

Bridging the Gap: Simplifying Metadata Flows with an EOV Application

Elizabeth Lawrence
Canada



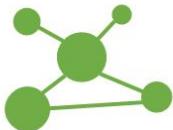
What makes (meta)data FAIR?



Findable



Accessible



Interoperable



RReusable

- Descriptive metadata with stable links (e.g. DOI)
- Clear instructions on how to access
 - Not just “available upon request”
- Easily combined with other datasets & machine readable
- Metadata enables replication
 - Data is contextualized

Metadata

BioEco Monitoring Metadata: GOOS BioEco Portal

Interactive map to show:

- **Who** is collecting data on BioEco Essential Ocean Variables?
- **Where** is sampling being done?
- **Descriptive metadata** about the monitoring efforts

bioeco.goosocean.org



*Redevelopment underway to use
Linked Data*



unesco

Intergovernmental
Oceanographic
Commission

IO

DE

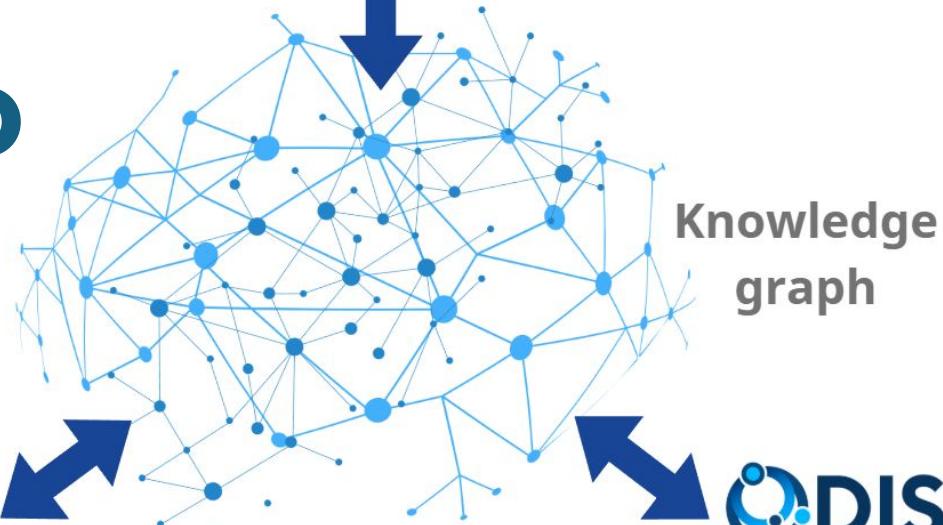
International
Oceanographic
Data and Information
Exchange

