Smallworld Design Manager™ software is an integrated management and graphic-based design tool that automates the engineering design process. Smallworld Design Manager™ provides powerful tools to develop and manage designs throughout the entire life cycle, while providing key integration to Work Management and Analysis applications that result in a least cost — best engineered design and automated update of the as-built network model.

Built on the GE Network Solutions proven spatial technology platform, Smallworld Design Manager™ provides a unique approach to engineering design, leveraging spatial data in new and powerful ways. Smallworld Design Manager™ solutions are designed to capitalize on a company’s strategic investments in spatial technology.

The Advantages of a Fully Integrated, Database-Supported Solution

The full integration of the design and as-built data into a single database allows planners and designers to work on the most up-to-date version of the network. Smallworld Design Manager™ is data model independent and is provided with easy to use configuration tools to implement with an existing data model. Unlike interfaced tools that require complicated extracts and redundant data (data that may become outdated during the design process), Smallworld Design Manager™ uses the network data in the database. The designer is informed about any changes that might affect work in progress and can incorporate the changes at the push of a button. Using a single database allows controlled access to design information, enterprisewide. Using authorization mechanisms, Smallworld Design Manager™ allows selected individuals or groups to access designs without copying data or engaging in redundant steps. Access permissions can be manually or automatically defined and changed and can depend on the type or phase of work. Sharing information in this way supports workgroups and workflow.

Smallworld Design Manager™ supplies any part of the corporation with information about planned work. Designs can be made available to utility personnel or outside agencies as soon as they are approved. This allows service representatives to provide customers with current and accurate information about work in progress, collaboration between designers, information sharing with external agencies and many other forms of information sharing that lowers costs and improves customer satisfaction.

Once the designed network is built and the newly built network is put into production, designs can be integrated with as-built data with one simple step. There are no extracts to be returned to the database. There is no need for recapture or digitizing, further reducing costs and removing a source of errors. With Smallworld Design Manager™, keeping the as-built data synchronized with changes to the network is simple, inexpensive, fast and efficient.

GE Network Solutions
**Provides Process Support During the Design Phase**

Using a completely customizable ‘status model,’ Smallworld Design Manager™ offers the ability to define any number of design processes. The processes defined may depend on job type, job size, job origin or other variables. The status model allows the definition of those processes that the enterprise uses and can be configured to match existing processes already modeled in a work management package. The status model provides the basis of interaction with such packages via standard interfacing technology.

**Supports the Design of Any Type of Network**

Smallworld Design Manager™ can be used for electric and gas transmission and distribution networks as well as for water and wastewater networks. For companies that operate more than one network, Smallworld Design Manager™ represents significant benefit by allowing designers from different departments to share information and work together. The ability to share a common set of data and design tools eliminates inefficiencies and redundancies associated with having multiple teams using different applications.

Industry-specific third party analysis tools can be integrated with Smallworld Design Manager™ to analyze networks and utilize the results for optimized designs. Smallworld Design Manager™ supports all analysis systems that interface via the Smallworld Analysis Integration Engines™ product line.

**Allows Flexible Design Definition**

With Smallworld Design Manager™, engineers may try out as many different solutions to a design problem as they please. The different solutions may be independent of each other or may be built upon one another. Smallworld Design Manager™ offers the flexibility to define multiple scenarios for a design and perform what-if analyses on the alternative designs. This approach supports multiple design or planning iterations for arriving at the best-engineered design.

**Powerful Graphical Design Tools**

Smallworld Design Manager™ includes powerful design layout tools. These tools allow designers to quickly and accurately place multiple objects, along with associated attributes and annotations in the design, without the use of trails or object editors. Design layout is quick, efficient and automatically available to support downstream processes upon job completion.

Smallworld Design Manager™ can be configured to assign compatible units (CUs) to all proposed work. The application provides the tools to create and configure CUs and graphic objects removing the requirement for manual association of the graphic design to CUs. Smallworld Design Manager™ also includes integration components to allow interaction with Work Management systems for a seamless flow throughout the entire design and construction process.
Allows Easy Construction Work Package Creation Including Related Documents

Electronic documents such as Microsoft® Word files, spreadsheets, HTML pages or even Internet URLs may be associated with designs in Smallworld Design Manager™. Documents can be related to design jobs, as well as to real-world objects within a particular design. This provides the most flexible means of associating miscellaneous information with a job and putting this information in the most appropriate place for a particular workgroup, allowing easy creation and management of a construction work package.

Supports Seamless, As-Built Update Capability and Digital Archiving of Design Jobs

Smallworld Design Manager™ allows engineers to quickly and easily post as-built updates to the design job and archive all jobs digitally. Designers may choose which designs should be archived, including those that have been rejected, and archive them with associated documents in a single step. The archives are suitable for use in a document management system, and do not require GE Network Solutions software to be viewed.

Smallworld Internet Application Server™

Smallworld Design Manager™ can be integrated with the Smallworld Internet Application Server™ product to share design information across the Internet or across a corporate Intranet. By sharing design information across the Internet, you can provide high-level design information, in a simple browser interface, to customer service representatives. Customer service representatives can then answer questions about work in progress with minimal IT infrastructure and training. Alternatively, customers can view the information themselves and answer their own questions. In both cases, customer satisfaction is improved at a minimum cost.
Smallworld Spatial Intelligence™
The Smallworld Spatial Intelligence™ application is an innovative decision support and analysis package for network companies. This business intelligence tool can be used with Smallworld Design Manager™ to analyze designs across departments.

Smallworld Spatial Intelligence™ can help identify bottlenecks in the design process, leading to more efficient engineering design and improvements in customer satisfaction.

Smallworld PowerOn®
Designers and engineers to make network updates from Smallworld Design Manager™ available to the Smallworld PowerOn® system or other downstream applications or processes.

An Integrated, End-to-End Solution
Ultimately, the integration of Smallworld Design Manager™ with complementary GE Network Solutions applications and Internet tools provides a one-stop solution for engineers, planners and operations personnel. This solution provides access to the full range of data and documents needed to support an end-to-end design or planning session.

Smallworld Design Manager™ can be integrated with analysis tools to help ensure that designs are optimized from the outset. And the ability of GE Network Solutions applications to share data makes it possible for designers to flow plans seamlessly into one or more designs.