Mercury – Distributed Metadata Search and Data Discovery System

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* On subcontract from Information International Associates, Oak Ridge, TN

About Mercury

Mercury is a metadata harvesting, search and retrieval tool that provides a single portal to information contained in disparate data management systems. Mercury was originally developed for NASA, with continuing development funded by NASA, USGS, and DOE for a consortium of projects (ORNL DAAC, NBII, DADDI, LBA, LTER, NARSTO, CDIAC, OCEAN, I3N, IAI, ESIP and ARM).
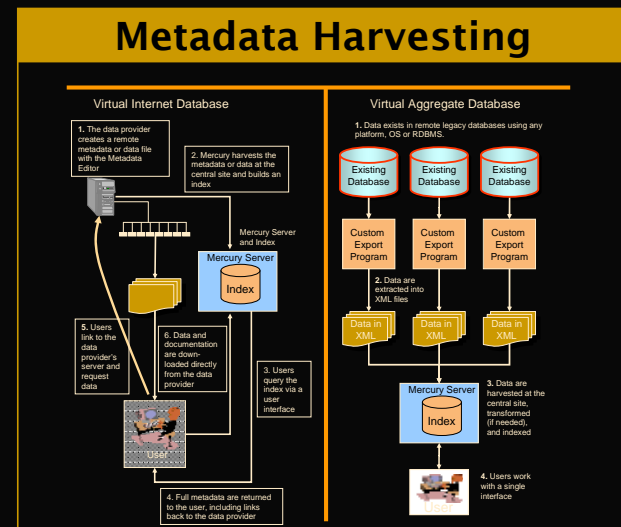
Projects Using Mercury

Mercury Architecture

Mercury supports various metadata standards including XML, Z39.50, FGDC, Dublin-Core, Darwin-Core, EML, and ISO-19115. The new Mercury system is based on open source and Service Oriented Architecture and provides multiple search services. It provides free text, fielded, spatial, temporal and keyword browse tree search capabilities.

Other key features include:
- Seamless data ordering/data extraction functionalities
- Seamless integration to external data visualization tools
- Semantic web integration support (thesaurus service)
- Provides harvested metadata records to other search applications (eg., Google, GCMD, NBII Biobot)

Metadata Harvesting

Search Options

Simple Search

Keyword Browse Search

Advanced Search

Search Results

The search summary page provides an integrated summary of results found in various data sources. Search summary can be emailed or bookmarked or used as an RSS feed, and summary results can be sorted or filtered.

- search services
- filter results
- sort results
- metadata summary
- access to metadata & data

Other Search Services

Global Forest Information Service is using the Mercury RSS feed for its portal search

Users can easily create RSS feeds for their search criteria

Sample RSS feed for ORNL DAAC metadata

Additional Information

Mercury home page
http://mercury.ornl.gov

ORNL DAAC Mercury Instance
http://mercury.ornl.gov/ornldaac

NBII Clearinghouse
http://mercury.ornl.gov/nbii

LBA Beija-flor Search Engine
http://mercury.ornl.gov/lba

Questions and Comments
mercury-support@ornl.gov