Manage increasing or decreasing WAN bandwidth requirements
to meet changing needs more cost-effectively



Ask your carrier about

Ethernet over SONET Services that give you the Lucent Advantage™

With Ethernet over SONET Services, IT managers can:

- Lower the total cost of network services
- Reduce complexity
- Lower the cost of adjusting bandwidth to meet changing needs
- Support bandwidth-intensive applications

Lucent Technologies
Bell Labs Innovations

Ethernet over SONET Services



Ethernet over SONET (EoS) Services combine the proven reliability and reach of today's Synchronous Optical Networks with the affordability and simplicity of Ethernet.

Enterprises can rely on efficient EoS Services to eliminate the cost and complexity of overlay networks.

Information Technology (IT) managers must find ways to manage their enterprise's increasing thirst for bandwidth, while coping with pressure to reduce capital and operating expenses. Growing demand for Internet access, intranet connectivity between distant sites, e-commerce, partner extranets, Storage Area Networks (SANs) and telecommuting challenge enterprise networking resources.

Just a few years ago, it was common for 50 to 100 employees to share a 10 Mbps Local Area Network (LAN). Now a single desktop can easily consume that much bandwidth on its own. As needs change, new technology is often deployed. In a rapidly-evolving environment, responding to bandwidth upgrades or downgrades – for example, moving from a T1 to DS3 – can be expensive and time-consuming. Wide-area Ethernet services offer a cost-effective strategy for supporting these changing service demands in a reliable and scalable way.

Ethernet over Synchronous Optical Network (SONET) Services allow enterprises to connect multiple sites with Ethernet as an end-to-end protocol. The use of multiservice platforms to access Metropolitan Area Networks (MANs) and Wide Area Networks (WANs) eliminates the requirement for overlay networking, reducing the equipment and management expense associated with multiple protocols.

Lower the total cost of network services

By eliminating the barriers between LANs and WANs with EoS Services, IT organizations can dramatically decrease capital and operating expenses and quickly improve their enterprise's return on investment with a seamless corporate network across geographic locations. Using Ethernet for both LAN and WAN networking reduces the variety of protocol conversion devices required. It allows WAN connections using Ethernet equipment that are generally less expensive than other WAN interfaces. The need to upgrade platforms to accommodate increasing bandwidth levels is vastly reduced. Plus the ongoing maintenance cost of supporting a single, widely used protocol is lower than the expense of supporting different LAN and WAN networking protocols.

Reduce complexity

Current WAN service architectures based on traditional telecommunications services such as T1 and DS3 constrain networking in several ways. Access bandwidth availability is restricted to a limited set of speeds, leading to under- or over-utilization of leased lines, and forcing expensive system upgrades when changing from one bandwidth to another. Access connections must terminate on special premises-based WAN switches. The use of multiple protocols requires IT expertise for each protocol. EoS Services eliminate these constraints. They allow enterprises to use inexpensive Ethernet equipment to connect directly to the carrier for transport using a common, well-understood protocol end-to-end.

Lower the cost of adjusting bandwidth to meet changing needs

Because EoS Services require less equipment and eliminate cumbersome intermediate protocols, carriers can respond more quickly to





changing enterprise bandwidth needs. Lucent's end-to-end integrated management system enables carriers to make changes in minutes. Enterprise IT organizations can change their QoS and tune transport throughput in 1 Mbps increments to the full 1 Gbps rate whenever necessary, without waiting for installation and configuration of new equipment.

Support bandwidth-intensive applications

The reduced complexity of a multiservice EoS platform improves reliability by reducing the number of failure points in the network. The increased resiliency enabled by SONET transport infrastructure further assures that business-critical processes are shielded from interruption. Enterprise IT organizations can improve accessibility to sophisticated distributed business applications such as Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) without WAN bottlenecks. When more bandwidth is required for next-generation services, such as video streaming, video teleconferencing, and other multi-media applications, the use of EoS Services assures that the infrastructure to support them is ready to go on demand.

Get the Lucent Advantage™

Lucent Technologies is a leader in providing advanced optical networking gear to leading telecommunications carriers globally. Lucent's standards-based Metropolis® DMX Access Multiplexers provide a compact, yet highly reliable hybrid Ethernet/SONET platform that bridges the bandwidth gap between the enterprise and WANs. With a Lucent-built EoS service, carriers can give enterprises access to resilient, high-speed metro data transport. Lucent's advanced optical multiplexing technology enables carriers to offer Quality of Service (QoS) and bandwidth that is scalable on demand. The overall result for the enterprise is better and more reliable network service at a competitive cost. Ask your carrier today about Ethernet over SONET Services that deliver the Lucent Advantage™: next-generation SONET innovations that make networks more reliable to protect valuable data, and more flexible to meet changing bandwidth needs.

To learn more about Ethernet over SONET Services, please contact your carrier. Be sure to ask for services that leverage the Lucent Advantage™.

To learn more about Lucent Technologies, visit our web site at http://www.lucent.com.

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 is a registered trademark of Lucent Technologies Inc.

Lucent Advantage is a trademark of Lucent Technologies Inc.

Copyright © 2003

Lucent Technologies Inc.

All rights reserved

Lucent Enabled Services/EOS V2 10/03

Lucent Technologies
Bell Labs Innovations