NDS Labs

Matt Turk, on behalf of the NDS Labs team

Kieran Evans
Mario Felarca
Mike Freemon
Jason Kastner
Kacper Kowalik
Dan LaPine
Ray Plante
Ian Taylor
Kandace Turner-Jones
I have a confession.
I am a domain scientist.
Data presents an existential crisis.
Top down model is disconnected and disempowering.
Bottom up model requires resources and experiences.
Synthesize and empower.
Components

Process

Network
Experimental environment

- Ingestion
- Storage
- Catalog
- Frontends

Events

Identity, authorization, authentication
Deliberately No Names

Ingestion

Storage

Catalog

Frontends

Identity, authorization, authentication

Events
“Reference” Implementation

cURL

Disk & Object

iRODS & ownCloud

Notebooks & Rstudio

Events

(Nothing)
Container
Environment Variables

Volumes

Container Links

Container
<table>
<thead>
<tr>
<th>Environment Variables</th>
<th>Dataset information, federation information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volumes</td>
<td>Persistent storage volumes and ephemeral storage volumes</td>
</tr>
<tr>
<td>Container Links</td>
<td>Databases, transformers, extractors, services</td>
</tr>
</tbody>
</table>

**Service Container**
<table>
<thead>
<tr>
<th>Environment Variables</th>
<th>Dataset information, federation information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volumes</td>
<td>Persistent storage volumes and ephemeral storage volumes</td>
</tr>
<tr>
<td>Container Links</td>
<td>Databases, transformers, extractors, services</td>
</tr>
</tbody>
</table>
“Application”
Credentials
Deployment
Interaction
“Reporting”
Interoperability does not arise naturally in a vacuum.

discuss@nationaldataservice.org
1. Components
2. Process
3. Network
1. Critical services are not yet in place.
2. The barrier to entry is too high.
3. Network is still sparking to life.
Thank you.

labsportal.nationaldataservice.org