

**A versatile, multilayer modular switching platform for mid-range Enterprise applications, delivering highly secure, resilient access to business resources.**

## OVERVIEW

The 3Com® Switch 7750 Family of modular LAN switches provides intelligent, multilayer switching and routing for enterprises and mid-market businesses, enabling end-to-end network connectivity with advanced traffic management. Providing unparalleled investment protection with high scalability and performance, advanced security and granular network control, the Switch 7750 Family delivers wirespeed Fast Ethernet and Gigabit Ethernet connectivity with 10-Gigabit Ethernet uplinks in a highly flexible and resilient modular platform.

The Switch 7750 Family is perfectly suited to networking environments requiring non-stop access to critical business applications. Three chassis models are available, providing a range of port densities and media flexibility:

- 3Com Switch 7758—8-slot chassis with two slots for switch fabrics (primary and redundant) and six slots supporting any combination of switching I/O modules, up to 292 10/100/1000 or 288 10/100 ports
- 3Com Switch 7757—7-slot chassis with one slot for the switch fabric and six slots supporting any combination of switching I/O modules, up to 292 10/100/1000 or 288 10/100 ports
- 3Com Switch 7754—4-slot chassis with one slot for the switch fabric and three slots supporting any combination of switching I/O modules, up to 148 10/100/1000 or 144 10/100 ports.

All chassis models share the same high-performance, scalable modular architecture—scaling up to 240 Gigabits per second (Gbps) system bandwidth and 179 Million packets per second (Mpps) forwarding performance—for maximum long term investment protection.



## KEY BENEFITS

### INTELLIGENT ENTERPRISE INFRASTRUCTURE

Enterprise network infrastructure is evolving dramatically, from the core to the edge of the network, and the 3Com Switch 7750 is designed to meet the greater demands being placed on the entire network system to deliver:

- Highly intelligent, non-stop transport of data and access to information resources
- Guaranteed quality of service (QoS) for mission critical business applications, including Voice over IP (VoIP), storage and video
- Comprehensive security for network access control, encryption and protection of corporate resources
- Unprecedented levels of management visibility and granular control
- An open, standards-based architecture to enable seamless growth and future investment without proprietary lock-ins

### RESILIENT ARCHITECTURE FOR BUSINESS CONTINUITY

Featuring a resilient and flexible modular architecture, the Switch 7750 Family enhances business continuity by ensuring availability of network resources and critical business applications—including data, voice and video. All critical system components including power supplies, cooling fans and switch fabrics are redundant\* and hot-swappable, minimizing the business impact in the unlikely event a component should fail.

Changes in network topology due to device or link failures can lead to disruption of service for critical business applications. Rapid recovery from such topology changes is ensured with features such as Multiple Spanning Tree Protocol (MSTP), Rapid Spanning Tree Protocol (RSTP), Open Shortest Path First (OSPF) routing and Virtual Router Redundancy Protocol (VRRP).

### APPLICATION CONVERGENCE: QOS AND POWER OVER ETHERNET

Real-time applications such as VoIP demand high QoS and differentiated service levels to function properly. Based on the same proven operating system as the flagship 3Com Switch 8800 Family, the 3Com Switch 7750 delivers robust QoS and advanced traffic management features to ensure critical applications are prioritized and serviced as the needs of the organization dictate.

Additionally, the Switch 7750 supports industry-standard IEEE 802.3af Power over Ethernet (PoE) to provide both electrical power and network connectivity to PoE-capable devices, such as IP telephones and wireless access points, making the Switch 7750 ideal for large-scale enterprise edge deployment.

PoE simplifies network deployment by eliminating the need for separate data and power infrastructures, significantly reducing installation and maintenance costs. PoE also provides greater flexibility for moves, adds and changes on the network. Powered network devices can be deployed or relocated anywhere an Ethernet connection is available without requiring a dedicated power outlet.

\* Redundant fabric available on Switch 7758 only.

## KEY BENEFITS (CONTINUED)

### ENTERPRISE-WIDE SECURITY

Security is paramount in today's enterprise and as dependency on information technology continues to rise, so does the need for highly secure IT systems and infrastructures. The 3Com Switch 7750 features advanced security capabilities, including user and device authentication, policy-based access controls, encrypted system management access and quarantine enforcement for containment of vulnerabilities and deliberate attacks.

The Switch 7750 ensures secure network access using standard IEEE 802.1X network login with RADIUS Authenticated Device Access (RADA). RADIUS support enables user authentication, while the switch is also able to authenticate attached devices (printers, for example) via their MAC address for an additional level of endpoint security. Port- and VLAN-based Access Control Lists (ACLs) and dynamic traffic filtering capabilities can be deployed to further control access to network resources.

Additional security measures—Secure Shell version 2 (SSH v2) and SNMP v3 with authentication and encryption of network management traffic—are enforced when accessing switch management utilities.

The Switch 7750 Family functions as an integral part of the 3Com Quarantine Protection solution to automate containment of security threats on the enterprise network. Quarantine Protection integrates the industry-leading TippingPoint™ Intrusion Prevention System with switch-based endpoint enforcement at the network edge.

