
MyData Overview

Dataverse 4.1

Goal

- Display/Filter/Search a User's Data
 - Do this (relatively) fast
-

Two Main Challenges

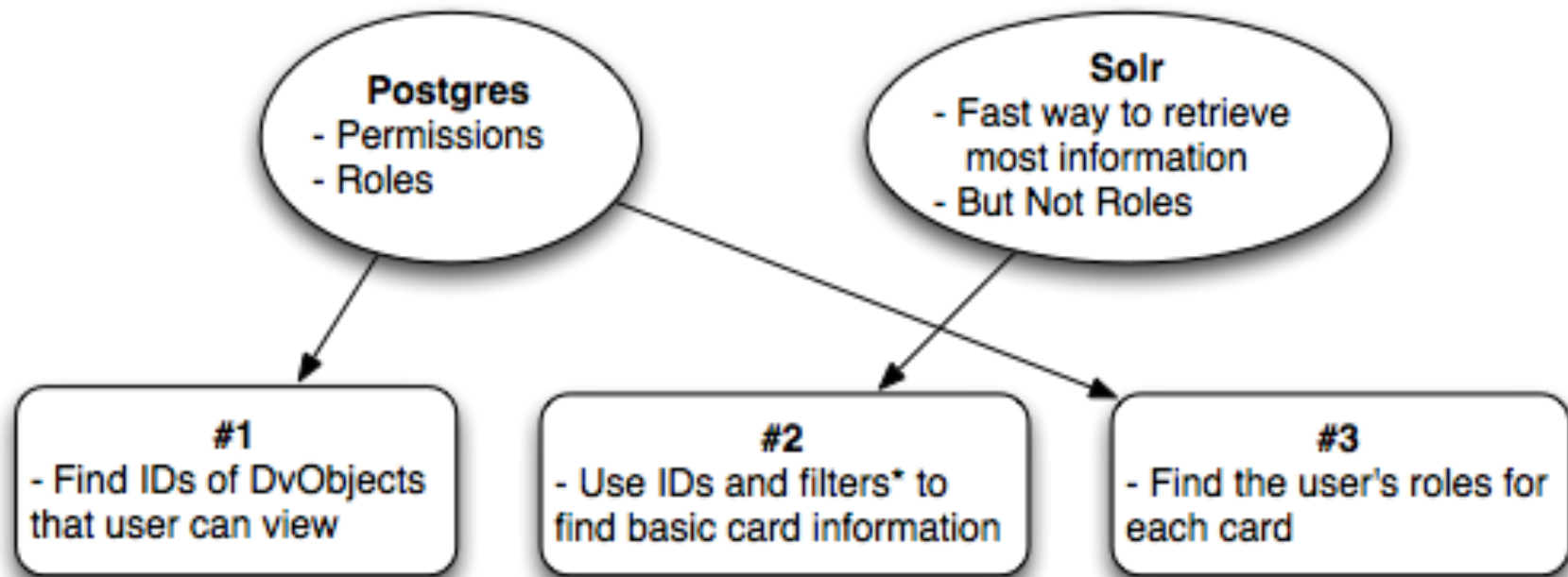
#1 - Retrieval:

How do we find all of a user's data?

#2 - Rendering:

Can we use JSON instead of XHTML?

Retrieval: Postgres + Solr



* filters = dataverse/dataset/file, publication status, role, search parameter

Retrieval: JSON for a Dataset Card

```
{  
  "name": "Wouldn't Take Nothing for My Journey  
Now",  
  "type": "dataset",  
  "url": "http://dx.doi.org/10.5072/FK2/OWJOSP",  
  "image_url": "https://localhost/api/access/  
dsCardImage/431",  
  "global_id": "doi:10.5072/FK2/OWJOSP",  
  "description": "description test dataset for the book:  
Wouldn't Take Nothing for My Journey Now",  
  "citation": "MAYA ANGELOU, 2015, 'Wouldn't  
Take Nothing for My Journey Now',  
http://dx.doi.org/10.5072/FK2/OWJOSP, Root Dataverse,  
DRAFT VERSION ",  
  "matches": [],  
  "score": 1,  
  "entity_id": 456,  
  "api_url": "https://RAD-rprasad/api/datasets/456",  
}
```

