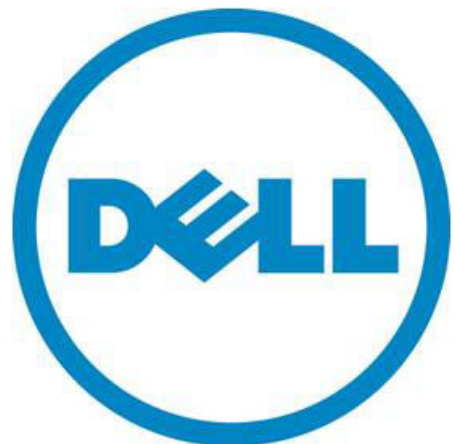


DELL PowerConnect™
PCM6220/PCM8024/PCM6348
PCM8024-k/PC8024/
PC8024F/PC7000 Series
Firmware CLI Transition Guide

A Dell Technical White Paper



Notes, Notices, and Cautions

A NOTE indicates important information that helps you make better use of your computer.

A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

A CAUTION indicates a potential for property damage, personal injury, or death.

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Model PCM6220, PCM8024, PCM8024-k, PCM6348, PC8024, PC8024F, PC7000 Series

Rev A00

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Introduction

The Dell™ PowerConnect *CLI Transition Guide White Paper* discusses the changes in the CLI commands from the PowerConnect 6200 and 8024 3.x software to the 4.x software release on the 6200, 7000, and 8000 Series switches. Some changes were syntactical only and some were functional as specified in the following sections.

NOTE: Not all commands are available on all switches. Refer to the **DELL POWERCONNECT CLI REFERENCE GUIDE** for commands specific to your switch model.

Changes to the Interface Naming Convention

Changes to the Interface Naming Conventions are applicable to all switches. The conventions for naming interfaces in CLI commands are described in the following sections.

Ethernet Interfaces

The gigabit Ethernet and 10-gigabit Ethernet ports are identified in the CLI by the variable *unit/slot/port*, where:

- **<Interface Type> Unit#/Slot#/Port#**—Identifies a specific interface by the interface type tag followed by the Unit# followed by a / symbol, then the Slot# followed by a / symbol, and then the Port#. For example, gi2/0/10 identifies the gigabit port 10 in slot 0 on unit 2. Table 1 below lists the supported interface type tags.
- **Unit #**—The unit number is greater than 1 only in a stacking solution where a number of switches are stacked to form a virtual switch. In this case, the Unit# indicates the logical position of the switch in a stack. The range is 1-12. The unit value is 1 for standalone switches.
- **Slot #**—The slot number is an integer number assigned to a particular slot. Fixed ports are in slot 0. The expansion slots use slot numbers 1 or 2. Use the **show slot** command to retrieve information for a particular slot.
- **Port #**—The port number is an integer number assigned to the physical port on the switch and corresponds to the number printed next to the port. Ports are numbered from 1 to the maximum number of ports available on the switch, typically 24 or 48.

Within the **CLI REFERENCE GUIDE**, the tag interface-id refers to an interface identifier that follows the naming convention above.

Table 1: Interface Identifiers

Interface Type	Long Form	Short Form	Identifier
Gigabit Ethernet	gigabitethernet	gi (gi was g)	unit/slot/port
10-Gigabit Ethernet	tengigabitethernet	te (te was xg)	unit/slot/port
Loopback	loopback	lo	Loopback-id (0-7)
Port Channel	port-channel	po	port-channel-number
Tunnel	tunnel	tu	tunnel-id (0-7)
VLAN	vlan	vl	vlan-id (1-4093)

When listed in command line output, gigabit Ethernet interfaces are preceded by the characters *Gi*, and 10-gigabit Ethernet interfaces are preceded by *Te*.

Port Channel Interfaces

Port-channel (or LAG) interfaces are represented in the CLI by the variable *port-channel-number*, which can assume values from 1-48.

When listed in command line output, port channel interfaces are preceded by the characters *Po*.

Loopback Interfaces

Loopback interfaces are represented in the CLI by the variable *loopback-id*, which can assume values from 0-7.

VLAN Interfaces

VLAN interfaces are represented in the CLI by the variable *vlan-id*, which can assume values from 1-4093.

Tunnel Interfaces

Tunnel interfaces are represented in the CLI by the variable *tunnel-id*, which can assume values from 0-7.

Refer to the *Interface Naming Conventions* section of the **CLI REFERENCE GUIDE**.

Migration Key Concepts

The 4.x software was designed for the migration to require minimal user intervention. Migration issues documented here are applicable across all platforms.

Commands That Did Not Migrate

Some commands did not migrate to the 4.x software. Some old commands no longer exist; some commands have been deprecated by a new command or removed entirely. A list of these commands is provided in *Deprecated Commands* on page 18.

Slot Naming Conventions

Along with the interface naming convention changes are the slot naming convention changes. The old method was unit/type port, for example 1/g1. The new method is interface type unit/slot, based on industry-standard naming convention, e.g., Gigabit Ethernet (Gi) 1/0/1.

Port channels old method ch1 or port-channel 1, depending on where you were in CLI. The new abbreviation for port-channel is “po”.

Ethernet Configuration Commands

There is no longer a **negotiation** command. Effective with the 4.x software, auto-negotiation is configured as part of the **speed** and **duplex** commands. Refer to the descriptions of the **speed** and **duplex** commands in the **CLI REFERENCE GUIDE**.

