

Unified architecture delivers 24 ports of Layer 2 Gigabit switching, wireless, PoE and centralized management providing maximum business ROI

OVERVIEW

Q. WHAT IS A UNIFIED SWITCH?

A. A unified switch combines the functionality of a traditional LAN switch with the benefits of a centralized wireless controller and voice/data convergence, in a centrally managed and physically integrated system. A unified switch is considered to be the next-generation of network infrastructure and convergence technology as it allows business to unify their wired and wireless, data and voice networks.

Businesses are interested in the unified switch architecture because of the reduced ROI it brings to their organizations:

- > Unified single IP address management interface for all LAN and WLAN devices
- > Converged authentication for wired and wireless users
- > Centrally managed PoE source for access points, IP phones and IEEE 802.3af devices
- > Centralized access point configuration, coordination, RF management and rogue detection
- > Investment protection.

You can deploy Fast Ethernet now, add:

- > GbE devices when ready
- > Wireless mobility, RF management and rogue detection when ready
- > PoE for access points and VoIP phones and IP telephony when ready.

Q. WHAT IS THE DIFFERENCE BETWEEN THE UNIFIED SWITCH AND A WIRELESS SWITCH?

A. A unified switch centralizes management of wired, wireless access points and wireless clients, in a single, combined user management interface. A wireless switch, also known as a wireless controller, centralizes management of IEEE 802.11 wireless access points and clients only.

Q. WHY WOULD I WANT A UNIFIED SWITCH?

A. A unified switch, with its single management interface for both the LAN and WLAN infrastructure, is less expensive to manage than when there are multiple IP addresses and interfaces for the switches, APs and other devices. Additionally, a unified switch allows you to invest now in technologies your organization will grow into: Gigabit Ethernet, wireless mobility and RF security, IP telephony and PoE.

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Q. WHAT IS THE BENEFIT OF THE 3COM UNIFIED SWITCH OVER A TRADITIONAL LAN SWITCH?

- A.** Beyond the single management address, small footprint, centralized wired and wireless deployment, other benefits include:
- > Converged authentication for wired and wireless users
 - > Unified single IP address management interface for all LAN and WLAN devices
 - > Centralized access point configuration, coordination and RF management
 - > Centrally managed PoE source for access points, IP phones and 802.3af devices
 - > Investment protection: deploy Ethernet now, and be ready for later implementation of GbE, wireless mobility and RF management, PoE and VoIP.

CAPACITY AND PERFORMANCE**Q. HOW MANY WIRED AND WIRELESS USERS CAN THE UNIFIED SWITCH SUPPORT?**

- A.** The switch can support up to 24 direct attached workstations operating at 10/100/1000 full line rate. The switch address table can learn over 8000 LAN addresses for forwarding. The switch can support up to 24 access points connected directly or indirectly to the system, and each AP can support up to 30 wireless clients per radio. The AP7760 has a single radio and supports up to 30 wireless clients, whereas the AP8760 has dual radios and supports up to 60 wireless clients (30 per radio).

Q. HOW MANY ACCESS POINTS DOES THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24 SUPPORT?

- A.** The unified switch supports up to 24 access points. The unified switch ships standard with full support for PoE and wireless access points on all 24 ports. There are no licensing or port fees ever required to utilize the full functionality—just add access points as you grow your WLAN.

Q. DOES THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24 SUPPORT LOCAL AND DISTRIBUTED ACCESS POINTS?

- A.** Yes. The unified switch will automatically discover and power locally attached APs connected to the switch. The switch also supports APs not directly connected to the switch by building secure tunnels between the switch and the distributed AP. The distributed AP must be on the same Layer 2 subnet and powered by a local PoE injector or other PoE switch or device.

Q. WHAT IS THE THROUGHPUT OF THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24?

- A.** The 3Com Unified Gigabit Wireless PoE Switch 24 delivers over 3.2 Giga bytes/sec throughput. This provides full Gigabit line rate on all 24 ports.

Q. HOW MANY 3COM UNIFIED GIGABIT WIRELESS POE SWITCHES CAN BE STACKED TOGETHER? CAN I SCALE THE SWITCH ACROSS MULTIPLE BUILDINGS?

- A.** There are no stacking capabilities in the Unified switch allowing management of multiple unified switches as a single entity. The unified switch supports a single mobility domain, which means that user rights and authentication are shared only inside a single unified switch. For larger wireless installations requiring multiple location support, we recommend the 3Com Wireless Mobility System comprised of 3Com Wireless Switches and Controllers, Wireless Switch Manager and AP2750 and AP3750 Access Points. For larger wired infrastructure demands requiring gigabit stacking and Layer 3 routing, we recommend the 3Com 4200G or 3Com 5500G.

Q. HOW MANY 802.3AF POE PORTS CAN BE ACTIVE AT THE SAME TIME?

- A.** All. The built-in power supply can fully power 15.4 watts on all 24 PoE compliant ports. There are no power budget restrictions in the switch.

WIRELESS AND INTEROPERABILITY

Q. WHAT ACCESS POINTS ARE SUPPORTED BY THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24?

A. The 3Com Unified Gigabit Wireless PoE Switch 24 supports the single-radio 3Com Wireless 7760 11a/b/g PoE Access Point (3CRWE776075) and the dual-radio 3Com Wireless 8760 Dual Radio 802.11a/b/g PoE Access Point (3CRWE876075) operating in "fit" or "managed" mode operation. Upon release of the 3Com Unified Gigabit Wireless PoE Switch 24, new code will be made available on 3Com's eSupport site that can be downloaded to these traditional "fat" access points. This new code, when installed, will present the user with a new option via the GUI to put the access point into managed fit mode for use with this new switch.