### SCALABLE PERFORMANCE

With up to 240 Gbps of system bandwidth and wirespeed switching capacity, the Switch 7750 provides exceptional scalability for Enterprise distribution and edge environments and for core networks of mid-market businesses. Connectivity and media options can be tailored to each environment with a wide selection of switching modules, scaling up to 292 Gigabit ports or 288 Fast Ethernet ports in a single chassis. 10-Gigabit Ethernet uplink modules allow ultra-high-bandwidth links for inter-switch backbone connections. The flexible design of the Switch 7750 allows for any combination of switching modules to be used in a single system, allowing easy expansion of network capacity with a wide selection of standard interface types for twisted pair (copper) and fiber media.

A 96 Gbps switching fabric provides high-performance switching, routing and centralized management in the Switch 7750. In addition, individual switching I/O modules provide on-board local switching, maximizing system performance and application response times, for an aggregate Layer 2/3 switching capacity of up to 179 Mpps.

Hardware-based routing of multicast traffic enhances performance and reduces latency (delay) for multicast applications, enhancing performance for real-time applications like streaming audio and video.

Standards-based link aggregation (via IEEE 802.3ad) allows scalable, high-bandwidth interconnectivity between network devices, with the ability to aggregate multiple Gigabit links together as a single trunk. Link aggregation of Gigabit ports is supported across fabric modules within the Switch 7758 chassis (when configured with redundant fabrics) for enhanced network availability.

## KEY BENEFITS (CONTINUED)

### PRIORITIZATION AND TRAFFIC MANAGEMENT

Eight priority queues per port enable standard IEEE 802.1p Class of Service/Quality of Service (CoS/QoS). Protocol filtering and bandwidth rate limiting capabilities allow the Switch 7750 to enforce port-based controls for efficient use of network resources and prioritization of business-critical or time-sensitive applications, including Voice over IP.

For example, protocols associated with key business applications can receive prioritized, high-bandwidth service; while other protocols that may be associated with non-critical (or even undesirable) applications can receive lower priority and/or bandwidth resources, or be blocked completely.

### STANDARDS BASED INTEROPERABILITY AND INVESTMENT PROTECTION

Enterprises today rely on open standards-based technology solutions to enable interoperability among new and existing systems and to ensure that today's investments will continue to provide value well into the future without being locked-in to a particular vendor's products or technology.

3Com has designed the Switch 7750 with an open architecture, facilitating seamless growth and migration based on widely accepted international standards, free from costly lock-ins and the restrictions of proprietary approaches.

3Com's standards-based design philosophy—inherent in the Switch 7750 and all other 3Com products—provides investment protection as well as the flexibility to deploy best-in-class technology solutions which leverage industry standards.

### ENTERPRISE CLASS MANAGEMENT AND CONTROL

The Switch 7750 provides independent paths for data and management. A dedicated data channel provides high-speed data switching and packet forwarding, while a separate management channel provides control, monitoring, route learning and distribution.

Comprehensive management capabilities provide enterprise-wide visibility and control to IT staff for configuration, network monitoring and advanced troubleshooting.

Management features are accessible via an intuitive command line interface (CLI), as well as by SNMP, with hierarchical access controls and password protection for secure management access. Additional management security is provided through user authentication and data encryption capabilities of SNMP v3 and SSH v2, further helping prevent unauthorized access or snooping of management traffic.

## FEATURES

Highly flexible, resilient architecture for end-to-end enterprise deployment in the core, data center, distribution layer and network edge.

High-density multilayer switching for Fast Ethernet, Gigabit Ethernet and 10-Gigabit Ethernet.

Up to 288 Fast Ethernet or 292 Gigabit Ethernet ports per system.

10-Gigabit uplinks for ultra-high-speed backbone connectivity.

Up to 240 Gbps system bandwidth; up to 179 Mpps switching capacity.

Advanced traffic prioritization and routing of multicast traffic in hardware for convergent applications including VoIP, streaming audio and video.

Virtually non-stop operation with redundant power supplies, fans and switch fabrics\*, as well as hot-swappable switching I/O modules.

Robust network access control and enterprise-wide security via standards-based IEEE 802.1X, RADIUS Authenticated Device Access (RADA), and advanced Access Control Lists; authentication and encryption of management traffic via SSH v2 and SNMP v3.

Industry-standard PoE to power IP phones, wireless access points and other devices; reduces implementation and maintenance costs.

Unified management and administration with a common operating system and centralized control available via 3Com Enterprise Management Suite.

Granular QoS and traffic management for enhanced availability and performance of critical business applications.

Extensive L2/3/4 switching and routing capability, including advanced features like IS-IS<sup>‡</sup> and BGP-4<sup>‡</sup>, applicable in very large enterprises. IPX routing for enhanced support of legacy environments.

\* Redundant fabric available on Switch 7758 only.

