



DATA SHEET

3Com® Switch 4050 and Switch 4060

Key Benefits

XRN Technology

3Com XRN™ (eXpandable Resilient Networking) technology allows implementation of high availability configurations using two interconnected Switch 4050s or Switch 4060s, scaling the backbone to 48 wirespeed Gigabit Layer 3 switching ports.

Performance

3Com's custom ASIC architecture delivers 56 Gbps of multilayer switching capacity, provides wirespeed performance across all ports, with a forwarding rate of more than 40 Mpps, minimizing network congestion.

Reliable and Serviceable Hardware

A durable, 2RU metal chassis offers high availability hardware features such as redundant, load sharing and hot-swappable power supplies, in addition to hot-swappable fan trays and GBIC transceivers.

High Availability Features

High availability software and management features, including Link Aggregation, Resilient Links, Spanning Tree and Rapid Spanning Tree (802.1w), seven groups of RMON, and email alerts, facilitate highly available network designs for the core backbone.

Advanced Network Control

Advanced Layer 2 and Layer 3 functionality such as multicast filtering, virtual LANs, and multilayer traffic classification and prioritization improve traffic control across the network.

Layer 3 Switching

Layer 3 switching capabilities such as support for IP unicast routing using static routes, RIP/RIPv2, CIDR, and UDP Helper, enhance performance, provide network control and security, and enable logical network segmentation.

Advanced Security Capabilities

Security features such as Radius client support and Routed Access Control Lists ensure authorized user access to network resources. Application Filtering enables the switch to identify and discard unauthorized applications from consuming network bandwidth.

Powerful Management

3Com® Network Supervisor (trial copy included) discovers, maps, monitors, and issues alerts for easy network administration. An intuitive interface eases network-wide setup of switch traffic prioritization. The 3Com Network Supervisor Advanced Package (separately sold) provides advanced configuration capabilities such as bulk software upgrades.

Webcache Support

Web traffic can be automatically redirected to a 3Com SuperStack® 3 Webcache, improving web performance and easing network administration.

Flexibility

A combination of integrated 1000BASE-SX, 10/100/1000 and GBIC ports supports a variety of cabling plants and network designs. An optional expansion slot accommodates a 4-port Gigabit module for even greater flexibility.

High Availability Without Compromise

High availability is one of the key requirements for connectivity in the core backbone of enterprise networks. The 3Com Switch 4050 and Switch 4060 deliver this capability through a combination of hardware and software features that provide redundancy, reliability, serviceability, and high network-level availability without compromising performance or functionality.

The Switch 4050 and Switch 4060 support two redundant, load sharing and hot-swappable power supplies in addition to hot-swappable fan trays and GBIC transceivers. Network-level availability features such as Link Aggregation and Rapid Spanning Tree enable resilient data paths across the network for even greater fault tolerance.

Advanced Multilayer Switching Functionality

3Com's Gigabit Multilayer Switching software, supported by the 3Com Switch 4050 and Switch 4060, provide feature rich Layer 2 functionality, Layer 3 switching for IP networks, and enhanced QoS services.

For more efficient use of Internet bandwidth, the 3Com Switch 4050 and Switch 4060 enable automatic redirection of web traffic to 3Com SuperStack 3 Webcache appliances, enhancing overall web performance.

Advanced Layer 2 features such as VLAN tagging, Multicast Filtering, Link Aggregation, Spanning Tree, Rapid Spanning Tree (802.1w), and support for seven groups of RMON provide a rich feature set for demanding Gigabit backbones.

The Switch 4050 and Switch 4060 provide enhanced device management functionality through support for BootP/DHCP clients, seven groups of RMON, and RMON event notification via an integrated SMTP client.

The 3Com Switch 4050 and Switch 4060 support four priority queues per port, Weighted Round Robin queue scheduling, traffic classification and prioritization based on Layer 2 (physical port, 802.1p, Ethertype), Layer 3 (DSCP, IP host address and IP subnet) and Layer 4 (TCP/UDP) information. Priority remarking for DSCP and application filtering is also available for enhanced traffic control across the backbone.

