

Future-oriented software architecture supports service connection process and fault reporting

Stadtwerke Herne: SAP-GIS integration with NRM-EIS

Mettenmeier GmbH is expanding the SAP-GIS integration which Stadtwerke Herne have had in live operation since 2005 into a genuine service-oriented architecture (SOA). The link between the systems is formed by Mettenmeier GmbH's SAP-certified NRM-EIS connector, the technological leader in its field. "Thanks to this flexible integration technology, we are creating the basis for effective support, not only for service connections, but other processes as well," explained GIS Project Manager Dietmar Solinski.

Electricity/gas service connections

Stadtwerke Herne is currently taking advantage of point-to-point integration between the two systems. To date, this has essentially been used for the maintenance of service connection data in SAP and Smallworld GIS. For example, whenever a new service connection is provided in Stadtwerke's service area, a corresponding entry is made in SAP PM. An automatic, unambiguous association to GIS objects is established via the location (street, house number). The integration solution therefore ensures that the full data set need only be maintained in a single system and that mutual access is available at all times. For example, it is possible to jump directly from SAP to the location in GIS.

Thanks to XML/HTML technology, both SAP data and the SAP user interface can be

reproduced 1:1 in the GIS browser. That has the decisive advantage that GIS users do not need to launch the SAP system directly to access data. An additional advantage is that SAP installations are not required on GIS workstations.

While rku.it GmbH is handling the SAP-side implementation of the system integration and providing the technical infrastructure with the associated data centre, Mettenmeier GmbH is realising the GIS-side work.

Fault reporting

The previous solution is currently being expanded towards a service-oriented architecture. In this respect as well, Stadtwerke Herne is relying on the proven co-operation between rku.it and Mettenmeier. The NRM-EIS integration

solution, which provides a range of service functions optimally adapted to Smallworld GIS and the NRMs, is being deployed.

With NRM-EIS, new processes can be implemented for comparatively low investment and operating costs. For example, the SAP and GIS systems at Stadtwerke Herne will be able to exchange fault reports in future. Faults will be recorded in SAP as fault objects and sent to GIS. In the case of point-shaped objects, the location data will also be provided.

EWMR TIS project

The individual members of the EWMR (Energie und Wasserversorgung Mittleres Ruhrgebiet, a partnership of Stadtwerke Bochum, Herne and Witten) are co-operating closely in the TIS project. Only the best individual solutions are taken into consideration. With their initial implementation of the SAP-GIS integration, Stadtwerke Herne are the leaders in the EWMR partnership and will be contributing not only the technical realisation, but also their experience with incident processes to the shared technical information system.

Stadtwerke Herne

Gas supply network		Electrical supply network	
Service connections	19,341 (181.3 km)	Service connections	24,525 (201.24 km)
High pressure	2.4 km	Medium voltage	539.3 km
Medium pressure	53.9 km	Low voltage	700.3 km
Low pressure	382.5 km		

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