COINAtlantic: Sharing Through Open Tools and Open Standards

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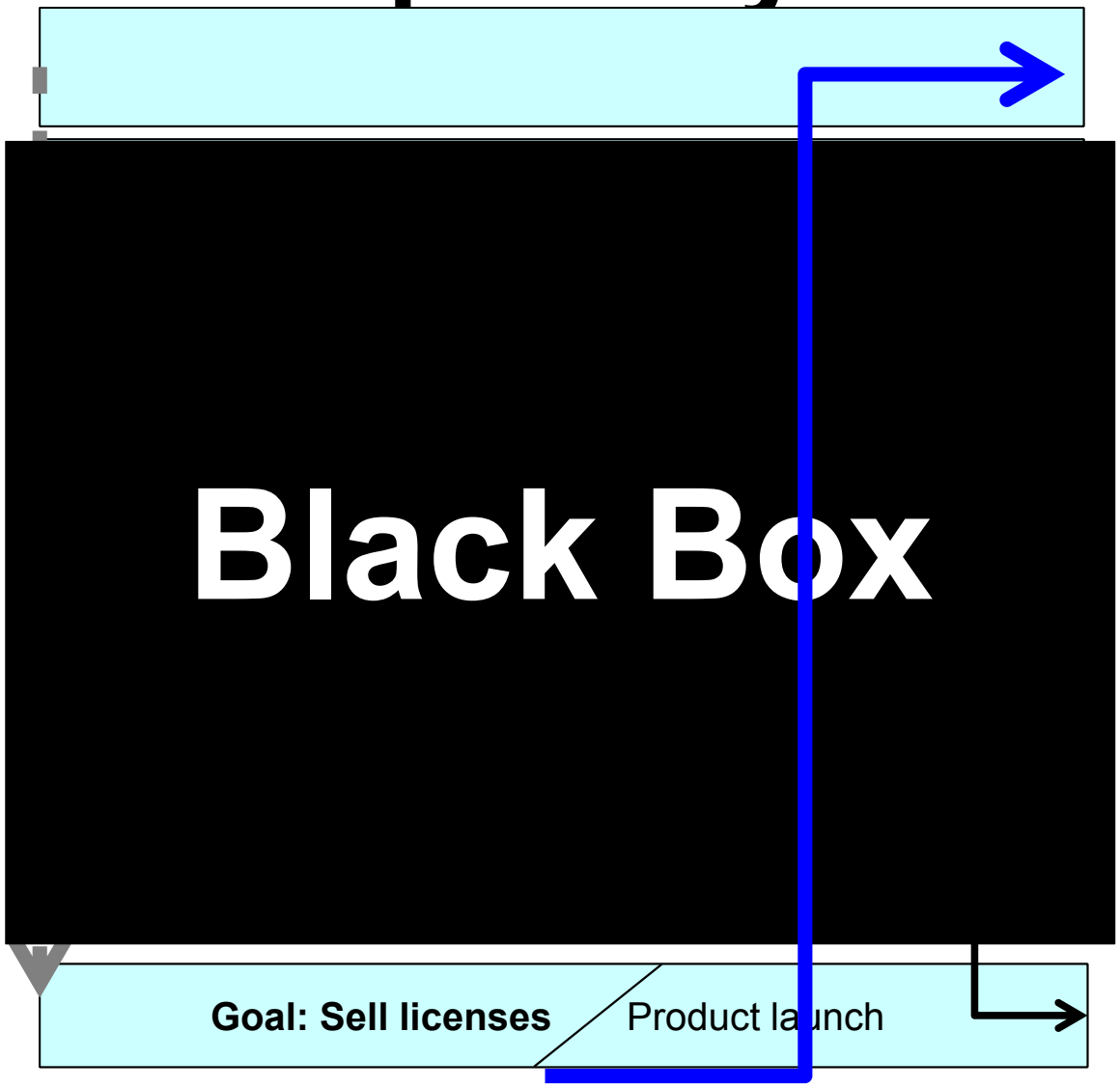
Today's Geospatial World

A solution will contain many pieces, and they all must work together.

