NATIONAL DATA SERVICE

NDS Labs Workbench update

Craig Willis
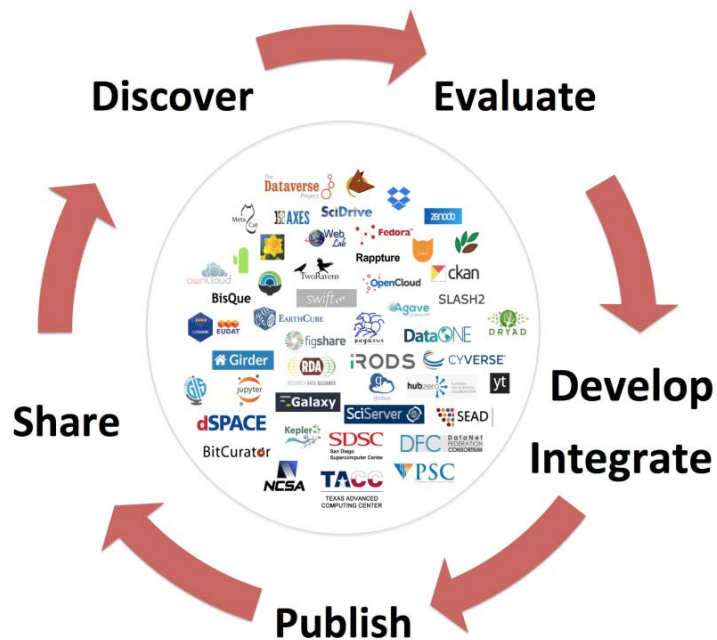willis8@illinois.edu
NCSA/NDS

National Data Service Workshop (NDS7)
April 13, 2017

NDS Labs Workbench (beta)

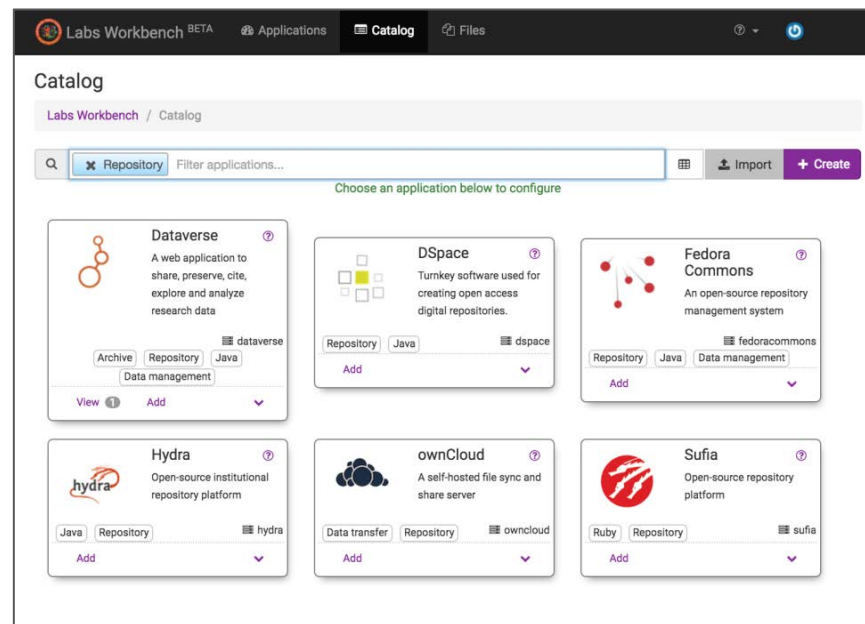**https://www.workbench.nationaldataservice.org**

- NDSC initiative started in ~January 2016

- Community-driven platform to share, discover, evaluate, develop, and test research data management and analysis tools

- Open platform -- community members recommend and/or contribute tools

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What is Labs Workbench?

- Scalable platform

- Web-based, turn-key system for the deployment of data tools

- Includes catalog of community-contributed tools

- Deploy in seconds

- A personal test environment or sandbox

- Personal catalogs

Data management training and incubator platform

https://www.workbench.nationaldataservice.org

Incubate data projects: Use the demonstration instance to explore, develop, and experiment with data management and analysis tools.

Promote tools: Add your tools to the catalog for others to discover.

