STEELCENTRAL OPTICAL PLANNER

THE RIVERBED SOLUTION

Riverbed® SteelCentral™ Optical Planner is an advanced network planning solution that enables service providers and network equipment manufacturers to design resilient, cost-effective DWDM, OTN, and SONET/SDH optical networks. Its unique multi-layered network presentation, broad technology support, and cutting edge optimization and design capabilities make SteelCentral Optical Planner an invaluable resource for network engineers, architects and planners.

Using SteelCentral Optical Planner, you can:

- Optimize network routing and equipment to efficiently meet current traffic demands and plan for future requirements.
- Quantify expected service availability, analyze the impact of failures, and plan protection strategies to maximize resiliency.
- Visualize working, protection, and restoration routes under normal and failure conditions.
- Analyze the network resource usage including fibers, wavelengths, tributary slots, time slots, and ports to plan for future capacity requirements.
- Analyze costs associated with equipment and connections and optimize the network design to minimize the cost of carried traffic.
- Design a greenfield network or plan for a technology refresh by evaluating and comparing design alternatives and proposed vendor architectures.

Transport network technologies are evolving and market economics are driving requirements to reduce the cost per bit based on the next generation of optical and packet-optical products. Planning a converged transport infrastructure supporting legacy SONET/SDH traffic, Ethernet, and other packet-based services using OTN is a common challenge. SteelCentral Optical Planner provides the ability to optimize the transition and efficiently plan for future requirements.

“Multi-layer network optimization is important to reduce transport cost, increase network reliability, perform network dimensioning, and generate shared risk groups. These are traditionally hard problems to solve, but using the [SteelCentral NetPlanner] product makes multi-layer optimization possible. I have been using [Riverbed’s] products for many years and [NetPlanner] is the best product out there.”

Principal Network Architect, North American MSO
KEY BENEFITS

- Plan cost-effective networks to support greenfield design, capacity requirements, network upgrades, and proposal response.
- Accelerate the deployment of new services and technologies.
- Minimize risk by evaluating competing next-generation architectures and technology options.
- Improve service availability and network survivability.
- Improve staff productivity by providing an interactive visual representation of the network.
- Achieve service level requirements for latency, diversity, and availability.

KEY FEATURES

- Model multi-layer network services and infrastructure including SONET/SDH, OTN, wavelength, fiber, and cable layers for mesh, ring, and hybrid architectures.
- Visualize the transport network topology, link utilization, and connection routing in an interactive user-interface and generate detailed reports in HTML and spreadsheet formats.
- Route connections over the existing infrastructure to optimize cost, fiber length, delay, availability, and diversity using an interactive routing wizard or an automated design action.
- Groom SONET/SDH and ODU traffic to higher bit rates to optimize the balance of switching versus link costs.
- Dimension the network to cost-effectively add or upgrade equipment to support traffic requirements.
- Use the Hardware Configurator to translate site requirements into a minimum cost bill-of-materials based on a user-defined equipment library and cost information.
- Plan protection strategies including dedicated 1+1 protection, shared path protection (1:N, M:N), shared path restoration, shared link restoration, ring (UPSR/BLSR), and ring/mesh hybrid.
- Assess survivability under specified failures considering the impact of shared risk link groups (SRLGs) resulting from resources shared on lower layers (e.g., cables, fibers, and sites).
- Compute expected service and service group availability based on probabilities of equipment and fiber failures (e.g., MTTF/MTTR, cable length per cut per year, etc.).
- Design opaque, pure-optical, or hybrid networks with support for transparent routing at the optical channel layer based on amplification and regeneration constraints.
- Import and export network data using open text file interfaces.

STEELCENTRAL OPTICAL PLANNER PROVIDES A HIGHLY INTERACTIVE AND VISUAL ENVIRONMENT FOR DESIGNING SONET/SDH, OTN, AND DWDM NETWORKS.
INTEGRATIONS WITH OTHER RIVERBED SOLUTIONS

SteelCentral Optical Planner integrates with SteelCentral NetPlanner to perform network analyses that encompass the entire protocol stack, including IP/MPLS, Ethernet, SONET/SDH, OTN, and (D)WDM technologies. This industry-exclusive integration provides unique traffic engineering capabilities across multiple layers, and avoids sub-optimal designs, as performed by non-integrated point products.

COMPARE STEELCENTRAL OPTICAL PLANNER TO OTHER SOLUTIONS

- SteelCentral Optical Planner focuses on designing resilient, cost-effective transport networks with a primary focus on connection routing, protection, and capacity. Unlike products that focus primarily on optical link design or service management, SteelCentral Optical Planner offers a multi-vendor solution that is applicable across a wide range of vendors, devices, and technologies.

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ABOUT RIVERBED

Riverbed Technology, Inc., at more than $1 billion in annual revenue, is the leader in Application Performance Infrastructure, delivering the most complete platform for location-independent computing. Location-independent computing turns location and distance into a competitive advantage by allowing IT to have the flexibility to host applications and data in the most optimal locations while ensuring applications perform as expected, data is always available when needed, and performance issues are detected and fixed before end users notice. Riverbed’s 25,000+ customers include 97% of the Fortune 100 and 96% of the Forbes Global 100. Learn more at www.riverbed.com.