



THE UNIVERSITY OF
CHICAGO



Computation
Institute



Globus for ESGF

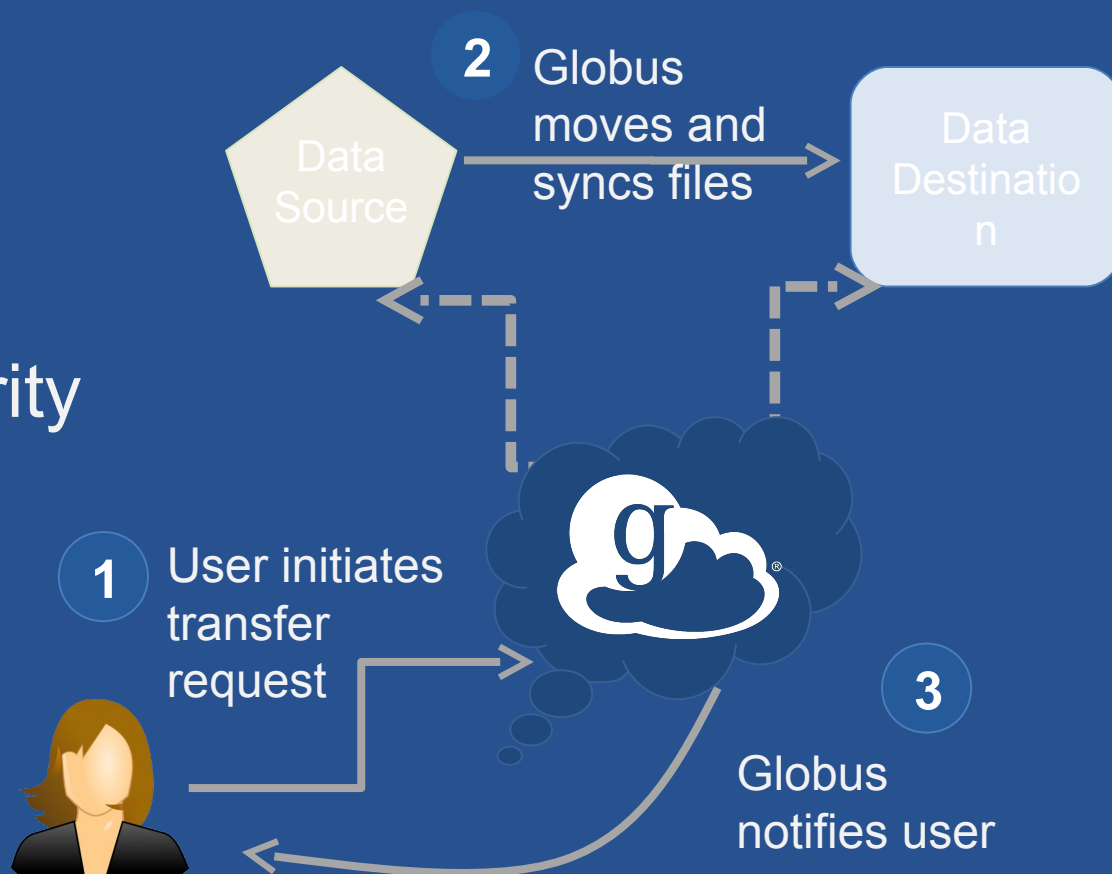
Eric Blau

Rachana Ananthakrishnan



Reliable, secure, high-performance *file transfer* and *synchronization*

- “Fire-and-forget” transfers
- Automatic fault recovery
- Seamless security integration
- Powerful GUI and APIs





Transfer Files

[Manage Data](#)[Groups](#)[Support](#)[ranantha](#)[Transfer Files](#)[Activity](#)[Manage Endpoints](#)[Dashboard](#)[Flight Control](#)

Transfer Files

[Get Globus Connect Personal](#)

Turn your computer into an endpoint.

