

# **GE Digital**

# Smallworld Network Inventory

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

GE Digital's geospatial 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 new build costs**

 Up to 5% reduction in new build costs due to better utilization of network resources

### Reduce design time

 Up to 80% reduction in network design time through automation

### Improve field productivity

 Up to 15% workforce productivity improvements through process digitization

#### **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**

### Market-leading geospatial network inventory solution

Network inventory, and particularly physical network inventory, is the foundation of a Competitive Service Providers (CSPs) operation. Even in the era of increased virtualisation and Software Defined Networking the physical network is still fundamental to delivering service. Every revenue generating opportunity depends upon having accurate up-to-date information about where the network is and how it is connected. 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 physical infrastructure on which all end-customer services depend.

Smallworld Network Inventory provides a spatially-based, cross-technology, end-to-end view of the network. This comprehensive and integrated view combines the fully connected inside and outside plant of the physical network with the ability to integrate logical inventory to deliver an integrated inventory capability.

The underlying geospatial platform allows you to truly understand where your network is and how it is connected. This powerful solution supports all network technologies, including 5G x-haul, FTTx, copper, RF coaxial and wireless. As a result, you are able to utilize your network resources more cost effectively, providing and maintaining services to your end customers more quickly and efficiently.



#### COMPLETE END-TO-END SUPPORT FOR THE NETWORK LIFECYCLE

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

# Operate Operations & Maintenance

- Enable rapid response to customer requests
- Automatically identify available capacity
- Provide NOC and field engineers with tools to quickly identify precise fault location

# Build Field Techs\Supervisors

- Eliminate paper...view design in the field
- Change as-designed network to reflect final asbuilt network
- Built-in QA processes ensures quality is maintained



# Plan Sales & Marketing

- Automated planning tool to quickly evaluate bid/no-bid
- Combine different data sources to generate business insights & inform decisions
- Simple solutions for nondesign experts

## Design Network Engineering

- Scale up network design activities for FTTx, 5G x-haul
- Automated, rules-based, network design
- Automatically generate job packs for construction

Smallworld Network Inventory is an integral part of the Operations Support Systems (OSS) environment supporting business critical processes. A single consolidated network inventory forms the heart of an OSS solution. Through integration with other key systems, Smallworld Network Inventory fulfils a vital role in planning and engineering and brings together service fulfilment and service assurance processes.

Smallworld Network Inventory is a strategically powerful business resource, providing access to comprehensive, up-to-date network information. Designers, planners, field engineers, sales and marketing, network operations and customer care staff can access inventory data in whatever form is most appropriate, from geographic maps to spreadsheets or database reports via desktops or tablets, in the office or in the field.

#### STRENGTH IN DEPTH

#### Extensive global customer base with proven large-scale deployments

Our customers range from new entrant small fiber operators to large, established national operators, cable multiservice operators, long haul carriers and wireless operators. Electrical utilities also use Smallworld solutions to improve the management of their telecommunications networks.

The Smallworld Network Inventory solution has provided key business benefits at more than 160 high-profile customers across 37 countries worldwide. Our 20 plus years of experience has resulted in a solution that is functionally rich, minimizing the need for customization while delivering on customer expectations. True scalability means that the Smallworld Network Inventory system can meet the needs of the smallest operator all the way to the largest operators with vast databases and hundreds of users.

#### **KEY SMALLWORLD PHYSICAL NETWORK INVENTORY CAPABILITIES & ADD-ON MODULES**



#### **Single Network View**

Underpins operations by modelling entire physical network, both inside & outside plant, supporting multiple technologies & equipment from multiple vendors. Maintain data quality with robust automated quality assurance tests.



#### **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 Schematics**

Provide field teams, customers and engineering team with, automatically generated, easy to understand single line diagrams and schematics showing cable and fiber level connectivity at all levels of the network.



### **Mobile Enterprise Suite**

Streamline field operations with Mobile Enterprise Suite enabling enterprise wide access for field engineers and others for specific workflows. Use any device to access the capabilities needed to complete tasks quickly and efficiently.



# Geospatial Reporting & Thematic Mapping

Deliver business insights with GeoSpatial Analysis a powerful reporting, analytic visualization and historized data warehouse tool for "mash-ups" easily configurable to use Smallworld and over 35 other data sources.



# Business Process Integration

Automate business processes through integration with wider OSS using GeoSpatial Server via a range of APIs which can easily be extended. Open Geospatial Consortium standards are also supported.

#### A SINGLE INTEGRATED VIEW OF THE COMPLETE NETWORK

#### **Geospatial Network Views**



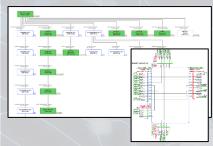
Fully connected network model, the basis for operations

#### **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:

#### **PROVEN SOLUTION**

GE's Smallworld Network Inventory is an off-the-shelf product proven in large scale Tier One deployments reducing risks for all sizes of operators.

#### **ENABLING DIGITAL TRANSFORMATION**

Accelerating change through digitizing field operations, automating processes and increasing and maintaining data quality.

#### **LOWER TOTAL COST OF OWNERSHIP**

Rich functionality supports customer requirements through configuration rather than customization and simplifies integration.

#### **ARCHITECTED FOR THE FUTURE**

Based on industry standard technology and adopting latest technologies as appropriate to keep pace with change in the industry.

#### **Contact Us**

#### www.ge.com/digital/gis-telecom

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