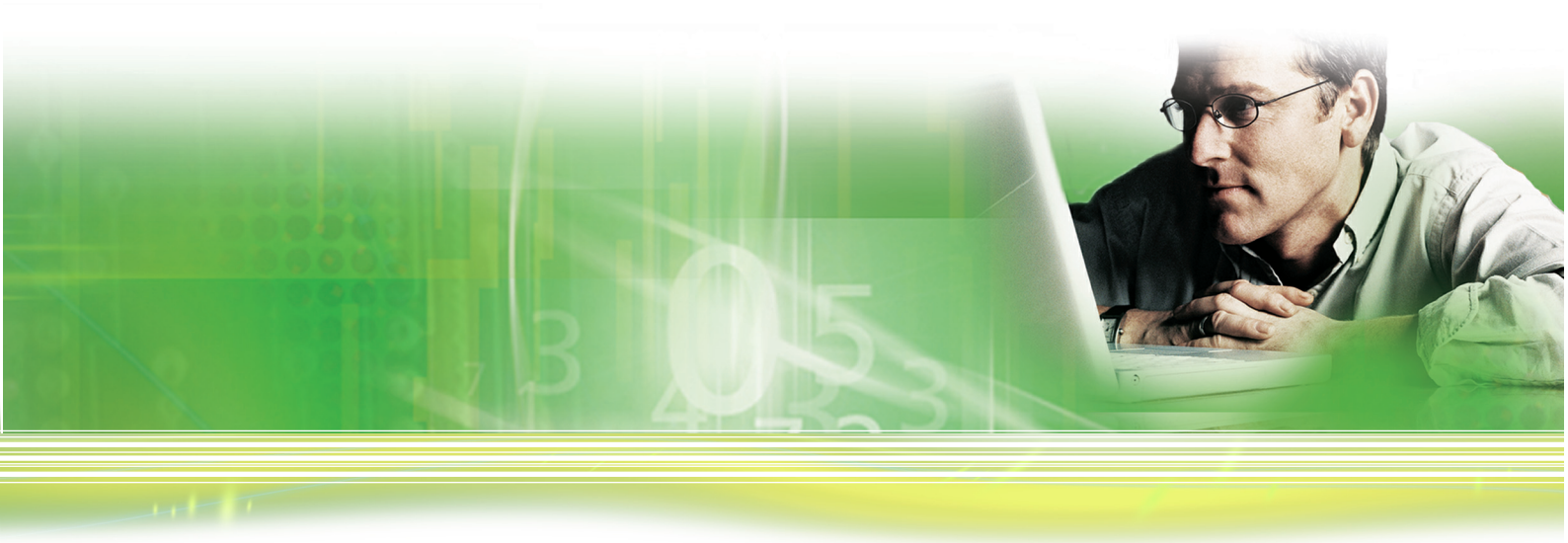
Managed Wavelength Solutions



Capitalize on new revenue opportunities
by delivering the performance that your customers demand

The benefits of Managed Wavelength Solutions for your business:

- Scales bandwidth quickly and efficiently
- Supports a wide range of applications over a common platform
- Creates service differentiation through extensive management capabilities
- Provides an end-to-end solution and certified interoperability with leading storage vendors
- Leverages existing network investments and infrastructure

The benefits of Managed Wavelength Solutions for your enterprise customers:

- Provides reliable transport for mission-critical applications
- Consolidates network access and transport
- Avoids complexity of managing the transport network through outsourcing
- Reduces storage costs through consolidation and pooling
- Improves security and efficiency by connecting islands of information

Lucent Technologies
Bell Labs Innovations

Managed Wavelength Solutions



Managed Wavelength Solutions provide cost-effective, multi-location Storage Area Network (SAN) over distance interconnects and general purpose high-speed Wide Area Networking (WAN) services.

Managed Wavelength Solutions with the Lucent Advantage are designed to introduce highly available, scalable and low latency solutions that support mission-critical and bandwidth-intensive applications across the MAN/WAN.

Incremental and expanded applications such as remote storage, business continuity, centralized hosting, and high-speed site-to-site networking represent new revenue opportunities. Managed Wavelength Solutions help you capitalize on these opportunities while simultaneously supporting traditional services.

Managed Wavelength Solutions provide common, multiservice platforms from which traditional voice, private line and data services can be delivered. Using Dense Wavelength Division Multiplexing (DWDM) technology, numerous high-speed protocols are multiplexed and transported over a single fiber without the need for costly protocol conversion gateways. You can offer customers transport services where applications run at their native full rate, while affording you a flexible and scalable platform designed for current and future needs. Managed Wavelength Solutions with the Lucent Advantage provide extensive management capabilities that let you offer differentiated services by facilitating performance monitoring, remote test capabilities, fault isolation, and preventative maintenance, all on a per application basis. Our comprehensive portfolio includes end-to-end optical solutions for today's metro and long-haul networks — coupled with leading software and services to deliver services quickly and profitably to your enterprise customers.

The Lucent Advantage is built into products that focus on lowering your total cost of network ownership while delivering higher levels of performance and value. Metropolis® EON can deliver a wide range of services using a single platform to improve operational efficiency, compared to maintaining multiple fiber overlay networks. You can tap into new revenue streams by offering incremental Managed Wavelength services.