Endpoint 

Go

Path

Go

select all | none up one folder refresh list

scratch-midway

Folder

share

Folder

Endpoint 

Go

Path

Go

select all | none up one folder refresh list

user2

Folder

vyta

Folder

CASC Registration Form - April 2014-Rachana.docx

13.16 kB

NAMD_2.9_Linux-x86_64-multicore.tar.gz

2.75 MB

test2.txt

28 b

test3.txt

32 b

[more options](#)

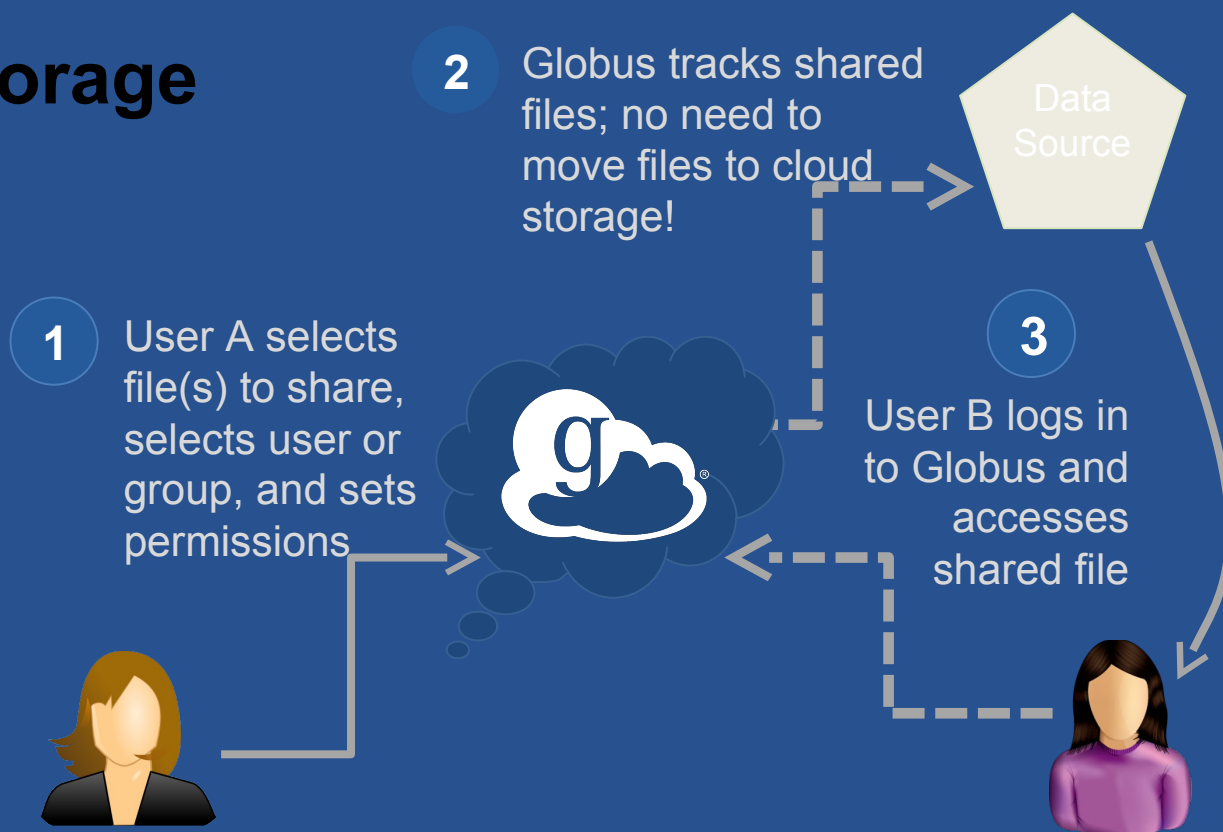
Label This Transfer

This will be displayed in your transfer activity.