Experiment: Instantly deploy turn-key applications into a personal sandbox directly from your browser
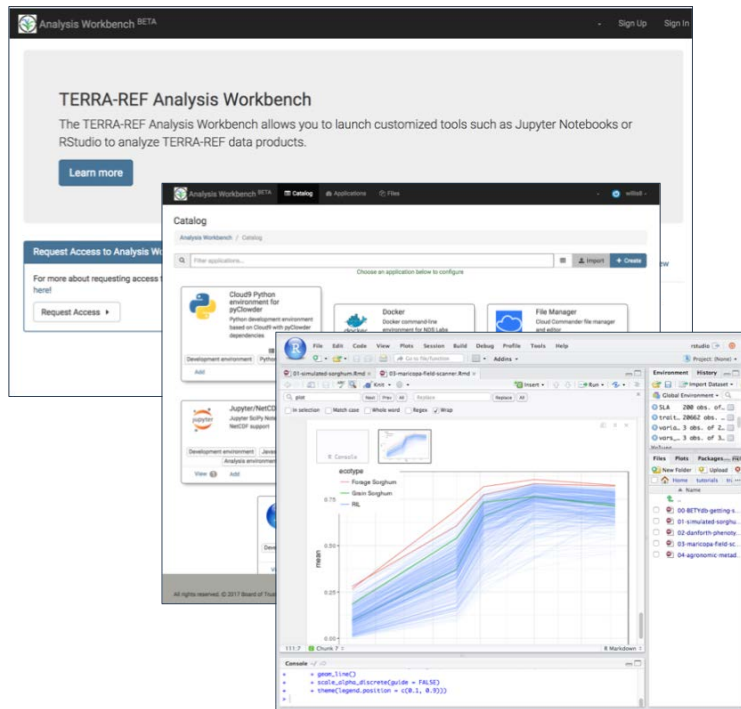
Hosted private or cloud instances

https://github.com/nds-org/ndslabs

Become an NDS node: Install your own instance or host through NDSC.

Provide **scalable**, **consistent cloud-based environments** for workshops/training.

In-place analysis: Allow users to launch custom analysis environments near data.
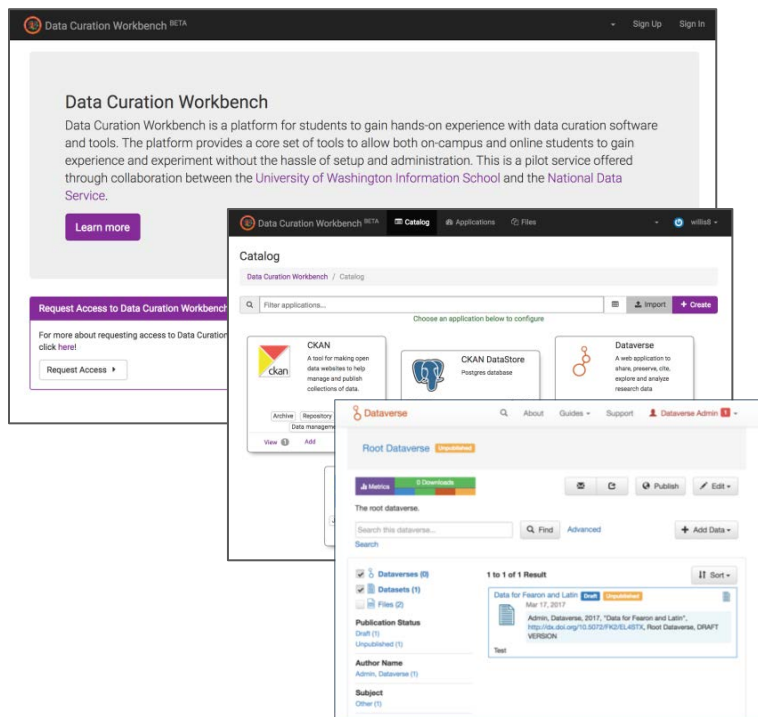
Customizable interface and catalog

Use case: TERRA-REF Analysis Workbench

- Initially used for workshop tutorial to provide consistent environments, scaling to support ~50 participants.

- Customized Labs Workbench instance hosted as part of TERRA-REF infrastructure at NCSA.

- Custom analysis and development environments with direct access to TERRA-REF data. Used by collaborators and alpha users.

Use case: Data Curation Education Workbench

- NDS pilot project initiated during NDSC6, led by Carole Palmer at the University of Washington iSchool

- Customized instance of Labs Workbench hosted on SDSC Cloud

- Sandbox for students to get hands-on experience with data curation systems and tools including CKAN and Dataverse.

On the horizon:

- ThinkChicago

  - Potential use as analysis engine in data management systems

    - DataDNS, Cyverse

- Simplified installation (balancing scalability with simplicity)

  - Improved courseware integration (iSchool pilot)

  - Enable deployment in more environments, including commercial cloud providers

Contribute and collaborate

- General Q&A (Google group)

  - https://groups.google.com/forum/#!forum/ndslabs

  - Ask questions, propose ideas, announce your services

- Code and issues (Github):

  - Fork, create pull requests, report issues

  - https://github.com/nds-org/ndslabs

- Developer chat (Gitter)

  - https://gitter.im/nds-org/ndslabs