



SILVX Intelligent Network Management

End-to-End Visibility and Control for Multiservice Networks

A Foundation for Managing Relentless Change

It's not what you have, it's what you can do with it... and in today's multiservice networks, raw capacity is not enough. What matters are the services you support – and how efficiently you can provision and monitor them. Automated networks, dynamic services, and true point-and-click provisioning require unprecedented operational integration and synchronization.

In fact, next-generation networking success may hinge on the simplicity and interoperability of your network management systems. Robust and reliable SILVX® software provides end-to-end, network-level management of Sycamore optical switches – with multi-layer visibility, ease of use, and the exceptional service awareness network operators need now.

SILVX ensures Sycamore switching solutions integrate smoothly, and delivers full FCAPS management functions, while optimizing networks for scalability, reliability, and circuit/packet convergence. Moreover, SILVX has proven to seamlessly extend its capabilities to higher-level Operations Support Systems (OSS) through a choice of industry-standard interfaces; to Ethernet traffic management, through intelligent policing and packet-to-circuit mapping; and to select users, through advanced network partitioning and secure access features.

Multi-Layer Manageability Simplifies Convergence

By incorporating logical service partitioning and multi-layer resource management in a single, user-friendly platform, SILVX makes it easier for operators to translate complex network data into proactive, usable information. Unique and powerful Layered Services Management functions address the challenges of managing the increasingly diverse and complex mix of circuit and packet services in metro and regional networks. SILVX simplifies the creation and management of IP VPNs, TLS, VPLS, EPL, EVPL, and other advanced data services.

Sophisticated multi-layer resource awareness, partitioned views of pertinent data, and easy-to-use service management tools help network operators correlate multi-layer (e.g., Ethernet, optical, low-order and high-order SONET/SDH) service information, greatly improving efficiency throughout the network operations lifecycle.

For example, in the event of a fiber cut, advanced service awareness and resource allocation capabilities support a coordinated restoration effort across multiple network layers (Ethernet, SONET/SDH, optical transport). And new service requests at one layer can be coupled with automatic requests at other layers.

Features and Benefits

- Simplifies Provisioning and Management
- Leverages BroadLeaf Network Awareness
- Displays Partitioned Views of Layered Services
- Integrates Seamlessly with Existing OSS
- Improves Operational Efficiency, Reduces Costs



Ethernet Simplicity Solves Growing Problems

Manageability is also key to expanding carrier-class Ethernet services non-disruptively across transport networks. Intelligent Ethernet transport, through SILVX, gives network operators unprecedented control, a high-availability Ethernet solution, and a scalable, cost-effective way to support rapidly growing broadband traffic. Intelligently mapping Ethernet flows to optical transport, with a choice of protection options, improves the efficiency of Ethernet transport while accommodating a range of SLA requirements. VCAT and LCAS, combined with SILVX, enable hitless, on-demand bandwidth adjustments for scheduled bandwidth services. SILVX simplifies provisioning, enhances security for network partitioning, and improves overall manageability and resiliency of carrier-class Ethernet services.

Enhanced Security and Performance Management

SILVX also improves performance management, with threshold crossing alerts, path-level performance data, and other resource monitoring tools that enable proactive alarming and simplify troubleshooting. SILVX protects sensitive information and infrastructure assets with advanced resource partitioning features to create secure, dedicated Optical Virtual Private Networks (OVPN) for internal or external user groups; restrict bandwidth and routing options for specific services or users; or separate and prioritize network traffic. Enhanced security countermeasures (e.g., optional RADIUS Central Authentication and IPsec trusted path support, including AES encryption) can help defend communication systems in threat environments.

SILVX: Visibility and Control Networks Need Now

SILVX offers the industry's most innovative, integrated, and scalable solutions for end-to-end provisioning and performance management of high-speed bandwidth and multi-layer services – from one, unified management platform. An infrastructure foundation built on this exceptional intelligence introduces new operational efficiencies, creates new service opportunities, and will adapt gracefully – to keep your network ahead of change.

For more information about our intelligent networking products and solutions, please contact your Sycamore Sales Representative.

FULLY INTEGRATED NETWORK AND SERVICE MANAGEMENT

SilvxManager® NMS and SilvxSource® node-level intelligence share a common software base that encompasses every management function from provisioning to performance monitoring. SILVX leverages Sycamore's ASON/GMPLS-compliant **BroadLeaf®** control plane intelligence to achieve the real-time capacity utilization and circuit routing views that empower next-generation service awareness and resource management. BroadLeaf underpins automatic topology discovery; dynamic end-to-end provisioning in any network topology; and optical mesh resiliency.

SilvxManager® for Windows extends the full suite of SILVX features – proven in Tier 1 networks around the world – into an economical service management solution for today's evolving metro and regional networks, with an easy-to-use graphical user interface and security features that enhance multiservice provisioning and multi-layer performance monitoring.

SilvxOSS® provides a choice of interchangeable, industry-standard interfaces (TMF-CORBA, TL1, XML, SNMP) to ensure smooth integration with existing management systems and operational procedures while reducing OSS maintenance, improving network reliability and scalability – and forming a single-source gateway into Sycamore switch intelligence.

SILVX Hot Standby ensures against disaster or data loss, with primary and standby database sites providing full system redundancy and carrier-class network availability. Hot Standby automates much of the database synchronization and restoration process, minimizing unacceptable server downtime and enhancing the survivability of vital infrastructure.

SILVX InSight® network design and analysis applications optimize Sycamore switch deployments in ring-based and mesh-based networks with least-cost designs, shorten timeframes from design to deployment, and allow “what if” failure scenarios for advance insight into how the network will behave. In production networks, SILVX InSight enhances performance monitoring, capacity management, and operational efficiency.

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Sycamore Networks, Inc. (NASDAQ: SCMR) is a leading provider of intelligent bandwidth management solutions for fixed line and mobile network operators worldwide. From multiservice access networks to the optical core, Sycamore products enable network operators to lower overall network costs, increase operational efficiencies, and rapidly deploy new revenue-generating services.

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