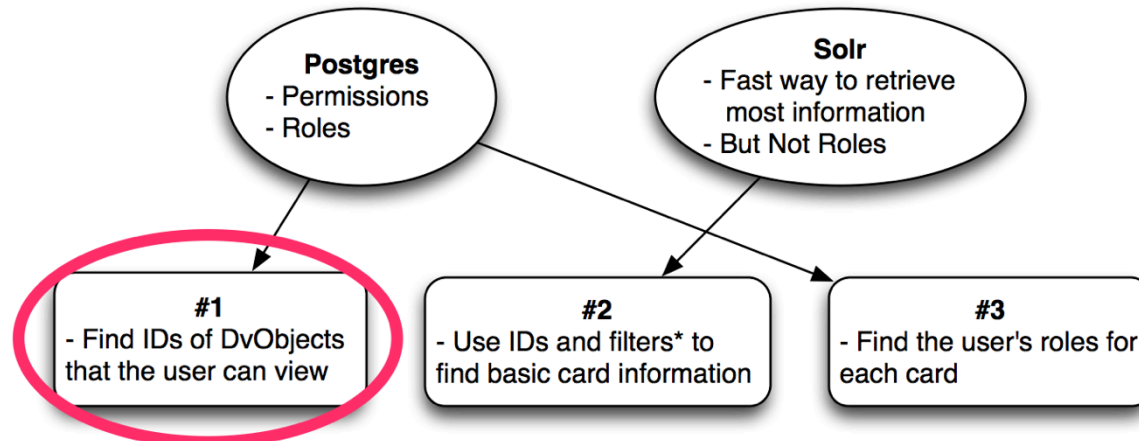
#2 - SOLR

```
"authors": [  
  "MAYA ANGELOU"  
],  
"publication_statuses": [  
  "Unpublished",  
  "Draft"  
],  
"is_draft_state": true,  
"is_unpublished_state": true,  
"is_published": false,  
"is_deaccessioned": false,  
"date_to_display_on_card": "Jun 8, 2015",  
"parentId": "1",  
"parentName": "Root",  
"user_roles": [  
  "Admin",  
  "Contributor",  
  "File Downloader"  
]  
},
```

#3 - Postgres

Retrieval: Permissions

- Find IDs of a User's DvObjects
 - How do you find Gary King's 1,981 objects?
 - In a timely way, can we find Sonia's 37,614 objects?



* filters = dataverse/dataset/file, publication status, role, search parameter

Retrieval: 1st Query - Role Assignments

RoleAssignment Table:

	Assignee	Role	DV Object ID
Sample Data	@fred	1	101
What it means	user: Fred	role: Administrator	DvObject 101

Retrieval: Questions to Answer for Role Assignments

Assignee	Role	DV Object ID
user: Fred	role: Administrator	DvObject 101

1. What is object 101? (Dataverse? Dataset? File?)
 2. Can it have child objects?
 3. Does the role* apply to child objects?
 - including custom roles
-

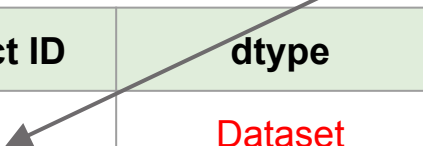
Retrieval: Answering the Questions

RoleAssignmentTable

Assignee	Role	DV Object ID
user: Fred	role: Administrator	DvObject 101

DvObject Table

DV Object ID	dtype	Parent ID
101	Dataset	7




Retrieval: Answering the Questions

RoleAssignmentTable

Assignee	Role	DV Object ID
user: Fred	role: Administrator	DvObject 101

DvObject Table

DV Object ID	dtype	Parent ID
101	Dataset	7



1. What is object 101?

Dataset

2. Can it have child objects?

Yes,

Files

3. Does the role apply to child objects? ???

Retrieval: Answering the Questions

1. What is object 101?

Dataset

2. Can it have child objects?

Yes,

Files

3. Does it

its? Yes

DataverseRolePermissionHelper

- hasDataversePermission(Long role_id)
- hasDatasetPermission(Long role_id)
- hasFilePermission(Long role_id)