Proprietary Software



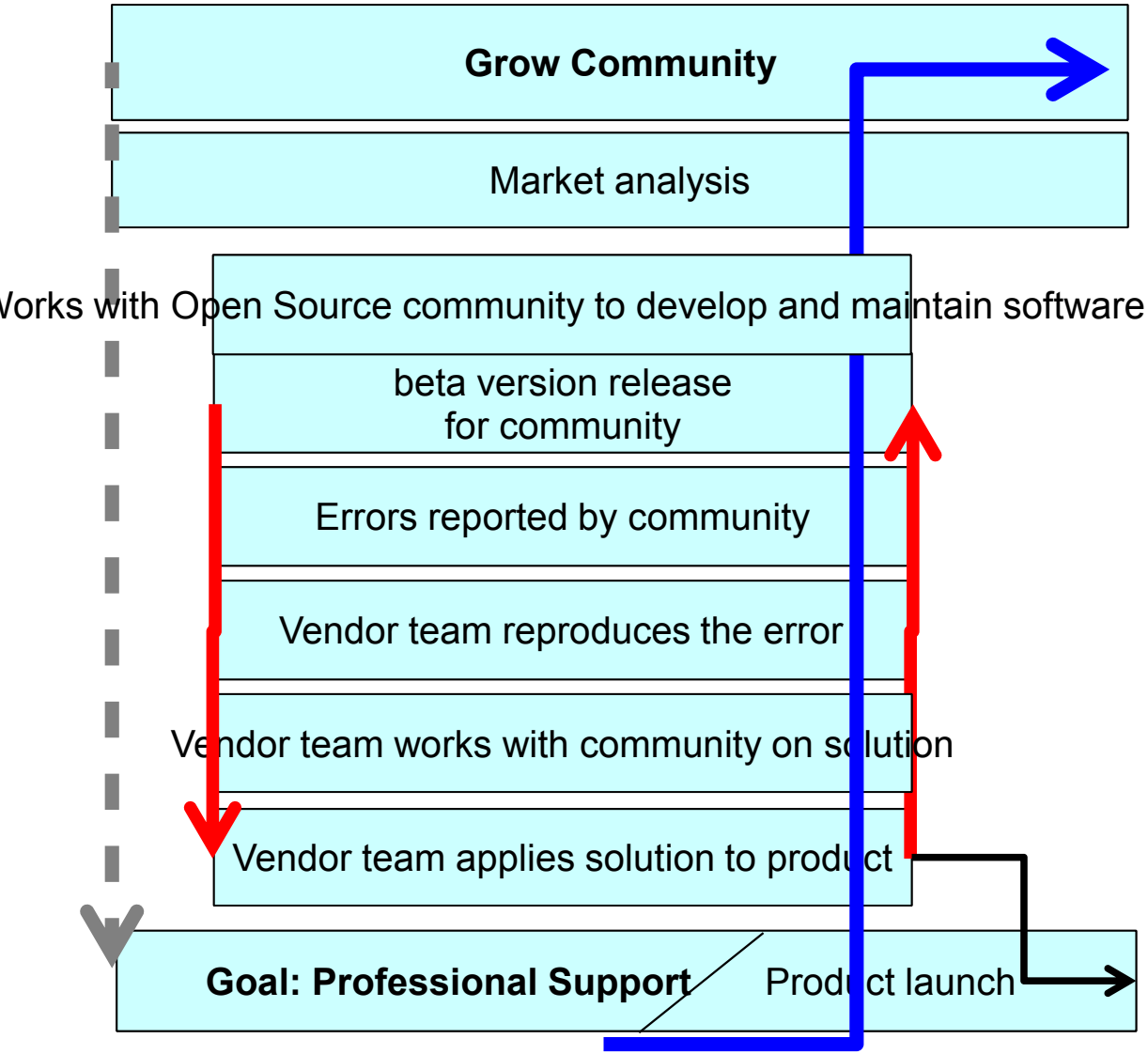
Connecting to other software is often after-thought

Do not leverage community in development process

Difficult to plug your solution in

Just now realizing benefits of being "open"

Open Source Vendors



Follow standards to make sure solution can plug into others

Leverage vibrant community for development

Promotes growth of community and product

Gateway Geomatics

ACZISC
ATLANTIC COASTAL ZONE INFORMATION STEERING COMMITTEE

Case Study: Danish Geodata Agency

http://download.kortforsyningen.dk/

- As of January 1st, 2013 all data is open
- 100+ datasets
- Mandated by government
- Entire infrastructure based on open standards and open source software
- ~5 million maps per day