VLANs

In version 4.x, there is a distinction between Layer 2 and Layer 3 configuration. Interface VLAN Configuration mode is used only for Layer 3 configuration.

Management Interfaces

There is no longer a preconfigured management VLAN on the switch. Effective with the 4.x software, the administrator can configure a management VLAN on the in-band interfaces, but the VLAN should not be enabled for routing. The **ip address** command in Global Config mode no longer exists.

The ability of the switch to obtain an address via DHCP is no longer restricted to a single interface. Effective with the 4.x software, the embedded DHCP client can be enabled on more than one interface at a time. **DHCP now works on any routing interface.** For example, DHCP can operate on a routing interface and out-of-band (OOB) at the same time. Therefore, DHCP can obtain a switch address over more interfaces than before.

Updated Commands - Operational Modifications

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation	Comments
ARP	arp timeout seconds	arp timeout seconds	In the revised implementation, the command is supported in both Global Configuration Mode and Interface Configuration Mode, while previous implementation supported only Global Configuration Mode. This capability gives administrators the ability to adjust the ARP timings to better operate on subnets with different performance requirements.
ARP	arp dynamicrenew	arp dynamicrenew	Changed default state from enabled to disabled.
ARP	show arp	show arp	Changed the behavior so that all entries are displayed when the command is used without any keywords. Made the command available in User EXEC mode.
Audit	show logging	show logging	This command is used to display all logging information, including auditing status.
Banner	show running-config	show running-config	This command output has been enhanced to show banner configuration.
Denial of Service	dos-control icmp [size]	dos-control icmp [size]	Maximum ICMP packet size. (Range 0-16376). If size is unspecified, the value is 512.
Ethernet Configuration	flowcontrol	flowcontrol	Changed the default configuration from disabled to enabled.
IP Routing	show ip route	show ip route	The command displays the default gateway associated with the route.
IPv6 Routing	show ipv6 route	show ipv6 route	The command displays the default gateway associated with the route.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation	Comments
IPv6 Routing	show ipv6 route summary [all]	show ipv6 route summary [best]	Use best to display the count summary for only best routes.
IP Routing	show ip interface	show ip interface	The output of the command is updated to indicate how each IP address was assigned.
IPv6 Routing	show ipv6 interface	show ipv6 interface	The output of the command is updated to include the method of assignment for each IPv6 address that is either auto-configured or leased from a DHCP server.
IP Routing	show ip route	show ip route	Displays the IPv4 address of the default gateway.
IPv6 Routing	show ipv6 route	show ipv6 route	Displays the IPv6 address of the default gateway, similar to show ip route.
IP6 Routing	show ip route preferences	show ip route preferences	The user can configure a global default gateway (ip default-gateway), creating a default route with a preference of 253. The command output is updated to list the new preference value and the preference of default routes learned from a DHCP server.
Spanning Tree	spanning-tree mst <i>instance-id</i> priority <i>priority</i>	spanning-tree mst <i>instance-id</i> priority <i>priority</i>	Changed the instance-id range to 1-4094.
Stack Firmware Synchronization (SFS) SDM Templates	show switch [unit] show stack-port show stack-port counters show stack-port diag show stack-standby	show switch [chassis-mgmt stack-member-number stack-ports [counters diag] stack-standby]	Modified the show switch command to show the Switch Firmware Synchronization (SFS) status. The show switch command can display a new value, SDM Mismatch, in the Switch Status field, indicating that the unit joined the stack, but is running a different SDM template than the management unit.
Syslog	logging file level	logging file [severity-level-number type]	Made severity-level optional, with a default value of error. Note that persistent logging is disabled by default.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation	Comments
User Interface	Exit	Exit	In User EXEC mode, this command behaves identically with the quit command, closing an active terminal session by logging off the switch.
Virtual Router Redundancy Protocol (VRRP)	Ip vrrp Ip vrrp mode	vrrp group ip ip-address [secondary] no vrrp group ip ip-address vlan secondary	Use the no form of the command to remove the secondary IP address. It is not possible to remove the primary ip address once assigned. Remove the VRRP group instead.

