

The ProCurve Switch 2600 series is a collection of low-cost, stackable, multi-layer, managed switches with 48, 24, or 8 auto-sensing 10/100 ports and dual-personality ports for 10/100/1000 or mini-GBIC connectivity. The ProCurve Switch 2650-PWR, 2626-PWR, and 2600-8-PWR are IEEE 802.3af-compliant for Power over Ethernet and provide up to 15.4 W per port. A redundant external power supply is also available as an accessory.



ProCurve Switch 2650 (J4899B)



ProCurve Switch 2626 (J4900B)



ProCurve Switch 2600-8-PWR with Gigabit Uplink (J8762A)



ProCurve Switch 2650-PWR (J8165A)



ProCurve Switch 2626-PWR (J8164A)



Features and benefits

Connectivity

- Dual-personality functionality: two 10/100/1000 ports or mini-GBIC slots for optional fiber connectivity such as Gigabit-SX, -LX, or -LH
- Power over Ethernet (IEEE 802.3af) compliant (ProCurve 2650-PWR, ProCurve 2626-PWR, ProCurve 2600-8-PWR): provides up to 15.4 W per port to power IP phones, wireless access points, Web cameras, and more (ProCurve 2650-PWR may require an external power supply to provide full 15.4 W for all 48 PoE-ready ports)

Performance

• 13.6 Gbps (ProCurve 2650 and 2650-PWR)/9.6 Gbps (ProCurve 2626, 2626-PWR, 2600-8-PWR) backplane: wire-speed non-blocking architecture for low-latency throughput

Resiliency and high availability

- IEEE 802.3ad Link Aggregation Control Protocol (LACP) and ProCurve trunking: support for up to 6 trunks, each with up to 8 links (ports) per trunk; trunking across modules is supported
- Spanning Tree Protocol (IEEE 802.1D): provides redundant links while preventing network loops
- IEEE 802.1w Rapid Convergence Spanning Tree Protocol: increases network uptime through faster recovery from failed links
- IEEE 802.1s Multiple Spanning Tree: provides high link availability in multiple VLAN environments by allowing multiple spanning trees
- Optional external redundant power supply (ProCurve 2650-PWR, ProCurve 2626-PWR, ProCurve 2600-8-PWR): provides uninterrupted power; sold as an accessory

Layer 2 switching

- VLAN support and tagging: support complete IEEE 802.1Q (4,096 VLAN IDs) and 253 VLANs simultaneously
- GARP VLAN Registration Protocol: allows automatic learning and dynamic assignment of VLANs

Layer 3 routing

• Basic IP routing: enables automatic routing to the connected VLANs and up to 16 static routes--including one default route--in IP networks

Security

- **Port security:** allows access only to specified MAC addresses, which can be learned or specified by the administrator
- MAC address lockout: prevents configured particular MAC addresses from connecting to the network
- IP lockdown: only allows traffic from a specific IP address to be forwarded
- Dynamic ARP protection: blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or data theft of network data
- Multiple user authentication methods:
- IEEE 802.1X: industry-standard way of user authentication using an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server
- **Web-based authentication:** similar to IEEE 802.1X, provides a browser-based environment to authenticate clients that do not support the IEEE 802.1X supplicant
- MAC-based authentication: client is authenticated with the RADIUS server based on the MAC address of the client

NEW Authentication flexibility:

- Multiple IEEE 802.1X users per port:

provides authentication of up to 8 IEEE 802.1X users per port; prevents user "piggybacking" on another user's IEEE 802.1X authentication

- Secure FTP: allows secure file transfer to/from the switch; protects against unwanted file downloads or unauthorized copying of switch configuration file
- TACACS+: eases switch management security administration by using a password authentication server
- Source-port filtering: allows only specified ports to communicate with each other
- Secure Shell (SSHv2): encrypts all transmitted data for secure, remote command-line interface (CLI) access over IP networks
- Secure Sockets Layer (SSL): encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- Switch management logon security: can require either RADIUS or TACACS+ authentication for secure switch CLI logon

Convergence

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): automated device discovery protocol for easy mapping by network management applications
- LLDP-MED (Media Endpoint Discovery): a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones

Quality of Service (QoS)

• Traffic prioritization (IEEE 802.1p): allows real-time ProCurve Switch 2600 series traffic classification into 8 priority levels mapped to 4 queues

- Class of Service (CoS): sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), L3 protocol, TCP/UDP port number, source port, and DiffServ
- Layer 4 prioritization: enables prioritization based on TCP/UDP port numbers

