



Smallworld Network Inventory

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EVERY REVENUE GENERATING OPPORTUNITY DEPENDS UPON HAVING ACCURATE UP-TO-DATE INFORMATION ABOUT THE NETWORK

GE Digital's solutions are helping service providers with their digital transformations by enabling business savings across the plan, design, build, and operate network lifecycle.



REAL RESULTS

Reduce design time

- Up to 80% reduction in network design time through automation

Reduce time to market

- Accelerate time to market with automated availability checks and integrated provisioning workflows

Optimize resources and services

- Up to 20% reduction in leased line costs through resource consolidation

Reduce provisioning time

- Up to 30% savings in provisioning time through task automation

Reduce network downtime

- Up to 30% reduction in network downtime through rapid fault location



OVERVIEW

Complete physical & logical network inventory solution

Network inventory is the foundation of a Competitive Service Providers (CSPs) operation. Every revenue generating opportunity depends upon having accurate up-to-date information about where the network is and how it is connected, both physically and logically. GE Digital's solutions are helping CSPs with their digital transformations by enabling business savings right across the plan, design, build, and operate network lifecycle. This offers CSPs an inventory system to control the deployment of the critical infrastructure on which all end-customer services depend and form the bridge into the BSS for rich automation and service activation and delivery enabling both OpEx and CapEx savings.

The combination of GE Digital's market leading geospatial physical inventory, Smallworld Network Inventory, and the CROSS Network Intelligence solution provides a spatially-based, cross-technology, end-to-end view of the entire network. This comprehensive and integrated view combines the fully connected inside and outside plant of the physical network with the logical view of the network to deliver a seamlessly integrated inventory solution.

CROSS is an OSS solution that builds a common network model by consolidating fragmented inventory and network data into a configurable web-based platform. It uniquely integrates and correlates resources vertically across multi-domain, multi-vendor inventory within a single source of truth, vastly improving data quality.



A SINGLE SOURCE OF TRUTH ABOUT YOUR NETWORK

Work with imperfect data to build a single, comprehensive inventory record
OSS provides a single source of truth about the network, that links and integrates all assets. CROSS integrates and links all assets vertically from location through the physical, logical and virtual layers to the service inventory, while simultaneously keeping the database up-to-date with self-discovery data from the network itself. Based on true integration, rather than a federated or registered “snapshot”, CROSS captures the entire inventory record in a single database and works with data in its existing state regardless of its quality, allowing you to skip tedious data cleansing before go live. As a single source of truth about the network, CROSS provides a reliable foundation for all current operational processes as well as automation and digital transformation to new technologies such as IoT, 5G, and SD-WAN. CROSS makes operational processes more efficient, reduces OPEX and is a valuable tool to assist in validating CAPEX planning for network and service growth.



COMPLETE END-TO-END SUPPORT FOR THE NETWORK LIFECYCLE

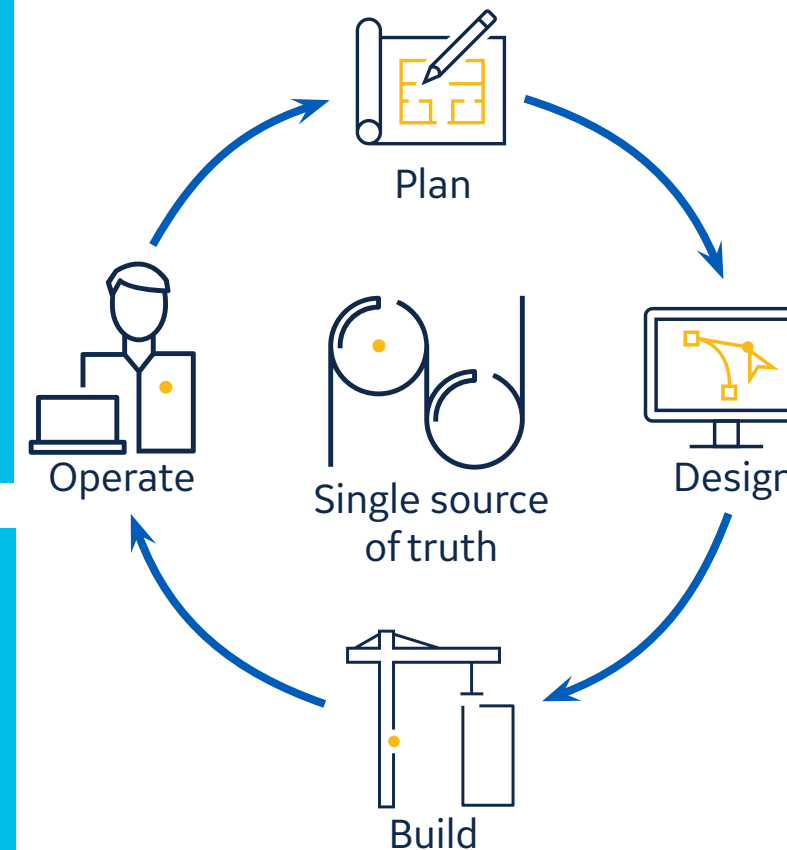
Knowing where the network is, and how it is connected, is critical

Operations & Maintenance

- Accelerate time to market by automating feasibility and fulfillment requests with complete visibility of entire physical and logical network
- Understand how faults impact customer services and determine root cause

Field Techs\Supervisors

- Enable field techs to understand fault impacts
- Eliminate paper...view designs in the field
- Dynamically change as-designed network to reflect final as-built network in the field during construction



Complete end-to-end process support

Network Engineering

- Scale up network design activities for FTTx, 5G x-haul across physical & logical network
- Automated & optimized rules-based, network design
- Work with imperfect data to get the job done
- Automatically generate job packs for construction

Sales & Marketing

- Respond to service feasibility requests in near-real time with confidence
- Combine different data sources to generate business insights & inform decisions
- Simple solutions for non-design experts

Service inventory can be ingested and linked with the resources utilized, providing end-to-end visibility of Resources and Services, and underpinning effective OSS process support, such as rapid root cause analysis, resource optimization, tracking faults, and service availability checks. Open APIs and an evolving library of probes allows CROSS to integrate with other

network and business systems and import relevant data as needed to support workflow automation. CROSS's dynamic data model, combined with its suite of configurable OSS modules and APIs enables CSPs to master their inventory and seamlessly integrate it into their key financial, operational, and assurance processes.

