spatial info
CLEARING THE NETWORK CLOUD

spatial net

Data Sheet: Fiber Design & Management

Efficiently Manage Fiber Networks with spatialNET®

spatialNET® is a network design and management tool that helps network engineers design and manage fiber, coax, copper and power networks. spatialNET's open architecture and integrated product suite let you leverage the power of your network asset data throughout your organization to drive sales, marketing, construction, circuit planning, provisioning and network health monitoring.

Inventory management application that enhances fiber network planning, designing, building, and management.

Fiber Design & Management

spatialNET provides state-of-the-art fiber network design and inventory management functionality on a scalable, enterprise platform. spatialNET is used to effectively design, document and manager fiber optic networks. It is integrated with inside plant design management functionality to allow seamless connectivity from fiber runs into the equipment housed inside buildings. It is also integrated with coaxial management functionality to trace network connectivity seamlessly from fiber to RF plant, through to serviced addresses. spatialNET's fiber-specific functions include:

Fiber Cabling & Design

- Create and maintain fully connected end-to-end fiber designs and as-builts in a single, intuitive graphical environment, with embedded enforcement of specified business and design rules. A single point of entry is used for both design and management of fiber
- Represent fiber routes, individual fiber cables of varying configurations, storage loops, termination racks, node equipment, network support structures, and any other database features with graphics and text
- Add/edit fiber cable, including single-click insertion of a new splice into existing cable
- Associate fiber cable to support structures, such as strand, conduit, etc.
- Manage cable footage
- Automate fiber annotation/reading creation including rippling
- Validate fiber design
- Automate design documentation, including splicing sheets, BOM, link loss reports, etc.

Circuit & Wavelength Management

- Associate logical circuits to physical fibers and equipment in both outside plant and inside plant environments
- Manage CWDM/DWDM, from simple wavelength management, to complex nested protocol hierarchies
- Manage circuits that carry status information indicating current usage and priority, and that may be assigned to customers, third party carriers, transport protocols, or to other purposes. Circuits may be carried directly to physical plant, or may be nested within lower levels of a protocol hierarchy. Such assignment will automatically ripple through to all physically connected plant used to deliver the circuit

Reporting

- Trace end-to-end upstream and downstram either at the sheath level (ignoring splicing), or at the circuit level, where splicing details are traced. Tracing may be done for existing network or for proposed/designed future network
- Trace network outages OTDR event locations by tracing fiber optical length
- Maintain conduit inventory and occupation
- Route and attach fiber sheaths
- Calculate storage loop and slack lengths
- Manage equipment placement and connectivity
- Splice individual fibers
- Maintain Bills of Materials (BOMs)

Query Fiber

- View cable annotations in map views
- Display fiber cable details
- Display fiber segment usage
- Display fiber splice details
- Display fiber equipment details
- Trace connectivity - upstream/downstream
- Report total cable count/footages
- Find and record fiber fault location (from OTDR trace result)
- Display strand attachment/conduit usage details

Fiber Splicing

- Use a friendly splicing interface that allows single-click splicing of many fibers
- Edit splices with graphics and text entry
- View splice reporting and splice matrix
- Record tray assignments, splice loss, unspliced fibers, etc.
- Edit splice enclosure details including cable footages

Fiber Management

- Assign and track fiber usage, ownership and priority
- Assign and track fiber channels and direction
- Locate fiber with available physical capacity (dark fiber) or logical capacity (unused wavelengths or channels)
- Track sheath segment as-built footages
- Determine customers fed by each fiber

spatialNET® is part of the spatialSUITE line of communications products from SPATIALinfo Inc.