

Optical Modeler

With the dramatically growing demands being placed on networks today by high-speed data, HD television and increasing user devices, network planning and modeling tools are critical for managing growth as well as maximizing network utilization, operational efficiency and ultimately, profitability. Ciena's advanced modeling and planning tools provide a wealth of capabilities for optical-centric network environments, and enable operators to fine-tune their infrastructures to ensure every CAPEX dollar is wisely spent, and every OPEX dollar is maximized.

The Optical Modeler allows the user to simplify and accelerate photonic network design and expansion to provide an end-to-end photonic solution from planning to modeling to implementation. With Optical Modeler, the user can perform detailed photonic simulation, creating ready-to-deploy designs and guaranteed end-of-life designs.

Optical Modeler gives the user the power to design Ciena DWDM networks by comparing, analyzing and verifying a variety of deployment scenarios prior to implementation, removing the guesswork from network engineering and enabling the customer to future-proof their network designs, saving time, money and costly re-engineering.

Facilitating and accelerating the design of photonic systems

Remove the guesswork while running pre-deployment "what if" scenarios.

Optical Modeler is the link engineering tool supporting design and

implementation of Ciena's Common Photonic Layer (CPL) and Optical Multiservice Edge 6500 networks by allowing the user to accurately characterize the network topology and constraints to match actual network conditions and growth scenarios. This tool is intended for Ciena customers as well as Sales and Engineering teams who would like to evaluate a variety of deployment scenarios while facilitating the ordering process and project documentation.

Optical Modeler uses sophisticated link engineering algorithms to position key photonic components in a cost-effective manner and allows users to design efficient and optimized networks, with minimal inputs. The powerful algorithms perform photonic component placement while the flexibility of the tool allows users to manually add and modify components to validate designs meeting specific customer network characteristics.

The ability of the user to create forecast-tolerant designs ensures seamless growth of the network, guaranteeing full connectivity up to the full capacity and end of life of the Optical Multiservice Edge 6500 or CPL system. By modifying

Features & Benefits

- Builds and displays various network views selectively through powerful GUI
- Minimizes CPL and OME photonic components using sophisticated design algorithms
- Features forecast-tolerant designs, ready for future growth
- Supports optical branching, allowing optical paths to cross optical domain boundaries without regeneration
- Supports 40G designs on both OME 6500 and CPL platforms
- Enables automatic or manual wavelength routing and assignment
- Allows the creating of user-defined profiles
- Provides various on-screen summaries as well as exportable reports



Figure 1.