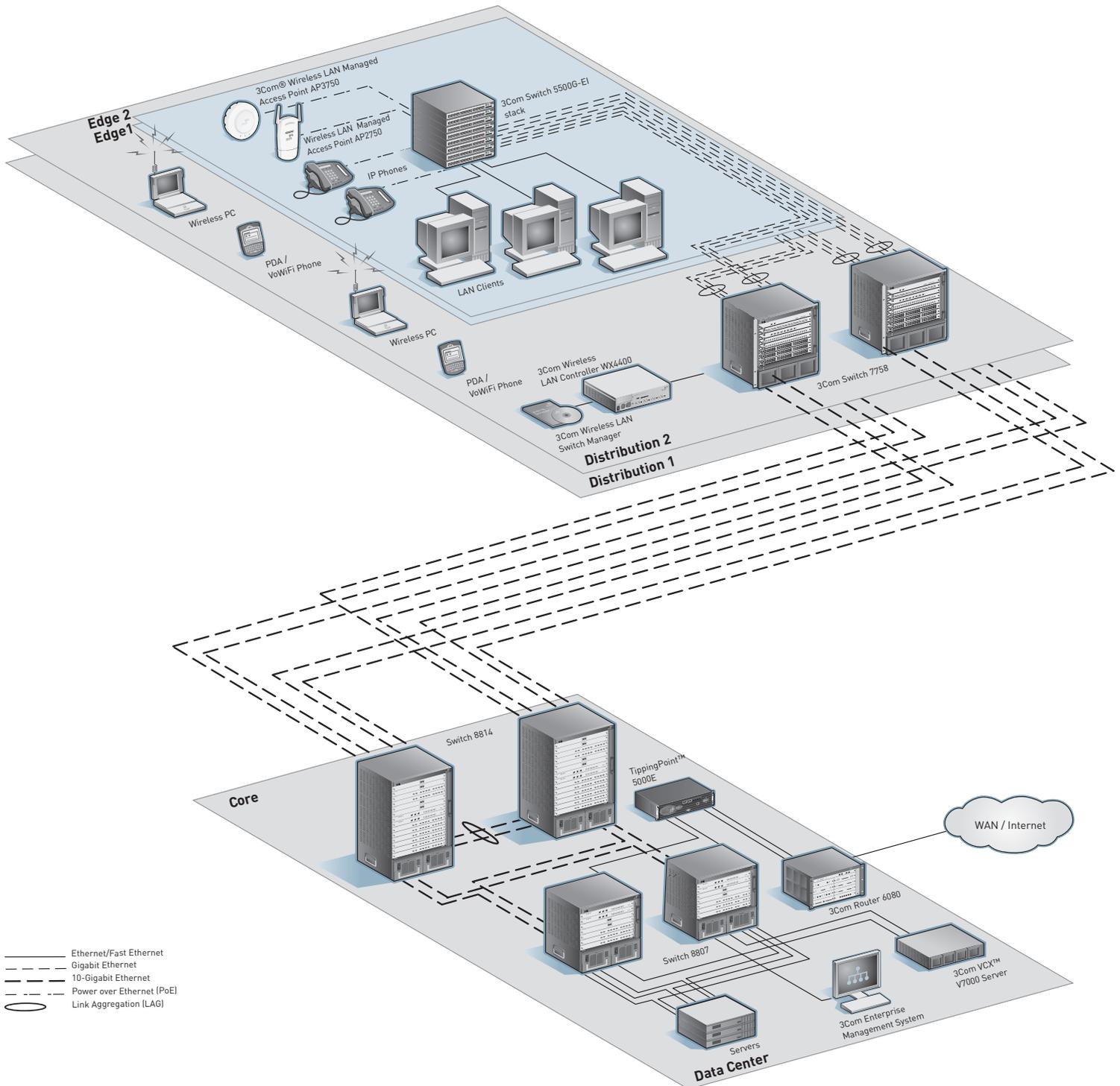
‡ Available in the 3Com Advanced Feature Software, at additional cost.

