BROCHURE

Octave NetWorks Comms

Telecommunications network management



Telecommunications network operators need a functionally capable network model that delivers accurate, current information across organizations. However, conventional GIS tools lack the detail and ability to model the relationships needed to integrate with operational systems and coordinate a network's logical and physical elements.

Part of the Octave NetWorks portfolio, NetWorks Comms (formerly HxGN Networks Comms) streamlines engineering processes from planning to maintenance and maintains an operations-ready network model accessible across the business.

NetWorks Comms is a GIS for telecommunications resource management that provides location-based information and tools for civil infrastructure and fiber networks from design and construction to maintenance and operations in the back office and the field. It facilitates key business processes, such as work order design and execution, mapping, asset records management and maintenance records for the entire system.

NetWorks Comms has a feature-rich interface that supports full tracing capabilities, fault analysis and path redundancy. It can assess, manage and track the status of projects, equipment and connections and coordinate with other systems to model the full engineering lifecycle.

With NetWorks Comms, communications providers can more effectively design, document, administer, analyze, maintain and manage their fiber optic networks.

Operational workflows

Prepare your work

Plan and review your work.

- Find, review and adapt existing projects
- Generate reports of network assets
- Create new plans and share with other users and applications

Perform surveys

Create, review and update assets in the field while performing surveys.

- Create and edit all assets, including buildings and other non-proprietary data
- Access inside and outside plant data
- Leverage GPS positioning
- Run reports and analyses – OTDR, fiber path, etc.
- Synchronize updates with the network inventory database

Build, maintain and modify

Manage your network throughout its entire lifecycle.

- During the build of your network
  - Open and update work orders
  - Tag assets during their construction
- Identify and document changes
  - Identify, record and manage incidents in the field
  - OTDR trace offline
  - Report incidents
  - Create and register repairs
- Track status with map-based analytic dashboards
  - Real-time overview of current works
  - Incidents and statistics

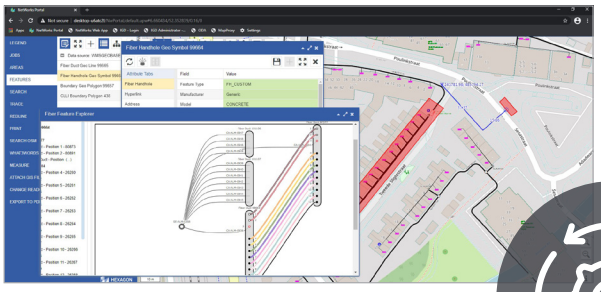


Create detailed designs

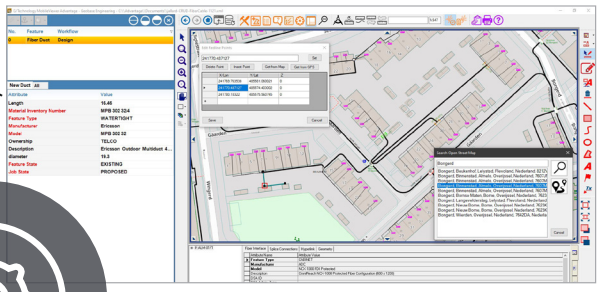
Validate and post field updates to the production system.

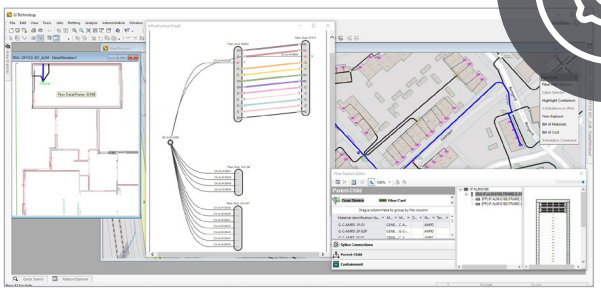
- Automate changes coming from the field
- Finalize the detailed design
  - Update devices
  - Define splicing schemes
  - Organize racks
- Validate the network
  - Materials and specifications
  - Topology of infrastructure and fiber
- Prepare project documents for build, including reports, schemes, etc.
- Allocate services
- Track status with map-based analytic dashboards
  - Real-time overview of current works
  - Incidents and statistics

