

Dell™ PowerConnect™ 3424/3448/3424P/3448P

PowerConnect 3424/3448/3424P/3448P Release Notes

Date: November 2006
System Firmware Version 2.0.0.20



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PowerConnect 3424/3448 Release Notes

Introduction

This document provides specific information for the Dell PowerConnect 3424/3448/3424P/3448P Switch system, firmware version 2.0.0.20.

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

GLOBAL SUPPORT

By Web: <http://support.dell.com/>

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

Firmware Specifications

Firmware Version Details

Boot PROM Name	Version No.	Release Date
PowerConnect_34XX_boot-10101.rfb	1.0.1.01	November, 2006

Firmware Image Name	Version No.	Release Date
PowerConnect_34XX-20020.ros	2.0.0.20	November, 2006

The firmware image version should be 2.0.0.20 on the PowerConnect 3424/3448/3424P/3448P. The boot prom image should be 1.0.1.01 Refer to the PowerConnect 34XX Systems User's Guide for instructions on loading the boot PROM software and updating the firmware image.


Version Numbering Convention

Version number	Description
3424/3448/ 3424p/3448P	Four part version number
2 0 0 20	
ℓ	Denotes the build number.
ℓ	Denotes an ad hoc release of the product software.
ℓ	Denotes a scheduled maintenance release of the product software.
ℓ	Denotes a major version number.

Supported Firmware Functionality

For more details regarding the functionalities listed, please refer to the PowerConnect 34XX Systems User's Guide.

Added functionality in this release

 **NOTE: When the new firmware version 2.0.0.20 is downloaded to the PowerConnect 3424/3448/3424P/3448P, Please make sure you also download the new boot code v 1.0.1.01. Failure to download the new boot code when you download new firmware results the system to boot continuously**

This firmware release introduces the following new features

- DHCP Spoofing
- Q-in-Q



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- Spanning Tree Root Guard
- Link Layer Discovery Protocol
- HTTP/S Upload / Download of Configuration Files
- HTTP/S Upload of Software Image

Issues resolved

The following is a list of issues resolved in the current firmware release.

Title	Description
Management Station Loses Communication to Stack after Master Unit Failure.	When a management station is connected to a stack, which undergoes a master failover, so that the backup unit takes over, connectivity to the stack may be lost. The backup unit does take over the IP address of the stack, but the management station cannot communicate with the stack using the management IP address. This is due to the fact that the management station associates the management station's IP address with the MAC address of the "old" Master unit. The management station does not update its ARP table, unless the ARP cache of the management station is deleted.
Configuration file with PVLAN cannot be copied to startup.	It is not possible to copy a configuration file from a TFTP server to the startup configuration, when PVLAN is configured.
Native VLAN display.	The switch mistakenly displays native VLANs as if they are configured for all ports, instead of a specified range of ports.
Display of configured LACP Channels.	The CLI global command "show interfaces port-channel" displays information for inactive LAG port-channels is displayed, but does not show information for configured and inactive LACP port-channels. Ports that are members of the LAG that are not displayed in the WBI, if they are down (no link). Use the channel-group 1 mode auto Interface Configuration command to configure a port as a candidate to dynamically join a LAG (using LACP). These ports are not displayed as LAG members if the interface is down.
WBI Stacking Port Information	The network management GUI does not show the stacking port information.

Known Restrictions and Limitations

Title	Description	ID
Broadcast Storm Control Ranges	Storm control rates refer to the average number of frames over a period of time. This period of time decreases as the configured rate increases. For example, configuring a rate of 70 kbps results in a rate of 70 kbps over an average of 1 minute. From rate of 100 it becomes steady.	34665
Queue Settings on Cascaded/Stacked Ports	Every port can be set to be either Strict Priority or WRR. This applies to cascading and stacking ports as well. In order to be able to handle high priority traffic across the cascaded links. From an implementation perspective cascaded ports are set to SP. Unicast traffic was assigned to the high priority queue. Therefore, if Unicast traffic is sent at wire-speed, it is prioritized over broadcast traffic to the CPU. This is not a real-life scenario, but should be noted in the Release Notes.	33794