## AGGREGATE SYSTEM CAPACITIES

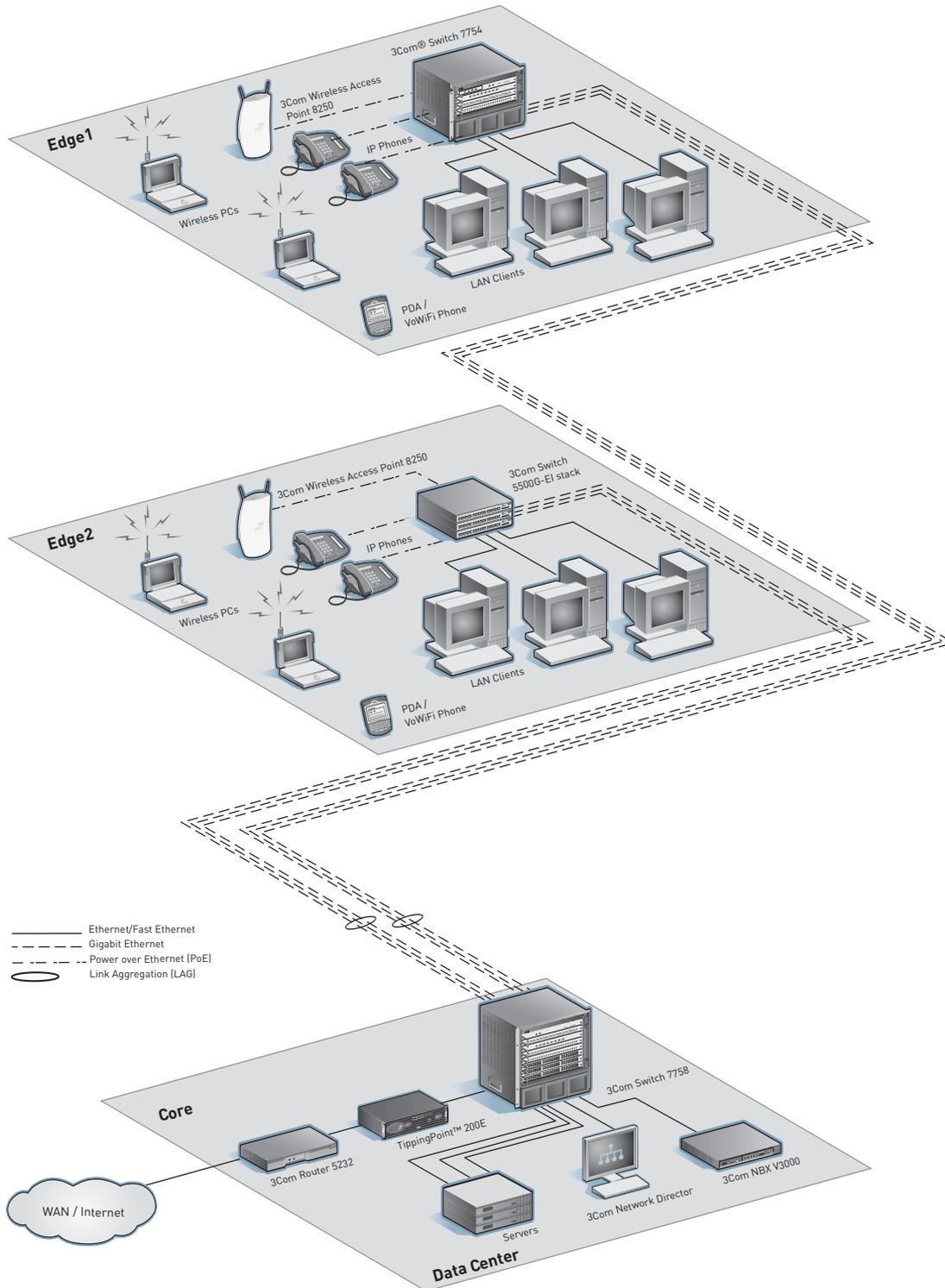
	Switch 7758	Switch 7757	Switch 7754
<b>Chassis slots</b>			
Available slots (switch fabric and I/O)	8	7	4
<b>Performance</b>			
Switching capacity	179 Mpps	179 Mpps	89 Mpps
Fabric bandwidth	240 Gbps	240 Gbps	120 Gbps
<b>Total port capacity</b>			
10-Gigabit Ethernet (XENPAK)	6	6	3
Gigabit Ethernet (10/100/1000)	292	292	148
Gigabit Ethernet PoE <sup>§</sup> (10/100/1000)	288	288	144
Gigabit Ethernet (SFP)	124	124	64
Fast Ethernet (10/100)	288	288	144
Fast Ethernet PoE <sup>§</sup> (10/100)	288	288	144
Fast Ethernet (100BASE-FX SFP)	288	288	144

<sup>§</sup> Power over Ethernet (PoE) using 48-port 10/100/1000 Ethernet module; requires optional PoE components to be installed

## SAMPLE CONFIGURATION: DISTRIBUTION/EDGE DEPLOYMENT OF SWITCH 7750 FAMILY IN ENTERPRISE CAMPUS NETWORK



## SAMPLE CONFIGURATION: CORE-TO-EDGE DEPLOYMENT OF SWITCH 7750 FAMILY IN MID-SIZE ENTERPRISE NETWORK



## SERVICE AND SUPPORT

3Com Global Services offers the resources and talents of a major corporation plus more than two decades of experience in resolving network challenges and delivering business benefits to enterprises around the world.

Global support with a personalized, local focus in the local language helps drive productivity and minimize expenses. Because 3Com understands both the technology and the business, we're the partner you need to remain strong and competitive.

### Suggested Service, Support and Training Offerings

Network Health Check	<p>An activity-auditing service focused on improving network performance and productivity</p> <p>Includes traffic monitoring, utilization analysis, problem identification, and asset deployment recommendations</p> <p>Extensive report provides blueprint for action</p>
Network Installation and Implementation Services	<p>Experts set up and configure equipment and integrate technologies to maximize functionality and minimize business disruption</p> <p>For large and complex sites, implementation services include personalized configuration, project management, extended testing and coaching on network administration</p>
Project Management	<p>Provides extra focus and resources that special projects demand</p> <p>3Com engineer(s) manage entire process from initial specifications to post-project review</p> <p>Using structured methodology, requirements are identified, projects planned and progress of implementation activities tracked</p>
3Com Guardian <sup>SM</sup> Maintenance Service	<p>This service provides comprehensive on-site support and includes advance hardware replacement, telephone technical support and software upgrades</p>
3Com Express <sup>SM</sup> Maintenance Service	<p>This service provides speedy access to 3Com shipment of advance hardware replacements, software upgrades and telephone support</p>
3Com University	<p>Self-paced and instructor-led technology and product courses, plus certification programs</p>

For additional information, please visit [www.3com.com/services](http://www.3com.com/services)

## SPECIFICATIONS

All information in this section is relevant to all current members of the 3Com Switch 7750 Family, unless stated otherwise.

