Nortel Networks

Terabit Capacity for long haul networking solutions

No one can question the insatiable demand for capacity in backbone networks. Nortel Networks revolutionized global high-capacity, long haul transport with 10 Gbps optical line systems that set the industry standard. The OPTera portfolio continues to evolve to provide open, flexible, and scalable transport solutions for the new millennium. And Nortel Networks is extending this tradition of leadership and innovation, with solutions for optical connectivity that simplify connection management in terabit networks.

The highest capacity line systems for today and tomorrow

Nortel Networks OPTera Long Haul 1600 Optical Line System offers multi-service, ultra high capacity transport solutions that cost effectively address the bandwidth demands of the new millennium up to 1.6 Terabits per second on a single fiber.

The OPTera Long Haul 1600 Optical Line System enables bandwidth growth up to 160 simultaneous wavelengths, with a scalable, modular design that minimizes the initial cost of network deployment.
Delivering optical economics to the hub of the Optical Internet

The wide variety of new service offerings, coupled with the incredible growth of data networks, is resulting in large Point-of-Presence (POP) and junction sites where multiple network systems terminate. These sites must manage hundreds of high-capacity wavelength services while consuming minimal power and floor space.

Designed to effectively manage this complexity, the OPTera Connect portfolio provides full management of add/drop, transit, and pass-through traffic. This capability is effective for all service mixes (IP, ATM, and TDM).

The Nortel Networks OPTera Connect DX and HDX Connection Managers offer scalable capacity from hundreds of gigabits per second to 40 Tbps with multi-service wavelength and sub-wavelength aggregation and grooming. The Nortel Networks OPTera Connect PX Connection Manager offers efficient wavelength and multi-wavelength switching scalable to hundreds of terabits per second. Terabit connection management is achieved with the lowest footprint requirement in the industry.

Reliability

The capacity of the OPTera portfolio is protected with a suite of service quality options. Built-in forward error correction (FEC) permits virtually error-free transmission that can handle even the most demanding service quality objectives. Service quality is further enhanced by numerous proactive optical performance monitoring functions. And the introduction of optical protection on a per-channel basis enables full-time “always-on” availability, even in the presence of cable cuts and node failures.

Network and services management for terabit capacity networks

Nortel Networks realizes the challenges facing operators when it comes to management of DWDM (Dense Wavelength Division Multiplexing) systems. The OPTera portfolio can be managed by Nortel Networks serviceware solutions, namely the Preside family of products and solutions. Preside supports the management of the optical layer as a natural extension of the existing management structures and operations.

Long haul solutions optimized for the application

Only Nortel Networks has a complete optical portfolio that can be optimized to match any customer application or business need. With industry-leading technology solutions that go wider (with more DWDM wavelengths), further (with ultra-long reach) and faster (with 10 and 40 Gbps line rates), Nortel Networks is delivering end-to-end solutions that ensure profitable customer networks for the global, high-capacity open optical networking challenges of the 21st century.