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Experience. Outcomes.

OneControl Unified Management System

OneControl Unified Management System offers a unique and comprehensive solution to manage mission-critical networks that span across domains (access, metro, core, and subsea), with unprecedented visibility through protocol layers (WDM, OTN, packet services). With this innovative approach, OneControl returns network and services control to the operator.

OneControl unites the management of Ciena's Packet Networking, Converged Packet Optical, and Optical Transport product portfolios under a single solution, as shown in Figure 1. With its unique toolset of comprehensive management features, OneControl puts the control of critical networks at the operator's fingertips. Through a unified GUI and common management model, NOC operators can rapidly deploy new service offerings that cut across domains (access, metro, and core) and coordinate across network protocol layers to ensure efficient use of critical network assets and bandwidth optimization.
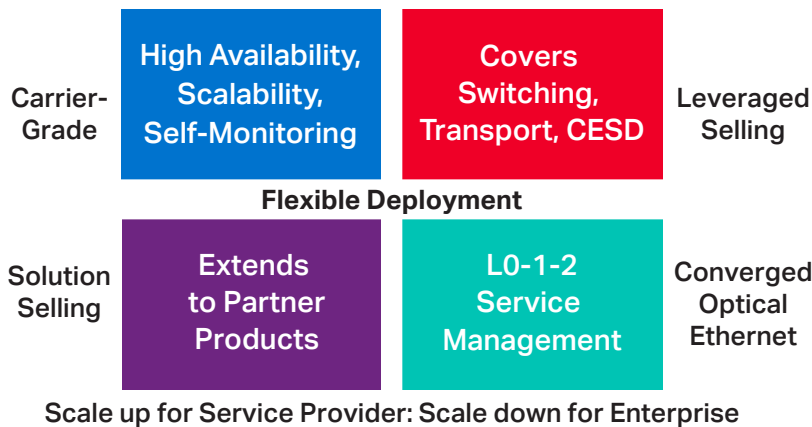
Features and Benefits

- Offers comprehensive network and service management for end-to-end Ciena networks
- Features a unique integrated cross-layer management view (WDM, OTN, packet)
- Isolates and remediates faults rapidly via a multi-layer fault correlation engine
- Provides unified management of entire service provider network, from edge to edge and through the protocol stack
- Provides concise visualization of network health and status with drill-down capabilities for efficient/proactive network management
- Controls mission-critical network assets cost-efficiently
- Includes geographically redundant configuration for resilient control of critical networks
- Integrates easily into next-generation back office solutions due to a service-oriented architecture
- Features a flexible and scalable deployment model including cost effective Virtual Machine configurations
- Offers a unified service creation, activation, and assurance GUI to enable rapid deployment of next-generation services and technologies under a single umbrella system

Flexible Deployment

Carrier-Grade	High Availability, Scalability, Self-Monitoring	Covers Switching, Transport, CESD	Leveraged Selling
Solution Selling	Extends to Partner Products	L0-1-2 Service Management	Converged Optical Ethernet

Scale up for Service Provider: Scale down for Enterprise

Figure 1. OneControl unified management

This efficiency provides comprehensive management and control from the access customer hand-off points, through the metro, and into the intelligent core. The OneControl GUI allows NOC personnel to create and activate end-to-end services at the optical layer—OTN/SONET/SDH and Layer 2 services such as E-LAN, E-Line or E-Tree. Once enabled, OneControl provides complete visualization of the entire end-to-end service multi-layer correlation, facilitating proactive root cause analysis and troubleshooting.

Executive Dashboard

A set of user-definable widgets offers a customized view of the most important aspects of the network in a single screen. From this launch point, users can take control quickly and drill down to the trouble spots in the network.

Hierarchical Topology Map

The hierarchical topology map is a real-time, accurate, graphical representation of the deployed network inventory and topology. The map is color-coded to depict the current health and status of the network, enabling rapid fault isolation and remediation. A user-defined hierarchical container view and a single GUI facilitate the management of large networks.

Operational Savings

OneControl provides end-to-end visibility of customer services across all transport, switching, and packet elements. This unified management approach decreases time for fault recognition, isolation, and resolution. Early detection, diagnosis, and prioritization of trouble spots within the network allow service providers to resolve problems proactively—before these issues affect revenue streams. Remote monitoring and diagnostic capabilities decrease truck rolls to further simplify network operations. The common management model extends across all Ciena technologies and obviates the need for additional staff training. Seamless integration into operators' already-deployed third-party OSS/BSS infrastructure through an MTOSI Gateway.

Efficient Service Management

Complete management of the entire network allows a single GUI command to create the end-to-end service path, avoiding the piecemeal approach required by existing network management systems. OneControl's multi-layer management model provides visibility and fault correlation through the protocol stack, from optical transport to Ethernet packet services.

Technical Information

Supported Operating Environments*	
OneControl Server	Solaris: SPARC T-Series (T4, T5, and T7) or running Solaris 10, 11.3
	Linux (64-bit): Red Hat Enterprise (RHEL) or Oracle: 6.7, 6.8, 7.3, 7.4, 7.5
	Simplex and Geographically Redundant configurations available
	Supported virtualization configs: SPARC LDOM or Linux VMware ESXi 5.0, 5.1, 5.5, 6.0, 6.5
OneControl Client	Windows: Intel-based personal computer running Windows 7 Professional, Ultimate or Business Edition (32-bit or 64-bit), Windows 10 Pro or Enterprise Edition (64-bit)

* Specific hardware and software operating requirements will vary based upon network size, complexity, and supported network element types. Please consult a Ciena representative for sizing guidelines.

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