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Odum Institute iRODS Policies to Support Preservation NDSLabs Demonstration

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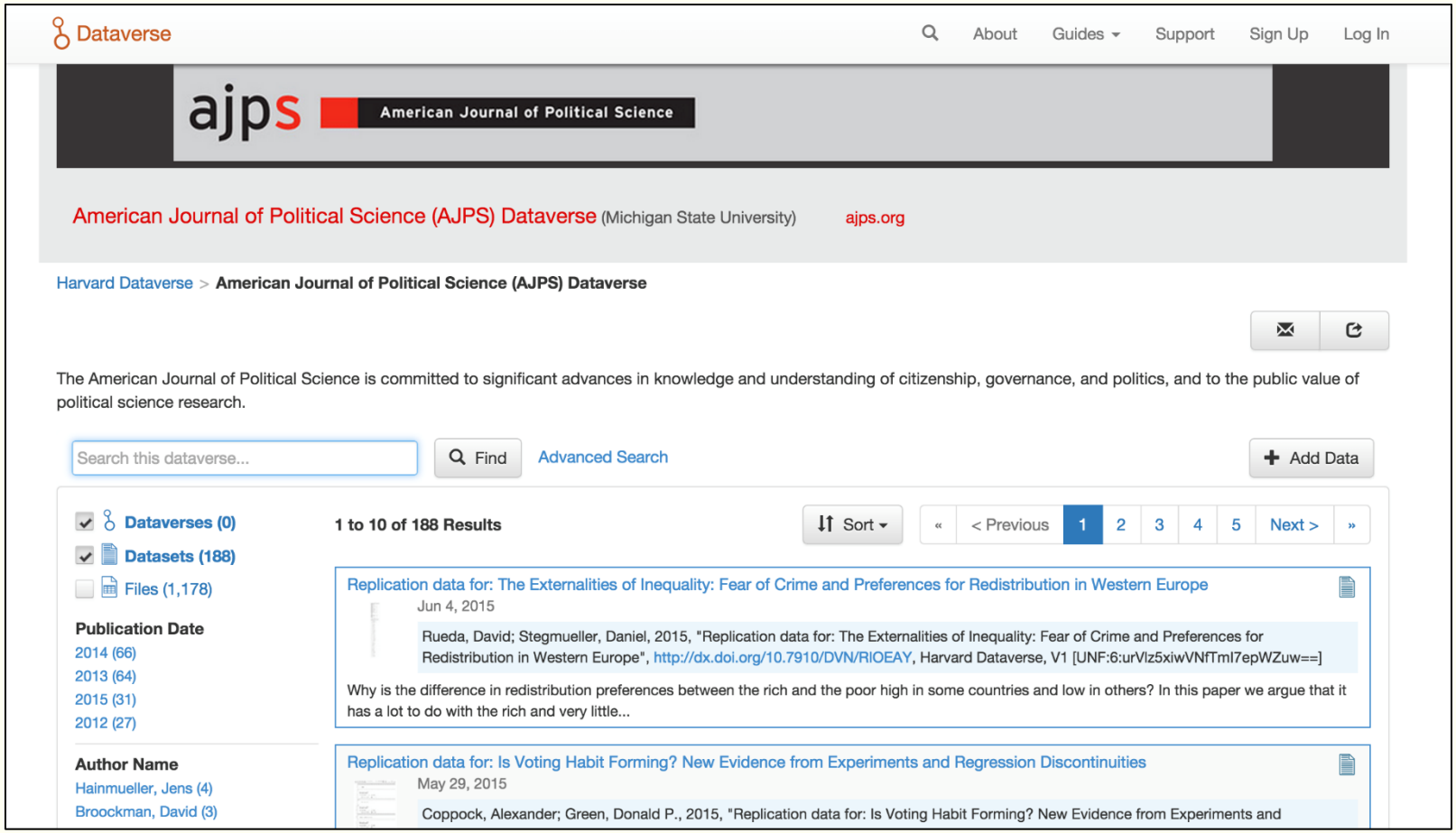
Project Goals

- Design curation/preservation workflow integration
- Connect research environment with archive
- Connect archive with national architecture
- Policy based
- Open source focused
- As “pluggable” as possible

Bringing great tools together

- iRODS
- Dataverse
- Modeshape
- BitCurator
- BagIt
- Preservation Audit Standards
  - ISO 16363
  - Data Seal of Approval
- Databook Architecture
  - Apache Service Mix
  - iRODS Rule Integration
  - Indexing Engine

Integration of the Dataverse



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Leveraging iRODS

- Automate preservation actions
- Rule based policy management
- Scalable storage infrastructure
- Enhances secure data sharing possibilities
- Diversifies Dataverse storage options

Preservation Policy Enforcement

- Odum Current Production Efforts
  - iRODS configured to utilize BitCurator
  - Testing sensitive information identification utilizing iRODS/BitCurator/BulkExtractor
  - Selected ISO 16363 policies implemented with iRODS rules
  - Rules published to GitHub
  - Utilizing irsync client/server method to push data from Odum Dataverse to iRODS and policies to archive data in DFC
  - Integrated staging iRODS server to traverse UNC Firewall

Next Steps

- Stress test sensitive information identification and valid file formats
- Add more complex sensitive information formats
- Expand iRODS rules based policy reporting
- Complete testing of iRODS/Modeshape/ Dataverse integration
- Enable Dataverse/iRODS metadata lookup

Links

- https://github.com/DICE-UNC/dfc-dataverse-integration
- https://github.com/DICE-UNC/indexing-irods
- https://github.com/akio-sone/dvn/tree/Odum-Ext
- https://github.com/donsizemore/odum/tree/master/irods_rules
- https://en.wikipedia.org/wiki/BagIt
- http://datafed.org
- http://www.odum.unc.edu/odum/home2.jsp
- http://Dataverse.org
- http://nationaldataservice.org

Thanks

Demonstration of workflow and tools in NDSLabs

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