



GE VERNOVA

# **Smallworld GeoSpatial Asset Management Standard Training Courses**



November 2023

[www.gegridsolutions.com/geospatial](http://www.gegridsolutions.com/geospatial)

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# Asset Management Training

## Introduction

Educating staff to properly operate, configure and maintain information systems is key to realising the productivity gains achievable from new technology. GE Digital's training is a service offering designed to assist clients in applying our applications as effectively as possible.

We offer a wide range of technical training courses relating to products in the GeoSpatial Asset Management portfolio. These courses are available on-line or in a traditional classroom format at GE Digital training facilities or customer sites. Training is provided by subject matter experts (SMEs) in specialized areas including core geospatial software, utility applications, telecommunications network inventory management and mobility solutions.



Training formats include e-learning, webinars or traditional classroom

Our standard courses are scenario-based using the off-the-shelf products configured with example databases. We can also provide bespoke training in which we adapt our materials in line with customers business processes and available data. Our consultants will work closely with key users to identify appropriate scenarios as a basis for the materials. This is generally accepted as the best means of providing high quality, relevant training.

GE Digital offer training in a variety of formats:

### In a Classroom

GE Digital has a number of dedicated training centres with fully equipped classroom facilities. Classroom courses are either open, in which case they are made available to the entire customer and partner base, or private for a particular customer often using bespoke training materials for a larger group of users.

Customers may have their own classroom facilities in which case our trainers are prepared to travel to present the course. Customers should note that the classroom will require an installed training environment for the practical sessions - typically a machine per attendee.

### Online as a Series of Webinars

Webinar or remote learning is flexible, quick to set up, low cost and has the advantage of minimising disruption to staff schedules.

Our webinars consist of a series of remote sessions over Teams or equivalent – typically presentations and demonstrations in the mornings leaving students to practice exercises in the afternoons. Course attendees are provided with a pre-installed virtual machine for the practical sessions.

### Online as self-paced e-Learning

A number of courses are available in an eLearning format accessed through our Learning Management System. This is self-paced training consisting of a series of interactive presentations and videos used to teach the theory and incorporating hands-on practical exercises. We offer a package which includes a pre-installed virtual machine and a tutor to assist or answer questions should the need arise. You can pause taking the course at any time and return to it later over a period of 30 days and opt for a test at the end.

### Self-teach with Remote Support

Where there is no elearning or open session of a particular course available, GE can provide materials for individual self-teach with limited remote assistance from an assigned tutor.

Information on training can be found on our website:

<https://www.ge.com/digital/services/education-services>

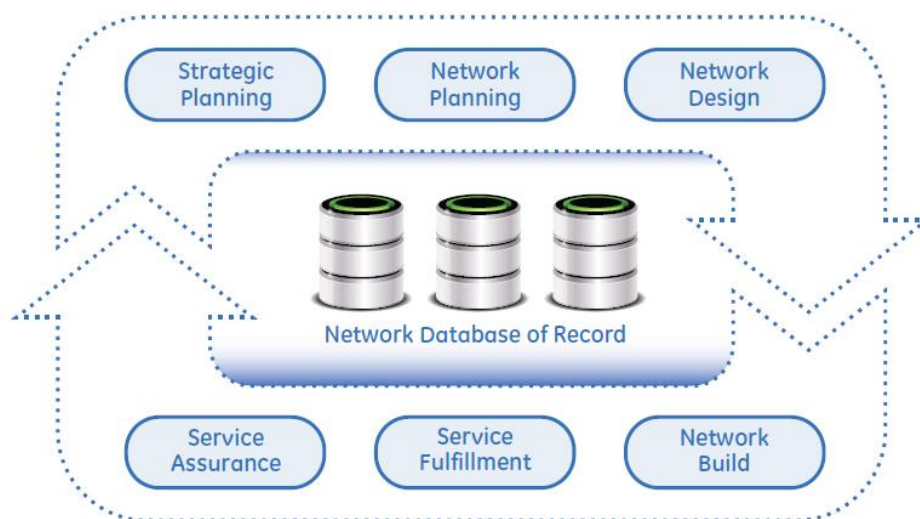
For pricing or to enquire about other courses and training options, send an email to [education.services@ge.com](mailto:education.services@ge.com)



# Training as Part of a Project Delivery

Training is typically a stage in one of our implementation projects rooted on GE's Software Solutions Delivery Methodology; a set of tools and processes to develop new products quickly, achieve better outcomes for our customers, and drive quality and competitive advantage. By using these new set of tools GE Digital aims to deliver the right solution faster, within budget and with a quicker return on investment for our customers.

For bespoke user training we review with our customers how they plan, design, build, optimise and roll out network infrastructures against a set of industry recognised business processes. These business processes have been created by GE Digital over 20 years of working with more than 350 global utility and telecommunications customers.



These business processes form the backbone of the solution delivery, with all aspects of configuration, testing and training aligned to ensure the solution delivery matches the customers' business practices. The adoption of this approach maximises scope within cost constraints whilst successfully implementing next generation technologies with increased organisational efficiency.

GE Digital asset management solutions are internationally known and widely used in the planning, construction and maintenance of complex network infrastructure. GE has a large array of industry standard out-of-the-box technologies, which can be combined to build an end to end solution, closely aligned to a customer's business needs. Much of our solution is preconfigured to meet the majority of our customer's business processes, and acts as a documented baseline for solution enhancement; reducing extensive and costly customisation as well as reducing the time to recover the value of implemented solutions.

GE Digital's solution offering includes industry market leading technology such as:

**Geospatial Asset Management:** Market leading solution suite that provides geospatial asset management for utilities and telecommunication providers to support network planning, design and analysis, maintenance and operations.

**OMS and DMS integration:** A configurable standards-based software solution that provides utilities with an automated way of introducing the electric network to the OMS (Outage Management System) and DMS (Distribution Management System) via CIM (Common Information Model).

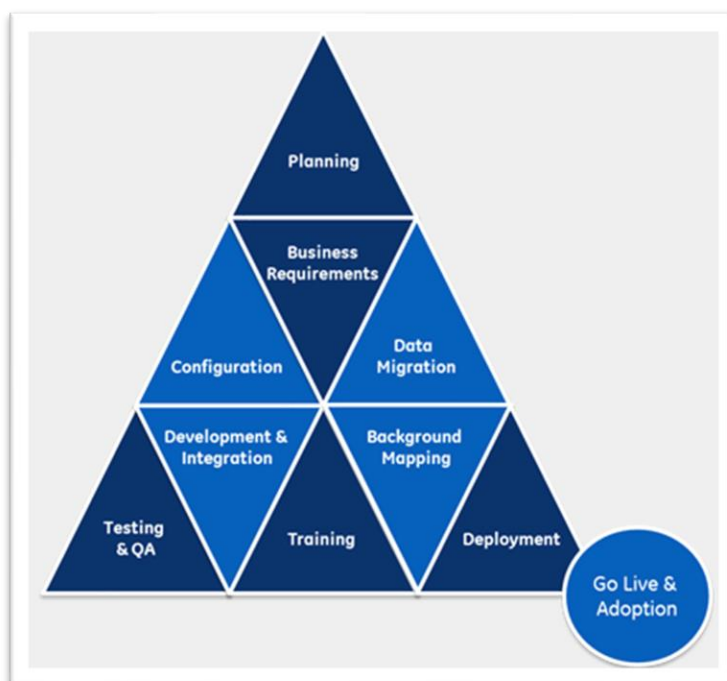
**Business Intelligence:** A state of the art map-centric business intelligence suite providing complete, fast, relevant, actionable insight to all those involved in the enterprise.

**Mobile Solutions** – Suite of offline and web-based work force management tools that allow companies to optimize the full life cycle of field service operations.

**Web Solutions** – A range of simple, easy-to-use business applications for customers to deploy, working in tandem with the enterprise engineering applications.

### **Best in Class Delivery Methodology**

Successful delivery of projects can be attributed to a structured, governed and repeatable project management methodology. Here at GE Digital, we are firmly grounded in industry standard project management principles which act as a framework to optimise solution deliveries. The application of the principles significantly reduces uncertainty and supports our customer's goal of a delivered solution; on time, within budget and to agreed quality criteria. GE Digital services projects are delivered over 10 stages. Each stage has clear stage boundary controls which deliver flexible decision points



### **Right People**

All of GE Digital consultants have strong domain and technology knowledge, allowing us to work closely with key stakeholders within our customers businesses and develop truly innovative solutions. We collaborate with our customers throughout the planning, design, and implementation of the adopted solution and build strong connections into the customer business. Post implementation, we provide business centric training and 'go live' support to ensure a smooth transition from legacy systems to the customer new solution. With a global body of GE Digital consultants and accredited partners, we are able to truly serve a diverse global client base with a strong local presence.



# Smallworld Core Spatial Technology Courses

## CST001: Smallworld Core Foundation

### Description

The Foundation Training course provides a general overview of various parts of Smallworld Core Spatial Technology. Most of the topics described in this course are covered in much greater depth in other specific training courses.

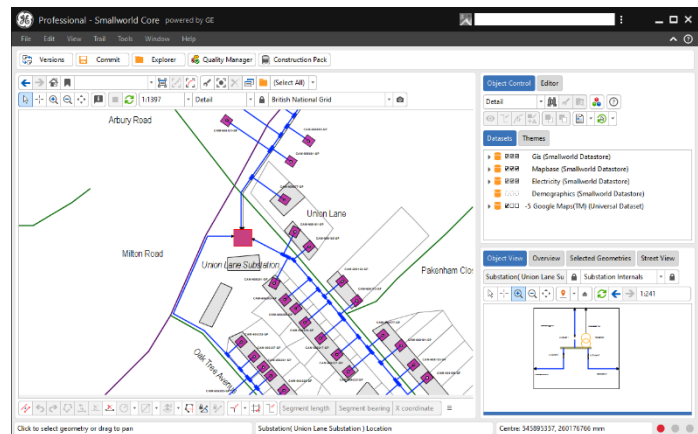
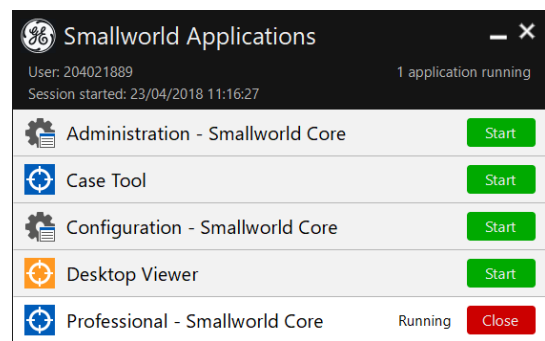
### Objectives

Having attended this course, attendees will ...

- Be familiar with using Smallworld Core as a user.
- Gain a basic knowledge of how to configure the user environment for Smallworld applications.
- Understand the main functions of database administration.
- Explore some basic Smallworld Magik commands and create some Magik objects.
- Know the product portfolio.