1. Prepare



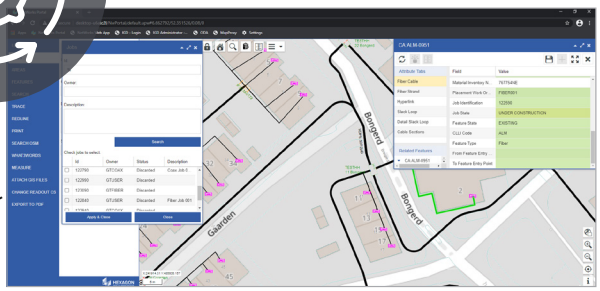
2. Perform





3. Build

4. Create



NetWorks Comms is a comprehensive suite of online and offline capabilities to design, document, maintain and adapt your telecommunications network.

Product capabilities

Advanced editing

NetWorks Comms delivers computer-aided design capabilities and smart editing tools within the GIS environment.

- Replaces separate tools with a single system
- Improves network design and documentation
- Removes latency and errors from network records
- Uses rules to drive semi-automated placement with integral data validation
- Captures high-quality data faster

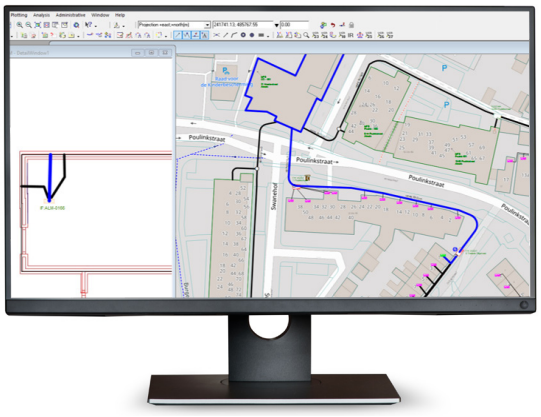


Figure 1. Advanced modeling of a telecommunications network

Rich telecommunications model

NetWorks Comms provides an out-of-the-box, rich and highly functional connected telecommunications model.

- Accommodates connectivity of the complete network from any terminating device to the inside-plant termination
- Supplies the inventory and connectivity of fiber, copper and equipment components



Figure 2. Complete physical inventory to model and manage the entire engineering lifecycle

Complete engineering lifecycle

NetWorks Comms provides the version management, analysis, tracking and reporting capabilities needed to model and manage the complete engineering lifecycle.

- Enables coordination with other business platforms, including
  - Enterprise resource planning (ERP) systems
  - Work and asset management systems (WAMS)
  - Field operations
- Allows for maintaining alternate versions
- Performs design validation and estimation for financial and technical assessment

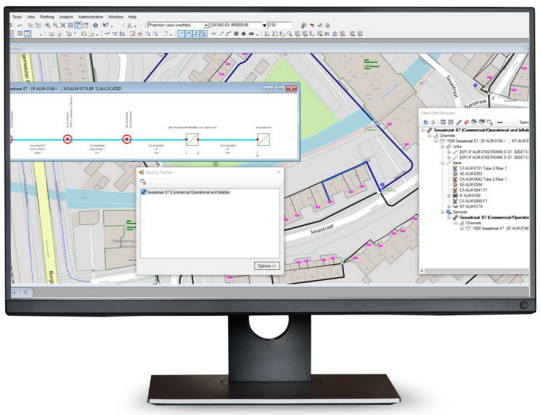


Figure 3. Logical network inventory management

OSS/NRM integration

NetWorks Comms works alongside a range of OSS/ NRM platforms, including Amdocs OSS (previously Cramer Dimension).

