Simplify Big Data
Transfer and Sharing

www.globusonline.org

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We asked ourselves:
What if the research work flow could be managed as easily as...

...our pictures

...our e-mail

...home entertainment
What makes these services great?

Great User Experience

+ High performance (but invisible) infrastructure
We aspire (initially) to create a great user experience for research data management.

What would a “dropbox for science” look like?
Transferring and sharing data should be easy …
... but it's hard and frustrating!
Bandwidth Requirements

Use a Science DMZ to optimize
http://fasterdata.es.net/science-dmz/

http://fasterdata.es.net
What is Globus Online?

Big data transfer and sharing…

…with Dropbox-like simplicity…

…directly from your own storage systems
Reliable, secure, high-performance file transfer and synchronization

- “Fire-and-forget” transfers
- Automatic fault recovery
- Seamless security integration
Simple, secure *sharing* off existing storage systems

- Easily share large data with any user or group
- No cloud storage required

**1** User A selects file(s) to share, selects user or group, and sets permissions

**2** Globus Online tracks shared files; no need to move files to cloud storage!

**3** User B logs in to Globus Online and accesses shared file
Globus Online is SaaS

- Web, command line, and REST interfaces
- Reduced IT operational costs
- New features automatically available
- Consolidated support & troubleshooting
- Easy to add your laptop, server, cluster, supercomputer, etc. with Globus Connect
Demonstration
Globus Connect Multiuser

- Create endpoint in minutes; no complex GridFTP install
- Enable all users with local accounts to transfer files
- Native packages: RPMs and DEBs
- Also available as part of the Globus Toolkit
Globus Platform-as-a-Service

Globus Online APIs
- Dataset Services
- Sharing Service
- Transfer Service
- Globus Nexus (Identity, Group, Profile)

Globus Toolkit

Globus Connect

NERSC

University of Michigan

XSEDE

Cornell University
• Workflows can be easily defined and automated with integrated Galaxy Platform capabilities

• Data movement is streamlined with integrated Globus Online file-transfer functionality

• Resources can be provisioned on-demand with Amazon Web Services cloud based infrastructure

• Authenticate using your Globus Online account
We are a non-profit service provider to the non-profit research community
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Our challenge: Sustainability
Globus Online End User Plans

• **Basic: Free**
  – File transfer and synchronization to/from servers
  – Create private and public endpoints
  – Access to shared endpoints created by others

• **Plus: $7/month (or $70/year)**
  – Create and manage shared endpoints
  – Peer-to-peer transfer and sharing
Globus Online Provider Plans

Bundle of Plus subscriptions
+ Features for providers

http://globusonline.org/provider-plans
(Working on NET+ offering)
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