Q. CAN I USE MY FIT AP2750 AND AP3750 FROM THE 3COM WIRELESS MOBILITY SYSTEM WITH THE UNIFIED SWITCH?

A. No. Only the AP7760 and AP8760 (3CRWE776075 and 3CRWE876075, respectively) are supported.

Q. CAN I USE MY 3COM AP8750, 8250 OR 7250 ACCESS POINT WITH THE UNIFIED SWITCH?

A. No. Only the AP7760 and AP8760 (3CRWE776075 and 3CRWE876075, respectively) are supported. However these models may be used as fit APs on the 3Com Wireless Mobility System.

Q. CAN I USE OTHER VENDORS' ACCESS POINTS WITH THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24?

A. No. You cannot use other vendors' access points as fit access points centrally managed by the unified switch. However, you can use the 802.3af capabilities to power and provide connectivity to these other vendors APs. They would be running as stand-alone, fat APs obtaining power and a network connection from the unified switch.

SYSTEM FEATURES

Q. DOES THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24 SUPPORT SEAMLESS ROAMING BETWEEN ACCESS POINTS?

A. Yes. The unified switch provides fast hand-offs between access points. Roaming between access points is transparent to the user. This allows the switch to support time-sensitive applications such as Voice over WiFi (VoWiFi) or real-time applications requiring WiFi Multimedia (WMM) support.

Q. WHAT TYPE OF WIRELESS RF MANAGEMENT, ROGUE DETECTION AND MITIGATION IS AVAILABLE ON THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24?

A. Rogue AP detection and mitigation ensure only the APs you install are able to function on your network. AP detection allows identification of APs into "known" and "rogue" classifications. The operator may initiate rogue AP mitigation of the unauthorized AP. Closest authorized AP will then periodically send broadcast de-authenticate frames to the offending network, mimicking BSSID of the rogue AP.

Q. WHAT TYPE OF AUTHENTICATION AND ENCRYPTION ARE AVAILABLE ON THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24 TO ENSURE MY WIRED AND WIRELESS TRAFFIC IS SECURE?

A. The unified switch provides enhanced wireless security features to ensure your data is protected from hackers. Support for WEP (64- and 128-bit), WPA and WPA2 (TKIP/AES) encryption guarantees the privacy of your network data. IEEE 802.1x authentication provides secure network logins using external RADIUS servers. Support also includes:

- > EAP-TLS
- > EAP-TTLS/MSCHAP v2
- > PEAPv0/EAP-MSCHAP v2
- > EAP-SIM

- Q. IS THERE ANY LICENSING FOR PORTS OR ACCESS POINTS REQUIRED IN THE UNIFIED SWITCH?**
- A. No. The 3Com Unified switch is fully functional, supporting Layer 2 switching, full wireless functionality and full PoE on all 24 ports at once. There are no additional licensing requirements.
- Q. WILL THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24 SUPPORT THE IEEE 802.11N SPECIFICATION?**
- A. Yes. The architecture was designed to support 802.11n access points. 3Com will deliver this 802.11n AP support after the specification is approved.
- Q. HOW DO I MANAGE THIS UNIFIED SWITCH?**
- A. The 3Com Unified Switch was designed to be simply managed via the GUI web interface. The web interface provides wizard-based setup and configuration of the basic operational and security parameters. For more advanced configuration, a console and Telnet interface is available. The switch supports HTTPS web GUI, CLI, Telnet, SSH, RMON, HTTP, SNMP v1/v2/v3 and Syslog.
- Q. 3COM JUST INTRODUCED THE 4200G FAMILY OF GIGABIT SWITCHES. WHAT'S THE DIFFERENCE BETWEEN THE 4200G AND THE UNIFIED SWITCH?**
- A. These two products are targeted at different market segments. The 4200G is a traditional LAN switch offering high-end Layer 3 switching/routing in 12-, 24- and 48-port models. The 4200G also offers 10-Gigabit uplinks for stacking capabilities, allowing easy growth of the wired infrastructure. The 3Com Unified Gigabit Wireless PoE Switch 24 is a standalone 24-port system targeted at the medium-to-small business, offering gigabit layer 2 switching with integrated PoE and wireless functionality.
- Q. WHAT IF I AM NOT READY TO INVEST IN A UNIFIED SWITCH-DO I HAVE OTHER OPTIONS?**
- A. The benefit of the unified switch is that it provides immediate investment protection. Some businesses may not be ready today to deploy Gigabit Ethernet, wireless or Voice over IP, but there is a good chance they will in the next few years. Even if you don't decide to use the PoE capabilities or the wireless functionality, those features will be there, at no charge, when the time is right. Simply add the access point where wireless connectivity is needed, or plug in the IP phone when you start to deploy VoIP, and the device will be automatically recognized and powered. All this investment protection for the same, or a few dollars more, than you would pay for a traditional LAN switch. If you are still not convinced, then 3Com has a large selection of traditional LAN switches offering 10/100 or 10/100/1000 with or without PoE support. Please visit www.3com.com for more information.
- Q. WHAT IS THE WARRANTY ON THE 3COM UNIFIED GIGABIT WIRELESS POE SWITCH 24?**
- A. The switch comes with a three (3) year hardware warranty and a ninety (90) day software warranty. Advanced hardware replacement is provided in most regions of the globe for the duration of the warranty.

ORDERING INFORMATION

PRODUCT DESCRIPTION	3COM SKU
3Com Unified Gigabit Wireless PoE Switch 24	3CRUS2475
Supported Access Points	
3Com Wireless 7760 11a/b/g PoE Access Point	3CRWE776075
3Com Wireless 8760 Dual Radio 802.11a/b/g PoE Access Point	3CRWE876075

Visit www.3com.com for more information about 3Com secure converged network solutions.

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