Updated Commands - Command Mode Modifications

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation	Comments
ARP	arp timeout seconds	arp timeout seconds	In the revised implementation, the command is supported in both Global Configuration Mode and Interface Configuration Mode, while previous implementation supported only Global Configuration Mode.
Banner	banner motd	banner motd <message>	The command mode was changed from Privileged EXEC to Global Configuration.
DHCP Snooping	show ip dhcp snooping	show ip dhcp snooping	The command mode was changed from Privileged EXEC to User EXEC and Privileged EXEC.
DHCP Snooping	show ip dhcp snooping database	show ip dhcp snooping database	The command mode was changed from Privileged EXEC to User EXEC and Privileged EXEC.
DHCP Snooping	show ip dhcp snooping statistics	show ip dhcp snooping statistics	The command mode was changed from Privileged EXEC to User EXEC and Privileged EXEC.
Ethernet Configuration	interface range ethernet {port-range all}	Interface range {port-range port-type all}	It is no longer necessary to exit Interface Configuration mode to execute this command.
IGMP Snooping	ip igmp snooping	ip igmp snooping vlan vlan-id	In Dell™ PowerConnect, the command was modified from VLAN Interface Configuration Mode command to Global Configuration Mode command that includes the VLAN ID as a parameter.
IGMP Snooping	ip igmp snooping leave-time-out [<i>time-out</i> immediate-leave]	ip igmp snooping leave-time-out [<i>time-out</i> immediate-leave]	Changed the leave-time-out range to 1-3174 seconds.
IP Addressing	ip address	n/a	There is no longer an ip address command in Global Config mode due to the deprecation of support for the management interface (i.e., network port).
IP Routing	show ip protocols	show ip protocols	The command mode was changed from Privileged EXEC to Privileged EXEC and User EXEC.
IP Routing	show ip route summary [all]	show ip route summary [best]	The command mode was changed from Privileged EXEC to Privileged EXEC and User EXEC.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation	Comments
IPv6 Routing	show ipv6 interface {brief loopback loopback-id tunnel tunnel-id vlan vlan-id [prefix]}	show ipv6 interface [brief] [loopback loopback-id tunnel tunnel-id vlan vlan-id [prefix]]	The command mode was changed from Privileged EXEC to Privileged EXEC and User EXEC.
IPv6 Routing	show ipv6 neighbors	show ipv6 neighbors	The command mode was changed from Privileged EXEC to Privileged EXEC and User EXEC.
IPv6 Routing	show ipv6 route summary [all]	show ipv6 route summary [best]	The command mode was changed from Privileged EXEC to Privileged EXEC and User EXEC.
Management Interfaces	ipv6 address dhcp	ipv6 address dhcp	Added command modes Interface (Loopback, Port-Channel) Configuration.
Mode Commands		configure terminal	Terminal is now accepted as an optional parameter on the configure command.
Tunnel Interface	tunnel destination ipv4addr	tunnel destination ip-address	Added Tunnel Interface Configuration.
VLAN	name string (VLAN Configuration)	name <vlan-name>	Moved the command from Interface Configuration mode to VLAN Configuration mode.

Updated Commands - Syntax Modifications

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
802.1x	dot1x timeout re-authperiod seconds	dot1x timeout reauth-period seconds
802.1x	dot1x re-authentication	dot1x reauthentication
802.1x	dot1x multiple-hosts	dot1x host-mode {single-host multi-host}
802.1x	show dot1x [{ethernet interface statistics ethernet interface}]	show dot1x [interface interface-id [statistics]]
802.1x	show dot1x clients {all ethernet interface}	show dot1x clients {<interface-id> all}
802.1x Enhancements	show vlan [id vlan-id name vlan-name]	show vlan [id vlan-id name vlan-name]
AAA	username name password password [level level] [encrypted]	username name password password [privilege level] [encrypted]
AAA	username name passwd password [level level] [encrypted] [override-complexity-check]	username name password password [privilege level] [encrypted]
Address Table	clear bridge clear mac-addresses {ethernet interface port-channel port-channel-number}	clear mac address-table dynamic [address mac-addr interface interface-id vlan vlan-id]
ARP	arp ip-address mac-address	arp ip-address hardware-address
ARP	show ip arp inspection ethernet [interfaces [interface-id]]	show ip arp inspection [interfaces [interface-id] statistics [vlan vlan-range] vlan vlan-range]
Captive Portal	show captive-portal interface interface client status	show captive-portal interface {gigabitethernet unit/slot/port tengigabitethernet unit/slot/port} client status
Configuration and Image File	boot system [image1 image2]	boot system [unit-id] [image1 image2]
DHCP Snooping	ip dhcp snooping limit {none rate pps [burst interval seconds]}	ip dhcp snooping limit {none rate rate [burst interval seconds]}
DHCP Snooping	show ip dhcp snooping binding [{ static dynamic }] [interface port] [vlan vlan-id]	show ip dhcp snooping binding [{ static dynamic }] [interface interface-id] [vlan vlan-id]
DHCPv6	domain-name dns-domain-name	domain-name domain
DHCPv6	prefix-delegation ipv6-prefix/prefix-length client-DUID [name hostname] [valid-lifetime {valid-lifetime infinite}] [preferred-lifetime {preferred-lifetime infinite}]	prefix-delegation ipv6-prefix/prefix-length client-DUID [name hostname] [valid-lifetime {valid-lifetime infinite}] [preferred-lifetime {preferred-lifetime infinite}]
DHCPv6	show ipv6 dhcp binding [ipv6 addr]	show ipv6 dhcp binding [ipv6-address]
DHCPv6	show ipv6 dhcp interface {tunnel tunnel-id vlan vlan-id} [statistics]	show ipv6 dhcp interface [interface-id] [statistics]
DHCPv6	show ipv6 dhcp pool pool-name	show ipv6 dhcp pool [poolname]