Google

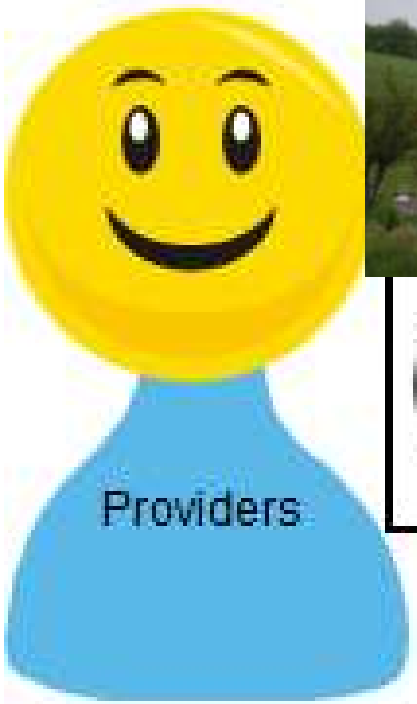
COINAtlantic
"Chain for Information Access"

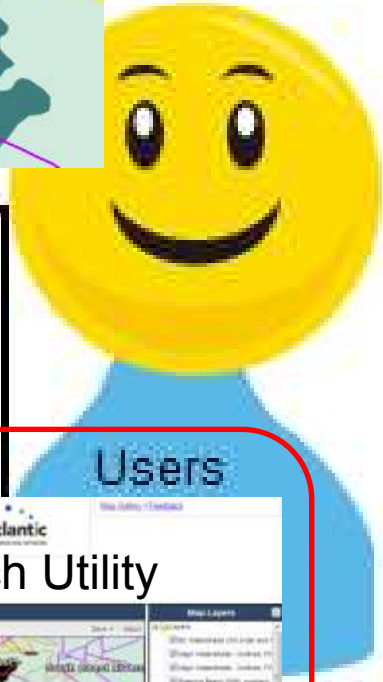
Well Managed Silos

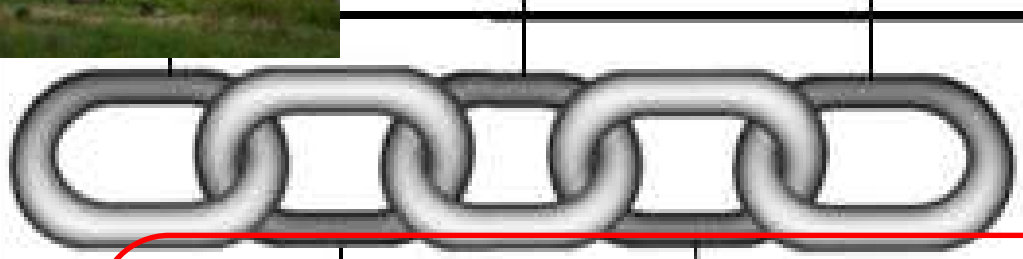
Indexed by

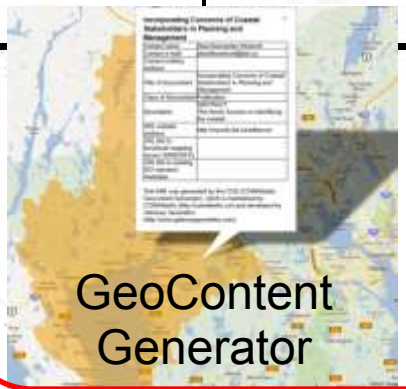
Google™

Your Map









GeoContent Generator

Search Utility

COINAtlantic Tools

http://coinatlantic.ca/

- Focus on sharing ocean data
- Goal is to provide tools for users with little technical knowledge
- Tools leverage Open standards, data, software