XRN Technology

Companies no longer have to spend a fortune or double their IT staff to ensure that their essential business systems are continuously available to users who need them. eXpandable Resilient Networking (XRN) technology from 3Com is a new LAN core technology allowing network managers to build affordable network cores with exceptional performance and flexibility.

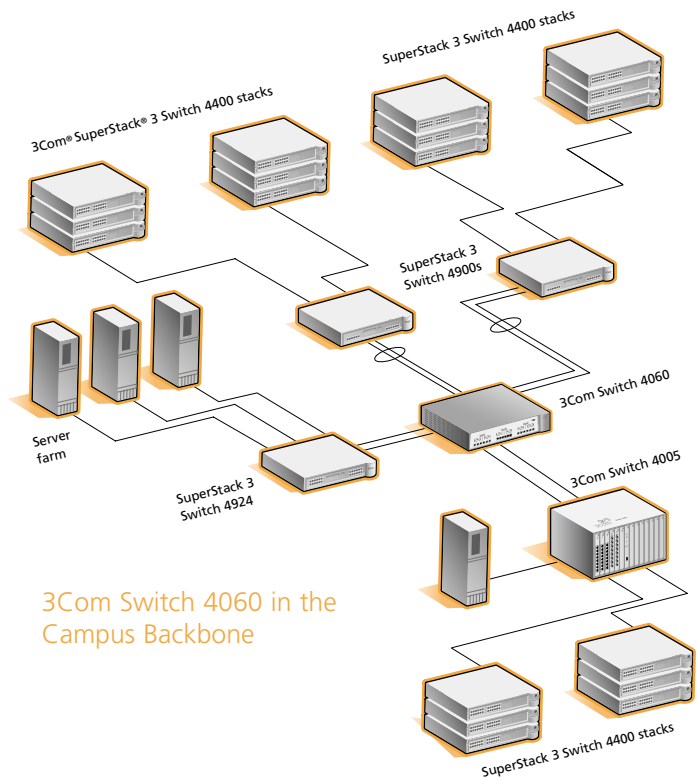
These switches also support Layer 3 switching for IP networks, enabling a wide array of services such as unicast IP routing supporting static routes, RIP and RIPv2, IP Multinetting, Classless Interdomain Routing (CIDR) and UDP Helper. Routed Access Control Lists based on IP address information can also be used to provide enhanced control and security across a Layer 3 switching implementation.

With XRN technology, multiple interconnected Gigabit switches behave as a single distributed switching fabric that grows with the network, without the physical limitations of a centralized core device.

XRN technology, enabled via the XRN Interconnect Kit, is supported on the 3Com Switch 4050 and Switch 4060, and the SuperStack 3 Switch 4900 family.

"3Com's enterprise networking approach accommodates both the new XRN technology and traditional chassis LAN core switches, so customers have a choice and can customize their solutions to best meet their networking requirements at a lower total cost of ownership."

Zeus Kerravala, research director, Yankee Group



High-Performance Switching and Flexibility for the Backbone

The 3Com Switch 4050 and Switch 4060, based on a 3Com-developed ASIC architecture, deliver 56 Gbps multilayer switching capacity for bandwidth-intensive core backbones and demanding enterprise applications. Each switch delivers non-blocking Layer 2 and Layer 3 switching across all ports, forwarding at speeds in excess of 40 Mpps.

Many Gigabit backbones require multimode and single mode fiber for connectivity to distributed wiring closets or buildings, and copper cabling for high bandwidth connections to servers and hosts in the data center.

The 3Com Switch 4050 and Switch 4060 deliver integrated media flexibility by providing different combinations of 1000BASE-SX and 10/100/1000 ports, and six GBIC ports (normally used for campus backbone connectivity).

In addition, using link aggregation, these switches can be connected to an external server farm aggregation device such as the 3Com SuperStack 3 Switch 4924. An optional expansion slot accommodates a 4-port Gigabit module for even greater flexibility.

Specifications

All information in this section is relevant to both the 3Com Switch 4050 and Switch 4060 unless stated otherwise.