DNS Client Enhancements	The following commands are modified to allow spaces in host names.	Global Configuration Mode Commands:
		radius-server host [acct auth] { ip-address hostname }
		tacacs-server host {ip-address hostname}
		sntp server {ip-address ipv6-address hostname}
		snmp-server v3-host {ip-address hostname} username {traps informs} [noauth auth priv] [timeout seconds] [retries retries] [udpport port] [filter filtername]
		logging {ip-address hostname}
		hostname name
DNS Client Enhancements	The following commands are modified to allow spaces in host names.	Privileged EXEC Mode Commands:
		show hosts [<hostname>]
		show radius-servers statistics [accounting authentication] { ipaddress hostname name servername }
		ping ipv6 {ip-address hostname} [size size]
		tracert ipv6 {ip-address hostname} [port]
		copy source-url destination-url
		ping [ip ipv6] ipaddress hostname [repeat count] [timeout interval] [size size]
DNS Client Enhancements	The following command is modified to allow spaces in host names.	tracert [ip ipv6] ipaddress hostname [initTtl initTtl] [maxTtl maxTtl] [maxFail maxFail] [interval interval] [count count] [port port] [size size]
		IPv6 DHCP Pool Configuration mode commands:
Ethernet Configuration	speed [10 100]	prefix-delegation ipv6-prefix/prefix-length client-DUID [name hostname] [valid-lifetime {valid-lifetime infinite}] [preferred-lifetime {preferred-lifetime infinite}]
		speed {10 100 1000 10000 auto [10 100 1000 10000]}
Ethernet Configuration	duplex {half full}	duplex {auto full half}
File System	copy <source><dest>	copy <source-url><destination-url>
IGMP	ip igmp last-member-query-count count	ip igmp last-member-query-count lmqc

IGMP	ip igmp query-max-response-time tenthsseconds	ip igmp query-max-response-time seconds
IGMP	show ip igmp interface vlan vlan-id	show ip igmp interface [interface-type interface-number]
IGMP	show ip igmp groups interface vlan vlanid [detail]	show ip igmp groups [interface-type interface-number] [detail]
IGMP	show ip igmp interface membership groupaddr [detail]	show ip igmp membership [groupaddr] [detail]
IGMP Snooping Querier	ip igmp snooping querier [vlan-id [address ipv4_address]]	ip igmp snooping querier [vlan vlan-id] [address ip-address]
IGMP Snooping Querier	ip igmp snooping querier query-interval seconds	ip igmp snooping querier query-interval interval-count
IGMP Snooping Querier	ip igmp snooping querier version number	ip igmp snooping querier version version
IGMP Snooping Querier	show ip igmp snooping querier [{detail vlan vlan-id}]	show ip igmp snooping querier [detail vlan vlan-id]
Interface Configuration	interface ethernet interface interface range ethernet { port-range all } interface port-channel port-channel-number	interface interface-id interface range {port-range-list all}
IP Addressing	ip address ip-address {subnet-mask prefix-length} [secondary]	ip address {ip-address {mask prefix-length} dhcp}
IP Routing	ip mtu integer	ip mtu [bytes]
IP Routing	show ip interface [vlan vlan-id loopback loopback-id]	show ip interface [type number]
IPv6 Routing	ipv6 mtu mtu	ipv6 mtu bytes
IPv6 Routing	ipv6 nd dad attempts attempts	ipv6 nd dad attempts value
IPv6 Routing	ipv6 nd prefix prefix/prefix-length [{valid-lifetime infinite} {preferred-lifetime infinite}] [no-autoconfig] [off-link]	ipv6 nd prefix <ipv6-prefix/prefix-length> [{valid-lifetime infinite} {preferred-lifetime infinite}] [no-autoconfig] [off-link]
IPv6 Routing	ipv6 route ipv6-prefix /prefix-length [Null interface {tunnel tunnel-id vlan vlan-id}] nexthop-address [preference]	ipv6 route <distance> ipv6 route <ipv6-prefix/prefix-length> { ipv6-address <interface-type> ipv6-address } [preference]
IPv6 Routing	show ipv6 interface {brief loopback loopback-id tunnel tunnel-id vlan vlan-id [prefix]}	show ipv6 interface [brief] [loopback loopback-id tunnel tunnel-id vlan vlan-id [prefix]]
iSCSI	iscsi cos {vpt vpt dscp dscp } [remark]	iscsi cos {enable disable vpt vpt dscp dscp [remark]}
Multicast	ip mroute source-address source-mask rpf-address preference	ip mroute <source-address> <mask> <rpf-address> <preference>
OSPF	area area-id nssa (Router OSPF)	area <area-id> nssa [no-redistribution] [default-information-originate [metric metric-value] [metric-type metric-type-value]] [no-summary] [translator-role role] [translator-stab-intv interval]

OSPF	area area-id virtual-link neighbor-id area area-id virtual-link neighbor-id dead-interval seconds area area-id virtual-link neighbor-id hello-interval seconds area area-id virtual-link neighbor-id retransmit-interval seconds area area-id virtual-link neighbor-id transmit-delay seconds	area <area-id> virtual-link <router-id> [hello-interval seconds] [retransmit-interval seconds] [transmit-delay seconds] [dead-interval seconds]
OSPF	default-information originate [always] [metric integer] [metric-type {1 2}]	default-information originate [always] [metric metric-value] [metric-type type-value]
OSPF	default-metric integer	default-metric metric-value
OSPF	distance ospf {external inter-area intra-area } distance	distance ospf {[intra-area dist1] [inter-area dist2] [external dist3]}
OSPF	distribute-list accesslistname out {rip static connected}	distribute-list name out {rip static connected}
OSPF	ip ospf cost integer	ip ospf cost interface-cost
OSPF	ip ospf priority integer	ip ospf priority number-value
OSPF	redistribute {rip static connected} [metric integer] [metric-type {1 2}] [tag integer][subnets]	redistribute protocol [metric metric-value] [metric-type type-value] [tag tag-value] [subnets]
OSPF	show ip ospf	show ip ospf
OSPF	show ip ospf interface {vlan vlan-id loopback loopback-id}	show ip ospf interface [interface-type interface-number]
OSPF	show ip ospf neighbor [interface vlan vlan-id] [ip-address]	show ip ospf neighbor [interface-type interface-number] [neighbor-id]
OSPF	show ip ospf statistics	show ip ospf statistics
OSPF	show ip ospf virtual-link area-id neighbor-id	show ip ospf virtual-links [area-id neighbor-id]
OSPF	show ip ospf virtual-link brief	show ip ospf virtual-links brief
OSPFv3	area areaid default-cost cost	area <area-id> default-cost <cost>
OSPFv3	area area-id nssa	area <area-id> nssa [no-redistribution] [default-information-originate [metric metric-value] [metric-type metric-type-value]] [no-summary] [translator-role role] [translator-stab-intv interval]
OSPFv3	area area-id range ipv6-prefix/prefix-length {summarylink nssaexternallink} [advertise not-advertise]	area <area-id> range ipv6-prefix/prefix-length {summarylink nssaexternallink} [advertise not-advertise]
OSPFv3	area areaid stub area areaid stub no-summary	area <area-id> stub [no-summary]