### Topics

- Introduction
- Using Smallworld Core Spatial Technology
- Getting Started
- Updating Information
- Analysing Data
- Using Layouts and Plotting
- Configuring the user environment
- Database administration
- Data modelling
- Introduction to Magik
- Product Portfolio



### Who should attend?

Anyone who requires an overview of Smallworld Core, such as users, configurers, database administrators, data modellers, developers of Smallworld applications, managers and prospective Smallworld customers. For those seeking accreditation a multiple choice test is available for this course.

**Duration:** 2 days

**Available formats:** Classroom, Webinars or eLearning

**Products Required:** Smallworld 5 configured with Cambridge Database

# CST002: Smallworld Core Magik Programming

## Description

The Magik Training course provides an introduction to the Magik language and some of the system objects defined in Smallworld Core. It introduces the structure of an installed product and the customisation of an application — that is, making small changes in existing functionality and user interface. It also introduces Java and Magik interoperability.

## Objectives

Having attended this course, attendees will have ...

- A knowledge of Magik syntax.
- An understanding of the concepts underlying object-oriented programming.
- Ability to write, compile and debug Magik code.
- An understanding of classifying methods and classes using pragma statements.
- Knowledge of the physical architecture of the Smallworld system and key objects.
- An understanding of how resources are used in a session
- The ability to provide additional resources to customise a user interface.
- Understand Java and Magik interoperability.
- Experience of using the Class Browser.

## Topics

- |  |                                     |
|--|-------------------------------------|
| • Core Product System Rationale        | • Debugging                         |
| • Magik Language                       | • Graphical User Interface in Magik |
| • Object Orientation and Magik Objects | • Product Structure                 |
| • Object Inheritance                   | • Development Tools                 |
| • Collection Classes                   | • Magik - Java interoperability     |
| • Accessing the Database               | • Topology                          |

## Who should attend?

Software engineers who are following the full Smallworld customisation programme. For those seeking accreditation a multiple choice test is available for this course.

## Prerequisites

- Smallworld Core Spatial Technology Foundation Training (course CST001)
- A minimum of two years' experience with a procedural or object-oriented programming language such as C++ or Java

**Duration** – 3 days

**Available formats:** Classroom, Webinars or eLearning

**Products Required:** Smallworld 5 configured with Cambridge Database

# CST003: Smallworld Core Application Development

## Description

The Application Development Training course introduces the development of customised applications based on Smallworld Core Spatial Technology.

## Objectives

Having attended this course, attendees will have ...

- Developing an application based on Smallworld Core, with interactive access to the functionality.
- Configuring the user interface to an application, to include providing alternative ways of accessing existing functionality and providing access to new functionality.
- Advanced aspects of the Magik language necessary for controlling an application.
- Advanced techniques for accessing datasets in a Smallworld database, including loading data, creating geometry, and storing it in a dataset.
- Customising the Style system for user objects and geometry types.
- Creating a new database and defining the data model for a Smallworld dataset, including custom behaviour for user objects.

## Topics

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| • Product Structure                 | • Accessing and Updating User data   |
| • Sessions                          | • Understanding the Spatial Contexts |
| • Smallworld Framework Architecture | • Customizing the Style System       |
| • Interfacing Core Plugins          | • Magik Control                      |
| • Graphical User Interface          | • Creating a database                |
| • Threads                           | • Methods for the data model         |
| • XML Data Loader                   | • Development Tools                  |

## Who should attend?

The course is intended for software engineers who are following the full Smallworld customisation programme. For those seeking accreditation a multiple choice test is available for this course.

## Prerequisites

- Smallworld Core Spatial Technology Foundation Training (course CST001)
- Smallworld Core Spatial Technology Magik Training (course CST002)
- A minimum of two years' experience with a procedural or object-oriented programming language such as C++ or Java

**Duration** – 5 days

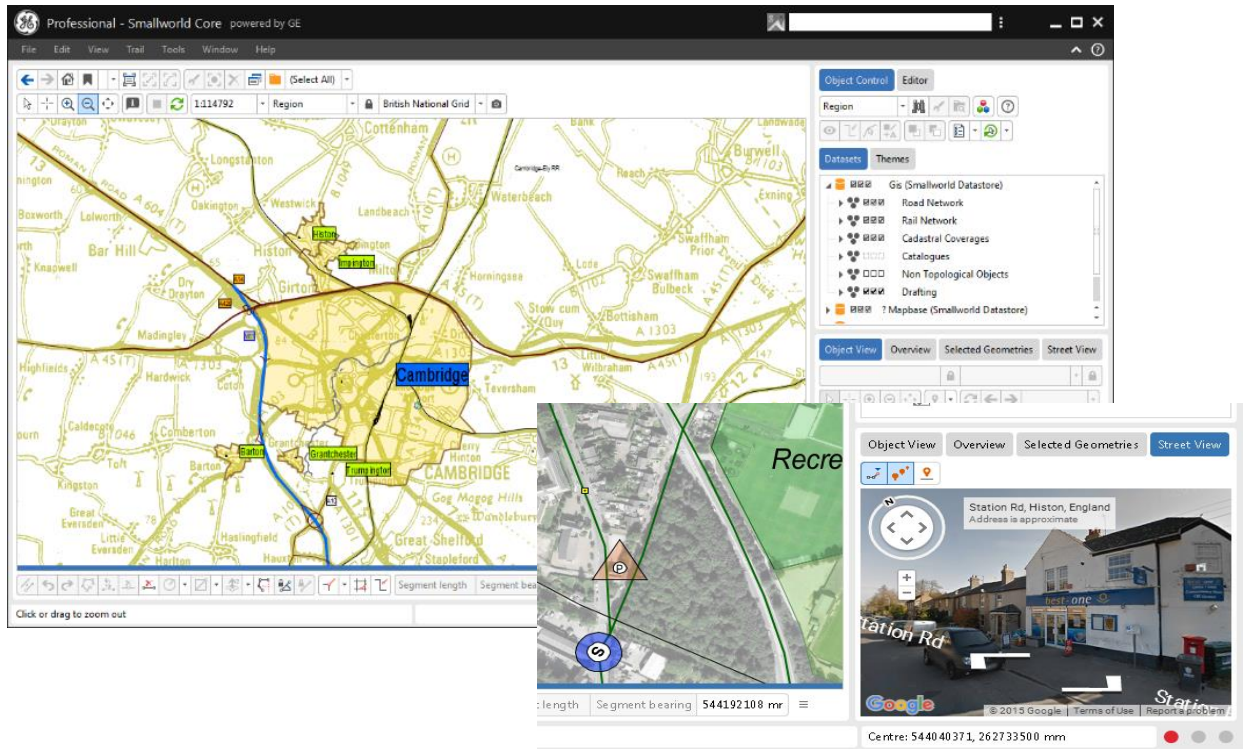
**Available formats:** Classroom, Webinars or eLearning

**Products Required:** Smallworld 5 configured with Cambridge Database

# CST004: Smallworld Core Fast Track for Accreditation

## Description

A 10 day course ideal for those wanting an introduction to the Smallworld product suite and likely to be involved in project delivery including configuration, administration and application development.



## Objective

This course consists of the three standard courses (Foundation, Magik and Application Development) typically run in series to achieve accreditation in Smallworld Core Application Development. For accreditation, students must pass an on-line multiple choice quiz at the end of each course.

## Topics

See the descriptions of the three individual courses for details outlined earlier in this brochure.

## Who should attend?

The course is intended for software engineers who are following the full Smallworld customisation programme. For accreditation purposes each course has an accompanying multiple choice test. Passing all three is required for Smallworld Core Application Development accreditation.

**Duration** – 10 days

**Available formats:** Classroom, Webinar or eLearning

**Products Required:** Smallworld 5 configured with Cambridge Database

# CST005: Getting Started with Smallworld Core

## Description:

A 5-day course for those new to Smallworld introducing the product suite and covering its use plus a basic introduction to Magik programming and Application Development.

## Objective

Having attended this course, attendees will have ...

- Familiarity with using Smallworld Core as a user
- Knowledge of Magik syntax.
- An understanding of the concepts underlying object-oriented programming.
- The ability to write, compile and debug Magik code.
- An understanding of classifying methods and classes using pragma statements.
- Knowledge of the physical architecture of the Smallworld system and key objects.
- Configuring the user interface to an application, to include providing alternative ways of accessing existing functionality and providing access to new functionality.
- Advanced techniques for accessing datasets in a Smallworld database, including loading data, creating geometry, and storing it in a dataset.

## Topics

- |  |                                     |
|--|-------------------------------------|
| • Using Smallworld Core Spatial Technology | • Product Structure                 |
| • Configuring the user environment         | • Smallworld Framework Architecture |
| • Database administration                  | • Interfacing Core Plugins          |
| • Magik Language                           | • Graphical User Interface          |
| • Object Inheritance                       | • XML Data Loader                   |
| • Collection Classes                       | • Accessing and Updating User data  |
| • Accessing the Database                   | • Magik Control                     |
| • Topology                                 |                                     |

## Who should attend?

The course is intended for software engineers who are following the Smallworld customisation programme in a reduce time to incorporate to develop of existing Smallworld installations.

**Duration** – 5 days

**Available formats:** Classroom or Webinars

**Products Required:** Smallworld 5 configured with Cambridge Database

# CST006: Smallworld Core System Administration

## Description

The Administration Training course covers fundamental architectural concepts of Smallworld databases, through to the main steps necessary to perform regular database, application and software installation maintenance, through lessons and hands-on exercises.

## Objective

Having attended this course, attendees will have ...

- Install Smallworld products
- Build and maintain sessions
- Back up Smallworld databases
- Perform core DBA activities such as backing up, compressing and restructuring a database, to ensure data is maintained and optimized
- Configure a Smallworld Core installation
- Manage access to Smallworld databases
- Understand how a Smallworld database operates

## Topics

- Product installation
- Product structure
- Sessions
- Dataset Controller
- Configuring Plotting
- Authorisations
- Version managed datastore
- Smallworld Datastore Server
- Managing the database
- Monitoring performance
- Backup and integrity
- Problem solving and disaster recovery
- Superfiles, working top, and managing large databases
- Persistent cache
- Remote data, extracts and replicas
- Planning, strategies and recording
- External Databases
- Data Model Evolution

## Who should attend?

Smallworld System Administrators, Smallworld Database Administrators (DBAs)

## Prerequisites

- Smallworld Core Spatial Technology Foundation, or equivalent practical experience of using Smallworld software
- Basic knowledge and experience with the Magik programming language are desirable
- Practical experience of performing system and database administration tasks are desirable

**Duration** – 3-5 days, depending on required modules

**Available formats:** Classroom or Webinars

**Products Required:** Smallworld 5 configured with Cambridge Database



# CST007: Smallworld Core Upgrade to 5

## Description

A 2-day course outlining the new features of Smallworld 5 with hands-on experience of the upgrade process from version 4.3.

## Objective

By the end of this course attendees will have an understanding of the changes at Smallworld 5 with hands-on experience of the upgrade process.

