Unidata Technologies

Repository

Decoders, conventions, CDM, etc.

ADDE
ADDE TDS
Catalogs

LDM

What do you have?

Gempak
McIDAS
IDV
Repository Usage Contexts

- Local Client
- Home Machine
- “Youtube” of data
- Field Projects, e.g., VOC
- IDD
- Federated Repositories
External services (e.g., LDM) → Service API → Collection Metadata “Entries” → Library API → Harveters

End user → Web API → Repository

Output Handlers:
- HTML
- RSS
- Catalog
- Etc.

- CRUD
- Search
- Events
- Product generation
- Scour

Embedded Client → Library API

Harvesters:
- HTML
- RSS
- Catalog
- Etc.
Data Model

Exensible Metadata
Tags
Creator
Date
Geospatial
Documentation
Associations

Entry

Extensible Types

Group
Radar
Model
...
Create a group

• Create a new group entry
• Common metadata - name, description, date range, geospatial
• All but name is optional
Specify access

- Role based access control
- Hierarchical – child entries inherit access
- Actions – view, edit, delete, etc.
Define metadata

- Any number of metadata definitions
- Extensible – easy to add new types
- Searchable
View Metadata

Summary: This is a test group
Tag: Hurricanes
Link: Unidata web site
Publisher: UNIDATA/UCAR
  Email: jeffmc@ucar.edu
  URL: http://www.unidata.ucar.edu
Upload Radar File

- Specify name, file, geospatial, product, etc.
- It's possible to crack open files to harvest metadata
View Details
Preview Data

- Dynamically generated IDV imagery, movies, etc.
Search

- Search on:
  - type
  - geospatial
  - metadata
  - text
  - sub types (e.g., station)
  - etc.
Sub-Type Search
Search Results as Timeline
Search Results as RSS Feed

- Output handlers are extensible
- E.g., html, timeline, rss, catalog, etc.
Issues

• Scalability & Performance
• Database Technology
• Is common metadata enough?
• Descriptive metadata model
• Service integration
• Etc – users, authentication, security, access control, …
• ???