IOC of UNESCO Digital Ecosystem

GOOS
BioEco Portal

OBIS

OCEAN BIODIVERSITY
INFORMATION SYSTEM

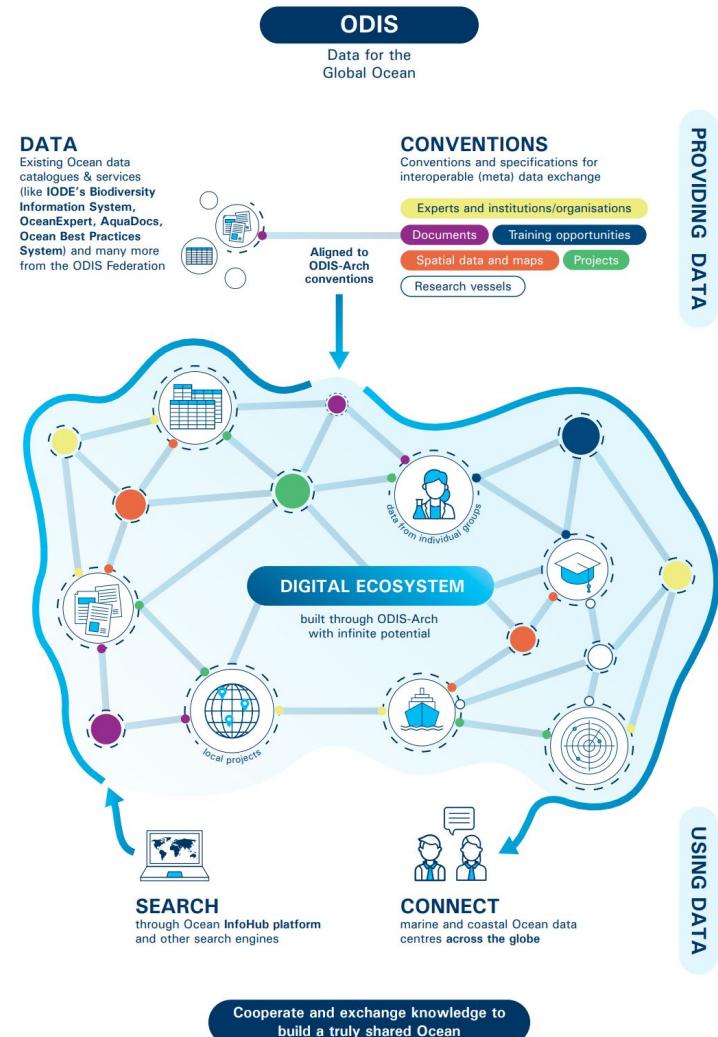


Knowledge
graph

ODIS
OIH
Ocean InfoHub

ODIS odis.org Ocean Data and Information System

- Laying infrastructure
- Provides **metadata schemas** using schema.org vocabulary in **JSON-LD format**
 - **Co-developed** by community
- Makes resources more discoverable using linked **web architecture**



JSON-LD

Not friendly to
non-technical
users

```
{
  "@type": "Project",
  "legalName": "Example Monitoring Organization",
  "name": "Example",
  "url": "https://exampleurl.org/",
  "description": "This is an example entry",
  "identifier": {
    "@type": "PropertyValue",
    "description": "DOI",
    "propertyID": "https://registry.identifiers.org/registry/doi",
    "url": "123",
    "value": "123"
  },
  "parentOrganization": {
    "legalName": "",
    "url": ""
  },
  "publishingPrinciples": [
    {
      "@type": "CreativeWork",
      "name": "CC-BY: Creative Commons Attribution 4.0",
      "url": "https://creativecommons.org/licenses/by/4.0/"
    }
  ],
  "foundingDate": "2025-07-14",
  "dissolutionDate": "2025-07-23",
  "areaServed": [
    {
      "@type": "Place",
      "name": "Quebec",
      "identifier": "http://marineregions.org/mrgid/9057",
      "geo": {
        "@type": "GeoShape",
        "description": "Bounding box polygon with lat long (Y X) coordinate order.",
        "geosparql:asWKT": {
          "@type": "http://www.opengis.net/ont/geosparql#wktLiteral",
          "@value": "<http://www.opengis.net/def/crs/OGC/1.3/CRS84> POLYGON((-77.403
          }
        }
      }
    }
  ]
}
```



