ED-6064 Director

Continuous Access

to Critical

Data Across

the Enterprise

McDATA's ED-6064 Director provides the availability, manageability, scalability and performance companies need to build powerful, flexible storage area networks (SANs) and consolidate data access. A SAN with a McDATA ED-6064 Director at the backbone keeps pace with exponential storage growth and can evolve to meet even unexpected business opportunities. The McDATA ED-6064 Director:

- Ensures business continuance through 99.999 percent availability
- Maximizes system administrator resources with centralized management
- Delivers consistently high performance
- Consolidates storage to reduce costs and promote information sharing
- Connects to more servers at greater distances

ED-6064 Directors are easier to deploy, easier to manage and offer higher availability than any other switching device available.

The Highest Availability

With downtime potentially costing companies millions of dollars per hour, information technology managers can't afford to base their information backbone on anything less than the most stable and robust switching devices. McDATA ED-6064 Directors ensure data is continuously online with the highest level of availability on the market — 99.999 percent. A SAN built with the ED-6064 Director is a highly available centralization point for connecting all the devices in a SAN. With redundancy of all major components, automatic failover of active components, and call home alerts, the self-healing ED-6064 Director provides bulletproof access to mission-critical data.

Every McDATA solution offers these important advantages:

- Compatibility proven in our Systems Integration Lab
- Education and training built on experience
- Proven methodology for building scalable solutions
- Complete family of products — from enterprise to edge
- Collaborative partnerships with leading companies

Cost of Interswitch Links

Although low port-count switches are cost-effective for small fabrics, once ports grow beyond 64 the added cost of ISLs grows exponentially.

Cost

— Switches
— Directors

Cost of
Interswitch Links

Number of User Ports
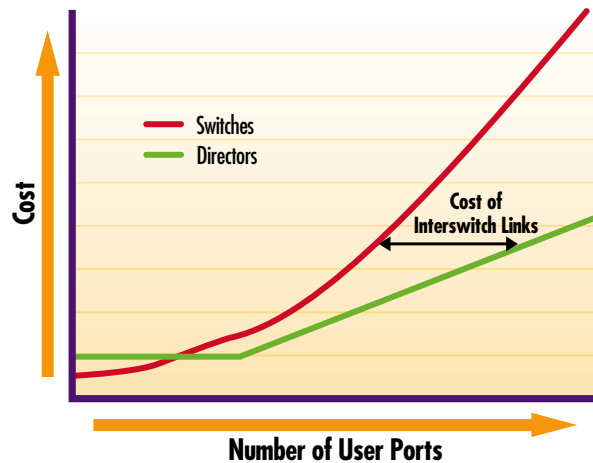
Centralized Management

McDATA's Enterprise Fabric Connectivity Manager lets information technology managers accelerate trouble shooting and swiftly resolve problems.

Manage Across the Enterprise

McDATA's Enterprise Fabric Connectivity (EFC) Manager software simplifies setup, configuration and control of a SAN — requiring fewer resources and lowering management costs. With system management costs running five to seven times the cost of storage, the EFC manager lets companies get the most out of administrative resources.

With remotely accessible centralized management, IT departments can manage a single switch or thousands of ports in an enterprise SAN. EFC Manager seamlessly integrates into framework applications to expand administrator's SAN visibility. In addition, EFC Manager supports the ED-6064 Director's high-availability characteristics by communicating network errors before they become a problem that could threaten SAN stability.

Performance Without Compromise

When data cannot be instantly retrieved, companies miss opportunities and waste resources. McDATA ED-6064 Directors deliver unwavering performance and protection against disruption, enabling companies to fully exploit one of their greatest assets — data. Unlike backbones built with clusters of fabric switches, which force data through too many performance-draining interswitch links, McDATA ED-6064 Directors can easily scale to meet any business demand. The ED-6064 Director is the only Fiber Channel Director with the ability to support up to 10-gigabyte data transfer rates with a simple upgrade.

Courtesy of

Scalability

McDATA's ED-6064 Director offers the highest port density available, making it the largest, most efficient SAN building block on the market. Start with 32 to 64 non-blocking ports and easily expand your SAN on the fly as business grows. Distances of up to 100 km allow connectivity to remote campus operations.

McDATA's second-generation architecture seamlessly integrates with McDATA's family of switching products and with legacy competitive networking devices. No matter where a company has started or is starting their SAN, the ED-6064 Director provides an ideal foundation for growth.

Open Storage Networking Flexibility

The ED-6064 Director supports Fibre Connection (FICON) and open system Fibre Channel products, as well as servers and mainframes. Users can combine mainframe, UNIX and NT storage needs into one infrastructure. A McDATA ED-6064 Director is the logical choice for customers who need open storage area networks in their computing environment.

Total SAN Solutions

McDATA offers more than just point products. Our family of switch products includes Directors and department and edge devices, and is backed by the company's experience in building enterprise-to-edge solutions.

Interoperability is more than defining and building products to industry standards. To McDATA, it is the complete testing of solutions in real-world installations in the company's multi-million dollar Systems Integration Lab. This includes interoperability testing with the industry's leading servers, storage and storage network components.

McDATA thoroughly tests products long before they are approved for a production environment — reducing risk and time-to-installation while increasing the success of SAN implementations.