## Topics

- What's New and Why
- Installation of SW5
- What's New for Users
- What's New for Administrators
- Product Structure and Sessions
- What's New for Developers
- Smallworld Interface Toolkit
- Upgrading an example custom application
- Compiling
- Serialising and database contexts
- Java interoperability

**Who should attend?** – Developers, Administrators and Configurers of Smallworld applications.

**Prerequisites** – An understanding of earlier versions of Smallworld is required, particularly Smallworld 4.3.

**Duration** – 2 days

**Available formats:** Classroom or Webinars

**Products Required:** Smallworld 4.3 and Smallworld 5 configured with Cambridge Database

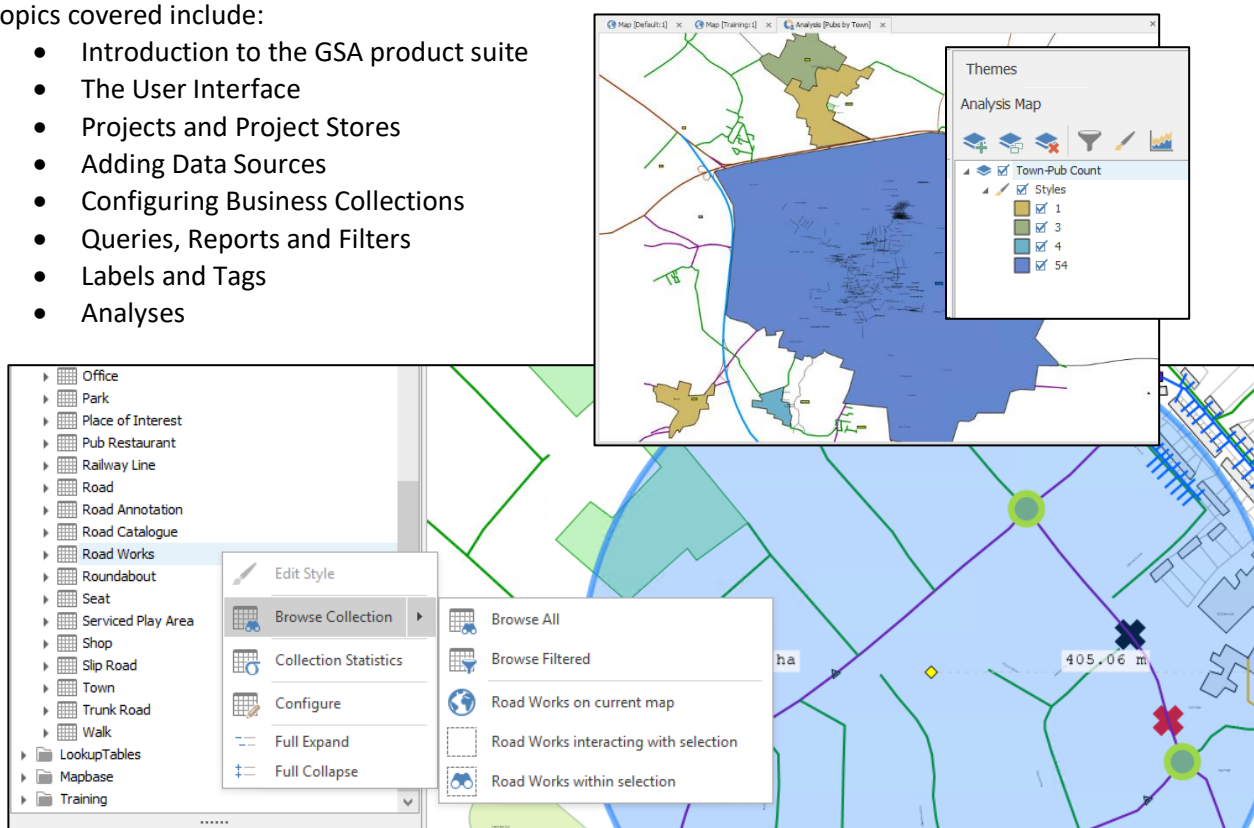
# Smallworld GeoSpatial Analysis Courses

## GSA001: GeoSpatial Analysis User & Configurer (Generic course using GSA Pro)

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution to aggregate geospatial and non-geospatial data to support business decisions. This course provides an introduction to the full client product and can be run as a standalone course. It also forms a pre-requisite course for the industry specific courses using GSA-Pro for Telecoms, Electric and Gas Network Strategic Planning (Ref SNI001, EOS001, GDO001 and GTO001 detailed later in this document).

Topics covered include:

- Introduction to the GSA product suite
- The User Interface
- Projects and Project Stores
- Adding Data Sources
- Configuring Business Collections
- Queries, Reports and Filters
- Labels and Tags
- Analyses



Attendees will also be able to share this information across the enterprise, empowering a wide range of users with visualisation, query, analysis and reporting capabilities.

**Who should attend?** – Strategic Planning, Business Intelligence, Marketing & Direct Sales staff.

**Course duration** – 2 days

**Available formats:** Classroom, Webinars or eLearning

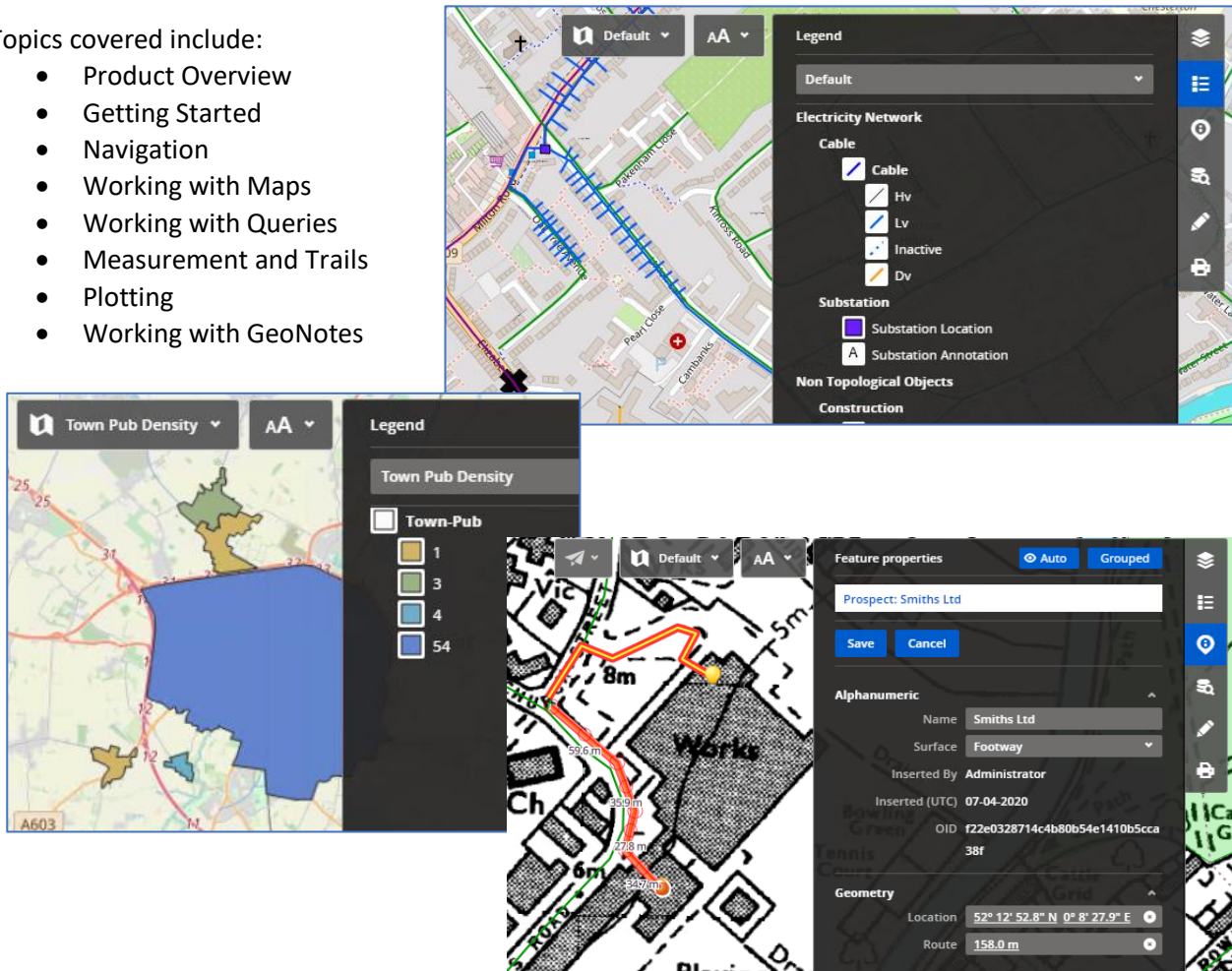
**Products Required:** GSA 5 Pro with Cambridge database and variety of other sources provided

# GSA002: GeoSpatial Analysis Web User (Generic course using GSA Lite)

**Objective** – By the end of this course attendees will be able to query, view and print geospatial analyses using the GSA Lite web client

Topics covered include:

- Product Overview
- Getting Started
- Navigation
- Working with Maps
- Working with Queries
- Measurement and Trails
- Plotting
- Working with GeoNotes



**Who should attend?** – Web users requiring infrequent, casual access to published strategic planning analyses. The course is generic and uses the Cambridge database, but is applicable to Telco, Electric and Gas domains.

**Course duration** – ½ day classroom or single webinar session

**Available formats:** Classroom or Webinar

**Products Required:** GSA Lite 5 configured with Cambridge database and variety of other sources provided.

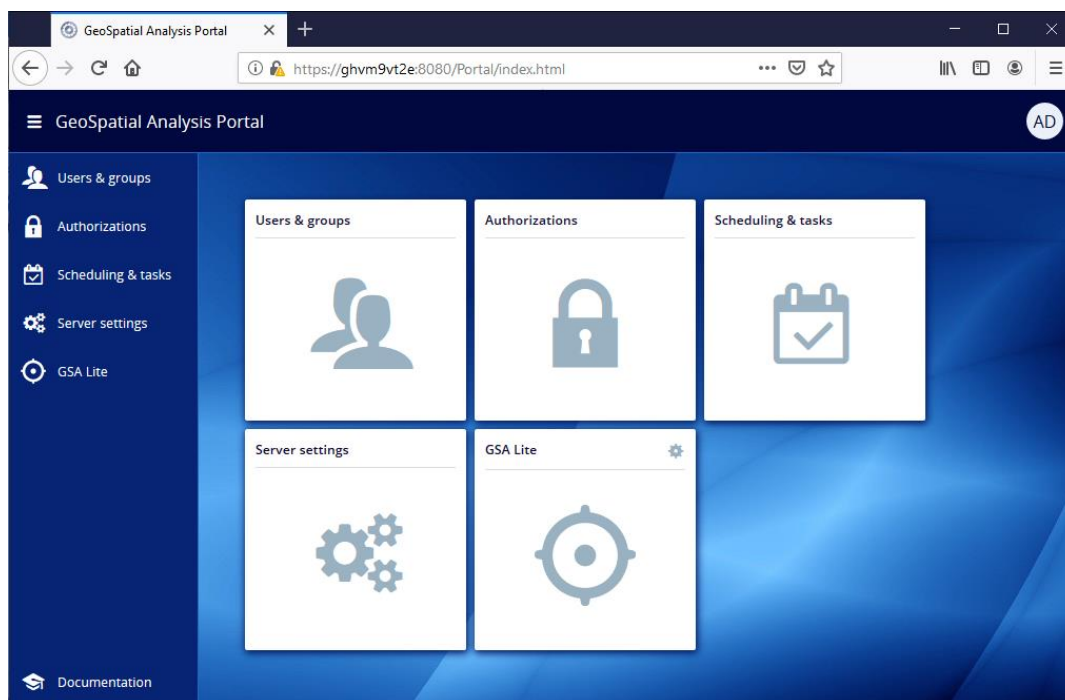
# GSA003: GeoSpatial Analysis Web Configuration

## (Generic course using GSA Lite)

**Objective** – By the end of this course attendees will be able to configure a GeoSpatial Analysis installation to provide query, view and print functionality to web users accessing published projects

Topics covered include:

- The GSA Server and Portal
- Configuration of users and groups
- Managing background map providers
- Map tile generation
- Configuring Layers
- Managing automated server tasks



**Who should attend?** – IT staff and expert users responsible for the setup and day to day operation of the GSA web server and client.