KEY CAPABILITIES



Service assurance

Quickly identify the likely cause of service faults and identify affected services with Root Cause Analysis and Service Impact Analysis, correlating service faults and alarms and collapsing them to common providers.



Revenue assurance

Assess the profitability of services and network resources (including leased inventory) by linking resources with operational costs and bridging revenue from service contracts with service inventory data.



Service provisioning and fulfillment

Provision services over optimal network paths, factoring in elements such as available capacity, physical constraints defined by SLAs, and more.



Network planning

Confidently plan and design future networks, automatically generating task and material lists while factoring in available existing resources and their capacity.



Network design tools

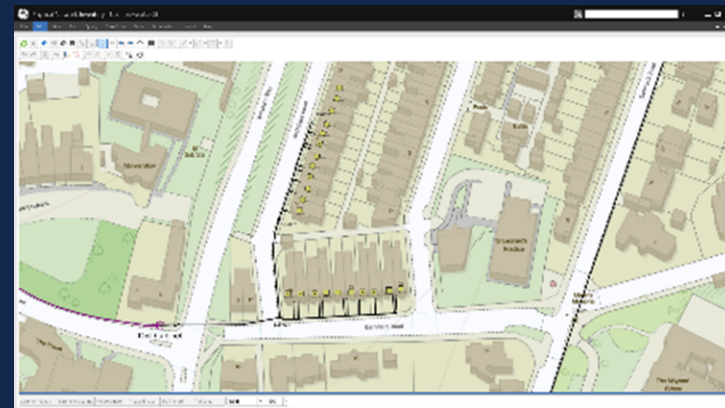
Accelerate network design by automatically creating designs for any FTTx networks and creating connectivity and enforcing data integrity. Show current and proposed future network through workflow with integrated validation.



Network data visualization

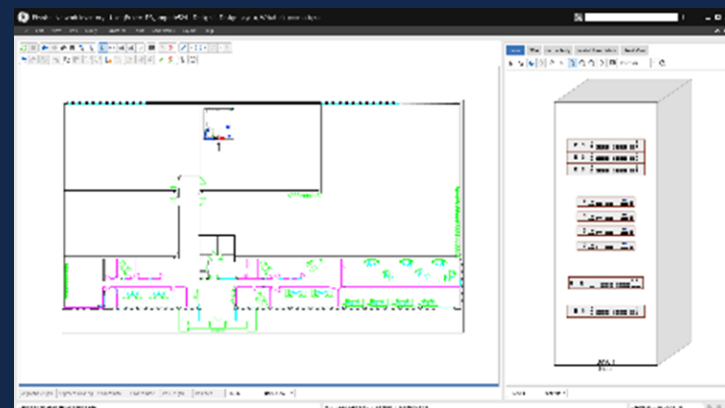
Illuminate hidden data and visualize the network with Google-like map overlays, multi-layer schematics, and powerful reporting tools that can be consumed by field teams, customers and engineering teams.

A SINGLE INTEGRATED VIEW OF THE COMPLETE NETWORK



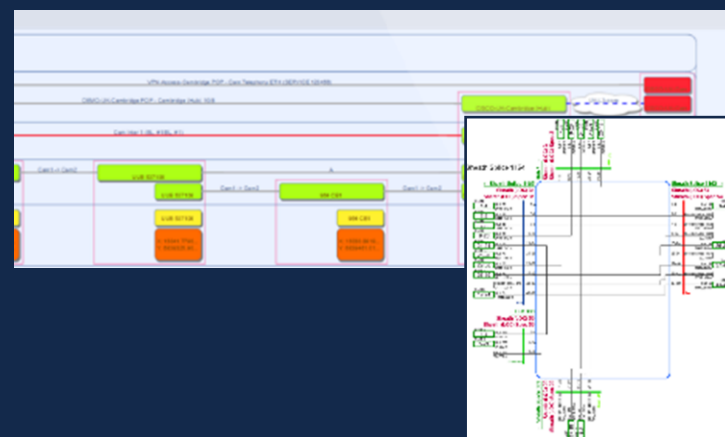
Geospatial Network Views

Fully connected network model, the basis for operations



Inside Plant Views

Manage connectivity, cabling, space and power for buildings



Schematic Views

Single line & splice diagrams

MARKET LEADING CAPABILITY

GE Digital offers unique and unparalleled value to telecoms operators:

INDUSTRY-STANDARDS

Built using industry-standard technologies and fully-aligned with TMF's business process framework (eTOM).

ENABLING DIGITAL TRANSFORMATION

Work with imperfect data, accelerate change through digitizing field operations, automating processes and increasing and maintaining data quality.

REDUCE TIME TO MARKET

Accelerate time to market on new services with availability checks and integration with service provisioning workflows with CRM and ERP.

BRIDGE OSS AND BSS

Seamlessly integrate CROSS inventory with external systems and data to support unified network and business operations.



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