Retrieval: How does this relate to Solr?

what we know

DvObject ID	101
Type	Dataset
Role	Administrator
Can object have Children?	Yes, Files
Does Role Apply to Children? (Files)	Yes

solr query

(id : 101) or
((parent id : 101))

- get Dataset
- get Files

Retrieval: Another Example (#2)

what we know

DvObject ID	7
Type	Dataverse
Role	Dataset Creator
Can object have Children?	Yes, Datasets + Files
Does Role Apply to Children? (Files)	No

solr query

(id : 7)

- get Dataverse

Retrieval: Another Example (#3)

what we know

DvObject ID	9
Type	Dataverse
Role	Contributor
Can object have Children?	Yes: Datasets, Files
Does Role Apply to Children? (Files)	Yes: Datasets, Files

solr query

(id : 9) or (parent id : 9)
or *(parent id : dataset ids)*

- get Dataverse + Datasets
- *files: extra postgres query to get dataset ids*


Retrieval: How do we do this “en masse”?

RoleAssignmentTable

Assignee	Role	DV Object ID
user: Fred	role: Administrator	DvObject 101

DvObject Table

DV Object ID	dtype	Parent ID
101	Dataset	7



1. What is object 101?

Dataset

2. Can it have child objects?

Yes,

Files

3. Does the role apply to child objects? **???**

Retrieval: How do we do this “en masse”?

Assumptions:

- All dataverses are permission root
- Limited inheritance

Retrieval: How do we do this “en masse”?

- Role Permission Helper (1 query)
- Find IDs Directly or by Parent (2 queries)
- Find via **Grandparent** (1 query)

	Direct Assignment	Via Dataverse	Via Dataset
Dataverse	Yes	--	--
Dataset	Yes	Yes (parent)	--
File	Yes	Yes (grandparent)	Yes (parent)

“DvObject Sorting”

- MyDataFinder.java
 - Step 1 - Role Assignments
 - Step 2 - Direct + Parent
 - Step 3 - Grandparent
 - - File Perms @ Dataverse
 - Create Solr Query





#2: Rendering


(1) From mydata_fragment.xhtml

(2) dynamic: JSON + javascript

Results by Username
dataverseAdmin

☒  **Dataverses (25)**

☒  **Datasets (446)**

☐  **Files**

Publication Status

☒ **Published (26)**

☒ **Unpublished (440)**

☒ **Draft (440)**

☒ **Deaccessioned (4)**

Roles

☒ **Admin**

☒ **File Downloader**

☒ **Dataverse + Dataset Creator**

1 to 10 of 471 Results

hare


Draft


Unpublished

Admin

Contributor

File Downloader





Aug 3, 2015 - Riparian Brush Rabbit Dataverse

Admin, Dataverse, 2015, "hare", <http://dx.doi.org/10.5072/FK2/PVY5RP>, Root Dataverse, DRAFT VERSION


hare


Gastronomia divina (L'ncora)

Draft

Admin

File Downloader





Jul 24, 2015 - Root Dataverse

Eugeni Perea Simn, 2015, "Gastronomia divina (L'ncora)", <http://dx.doi.org/10.5072/FK2/9IO17W>, Root Dataverse, DRAFT VERSION [UNF:6:H4onuiklAbuZAxVRNWW1w==]