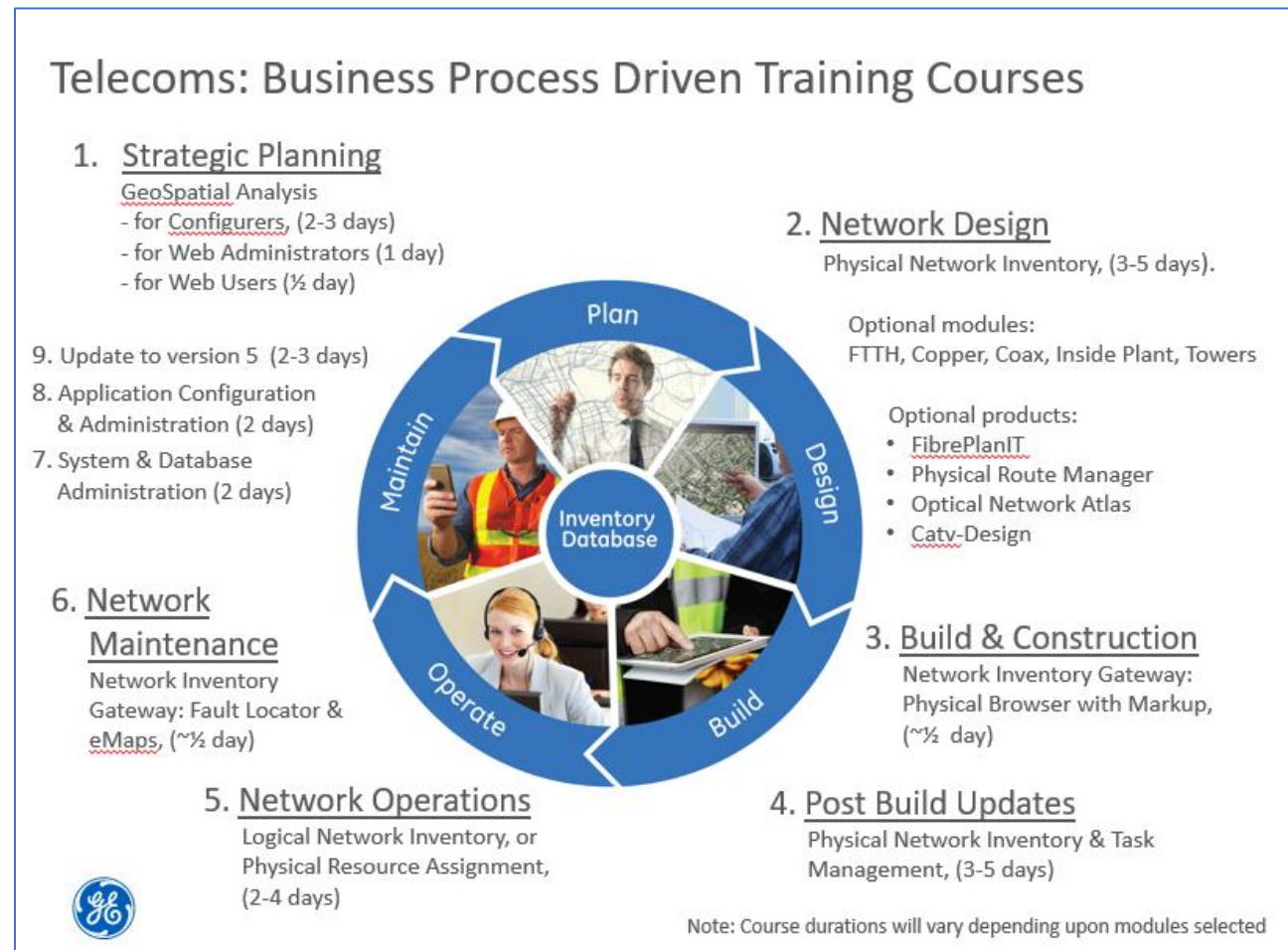
**Course duration** – 1 day

**Available formats:** Classroom or Webinars

**Products Required:** GSA and GSA Lite 5 configured with Cambridge database

# Smallworld Network Inventory Training Courses

The Telecoms suite of courses are structured around the asset lifecycle and delivered using standard business processes or customised to suit an individual customer's procedures and data sources.



The above diagram illustrates the courses available with further details below.

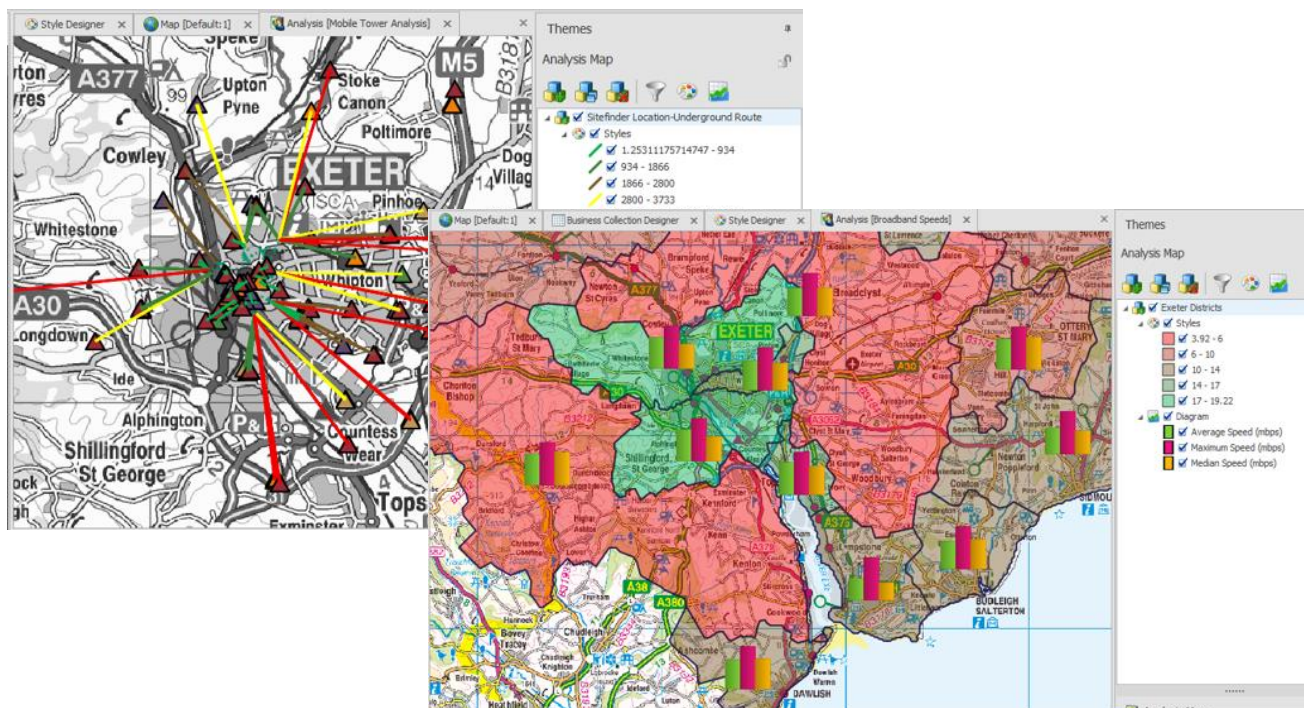


# SNIO01: Telecoms Strategic Planning

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution to aggregate geospatial and non-geospatial data to support business decision making process. The objective is to enable informed decision making based on previously unknown relationships between the customer, demographic and network data.

Examples of topics covered include:

- Identification of potential customers who are close to an existing network
- Estimating cost of access for prospects
- Analysis of broadband speeds per postcode
- Relating spare network capacity to prospective customers
- Correlate historical network fault data with the geographic location of the failing elements



Attendees will also be able to share this information across the enterprise, empowering a wide range of users with visualisation, query, analysis and reporting capabilities.

**Who should attend?** – Strategic Planning, Business Intelligence, Marketing & Direct Sales. Courses are offered for users, configurers and administrators of the full and web client.

**Pre-requisites:** Course GSA001 GeoSpatial Analysis User & Configurer (available in eLearning format)

**Course duration** – 2 days

**Available formats:** Classroom or Webinar

**Products Required:** GSA 5 Pro with example database from PNI and variety of other sources provided

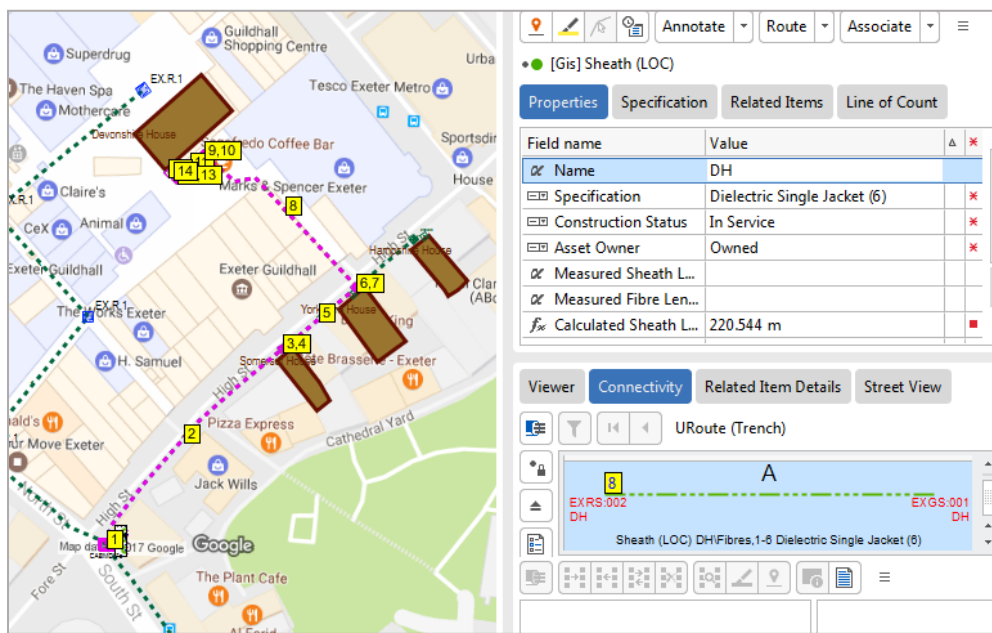


# SNI002: Telecoms Network Design

**Objective** – By the end of this course attendees will be able to use Smallworld Solution to design alternative proposals to a new service or maintenance work request (Civils & Cables). This is undertaken in a controlled design environment. Cost information for the proposed network changes are used as part of the design approval process within the business and for sharing with other Enterprise Asset Management systems.