SAN Environment
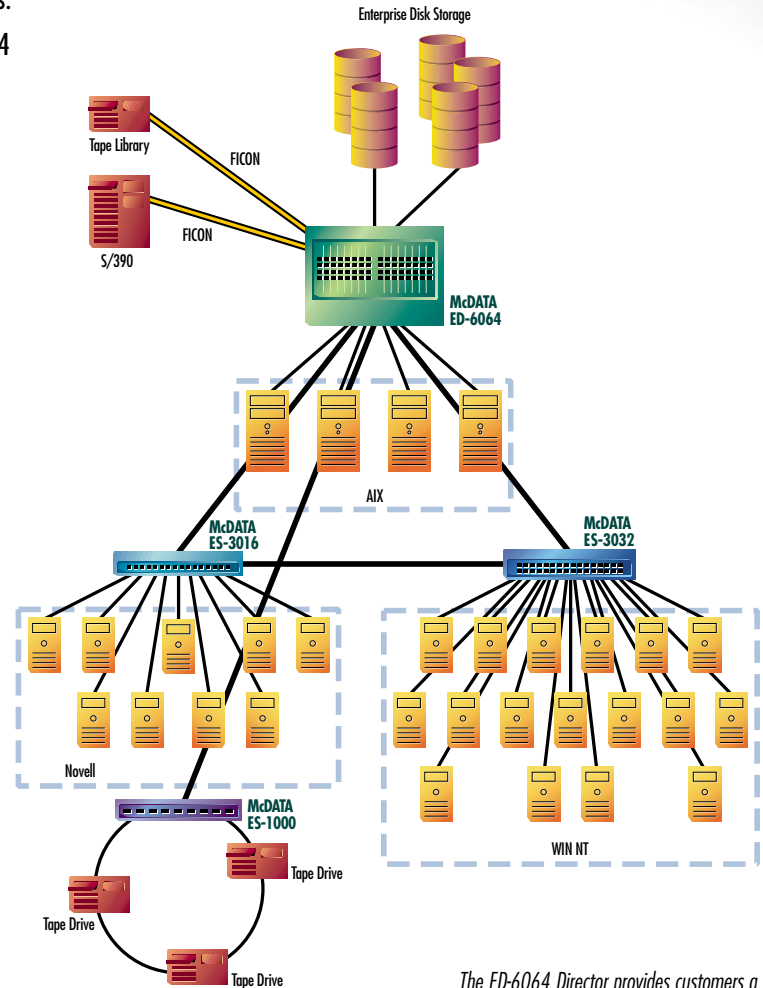
The ED-6064 Director provides customers a scalable platform to add connectivity on the fly. Thus whether a customer chooses to implement a SAN in the data center or department, they have an ideal foundation to build extensible SANs.

Courtesy of

ED-6064 Director

Specifications:

Availability
Hot-plug redundant power supplies
Hot-plug redundant fans
Hot-plug optics
Hot-plug processors
Hot-plug switch modules
Hot-plug port modules
On-line diagnostics
On-line, non-disruptive firmware load and activation
Fault isolation tools for network-wide activity

Compatibility

Fibre Channel Protocols:	FC-PH Rev 4.3, FC-PH-2 FC-PH-3, FC-GS-2, FC-FLA FC-FG, FC-SW-2
Fibre Channel Element MIB:	(FE-MIB) - Version 3.0
TCP/IP MIB-II Groups:	System, Interface, Address Translation, IP, ICMP, TCP, UDP, SNMP
Classes of Service:	Class 2 Class 3 Class F

Performance

Port Speed:	1.0625 Gbps, full duplex
Buffer Credits:	60 per port
Switch Latency:	Less than 2 microseconds average

Scalability

Ports per Chassis:	64 G Ports
Multi-Switch Fabric:	31 switches
Media Type:	Hot-plug, industry standard LC Small Form Factor

Supported Optical Media Types/Distance

Shortwave:	500 m (1,640 ft.)
Longwave:	10 km (6.2 miles)
With Repeaters:	100 km (60 miles)
Cabling:	9/125 micron single mode, 10 km (6.2 miles) 50/125 micron multimode, 500 m (1,640 ft.) 62.5/125 micron multimode, 300 m (1,148 ft.)

Management Options
McDATA Software
SNMP
Open Systems Management Server
Embedded Web Server

Access
In-band
Ethernet (10/100 Mbps)

Fabric Services
Simple Name Server
In-order delivery (Class 2, 3)
Management Server (optional)
Broadcast
Name server zoning

Diagnostics
Power-on self test
On-line port, CTP, SBAR
Internal and external loopback
On-line system health

Serviceability
Hot-load firmware upgrades
Call-home, e-mail (with McDATA software)
Maintenance port (DSUB)
Smart thermal protection
Unit, Port, FRU beaconing
System error LED
FRU failed LED

Physical Dimensions

Height:	39.7 cm (15.8 in. 9u)
Width:	44.5 cm (17.2 in.)
Depth:	54.6 cm (21.5 in.)
Weight:	52.3 kg (115 lbs.)

Installation Options   Rack mountable, 19 inch EIA rack

Environmental

Non-operating temp:	40° F to 125° F
Humidity:	8% – 80%
Altitude:	12,192 m (40,000 ft.)
Operating temp:	40° F to 104° F
Humidity:	8% – 80%
Altitude:	3,048 m (10,000 ft.)

Electrical

Operating voltage:	100-230 VAC
AMPs:	2 – 4 AMPs
Heat output:	1,672 BTU per hour

Regulatory   UL, CSA, CE Mark, VCCI Class 1, FCC Part 15

McDATA
The experience to rely on™

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