610AP: DWL-8610_FW_v_4.3.0.10B022C.tar
		Link: <u>https://www.dropbox.com/s/h1rcqukb59ej44g/DWL-8610 FW v 4.3.0.10B0</u>
		<u>22C.tar?dl=0</u>
		md5sum: 956661cb567e1b392a4dfe65445e0206
		=======================================
		<ul> <li>WPA3 setup options on DWC (for DWL-X620AP)**</li> </ul>
		<ul> <li>Add LAG and LACP options (for DWL-X620AP)**</li> </ul>
		DI20190729000005 DJP DWC-2000 There is no WMF setting in the wireless
		profile (for DWL-X620AP)**
		Note: New features (**) need changes on AP, it's not supported on all DWL AP formal
		releases yet, only work with releases as below.
		DWL-8620AP/7620AP/6620APS: v4729 and onwards.
		1. MAC-Bypass*
		2. FB WiFi enhancement*
		3. Default NTP Server proposal (adding tertiary server)
		4. GUI enhancements
	4.7.2.1	5. UAP Direct Config (for managed AP)*
	7.7.2.1	6. Navigator
		Note: New features (*) need changes on AP, it's not supported on all DWL AP formal
		releases yet, only work with test releases as below.
		a. DWL-6600AP/3600AP: upgrade_4_2_0_15B003C.tar
iro	on	



	b. DWL-8610AP: DWL-8610_FW_v_4.3.0.10B019C.tar			
4.7.1.1	Support DWL-8620AP			
4.7.0.3	Support DWL-6620APS and DWL-7620AP			
	1. Support 3610AP/6610AP_B1			
	2. Human Readable Log for AP Lost Management			
	3. Sync MAC authentication and CP attribute with DWS			
4.6.0.2	4. Dynamic language packs support			
4.0.0.2	5. Facebook Wi-Fi support			
	6. Firmware naming change to Ax			
	7. Restricting A2 HW to downgrade any firmware $< v4602$			
	(Cut-in Rev A2 due to EOL of eMMC, and v4602 supports new eMMC)			
	1. DWL-8710AP Support			
	2. Multiple LDAP SSID Mapping Enhancement			
4.5.0.2	3. Hotspot enhancement changes			
	4. AP firmware upgrade enhancement.			
	5. New Dashboard and Wizard feature set.			

# **Problems Fixed:**

Firmware Version	Problems Fixed
	1. Problem with FW upgrade and config.
	DRU20190628000001/ HQ20190702000006. SPR #66650
	2. LOGO of the captive portal billing profile
	[DEUR20200826000001-South Europe] HQ20200901000008/ SPR #68887