Examples of processes covered include:

- New office development involving alternative designs for civils and cabling network
- FTTH network design scenario
- Plant diversion scenario
- Providing fibre level connectivity with office building
- Copper and Coax network design scenarios



**Who should attend?** – Network Planners/Designers & Data Capture Operatives

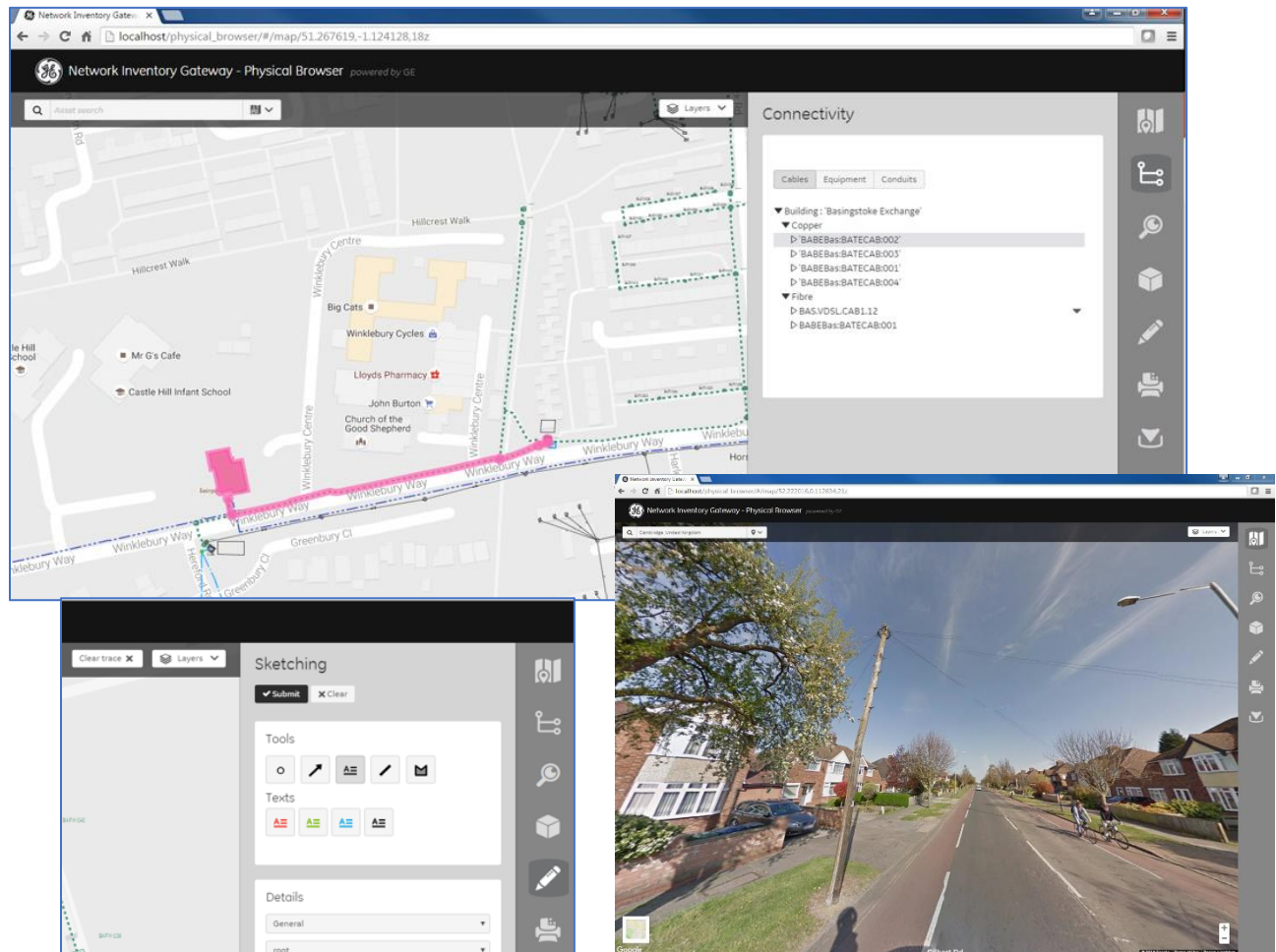
**Course duration** – 3-5 days. Some modules are optional e.g. Fibre, Copper, Coax. Wireless, Inside Plant. Other complementary products such as FibrePlanIT, Physical Route Manager and Optical Network Atlas may also feature in this course.

**Available formats:** Classroom or Webinars

**Products Required:** PNI-FTTH 5 configured with example database

# SNIO03: Telecoms Network Build and Construction

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution over the web to query, view and print information on-site during the construction process and support on site construction decisions. They will also be able to digitally record any variation from 'as-planned' design and return 'as-built' information to the central records office.



**Who should attend?** – Network Construction Staff. Staff requiring casual, read-only user access to network records. QA staff.

**Course Duration** – ½ day, typically presented over the web.

**Available formats:** Classroom or Webinar

**Products Required:** NIG and PNI-FTTH 5 with example database (Task Management optional)

# SNIO04: Telecoms Network Post Build Updates

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution over the web to query, view and print information on-site during the construction process and support on site construction decisions. They will also be able to digitally record any variation from ‘as-planned’ design and return ‘as-built’ information to the central records office.

This course is similar to the Network Design course, but emphasis is on as-built recording rather than new build. The two courses may be combined if appropriate to a company’s organisational structure.

**Who should attend?** – Network Records or Bureau Staff & Data Capture Operatives.

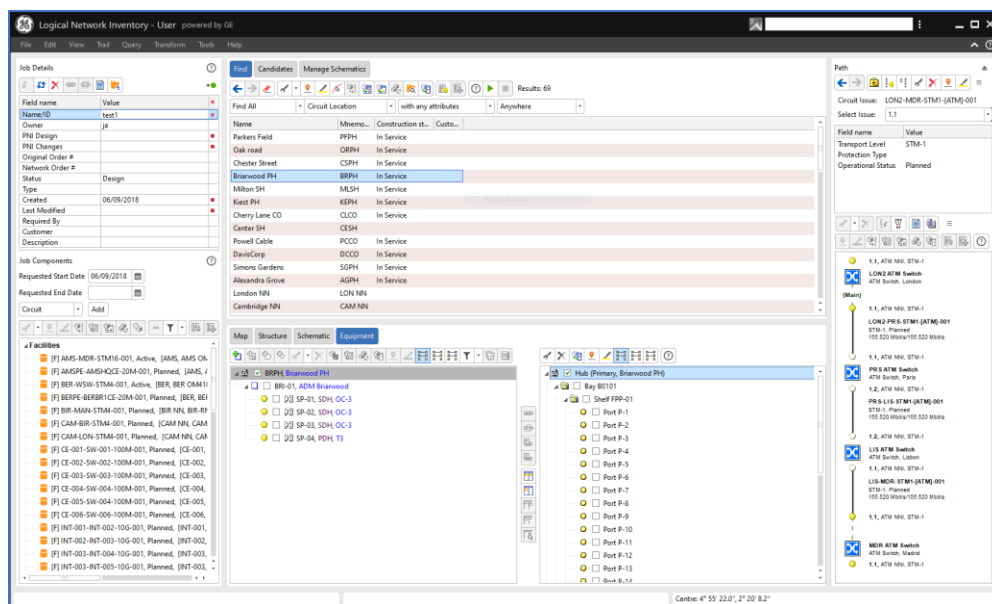
**Course Duration** – 3-5 days.

**Available formats:** Classroom or Webinar

**Products Required:** PNI-FTTH 5 configured with example database

# SNIO05: Telecoms Network Operations

**Objective** – By the end of these courses attendees will be able to use the Smallworld Solution to handle Requests For Service, assign and reserve physical resources to circuits, design new circuits over the existing infrastructure and manage the logical network.



**Who should attend?** – Network Operations Centre staff.

**Course Duration** – 3-5 days. User, Configuration and Administration variants of the courses are available.

**Available formats:** Classroom or Webinars

**Products Required:** PNI-FTTH 5 configured with example database plus LNI or PRA or PRM.

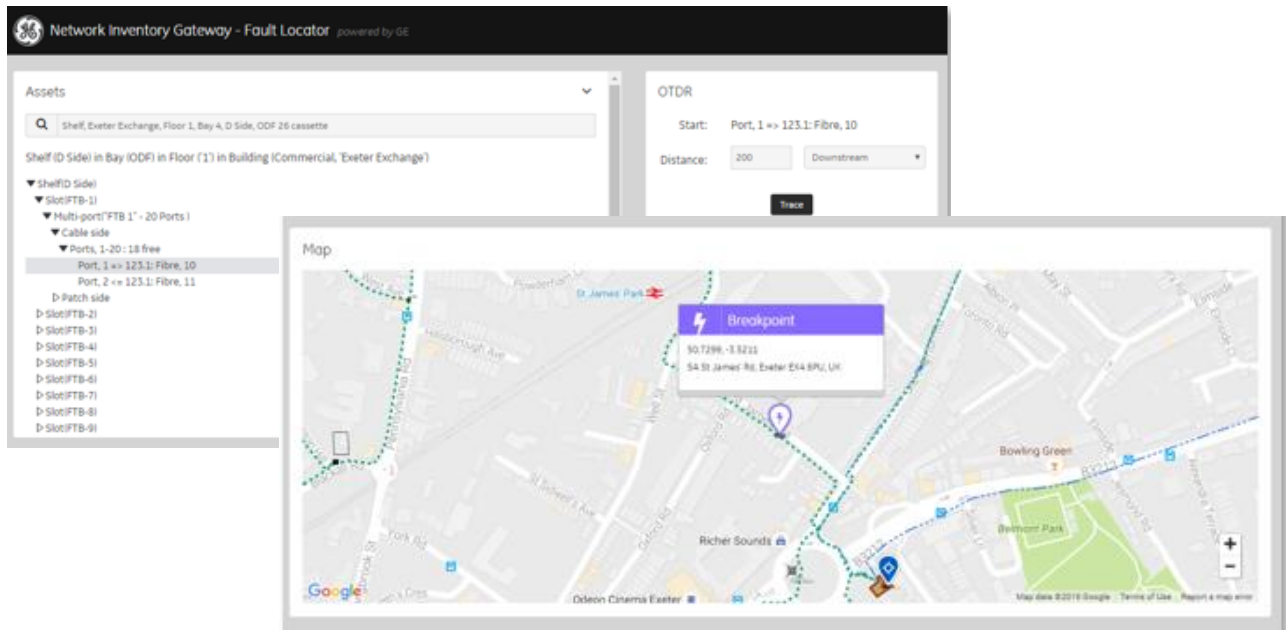
# SNIO06: Telecoms Network Maintenance

**Objective** – By the end of this course attendees will be able to handle enquiries involving querying, viewing and printing network asset records.