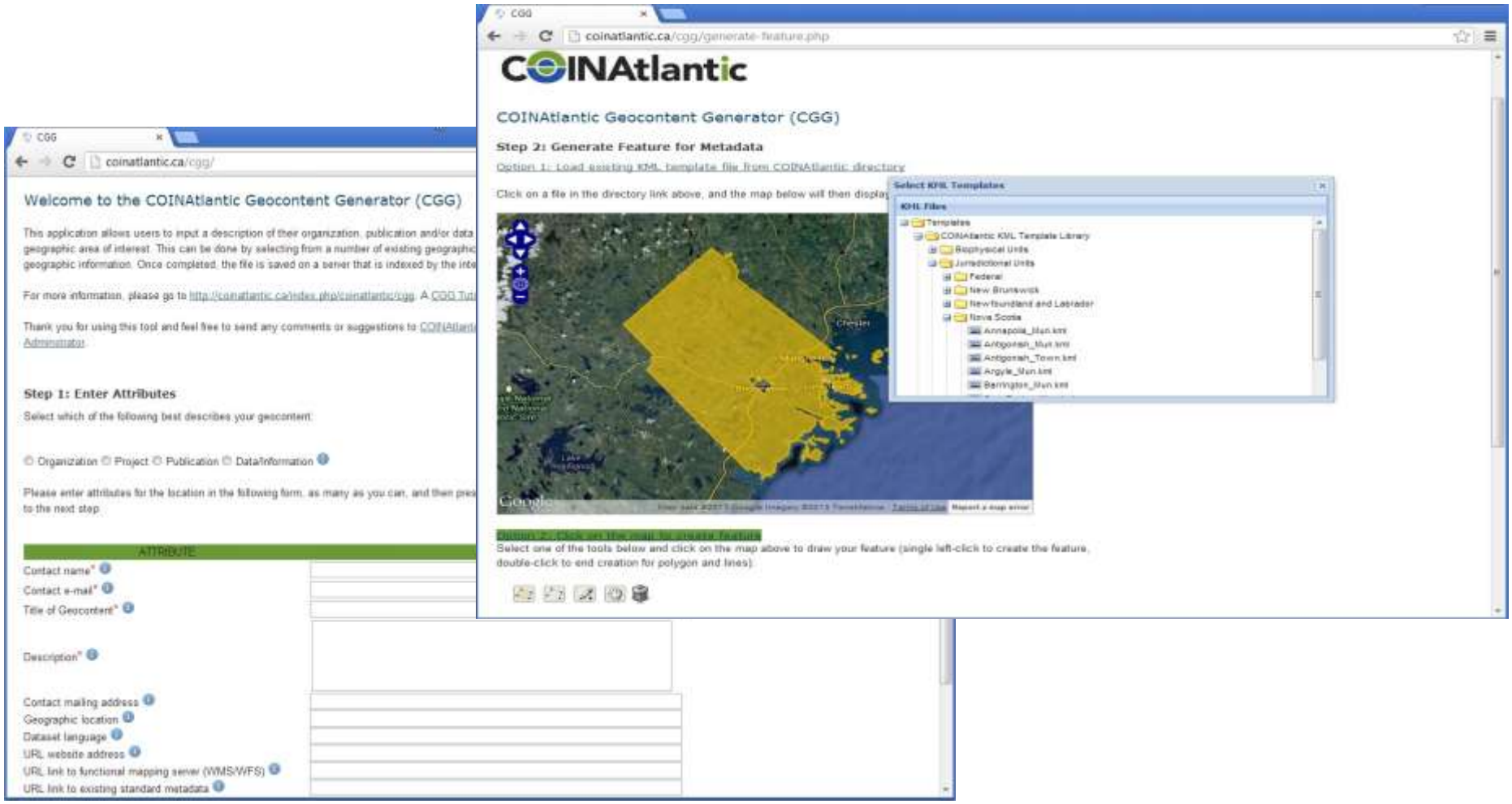
COINAtlantic Geocontent Generator (CGG)

http://coinatlantic.ca/cgg

COINAtlantic
COASTAL AND OCEAN INFORMATION NETWORK

- Allows coastal data managers to generate metadata to describe their services
- Links attributes with spatial feature
- Published through Google search engine
- Open standards & software: OGC:KML, OpenLayers

COINAtlantic Geocontent Generator (CGG)