	3. Issue with CP
4.7.5.1	[DEUR20200924000004-South Europe] HQ20200928000010/ SPR #69089
4.7.3.1	4. [DWL-8600AP/DWC-2000] CH 140 issue. HQ20201029000002/ SPR #69403
	5. After reaching 125 managed APs, the Managed page can not be displayed any
	more - A critical error encountered while loading web page
	[DEUR20201104000005-Eastern Europe] HQ20201105000011/ SPR #66915
	6. Multiple issues with the Controller & AP setup
	[IMA20201028000003-India] HQ20201113000007/ SPR #69445
	1. RADIUS server setup issue. DBG18061014
4.7.4.2	2. In trunk mode, vlan-1(default vlan-1) should get tagged like other VLANs
	3. Upgrade the dhcpv6 server code HQ20181115000003 / SPR #64995



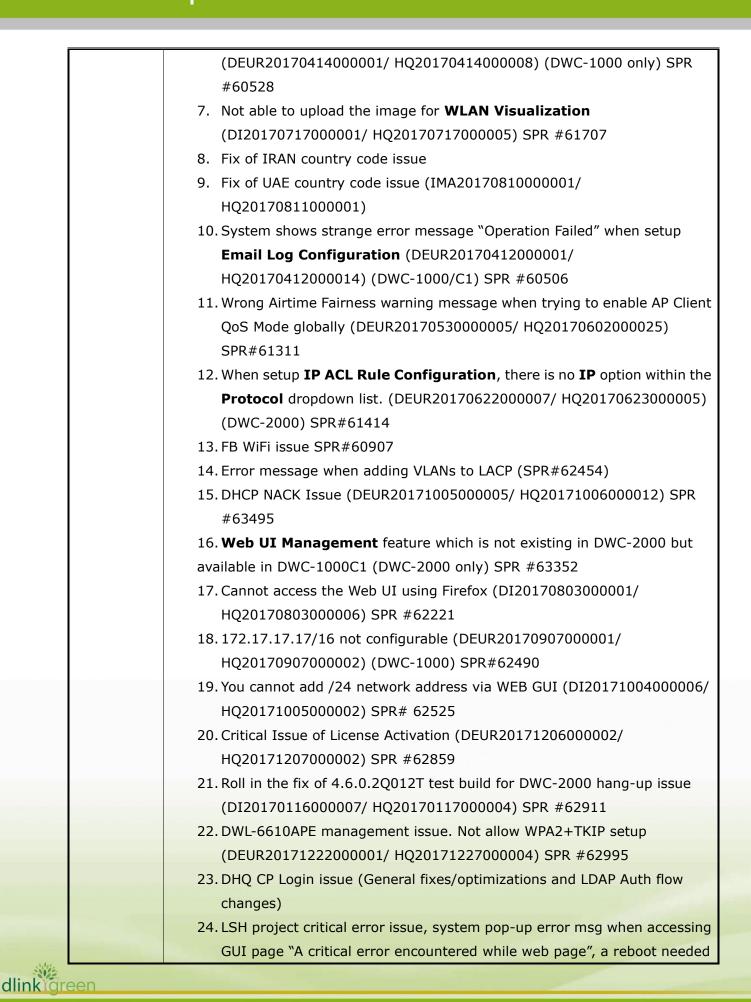
	4. [Web GUI] AC Client is counted as both 802.11N &802.11AC client
	HQ20190114000006/ SPR #65355
	5. Neighbor AP entries are not showing for 2.4Ghz radio in Neighbor AP status
	page. SPR #65482
	6. DWC-2000 WEP can be set even if 11n or 11ac is enabled on 5GHz
	DI20190214000003/ HQ20190215000007. SPR #55940
	7. DWC-2000 Does not send Email logs for Managed AP Status.
	DI20190222000001/ HQ20190225000002/SPR #65715
	8. DWC-2000 Sending Radius packets to Primary -> Tertiary -> Secondary
	Server. DI20190221000003/ HQ20190305000023/ SPR #65815
	9. Unable to upgrade DWL7620Ap from Managed AP page. SPR #65849"
	10. IP sorting columns is incorrect in Managed APs ane AP Provisioning page.
	DEUR20190320000004/ HQ20190322000010 SPR #65894
	11. Removing debug logs. HQ20190510000007/ SPR #66176
	12. Critical error page appears when access into ""Event"" page with customer's
	configuration. DI20190527000001/ SPR #66242
	13. Popup window cannot be closed by close button. HQ20190523000001/ SPR
	#66246
	14. Wrong information of Radar Status in Radio Details/ DWL-8610AP.
	HQ20190516000012
	15. Cannot add 2048 MAC addresses to Local MAC authentication database.
	HQ20190604000012/ SPR #66294
	16. DWL-7620AP, Auto channel doesn't work on 2nd 5G. DI20190315000003 SPR
	#66613.