Manageability

- **RMON:** provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Friendly port names: allow assignment of descriptive names to ports
- **ProCurve/IEEE Auto-MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- Dual flash images: provides independent primary and secondary OS files for backup while upgrading
- Stacking capability: single IP address management for a virtual stack of up to 16 switches, including the ProCurve 2500 series, 2510 series, 2600 series, 2800 series, 2810 series, 2900 series, 3400cl series, 3500yl series, 4200vl series, 6108, 6200yl-24G-mGBIC, and 6400cl series
- **Find-Fix-and-Inform:** finds and fixes common network problems automatically, then informs administrator
- **Troubleshooting:** ingress/egress port monitoring enables network problem-solving (ProCurve Switch 2626 and 2626-PWR only)
- **Software updates:** free downloads from the Web

Industry-leading warranty

• Lifetime warranty: for as long as you own the product, with next-business-day advance replacement (available in most countries)

Services

ProCurve Switch 2650

- 3-year, 4-hour onsite, 13x5 coverage for hardware (H5481E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (U6303E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6302E)
- 3-year, 24x7 SW phone support, software updates (UE261E)
- Installation with minimum configuration, system-based pricing (U4826E)
- Installation with HP-provided configuration, system-based pricing (U4830E)

ProCurve Switch 2650-PWR

- 3-year, 4-hour onsite, 13x5 coverage for hardware (H4496E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (H2893E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6319E)
- 3-year, 24x7 SW phone support, software updates (UE264E)
- Installation with minimum configuration, system-based pricing (U4826E)
- Installation with HP-provided configuration, system-based pricing (U4830E)

ProCurve Switch 2626

- 3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E)
- 3-year, 24x7 SW phone support, software updates (UF792E)
- Installation with minimum configuration, system-based pricing (U4826E)
- Installation with HP-provided configuration, system-based pricing (U4830E)

ProCurve Switch 2626-PWR

- 3-year, 4-hour onsite, 13x5 coverage for hardware (U2855E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (U2856E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6304E)
- 3-year, 24x7 SW phone support, software updates (UE262E)
- Installation with minimum configuration, system-based pricing (U4826E)
- Installation with HP-provided configuration, system-based pricing (U4830E)

ProCurve Switch 2600-8-PWR with Gigabit Uplink

- 3-year, 4-hour onsite, 13x5 coverage for hardware (UD537E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (UD538E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UD539E)
- 3-year, 24x7 SW phone support, software updates (UF793E)
- Installation with minimum configuration, system-based pricing (U4826E)
- Installation with HP-provided configuration, system-based pricing (U4830E)

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	ProCurve Switch 2650 (J4899B)	ProCurve Switch 2650-PWR (J8165A)	ProCurve Switch 2626 (J4900B)
Specifications			
Ports			
	48 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: ProCurve Auto-MDIX; Duplex: half or full	48 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: ProCurve Auto-MDIX; Duplex: half or full	24 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: ProCurve Auto-MDIX; Duplex: half or full
	1 RS-232C DB-9 console port	1 RS-232C DB-9 console port	1 RS-232C DB-9 console port
	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)
Physical characteristics			
Dimensions	12.8(d) x 17.32(w) x 1.75(h) in. (32.51 x 43.99 x 4.45 cm) (1U height)	18.03(d) x 17.42(w) x 1.75(h) in. (45.8 x 44.25 x 4.45 cm) (1U height)	12.8(d) x 17.32(w) x 1.73(h) in. (32.51 x 43.99 x 4.39 cm) (1U height)
Weight	9.78 lb. (4.44 kg), Fully loaded	16.31 lb. (7.4 kg), Fully loaded	9.15 lb. (4.15 kg), Fully loaded
Memory and processor			
Processor	Motorola PowerPC MPC8245 @ 266 MHz, 8 MB flash, 32 MB SDRAM	Motorola PowerPC MPC8245 @ 266 MHz, 8 MB flash, 32 MB SDRAM	Motorola PowerPC MPC8245 @ 266 MHz, 8 MB flash, 32 MB SDRAM
Mounting			
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance			
Latency	< 13.3 µs (LIFO)	< 12 μs (LIFO)	< 13.3 µs (LIFO)
	Gbps	Gbps	Gbps
Throughput	up to 10.1 million pps	up to 10.1 million pps	up to 6.6 million pps
Routing/Switching capacity	13.6 Gbps	13.6 Gbps	9.6 Gbps
MAC address table size	8000 entries	8000 entries	8000 entries
Environment			
Operating temperature	32°F to 131°F (0°C to 55°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), non-condensing	15% to 95% @ 104°F (40°C), non-condensing	15% to 95% @ 104°F (40°C), non-condensing
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Non-operating/Storage relative humidity	15% to 95% @ 149°F (65°C), non-condensing	15% to 95% @ 149°F (65°C), non-condensing	15% to 95% @ 149°F (65°C), non-condensing
Altitude	up to 15000 ft. (4.6 km)	up to 15000 ft. (4.6 km)	up to 15000 ft. (4.6 km)
Acoustic	Power: 50 dB; DIN 45635T.19 per ISO 7779	Power: 53 dB; DIN 45635T.19 per ISO 7779	Power: 50 dB; DIN 45635T.19 per ISO 7779

