GE
Digital Energy

Wireless Network Inventory

fact sheet

Control Your Network – Control Your Future

The Smallworld Network Inventory™ product from GE Energy offers leading service providers intelligent inventory to control the deployment of their network. The combination of spatially accurate inventory, integrated design intelligence, and strategic decision support is critical to business success.

Smallworld Network Inventory supports an impressive list of world class communications customers, streamlining their network planning and engineering, service fulfilment and service assurance business processes. Smallworld Network Inventory is a highly scalable portfolio of products that provides an end-to-end view of multi vendor, multi technology networks.

Part of the Smallworld Network Inventory product portfolio, Wireless Network Inventory™ builds on Physical Network Inventory™ to document, manage and plan the infrastructure required to support wireless networks.

To manage and plan mobile networks effectively, operators must have an integrated record of all of their network assets and how they are utilized.

Wireless Network Inventory is a highly configurable solution enabling users to model and manage all of their equipment. Wireless Network Inventory seamlessly integrates with Physical Network Inventory, enabling:

- Tower Inventory Management
- Radio System Inventory Management
- Physical Capacity Management
- Wireless and Fixed Line Integration

Tower Management

In the real world, radio systems can be mounted on a variety of different structures in a variety of different ways. Users can place towers and lattice towers with a variety of different footprints. Building towers include an equipment room to house the standard rack mounted equipment. Platforms and gantries can be added to these structures, and mounting poles attached to the platforms. These are displayed in the tower face views. Platforms also have their own internal plan view. This shows the poles, radio systems and their azimuths.

Access points, gantry holes and cable trays can also be modeled, to document how the cables are routed up through the towers and out to the radio systems.

Radio System Inventory Management

Radio systems can include a variety of components, including antennae, radio units, splitters and repeaters. Radio systems can be placed on buildings either directly onto mounting spaces on the faces of the building, or via mounting poles. They can also be placed on mounting spaces on the legs of lattice towers or also onto mounting poles.

Physical Capacity Management

Wireless Network Inventory enables the user to manage key resources. Users can track and reserve assignable resources such as mounting spaces on towers and mounting poles and internal floor spaces. Users can also keep track of the utilization of key resources, such as power supplies and air conditioning. Configurable thresholds provide immediate feedback on resource utilization and provide alerts and warnings as capacity limits are reached. The user can also create reports to aid planning, sales and regulatory requirements. Information about the utilization of resources is provided both textually and graphically. As radio systems are placed, the mounting spaces they utilize are automatically updated to show that they are occupied.

Other resources that can be managed include cable tray occupancy, floor space in the equipment rooms, and power utilization. Resources can be marked as being reserved, available, occupied or unavailable.
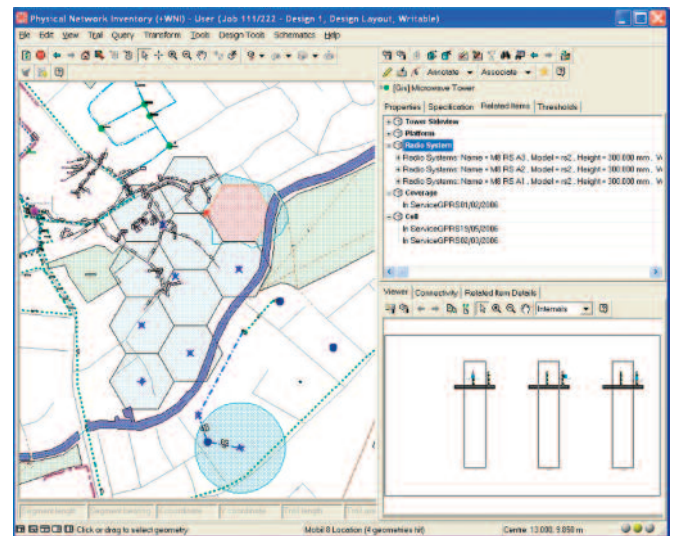
Wireless and Fixed Line Integration

Wireless Network Inventory radio systems and radio routes are fully integrated with the standard Physical Network Inventory rack-mounted equipment and cable models. The radio units can be connected to standard Physical Network Inventory cables through their ports, using standard connectivity tools.

Radio routes are then used to connect the radio systems at different sites together. The azimuth of the radio system and antennae are automatically reset when the connection is made.

Once the wireless and wire line network have been connected, users can trace the network through the antennae and over the radio routes using the standard Physical Network Inventory tracing tools.