

GridWorx™

GridWorx is GIS created specifically for the operators of small and rural utility systems. It requires no prior knowledge of mapping, GIS theory, database administration, nor very much experience using a computer. It gives rural water managers the tools they need to accurately map their systems without hiring a full-time GIS person or even need to become one themselves.

The Utility Sector is one of the fastest growing of the many fields in which Geographical Information System (GIS) software is used. GIS is emerging as an important planning, implementation management and operations management tool for the utility industries such as Telecom, Transportation, Energy and several urban utilities such as Water Supply, Waste Water and Health.

GridWorx™ Utilities Management System Services the Unique Needs of:

* Pipeline * Gas * Electric * Water * Wastewater * Telephone * Cable * Internet *

Utility companies have the data required to identify maintenance trends, determine the actual cost of operation of their assets, and develop management strategies by analyzing maintenance costs and work history. With the GridWorx™ system, both time and money are saved from the maintenance process and parts availability is ensured, while decreasing inventory investment and streamlining contract and sourcing management.

Key Benefits and Features:

- * Open data format
- * Lowers operating costs
- * Enhances decision-support capabilities
- * A broad range of design documentation capabilities
- * Reports available in both graphical or tabular form
- * Ability to manage meter inventories and create work orders all from the same source
- * Automatically updates attribute data and cross referencing data in the projects design files
- * Uses an interface software that integrates with corporate applications and other systems in the architecture
- * Utilizes a single application for a variety of schematic types
- * Links key design functions seamlessly, including schematic, panel layout, cable block diagrams, and wiring design for increased productivity
- * Easily shares facility-related data with other company applications
- * Improves company-wide productivity with system integration
- * Saves time with automatic generation of diagrams and schematics
- * Prevents accidental concurrent project access which can corrupt a data model
- * Enhance data quality by importing data from external data files and database platforms
- * Single data entry saves time and money by eliminating redundant work and facilitates the revision process
- * Ties in with work order management and asset-transaction management tools
- * Detailed reporting for improved decision making
- * Easy record keeping for purchasing and compliance documentation

The **GridWorx™** system provides a unique and comprehensive set of solutions to meet the asset management needs of any organization. This system can be deployed on a single machine for small to medium-sized companies, yet its scalability and performance can meet the demands of large global, distributed organizations that operate multiple sites. The **GridWorx™** system can also improve management in the areas of finance, materials, and supply chain, and optimize utilization of equipment.

The **GridWorx™ Infrastructure Management Tool** serves the unique needs of the utility industry and devises better ways of protecting critical commodities and responding more rapidly in cases of emergency. GridWorx™ management system enables utility companies in protecting their critical infrastructure in the areas of service. This includes far more than physical assets it also includes computer-generated grid-systems. These assets are so vital that their infiltration, incapacitation, destruction or misuse would have a debilitating impact on the health, safety, and economic welfare of the organization.

Electric The GridWorx™ system provides powerful tools to support the facilities and asset management needs of electric distribution and transmission companies. It links critical workflow processes into an integrated IT environment. Integrating geofacilities management with operational support and service-delivery applications enables these systems to cooperate seamlessly in managing the planning, design, construction, operations, maintenance, and emergency response functions of an electric utility. It offers powerful functionality that helps an organization automate work processes, comply with corporate or project standards, and keep electrical data current through the lifetime of a plant.

Gas Companies look forward knowing that their competitive edge depends largely on their ability to take advantage of current and future technological advances. Maintaining a competitive advantage requires operational systems that work together with mission-critical business systems to deliver a complete view of an organization. Such a system can only be delivered by applications that are built upon a standards-based Internet architecture.

Pipeline A management system created for transmission companies with support for stationing and interfaces to popular engineering analysis and asset management packages, DOT compliance applications, and other third-party systems.

Water / Wastewater The system provides a suite of geofacilities management applications based on water/wastewater industry best practices and offers unprecedented openness and seamless integration with other corporate applications, streamlining the day-to-day tasks of model design and maintenance, and enabling ad hoc and routine analysis of the model, as well as enterprise Web data access. The system is designed to help manage many of the aspects of a complex water and wastewater project - from initial data entry to maintenance and reporting. Provides tools that allow the user to create, validate, maintain, and analyze network data. The validation system locates and displays features that violate the data model and queues them up for efficient editing.

GIS for Operations and Maintenance

- * Many utilities have discovered the value of GIS for improving day-to-day operations. GIS can be used to closely model utility networks and integrate other related types of data such as raster images and CAD drawings. GIS spatial selection and display tools allow users to visualize scheduled work, ongoing activities, recurring maintenance problems, and historical information.
- * The topological characteristics of a GIS database can support network tracing and can be used to analyze specific properties or services that may be impacted by such events as stoppages, main breaks, drainage defects, and so forth. Dynamic segmentation can also be used to derive a generalized network that combines hydraulically similar sections into larger strips to make pressure and flow analysis algorithms run more efficiently. GIS can perform many other operations and maintenance tasks, including work order and warehouse inventory management and SCADA.
- * Water agencies use GIS to map the full extent of their water distribution systems and link them to a database defining each element including reservoirs, pipe segments, services, and system appurtenances.
- * GIS provides you with an intelligent database so that job planning, equipment inventory, and flow analysis become an automated procedure integrated into one system. You can link your current network modeling system to the GIS, tie it to the attribute data, and map the results.
- * GIS allows you to represent a project in three-dimensional form to visualize the impact of facilities on landscape during the design process. This data can then be combined with other computer-aided engineering functions to assist the engineering designer in the planning and scenario testing of various designs.

Utility companies depend on critical assets to drive their business. Allow DBS to customize and implement **GridWorx™** as your complete **Infrastructure Management Tool**. Doing so will minimize downtime, unscheduled maintenance, improve overall operational performance and reduce the need for capital expenditures

Another DBSgraph product that integrates with and compliments **GridWorx™** functionality is:
OrderTrak™ (Work Order Management Tool)