Electrical characteristics			
Maximum heat dissipation	342 BTU/hr (360.81 kJ/hr)	2155 BTU/hr (2273.53 kJ/hr)	342 BTU/hr (360.81 kJ/hr)
Voltage	100-240 VAC	100-240 VAC	100-240 VAC
Current	1.5 A	7.5 / 3.5 A	1.5 A
Power consumption	100 W	631 W	100 W
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Safety			
	CSA 22.2 No. 950; cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition; UL 60950	CSA 22.2 No. 950; cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition; UL 60950	CSA 22.2 No. 950; cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition; UL 60950
Emissions			
	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A
Immunity			
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2; 4 kV CD, 8 kV AD	IEC 61000-4-2; 4 kV CD, 8 kV AD	IEC 61000-4-2; 4 kV CD, 8 kV AD
Radiated	IEC 61000-4-3; 3 V/m	IEC 61000-4-3; 3 V/m	IEC 61000-4-3; 3 V/m
EFT/Burst	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)
Surge	IEC 61000-4-5; 1 kV/2 kV AC	IEC 61000-4-5; 1 kV/2 kV AC	IEC 61000-4-5; 1 kV/2 kV AC
Conducted	IEC 61000-4-6; 3 V	IEC 61000-4-6; 3 V	IEC 61000-4-6; 3 V
Power frequency magnetic field	IEC 61000-4-8; 1 A/m, 50 or 60 Hz	IEC 61000-4-8; 1 A/m, 50 or 60 Hz	IEC 61000-4-8; 1 A/m, 50 or 60 Hz
Voltage dips and interruptions	IEC 61000-4-11; >95% reduction, 0.5 period; 30% reduction, 25 periods	IEC 61000-4-11; >95% reduction, 0.5 period; 30% reduction, 25 periods	IEC 61000-4-11; >95% reduction, 0.5 period; 30% reduction, 25 periods
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
Management			
	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)

Standards and Protocols

Device Management

HTML and telnet management

General Protocols

RFC 951 BOOTP

IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3af Power over Ethernet IEEE 802.3x Flow Control RFC 768 UDP RFC 783 TFTP Protocol (revision RFC 792 ICMP RFC 793 TCP RFC 826 ARP **RFC 854 TELNET**

RFC 1542 BOOTP Extensions RFC 2030 Simple Network Time Protocol (SNTP) v4 RFC 3046 DHCP Relay Agent Information Option

IP Multicast

RFC 2236 IGMPv2

MIBs

RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 2021 RMONv2 MIB
RFC 2096 IP Forwarding Table
MIB
RFC 2613 SMON MIB
RFC 2618 RADIUS Client MIB
RFC 2665 Ethernet-Like-MIB
RFC 2668 802.3 MAU MIB
RFC 2674 802.1p and IEEE
802.1Q Bridge MIB
RFC 2737 Entity MIB (Version 2)

RFC 2863 The Interfaces Group MIB

Network Management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP) RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) RFC 3164 BSD syslog Protocol ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3

Security

IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL) SSHv1/SSHv2 Secure Shell





ProCurve Switch 2626-PWR (J8164A)

ProCurve Switch 2600-8-PWR with Gigabit Uplink (J8762A)