Connectors

3Com Switch 4050:
12 autosensing 10/100/1000 ports, 6 fixed 1000BASE-SX ports (MT-RJ), 6 GBIC ports accommodating 1000BASE-SX, 1000BASE-LX GBICs or 1000BASE-LH70 GBICs

1 module slot accommodating SuperStack 3 Switch 4900 family expansion modules or XRN™ Interconnect

3Com Switch 4060:
6 autosensing 10/100/1000 ports, 12 fixed 1000BASE-SX ports (MT-RJ), 6 GBIC ports accommodating 1000BASE-SX, 1000BASE-LX GBICs or 1000BASE-LH70 GBICs

1 module slot accommodating SuperStack 3 Switch 4900 family expansion modules or XRN™ Interconnect

Dimensions

Height: 8.3 cm (3.5 in)
Width: 44 cm (17.3 in)
Depth: 36.3 cm (14.3 in)
Weight: 8.95 kg (19.7 lb)

Performance

41.7 million packets per second

Reliability

MTBF @ 25°C: 365,000 hours

Environmental Requirements

Operating temperature: 0° to 40°C (32° to 104°F)

Storage Temperature: -40° to +70°C (-40° to +158°F)

Operating Humidity: 10% to 95% relative humidity non-condensing

Standards: EN60068 (IEC68)

Safety Agency Certifications

UL60950, EN60950, CSA22.2 No. 60950, IEC 60950, IEC 825-1, EN 60825-1

Emissions

EN55022 Class A, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, AS/NZS 3548 Class A, CNS 13438 Class A, EN61000-3-2

Immunity: EN55024

Heat Dissipation:
210 W maximum (717 BTU/hr maximum)

Power Supply

AC Line Frequency 50/60 Hz
Input Voltage Options 90-240 VAC
Current Rating 3.5A maximum

Switching Features/Functionality

802.1D
802.1Q VLAN Support
IGMP Snooping
Link Aggregation

SNMP Standards

SNMP Protocol (RFC 1157)
MIB-II (RFC 1213)
Bridge MIB (RFC 1493)
RMON MIB II (RFC2021)
Remote Monitoring MIB (RFC 1757)

Interface MIB (RFC 2233)

MAU MIB (RFC 2239)

IP Forwarding Table MIB (RFC 1354)

Ethernet MIB (RFC 1643)

RIP v2 MIB (RFC 1724)

IP Forwarding Table (RFC2096)

Administration

UDP (RFC 768)
IP (RFC 791)
ICMP (RFC 792)
TCP (RFC 793)
ARP (RFC 826)
TFTP (RFC 783)
TELNET (RFC 854)
BOOTP/DHCP (RFC 1542)
HTTP (RFC 2068)

Routing Protocols

RFC 1058 RIP
RFC 1519 CIDR
RFC 1723 RIP v2
RFC 2131 BootP/DHCP Relay

Hardware Warranty

Limited Warranty for one year. Includes fan and power supply. See www.3com.com/warranty for details.

Management

3Com Network Supervisor (trial copy provided on accompanying CD)
Web interface
Command line interface management
SNMP compatibility

Ordering Information

3Com Switch 4050	3C17708
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3Com Switch 4060	3C17709
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Optional Modules and Accessories

3Com 200W AC Power Supply	3C17718
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3Com Spare Fan Tray	3C17717
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3Com SuperStack 3 Switch 4900 1000BASE-SX Module	3C17710
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3Com SuperStack 3 Switch 4900 4-port 1000BASE-T Module	3C17711
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3Com SuperStack 3 Switch 4900 4-port 1000BASE-LX module	3C17712
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3Com SuperStack 3 Switch 4900 4-Port GBIC Module	3C17714
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Optional Modules and Accessories, continued

3Com 1000BASE-SX GBIC	3CGBIC91
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3Com 1000BASE-LX GBIC	3CGBIC92
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3Com 1000BASE-LH70 GBIC (up to 70km)	3CGBIC97
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3Com XRN Interconnect Kit	3C17715
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3Com 5m XRN Interconnect Cable	3C17722
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Optional Network Management Packages

3Com Network Supervisor Advanced Package	3C15201
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3Com Integration Kit for HP OpenView	3C15300
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To learn more about 3Com solutions, visit www.3com.com. 3Com Corporation is publicly traded on Nasdaq under the symbol COMS.

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