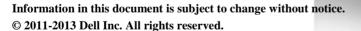Dell™ PowerConnect™ 5524/5548/5524P/5548P

PowerConnect 5524/5548/5524P/5548P Release Notes

Date: Aug 2013
System Firmware Version 4.1.0.12

Table of Contents

Introduction

This document provides specific information for the Dell PowerConnect 5524/5548/5524P/5548P Switch systems, firmware version 4.1.0.12 (which is a maintenance release).

It is recommended that this release note be thoroughly reviewed prior to installing or upgrading this product.

GLOBAL SUPPORT

For information regarding the latest available firmware, recent release revisions or if requiring additional assistance, please visit http://support.dell.com Support Web Site.

Firmware Specifications

Firmware Version Details

Boot PROM Name	Version No.	Release Date
powerconnect_55xx_boot-10014.rfb	1.0.0.14	Apr, 2012

Firmware Image Name	Version No.	Release Date
powerconnect_55xx-41012.ros	4.1.0.12	Aug, 2013

The firmware image version should be 4.1.0.12 on the PowerConnect 5500 Series. The boot prom image should be 1.0.0.14. Refer to the PowerConnect 5500 Series User's Guide for instructions on loading the boot PROM software and updating the firmware image.

Version Numbering Convention					
Version number					**Description**
PC55XX	4	1	0	12	Four part version number
				∟	Denotes the build number.
			∟		Denotes an ad hoc release of the product software.
		∟			Denotes a scheduled maintenance release of the product software.
	∟				Denotes a major version number.

Supported Firmware Functionality

For more details regarding the functionalities listed, please refer to the PowerConnect 5500 Series User's Guide.

Functionality Changes

From Version 4.1.0.10 and on – OpenSSH version upgraded to 5.9; SSL version upgraded to 0.9.8r

From version 4.1.0.8 and on – Fast Link failover feature was improved. In case of a topology change from ring to chain or chain to ring within the stack the traffic interruption is now as low as 9ms.

From version 4.1.0.5 support for PC55xx switches with a new PHY revision (A1) was added. PC55xx switches with new A1 PHY revision are identified by the PPID ends greater than and equal to **A05** (for example., CN08PY352829825S0106**A05**)

It is recommended to run firmware version 4.1.0.5 or later on PC55xx switches with new A1 PHY revision. PC55xx with new PHY revision can also run previous firmware versions, but will be subject to certain limitations related to VCT, EEE and Green Ethernet functionality, as detailed below:

Previous Firmware Version	Limitation on PC55xx switches with new PHY revision
Firmware version 4.0.1.x	VCT may not provide accurate cable length. As a result Green Ethernet Feature may not function as expected. EEE is supported
Firmware version 4.1.0.x	VCT may not provide accurate cable length. As a result Green Ethernet Feature may not function as expected. EEE is fully supported

Issues Resolved

The following issues have been resolved in current firmware release (Version 4.1.0.12)

Description	User Impact	Resolution
Wrong value used for chassis Service Tag	MIB – switch reports switch Service Tag as Chassis Service tag. However – device is not designed to be included in a chassis	Chassis Service Tag is now set to NULL.
STP frame size - STP frames had extra padding (frame size 68 instead of 64)	STP frames with extra padding are valid from standard point of view. However – some systems reported errors when receiving such frames.	Extra padding was removed
When refreshing the Switching->VLAN->LAG interface->Edit page the device presents the "Port Interface" page instead	GUI displays wrong page	Issue resolved

Deletion of all static entries in DHCP Server page causes device to crash	System reboots	Issue resolved
When trying to add via Web GUI MAC ACE with broadcast MAC address as destination address, configuration is not accepted and an error message is displayed "value is an illegal unicast MAC address"	user cannot configure via the web GUI a MAC ACE with a broadcast as destination MAC address	Issue resolved