Specifications		
Ports		
	24 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: ProCurve Auto-MDIX; Duplex: half or full	8 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: ProCurve Auto-MDIX; Duplex: half or full
	1 RS-232C DB-9 console port	1 RS-232C DB-9 console port
	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)	1 dual-personality port; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)
		Supports a maximum of 8 auto-sensing 10/100 ports
Physical characteristics		
Dimensions	18.03(d) x 17.42(w) x 1.75(h) in. (45.8 x 44.25 x 4.45 cm) (1U height)	8.86(d) x 17.44(w) x 1.73(h) in. (22.5 x 44.3 x 4.39 cm) (1U height)
Weight	15.01 lb. (6.81 kg), Fully loaded	7.5 lb. (3.4 kg)
Memory and processor		
Processor	Motorola PowerPC MPC8245 @ 266 MHz, 8 MB flash, 32 MB SDRAM	Motorola PowerPC MPC8245 @ 266 MHz, 8 MB flash, 32 MB SDRAM
Mounting		
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance		
Latency	< 12 μs (LIFO)	< 12 μs (LIFO)
	Gbps	Gbps
Throughput	up to 6.6 million pps	up to 6.6 million pps
Routing/Switching capacity	9.6 Gbps	9.6 Gbps
MAC address table size	8000 entries	8000 entries
Environment		
Operating temperature	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), non-condensing	15% to 95% @ 104°F (40°C), non-condensing
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Non-operating/Storage relative humidity	15% to 95% @ 149°F (65°C), non-condensing	15% to 95% @ 149°F (65°C), non-condensing
Altitude	up to 15000 ft. (4.6 km)	up to 15000 ft. (4.6 km)
Acoustic	Power: 53 dB; DIN 45635T.19 per ISO 7779	Power: 57 dB; DIN 45635T.19 per ISO 7779
Electrical characteristics		
Maximum heat dissipation	2155 BTU/hr (2273.53 kJ/hr)	649 BTU/hr (685 kJ/hr), including the switch and attached PoE devices; switch only: 228 BTU/hr (241 kJ/hr)
Voltage	100-240 VAC	100-240 VAC

Current	7.5 / 3.5 A	3.3 / 1.7 A
Power consumption	631 W	190 W
Frequency	50 / 60 Hz	50 / 60 Hz
Safety		
	CSA 22.2 No. 950; cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition; UL 60950	CSA 22.2 No. 950; cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition; UL 60950
Emissions		
	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A
Immunity		
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2; 4 kV CD, 8 kV AD	IEC 61000-4-2; 4 kV CD, 8 kV AD
Radiated	IEC 61000-4-3; 3 V/m	IEC 61000-4-3; 3 V/m
EFT/Burst	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)
Surge	IEC 61000-4-5; 1 kV/2 kV AC	IEC 61000-4-5; 1 kV/2 kV AC
Conducted	IEC 61000-4-6; 3 V	IEC 61000-4-6; 3 V
Power frequency magnetic field	IEC 61000-4-8; 1 A/m, 50 or 60 Hz	IEC 61000-4-8; 1 A/m, 50 or 60 Hz
Voltage dips and interruptions	IEC $61000-4-11$; >95% reduction, 0.5 period; 30% reduction, 25 periods	IEC 61000-4-11; >95% reduction, 0.5 period; 30% reduction, 25 periods
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
Management		
	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)

Standards and Protocols

Device Management

HTML and telnet management

General Protocols

RFC 951 BOOTP

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IP Multicast

RFC 2236 IGMPv2

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RFC 2096 IP Forwarding Table
MIB
RFC 2613 SMON MIB
RFC 2618 RADIUS Client MIB
RFC 2665 Ethernet-Like-MIB
RFC 2668 802.3 MAU MIB
RFC 2674 802.1p and IEEE
802.1Q Bridge MIB
RFC 2737 Entity MIB (Version 2)

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Network Management

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Security

IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL) SSHv1/SSHv2 Secure Shell

Accessories



NEW ProCurve Gigabit-SX-LC Mini-GBIC (J4858C)

A small form factor pluggable (SFP) gigabit SX transceiver that provides a full-duplex gigabit solution up to 550 meters on multimode fiber.

Ports

1 LC 1000Base-SX port (IEEE 802.3z Type 1000Base-SX) Duplex: full only

Physical characteristics

Dimensions: $2.24(d) \times 0.54(w) \times 0.486(h)$ in. $(5.69 \times 1.37 \times 1.23 \text{ cm})$ Weight: 0.04 lb. (0.02 kg)

Cabling

Type:

• 62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index,

low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively

Maximum distance:

• 220 m (62.5 μm core diameter, 160 MHz/km bandwidth)• 275 m (62.5 μm core diameter, 200 MHz/km bandwidth)• 500 m (50 μm core diameter, 400 MHz/km bandwidth)• 550 m (50 μm core diameter, 500 MHz/km bandwidth)



NEW ProCurve Gigabit-LX-LC Mini-GBIC (J4859C)

A small form factor pluggable (SFP) gigabit LX transceiver that provides a full-duplex gigabit solution up to 10 km (singlemode) or 550 m (multimode).