### CAPACITIES AND PERFORMANCE

#### 3Com Switch 7758 8-slot:

2 switch fabric and 6 payload slots

Backplane: 96 Gbps

Max. system bandwidth: 240 Gbps (full duplex)

Max. aggregate system throughput: 179 Mpps

#### 3Com Switch 7757 7-slot:

1 switch fabric and 6 payload slots

Backplane: 96 Gbps

Max. system bandwidth: 240 Gbps (full duplex)

Max. aggregate system throughput: 179 Mpps

#### 3Com Switch 7754 4-slot:

1 switch fabric and 3 payload slots

Backplane: 48 Gbps

Max. system bandwidth: 120 Gbps (full duplex)

Max. aggregate system throughput: 89 Mpps

#### All models:

Layer 3: 1,024 IP interfaces, IP routing at 48 Mpps, 64k IP routing entries

### LAYER 2 SWITCHING

16K MAC addresses

5K static MAC addresses

Modules forwarding (delay <10µs)

9K jumbo frame support

4,096 VLANs (IEEE 802.1Q)

Port-based (IEEE 802.1Q) and protocol-based (IEEE 802.1v) VLANs

GARP VLAN Registration Protocol (GVRP)

IP v6 tunneling using protocol-based VLANs

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

Supports maximum of 64 link aggregation groups

Auto-negotiation of port speed and duplex

IEEE 802.3x full-duplex flow control

Back pressure flow control for half-duplex

Supports broadcast storm suppression

IEEE 802.1D Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1s Multiple Spanning Tree Protocol instances (MSTP)

Bridge Protocol Data Unit (BPDU) protection

### LAYER 3 SWITCHING

Hardware based routing

64K dynamic routes

5K static routes

8K dynamic/static Address Resolution Protocol (ARP) entries

1,024 IP interfaces

Routing Information Protocol (RIP), v1 and v2; supports Split Horizons

Open Shortest Path First (OSPF), v1 and v2; 50 areas

Equal Cost Multi-Path (ECMP) Routing

Border Gateway Protocol 4 (BGP4)<sup>†</sup>

Intra-Domain Intermediate System to Intermediate System (IS-IS)<sup>†</sup>

Hardware-based multicast routing for wirespeed performance

1K multicast routes

Multicast Source Discovery Protocol (MSDP)

Multicast rate limiting

Internet Group Management Protocol (IGMP) snooping on Layer 2 interfaces

IGMP v1 and v2

GARP Multicast Registration Protocol (GMRP)

Protocol Independent Multicast-Dense Mode (PIM-DM)

Protocol Independent Multicast-Sparse Mode (PIM-SM)

Multicast VLAN

Dynamic Host Configuration Protocol relay (DHCP relay)

DHCP client and server

TCP/IP protocol stack; ARP

Virtual Router Redundancy Protocol (VRRP)

### CONVERGENCE

8 hardware queues per port

Flow-based QoS profiles

Ingress and egress

Remarking of packets based on priority:

- Auto identification and classification of IP telephones
- Selectable prioritization
- Diffserv Code Point (DSCP)
- Type of Service (ToS)
- IEEE 802.1p Class of Service (CoS)
- IP precedence
- Local precedence: physical port, source/destination MAC address, VLAN information, Ethernet type, Layer 3 protocol, source/destination IP address, DSCP, datagram type, IP Layer 4 protocol, IP Layer 4 ports

Flow-based bandwidth management

Flows identified through Access Control Lists (ACLs)

Minimum and maximum thresholds: 64kbit/s increments, 100 traffic classes per port

Queuing algorithms

Strict Priority Queuing (SPQ)

Weighted Round Robin (WRR) provided through bandwidth management

IEEE 802.3af Power over Ethernet standards-compliant

Available 10/100 and 10/100/1000 48-port PoE switch modules

PoE modules require external PoE Power Rack:

- One 2,500W PSU standard with Power Rack
- Each 2,500W PSU supports up to 155 PoE ports at full standard 15.4W per port
- Add one or two additional PSUs for added PoE and N+1 PoE redundancy

### SECURITY

IEEE 802.1X Network login user authentication

Local authentication and

RADIUS/AAA authentication

RADIUS/TACACS+ session accounting

RADIUS Authenticated Device Access (RADA): authenticate devices based on MAC address against RADIUS server or local database; assign VLAN ID and ACL through RADIUS

DHCP snooping

Wirespeed packet filtering in hardware

Supports a maximum of 1,536 ACL rules

ACLs filter at Layers 2, 3 and 4:

- Physical port
- Source/destination MAC address
- VLAN information
- Ethernet type
- Layer 3 protocol
- Source/destination IP address
- DSCP
- Datagram type
- IP Layer 4 protocol
- IP Layer 4 ports

Anti DoS (Denial of Service) attack via BPDU route guard, DHCP server address check and SYN packet attack protection

Guest VLAN to quarantine unauthorized users or users that fail to re-authenticate via RADIUS

Multiple authentication server realm definitions

Spanning Tree root bridge protection

SYN packet attack protection

Telnet protection

Switch protocol security: MD5 ciphertext authentication and clear-text authentication for OSPF v2 and RIP v2 packets and SNMP v3 traffic

IEEE 802.1X user authentication of switch management on switch Telnet sessions

Hierarchical management and password protection for management interface

SNMP v3 encryption<sup>‡</sup>

SSH v2 management session encryption<sup>†</sup>

<sup>†</sup> Available in the 3Com Advanced Feature Software, at additional cost.