Known Restrictions and Limitations

Summary	User Impact	Workaround
WEB GUI Page "Utilization Summary", "Interface Utilization field" sometimes displays "-"	When sending wire-speed traffic and the refresh rate is longer than 15 seconds, the WEB GUI displays "-"instead of a real value.	When sending wire-speed traffic, use refresh rate of 15 seconds.
USB key might hang after several quick inserts and removals requiring a reboot.	After the USB key is inserted and removed several times very quickly (within a second) along with the "dir usb:" command, the key stops responding. The USB key becomes operational after reboot.	Wait a few seconds between insertion and removal of the USB key.
Cisco Phones 7960 interoperability problem	Some of Cisco 7960 IP Phones create a short on Ethernet wires when connected to PC55xx POE ports. Connecting such phone to PC55xx might cause a leakage of power to other POE devices connected on the same switch. This may cause POE issues on neighboring ports.	Use a two pair Ethernet cable (e.g. Cat3) while working with Cisco 7960 IP Phones

Documentation Updates

This document lists the changes from the PowerConnect 5524/5548/5524P/5548P Systems CLI and User's Guide. The modifications are due to instances discovered in various user environments.

Summary	Description	Relevant Documents
Default Configuration of service cpu-utilization is wrong	In CLI Guide - Default Configuration of service cpu-utilization should be enabled and not disabled.	CLI Guide

Issues Resolved in Previous Versions

The following issues have been resolved in firmware 4.1.0.10 release

Description	User Impact	Resolution
Summer time clock with SNTP	Sometimes when working with SNTP server, the device clock adds 2 hours instead of 1 hour in Summer Time	Issue resolved
Show Tech Support (enhancement request)	Request to add more info in "show tech-support" command	The following command outputs was added to show Tech-supp output: "show interface counters errors" "show system unit X " "show power inline"
PC5500 DVA randomly fails and assigns clients to the guest VLAN	Traffic from Dot1x users is not assigned to the correct VLAN	Issue resolved
VLAN trunk mode Native VLAN with IPv6	Device crashes when defining an IPv6 enabled VLAN as a native VLAN on a port in trunk mode	Issue resolved
GUI problem in VLAN pages	"apply" and "cancel" button disappear from VLAN port setting edit page if interface includes command to remove certain VLANs	Issue resolved
Voice VLAN and LAGs	Device crashes when Adding Voice VLAN enabled ports to a LAG	Issue resolved
vulnerabilities and DoS attacks reported on SSH service	Reports of SSH vulnerabilities on device	Upgrade to OpenSSH version 5.9

The following issues have been resolved in firmware 4.1.0.8 release

Description	User Impact	Resolution
PowerConnect 55xxP having problem providing power when using Shortel IP230G phones (PSE/PTR issue - 213880)	The Shortel IP230G phones don't work. Issue was related to phone requesting/consuming power beyond the limit of the class it was advertising	Additional global option was added to allow switch to provide power up to the max limit of 15.4W regardless of device POE class.

PC55xx - speed not listed for 10Gb ports in Web GUI unless page was refreshed.	In Web GUI the current speed of the 10Gb ports is not presented	Issue resolved
PC55XX MIB OIDs for optical transceivers conversion from bBm to mWatt is mistaken	Wrong mWatt values are displayed in CLI and Web GUI	Issue resolved
Routed traffic in the device is using the port MAC as the SMAC instead of the device MAC	In some rare cases this behavior would affect the ability of end stations to use the switch interface as a default gateway.	Issue resolved. Device base MAC is always used as SMAC when routing traffic
Web GUI displays tagged VLANs as Inactive configuration	Wrong configuration is being shown to the user. CLI displays accurate information.	Issue resolved
PCT55xx PS (main Power Supply) and RPS (Redundant PS) LED status is not reflected accurately in the Zoom view of the Web GUI	PS LED was always on even if PS was not connected to power. RPS LED was always off, even if RPS was connected. GUI did not provide accurate indication if PS and/or RPS are functioning properly.	Issue resolved
VCT results on short cables were shown as "Bad Value"	When using HW revision 02 (with PHY revision A0), VCT results of short cables (below 30 m) were shown as "Bad Value"	Issue resolved