OSPFv3	area area-id virtual-link neighbor-id area area-id virtual-link neighbor-id dead-interval seconds area area-id virtual-link neighbor-id hello-interval seconds area area-id virtual-link neighbor-id retransmit-interval seconds area area-id virtual-link neighbor-id transmit-delay seconds	area area-id virtual-link router-id [hello-interval seconds] [retransmit-interval seconds] [transmit-delay seconds] [dead-interval seconds]
OSPFv3	default-information originate [always] [metric integer] [metric-type {1 2}]	default-information originate [always] [metric metric-value] [metric-type type-value]
OSPFv3	default-metric integer	default-metric metric-value
OSPFv3	ipv6 ospf cost cost	ipv6 ospf cost <interface-cost>
OSPFv3	ipv6 ospf priority priority	ipv6 ospf priority <number-value>
OSPFv3	show ipv6 ospf show ipv6 ospf area areaid	show ipv6 ospf [area-id]
OSPFv3	show ipv6 ospf [areaid] database [{external inter-area {prefix router} link network nssaexternal prefix router unknown [area as link]]] [lsid] [adv-router [rtrid] self-originate]	show ipv6 ospf [area-id] database [{external inter-area {prefix router} link network nssaexternal prefix router unknown [area as link]]] [link-state-id] [adv-router [router-id] self-originate]
OSPFv3	show ipv6 ospf database database-summary	show ipv6 ospf database database-summary
OSPFv3	show ipv6 ospf interface {vlan vlan-id tunnel tunnel-id loopback loopback-id}	show ipv6 ospf interface [interface-type interface-number]
OSPFv3	show ipv6 ospf neighbor [interface { vlan vlan-id tunnel tunnel-id }] [ip-address]	show ipv6 ospf [process-id] [area-id] neighbor [interface-type interface-number] [neighbor-id] [detail]
OSPFv3	show ipv6 ospf virtual-link {areaid neighbor brief}	show ipv6 ospf virtual-links [area-id neighbor-id brief]
Password Management	passwords aging age	passwords aging <1-365>
Password Management	passwords history historylength	passwords history <0-10>
Password Management	passwords lock-out attempts	passwords lock-out <1-5>
Password Management	passwords min-length <length>	passwords min-length <8-64>
Password Management	show passwords configuration	show passwords configuration
Password Management	password	password (User EXEC)
Password Management	show users accounts [long]	show users accounts
Port Monitor	monitor session session-id {source interface src-interface [rx tx] destination interface dst-interface}	monitor session session_number {source interface interface-id [rx tx] destination interface interface-id}
Port Monitor	show monitor session session-id	show monitor session session_number

Power Over Ethernet	power inline usage-threshold <threshold>	power inline usage-threshold <threshold>
Power Over Ethernet	priority { critical high low }	power inline priority { critical high medium low }
Power Over Ethernet	show power inline [detailed]	show power inline [<interface-id>] [detailed]
QoS	show service-policy	show service-policy {in out}
RADIUS	radius-server deadtime deadtime	radius-server deadtime deadtime
RADIUS	radius-server host [acct auth] {ipaddress hostname}	radius-server host [acct auth] { ipaddress hostname }
RIP	default-metric integer	default-metric metric-value
RMON	rmon alarm index variable interval rthreshold fthreshold revent fevent [type type] [startup direction] [owner name]	rmon alarm number variable interval {delta absolute} rising-threshold value [event-number] falling-threshold value [event-number] [owner string] [startup direction]
RMON	rmon event index type [community text] [description text] [owner name]	rmon event number [log] [trap community] [description string] [owner string]
Router Discovery Protocol	This command was previously documented as seven separate commands: ip irdp ip irdp multicast ip irdp holdtime integer ip irdp maxadvertinterval seconds ip irdp minadvertinterval seconds ip irdp preference number ip irdp address ip-address	ip irdp [multicast holdtime seconds maxadvertinterval seconds minadvertinterval seconds preference number address address]
Router Discovery Protocol	show ip irdp {vlan vlan-id all}	show ip irdp [vlan vlan-id]
SNMP	show trapflags [ospf ospfv3]	show trapflags [acl auto-copy-sw captive-portal cp-type dot1q dvrmp link maclock multiple-users ospf ospftype ospfv3 ospfv3type pim poe snmp authentication spanning-tree stack vrrp]
SNMP	snmp-server community community-string {ro rw su} [ipaddress ipaddress] [view viewname]	snmp-server community string [ro rw su] [view view-name] [ipaddress ipaddress]
SNMP	snmp-server enable traps snmp-server enable traps authentication power inline traps boot auto-copy-sw trap ip dvrmp trapflags ip pim trapflags port security trap trapflags (ip ospf mode) trapflags (ipv6 ospf mode) port security trap	snmp-server enable traps [acl all auto-copy-sw captive-portal cp-type dot1q dvrmp link maclock multiple-users ospf ospftype ospfv3 ospfv3type pim poe snmp authentication spanning-tree stack vrrp]