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Management Station Loses Communication to Stack after Master Unit Failure.	<p>When a management station is connected to a stack, which undergoes a master failover, so that the backup unit takes over, connectivity to the stack may be lost. The backup unit does take over the IP address of the stack, but the management station cannot communicate with the stack using the management IP address. This is due to the fact that the management station associates the management station's IP address with the MAC address of the "old" Master unit. The management station does not update its ARP table, unless the ARP cache of the management station is deleted.</p> <p><u>How to rectify the situation:</u> To ensure connectivity to a management station following master failover, the ARP cache on the management station must first be deleted.</p>	35954
SNTP Interface Polling	<p>If the IP interface is configured on a physical interface (port, LAG), which goes to down, the device continues to poll until the timer expires. If the physical interface goes up again, the unit will not continue to poll. Consider, for example, a case of a stack in which an IP interface is configured on a physical interface of the backup unit (or any other unit). If that unit is severed from the stack, the master unit continues to poll until the timer expires. After that, it ceases polling, even if the backup unit is reconnected to the stack.</p> <p><u>How to avoid the situation:</u> It is recommended to configure SNTP servers on the default VLAN.</p> <p><u>How to rectify the situation:</u> If you have not configured SNTP servers as recommended, use the Global Configuration command clock source sntp to re-activate the server.</p>	34466
Migration of hosts from one device port to another.	<p>MAC addresses are not flushed when a port goes down. Relearning occurs when a packet is sent from the host. Therefore, when a host migrates from the one port to another, it is not erased from the database, and therefore not relearned. This issue is apparent when the user tries to ping from the device to the host, as no traffic has been sent yet from the host to the device. The address is learned when a packet is received from the host, or after the address ages out from the old location.</p> <p><u>How to avoid this situation:</u> When a host moves from one port to another, check viability by pinging from the host to the device, and not vice versa.</p>	36314



Documentation updates

Introduction

This document lists the changes from the PowerConnect 3424/3448 Systems User's Guide. The modifications are due to instances discovered in various user environments.

Corrections and Additions to the System Information Guide

Dell PowerConnect 34xx Systems Information Update provides updated installation and configuration information that replaces part of the installation and configuration information in the Dell PowerConnect 34xx Systems User's

Note: The phrase "the device" herein after is used to refer to the PowerConnect 34xx Series switches.

Corrections and Additions to the User's Guide and CLI Reference Guide

Corrections and Additions to the User's Guide

Web Screen / Section in Guide	Description of Change
Configuring Switch Information -> Configuring VLANs -> Defining VLAN Ports Settings (RN34666)	* A port can only be assigned to "dynamic VLAN" if it is not a member of any VLAN except the default VLAN. * A port can be assigned to "dynamic VLAN" only if it is in access mode. Note that the default port mode for all ports is "access".
Configuring Switch Information -> Configuring Network Security -> Configuring Port Security	In order to configure traps, the interface must be set to "locked".
Configuring Switch Information -> Configuring VLANs -> Defining VLAN Membership -> Defining VLAN Port Settings -> Defining VLAN LAG Settings	When an interface in General Mode is configured with a PVID, this interface is not automatically added as a member of the VLAN with that VID.
Viewing Statistics -> Viewing RMON Statistics -> Viewing RMON Statistics Group	Oversize Packets – Number of oversized packets (over 1632 octets) received on the interface since the device was last refreshed. Jabbers – The number of packets received during this sampling interval that were longer than 1632 octets (excluding framing bits but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). Dropped Events – counter is not supported. (and not as indicated)



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<p>Viewing Statistics → Viewing RMON Statistics → Viewing RMON History Table</p>	<p>Oversize Packets – Number of oversized packets (over 1632 octets) received on the interface since the device was last refreshed.</p> <p>Jabbers – The number of packets received during this sampling interval that were longer than 1632 octets (excluding framing bits but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).</p> <p>Dropped Events – counter is not supported.</p> <p>(and not as indicated)</p>
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Corrections and Additions to the CLI Reference Guide

