Libre: Freeing your data - Free to share, discover, and use

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**What if...**

Finding data and services that worked on that data that matched your interests was as easy as subscribing to the news?
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myData News.org

- Greenland 1 km DEM has been published
  A Digital Elevation Model (DEM) of Greenland acquired by a researcher is available in binary format at a 1 KM grid spacing in a polar stereographic projection...
- Greenland Ice Sheet Melt Characteristics Data updated
- Greenland Ice Sheet Melt Characteristics now available via OpenSearch API

Presented at the ESIP Federation Meeting
July 2011, Santa Fe
What would it take to make that happen?

• Simple mechanisms to advertise data and services
• Tailored aggregators looking for ads
• Aggregation-based news services and portals that allow user subscriptions
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• Simple mechanisms to advertise data and services

• Tailored aggregators looking for ads

• Aggregation-based news services and portals that allow user subscriptions

Libre is working on all of these things!
Libre - Advertising Support through Casting

- Casting is the dissemination of news through subscription-based syndication formats
- Uses Atom, RSS, or any other syndication format
- Entries contain enough information
  - For subscribers to access the service or data
  - To populate search indexes
- Cast feeds can include:
  - Lists of available data collections
  - Lists of files available for download
  - Lists of services (OPeNDAP, OGC, WMS, etc.)
Libre - Advertising Support through Casting

A live data file cast feed
Libre - Advertising Support through Casting

A live service cast feed

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A live data catalog feed

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Libre - Advertising Support

• Things that are easy
  • Casting all of NSIDC's data sets
  • Casting some of NISDC's data granules
  • Casting NSIDC services
  • Working with groups like ESIP to get others to cast their data and services

• Things that are hard
  • Convincing regular scientists to cast their data
What if...

Advertising your data so that everyone could find them, were as simple as...

1 - Filling out a web form
2 - Saving it to your website
3 - Adding it's link to your site
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Well... It can be!
Libre - Aggregation Support

Search API
Use search API's to find casts for specific subject areas
Feed the aggregator with new casts

Aggregation Server
Support storage & retrieval of active cast entries
Retrieve a feed matching OpenSearch Criteria

Cast Crawler
• Monitor known casts for updates
• Find new casts on known sites
Seed list
Schedule
Heritrix

Seed crawler
with new sites
Feed the aggregator with new or updated casts
• In conjunction with NSIDC's IceBridge Project, Libre is developing a portal that will demonstrate the power of these technologies.

• OpenSearch will be used to discover relevant data and services which will then be used in providing portal discovery, subscription, access, and visualization capabilities.
Questions?