

IntelliTeam[®] CNMS

Communication Network Management System



Intuitive, browser-based monitoring and management
of SpeedNet[™] Radio networks.

IntelliTeam® CNMS Communication Network Management System

As the number of networked grid devices increases, so does the difficulty of managing network communication and identifying problems before they affect grid operations. Designed to meet the specialized needs of electric utilities, the IntelliTeam CNMS Communication Network Management System simplifies monitoring and management of SpeedNet™ Radios supporting SCADA and distribution automation applications.

IntelliTeam CNMS software provides a comprehensive view of the radio network's configuration and performance. It offers centralized management of the network with multi-level user access from PCs with IP connectivity to the IntelliTeam CNMS virtual server. Using a standard Web browser, such as Google Chrome, the software enables users to monitor real-time and historical network data. Authorized users can manage each radio and perform configuration changes, and firmware upgrades.

Easy to Use

- A browser-based interface with intuitive navigation
- Simultaneous, multi-user access
- Customizable filters and reports
- Google Maps™ and Google Earth™ integration
- Color-coded icons for alarms and radio-frequency (RF) links

Functions

Network Visualization. IntelliTeam CNMS software overlays an interactive radio network map on a Google Maps interface. Users can access the configuration and performance functions of the radio by clicking on the respective radio icon.

The **Deployment** view:

- Shows links between radios, color-coded based on link quality (see Figure 1)
- Identifies radios with active alarms, color-coded based on severity
- Exports to Google Earth for offline analysis

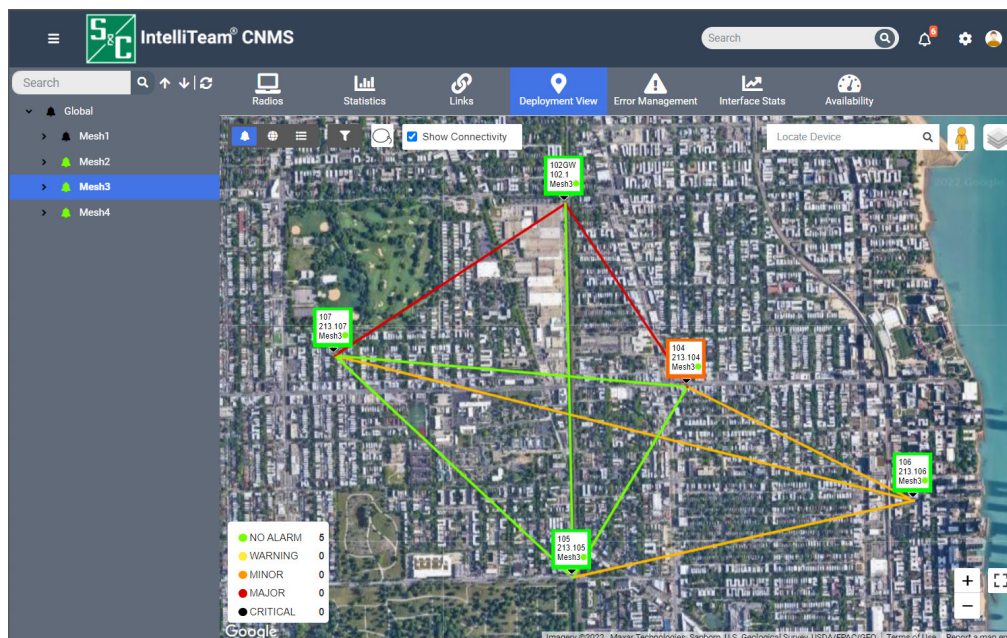


Figure 1. The Deployment View tab.

Configuration Management. IntelliTeam CNMS software makes it easy to monitor and change radio-configuration settings.

The Configuration Manager:

- Displays radio-configuration settings
- Enables editing of radio-configuration settings (see Figure 2)
- Supports scheduled firmware upgrades

Error Management. Radio data are compared against user-defined thresholds, and alarms are raised when issues are identified.

The Alarm Manager:

- Triggers an alarm when a deviation is discovered in a performance metric
- Generates reverse chronological alarm and event lists (see Figure 3)
- Does not fix network or radio errors, but enables corrective actions to be performed

Performance Management. IntelliTeam CNMS software makes it easy to collect and analyze critical radio performance statistics.

The Performance Manager:

- Enables configuration of data-collection and reporting schedules
- Organizes radio data in interactive tables and graphical interfaces for easy monitoring and analysis (see Figure 4)
- Produces consolidated reports on the performance of individual radios, subgroups, or the entire network

Security Management. IntelliTeam CNMS software offers in-depth security management functions. It provides authentication, authorization, and privilege management for individual users and groups of users.

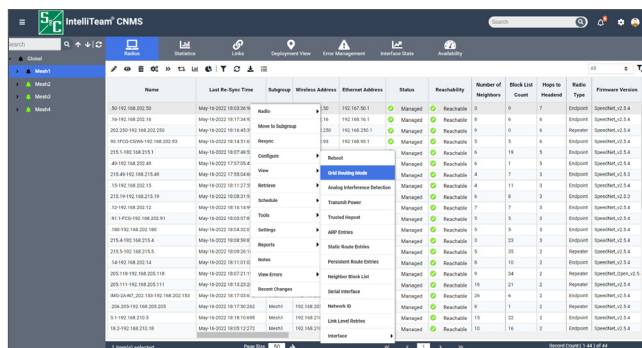


Figure 2. Radio-configuration options.

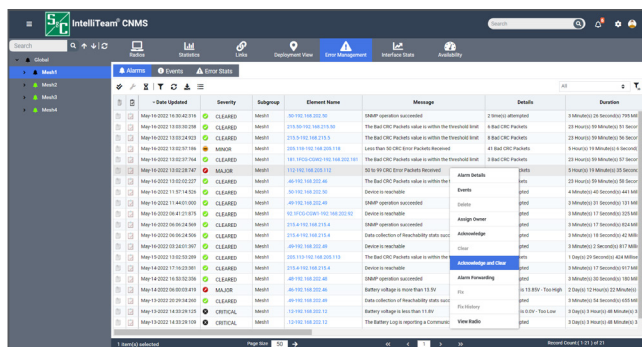


Figure 3. The Events tab.

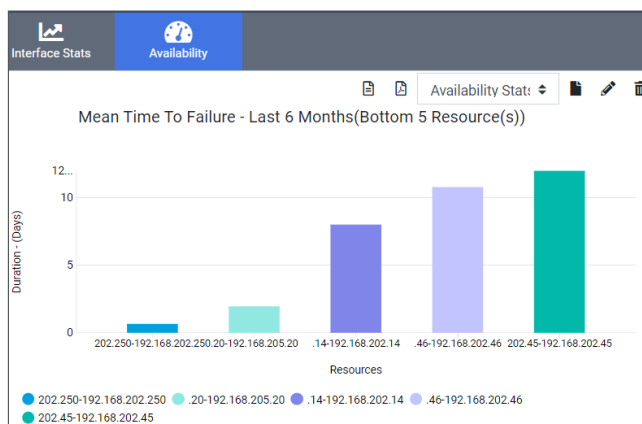


Figure 4. The Wireless Interface Stats tab.