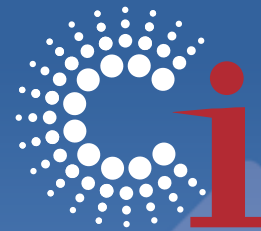




globus online



Computation Institute

Globus Online: Use Cases and Security

EGI-TF EGI/EUDAT/PRACE workshop

Steve Tuecke

Computation Institute

University of Chicago and Argonne National Laboratory



What is Globus Online?

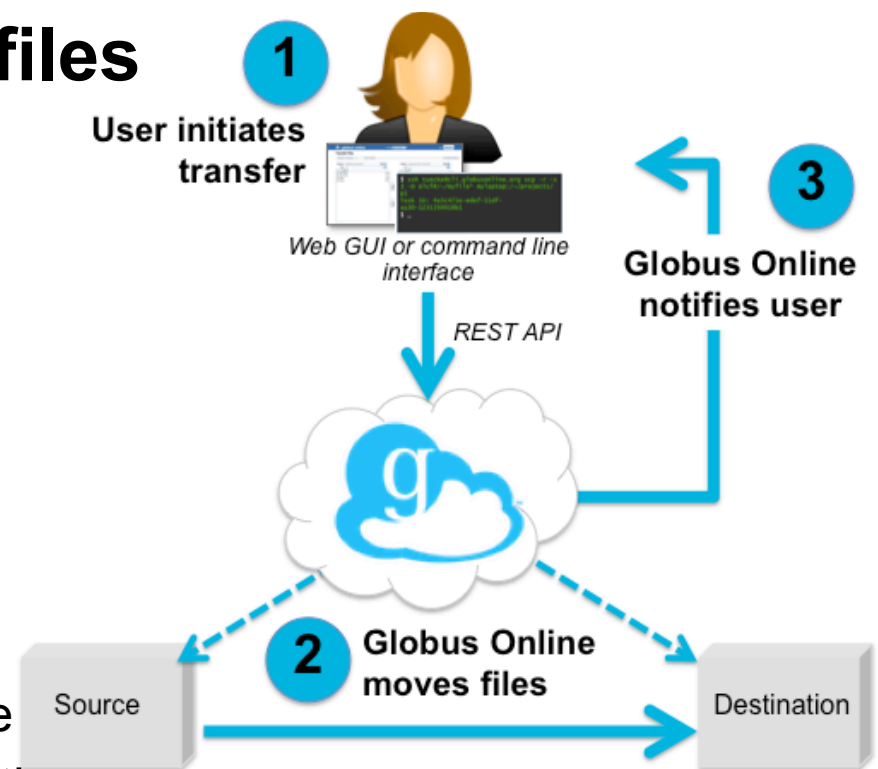
- **Transfer and synchronize files**

- Easy “fire-and-forget” transfers
- Automatic fault recovery
- High performance
- Across multiple security domains

- **Minimize IT costs**

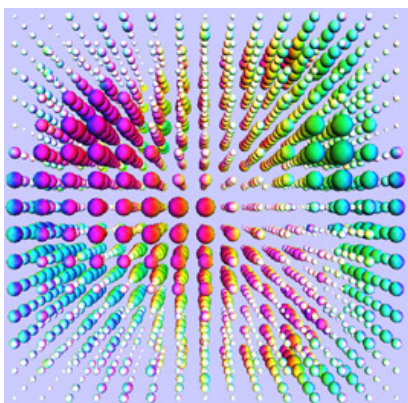
- Software as a Service (SaaS)
 - No client software installation
 - New features automatically available
- Consolidated support & troubleshooting
- Simple endpoint installation with Globus Connect and GridFTP

