Marine Information and Data Acquisition System

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The Marine Information and Data Acquisition System (MIDAS) was developed by the Flanders Marine Institute. It is used in planning and follow up of all activities onboard the RV Zeeleeuw and for capturing of monitoring data. The system captures underway data of different types (navigation, meteorological and oceanographic), and stores them in a relational database. It will also register all ship movements (leaving/arriving at ports and stations) as well as research activities (CTD casts, seabed and water sampling...).

The ship track, stations and sampling locations can be displayed on the workstations of the on-board LAN. It uses a GIS interface with a direct link to the UW data stored in the database. Drift from station calculations and distance-long-track-analysis for trawling activities are automated giving instant QC feedback to scientists and crew.

All data can be directly exported onboard or consulted some days later through the VLIZ website. The data is provided as is, meaning no further QC steps are implemented as to date. The database replication from shore to board and vice versa is based on XML files, but is still a manual process. Optimisation planned and possible as soon as a direct telecom link is available.

The ship programs have a two-tier client-server infrastructure with a database server, an acquisition server and two client applications (one for the bridge crew and one for the scientists). The shore components are a database server, a planning application and a CGI-BIN based web interface.

VLIZ being a non-profit organization and believing in the free exchange of software and data, has decided to make the system freely available to fellow institutes under the terms of the GNU license agreement. For more information please visit the site http://www.vliz.be/Vmdcdata/midas/.