BCO-DMO Data Management Architectural Overview

Public access via Drupal

Web content and metadata

BCO-DMO Website

Geospatial Access

MapServer-cartography

OpenLayers-interface; interrogate and draw features

ExtJS and other JavaScript libraries-environment

MySQL-metadata

Metadata Database and Web Content

Data Manager access

Metadata and web content insert, update, delete and display

Perl Library
Perl code calling REST API via Drupal

Supporting Software
- Drupal
- PHP, Perl
- Load navigation and date information into Location table (Perl)
- Report modules
- NSF Tracker subsystem

JGOFS/GLOBEC
Backend Data Storage and Retrieval

Data Server   Data Server   Data Server

Highlights
Text based interface; Geospatial (MapServer) interface; Metadata database stored in Drupal CMS; Distributed backend data management system; Fitness for purpose tools in MapServer and JGOFS/GLOBEC; Browser clients, also distributed; Ability to support other data management backends; Semantic elements (contributed vs standard names); Advanced search using triple stores from several sources; No login required; Access to metadata; Access to actual data; Data manager interface via Drupal; Direct transfer of data and metadata to appropriate national archive, such as NODC, when data are final.

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