

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.

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Our Grid Analytics solution framework is designed to support asset management related issues in the transmission and distribution grid. All relevant information required for asset management and grid planning is geo-visualized for a thorough and complete analysis. The combination of technical data from sources like GIS and SAP EAM with external services and business information enables a value-oriented view on the assets.

ALL INFORMATION ON ONE MAP

Grid Analytics addresses critical asset management issues, such as:

- Where are the critical weak points in the grid?
- Which key customers are affected?
- Where are my SAP work orders in the grid?
- Are there any other pending orders in the surrounding area so that work orders might be pooled?
- Are there any potential instabilities in the grid due to fluctuating power feeds?

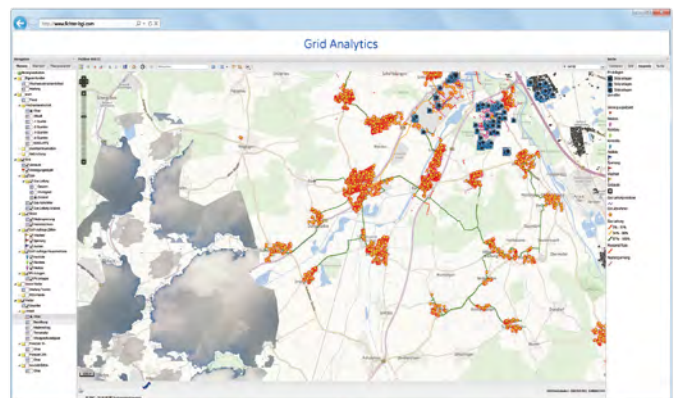
Grid Analytics is a modular WebGIS solution framework that belongs to the new Fichtner product line »BGI Analytics«. The solution offers a flexibly adjustable set of combinable functions, data, services and systems to match the particular requirements. The grids are displayed on the map according to the categories material and age along with the periodic replacement list. Further data layers can be visualized, e.g. stations, PV and wind power feed-ins, customer and meter reading data, meter and churn orders, postcode regions, digital cadasters, construction site information, protected areas as well as weather and lightning data with the exact coordinate and voltage. Incidents can thus be correlated with the assets, anytime and anywhere.

BIG DATA ANALYSES: GEOSPATIAL SERVICES 100% IN SAP HANA

Due to its flexible architecture, Grid Analytics can be integrated into any standard asset management, ERP and database system. For SAP users, we have developed BGI Customer Analytics for the new Big Data solution »SAP HANA« which can be deployed either on-premise or as a hosted solution – likewise attractive in terms of price and flexibility. This in-memory database technology enables real-time analyses of hundreds of thousands of geo-coded asset data. Grid An-

alytics uses master data from various systems on a WebGIS interface. This way, SAP data concerning assets and transaction data, e.g. incidents, applications and messages are incorporated into the system. In addition, the Fichtner FAST modules enable an analysis and assessment of the assets by failure risk and impact on the basis of technical data and damage history. Taking an overall view in Grid Analytics, the user can now analyze critical assets in accordance with their geographic location. Assets calling for maximum and immediate maintenance action are thus identified. To reduce costs, these assets can then be pooled geographically for the preparation of maintenance orders.

The solution is based on a flexible architecture integrating map services like »HERE«, »Bing Maps« or »OpenStreetMap«. The up-to-date, high-resolution aerial and angled views enable a preliminary assessment of the situation at a glance. The lengths of grid segments can be measured on the map. Service trips can be planned in the same system via integrated address queries, proximity searches, also by travel time and route planner. The identified critical assets can be directly written 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 AG

FIT is the IT competence center of the Fichtner Group with some 2000 employees in over 70 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.