NDS Labs and NDS Share early ideas

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NDS Lab and NDS Share

• NDS Lab
  – Target: friendly developers
  – A community support environment for developing, coordinating, deploying prototype service
  – Spinning disk, storage, virtual machines for developing and hosting services
  – Available to NDS community members

• NDS Share
  – Target: friendly scientists
  – Experimental platform for sharing data
    • Enable anyone to create data collections, store data, get DOI
  – Include installations of community data sharing applications
  – Will evolve over time

• Partnership between NCSA, ANL, TACC, and SDSC
  – Other interested partners?

• Look to make available by January 2015
Experimental Platforms for NDS

• Partnership between NCSA, ANL, TACC, and SDSC
  – Leverage existing infrastructure
  – Other interested partners?

• Goals
  – Provide non-toy, operational-scale platform for developing NDS capabilities
  – Provide an environment for consortium members to contribute in a real way
  – Understand what is required from an NDS Framework
  – Provide a vehicle for interacting with real users and responding to their needs
  – Further cultivate an NDS community of providers, developers and users
NDS Share

• Targeted at friendly users
  – Experimental platform for sharing data
  – Place to interact with real users, understand how they use tools, get feedback, respond to needs

• Offers a menu of capabilities
  – Options will overlap in functionality
  – Expect a certain level of software maturity

• Possible initial offerings
  – SciDrive (deployed across sites)
  – Globus Share
  – Repository apps: Dataverse, Zenodo (Invenio), Dspace
NDS Labs

- Targeted to developers
  - Provide access to storage accessible through various modes
    - Spinning disk, slow storage (tape)
    - Object store, Databases, filesystems
  - Provide VMs for developing services
  - Provide common community tools
    - iRODS, Globus Share, OwnCloud, SQL Databases
    - Repository apps, Fedora, ...

- Open to Consortium members with low bar

- Migration to NDS Share
  - When app/service matures enough, ready for external users
    (though still experimental)
  - Expect process for determining what gets migrated
Community Support

• Expect develops with access to NDS Labs/Share will share what they are doing with Consortium

• Need vehicles for communicating this
  – Low-bar access to an NDS Wiki
    • Expected to provide summaries that others can easily find
    • Open discussion
  – Open Archived Mailing lists, chat rooms
  – Open Source Repositories (GitHub, Bitbucket)

• Communication will be key for evaluating
  – Migration from Labs to Share
  – Impact on users