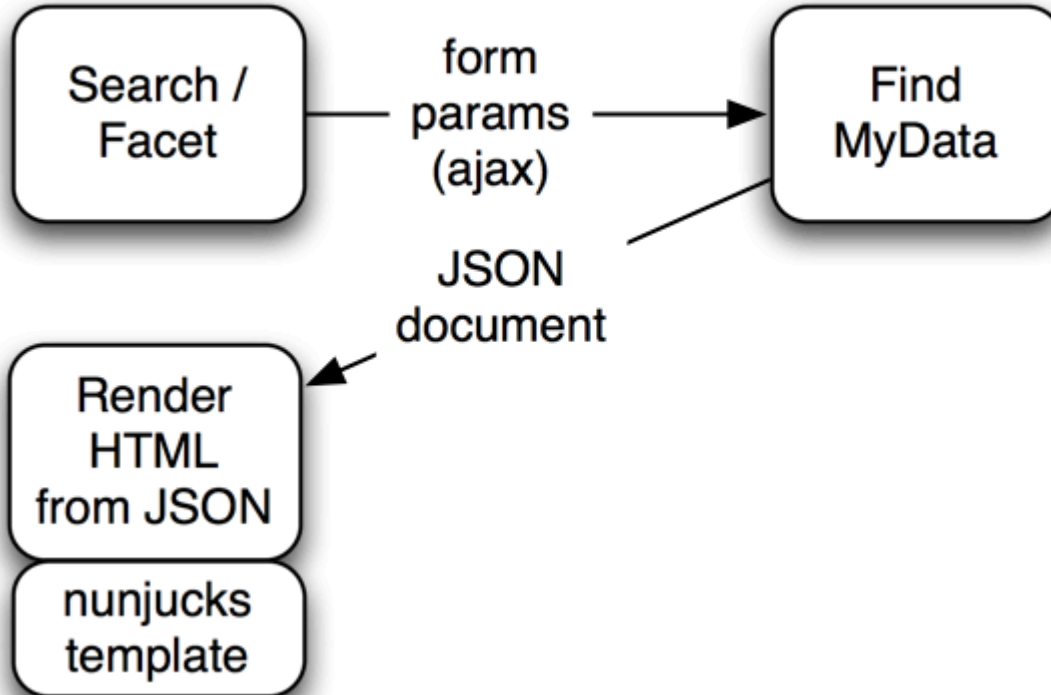
description test dataset for the book: Gastronomia divina (L'ncora)

Rendering: Basic Flow

[local example](#)

Browser/Client

Dataverse Server



Rendering: JSON -> String

- mustache (java server side, twitter)
 - <https://github.com/spullara/mustache.java>
 - handlebars:
 - <https://github.com/jknack/handlebars.java>
 - Jinja (very nice): <http://jinja.pocoo.org/>
 - java server side: <https://github.com/HubSpot/jinjava>
 - only Java 8
-

Rendering: JSON -> String

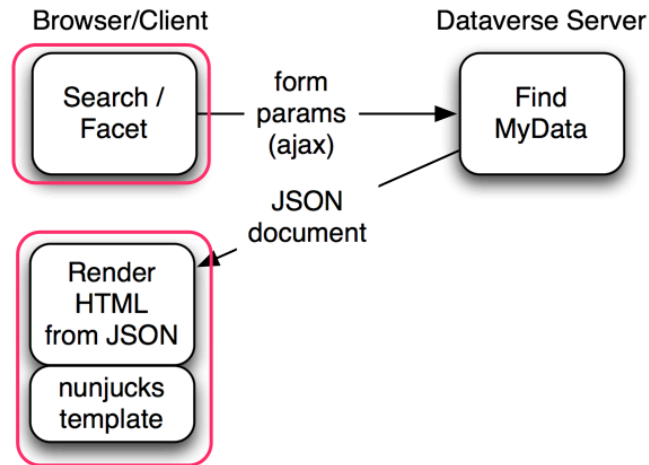
- Jinja (very nice): <http://jinja.pocoo.org/>
 - used by interns (python)
 - java server side: <https://github.com/HubSpot/jinjava>
 - only Java 8
 - Nunjucks - <https://mozilla.github.io/nunjucks/>
 - client side, .js file
-

Rendering

mydata.js

- submit search
- card rendering

.js templates



Overview

