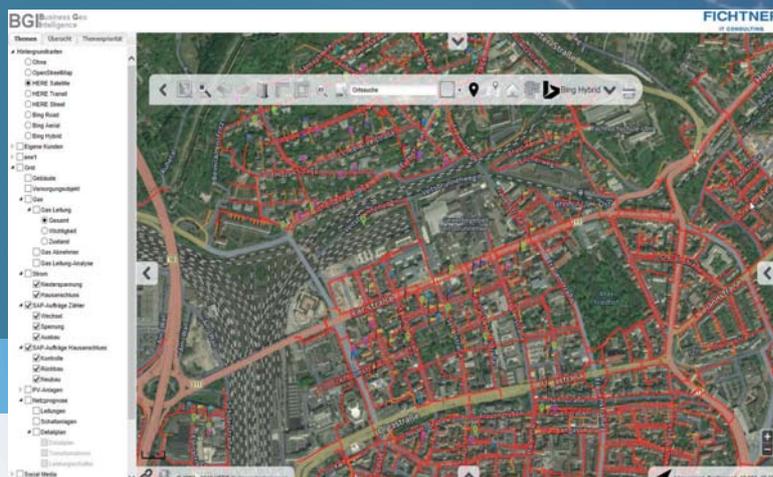


GRID ANALYTICS



The display of the grids and the pertaining SAP work orders provide you with a rapid overview of the situation and the customers affected.

GRID ANALYTICS

The Grid Analytics solution supports asset management in the transportation or distribution network. It provides a complete analysis through the geo-visualization of all relevant information needed in asset management and network planning. The combination of technical data from sources such as GIS and SAP EAM with external services and business information enables a value-oriented view of the assets.

ALL INFORMATION ON ONE MAP

Grid Analytics addresses critical asset management issues, such as:

- Where are the critical weaknesses in the network?
- Which important customers are behind it?
- Where in the pipeline are my SAP work orders?
- Where is further maintenance work in the area for the bundling of work orders?
- Where are instabilities threatening due to fluctuating feeds in the grid?

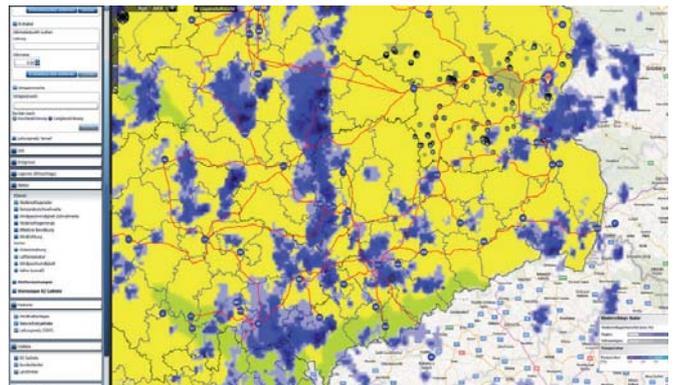
Grid Analytics is a modular web GIS framework from the new Fichtner solution series »BGI Analytics«. It offers a flexibly customizable set of combinable functions, data, services and systems for each requirement. The nets are shown on the map according to material and age, including a change list. In addition, additional data layers can be visualized, such as stations, PV and wind feeders, customer, and readout data, meter, and exchange orders, postal code areas, real estate maps, construction site information, protected areas, and weather, and lightning data with exact coordinates and strength. In this way, events can be related to the systems at any time and at any place.

BIG DATA ANALYSES: GEOSPATIAL SERVICES 100% IN SAP HANA

The flexible architecture of the solution enables integration into any standard asset management system, ERP and database system. BGI Grid Analytics was developed especially for SAP customers for the new big data solution »SAP HANA«: as an on-premise option for the customer or as a very attractive and flexible hosted solution. This in-memory database technology enables the analysis of hundreds of thousands of geocoded plant data in extremely high speed. Grid Analytics accesses master data from different systems on a Web GIS interface. This is how the SAP data is integrated with the

plants and transaction data such as incidents, requests and notifications. In addition, Fichtner FAST modules allow analysis and evaluation of the equipment according to risk of failure and importance based on technical data and damage history. In the synopsis in Grid Analytics, users can now analyze their critical assets by default risk and importance according to their situation. Thus, the plants are identified with maximum and urgent maintenance needs, which can also be bundled more cost-effectively for the maintenance orders.

The solution is based on a flexible architecture and integrates card services such as »HERE«, »Bing Maps« or »OpenStreet-Map«. The current and high-resolution aerial and oblique views can be used to make an initial assessment of the situation from the office. The lengths of network segments can be measured on the map. By means of integrated address search, proximity search by travel time, and route planner, it is possible to plan approaches directly from the same system. The identified particularly critical systems can be written directly from the map analysis into a list and transferred to the SAP EAM or GIS for further processing.



The up-to-date and predicted weather data enable a forecast on the development of PV power feed-ins in the grid. The figure shows the combination of grids, PV positions and cloudiness layer.

ABOUT FICHTNER IT CONSULTING GMBH

FIT is the IT competence center of the Fichtner Group with some 1500 employees in over 60 countries. The Fichtner Group has been established in 1922 and is family-owned ever since. We design and implement information logistics for technical networks, assets and infrastructure. We combine industry-specific knowledge with process know-how and state-of-the-art technological expertise to deliver innovative and economic solutions for your success. We extract, structure, link, process and present your (geo-referenced) data to provide efficient and effective solutions.