SNMP	snmp-server host {ip-address hostname} community {traps {v1 v2} informs [timeout seconds] [retries retries]} [udpport port] [filter filtername]	snmp-server host host-addr [informs [timeout seconds] [retries retries] traps version {1 2}] community-string [udp-port port] [filter filtername]
SNMP	snmp-server v3-host {ip-address hostname} username {traps informs}[noauth auth priv] [timeout seconds] [retries retries] [udpport port] [filter filtername]	snmp-server v3-host {ip-address hostname} username {traps informs}[noauth auth priv] [timeout seconds] [retries retries] [udpport port] [filter filtername]
Spanning Tree	revision <value>	revision <version>
Spanning Tree	spanning-tree cost cost	spanning-tree cost cost
Spanning Tree	spanning-tree mode {stp rstp mstp}	spanning-tree mode {stp rstp mst}
Spanning Tree	spanning-tree mst instance-id cost cost	spanning-tree mst instance-id cost cost
Spanning Tree	spanning-tree portfast	spanning-tree portfast
Syslog	logging buffered level	logging buffered [severity- level]
Syslog	logging buffered level	logging buffered [severity- level]
Syslog	logging file level	logging file [severity-level-number type]
System Management	reload [unit]	reload [stack-member-number]
System Management	telnet {ip-address hostname} [port] [keyword1.....]	telnet {ip-address hostname} [port] [keyword1.....]
Time-Based ACLs		<p>IP Standard ACL:</p> <p>access-list <name></p> <p>access-list <name> {deny permit} {every <srcip> <srcmask>} [log] [time-range <time-range-name>] [assignqueue <queue-id>] [{mirror redirect} <interface-id>]</p> <p>IP Extended ACL:</p> <p>access-list <name> {deny permit} {every {icmp igmp ip tcp udp <number>} <srcip> <srcmask>[{eq {<portkey> <0-65535>} <dstip> <dstmask> [eq {<portkey> <0-65535>}] [precedence <precedence> tos <tos> <tosmask> dscp <dscp>] [log] [time-range <time-range-name>] [assign-queue <queue-id>] [{mirror redirect} <interface-id>]</p>
Time-Based ACLs	{deny permit} {srcmac srcmacmask any} {dstmac dstmacmask any bpdud} [{ethertypekey 0x0600- 0xFFFF}] [vlan eq 0-4095] [cos 0-7] [secondary-vlan eq 0-4095][secondary-cos 0-7][log] [assign-queue queue-id] [{mirror redirect} interface]	{deny permit} {<srcmac> any} {<dstmac> any} [<ethertypekey> <0x0600- 0xFFFF>] vlan {eq <0-4095>} [cos <0-7>] [[log] [time-range <time-range-name>] [assign-queue <queue-id>] [{mirror redirect} <interface-id>]

Time-Based ACLs	{deny permit} {every {{icmp igmp ipv6 tcp udp number} {any sourceipv6prefix/prefixlength} [eq {portkey portvalue}] {any destinationipv6prefix/prefixlength} [eq {portkey portvalue}] [flow-label value] [dscp dscp]]} [log][assign-queue queue-id] [{mirror redirect} interface]	{deny permit} {every {{icmpv6 ipv6 tcp udp protocolnumber} {any sourceipv6prefix/prefixlength} [eq {portnumber portkey}] {any destinationipv6prefix/prefixlength} [eq {portnumber portkey}] [flow-label flow-label-value] [dscp dscp-value]]} [assign-queue queue-id] [log] [{mirror redirect} interface-id] [time-range time-range-name]
Time-Based ACLs	show ipv6 access-lists [name]	show ipv6 access-lists [name]
Time-Based ACLs	show mac access-list name	show mac access-list name
Tunnel Interface	tunnel destination ipv4addr	tunnel destination ip-address
Tunnel Interface	tunnel source {ipv4addr vlan vlan-id}	tunnel source { ip-address interface-type interface-number
User Manager Enhancements	aaa authentication dot1x default method1	aaa authentication dot1x default { radius ias none }
Virtual Router Redundancy Protocol (VRRP)	show ip vrrp interface { brief [stats] vlan vlan-id vr-id }	show vrrp interface [brief vlan <vlan-id> {stats}]
Virtual Router Redundancy Protocol (VRRP)	show ip vrrp	show vrrp [brief group]
VLAN	dvlan-tunnel ethertype {802.1Q vman custom 0-65535}	dvlan-tunnel ethertype {802.1Q vman custom 0-65535 [primary-tpid] }
VLAN	switchport mode {access trunk general dot1q tunnel }	switchport mode {access trunk general }
VLAN	name string (VLAN Configuration)	name vlan-name
Corrected parameters to match CLI for the following commands:		mac address-table multicast forbidden address mac address-table multicast static mac address-table static interface (removed the Interface Ethernet command and consolidated it into the interface command) interface range show dot1x ethernet has been changed to show dot1x interface {gigabitethernet tengigabitethernet} arp (global) -- removed second (redundant) instance -- it did not match CLI. deny/permit (ipv6 acl mode) show lldp med local-device detail -- Added the word detail to command name, changed description.