	17. Radio details are not showing properly in the Managed AP List page when we
	manage more number of APs. DEUR20190827000006/ HQ20190904000009 SPR
	#66785
	18. Critical error appear in managed AP
	DEUR20190826000003/HQ20190828000006, SPR #66915
	19. No option for Channel and Power for 3rd radio
	DUSA20191031000001/ HQ20191101000003, SPR #66528
	20. Fix: SSL/TLS Weak Cipher Algorithm (OnSec-TC-03003001)
	21. Internal DHCP server issue. DRU20191225000003/DWC-2000. SPR#67408
	22. DWC-2000 GUI display, to add 200/500 to the drop-down list SPR# 66954
	23. No CLI command for radius accounting configuration. DGC20200225000001.
	SPR# 67763
	24. Web GUI Management feature is not blocking CP login users from accessing
	controller Web GUI. DEUR20200220000004. SPR# 67834
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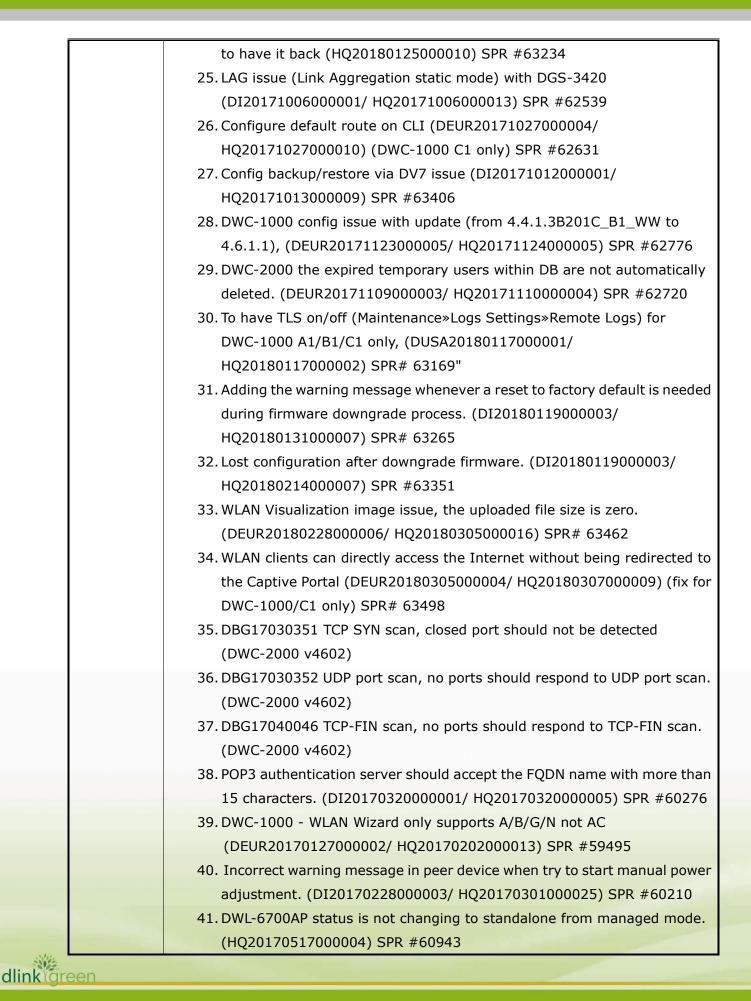
		1. DWL-XX10APs are crashing in loop when they are getting managed with
		latest DWC-1000C1 release v4.7.2.1. (DBG19020237) SPR #65544
		2. Observed error on viewing billing profiles from CLI (DBG17020231). SPR
		#60641
		<ol> <li>[DLAB] Observed some issue with snmpwalk commands and in MIB browser. SPR #61032</li> </ol>