Ports

1 LC 1000Base-LX port (IEEE 802.3z Type 1000Base-LX)
Duplex: full only

Physical characteristics

Dimensions: $2.24(d) \times 0.54(w) \times 0.486(h)$ in. $(5.69 \times 1.37 \times 1.23 \text{ cm})$ Weight: 0.04 lb. (0.02 kg)

Cabling

Type:

- Either single mode or multimode
- 62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC

793-2 Type A1b or A1a, respectively

 Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1

Maximum distance:

• 10 km (single mode) or 550 m (multimode)

Notes

A mode conditioning patch cord may be needed in some multimode fiber installations.



NEW ProCurve Gigabit-LH-LC Mini-GBIC (J4860C)

A small form factor pluggable (SFP) gigabit LH transceiver that provides a full-duplex gigabit solution up to 70 km on singlemode fiber.

Ports

1 LC 1000Base-LH port (no IEEE standard exists for 1550 nm optics)
Duplex: full only

Physical characteristics

Dimensions: $2.17(d) \times 0.60(w) \times 0.46(h)$ in. $(5.5 \times 1.53 \times 1.18 \text{ cm})$ Weight: 0.04 lb. (0.02 kg)

Cabling

Type:

 Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1

Maximum distance:

• 70 km

ProCurve 600 Redundant External Power Supply (J8168A)

The ProCurve 600 Redundant and External Power Supply (RPS/EPS) has 6 RPS ports and 2 EPS ports and supplies backup and Power over Ethernet power.

Ports

6 redundant power supply ports Restrictions: Each port can provide redundant +12 V power to a connected switch; only one port can provide power at a given time

2 external power supply ports Restrictions: Provides +50 VDC external PoE to up to two switch devices; provides max. of 408 W full power to one device, and half power (204 W each) if connected to two devices

Physical characteristics

Dimensions: 12.83(d) x 17.44(w) x 1.73(h) in. (32.59 x 44.3 x 4.39 cm) (1U

height)

Weight: 11.78 lb. (5.34 kg), Fully loaded

Mounting

1U rack-mountable and wall-mountable enclosure using standard mounting hardware

Environment

Operating temperature: 32°F to 131°F

(0°C to 55°C)

Operating relative humidity: 15% to 95% @ 104°F (40°C), non-condensing Non-operating/Storage temperature: -40°F to 158°F (-40°C to 70°C) Non-operating/Storage relative humidity: 15% to 95% @ 149°F (65°C), non-condensing

Altitude: up to 15000 ft. (4.6 km) Acoustic: Noise emission LwA=59.2 dB at virtual workspace, according to DIN

45635 T.19

Electrical characteristics

Description: The unit automatically adjusts to any voltage between 100-240 V and either 50 or 60 Hz

Voltage: 100-240 VAC Current: 9 / 5 A

Power consumption: 800 W

RPS power: 180 W PoE power: 408 W Frequency: 50 / 60 Hz

Safety

CSA 22.2 No. 60950 EN 60950/IEC 60950 UL 60950

Emissions

FCC Class A VCCI Class A

EN 55022/CISPR 22 Class A

Immunity EN: EN 55024, CISPR 24 ESD: IEC 61000-4-2; 4 kV CD, 8 kV AD

Radiated: IEC 61000-4-3; 3 V/m EFT/Burst: IEC 61000-4-4; 1.0 kV (power

line), 0.05 kV (signal line)

Surge: IEC 61000-4-5; 1 kV/2 kV AC Conducted: IEC 61000-4-6; 3 V Power frequency magnetic field: IEC 61000-4-8; 1 A/m, 50 or 60 Hz Voltage dips and interruptions: IEC 61000-4-11; >95% reduction, 0.5 period;

30% reduction, 25 periods Harmonics: EN 61000-3-2, IEC 61000-3-2 Flicker: EN 61000-3-3, IEC 61000-3-3

Management

Provides information via port interfaces of attached devices

Supported devices

• ProCurve Switch 2600-PWR series, ProCurve Switch 2800 series, ProCurve Switch 5300xl series, ProCurve Switch 3400cl series, ProCurve Switch 6400cl series, ProCurve Secure Router 7000dl

series

ProCurve 610 External Power Supply (J8169A)

The ProCurve 610 External Power Supply (EPS) has 4 EPS ports and provides power to connected Switch xI 10/100-TX PoE modules.