EOV Metadata App

eovmetadata.obis.org



user action



login

automatic

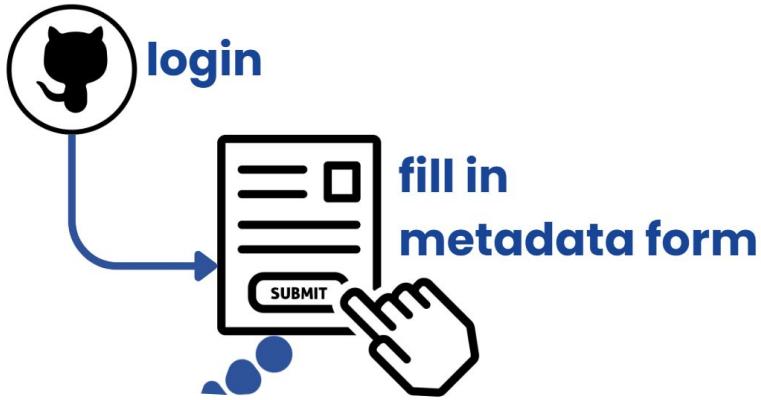


EOV Metadata App

eovmetadata.obis.org



user action



automatic

- Simple **Form-based** interface

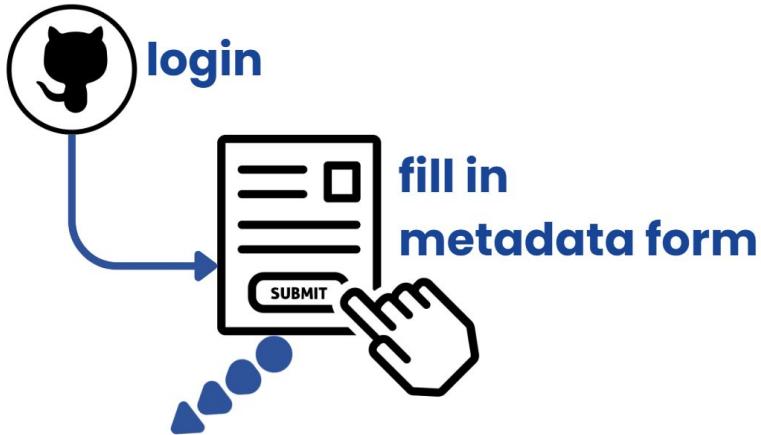


EOV Metadata App

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user action



automatic



- Simple **Form-based** interface
- Generates **metadata files** in **JSON-LD**
 - Connects with OBIS and

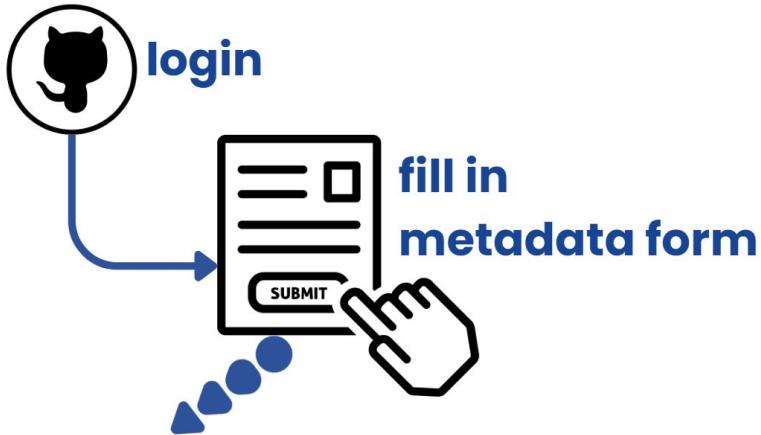


EOV Metadata App

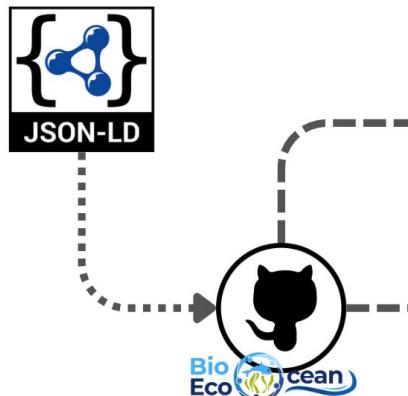
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user action