CLI Command	Description of Change															
Copy	The range of the <i>source-url</i> and <i>destination-url</i> in the command copy source-url destination-url should be 1 – 128 characters.															
spanning-tree pathcost method	<p>In the command spanning-tree pathcost method {long short}, long specifies that defaults are per long pathcost method, and short specifies that defaults are per short pathcost method.</p> <p>The default path cost for interface are per the path cost method specified. The following indicates default path cost per method selected:</p> <table border="1" data-bbox="628 894 1414 1073"> <thead> <tr> <th>Interface</th> <th>Long Method</th> <th>Short Method</th> </tr> </thead> <tbody> <tr> <td>Port-channel</td> <td>20,000</td> <td>4</td> </tr> <tr> <td>Gigabit Ethernet Port</td> <td>20,000</td> <td>4</td> </tr> <tr> <td>Fast Ethernet Port</td> <td>200,000</td> <td>19</td> </tr> <tr> <td>Ethernet (10 Mbps)</td> <td>2,000,000</td> <td>100</td> </tr> </tbody> </table>	Interface	Long Method	Short Method	Port-channel	20,000	4	Gigabit Ethernet Port	20,000	4	Fast Ethernet Port	200,000	19	Ethernet (10 Mbps)	2,000,000	100
Interface	Long Method	Short Method														
Port-channel	20,000	4														
Gigabit Ethernet Port	20,000	4														
Fast Ethernet Port	200,000	19														
Ethernet (10 Mbps)	2,000,000	100														
spanning-tree portfast	<p>Syntax is changed to: spanning-tree portfast [auto] auto – Specifies that the software waits for three seconds (with no BPDUs received on the interface) prior to transitioning the interface to PortFast mode. The default mode is auto.</p>															
service cpu-utilization	By default, the <i>cpu-utilization</i> collection is enabled.															
switchport access vlan	<p>An interface can only be assigned to "dynamic VLAN" if it is not a member of any VLAN except the default VLAN.</p> <p>An interface can be assigned to "dynamic VLAN" only if it is in access mode. Note that the default port mode for all ports is "access".</p>															
switchport general allowed vlan switchport general pvid show vlan	When an interface in General Mode is configured with a PVID, this interface is not automatically added as a member of the VLAN with that VID.															
show vlan mac-to-vlan	Syntax of command is "show vlan mac-to-vlan" and not as documented.															
power inline	The syntax of the command is not as written, and should be power inline [auto never]															



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<p>show rmon statistics</p>	<p>Oversize Packets – Number of oversized packets (over 1632 octets) received on the interface since the device was last refreshed.</p> <p>Jabbers – The number of packets received during this sampling interval that were longer than 1632 octets (excluding framing bits but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).</p> <p>Dropped Events – counter is not supported.</p> <p>(and not as indicated)</p>
<p>show rmon history</p>	<p>Oversize Packets – Number of oversized packets (over 1632 octets) received on the interface since the device was last refreshed.</p> <p>Jabbers – The number of packets received during this sampling interval that were longer than 1632 octets (excluding framing bits but including FCS octets), and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error).</p> <p>Dropped Events – counter is not supported.</p> <p>(and not as indicated)</p>

System Usage Notes

Title	Description	
<p>Non-Present Ports.</p>	<p>Certain ports in the device may have a status of "non-present ports". These include:</p> <ul style="list-style-type: none"> - The stacking ports can be presented as user ports, in the event that the device is a standalone (and not a stack unit). Therefore, these ports are treated as "non-present". - FE ports 25-48 of a 24-port device are considered "non-present" ports, so that in the event of hot insertion of a 48-port device in place of the 24-port device, the ifindexes of the GE ports remain consistent. 	<p>34465, 34409</p>
<p>Ports are not removed automatically from an IGMP group by removing them from the VLAN.</p>	<p>Ports are not removed from IGMP group configuration, when they are removed from the VLAN. Ports are added to the IGMP group by using the command bridge multicast address ip-address add interface. Ports must be proactively removed from the IGMP group by using the command bridge multicast address ip-address add interface.</p>	<p>36216</p>
<p>Only management stations with super community access can set rndAlarmEnabling.</p>	<p>Only management stations with super community access can set rndAlarmEnabling. It is not possible to set rndAlarmEnabling when rw community is defined for the Default View.</p>	<p>36266</p>

End of Release Notes