- Integrates and coordinates advanced telecommunications GIS to streamline processes
- Enhances data quality and currency
- Speeds up operations and extends functional capabilities

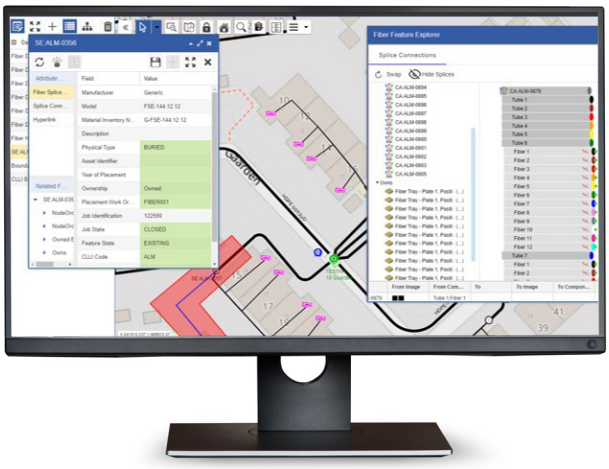


Figure 4. Online review and update of the network

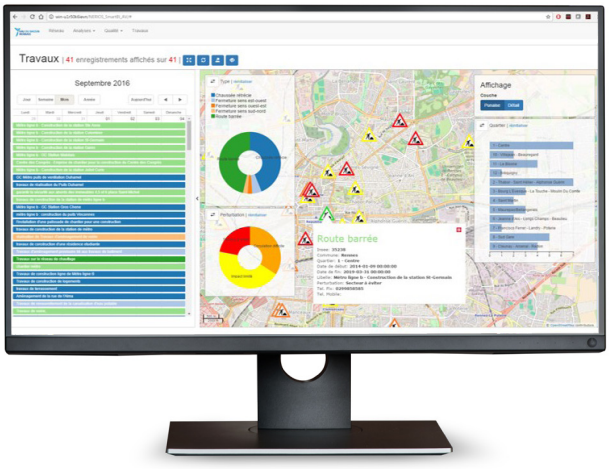


Figure 5. Intuitive dashboard and analytics enhances faster decisions with real-time data

Enterprise scalability

NetWorks Comms' scalable architecture is proven in production environments.

- Supports tens to thousands of connected users
- Networks local businesses or multinational operations
- Establishes consistency and teamwork
- Applies corporate design practices and standards through work processes and business rules

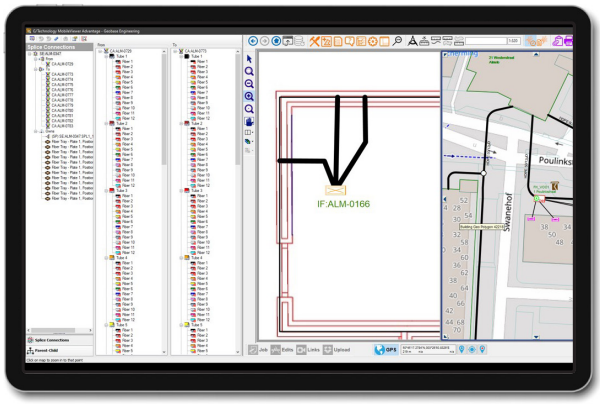


Figure 6. Offline design and survey of the network and its components

Key benefits

Optimized resources and ROI

The NetWorks Comms model records asset details and relationships to support most function.

- Filter and render information in different ways, on the fly
  - Text
  - Maps
  - Schematics
  - Diagrams
- Eliminate duplicated data
- Coordinate engineering capabilities with other business systems
- Streamline workflows and gain valuable insights
- Compare alternative design proposals from technical and financial perspectives
- Reduce overall project time
- Determine the necessary materials and works in advance
- Minimize implementation and future upgrade efforts with the advanced, pre-configured telecommunications data model

Improved processes

Edits within NetWorks Comms are immediately available in the model and accessible via the database.

- Support time-sensitive use cases
  - Lower data latency
  - Universal access
  - Faster operations
  - Greater efficiency
  - Enhanced capabilities
- Cut costs and increase productivity with improved field processes
- Share information in both directions between the office and field
- Eliminate paper copies and duplicate work
- Reduce field visits and travel time for fewer project delays
- Shorten response and intervention times with improved installation and repair processes
- Respond quickly to outages
  - Track the network
  - Locate the true source of the problem
  - Identify and communicate with affected customers
  - Help field engineers resolve the issue

Reduced financial risk

NetWorks Comms can reduce financial risk by assessing high-level costs of proposed plans.

- Design alternative proposals for build-out
- Assess the siting of distribution points, service areas and deployment methods
- Use spatial analysis to lessen financial risk when assessing new connections

Discover how you can benefit from NetWorks Comms.

Contact us

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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