		4. Facebook WiFi Enhancement (SNR v1.06). SPR #62604
		5. DWC-1000 - issues with visualization Win10 64bit.
		(DEUR20180228000006/ HQ20180305000016). SPR #63462
		6. NTP Server Enhancements (adding tertiary server)
		(DEUR20170516000006/ HQ20170517000003). SPR #64200
		7. Add ATF feature support for DWL-6620/7620AP profile types and with
		profile type 'Any' in DWC. SPR #64207
		8. Observed ipset related logs in DLI and shell needs to be suppressed.
		(DBG18070008). SPR #64239
		9. Multi Radius support & Profile selection for Mac authentication in AP
		profile SSID page. SPR #64296
		10. Issue with DST and SNTP (DWC-1000/C1) (DEUR20180620000002/
	4 7 2 4	HQ20180626000010). SPR #64325
	4.7.2.1	11. Japan 5G channel issue for managed 7620AP (DI20180704000002/
		HQ20180710000005)
		a. Able to configure same channel in both radio mode primary and secondary
		in default and custom AP Profile while managing 7620AP. And notification
		enhancement when configure primary 5Ghz and secondary interface. SPR #63530
		b. Channel # 100 not shown in the secondary radio issue. SPR# 64414
		12. Certification revoked in Wlan Visualization (HQ20180917000003). SPR
		#64430
		13. DWC cannot manage DWL-6700 when the hardware type of AP profile is
		DWL-6700 (HQ20180809000014). SPR #64507
		14. Device is not allowing to enable "Radio Resource Management" and
		"Space time block code" options in radio settings of DWL-6610AP(A1)
		Hardware type AP profile. (HQ20180807000009) SPR #64512
		15. Need to add support for SNMP OID to get cpu usage in dwc-1000 series
		(OID: 1.3.6.1.4.1.171.10.121.1.2.5.9.1.1). SPR #64528
		16. Radius Accounting sends wrong info if client is roaming
		(DEUR20170403000007/ HQ20170420000017). SPR #64583
		RADIUS accounting for roaming clients [SNR 1.04]
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	17. WLAN visualization background images upload limit should be 12 with maximum size of 2048 KB (HQ20170303000010) SPR #64769 (DWC-2000 only)
	18. Unable to access webUI from port 1 when Voice VLAN option is activated
	(DI20181019000001/ HQ20181019000004) SPR #64866 (DWC-2000 only)
	19. CLI command issue (DEUR20181123000003/ HQ20181126000003) SPR
	#65013 (DWC-2000 only)
	1. Failure when building controller cluster (DEUR20180420000006/
	HQ20180423000005). SPR #63862
	2. Guest account vulnerability by SSH (DRU20180521000002/
	HQ20180522000006). SPR #63945
	3. The issue with removing users (DRU20180426000002/
	HQ20180427000006). SPR #63940
	4. Missing TLS option in Remote Logs section. (DUSA20180117000001/
4.7.1.1	HQ20180117000002). SPR #63169
	5. Maximum limit for Per group ADMIN/GUEST/FD reached Error while upload
	CSV file (HQ20180409000019). SPR #63736
	6. Logout button doesn't work (DBG18060979). SPR #64256
	7. Cannot edit RADIUS profile via CLI when reach Max Radio server and
	RADIUS profile (DBG18061026, DBG18061007). SPR #64257
	8. Can't upload firmware to AP DWL-6610AP/B1
	(DEUR20180718000001/ HQ20180719000005) SPR #64364
	1. Wrong display of Expiration Date and Time on Frontdesk page.
	(DEUR20170131000013/ HQ20170202000026). SPR #59620
	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)
	3. The problematic AP profile gives wrong SSID assignment after system
	reboot. (DEUR20170111000006/ HQ20170113000006) (DWC-1000/A1/B1
4.7.0.3	only) SPR #52908
	4. Cannot remove DNS Hostname Mapping via either the GUI or CLI interface
	(DI20170219000001/ HQ20170220000001) SPR #61971
	5. (When no VPN license) Throwing "Bad Parameter" error message when
	using Manage Dashboard options. (DEUR20170707000003/
	HQ2017071000008) (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.