<sup>‡</sup> SNMP v3 and SSH v2 encryption features are available in the Basic Software with Encryption and Advanced Feature Software versions only.

## SPECIFICATIONS (CONTINUED)

### MANAGEMENT

Command Line Interface (CLI) configuration mode  
 Configuration via the control console port  
 Local/remote configuration via Telnet  
 Remote configuration via modem dial-up  
 System configuration with SNMP v1, 2 and 3<sup>†</sup>  
 Secure Shell Version 2 (SSH v2) for management access<sup>†</sup>  
 Comprehensive statistics, including ACL/QoS and IP interface  
 Remote Monitoring (RMON) groups statistics, history, alarm and events  
 System log  
 Syslog  
 Detailed alarm and debug information  
 Front panel indicators for port and unit status information  
 Hierarchical alarms; alarm generation and filtering  
 Supports ping and traceroute  
 Configuration file for backup and restore, stored in non-volatile memory; multiple configuration files available  
 Supports multiple software images and bank swap, stored in non-volatile memory  
 Backup and restore of software images  
 Network Time Protocol (NTP)  
 Device Link Detection Protocol (DLDP)  
 IGMP proxy  
 DHCP server  
 DNS client  
 Port mirroring  
 Remote port mirroring  
 Flow-based bandwidth management, with flows identified through Access Control Lists (ACLs)  
 Minimum and maximum thresholds: 64kbit/s increments, 128 traffic classes per port, 512 flows per class  
 Random Early Detect/Discard (RED) queue handling  
 Queuing algorithms  
 Strict priority queuing  
 WRR (Weighted Round Robin) provided through bandwidth management  
 DHCP Relay and UDP Helper  
 System file transfer mechanisms: Xmodem, File Transfer Protocol (FTP), Trivial File Transfer Protocol (TFTP), Secure File Transfer Protocol (SFTP), Secure Trivial File Transfer Protocol (STFTP)  
 Connectivity: 10BASE-T (RJ-45) Ethernet, RS-232 control port  
 Port loopback detection  
 Cable diagnostic test

### 3Com Management Applications:

- 3Com Enterprise Management Suite for flexible, extensible management in advanced enterprise IT environments
- 3Com Network Director for comprehensive, turn-key network management for the enterprise
- 3Com Network Supervisor for basic, turn-key network management for mid-market businesses

### AVAILABLE SWITCH FABRICS

96 Gbps Switch Fabric  
 Chassis model compatibility: Switch 7758, 7757 and 7754 and Switch 7708R and Switch 7700 7-slot and 4-slot legacy models  
 Connections: 4 SFP Gigabit ports (SFPs sold separately)

### CONNECTIVITY

Mix and match in available payload slots:  
 48-port 10BASE-T/100BASE-TX  
 48-port 10BASE-T/100BASE-TX PoE  
 20-port 10/100/1000BASE-T  
 48-port 10/100/1000BASE-T  
 48-port 10/100/1000BASE-T PoE  
 12-Port 10/100/1000BASE-T & 4-Port 1000BASE-X (SFP)  
 4-Port 10/100/1000BASE-T & 12-Port 1000BASE-X (SFP)  
 20-port 1000BASE-X (SFP)  
 48-Port 100BASE-FX (SFP)  
 1-port 10GBASE-X (XENPAK)

### DIMENSIONS

**Switch 7758 8-slot:**  
 Height: 51.9 cm (20.4 in); width: 43.6 cm (17.2 in); depth: 48.0 cm (18.9 in)  
 Weight (fully loaded chassis): 80 kg (176 lbs)

**Switch 7757 7-slot:**  
 Height: 48.6 cm (19.1 in); width: 43.6 cm (17.2 in); depth: 48.0 cm (18.9 in)  
 Weight (fully loaded chassis): 70 kg (154 lbs)

**Switch 7754 4-slot:**  
 Height: 35.2 cm (13.8 in); width: 43.6 cm (17.2 in); depth: 48.0 cm (18.9 in)  
 Weight (fully loaded chassis): 50 kg (110 lbs)

### SWITCH POWER SUPPLY

550 W AC Power Supply; dual power input connections  
 Input voltage: 100-240 VAC autoranging  
 Operating frequency: 47-63 Hz  
 Maximum current: 15A at 110 VAC; 7A at 200 VAC  
 Maximum output power: 460 W

### ENVIRONMENTAL

Operating temperature: 0° to 40°C (32° to 104°F)  
 Operating humidity: 5% to 85% non-condensing  
 Storage temperature: -40° to 70°C (-40° to 158°F)  
 Storage humidity: 10% to 90% non-condensing  
 Standard: EN 60068 (IEC 68) compliant