CGG: Future Enhancements

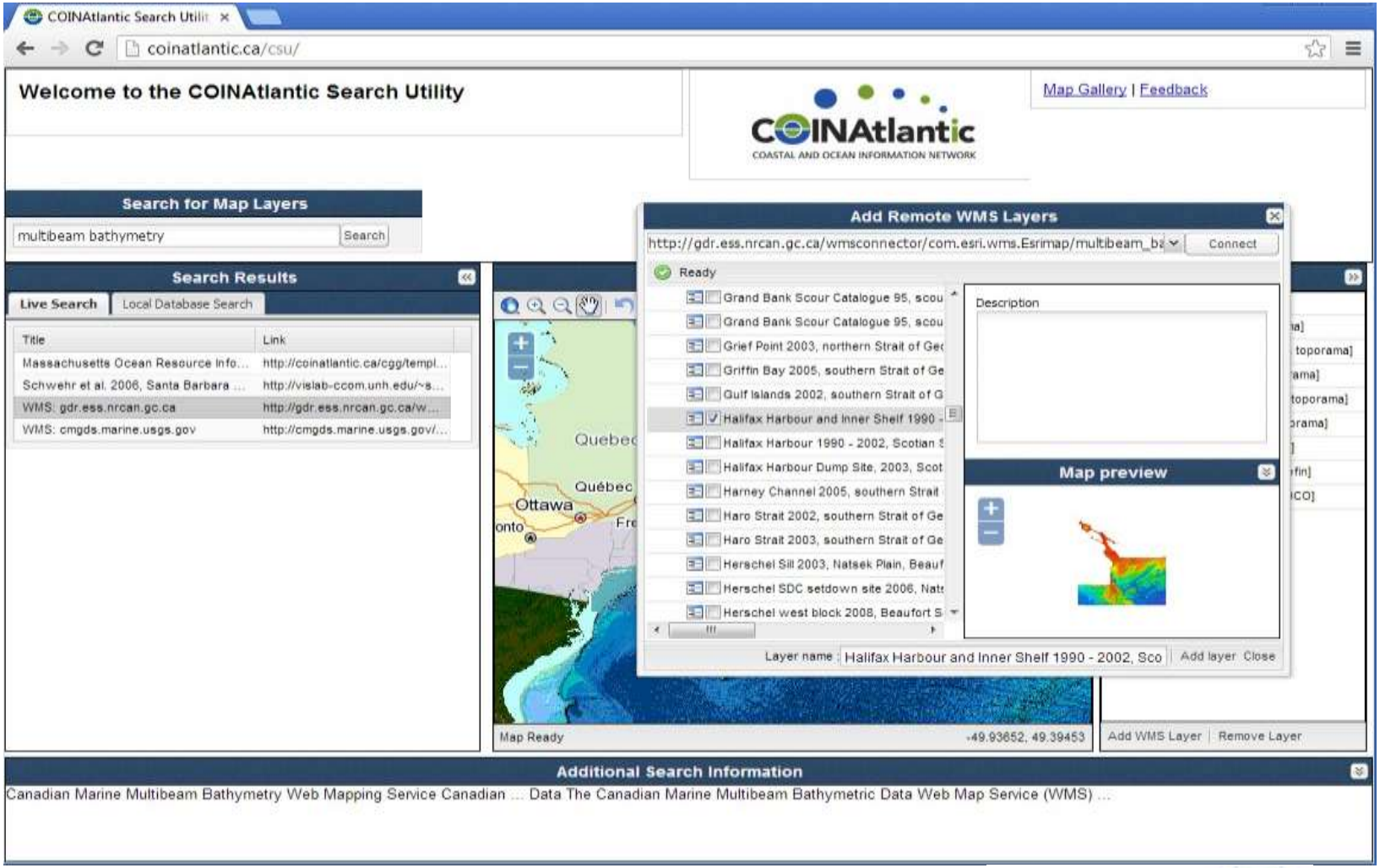
- Redesign interface
- Allow data authors to manage published metadata
- Expand KML template library

COINAtlantic Search Utility (CSU)