The following issues have been resolved in firmware 4.1.0.5 release

Description	User Impact	Resolution
Guest-VLAN timeout command is not working	Workstations connected to 802.1x-enabled ports prematurely receive a dynamic IP address from Guest VLAN DHCP server and not from DHCP server on required data VLAN DHCP server	Issue resolved
Problem with IPv4 and IPv6 ACL's combination	When using both IPv4 and IPv6 ACLs on multiple ports, the ACL did not function properly on some of the ports	Issue resolved

Port flapping when connecting devices to each other with EEE enabled	When connecting a link between 2 devices with EEE-enabled link may flap (down then up) around once a day	PC55xx switches with a new PHY revision resolves this issue

The following issues have been resolved in firmware 4.1.0.1 release

Description	User Impact	Resolution
Prevent creating duplicate ACEs per ACL	Every time the users applies the profile-global macro with the "macro global apply profile-global" command, a new duplicate entry is added to each of the ACLs	Delete redundant ACL
The command "boot host dhcp" needs to stay in the configuration if without autosave option.	The "boot host dhcp" command which initiates the auto configuration feature should not be removed from the running-config or startup-config (which terminates auto configuration retries) unless the customer has selected the auto-save option which indicates that he wants the new config saved and therefore does not want to retry the configuration download	Auto Update Phase 2 implementation
Link issues between PC5548 and e6320 (Dell) laptop (EEE interoperability on Intel NIC)	Link cannot be established	When EEE is disabled – Switch does not advertise EEE capability. When EEE is enabled – user can determine if to work in Auto-Negotiation slave mode to overcome the problem
PC55xx Port-channel inconsistent configuration in general mode	1. Whenever port is in general mode and bind to VLAN, an error message is present when trying to remove the port from the VLAN 2. When creating a range of VLANs, specific VLAN 3664 can not be created. Whenever trying to create this specific VLAN 3664 after the failure, it still cannot be created.	1. Removed the error message 2. All VLANs in any range or combination is being created.
PC55xx - FATAL ERROR and crash when changing port mode.	When changing the port mode to access or general, the switch crashed	Fixed the problem

PC55xx v4.0.1.0 LAG issue using 10Gb interfaces	When using the XG ports with SFP of 1G, can join both ports as uplink LAG Po1. - If reloading the device, XG port 1/0/2 cannot come up. - If replacing one of the 1G SFP with 10G SFP +, the device will allow such an illegal behavior	Port-Channel speed is based on the physical ports speed that are members of the Port-Channel
PC55xx Unable to reach Storm Control page via GUI (Japanese Internet Explorer)	When IE is in Japanese – Strom Control page is missing	Fixed the problem and verified that other web pages doesn't suffer from the same problem
55xx - Cannot modify port description in GUI on active fiber-optic interface	Cannot modify port description in GUI on active fiber-optic interface	Fixed the problem
PC55xx - show clock detail output different to user manual	Show clock in the device showed Summer time range in dates instead of words	Fixed the code to match the User Guide
Incorrect OID returned on SNMPGetNext 55xx	When using the SNMP GetNext on 1.3.6.1.2.1.2.2.1.1.1.9999 the incorrect OID is returned	Fixed the problem
PC55xx - SNMP ifType value of 6 for port-channel interfaces	ifType for Post-Channels is the same as for regular interfaces	Updated the MIB information to comply newer iANAifType definition

GUI shows a fan led in red which does not match the physical status of the front led	Once the switch temperature goes below 40 degrees, the GUI shows a fan led in red which does not match the physical status of the front led	GUI now shows the right status of the LED
PC55xx Connectivity issues with fixed port setting and stacking.	Use 2 PC55xx switches as stack and with fixed port setting 100 Full. for example 1/0/1 and 2/0/1 After remove/power of the master unit, the fixed port (gi2/0/1) did not do a linkup, but the LED is on.	Fixed the problem
PC55xx switch crashed on snmpgetnext 1.3.6.1.4.1.89.59.2.3.1.9.2.2	Device crashed when using snmpgetnext of 1.3.6.1.4.1.89.59.2.3.1.9.2.2	Fixed the problem
PC55xx - unable to set speed 1000 via web GUI on ten gigabit interfaces	User cannot set TE port speed to 100 via EWS. This can be done only VIA CLI	WEB GUI fixed
PC55xxP – Power to PDs lost every once in a while	every once in a while port flapping would occur, in some cases when a large number of POE edge equipment is connected to device, and in addition there are some non-POE equipment connected as well	Fixed the problem

