

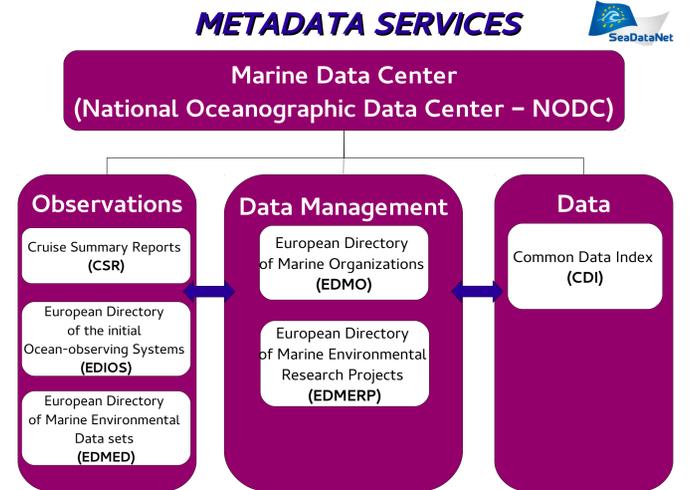
A SYSTEM FOR MANAGING METADATA USING XML FORMAT

Elena Partescano, Alberto Brosich, Alessandra Giorgetti
OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale)

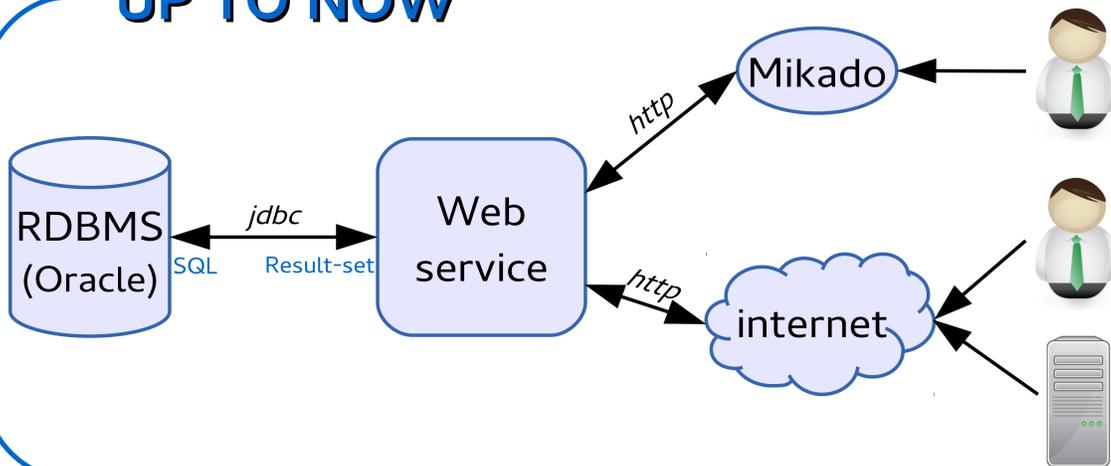
INTRODUCTION

The participation to EU-SeaDataNetProject has grown the need to create and share metadata in XML format. Tools for managing it (as Mikado Software) are available, therefore the next step is linking metadata XML files to data loaded into relational database and building a web service to allow the connection between the managing tool (Mikado) and the database.

METADATA SERVICES

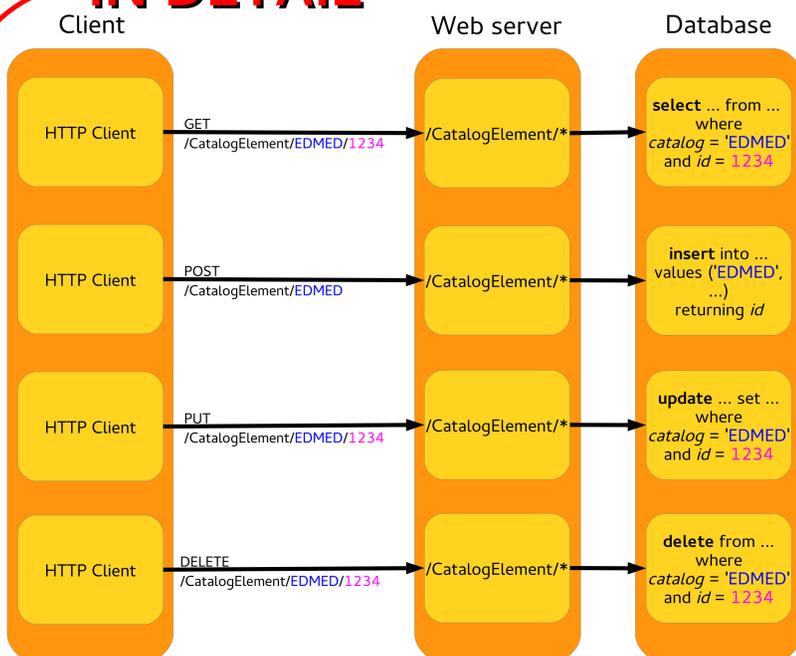


UP TO NOW



The chosen solution was to load into the Oracle database the whole XML metadata files, in a specific data type. Using XML and XQuery functions it is possible to store, extract and manage different kinds of information.

IN DETAIL



With a RESTful Web Service we have a simple and standard interface for quickly and easily creating, modifying and deleting records containing XML documents inside the database. Finally, through the use of that RESTful Web Service it is possible to decouple the applications, using a software such as the Mikado, the XML documents can be inserted, updated and deleted inside the database without the need for a direct connection to it.

IN THE FUTURE

Another way to manage XML files could be to use a native XML database. In the future, we would prefer a native XML database to store the XML metadata file, but even if it seems the more logical choice, several problems could arise, as for example how to join data and XML metadata (relational database and native XML database).