Deprecated Commands

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
802.1x	dot1x system-auth-control	This command is changed to dot1x system-auth-control monitor.
Address Table	bridge address	This command is changed to mac address-table static.
Address Table	bridge aging-table	This command is changed to mac address-table aging-time.
Address Table	bridge multicast address	This command is changed to mac address-table multicast static.
Address Table	bridge multicast filtering	This command is changed to mac address-table multicast filtering.
Address Table	bridge multicast forbidden address	This command is changed to mac address-table multicast forbidden address.
Address Table	bridge multicast forbidden forward-unregistered	This command is changed to mac address-table multicast forbidden forward-unregistered.
Address Table	bridge multicast forward-all	This command is changed to mac address-table multicast forward-all.
Address Table	bridge multicast forward-unregistered	This command is changed to mac address-table multicast forward-unregistered.
Address Table	clear bridge	This command is changed to clear mac address-table.
Address Table	mac address-table static drop	This command has been removed. Refer to the Address Table Commands section in the CLI Reference Guide.
Address Table	port security trap	This command is deprecated by the snmp-server enable traps maclock command.
Address Table	show bridge address-table	This command is changed to show mac address-table.
Address Table	show bridge address-table count [vlan vlan ethernet interface-number port-channel port-channel-number]	This command is changed to show mac address-table count.
Address Table	show bridge address-table [vlan vlan] [ethernet interface port-channel port-channel-number]	This command is changed to show mac address-table interface and show mac address-table vlan.
Address Table	show bridge address-table static	This command is changed to show mac address-table static.
ARP	clear counters ip arp inspection	clear ip arp inspection statistics
ARP	show ip arp inspection ethernet	show ip arp inspection