The following issues have been resolved in firmware 4.0.1.12 release

Description	User Impact	Resolution
Nessus vulnerability alert	Nessus scan on device discovers a false xss scripting vulnerability (CVE-2002-1060, CVE-2003-1543, CVE-2005-2453, CVE-2006-1681)	Removed the false vulnerability report by ignoring the script name in the scan and returning error on the page

		1. Updated new Hysteresis values Below 40° Celsius – Fan is Off Above 50° Celsius – Fan is On
Fan level improvements	1. Hysteresis values was not accurate – Fans went On and Off in high rate 2. When the Software turns off the fan due to low temperature - there is a syslog message in warning level 3. Show system showed the Fan as not-operational when the Software turned off the Fan	2. Changing the level of the syslog to informational in case the fans are turned off by software due to low temperature. 3. Software now distinguishes between the state of a failure FAN and a Fan that is not working due to software decision. These are the status displayed for each situation: IDLE – Fan was turned off by software state due to low temperature ON – Fan is operational due to high temperature FAILURE – Fan not functioning due to a problem
PC 5524 SNMP walk improvements	When performing an SNMP walk – the device would return MIB information for all interfaces of the stack (even those that are in non-present state) – SNMP walk performance was low	SNMP walk on ifTable and swIfTable MIBs will walk only existing interfaces in the stack

The following issues have been resolved in firmware 4.0.1.11 release

Description	User Impact	Resolution
EEE advertisement when EEE is disabled	When EEE is disabled, the Auto-negotiation advertises EEE capability of the port. In case the link partner is EEE enabled, but does not fully comply to EEE standard, the auto-negotiation process might fail causing the link to be down.	When EEE is disabled, the auto-negotiation process does not advertise EEE capability. Note that changing EEE state (globally or on individual interface) will cause link to toggle, since auto negotiation advertisement is being changed.
Devices stop to learn MAC addresses after 49.7 days	After 49.7 days of operation, the device stops re-learning MAC addresses. These MACs which were previously learned will not appear in MAC address table. As a result traffic streams sent to previously learned MAC addresses are treated as unknown-unicast traffic and flooded within the VLAN.	MAC address learning mechanism was fixed so that both learning new addresses and re-learning existing addresses are updating the MAC Address database.

	Slave unit sysUpTime (which can be displayed in show system command in CLI) wraps up after 49.7 days instead of wrapping up after 497.1 days. As a result, after operating for 49.7 days, slave units (including backup master) will begin re-counting sysUpTime from 0. No actual reboot occurred	
Slave unit up time wraps after 49.7 days		sysUpTime on slave unit is calculated correctly and will wrap up only after 497.1 days.
Fatal Error Loop - PC55xx stacking issues	If 2 devices (when at least one of them is a 24 port unit) with sequential MAC are placed in the same stack – the stack enters an endless reboot sequence and does not converge	MAC addresses assignments for device ports are calculated based on absolute port number and not on internal number.

The following issues have been resolved in firmware 4.0.1.0 release

Description	User Impact	Resolution
802.1X when spanning tree is enabled	When spanning-tree is enabled on a port, and portfast is disabled, the dot1x authentication does not take place after initial reload. This happens only with Windows Vista workstations.	In the implementation of 802.1x, software timers were modified to better support Windows Vista workstations.
POE LED might stay ON after Overload	When connected POE devices overload the ports, the amber POE LED is lit as expected. In some cases, after the overload condition is removed, the amber POE LED on ports will stay lit until a short polling cycle is complete. This is a cosmetic issue, even when the amber POE LED is lit, the device operates correctly (e.g. the output of the CLI command "show power inline consumption" displays the actual information).	The POE LED status is cleared after overload issue is resolved.

End of Release Notes