- **Recommended by XSEDE, Blue Water, NERSC, ALCF, ESnet, many Universities**





Case Study: Lattice QCD

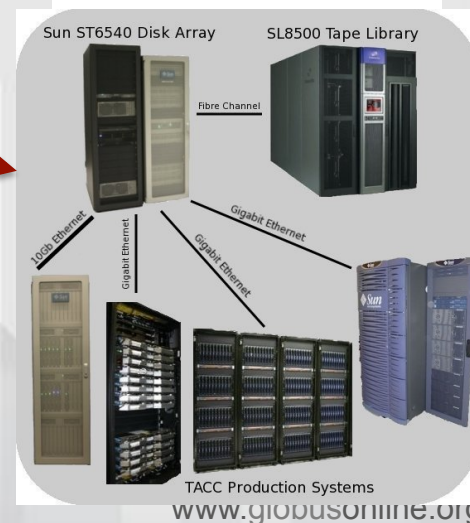


- **Fast:** Reduced transfer times
- **Easy:** Fire-and-forget transfers
 - Automated retry
 - No file pre-staging
 - No complex infrastructure
 - Convenient CLI and GUI interfaces

Indiana University
researcher moved
~6 TB from Tennessee
to Texas in 2 days

"Globus Online frees up my time to do more creative work than typing scp commands or devising scripts to initiate and monitor progress to move many files."

"I moved 100 7.3 GB files tonight in about 1.5 hours. I am very impressed. I also like the new commands and help system."





Case Study: Enabling Users @ NERSC

- **Challenge**
 - “We need to provide web-based ways to accomplish computing tasks – it’s what our scientists expect. And it will make them more productive.”
- **Solution**
 - Globus Online endpoints maintained by NERSC
 - GO = recommended transfer method
- **Benefits for NERSC users**
 - Drag and drop archiving
 - Easy to use
 - Users can focus on their research (not on IT)
- **Benefits for NERSC**
 - Operations and support outsourced to GO
 - Fast and easy to make endpoints available
 - Automated authentication
 - Reliable performance and support



“Fantastic! I have already started using Globus Connect to transfer data, and it only took me 5 minutes to set up. Thank you!” – NERSC user



Hopper, Franklin and HPSS are among the NERSC resources leveraged by Globus Online.



Case Study: Dark Energy Survey

Blanco 4m on Cerro Tololo

- **Every night, they receive 100,000 files in Illinois**
- **They transmit files to Texas for analysis ... then move results back to Illinois ... and make them available to users**
- **Process must be reliable, routine, and efficient**
- **The cyberinfrastructure team is not large!**



Image credit: Roger Smith/NOAO/AURA/NSF



[SIGN IN](#) [SIGN UP](#)

Reliable, high-performance, secure file transfer by Globus Online.

Blue Waters has partnered with the Globus Online file transfer service.

You may access this service by entering your Blue Waters username and password.

NOTE - If you are accessing this file transfer service for the first time, you will be asked to link your Blue Waters account to a Globus Online account (if you don't have a Globus Online account you'll be able to create one).

Sign In

[Use Your NCSA Blue Waters login](#)

[alternate login](#)

You will now jump to NCSA Blue Waters's authentication page.

[Proceed](#)