### MTBF

Switch 7750 96 Gbps Switch Fabric (3C16886): 46 years (405,000 hours)  
 Switch 7750/7700 20-port 100BASE-X SFP (3C16862A): 68 years (594,000 hours)  
 Switch 7750/7700 20-port 10/100/1000BASE-T (3C16863A): 59 years (519,000 hours)  
 Switch 7750/7700 1-port 10GBASE-X XENPAK (3C16875A): 61 years (539,000 hours)  
 Switch 7750/7700 48-port 10/100/1000BASE-T (3C16888): 48 years (418,000 hours)  
 Switch 7750/7700 48-port 10/100BASE-TX (3C16889): 48 years (421,000 hours)  
 Switch 7750 48-port 10/100/1000BASE-T PoE (3C16890): 39 years (342,000 hours)  
 Switch 7750 48-port 10/100BASE-TX PoE (3C16891): 44 years (389,000 hours)  
 Switch 7750/7700 48-port 100BASE-X SFP (3C168915): 74 years (653,000 hours)  
 Switch 7750/7700 4-port 10/100/1000BASE-T & 12-port 1000BASE-X SFP (3C168916): 72 years (628,000 hours)  
 Switch 7750/7700 12-port 10/100/1000BASE-T & 4-port 1000BASE-X SFP (3C168917): 66 years (576,000 hours)  
 Switch 7750 External PoE Power Rack (3C16883): 18 years (158,000 hours)  
 Switch 7750/8800 PoE Power Supply Unit (3C16884): 43 years (375,000 hours)

<sup>†</sup> SNMP v3 and SSH v2 encryption features are available in the Basic Software with Encryption and Advanced Feature Software versions only.

## SPECIFICATIONS (CONTINUED)

### INDUSTRY STANDARDS SUPPORTED

#### Ethernet Protocols

IEEE 802.1D (STP)  
 IEEE 802.1p (CoS)  
 IEEE 802.1Q (VLANs)  
 IEEE 802.1s (MSTP)  
 IEEE 802.1v (VLANs)  
 IEEE 802.1w (RSTP)  
 IEEE 802.1X (Security)  
 IEEE 802.3ab (1000BASE-T)  
 IEEE 802.3ad (LACP)  
 IEEE 802.3ae (10G Ethernet)  
 IEEE 802.3af (Power over Ethernet)  
 IEEE 802.3i (10BASE-T)  
 IEEE 802.3u (100BASE-TX/-FX)  
 IEEE 802.3x (Flow Control)  
 IEEE 802.3z (1000BASE-X)

#### Administration Protocols

RFC 768 (UDP)  
 RFC 783 (TFTP)  
 RFC 791 (IP)  
 RFC 792 (ICMP)  
 RFC 793 (TCP)  
 RFC 826 (ARP)  
 RFC 959 (FTP)  
 RFC 1058 (RIP v1)  
 RFC 1112 (IGMP v1)  
 RFC 1518, 1519 (CIDR)  
 RFC 1587 (OSPF NSSA Option)  
 RFC 1723 (RIP v2)  
 RFC 1765 (OSPF Database Overflow)  
 RFC 1812 (IP v4)  
 RFC 2131 (DHCP)  
 RFC 2132 (DHCP and BOOTP Extension)  
 RFC 2138 (RADIUS Authentication)  
 RFC 2139 (RADIUS Accounting)  
 RFC 2236 (IGMP v2)  
 RFC 2267 (Network Ingress Filtering)  
 RFC 2328 (OSPF v2)  
 RFC 2338 (VRRP)  
 RFC 2362 (PIM-SM)  
 RFC 2370 (OSPF Opaque LSA Option)  
 RFC 2474 (Diffserv)  
 RFC 2622 (Routing Policy)  
 RFC 2819 (RMON)

#### Management, including MIBs Supported

RFC 1155 (Structure and Management Information (SMI v1))  
 RFC 1157 (SNMP v1/v2c)  
 RFC 1213 (MIB II)

RFC 1213, 1573 (MIB II)  
 RFC 1493 (Bridge MIB)  
 RFC 1573 (Private IF MIB)  
 RFC 1724 (RIP Version 2 MIB Extension)  
 RFC 1850 (OSPF Version 2 MIB Extension)  
 RFC 1901-1907 (SNMP v2c, SMI v2 and Revised MIB-II)  
 RFC 2233 (Interfaces MIB)  
 RFC 2271 (FrameWork)  
 RFC 2572-2575 (SNMP v3)<sup>†</sup>  
 RFC 2578-2580 (SMI v2)  
 RFC 2618 (RADIUS Authentication Client MIB)  
 RFC 2620 (RADIUS Accounting Client MIB)  
 RFC 2665 (Pause Control)  
 RFC 2668 (IEEE 802.3 MAU MIB)  
 RFC 2674 (VLAN MIB Extension)  
 RFC 2787 (VRRP MIB)

### EMISSIONS/AGENCY APPROVALS

CISPR 22 Class A  
 FCC Part 15 Class A  
 EN 55022 Class A  
 ICES-003 Class A  
 VCCI Class A  
 Korean Class A  
 CNS 13438 Class A  
 AS/NZS 3548 Class A  
 EN 61000-3-2  
 EN 61000-3-3