Ports

4 external power supply ports Restrictions: Provides +50 VDC external PoE power to up to four switch devices; each pair of EPS ports provides max. of 408 W full power to one device, and half power (204 W each) if connected to two devices; total 816 W of power

Physical characteristicsDimensions: 19.02(d) x 17.3(w) x 1.73(h) in. (48.31 x 43.94 x 4.39 cm) (1U height)

Weight: 16.44 lb. (7.46 kg), Fully loaded

Mounting

1U rack-mountable and wall-mountable enclosure using standard mounting hardware

Environment

Operating temperature: 32°F to 122°F (0°C to 50°C) Operating relative humidity: 15% to 95% @ 104°F (40°C), non-condensing Non-operating/Storage temperature: -40°F to 158°F (-40°C to 70°C) Non-operating/Storage relative humidity:

15% to 95% @ 149°F (65°C), non-condensing

Altitude: up to 15000 ft. (4.6 km) Acoustic: Noise emission LwA=58 dB at virtual workspace, according to DIN

45635 T.19

Electrical characteristics

Description: The unit automatically adjusts to any voltage between 110-240 V and either 50 or 60 Hz

Voltage: 110-240 VAC Current: 11 / 6 A

Power consumption: 1000 W

PoE power: 816 W Frequency: 50 / 60 Hz

Notes: For Japan, the unit only operates

at 200 V, 50 Hz, and 6 A.

Safety

CSA 22.2 No. 60950 EN 60950/IEC 60950 UL 60950

Emissions

FCC Class A VCCI Class A

EN 55022/CISPR 22 Class A

Immunity EN: EN 55024, CISPR 24 ESD: IEC 61000-4-2; 4 kV CD, 8 kV AD Radiated: IEC 61000-4-3; 3 V/m

EFT/Burst: IEC 61000-4-4; 1.0 kV (power

line), 0.5 kV (signal line)

Surge: IEC 61000-4-5; 1 kV/2 kV AC Conducted: IEC 61000-4-6; 3 V Power frequency magnetic field: IEC 61000-4-8; 1 A/m, 50 or 60 Hz Voltage dips and interruptions: IEC 61000-4-11; >95% reduction, 0.5 period;

30% reduction, 25 periods Harmonics: EN 61000-3-2, IEC 61000-3-2 Flicker: EN 61000-3-3, IEC 61000-3-3

Management

Unmanaged power supply; provides information via LEDs or through port interfaces of attached devices

Notes

Supported devices: ProCurve Switch 2600-PWR series, ProCurve Switch 5300xl

NEW ProCurve Manager 2.2 (-)

Windows Server-based network management for ProCurve LAN products

System requirements

For networks having 50 to 250 managed devices, ProCurve recommends the following:

Minimum system hardware 2.0 GHz Intel Pentium 4 or equivalent

processor 2 GB RAM memory 10 GB storage 1000 MB NIC for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

3.0 GHz Intel Pentium 4 or equivalent processor
3 GB RAM memory
40 GB storage

40 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better Microsoft Windows 2003 Server

Windows XP SP2
Windows XP Professional SP2

For networks having 250 to 2,000 managed devices, ProCurve recommends the following:

Minimum system hardware

assuming a dedicated server

3.0 GHz Intel Pentium 4 or equivalent processor
3 GB RAM memory
40 GB storage
1000 MB NIC
for PCM+ as a standalone application,

Recommended system hardware

Intel Xeon or equivalent processor 4 GB RAM memory 80 GB storage 1000 MB NIC for PCM+ assuming a dedicated server,

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better Microsoft Windows 2003 Server

Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

Browsers

Microsoft Internet Explorer version 5.0 or later

Supported platforms

HP OpenView Network Node Manager version 6.41 or 7.01 or 7.5 (optional)

Additional requirements

NOTE: Network Immunity Manager when loaded on PCM+ 2.2 can sample up to 500 managed ports using sFlow or XRMON.

Notes

Unlimited license means that ProCurve does not impose a limit on the number of devices attached to the network as a condition of the license. Some degradation in performance may be expected the greater the number of devices attached to the network.

NEW ProCurve Manager Plus v2.2 upgrade from PCM+ 1.6 or newer (J9056A)

ProCurve Manager Plus 2.2 50-device upgrade adds new PCM+ 2.2 functionality to previously purchased PCM+ 1.6 or PCM+ 1.5 releases.

