

EurOcean Summary

URL: <http://www.eurocean.org>

Purpose of application

EurOcean – The European Centre for Information in Marine Science and Technology is an independent scientific non-governmental organization of 14 leading European Marine Organisations whose aim is to develop information exchange and derive values added products in the field of marine sciences and technologies. It maintains databases of marine infrastructures and a database cataloguing thousands of European marine relevant projects

Geographic extent

EurOcean databases cover information from across Europe, including both countries in and beyond the European Union.

Target audience

Researchers, practitioners and users of marine infrastructures; policy makers, project planners, and the general public

Data included (general categories)

Information on:

- Marine Research Infrastructures Database (<http://rid.eurocean.org>)
- European Research Vessels InfoBase (<http://www.rvinfobase.eurocean.org>). This database contains information on over 300 vessels.
- European Large Exchangeable Instruments InfoBase (<http://lexiine.eurocean.org>). This database catalogues over 130 pieces of equipment
- European Aquaculture Experimental and Research facilities InfoBase (<http://mefinfobase.eurocean.org>). This database lists over 60 relevant facilities
- Marine KnowledgeGate (<http://www.kg.eurocean.org>). This database catalogues thousands of nationally and European funded marine relevant projects.

Distinguishing features

The Marine Knowledge Gate is the most comprehensive catalogues of European marine funded research and technology projects available. It contains projects funded under European initiatives such as the Framework Programmes, Inter-Reg programmes, LIFE +, etc. H2020 projects will be added once information becomes available. In addition marine funded national project information is available. As well as cataloguing projects, it also lists “Knowledge Outputs”. These include everything from policy briefs to scientific published papers to videos to brochures.

Technology used (web GIS, server, database, content management system?)

Main used software:

- VMWare ESXi 5.0 virtualization platform;

- Debian 5 Linux OS virtual machine;
- Apache web server for security management and load balancing;
- Caucho Resin Web/Application Server;
- Mapbox and OpenStreetMap;
- Sun Java JDK EE 1.6;
- PostgreSQL 8 object-relational database management system.

Used supporting hardware is:

- Intel Xeon X3430 (4 Cores) 2.40GHz, 8MB Cache
- 16GB RAM DDR3
- 3 x HDD 500GB SATA2.

Atlas support (financial/institutional)

The development and maintenance of the databases is supported by the annual fees of the Members. In addition EurOcean participates in relevant European projects. Resources from these projects also assist with updating and development.

Challenges encountered

- Maintaining sufficient funding for database development and updates.
- Keeping existing information up to date. Contributors are regularly asked to update their records, but this has limited success
- Adding new information in a timely manner. Due to resource limitations, it is a challenge to source, edit and add new records to the databases.
- Managing the large number of records in some of the databases.
- Development and maintenance of the databases requires considerable time and effort.
- Integration of the information between the databases offered by EurOcean.
- Choice of the descriptors to describe the complexity of the universe of Information.

Lessons learned

- The landscape of marine research infrastructures and Research funded projects is complex, a choice of descriptors must be done in order to provide, as much as possible, a clear and consistent vision.
- Users place a high value on reliable performance of the databases.
- Databases need to evolve and simplify over many iterations allowing a frequent database reconfiguration.

Future directions (ongoing and future improvements?)

- Adding new searchable fields to the Knowledge Gate and expanding the funding programmes handled
- Integrating the disparate infrastructures databases in one
- Displaying live ship positions in the Research Vessels database
- Reviewing the technologies used.