Metropolis®
Enhanced Optical Networking (EON)



Generate new revenue from existing fiber assets. Leverage your network with a cost-effective lambda-based platform.

Benefits

- Provides both higher-capacity and higher-value wavelength services on a single platform
- Ease of operations; plug-and-play growth with a wide range of client interfaces
- Can enable differentiated Service Level Agreements (SLA) via various protection options
- Offers the necessary scalability and flexibility to help meet future traffic demands
- Increases metro fiber network capacity up to 64 unprotected wavelengths in a single node

Lucent Technologies
Bell Labs Innovations

High-margin services, reduced capital outlay

The Lucent Technologies Metropolis® Enhanced Optical Networking (EON) DWDM platform can significantly reduce the need for both transponders and amplifiers, helping you deliver new high-margin optical services cost-effectively. Its flexible, low-cost platform can scale up to 320Gbps over ring or point-to-point fiber architectures to help address your current and future capacity and performance requirements. With its advanced long-haul transport features, it can be deployed in access and metro applications, and to connect metropolitan networks. Metropolis® EON also supports certified services such as storage extension with IBM and EMC, and Ethernet with Foundry Networks.

Increase your transport capacity, lower your costs

Metropolis® EON helps increase the transport capacity of your metro network without the need for additional fiber optic cable. You can leverage prior Lucent Technologies WaveStar® OLS 40G/80G investments with the Metropolis® EON architecture, which is designed to support a cost-effective and graceful evolution. The in-service upgrade capability to 32 protected (64 unprotected) wavelengths can enable you to enhance your service capabilities while helping to avoid unnecessary downtime. And, you may realize reduced capital expenses with express optics, a feature of Lucent's TDM equipment that eliminates the need for transponders by allowing you to directly connect SONET/SDH equipment to the Metropolis EON.

Low-cost storage extension solutions

Metropolis® EON helps you target high-end customers who have storage extension needs. Storage is a business-critical application — driving demand for storage networking services that connect islands of mission-critical information across Metropolitan Area Networks (MAN). Metropolis® EON's storage networking over managed wavelength services helps meet this demand by boosting network speed, flexibility and reach cost-effectively, so you can offer enterprise customers new and value-added services on a single platform. With its muxing transponders, it can increase the data center bandwidth utilization while significantly reducing associated capital expenses. Metropolis® EON is certified by leading storage vendors for disaster recovery and business continuity applications.

Low-cost Ethernet solutions

Metropolis® EON supports a wide range of broadband, optical (SONET/SDH) and Ethernet-formatted channels simultaneously. It can interoperate with multivendor IP equipment via Gigabit Ethernet transponders to provide efficient, low-cost transport of IP data between multiple sites in a metro area. Metropolis® EON offers two varieties of Ethernet services:

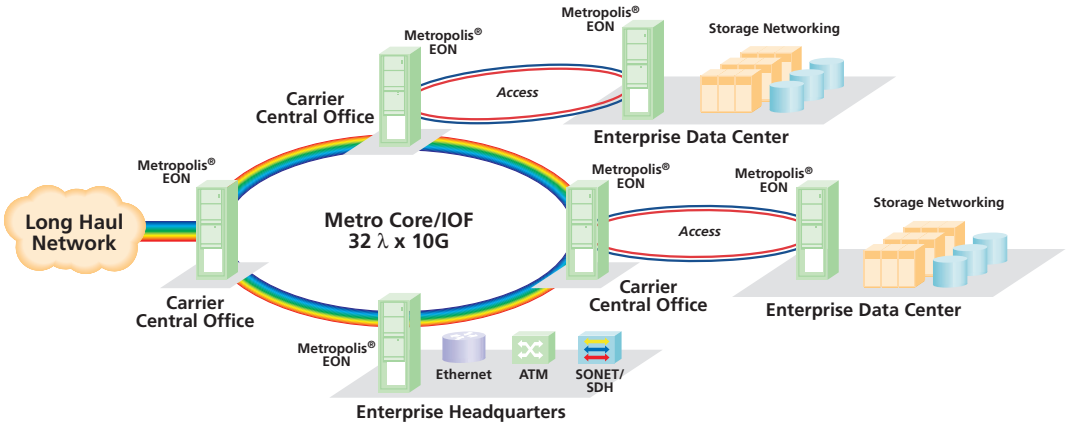
- Managed wavelength service — native Ethernet transport with optical Quality-of-Service (QoS) over carrier protected optical networks for point-to-point or mesh connectivity of enterprise LAN and WAN applications.
- Managed Ethernet Service — end-to-end Ethernet solution with IP QoS over carrier protected optical networks for mesh connectivity of enterprise LAN and WAN applications.