What enterprises want …

Enterprises needs vary, as their network is built with a variety of technologies. They require solutions that deliver the flexibility to interconnect offices across the MAN/WAN in support of a multitude of applications. Until now, enterprises have been forced to deal with rigid architectures originally designed for voice traffic, which led to network bottlenecks arising from costly protocol conversions that limit throughput to a fraction of native capacity.

Lucent Managed Wavelength Solutions enabled by Metropolis® EON use protocol independent WDM to facilitate the native transport of data services including ESCON, FICON, Fibre Channel, iSCSI, FDDI, GigE, 10GigE, Frame Relay, ATM and SONET/SDH. This allows your customers to utilize the technology best suited for their specific applications, while simultaneously eliminating the cost and operational complexity of conversion gateways. Other benefits include the extension of native protocol transmission distance (i.e.,up to 150 km for Fibre Channel), and the elimination of latencies associated with alternatives that require buffering, conversion and routing.

What enterprises need …

Enterprises need to reduce network cost and complexity, while improving reliability and access to mission-critical information. Those operating several applications such as tape backup, disk mirroring and clustering, require the deployment of separate, dedicated equipment and facilities. While this ensures applications are isolated, and don't interfere with one another, it requires separate overlay fibers to be deployed for each service.

Lucent Managed Wavelength Solutions can support these different applications using a single MAN/WAN connection. Isolation and security of each application is maintained with separate wavelengths as needed. Metropolis® EON maintains transport service protection using carrier grade (<50 msec) protection with optical unidirectional path switched rings (O-UPSR) and optional equipment protection. This lets you offer flexible SLA agreements that can be monitored and enforced.

What's in it for you …

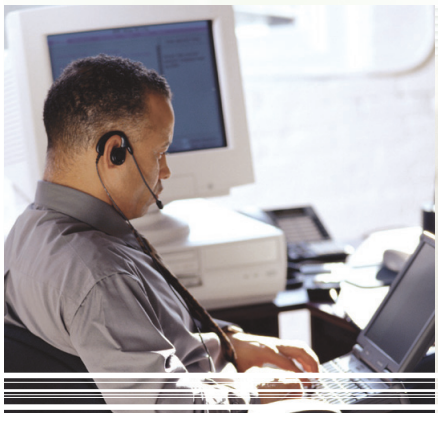
Managed Wavelength Solutions provide a very reliable and scalable high-bandwidth platform for transport service delivery. Service growth is easily accommodated through intelligent plug-and-play capabilities such as automatic gain control, and wavelengths can be incrementally added one at a time without impacting traffic. By using universal broadband muxing OTUs, the Metropolis® EON can aggregate any mix of services onto wavelengths, and efficiently use bandwidth resources. Its configuration can support flexible point-to-point, ring or logical mesh architectures.

An effective operations support system is beneficial to your optical network's operation. The Navis® Optical Management Solution helps improve your network efficiency, and can significantly reduce operating expenses by providing comprehensive, integrated single seat management of your entire network. It supports simplified and automated operations capabilities such as point-and-click provisioning, proactive capacity management, fast fault isolation and real time inventory management.

Why Managed Wavelength Services: Protocol independent connectivity allows customers to utilize the technology best suited for specific applications.

We have products, software and services that enable you to offer Managed Wavelength Services quickly and profitably. Managed Wavelength Solutions that deliver the Lucent Advantage consist of:

- Metropolis® Enhanced Optical Networking (EON) — 32 wavelength DWDM system that offers a cost-effective, highly scalable solution for access/metro/regional rings. It transports transparent wavelength services in their native form, with non-intrusive performance monitoring for both SONET/SDH and data applications.
- Navis® Optical Management Solution — seamless, end-to-end network management of the entire transport network, which reduces the need for manual intervention in managing global networks. Circuits can be provisioned from a single-seat management location, without complex manual provisioning tasks.
- Lucent Worldwide Services (LWS) — experience, expertise and tools that can make any network more efficient, more secure and more cost-effective by providing world-class planning, integration, deployment, operations and maintenance services.





The final word

Managed Wavelength Solutions that leverage the Lucent Advantage are certified to interoperate with products and applications from leading storage vendors. This facilitates the deployment of end-to-end solutions such as the EMC Symmetrix Remote Data Facility (SRDF™) and IBM Geographically Dispersed Parallel Sysplex (GDPS™).

The capabilities of Lucent Worldwide Services (LWS) enable us to design, implement and integrate Managed Wavelength Solutions into your network, helping you generate revenue more quickly. LWS is able to utilize proprietary network design, security and optimization tools developed by Bell Labs to support faster, better decisions. Talk to your Lucent representative about Managed Wavelength Solutions that offer the Lucent Advantage: the most cost-effective and easily deployed solutions available today.

To learn more about Managed Wavelength Solutions, please contact your sales representative, or call 1-888-426-2252. You can also visit our web site at http://www.lucent.com/wavelength

This document is provided for planning purposes only and does not create, modify or supplement any warranties which may be made by Lucent Technologies relating to the products and/or services described herein.The publication of information contained in this document does not imply freedom from patent or other protective rights of Lucent Technologies or other third parties.

Metropolis and Navis are registered trademarks of Lucent Technologies Inc.

SRDF is a trademark of EMC Corporation.

GDPS is a trademark of International Business Machines Corporation.

Copyright © 2003 Lucent Technologies Inc.

All rights reserved

Lucent Enabled Solutions/MWS v1 05/03

Lucent Technologies
Bell Labs Innovations