Example of topics covered include:

- Identification of fault locations
- Potential customer proximity to network access points.
- Third party access to network records

End users may be third parties using a self-service web-based client, for example plant requests.



**Who should attend?** – Customer Service Representatives, Sales and Marketing and Network Operations Centre (NOC) Staff.

**Course Duration** - ½ day, typically presented over the web.

**Available formats:** Classroom or Webinar

**Products Required:** NIG and PNI-FTTH 5 with example database

## SNI007: Telecoms System and Database Administration

**Objective** – By the end of this course attendees will be able to carry out basic system administration tasks to maintain a healthy system and database.

Topics covered include Smallworld architecture, terminology, key file and database locations, managing users, licensing, database backup and compression.

**Who should attend?** – Technical Specialists who will own and maintain the system. IT Staff.

**Duration** - 2 day

**Available formats:** Classroom or Webinar

**Products Required:** PNI-FTTH 5 with example database

## SNI008: Telecoms Application Configuration and Administration

**Objective** – By the end of this course attendees will be able to carry out basic configuration tasks for the Smallworld Network Inventory application.

Topics covered include user access, changing defaults, map appearance, styles, themes, picklists, plot layouts, favourites, specifications, templates and conflict resolution.

**Who should attend?** – The Technical Specialist who will own application configuration. Expert Users.

**Duration** - 2 days

**Available formats:** Classroom or Webinar

**Products Required:** PNI-FTTH 5 with example database

## SNI009: Telecoms Update to 5 for Expert Users

**Objective** – This course aims to bring attendees on previous versions of the product (PNI 4.3) up to date with the new features at Smallworld 5 (more precisely, PNI and NIG 5.1).

**Who should attend?** – Expert users and those involved in the implementation and deployment of the products.

**Duration** - 2 days

**Available formats:** Classroom or Webinar

**Products Required:** PNI-FTTH and NIG 5 with example database

# Mobile Enterprise Courses

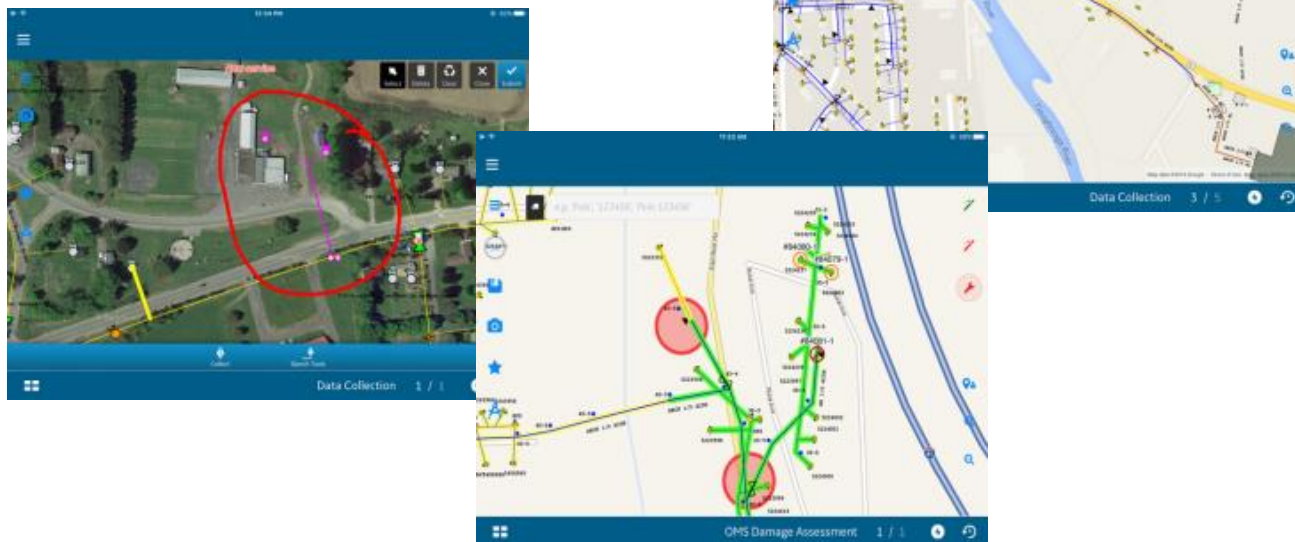
## MES001: Getting Started with Mobile Enterprise

### Objective

This course covers provides the attendee with all that's required to install and configure a working mobile solution using a prepared extract. It subsequently covers the process of creating an extract from a Smallworld database.

### Topics

- Introduction and architecture
- Installation from scratch
- Using the mobile client
- Configuring Mobile Enterprise Suite
- Creating an Extract from Smallworld.
- Tiling
- Creating a search database
- The Collect workflow with Task Management.



### Who should attend?

Sales engineers and technical services staff who will be involved in all aspects on deploying Mobile Enterprise Suite

**Duration** - 4 days

**Available formats:** Classroom. Webinars provided attendees have a local installation.

**Products Required:** ME 5.2.0.1 configured with supplied extract



# MES002: Mobile Enterprise Development using the SDK

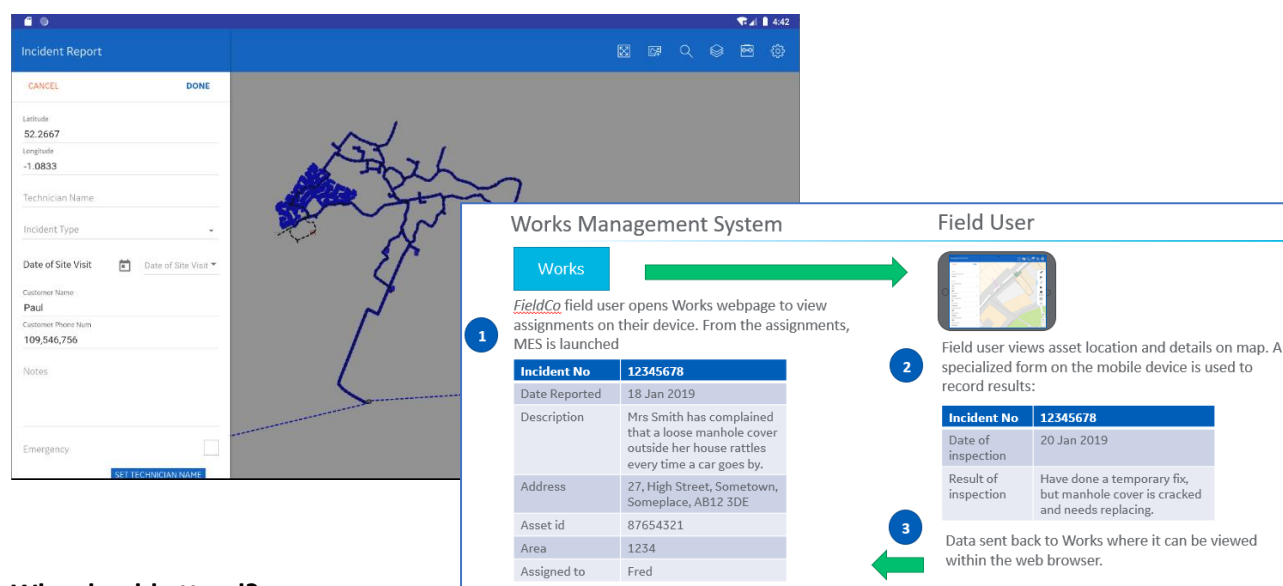
## Objective

This course provides attendees with the necessary skills to develop mobile applications on the ME platform using best practices

## Topics:

- Refresher on the ME architecture
- Use of Eclipse and Android Studio
- Emulating a mobile device
- Overview of Web Scripting and Angular JS
- Creating a microapp, developing modules and adding services
- Debugging JavaScript using the Chrome debugger
- Defining ME interfaces

The course includes a worked example in the form of a scenario to build a mobile enterprise solution to interface with an existing third-party work management system. Through this system, ME field workers will be passed locations, work, and customer details relating to reported incidents. This scenario covers working with mobile enterprise interfaces, ME map layers, and contains an in-depth look at form design and processing.



## Who should attend?

Partners and customers who will be developing and configuring ME applications

**Duration** - 3 days

**Available formats:** Classroom. Webinar provided attendees have a local installation.

**Products Required:** ME 5.2.3.2 configured with supplied extract

# Smallworld Electric Office Training Courses

The Electric Office suite of courses are structured around the asset lifecycle and can be delivered using standard business processes or customised to suit an individual customer's procedures and data sources.



The above diagram illustrates the courses available with further details below.

Note: Two eLearning courses are available for those entirely new to the Electric Office Suite of products. These two courses are 2 hours duration and designed for Sales and Technical Sales staff. They do not include any hands-on exercises or require an Electric Office installation.

EOS011: Electric Office Commercial Positioning

EOS012: Electric Office Technical Functionality

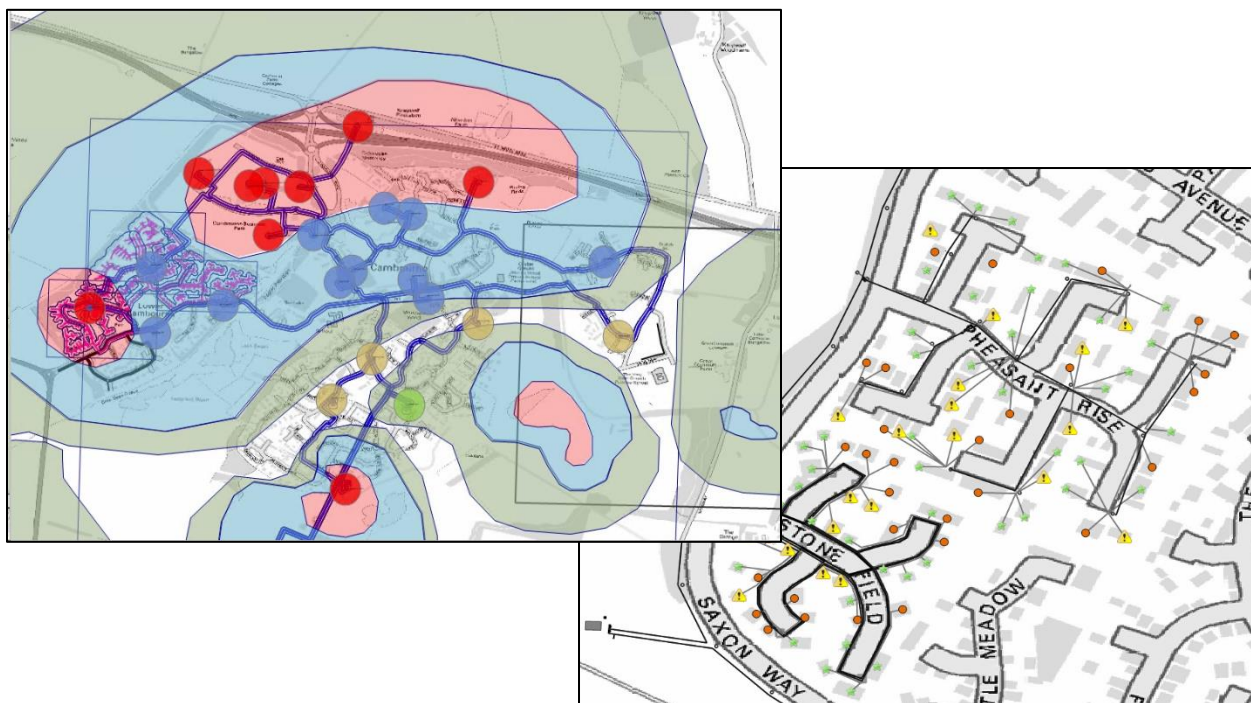
# EOS001: Electrical Network Strategic Planning

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution to aggregate geospatial and non-geospatial data to support business decision making process. The objective is to enable informed decision making based on previously unknown relationships between the customer, demographic and network data.