	42. In customized captive portal page, the login successful page shows <b>Password Change</b> option wrongly, it shouldn't be available since it was disabled. (DEUR20170717000004/ HQ20170718000008) SPR #63334
4.6.0.2	<ol> <li>DWC-2000_WDS_Incorrect WDS status info for the WDS link between two DWL-8610AP [continuous case from DBG16090029] DBG16090122</li> <li>Captive Portal issues from DHQ setup HQ20160627000021</li> <li>Unable to add 625 users from CSV only 624 are added DBG16110376</li> <li>LAN client cannot access Internet when default gateway is DWC HQ20160831000011</li> <li>httpd upgrade, ldap changes &amp; logging changes for issues observed in customer setup HQ20160822000012</li> <li>Need to allow space character in SSID profile configuration from both SSID profiles and ap profile SSID pages HQ2016122000011</li> <li>[DLAB] Unable to get the value for OID "wsManagedAPRadioBandwidth" when radio bandwidth is 80 MHz HQ20160722000011</li> <li>Unable to disassociate clients from SNMP browser with OID "wsAssociatedClientDisassocaiteAction" HQ2016070500002</li> <li>SLA content is not coming properly in mobile phone HQ20160831000014</li> <li>QoS issues in DWC GUI pages HQ2016070700003</li> <li>Validation checks for importing invalid files mac authentication in wizard dashboard DBG16080297</li> <li>Incorrect error message when we add 65th AP profile DBG16080306</li> <li>User DB invalid csv file import issues DBG16080158</li> <li>DWC-2000_webUI_DWC show the incorrect info in QoS page when Radio is off DBG16090024</li> <li>[DLAB] Unable to manage APs from 34 to 64th AP profiles when max AP</li> </ol>
	profiles are configured in the device 16. [DLAB]unable to configure IP ACL rule with IP address of last octet '0'
	17. [WebGUI] Status Bar shows Operation Failed When we edit & save SSID HQ20160621000015
	<ol> <li>Authorzie.net error mapping if any issue in configuration of billing profiles HQ20160825000010</li> </ol>
	19. When added an ACL rule with L4 port http then when edit it is showing as www DBG16110379, HQ20161116000010
4.5.0.2	<ol> <li>Unable to delete/deactivate the licenses through CLI HQ20130426000004</li> <li>OpenSSL Vulnerability Change Cipher</li> <li>Device is vulnerable to SQL injection attack for cookie.</li> </ol>



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 V	VDS connection in DWC-2000 DBG15100075

# 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
	DBG19030516 DWC-2000_4.7.2.1_cannot restore config via USB (Failed
	with NTFS, but works with FAT32) (SPR #65875)
4.7.5.1	DBG19030417 DWC-2000_4.7.2.1, wlan visualization failed, managed-AP
	did not save after reboot (SPR #65862)
	DBG21011038- Auto Eligible Channels of Secondary 802.11a/n/ac is empty



	after factory reset the DUT.
	DBG21011072- The operational status of the DWL-6610AP's SSID always
	shows 'DOWN' in VAP detail page on DWC-2000.
	DBG19030516 DWC-2000_4.7.2.1_cannot restore config via USB (Failed
4.7.4.2	with NTFS, but works with FAT32) (SPR #65875)
	DBG19030417 DWC-2000_4.7.2.1, wlan visualization failed, managed-AP
	did not save after reboot (SPR #65862)
	DBG17030308 Security scan - http access with the Password in plain-text
	DBG19030516 DWC-2000_4.7.2.1_cannot restore config via USB (Failed
	with NTFS, but works with FAT32) (SPR #65875)
	DBG19030417 DWC-2000_4.7.2.1, wlan visualization failed, managed-AP
	did not save after reboot (SPR #65862)
	DBG19030585 DWC-2000_AX_4721_After user connect the WLAN client
	and purchase the Billing user on-line via authorize.net, it will not redirect to
4.7.2.1	the user detail and not show "Email and Login Now" button. (Needs
4.7.2.1	replacing MD5 hash with SHA512 for Authorize.net users)
	DBG19030503 Need to add 5GHz DFS channel list in the DWL-X620AP radio
	profile with country code which support 5GHz DFS channel (SPR #65885)
	DBG19030506 The function "Detected Clients Delete" should be enable by
	default. But in the document the description is "By default it is disabled."
	(SPR#65394)
	DBG19030494 DWC-2000 not support the ".bin" file to upgrade the
	DWL-7620AP's firmware in Managed APs list page. (SPR #65849)
4.7.1.1	DBG18080275 When the user tries to change channel from AP Profile Radio
4702	page, it is not working with DWL-8620AP in this use-case. SPR #64459 N/A
4.7.0.3	·
4.6.0.2	DBG17030308 Security scan - http access with the Password in plain-text DBG17030351 Security scan - TCP Syn scan fail
	DBG17030352 Security scan - UDP port scan fail
	DBG17040046 DWC-2000 response the TCP-FIN this kind of probe packet
	for all listening ports.
	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.
	DBG16120077-The WiFi-channel won't follow what we set in the controller.
	DBG16120024-DWC-2000_CLI_Vlan setup via CLI not work
	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

