

ments located in the laboratory, giving a real feeling and experience with this sophisticated instruments.

Conclusions

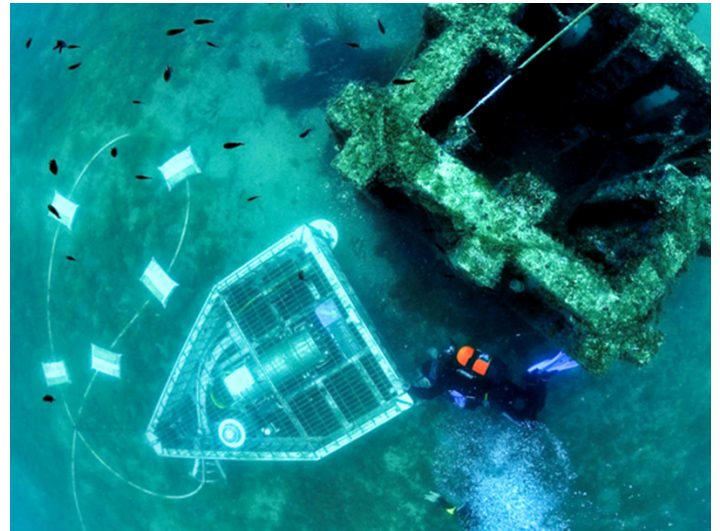
The IN-TRA-NET philosophy has shown to be interesting for companies that try to improve their performance through continuous updating of their workers, using web applications for remotely control equipments or monitoring processes. It has been applied to a didactic course for learning basic measurements with a multimeter, and for remote monitoring of a trawler vessel and scientific marine instruments.

References

[1] <http://www.intranetlab.eu/>

[2] Sarriá, D., Sánchez, A., del Río, J., Molino, E., Mánuel, A., Valls, F. "Acquisition system for improving energy efficiency in trawler vessels," 17th Symposium IMEKO TC4, 3rd Symposium IMEKO TC 19 and 15th IWADC Workshop Instrumentation for the ICT Era, 8-10 September, Kosice, Slovakia, 2010

[3] <http://www.obsea.es/>



OBSEA SOFTWARE DATA STRUCTURE

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Introduction

The OBSEA observatory must provide data and services in a suitable way to users who may use different platforms and programs. The purpose of this work is to provide a service transparent to the customers and compatible with the different platforms and programs.

Nowadays, the most widely used protocol is the WWW, and a Website can reach many users. However, there are other types of customers who need specific formatted data; the reasons are the tools and programs that they may use to study and process the information. In this case, several solutions have been developed: DataTurbine, SQL, metadata, and custom formatted data.

From sensor to client

The RAW data from the OBSEA instruments is routed to the Lluna server, where the data is collected and stored by a proprietary program developed at SARTI. Before the copy is performed, the data is resent to several ports and destinations. The aim of this application is to send the incoming data to any service required and be able to change destinations and services with minimal impact. Therefore, the application is able to resend data to whatever destination and port is required. The destinations and ports are stored in a configuration file that is read by the program during its execution.

Another SARTI proprietary application in Lluna server processes the incoming data, separating the CTD, the Weather Station, and the AWAC data, in order to insert the measurements in a SQL database. This application uses also a configuration file to know the format of the RAW data and decodes the measurements required for each instrument.

In this application, also NMEA sentence has been built, with the data from instruments as well as time-stamp from instruments and server. This implementation will become in the near future a metadata to offer new services.

Data in the Website

The website presents the data from the different sensors using different methods. The data from the CTD is retrieved from a SQL database. In the other hand, the AWAC and hydrophone data is stored in a folder, so the website gets the data from this folder.

Conclusions

A modular designed system for providing information to different users has been presented. This configuration and applications allow an easy expansion of the network and the system, and it is compatible with all the platforms and Operating Systems.