Examples of topics covered include:

- Analysis of Customer Minutes Lost
- Estimating cost of access for prospects
- Generation of reports
- Flood risk analysis for substations
- Correlate historical network fault data with the geographic location of the failing elements

Attendees will also be able to share this information across the enterprise, empowering a wide range of users with visualisation, query, analysis and reporting capabilities.



**Who should attend?** – Strategic Planning, Business Intelligence, Marketing & Direct Sales. Courses are offered for users, configurers and administrators of the full and web client.

**Pre-requisites:** Course GSA001 GeoSpatial Analysis User & Configurer (available in eLearning format)

**Course durations** – 2 days

**Available formats:** Classroom or Webinars

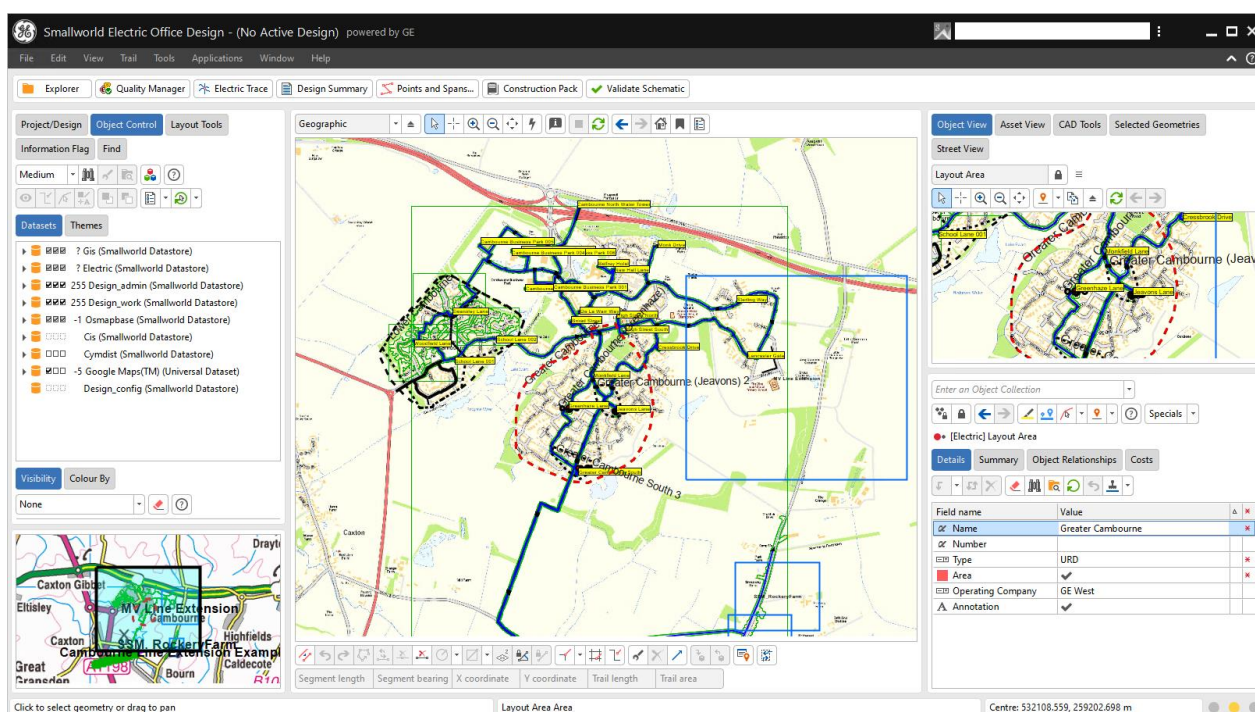
**Products Required:** GSA 5 Pro with example database from EO and variety of other sources provided

# EOS002: Electrical Network Design

**Objective** - By the end of this course attendees will be able to use the Smallworld Electric Office Application to design alternative proposals for a new electrical connection service or maintenance work request. This is undertaken in a controlled design environment. Cost information for the proposed network changes are used as part of the design approval process within the business and for sharing with other Enterprise Asset Management systems.

Examples of processes covered in the form of hands-on scenarios include:

- Network extension to serve a farm with three new service points
- Line extension to overhead network
- New substation fed using an underground route



The scenarios cover the following topics: Installation-Asset Model, Hypernodes, Electric Trace, Circuit Builder, Quality Manager, Projects and Designs, Phases, Modelling Overhead and Underground Networks, Accurate Routes, Design Layout Tools, Schematics, Thematic Maps and Creating Construction Packs.

**Who should attend?** – Electrical Network Planners/Designers & Data Capture Operatives

**Course duration** – 4 days assuming attendees are entirely new to Smallworld.

**Available formats:** Classroom or Webinars

**Products Required:** EO 5 configured with example database



# EOS003: Electrical Network Build & Maintain

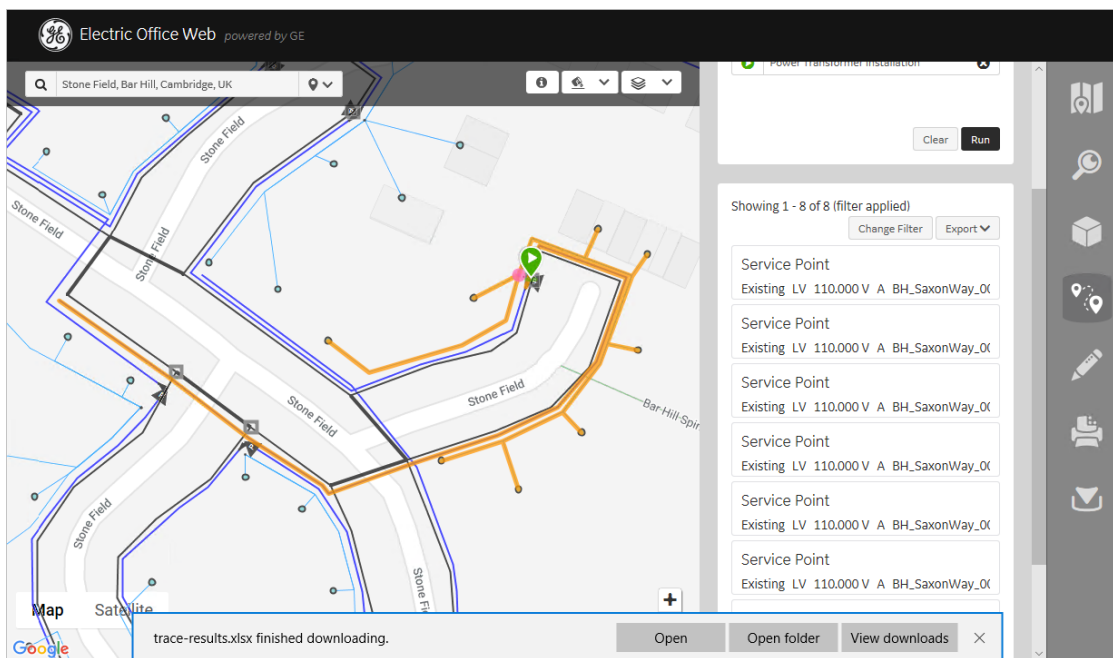
**Objective** – By the end of this course attendees will be able to use the Smallworld Solution over the web to query, view and print information on-site during the construction process and support on site construction decisions. They will also be able to digitally record any variation from 'as-planned' design and return 'as-built' information to the central records office.

By the end of this course attendees will be able to handle enquiries involving querying, viewing and printing network asset records.

Example of topics covered include:

- Identification of fault locations
- Potential customer proximity to network access points.
- Third party access to network records

End users may be third parties using a self-service web-based client, for example plant requests.



**Who should attend?** – Staff requiring casual, read-only user access to network records. Network Construction Staff. QA staff. Customer Service Representatives, Sales and Marketing and Network Operations Centre (NOC) Staff.

**Course Duration** - ½ day, typically presented over the web.

**Available formats:** Classroom or Webinar

**Products Required:** EO & EO Web 5 configured with example database

## EOS004: Electric Office System & Database Administration

**Objective** - By the end of this course attendees will be able to carry out basic system administration tasks to maintain a healthy system and database.

Topics include Smallworld architecture, terminology, key file and database locations, core product and EO configuration tools, conflict resolution, design manager, job server, managing file growth, data model changes and database administration.

**Who should attend?** – Technical Specialists or IT Staff who will own and maintain the system.

**Prerequisites** – The EO user course is a useful, but not essential pre-requisite for this course.

**Duration** – 2 days

**Available formats:** Classroom or Webinars

**Products Required:** EO 5 configured with example database

## EOS005: Electric Office Application Configuration and Administration

**Objective** - By the end of this course attendees will be able to carry out basic configuration tasks for the Smallworld Electric Office application.

Topics include configuring user access, changing defaults, map appearance, styles, themes, picklists, plot layouts, design layout tools, specifications, templates, business rules, user interface configuration using xml and viewing external files.

**Who should attend?** – The Technical Specialist or Expert User who will own and maintain the application configuration.

