OGC EDR API

ONE API TO RULE THEM ALL?



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Dan Lear - dble@mba.ac.uk



- Ensure frictionless recovery of data...promoting adoption of APIs across Data Archive Centres
- Horizon scanning for new technology
- DACs to provide OGC-compliant View and Download services
- Strengthen the archiving of multidisciplinary datasets
- Implement a DAC network API

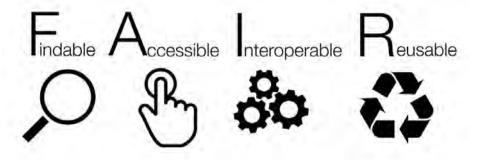


High Level Findings...

- EDR offers a great simple way for users to access data (but not necessarily for developers to deliver it!)
- Engagement with standards community is key
- Public funds = Public code Results are shared and improve data interoperability for the wider community
- Working with existing code can take longer than starting from scratch!



Which of the FAIR elements does this work address?







Findable?

How can EDR deliver beyond the limitations of discovery metadata (wide boundary boxes, long time spans, sometimes mixed data types within the same record)

- 1.Discovering data within a data centre varying in type and structure, adopting a standard which can be applied relatively easily to multiple data could be useful. Only one API need be queried, using the same language, to cover many datasets.
- 2.Discovering data *across* data centres advantage of using the same language but there can be different interpretations of the standard (e.g. definition of a collection) plus variable amount of data returned can result in a query working fine for one API but running into timeouts for another.





Accessible?

Does EDR improve the overall accessibility of data within MEDIN?

- 1.Data Centres will need to deploy limited resources in the adoption of a new standard and endpoint
- 2. Need to create a new portal (portal proliferation?) to realise the benefits of cross-data centre querying
- 3.A single API means great skill-sharing potential and technical collaboration between data centre staff



Interoperable/Reusable?

Does the simplicity of EDR benefit or hinder the user community?

Small-scale data retrieval - hiding of nuance/subtlety. Closer linkage of metadata to data (such as through the existing Cefas Data Hub) provides detail on collection methods, licensing, provenance etc)

Large scale data retrieval/comparison — Clear benefits for cross-Data Centre interoperability. Large volumes of broadly comparable (eg 'environmental') data accessible from federated data centres with the inherent risk of loss of nuance. The risks will greatly depend on intended use.



Bang for our buck? – Does the investment in implementing a new standard match the benefit of other data flow improvements (more data, more QA?)

A single standard? – What about non-spatial data?

That's cool, so what? – Is there a user demand for this? Does it offer tangible user benefits? Need to collect user stories to inform future





Fundamentally, we hope to answer the question...

'Is the OGC Environmental Data Retrieval API standard appropriate for marine environmental data?'