Simple, secure *sharing* off existing storage systems

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



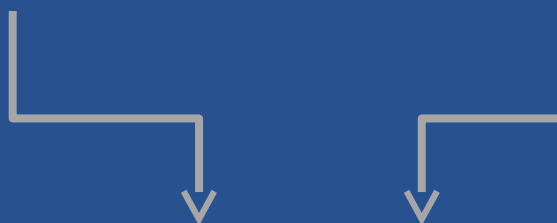


Mark Taylor
(Sandia)
securely shares
climate data with
collaborators
using Globus
Sharing

OLCF



ALCF



Argonne – Sharing Enabled





Globus Sharing in ACME

- Globus Connect Server w/ sharing installed at ANL
- 7.2 Terabytes of data shared between researchers



ESGF Portal and Globus Transfer

- Integrated as an option in the data cart
- Two types of transfers:
 - Download to user's machine
 - Transfer to another server
- Pre-requisites
 - Globus login
 - Agent to download to personal machine
- Both pre-requisite steps are worked in to the download workflow

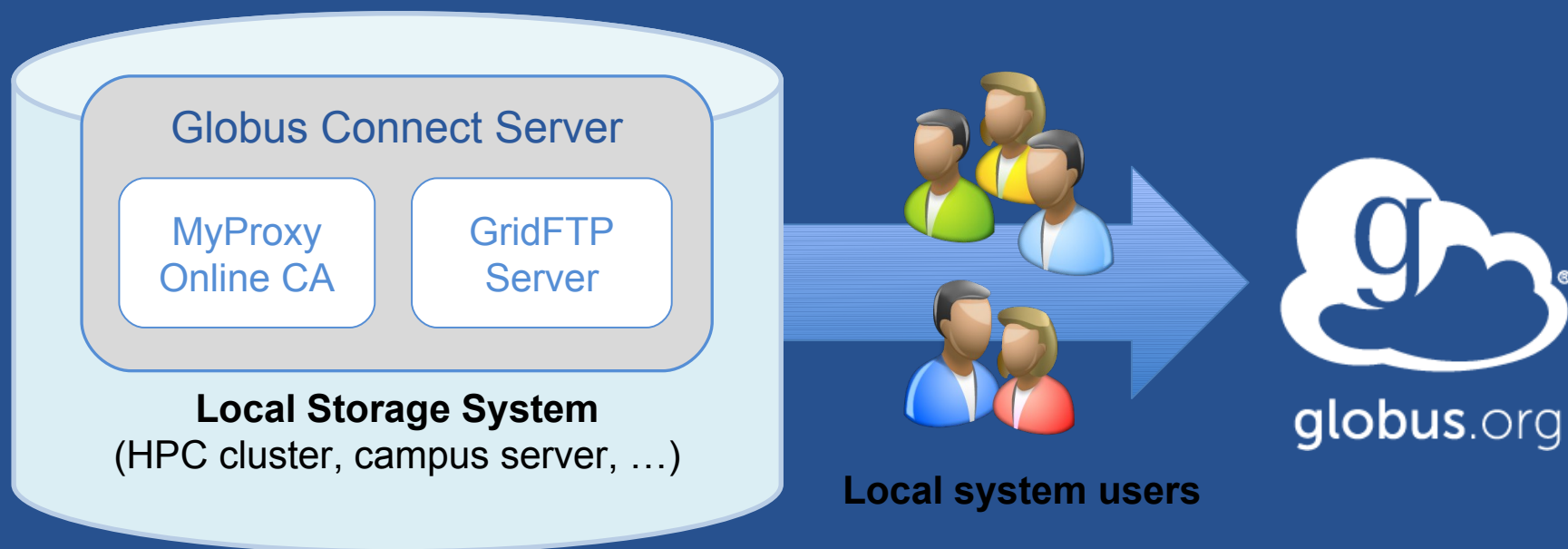


Updating GridFTP in ESGF

- Current version of Globus in use is 5.0.4
- Upgrading to 5.2/6.0 allows easier installation, configuration
 - Need to port authorization modules
- Supports Globus sharing
- Use Globus Connect Server



Globus Connect Server



- 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



Updating GridFTP in ESGF

- Globus Toolkit 6.0, packaged as RPM slated for ESGF 1.9 release
- Status:
 - ESGF Authorization Modules, ported, and packaged as RPM



ESGF Data Node as DTN

Goals:

- ESGF data node in DMZ on DTNs
- Allows data node to be setup for high performance data transfer
- Integrate with ESGF stack (and security)

DTN disk to disk data transfer between
LLNL and BADC and DKRZ



Questions?