**Prerequisites** – The EO user course is a useful, but not essential pre-requisite for this course.

**Duration** – 2 days

**Available formats:** Classroom or Webinars

**Products Required:** EO 5 configured with example database



# Gas Distribution Office Courses

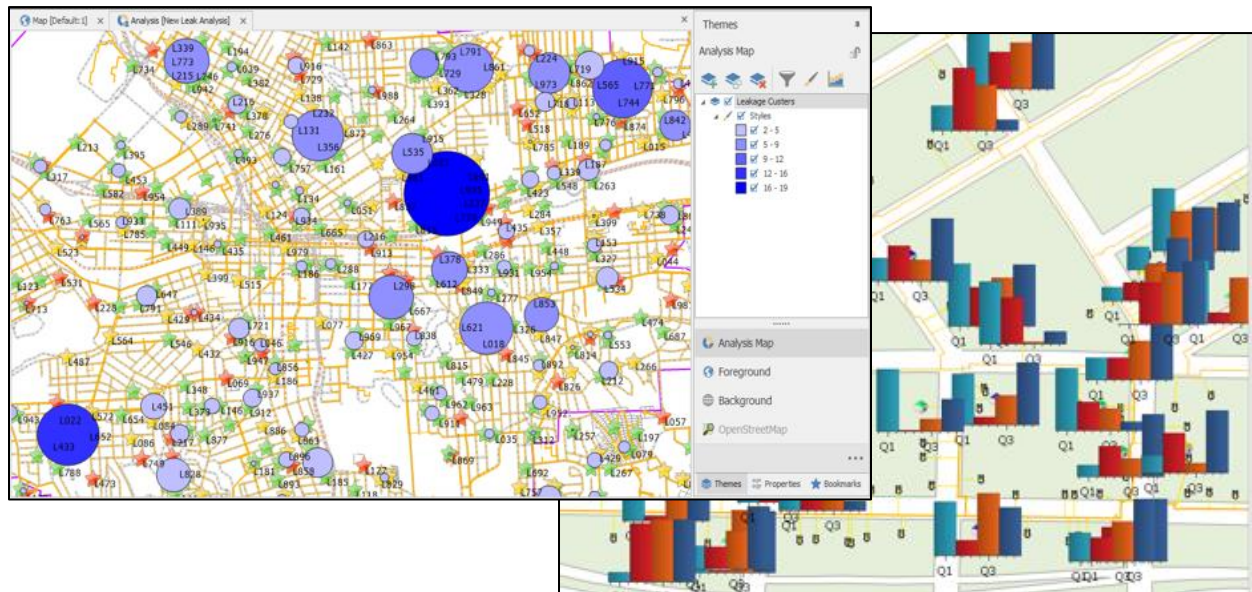
## GDO001: Gas Distribution Network Strategic Planning

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution to aggregate geospatial and non-geospatial data to support business decision making process. The objective is to enable informed decision making based on previously unknown relationships between the customer, demographic and network data.

Examples of topics covered include:

- Analysis of Mains by Material
- Estimating cost of access for prospects
- Generation of reports
- Gas Leakage analysis (clusters)
- Regulator Station Flood Risk Analysis
- Gas Consumption Analysis

Attendees will also be able to share this information across the enterprise, empowering a wide range of users with visualisation, query, analysis and reporting capabilities.



**Who should attend?** – Strategic Planning, Business Intelligence, Marketing & Direct Sales. Courses are offered for users, configurers and administrators of the full and web client.

**Pre-requisites:** Course GSA001 GeoSpatial Analysis User & Configurer (available in eLearning format)

**Course durations** – 2 days

**Available formats:** Classroom or Webinars

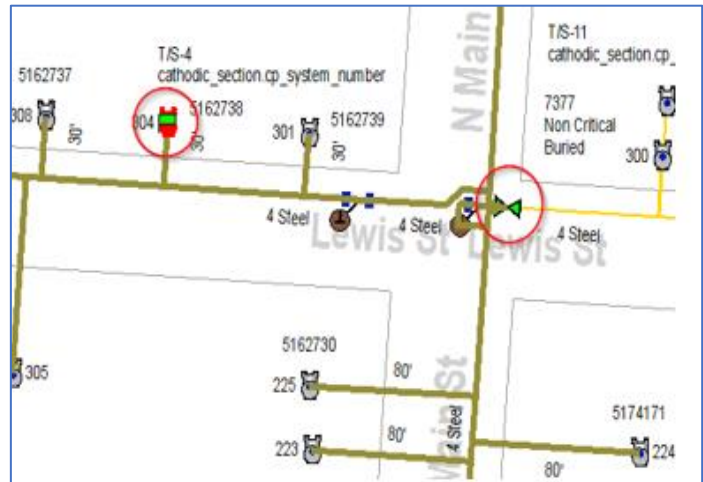
**Products Required:** GSA 5 Pro with example database from GDO and variety of other sources provided

# GDO002: Gas Distribution Network Design

## Objective

The GDO course is available in a traditional product-based format. Following the course, students will be able to:

- Retrieve and view the information stored in Gas Distribution Office
- Create objects and edit object geometries
- Trace and build a network and analyses the objects within it using Inventory, Audit and Event history applications
- Track pipeline condition and maintenance work using the Gas Distribution Office applications
- Manage compliance activities using the Gas Distribution Office applications



## Topics

- Object editors
- Cathodic protection
- Gas outage management
- Compliance management
- Route management
- Map grid plotting
- Public awareness programs
- Organizational hierarchies
- Network trace
- The network builder
- Leak analysis
- The survey points manage
- Thematic mapping
- Dimensioning
- Buffer zones

**Who should attend?** - This course is intended for end users who are responsible for creating Gas distribution designs, correcting existing Gas information, verifying network connectivity and creating gas outage scenarios including information on affected customers.

**Prerequisites** –Smallworld Core Spatial Technology Foundation course and knowledge of Gas Distribution industry procedures are desirable

**Course duration** – 4 days

**Available formats:** Classroom or Webinars

**Products Required:** GDO 5 configured with example database

# GDO003: Gas Distribution Office Configuration & Administration Course

This course is designed to instruct students in the use of the configuration modules included with the Gas Distribution Office product. These modules are used to modify or enhance the client's Gas Distribution Office implementations.

## Objective

Following the course, students will be able to:

- Create/modify object annotations
- Create/modify business rules
- Configure settings for dimensions
- Manage database versions and alternatives
- Configure regulations for buffer zones
- Define hierarchy trees for organizing assets

**Topics** include Smallworld architecture, terminology, key file and database locations, core product and GDO configuration tools, conflict resolution, design manager, job server, managing file growth, data model changes and database administration.

**Who should attend?** – Technical Specialists or IT Staff who will own and maintain the system.

**Prerequisites** – The GDO User and Core Foundation courses are pre-requisites for this course, which assumes attendees have experience of the ACE and an understanding of the CASE tool plus familiarity with GDO as a user. The basics of Smallworld Magik are desirable.

**Duration** – 1 day

**Available formats:** Classroom or Webinars

**Products Required:** GDO 5 configured with example database

# Global Transmission Office Courses

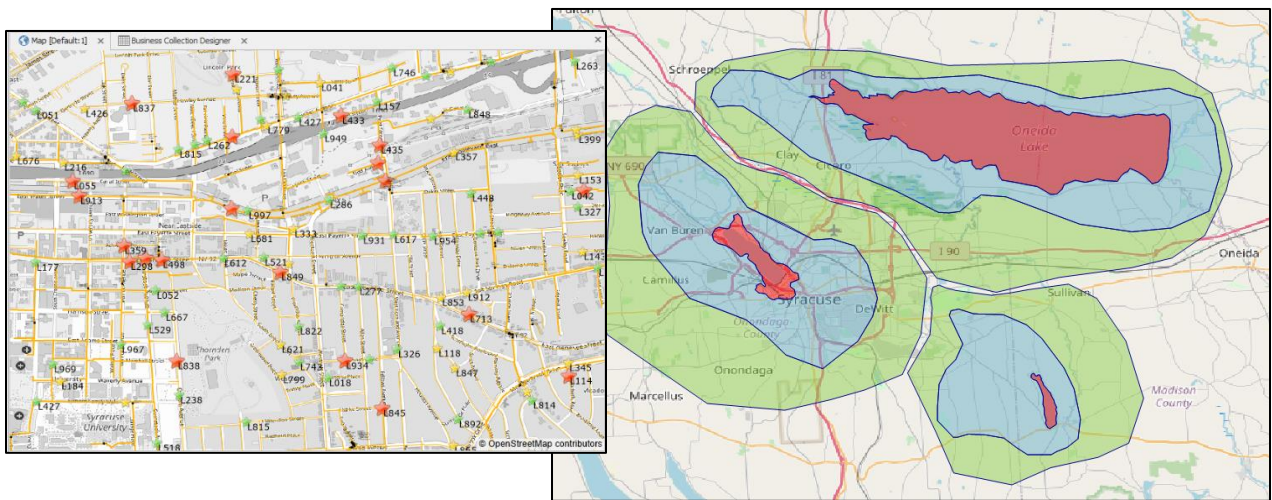
Note that not all courses currently available for Global Transmission Office are available in a scenario based format.

## GTO001: Global Transmission Network Strategic Planning

**Objective** – By the end of this course attendees will be able to use the Smallworld Solution to aggregate geospatial and non-geospatial data to support business decision making process. The objective is to enable informed decision making based on previously unknown relationships between the customer, demographic and network data.

Examples of scenarios covered include:

- Display pipe segments by nominal diameter
- Gas leakage analysis (clusters)
- Valve report
- Tools for marking up a map
- Pipe segment flood risk



Attendees will also be able to share this information across the enterprise, empowering a wide range of users with visualisation, query, analysis and reporting capabilities.

**Who should attend?** – Strategic Planning, Business Intelligence, Marketing & Direct Sales. Courses are offered for users, configurers and administrators of the full and web client.

**Pre-requisites:** Course GSA001 GeoSpatial Analysis User & Configurer (available in eLearning format)

**Course durations** – 2 days

**Available formats:** Classroom or Webinars

**Products Required:** GSA 5 Pro with example database from GTO and variety of other sources provided

# GTO002: Global Transmission Office User Course

## Objective

Following the course, students will be able to:

- Retrieve and view the information stored in Global Transmission Office
- Create objects and edit object geometries
- Manage network inventory using GTO update, analysis and reporting functions
- Manage pipeline condition data and changes to the centreline through the use of GTO applications
- Manage compliance activities through the use of GTO applications

## Topics

- |                               |   |
|-------------------------------|---|
| • Interface Overview          | • Cathodic Protection                       |
| • Object Editors              | • Profile viewer                            |
| • Creating objects            | • Alignment Sheets                          |
| • Dimensioning                | • Pipeline anomaly viewer                   |
| • Stationing viewer           | • Compliance applications                   |
| • Segmentation grapher        | • Reroute, repair and centreline adjustment |
| • Map grip plotting           | • Alignment tools                           |
| • HCA/Class Location Analysis | • Network trace tools                       |
| • Survey points manager       | • Organizational hierarchies                |
| • Integrity risk viewer       |   |

**Who should attend?** -This course is intended for end users responsible for maintaining Gas Transmission asset information in the Smallworld GIS.

**Prerequisites** –Smallworld Core Spatial Technology Foundation course and knowledge of Gas Transmission industry procedures are desirable

**Course duration** – 4 days

**Available formats:** Classroom or Webinar

**Products Required:** GTO 5 configured with example database

# GTO003: Global Transmission Office Configuration & Administration Course

## Objective

Following the course, students will be able to:

- Configure settings for importing survey point information
- Create / modify object annotations
- Create / modify business rules
- Manage database versions and alternatives
- Create alignment sheet templates
- Define hierarchy trees for organizing assets

## Topics

- Configuring survey point manager
- Annotation manager
- Business rules manager
- Application variables
- Table code lookup
- Version management
- PODS interface
- Alignment sheet templates
- Pipe splitting options
- Organizational Hierarchies

**Who should attend?** – This course is intended for power users or Smallworld administrators, who are responsible for modifying and enhancing the configuration of the client's GTO implementations.

This training may also be applicable to IT personnel if they are tasked with Smallworld configuration.

**Prerequisites** – To obtain maximum benefit attendees need to have knowledge of using and configuring the Smallworld Global Transmission Office, the basics of database administration and Magik Programming

**Duration** – 1 day

**Available formats:** Classroom or Webinar

**Products Required:** GTO 5 configured with example database





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