

# GeoNAM, warp one, engage!

## Integrating multiple data sources into a lean maintenance solution

In a joint project with an oil and gas exploration and production company, we introduced the maintenance management software GeoNAM and structured and simplified business processes along the way.

### Goals of the project

As our customer had recently taken over the management of an additional oil field and the associated facilities, data from external sources as well as third-party maintenance plans had to be consolidated and integrated into a new system or platform.

The objective was to continue to actively use the data inherited with the facilities and to link it into a new system for the new operator. This meant introducing the GeoNAM software and its strength in managing maintenance challenges as data

## Key Features

- Integration of asset data from multiple sources
- Streamlined business process
- Dashboarding to communicate progress and measure KPI
- Managing schedules

integration platform for different types of legacy data. The data had to be decoded and read from two different SAP systems and one other external system to be merged into one application. At the same time, the business processes using the data had to be optimized and re-implemented.

### Approach taken

The first step of the project included the customer and the GEOMAGIC team working together to analyze and map the existing data structures. Task types were also reviewed to get an understanding of data systematics which will function as a basis for the planned system architecture.

A GIS was set up first as a unified data repository. Based on the GIS, a data import process was configured to feed the GEOMAGIC maintenance solution GeoNAM.

Then additional asset and equipment data was imported into GeoNAM from SAP and supplemented by the associated descriptions and documents, such as operating instructions. Data on orders, maintenance plans, and work schedules had to be imported as well, with some data decoding required for the different data sources.

After the data had been made available in the new system, the user management for two separate administrative areas could be configured, and customer admins intensively trained. The business processes for asset management and maintenance were translated into their GeoNAM representations and could be streamlined and simplified from a 6-step to a 4-step workflow. GeoNAM process definitions are highly flexible, so changes can be easily incorporated. The data for asset management and maintenance is handled separately in GeoNAM which allows the dashboard view to be tailored based off the user's area of expertise. The system has dedicated rights management so that users see the data that needs to be seen, but not that data that is out of scope or is outside their authority range. About 6 months after the start of the project, all imports were finalized and the GeoNAM maintenance module was in production use.

**Training calendar in GeoNAM**

With GeoNAM, user permissions can be defined in a highly flexible way. It is thus also possible to authorize users for training purposes only, allowing them to register for training and view the training calendar. Sensitive data is secure at all times.

**Maintenance**

Maintenance data is displayed in a user-friendly way by means of a dashboard overview. Maintenance and inspection tasks can be organized, carried out and displayed in statistics after they are finished. In addition to maintenance tasks, asset operations can also be managed via the maintenance module.

**Solution**

Within a period of six months, and in close cooperation with the project partners at an oil and gas exploration and production company, we succeeded in bringing a heterogeneous mass of legacy data from different sources up to the required standards and into production use in a software solution that meets the customer's requirements and workflows. All maintenance tasks were transferred into working business processes.

**GEOMAGIC Utility Solutions Inc.**

1900 West Loop South  
Suite 1550  
Houston, TX 77027  
U.S.A.

sales@geomagic.world  
P +1 (319) 582-4031  
P +1 (304) 974-0084

[www.geomagic-utility.com](http://www.geomagic-utility.com)