

Mesh Networking

AN ADD-ON MODULE TO SIGNALPRO® FOR DESIGNING, DEPLOYING AND OPTIMIZING SMART GRID AMI, SMALL CELL, DISTRIBUTION AUTOMATION, IOT, WIFI, M2M AND OTHER WIRELESS MESH NETWORKS

From Small to Large Scale and Beyond

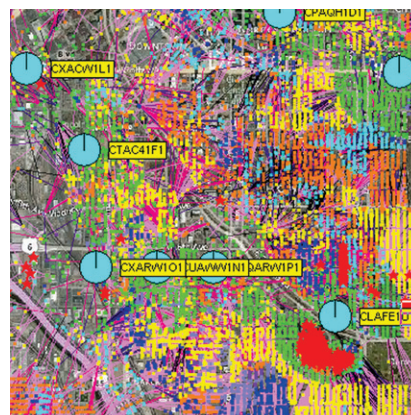
The Mesh Network Module is essential to the design of any efficient and robust mesh network. With custom analyses, studies, displays and features specifically designed to address the needs of mesh networks from hundreds of nodes to millions in size, the Mesh Network Module is an important addition to any wireless engineer's solution set.

MegaMesh®

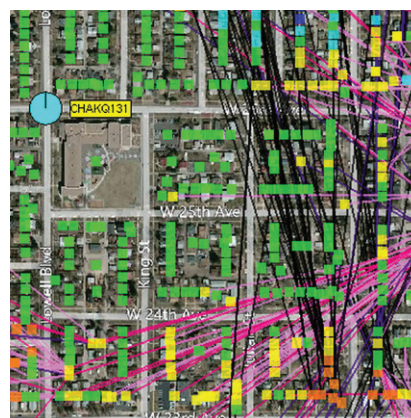
Essential to the design of any Smart Grid network, the MegaMesh feature allows Smart Grid vendors, utilities and system integrators to efficiently plan, deploy and optimize very large scale mesh and traditional AMI (Advanced Metering Infrastructure) networks consisting of potentially millions of nodes. Automated processes and detailed system reports ensure proper network dimensioning while identifying mesh vulnerabilities and critical mesh points.

Capacity-Constrained Mesh Analysis

By considering factors such as collector capacity, number of device connections and backhaul availability, networks can be designed to conform to the vendor's requirements. Study inputs allow the definition of collection capacity, hopping limits and mesh node downstream devices with the resulting studies identifying areas of weak capacity.

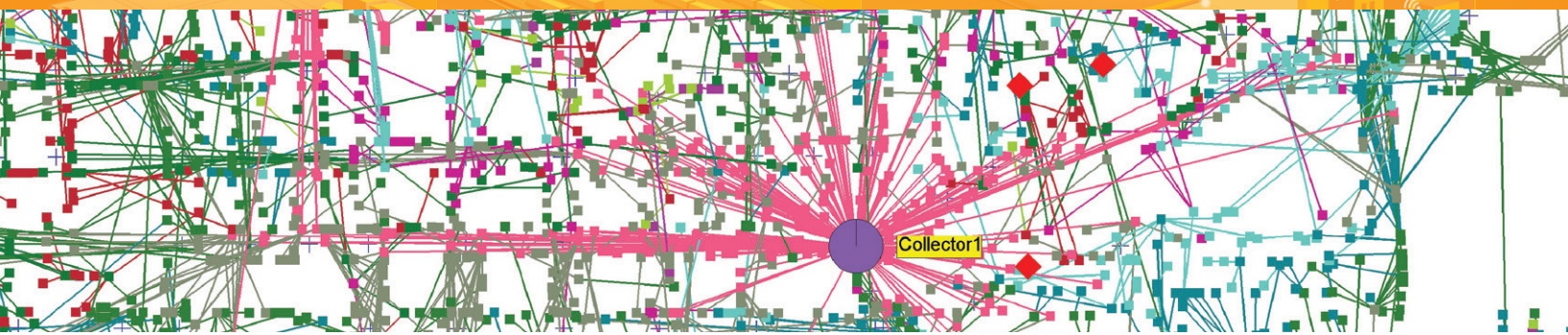


Large-scale mesh study



Smart meter link visualization

Next Generation Wireless Design



Automatic Router Layout

Automatic layout of access points and routers based on towers/poles databases and street vector data.

Automatic Selection of Routers

Easily determine the optimum number of required routers based on receive sensitivity, maximum number of hops for devices and maximum router distance.

Automatic Repeater Selection

Automatically assign optimal repeater location as determined from potential candidate locations.

Real-Time Repeater Selection

By calculating connectivity in real-time based on cursor location, engineers are able to quickly find ideal repeater locations that solve difficult node connectivity problems.

Automatic Selection of Gateway Nodes

Automatically identify and assign nodes as gateways based on the best connectivity conditions and availability of a backhaul network.

Traffic Loading

Automatically calculate traffic loading on individual nodes based on real service areas and a selection of multiple service types.

Benefits

- Streamline pre-sales activities
- Intelligently scale large networks
- Optimize infrastructure investment
- Automate detection of mesh vulnerabilities
- Decrease network optimization cycles
- Shorten time to deployment
- Reduce truck rolls

Reporting

Create reports and coverage/performance diagrams and take advantage of EDX SignalPro's import/export functionality for use with industry standard GIS tools and 3rd party software.

Complete System Design

Combining the Mesh Network Module with the LTE, WiMAX and/or Mobile & Cellular Modules in EDX SignalPro provides a fully featured solution for Heterogeneous Network Design.