System requirements

For networks having 50 to 250 managed devices, ProCurve recommends the following:

Minimum system hardware

2.0 GHz Intel Pentium 4 or equivalent processor . 2 GB RAM memory 10 GB storage 1000 MB NIC for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

3.0 GHz Intel Pentium 4 or equivalent processor 3 GB RAM memory

40 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better Microsoft Windows 2003 Server Windows XP SP2

Windows XP Professional SP2

For networks having 250 to 2,000 managed devices, ProCurve recommends the following:

Minimum system hardware

assuming a dedicated server

3.0 GHz Intel Pentium 4 or equivalent processor 3 GB RAM memory 40 GB storage 1000 MB NIC for PCM+ as a standalone application,

Recommended system hardware

Intel Xeon or equivalent processor

4 GB RAM memory 80 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

Browsers

Microsoft Internet Explorer version 5.0 or

Supported platforms

HP OpenView Network Node Manager version 6.41 or 7.01 or 7.5

Additional requirements

NOTE: ProCurve Network Immunity Manager when loaded on PCM+ 2.2 can sample up to 500 managed ports using sFlow or XRMON.

Notes

Additional processing power may be necessary for extensive traffic monitoring.

Unlimited license means that ProCurve does not impose a limit on the number of devices attached to the network as a condition of the license.

Some degradation in performance may be expected the greater the number of devices attached to the network.

NEW ProCurve Manager Plus v2.2 50-device license (J9057A)

PCM+ provides a starter license for advanced device management of up to 50 ProCurve devices, including integration with the HP OpenView Network Node Manager product.

System requirements

For networks having 50 to 250 managed devices, ProCurve recommends the following:

Minimum system hardware

2.0 GHz Intel Pentium 4 or equivalent processor 2 GB RAM memory

10 GB storage 1000 MB NIC

for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

3.0 GHz Intel Pentium 4 or equivalent processor

3 GB RAM memory 40 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better

Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

For networks having 250 to 2,000 managed devices, ProCurve recommends the following:

Minimum system hardware

3.0 GHz Intel Pentium 4 or equivalent processor

3 GB RAM memory 40 GB storage 1000 MB NIC

for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

Intel Xeon or equivalent processor

processor 4 GB RAM memory 80 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better

Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

Browsers

Microsoft Internet Explorer version 5.0 or later

Supported platforms

HP OpenView Network Node Manager version 6.41 or 7.01 or 7.5

Additional requirements

NOTE: ProCurve Network Immunity Manager when loaded on PCM+ 2.2 can sample up to 500 managed ports using sFlow or XRMON.

Notes

Additional processing power may be necessary for extensive traffic monitoring.

Unlimited license means that ProCurve does not impose a limit on the number of devices attached to the network as a condition of the license.

Some degradation in performance may be expected the greater the number of devices attached to the network.

NEW ProCurve Manager Plus v2.2 upgrade +100-device license (J9058A)

PCM+ 2.2 +100-device license gives the customer an additional 100-device license for companies with growing managed device counts.

System requirements

For networks having 50 to 250 managed devices, ProCurve recommends the following:

Minimum system hardware

2.0 GHz Intel Pentium 4 or equivalent processor 2 GB RAM memory 10 GB storage 1000 MB NIC for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

3.0 GHz Intel Pentium 4 or equivalent processor 3 GB RAM memory 40 GB storage

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

1000 MB NIC

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better Microsoft Windows 2003 Server Windows XP SP2

Windows XP Professional SP2

For networks having 250 to 2,000 managed devices, ProCurve recommends the following:

Minimum system hardware

assuming a dedicated server

3.0 GHz Intel Pentium 4 or equivalent processor
3 GB RAM memory
40 GB storage
1000 MB NIC
for PCM+ as a standalone application,

Recommended system hardware

Intel Xeon or equivalent processor

4 GB RAM memory 80 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

Browsers

Microsoft Internet Explorer version 5.0 or

Supported platforms

HP OpenView Network Node Manager version 6.41 or 7.01 or 7.5

Additional requirements

NOTE: ProCurve Network Immunity Manager when loaded on PCM+ 2.2 can sample up to 500 managed ports using sFlow or XRMON.

Notes

Additional processing power may be necessary for extensive traffic monitoring.

Unlimited license means that ProCurve does not impose a limit on the number of devices attached to the network as a condition of the license.

Some degradation in performance may be expected the greater the number of devices attached to the network.

NEW ProCurve Manager Plus v2.2 unlimited-device license (J9059A)

PCM+ 2.2 unlimited license provides a PCM+ license that does not limit the number of devices managed (it does NOT require the 50-device license).

