OIH-LAC - Web based tools for centralize marine and coastal information from Latin American and Caribbean

IOC/UNESCO IOCARIBE Secretariat, is working together with partners, and has been actively working on identifying early-stage partners who are ready to test the ODIS-architecture proof-of-concept. A number of events and meetings have taken place to raise awareness of the project in the LAC region, and to bring new partners into the co-design process.

Based on this, INVEMAR (Colombia) developed a pilot Clearing House Mechanism – CHM for the Latin America and Caribbean region – LAC (OIH-LAC), in the context of the Caribbean Marine Atlas (CMA) project.

- Rebuild/implements on CHM-LAC pilot whir ODIS Arch specifications
- Include more data providers
- Develop software prototype to retrieve data from regional providers that implement schema.org vocabulary and JSON-LD

The objective of the project is to develop interoperability between existing information systems, thus improving the flow of information to end users.

Some of initial datatypes are...
- People (researchers, youth, local communities)
- Organizations (Governmental & Private Sector)
- Documents
- Spatial data / maps
- Training opportunities
- Vessels (research opportunities)
- Projects

The platform’s versatility makes it possible to incorporate any type of dataset and create new categories in response to specific needs at the national or regional level.

The tool was developed using web mining mechanisms, interoperability, and traditional techniques. For the construction, the most recent advances were used, such as the use of non-relational databases, MongoDB, javascript libraries for a better user experience such as ReactJS and python scripting language.

Technical features:
- Different way to get the data
- Web scraping used for extracting data from websites
- NoSQL database for large volume of data and performance
- Expose web services for interoperability
- Access from mobile and web browser

The user interface

Capabilities:
- Container infrastructure
- Data model (NoSQL)
- Web scraping engine / harvesting engine
- Web services to expose data

How is the collection, dissemination and visualization of information and courses?

Defined PROCESS to access, harvest, store and publish information from different heterogeneous data sources. (Webservices, Flat Files and Webscraping)

Next steps

- Identify / Register new datasource
- Configure (mapping) datasource
- Run process to extract data
- Integrate data into OIH-LAC datasets
- Publish in portal
- Search engines
- Infographics
- Metadata

http://portete.invemar.org.co/chm