ESRI GIS and mySAP Utilities

Data, Maps, Decisions—Integrated Solutions for Utilities

Geographic information system (GIS) technology from ESRI® provides mySAP Utilities users with tools to visualize, analyze, and navigate their data resources more effectively. ESRI, the world leader in GIS and a SAP Development Partner, makes use of the SAP® GIS Business Connector (GBC). The GBC is a flexible interface to link mySAP Utilities to GIS, thus enabling users to leverage the value of their SAP data with the power of map displays and spatial analysis. With more than 300,000 customers worldwide, many of them in the utilities marketplace, ESRI has technology and solutions to help SAP users operate their utilities more effectively.

Utilities are no longer in the business of just building and running networks. They must thrive in a competitive business environment that not only requires careful investment in facilities but also careful management of market focus and customer satisfaction. Together, ESRI® GIS and mySAP Utilities provide a comprehensive set of tools for the entire business process, end to end. From design and engineering to maintenance, operations, business analysis, and customer service, ESRI and SAP solutions add efficiency and value to utility best practices.

ESRI GIS works with all aspects of the business and integrates with utilities throughout the process.

Joint Users Can

- Analyze potential network configurations for return on investment (ROI) using ESRI GIS business analysis tools.
- Design electrical, gas, water, and wastewater networks using ESRI business partner Miner & Miner’s ArcFM™ Solution, integrated with SAP Material Management (MM), SAP Plant Maintenance (PM), SAP Project Scheduling (PS), and SAP Customer Interaction Center (CIC).
- Manage network operations using a geographic interface to view network components and related data.
- Create outage notifications in the Call Center of mySAP Utilities and analyze the outage areas in the integrated ESRI GIS.

The GIS industry is entering a new era, led by ESRI. ArcGIS™, ESRI’s scalable family of software, is built on industry-standard Component Object Model (COM) architecture and object relational feature creation and storage using databases such as Oracle®, DB2®, and SQL Server®. These can be tightly coupled with mySAP Utilities and function as full-fledged members of an integrated IT implementation.

The utility industry has always had a strong geographic focus. The design process requires placing assets in specific locations with respect to streets, buildings, and existing services. The ArcFM Solution provides an intuitive graphic interface for designing and maintaining electrical, gas, and water networks. However, the assets must also be managed from an inventory, depreciation, and taxation perspective. mySAP Utilities provides comprehensive tools for doing just this. It is the integration of ESRI’s GIS solutions with Plant Maintenance, Material Management, Financial (FI), and Industry Solutions—Utilities/Customer Care and Service (IS-U/CCS) of mySAP Utilities that provides users with the tools to manage their entire business, not just their network.
ESRI GIS—mySAP Utilities Interfaces

ESRI GIS can be integrated with mySAP Utilities in a number of ways. For maximum flexibility, ESRI relies on the GBC, SAP’s standard interface to professional GIS solutions. The entire ArcGIS product family is recognized as 100 percent GBC compliant. “The implementation effort has been reduced to days by using GBC,” says Dr. Walter Kienle, head of development for SAP’s Asset & Work Management.

All of these ESRI solutions make use of ArcSDE®, ESRI’s enterprise spatial database server, and ArcIMS® for Internet mapping solutions.

ArcFM—The GIS for Utilities

Miner & Miner’s ArcFM, a powerful extension to ESRI’s ArcGIS platform, is a complete solution for facilities management designed to meet the needs of the utility business. It provides users with productivity tools that support the way the industry uses and manages data in the modern competitive marketplace. ArcFM software’s spatial components allow gas, water, wastewater, and electric utilities to realize additional improvements in all critical business areas including operations, engineering, customer service, marketing, and sales.

The ArcFM Solution allows utility businesses to make use of a single integrated environment to manage and map multiple assets, leveraging all the power of ArcGIS software’s object-oriented architecture. ArcFM fits into the overall information technology architecture of modern utilities through the use of open databases, industry-standard programming environments, and COM architecture. It leverages technology that is configurable and easily aligned to multiple processes using a unified strategic platform.

ArcFM provides a scalable architecture for the full range of utility business needs and can be used for a single departmental installation or as a multidepartmental enterprise configuration for creating, managing, and disseminating utility information.

Key Benefits to mySAP Utilities Users

Together, ESRI GIS and mySAP Utilities offer comprehensive solutions for utilities, ranging from business analysis to network design. Some of the key benefits include

- Flexible integration between ESRI GIS and mySAP Utilities.
- The ability to maintain mapping data in ESRI’s GIS and all other data in mySAP Utilities, eliminating data redundancy.
- An intuitive GIS front end that optimizes access to existing SAP data. For example, a customer care agent can quickly locate a reported outage using an intuitive map interface and can initiate familiar SAP transactions right from the map.
- Provision of faster and more accurate information on service restoration.
- Reduction of incident response times.

ESRI mapping technology is embedded in the SAP Business Information Warehouse (SAP BW). As many utilities turn to SAP BW for data warehousing and analysis, they will be able to use the familiar and intuitive ESRI-based mapping interface. ESRI and SAP are continuing to work closely on the development of additional integrated GIS and mySAP Utilities applications.