Enhanced efficiency with up-to-date mapping

GE and Google have combined forces to establish a next generation of industry-focused applications for electric and gas utilities and telecommunications providers. The combination takes the engineering excellence of GE with the pervasive, easy-to-access capability of Google’s web mapping to provide greater visibility into complex linear asset networks.

GE’s strength is in the provision of business-focused enterprise applications requiring complex network models, extreme levels of data accuracy and quality, extensive scalability and significant business process support. These applications have been successfully used in design, engineering and operations departments within utilities for many years.

Today’s Opportunities

Utilities recognize the power of their spatial asset information and are looking to extend beyond their strong engineering capability to achieve a higher return on investment through increased productivity and ability to access, visualize and analyze their network data by business users.

The combined capabilities of GE and Google can be used to offer enhanced solutions in the form of specific applications delivering real business benefits rather than just tools and technology. The strategic partnership will allow GE’s Smallworld customers to exploit Google’s technology and infrastructure and provide the foundations for new style applications. Specifically we will be using the following:

- Google Maps™ for desktop, web and mobile
- Google Maps engine for publishing and visualization
- Google Earth™ to complement our existing mobile product line
- Google cloud infrastructure for scalability and redundancy

Together, the two market leading technologies from GE and Google are the platform for these next generation applications.

Engineering Design and Operations Solutions

- Bringing Smallworld and Google Maps together
- Connect to cloud based aerial, terrain and base mapping for planning and recording existing assets using GIS tools
- Integrated Street View™ to check access constraints and visualize existing assets
- Google’s extensive address database searchable within the engineering applications

Web Solutions

- Focused solutions for business users
- Seamlessly integrate engineering asset data and visualizations with Google Maps including Google Street View
- Access to applications on many devices

Field Solutions

- Robust mobile solutions suite from GE
- Proven Field Force Automation™ and MapFrame™ FieldSmart extended with easy-to-use Google mapping
- Field automation on Android devices
Engineering Design and Operations

The availability of accurate and up-to-date base mapping supplied by the Google layer in combination with the Smallworld product portfolio provides a number of benefits for engineering planning, design and operations solutions.

In regions where mapping is unavailable, expensive or inaccurate, Google Maps data provides an economical mapping source to record existing network assets and plan network extensions with an up-to-date and maintained source of consistent map data. Google Maps integrated within the Smallworld GIS provides this information with no data loading or manipulation steps, and it is immediately available to users by selecting to display the map layers within existing applications.

For organizations with complete and accurate basemap data, aerial photography provides additional information on geographic features not present on many traditional street map sources. Based on this additional information, a planner can decide whether a survey is required or proactively design around vegetation, streams or other features apparent on the aerial data that will affect the network engineering.

Google Search Integrated into StreetView Electric Office Call Before You Dig

The GE and Google Maps integration now also provides the capability to access the extensive global address database maintained by Google, providing a new resource for quickly locating addresses within the engineering environment, without additional investment in data maintenance.

Web Solutions

Data from Google Maps can be seamlessly combined with Smallworld data in simple, easily accessible web applications running on many devices. This is now the standard in how business users will expect to access geospatial asset data; accessing information from the cloud with no learning curve and no specialist GIS knowledge.

Engineering Application with Integrated Google Street View

Google Street View provides a valuable additional visualization to map data, giving office based users another dimension to efficiently plan, allowing them for the first time to work with their map-based network assets while also looking at street level imagery. This allows engineering staff to assess if there are access constraints or unrecorded assets while working with their engineering application, directly within their office environment.

Smallworld Network Viewer

Applications such as GE's Smallworld Network Viewer can search and visualize layers of data from Google and Smallworld in a rich, familiar, browser-based solution. The complex network asset data is provided by the Smallworld server, allowing network details to be progressively and automatically made visible as users zoom in and view asset attribute data.
Field Solutions

GE’s Mobile Solutions suite of enterprise field automation products offers best of breed solutions to help utilities manage large workforces with complex field workflows across the organization.

Leveraging Google Maps technology within GE’s Field Force Automation and MapFrame FieldSmart products will enhance the field user’s experience by providing up-to-date base mapping, aerial photography, traffic, and other Google services.

Android Inspect

The FieldSmart product line will also leverage Google mapping technology to expand the footprint of existing products to include new and innovative complementary products. Proven FieldSmart products and utility domain knowledge combined with Google cutting edge technology will ensure we are providing future looking field automation products.

The combined solution will revolutionize the GIS space for utility and communications companies by bringing the excellence of the Smallworld platform and the visualization and cloud capabilities of Google together in extending the reach of asset management data for users operating and managing complex linear networks, wherever they need to access their data.

Google Gas Hybrid

Utilities will be able to complement their GIS and other back office spatial data in the field with robust, easy-to-use and familiar Google data to provide field crews with more accurate contextual awareness for their everyday tasks. The combination of these technologies will further drive efficiencies through the field organization whether a utility is working on regulatory inspections, maintenance, or critical storm assessment and recovery.