automatic

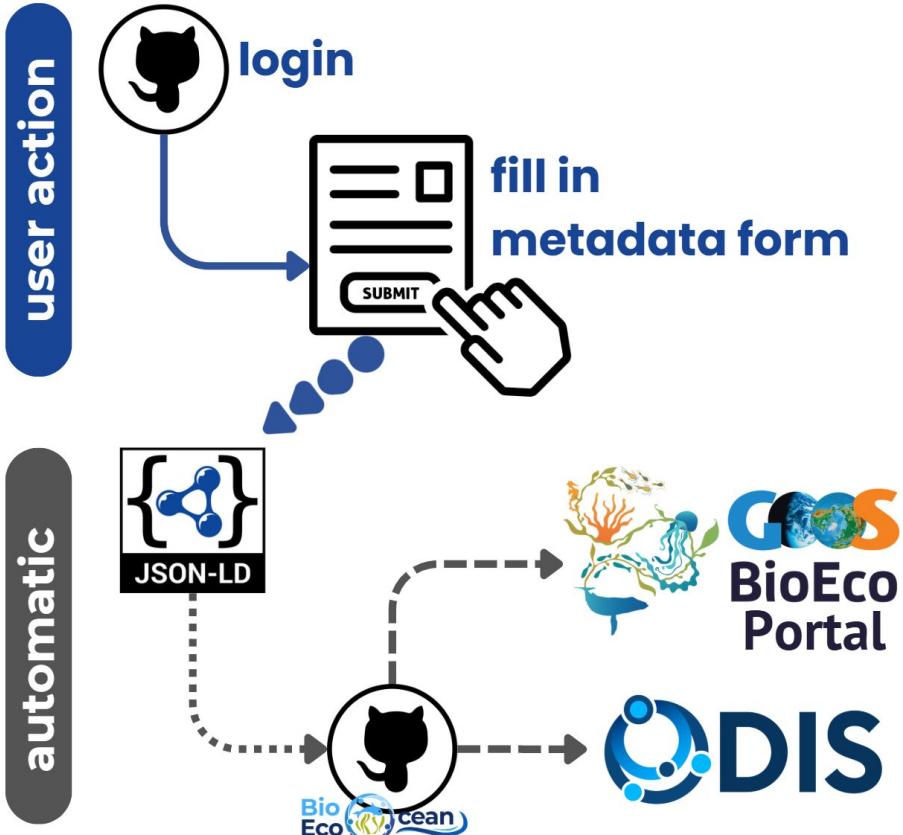


- Simple **Form-based** interface
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EOV Metadata App

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- Simple **Form-based** interface
- Generates **metadata files** in JSON-LD
- Connects with ODIS and BioEco Portal
- Aligned with **EOV Specification Sheets**



EOV Meta data App

eovmetadata.obis.org



unesco International
Biosphere
Data and Information
Exchange

OBIS
OCEAN BIODIVERSITY
INFORMATION SYSTEM

BioEcoOcean

BioEco

EOV Data Management Tools

Home Metadata Data tools About

Submit BioEco Metadata

Fill the form below, ensuring required fields are populated, and then submit. Examples are provided in placeholders. Forms can also be saved as drafts and updated for submission later using the "Update entry" button on the previous page. The "Print JSON" button will display the current form data in JSON-LD format.

[Back](#)

General Information

Data producers may include monitoring programs, projects, institutions, etc.

Data Producer

Name*

Data Producer

Acronym:

URL:*

Previously entered: N/A

Data producer ID:

Previously entered: N/A

Identifier Type:

Previously entered: N/A

If your desired type is not listed, please contact us to have it added. To generate a DOI for your entry, click the button and fill the form below, then copy the generated DOI into the field above. Some fields may have been prepopulated for you using information in the form. Please confirm data is correct before creating your DOI.

Contact helpdesk@obis.org to correct or update information.

[To Bottom](#)

Metadata form includes:

- Data producer **identifiers**
 - DOI creation
- Keywords from interoperable **vocabulary servers**
- **Geographic names & IDs** from Marine Regions
- **EOV keywords**



EOV Metadata App

eovmetadata.obis.org



EOV Data Management Tools

Home Metadata Data tools About

Coming soon: data standardization tools

These upcoming developments will allow you to upload an EOV dataset and convert it to Darwin Core, making it easier to submit data to OBIS! We will provide user-friendly data template spreadsheets with which you can align your data to, to use this tool.

For more information about the general data management practices for EOVs, please see: obis.github.io/eov-data-management.

Essential Ocean Variables (EOVs)



BioEco EOVS



Fish



Hard Coral



Invertebrates



Macroalgae



Mangroves



Marine Mammals



Microbes



Phytoplankton



Sea Turtles



Seabirds



Seagrass



Zooplankton

Sampling Approach



Upcoming

- **Data standardization tools for BioEco EOV data**



e.lawrence@obis.org
helpdesk@obis.org



Funded by
the European Union

Partners



UPPSALA
UNIVERSITET



EuroGOOS
European Global Ocean
Observing System



UNIVERSITÀ DI PISA



The Global Ocean
Observing System



Institute of Oceanology
Polish Academy of Sciences



MERCATOR
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