

# **Ocean Practices Federated Network (OPFN)**

ObsSea4Clim - BioEcoOcean Workshop

2 July 2025

Jay Pearlman



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# What is Ocean Practices Federated (OPFN) Network ?



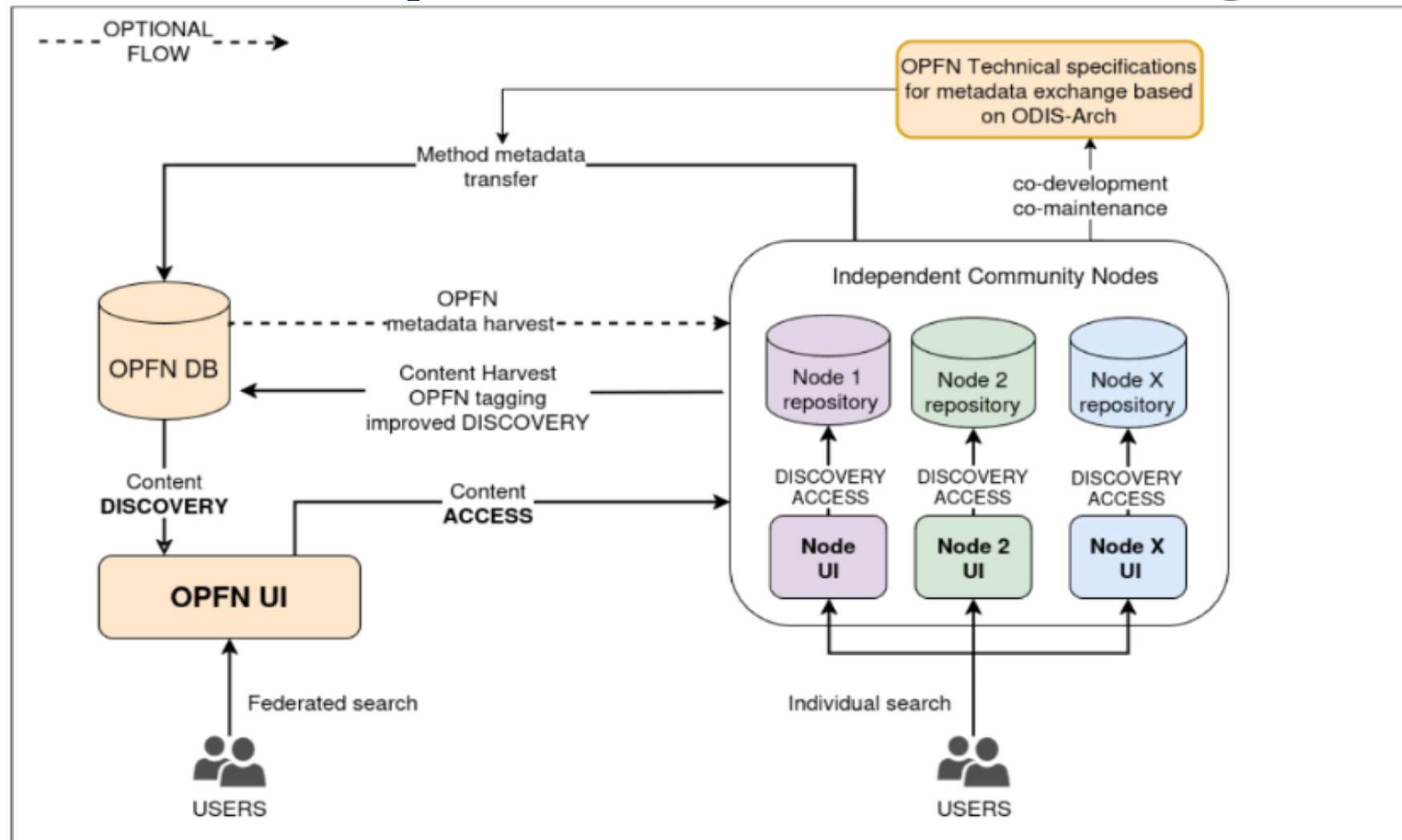
- OPFN is a global federated network,
- connecting isolated and fragmented Methodology Management Systems across the world,
- enabling centralized discovery and distributed access to methods, best practices, and standards
- Initially motivated by aquaculture users



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# OPFN Conceptual Architecture **ObsSea4Clim**

OCEAN OBSERVATIONS  
AND INDICATORS FOR  
CLIMATE AND ASSESSMENTS



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# Benefits of OPFN



Enhanced discovery opportunities



Autonomy and control



Deeper interoperability



Adaptability and updates



Improved practices



# Selecting Methods You Need



**How can you find what you need when there are 2000 methods?**

Methods should be selectable by users by:

Subject	EOV
<u>Maturity</u>	<u>Endorsed</u>
Language,	Etc

**Opening up BPs to informatics and linking them to data and information holdings**



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# OPFN User Interface - beta

Source All

Year All

Maturity Level All

Instrument All

Sensor No options

Keyword All

Language All

Document type All

Sort by Author Title ↓ Year

157 practices [Reset](#)

**A new strategic vision for sustainable aquaculture production and consumption in the European Union: Blue farming in the European Green Deal. (2021)**

Despite all of its benefits, aquaculture production and consumption in the European Union (EU) has not grown at the same pace as in other parts of the world. Of the total consumption of fish and seafood by the average EU citizen, only 25%...

**About Best Practices and the IOC Ocean Best Practices System (OBPS) [Presentation at**



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.



# Survey of Repositories for Ocean Data and Methods



Survey conducted for Oceanography data and methods  
48 repositories submitted

System Name	Type	Focus	User Base	API	Accessibility <sup>1</sup>	Longevity <sup>2</sup>
<a href="#">Allen Coral Atlas</a>	Both	<a href="#">BioEco</a>	Unknown	Yes	○	○
<a href="#">Argo Data Management Reference Documentation</a>	MMS	Phys, BGC	10 000s	Yes	○	○
<a href="#">AtlantECO (OpenAIRE)</a>	Both	All	Unknown	Yes	○	○
<a href="#">BlueCloud (D4Science)</a>	Both	All	10 000s	Yes	○	○
<a href="#">British Oceanographic Data Centre</a>	DMS	Phys	1000s	Yes	○	○
<a href="#">COPEPOD</a>	DMS	<a href="#">BioEco</a>	Unknown	No	○	○
<a href="#">Copernicus (Sentinel 2)</a>	DMS	Phys	100 000s	Yes	○	○
<a href="#">Copernicus Marine Service Standards</a>	MMS	Phys, BGC	100s	No	○	○
<a href="#">Criticbase</a>	DMS	<a href="#">BioEco</a>	Unknown	Yes	○	○
<a href="#">DAM Community (Zenodo)</a>	MMS	Phys, BGC	1000s	Yes	○	○
<a href="#">DMP Opidor</a>	MMS	Phys, BGC	Unknown	No	○	○
<a href="#">eCUDO.pl</a>	DMS	Phys, BGC	10 000s	Yes	○	○
<a href="#">EMODNet</a>	Both	All	Unknown	Yes	○	○
<a href="#">EMSO ERIC Metadata Specifications</a>	MMS	All	100 000s	Yes	○	○



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# Collaboration



- Identify repositories for data and methods for BioEco
- Define key subject areas in BioEco to be included in pilot
- Support beta testing of OPFN User interface



ObsSea4Clim is funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.



# Future actions

Each day begins with a plan