Transparent managed wavelength services

Metropolis® EON transports transparent wavelength services in their native protocol with non-intrusive performance monitoring for both SONET/SDH and data applications. This can enable users – enterprises or other carriers – to lease wavelengths for point-to-point connectivity over your network. The Metropolis® EON provides managed wavelength services via a wide range of standard ITU grid-compliant optical interfaces. Its Universal Broadband transponder can support any bit rate from 16Mbps to 2.5Gbps. Metropolis® EON eliminates the need for transponders when connecting to other Lucent SONET/SDH equipment with the proper interfaces.



Metropolis® EON supports access and regional networks with a single platform.



Metropolis® EON can provide both wavelength services and fiber exhaust relief in a single platform.

Cost-effective protection supporting differentiated SLAs

Metropolis® EON offers a wide range of per wavelength protection options for increased Service Level Agreement (SLA) differentiation. It can deliver an affordable, reliable, and manageable metro ring solution with an optional per-wavelength protection mechanism to enable protected ring architectures. With its Optical Unidirectional Path Switched Ring (OUPSR) technology, Metropolis® EON can support up to 32 protected DWDM wavelengths per node — improving network reliability and flexibility, which can reduce overall protection cost. This feature includes performance monitoring, remote test capability, fault isolation and preventive maintenance on a per wavelength basis.

Simpler and lower-cost operations

The Metropolis® EON plug-and-play wavelength growth feature can help reduce the cost of installing, growing and operating the system through its Automatic Gain Control (AGC) and circuit-pack pre-provisioning. Also, it supports any-to-any optical connectivity via full support of add/drop nodes. You can add/drop between 1 and 64 wavelengths in any node with complete flexibility.

Using its PC-based engineering tool, the Metropolis® EON can be custom-configured to the application in use, so it can support access, metro and regional networks with the same hardware and software. This can lower your operations cost by reducing the need for certifications, tests, and integration of multiple products.

Global service team

Lucent Worldwide Services offers professional, rapid deployment to help you get new services to market quickly. Our services solutions include all of the support you need to plan, test, deploy, operate, and maintain your investment. Our worldwide team of network engineers and consultants has experience and expertise that can help reduce your risks and increase your margin.

Storage, Ethernet, and ATM wavelength services in a single platform

Metropolis® EON helps you deliver new high-margin wavelength services cost-effectively now. Its flexible architecture can scale up to 320Gbps to help meet future capacity and performance demands. It interoperates with multi-vendor IP, ATM, and storage equipment to help provide efficient, low-cost transport of data traffic between multiple sites in the metro area. And, its interfaces are compatible with existing operating environments, so it can be deployed over new or existing fiber. Metropolis® EON has the speed, flexibility, scalability and cost-efficiency to help you offer enterprise and carrier customers new and value-added services on a single platform.

Features

- Lower cost by reducing the need for both transponders and amplifiers
- In-service upgrades: 16 wavelengths configuration to full 32 wavelengths system
- Any-to-any optical connectivity via full support of add/drop nodes
- Plug-and-play service expansion via AGC for flexible future growth
- End-to-end management through OSMINE, TL1, and TCP/IP compatibility
- Significant capital expense reductions through the use of express optics with Lucent's TDM equipment
- Graceful evolution when upgrading from the Lucent Technologies WaveStar® OLS 40G/80G

To learn more about our comprehensive portfolio, please contact your Lucent Technologies Sales Representative or call +800 11223333 (Europe wide Freephone) or +32 70 22 20 52.

Visit our web site at http://www.lucent.com.

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