System requirements

For networks having 50 to 250 managed devices, ProCurve recommends the following:

Minimum system hardware

2.0 GHz Intel Pentium 4 or equivalent processor 2 GB RAM memory

10 GB storage 1000 MB NIC

for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

3.0 GHz Intel Pentium 4 or equivalent processor

3 GB RAM memory 40 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better

Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

For networks having 250 to 2,000 managed devices, ProCurve recommends the following:

Minimum system hardware

3.0 GHz Intel Pentium 4 or equivalent processor

3 GB RAM memory 40 GB storage 1000 MB NIC

for PCM+ as a standalone application, assuming a dedicated server

Recommended system hardware

Intel Xeon or equivalent processor

processor 4 GB RAM memory 80 GB storage 1000 MB NIC

for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server

Recommended software

Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better

Microsoft Windows 2003 Server Windows XP SP2 Windows XP Professional SP2

Browsers

Microsoft Internet Explorer version 5.0 or later

Supported platforms

HP OpenView Network Node Manager version 6.41 or 7.01 or 7.5

Additional requirements

NOTE: ProCurve Network Immunity Manager when loaded on PCM+ 2.2 can sample up to 500 managed ports using sFlow or XRMON.

Notes

Additional processing power may be necessary for extensive traffic monitoring.

Unlimited license means that ProCurve does not impose a limit on the number of devices attached to the network as a condition of the license.

Some degradation in performance may be expected the greater the number of devices attached to the network.

Specifications subject to change

NEW ProCurve Identity Driven Manager 2.2 base product--500-user license (J9012A)

ProCurve Identity Driven Manager is a plug-in to ProCurve Manager Plus that dynamically applies security and performance settings based on user, device, location, time, and client system state -- 500 user license

System requirements

Please see ProCurve Manager Plus for system requirements.

Supported platforms

OpenView NNM integration

RADIUS server support

Free RADIUS

Funk Steelbelted RADIUS Server Microsoft IAS

Features

Intuitive Explorer-style interface OpenView NNM integration Application of policies by user identity

- Auto VLAN assignment
- Auto set quality of service by user

- Auto set bandwidth assignment by user Rule-based access rights deployment Dynamic rights assignment based on:
- Time
- Location
- User system

Auto-discovery of:

- RADIUS servers
- Realms
- Users

Notes

The base product for Identity Driven Manager allows for managing up to 500 users. Customers may add users in quantities of 2000 by purchasing J9014A.

NEW ProCurve Identity Driven Manager 2.2 base product (upgrade from v1.0) (J9013A)

Identity Driven Manager 2.2 500-user upgrade from v1.0 allows existing v1.0 customers to get the features of v2.0, with a 500-user limitation.

System requirements

Please see ProCurve Manager Plus for system requirements.

Minimum system hardware 2 MB storage

Required platforms

ProCurve Manager Plus version 2.1

Supported platforms

- Users

RADIUS server support

FreeRADIUS (on Red Hat ES3 or ES4 or SuSe Linux 9)
Funk Steelbelted RADIUS Server
Microsoft IAS

Features

Intuitive Explorer-style interface OpenView NNM integration Application of policies by user identity

- Auto VLAN assignment
- Auto set quality of service by user
- Auto set bandwidth assignment by user Rule-based access rights deployment Dynamic rights assignment based on:
- Time
- Location
- User system

Auto-discovery of:

- RADIUS servers
- Realms
- Users

Notes

This upgrade provides Identity Driven Manager 2.0, which allows for managing up to 500 users. Customers may add users in quantities of 2000 by purchasing J9014A.

NEW ProCurve Identity Driven Manager 2.2--add 2000 users license (J9014A)

Adds support for 2000 additional users to the base Identity Driven Manager 2.2 product

System requirements

Please see ProCurve Manager Plus for system requirements.

Minimum system hardware 2 MB storage

Required platforms

ProCurve Manager Plus version 2.1

RADIUS server support

Free RADIUS Funk Steelbelted RADIUS Server Microsoft IAS

Features

Intuitive Explorer-style interface OpenView NNM integration Application of policies by user identity - Auto VLAN assignment

- Auto set quality of service by user
- Auto set bandwidth assignment by user Rule-based access rights deployment Dynamic rights assignment based on:
- Time
- Location
- User system
- Auto-discovery of:
- RADIUS servers
- Realms
- Users

Notes

Pricing has not been confirmed, but it will likely have this structure, allowing customers to buy additional units of 2000 users at a time.

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