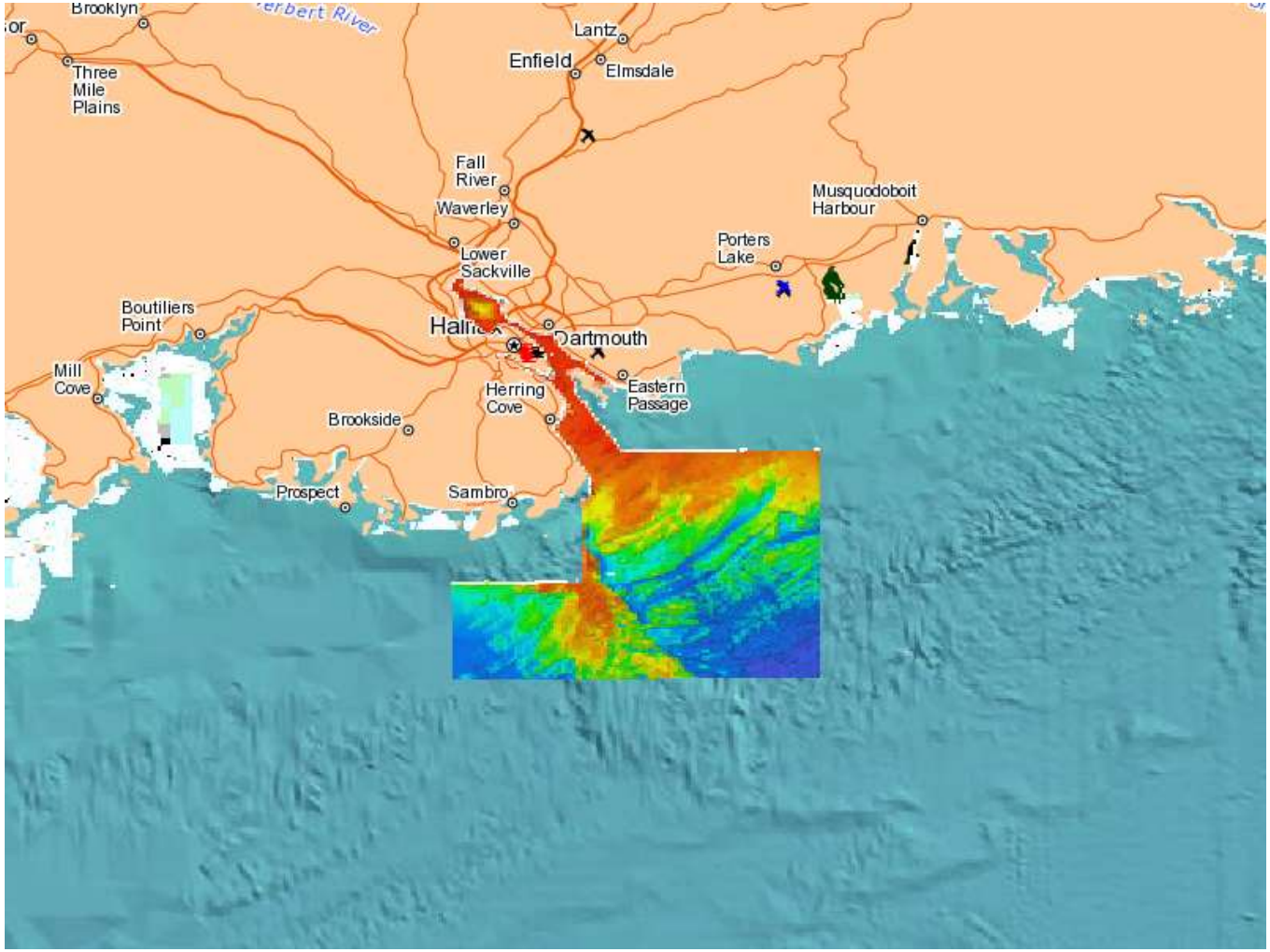
http://coinatlantic.ca/csu

- Allows coastal decision makers to search for geospatial data through Google and display in one interface
- Live Google search for CGG metadata, OGC:KML, OGC:WMS services
- Results stored locally in PostgreSQL database; map interface created with OpenLayers
- MapServer generates map output formats

COINAtlantic Search Utility (CSU)



COINAtlantic Search Utility (CSU)



CSU: Future Enhancements

- Perform live spatial search (filter)
- Add analytical spatial functions (possibly through WPS)
- Tune search term queries
- Leverage CSW catalogs (possible aggregate search?)

Challenges

- Not all software follow the same standards
- Google controls all services
- Free live API search is limited to 100 queries per day
- Complex KML files difficult to display over Internet
- Services are created by data managers, but often are not visible to Google search engine

Thank you!

www.coinatlantic.ca

@mapserving