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
Bridging	bridge address	Interface Configuration mode Rationale: The following parameters have been deprecated: delete-on-reset delete-on-timeout secure
DHCP and BOOTP Relay	bootpdhcprelay cidridoptmode	This command is changed to ip dhcp relay information option.
DHCP and BOOTP Relay	show bootpdhcprelay	This command is changed to show ip dhcp relay command.
DHCPv6	ipv6 dhcp relay-agent-info-opt	This command is deprecated. Refer to the DHCPv6 Commands section in the CLI REFERENCE GUIDE.
DHCPv6	ipv6 dhcp relay-agent-info-remote-id-subopt	This command is deprecated. Refer to the DHCPv6 Commands section in the CLI REFERENCE GUIDE.
DVMRP	ip dvmrp trapflags	The command is deprecated by the snmp-server enable traps dvmrp command.
Ethernet Configuration	Interface range ethernet	This command is changed to interface range.
Ethernet Configuration	negotiation	This command is deprecated. Negotiation is now configured using the speed or duplex commands. Refer to the Ethernet Configuration Commands section in the CLI REFERENCE GUIDE.
IGMP	show ip igmp interface membership groupaddr [detail]	This command is changed to show ip igmp membership [groupaddr] [detail] command.
IP Addressing	ipv6 gateway	This command is removed. Refer to the IP Addressing Commands section in the CLI REFERENCE GUIDE.
IP Addressing	show ip interface management	This command is removed. Refer to the IP Addressing Commands section in the CLI REFERENCE GUIDE.
IP Routing	routing / no switchport	This command is removed. Refer to the IP Routing Commands section in the CLI REFERENCE GUIDE.
IP Routing	show ip stats	This command is changed to show ip traffic.
IPv6 Multicast	ipv6 pimsm and ipv6 pimdm	These commands are replaced by the ipv6 pim command.
IPv6 Multicast	ipv6 pimsm	This command is replaced by ipv6 pim sparse (Global config) and ipv6 pim dense commands.
IPv6 Multicast	ipv6 pimsm bsr-border	This command is replaced by ipv6 pim bsr-border.
IPv6 Multicast	ipv6 pimsm bsr-candidate	This command is replaced by ipv6 pim bsr-candidate.
IPv6 Multicast	ipv6 pimsm dr-priority	This command is replaced by ipv6 pim dr-priority.
IPv6 Multicast	ipv6 pimsm hello-interval and ipv6 pimdm hello-interval	These commands are replaced by the ipv6 pim hello-interval command.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
IPv6 Multicast	ipv6 pimsm join-prune-interval	This command is replaced by the ipv6 pim join-prune-interval command.
IPv6 Multicast	ipv6 pimsm register-threshold	This command is replaced by the ipv6 pim register-rate-limit command.
IPv6 Multicast	ipv6 pimsm rp-address	This command is replaced by the ipv6 pim rp-address command.
IPv6 Multicast	ipv6 pimsm rp-candidate	This command is replaced by the ipv6 pim rp-candidate command.
IPv6 Multicast	ipv6 pimsm spt-threshold	This command is replaced by the ipv6 pim spt-threshold command.
IPv6 Multicast	ipv6 pimsm ssm	This command is replaced by the ipv6 pim ssm command.
IPv6 Multicast	show ipv6 pimdm	This command is removed. Refer to the IPv6 Multicast Commands section in the CLI REFERENCE GUIDE.
IPv6 Multicast	show ipv6 pimsm interface and show ipv6 pimdm interface	These commands are replaced by the show ipv6 pim interface command.
IPv6 Multicast	show ipv6 pimsm neighbor and show ipv6 pimdm neighbor	These commands are replaced by the show ipv6 pim neighbor command.
IPv6 Multicast	show ipv6 pimsm rp mapping	This command is replaced by the show ipv6 pim rp mapping command.
IPv6 Multicast	show ipv6 pimsm rphash	This command is replaced by the show ipv6 pim bsr-router command.
IPv6 Routing	ipv6 forwarding	This command is deprecated. Refer to the IPv6 Routing Commands section in the CLI REFERENCE GUIDE.
Multicast	ip pim-trapflags	This command is deprecated by the snmp-server enable traps pim command.
Multicast	ip pimsm	This command is replaced by the ip pim dense and ip pim sparse commands.
Multicast	ip pimsm bsr-border	This command is replaced by the ip pim bsr-border command.
Multicast	ip pimsm bsr-candidate	This command is replaced by the ip pim bsr-candidate command.
Multicast	ip pimsm cbsrhasmasklength and ip pimsm cbsrpreference	These commands are replaced by the ip pim bsr-candidate command.
Multicast	ip pimsm dr-priority	This command is replaced by the ip pim hello-interval command.
Multicast	ip pimsm join-prune-interval	This command is replaced by the ip pim join-prune-interval command.
Multicast	ip pimsm register-threshold	This command is replaced by the ip pim register-rate-limit command.
Multicast	ip pimsm ssm	This command is replaced by the ip pim ssm command.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
Multicast	ip pimsm spt-threshold	This command is replaced by the ip pim spt-threshold and ip pim register-rate-limit commands.
Multicast	ip pimsm rp-address	This command is replaced by the ip pim rp-address command.
Multicast	ip pimsm rp-candidate	This command is replaced by the ip pim bsr-border command.
Multicast	show ip pimsm bsr	This command is replaced by the show ip pim bsr-router command.
Multicast	show ip pimsm rphash	This command is replaced by the show ip pim rp hash command.
Multicast	show ip pimsm rp mapping	This command is replaced by the show ip pim rp mapping command.
Multicast	show ip mcast	This command is changed to show ip multicast.
Multicast	show ip mcast interface	This command is changed to show ip multicast interface.
OSPF	1583compatibility	This command is changed to compatible rfc1583.
OSPFv3	ipv6 ospf areaid	This command is changed to ipv6 ospf area.
PHY Diagnostics	show copper-ports cable-length	This command is deprecated. Use the show copper-ports tdr command to display the stored information regarding cable lengths and the test copper-port tdr command to perform a cable length test. Testing a port brings the port down momentarily.
PIM-DM and PIM-SM	ip pimsm and ip pimdm	These commands are replaced by the ip pim command.
PIM-DM and PIM-SM	ip pimsm hello-interval and ip pimdm hello-interval	These commands are replaced by the ip pim hello-interval command.
PIM-DM and PIM-SM	show ip pimsm interface and show ip pimdm interface	These commands are replaced by the show ip pim interface command.
PIM-DM and PIM-SM	show ip pimsm neighbor and show ip pimdm neighbor	These commands are replaced by the show ip pim neighbor command.
Power Over Ethernet	power inline legacy	This command is deprecated by the power inline detection command.
Power Over Ethernet	power inline traps enable	This command is deprecated by the snmp-server enable traps poe command.
Power Over Ethernet	show poe-firmware-version	This command is deprecated by the show power inline firmware-version command.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
Power Over Ethernet	trapflags (ip ospf mode)	This command is deprecated by the snmp-server enable traps ospf command.
Power Over Ethernet	trapflags (ipv6 ospf mode)	This command is deprecated by the snmp-server enable traps ospfv3 command.
Power Over Ethernet	ip pim trapflags	This command is deprecated by the snmp-server enable traps pim command.
RADIUS	show radius-servers	This command is changed to show aaa servers.
RADIUS	show radius-servers statistics	This command is changed to show radius statistics.
RMON	show rmon-alarm table	This command is changed to show rmon alarms.
SNMP	show snmp groups	This command is changed to show snmp group.
SNMP	show snmp users	This command is changed to show snmp user.
SNMP	snmp-server traps enable power inline	This command is deprecated. Use the poe keyword command.
Syslog	logging facility	This command is deprecated. Refer to the Syslog Commands section in the CLI REFERENCE GUIDE.

Feature	Previous Implementation	Dell™ PowerConnect 4.x Implementation
System Management	switch priority	This command is deprecated. Refer to the System Management Commands section in the CLI REFERENCE GUIDE.
	ip dvmrp trapflags	This command is deprecated by the snmp-server enable traps dvmrp command.
Virtual Router Redundancy Protocol (VRRP)	ip vrrp ip vrrp ip ip vrrp mode	These commands are replaced by the vrrp group ip ip-address [secondary] command.
Web Server	ip https certificate	This command is changed to ip http secure-certificate.
Web Server	ip https port	This command is changed to ip http secure-port.
Web Server	ip https server	This command is changed to ip http secure-server.
Web Server	show ip http	This command is changed to show ip http server status.
Web Server	show ip https	This command is changed to show ip http server secure status.