



# UPGRADING YOUR FIBRE CHANNEL INFRASTRUCTURE TO SUPPORT GEN 6 PERFORMANCE

## WHAT YOU NEED TO KNOW

Gen 6 Fibre Channel with 32/128 Gbps links dramatically increases IO performance. However, this demands a high-performance structured FC Infrastructure to support this exponential data growth. 32/128 Gbps links require ultra-low latency, reducing cabling distances and connector loss requirements. As a result, current cabling infrastructure may not support Gen 6 speeds.

## REDUCED DISTANCE AND CONNECTOR LOSS

1.5dB of connector loss needs to be maintained over the entire structured link for up to 100M switch to server distance over OM4 fiber. Less distance for OM3. Connector loss applies to the terminated ends of the fiber as well as patch panels or other interconnects. Any links beyond the FC-PI-6 (Gen 6) standard may be recognized as an unhealthy connection with a high probability of bit rate errors and increased latency.

16GFC (GEN5) DISTANCE (M) / LOSS BUDGET (dB)

Fiber Type	Connection Loss				
	3.0 dB	2.4 dB	2.0 dB	1.5 dB	1.0 dB
OM4	NA	50	100	125	150
OM3		40	75	100	120

32GFC (GEN6) DISTANCE (M) / LOSS BUDGET (dB)

Fiber Type	Connection Loss				
	3.0 dB	2.4 dB	2.0 dB	1.5 dB	1.0 dB
OM4	20	65	80	100	110
OM3	15	45	60	70	80

## DCS PROFESSIONAL AND MANAGED SERVICES

If you are planning to upgrade to Gen 6 directors, DCS can work with you and your team to assess your existing infrastructure and design a new sustainable infrastructure to support current and future requirements.

## DCS SERVICES

- We provide an assessment of your current infrastructure and consultation on bringing it up to the latest generation standards and a True Structured Cabling environment.
- We then establish a Central Patching Location (CPL) with our Multi-Bay to represent all ports on all devices within the data center network.
- By adding our Mimic series of connectivity products, we can identify each piece of equipment in its own image at the CPL. All ports are labeled exactly as the equipment they represent.
- If needed, our Engineering services will design patching and cable management products specific to your data center to improve your connectivity infrastructure.
- Installation services will mine out the obsolete cable, install new infrastructure and cabling from the equipment to the CPL.
- Our product-specific fiber trunk assemblies are built to mimic port labelling at the active equipment. Each connector leg is meticulously measured to reduce slack at the switch and avoid compromising connectivity.
- Each fiber port is documented and tested to exceed industry standards.
- Provide a series of fiber patch cords in various lengths and training on best practices in cable management.
- DCS Managed Services provide on-site technicians who perform day-to-day infrastructure and connectivity services and manage migration of next Generation upgrades.

## PRODUCTS

DCS' unique products are designed for ease of port identification and cable management. We represent all ports on all devices with Mimic panels in our Multi-Bay open frame central patching facility. Contact us for more information on our Mimic Series of patching components.