### IMMUNITY

EN 55024: 1998  
 EN 61000-4-2  
 EN 61000-4-3  
 EN 61000-4-4  
 EN 61000-4-5  
 EN 61000-4-6  
 EN 61000-4-11

### SAFETY AGENCY CERTIFICATIONS

UL 60950 3rd ed.  
 IEC 60950: 1999, corr. Feb. 2000; all national deviations  
 EN 60950: 2000, ZB and ZC deviations  
 CSA 22.2 No. 950 3rd ed., 1995  
 NOM-019 SCFI, Mexico; AS/NZS 60950:2000, Australia; Russian GOST safety approval

### SYSTEM SOFTWARE OPTIONS

#### Basic Software

Standard software version for Switch 7750, pre-loaded on Switch Fabric

#### Basic Software with Encryption

Includes all features of the Basic Software plus SNMP v3 and SSH v2 encryption

Available as a free download:  
[www.3com.com/software\\_7750](http://www.3com.com/software_7750)

#### Advanced Feature Software

Includes all features of the Basic Software with Encryption plus:

- BGP4 (WAN routing protocol)
- IS-IS (Large-scale WAN routing protocol)

Ordered separately

### WARRANTY

Limited Hardware Warranty for 1 year  
 Limited Software Warranty for 90 days  
 90 days of telephone technical support  
 Refer to [www.3com.com/warranty](http://www.3com.com/warranty) for details.

<sup>†</sup> SNMP v3 and SSH v2 encryption features are available in the Basic Software with Encryption and Advanced Feature Software versions only.

## ORDERING INFORMATION

### PRODUCT DESCRIPTION

### 3COM SKU

#### Chassis Kits

3Com Switch 7758 8-Slot Chassis Kit 3C16896<sup>§</sup>  
*(consisting of PoE-ready chassis, two power supplies and fan assembly; switch fabric ordered separately)*

3Com Switch 7757 7-Slot Chassis Kit 3C16895<sup>§</sup>  
*(consisting of PoE-ready chassis, two power supplies and fan assembly; switch fabric ordered separately)*

3Com Switch 7754 4-Slot Chassis Kit 3C16894<sup>§</sup>  
*(consisting of PoE-ready chassis, one power supply and fan assembly; switch fabric ordered separately)*

#### Switch Fabric

3Com Switch 7750 96 Gbps Switch Fabric 3C16886

#### Modules

3Com Switch 7750/7700 20-port 1000BASE-X (SFP) 3C16862A

3Com Switch 7750/7700 20-port 10/100/1000BASE-T 3C16863A

3Com Switch 7750/7700 1-port 10GBASE-X (XENPAK) 3C16875A

3Com Switch 7750/7700 48-port 10/100/1000BASE-T 3C16888

3Com Switch 7750/7700 48-port 10/100BASE-TX 3C16889

3Com Switch 7750 48-port 10/100/1000BASE-T PoE<sup>‡</sup> 3C16890

3Com Switch 7750 48-port 10/100BASE-TX PoE<sup>‡</sup> 3C16891

3Com Switch 7750/7700 48-Port 100BASE-FX SFP 3C168915

3Com Switch 7750/7700 12-Port 10/100/1000BASE-T & 4-Port 1000BASE-X SFP 3C168916

3Com Switch 7750/7700 4-Port 10/100/1000BASE-T & 12-Port 1000BASE-X SFP 3C168917

#### Power over Ethernet (PoE) Components

3Com Switch 7750 External PoE Power Rack 3C16883<sup>§</sup>

3Com Switch 7750/8800 PoE Power Supply Unit 3C16884

#### Software

3Com Switch 7750 Advanced Feature Software 3CR1686593-V3.2  
*(for use with 96 Gbps Switch Fabric, 3C16886)*

#### Transceivers

3Com 100BASE-FX SFP 3CSFP81

3Com 1000BASE-SX SFP 3CSFP91

3Com 1000BASE-LX SFP 3CSFP92

3Com 1000BASE-T SFP 3CSFP93

3Com 1000BASE-LH70 (70km) SFP 3CSFP97

3Com 10GBASE-LR XENPAK 3CXENPAK92

3Com 10GBASE-CX4 XENPAK 3CXENPAK95

3Com 10GBASE-ER XENPAK 3CXENPAK96

#### Spare Components

3Com Switch 77xx Family AC Power Supply 3C16854

3Com Switch 7758 and Switch 7708R 8-Slot Fan Assembly 3C16855

3Com Switch 7757 and Switch 7700 7-Slot Fan Assembly 3C16856

3Com Switch 7754 and Switch 7700 4-Slot Fan Assembly 3C16871

#### 3Com Global Services

3Com Network Health Check, Installation Services,  
 and Express Maintenance [www.3com.com/services\\_quote](http://www.3com.com/services_quote)

3Com University Courses [www.3com.com/3com](http://www.3com.com/3com)

<sup>§</sup> Country-specific code must be used when ordering.

<sup>‡</sup> Not for use in legacy models Switch 7708R or Switch 7700 7-slot and 4-slot chassis.

Visit [www.3com.com](http://www.3com.com) for more information about 3Com secure converged network solutions.

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