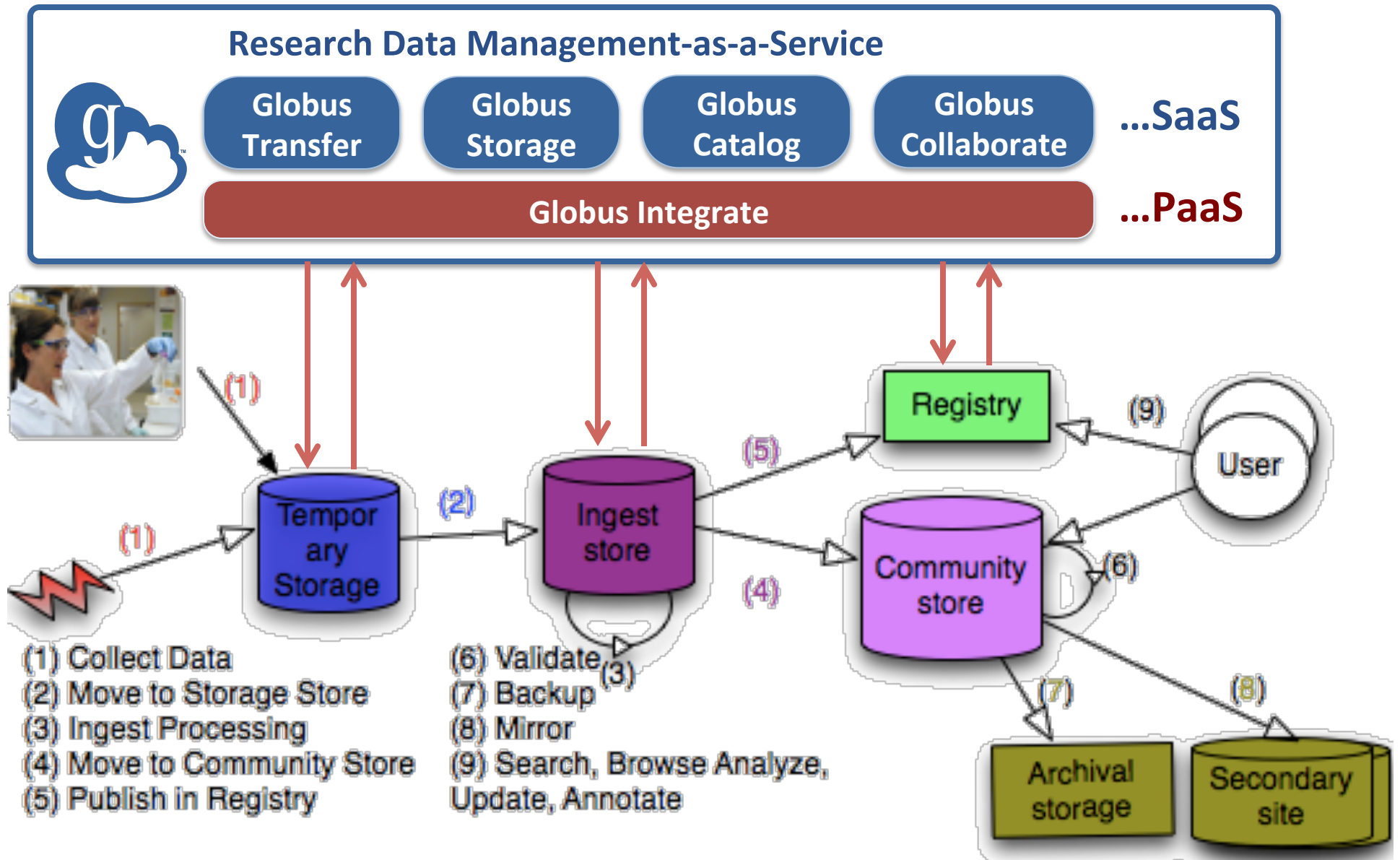


Current Globus Online Use Cases

- **For researchers to transfer files to/from HPC facilities**
 - E.g., NERSC, XSEDE, campus clusters
- **For researchers to get data from scientific instruments**
 - E.g., APS, Broad, campus next-gen sequencers
- **For developers of data intensive workflows**
 - E.g., DES
- **For developers and users of science gateways**
 - E.g., ESGF



Towards “research IT as a service”






Globus Online Security

- **Have addressed security issues raised by XSEDE and PRACE:**
 - Address cross site request forgery issues in user interface
 - Prevent a one time intruder subsequent access from a remote machine
 - Implement state of the art password storage
 - Implement protections against brute force password guessing
 - Protect user proxies stored in backups
 - Implement regular firewall or security group testing
 - Define and document an incident response plan
 - Implement remote logging
 - Implement logging for access to user credentials
 - Implement file integrity checking on servers
 - Restrict impact of a stolen delegated proxy



globusonline.eu (coming soon)

globus online 

Manage Data | News & Events | About | Support | Log In | Sign Up

Sign In

[Sign Up with Globus Online](#)

Use Your GlobusOnline login [alternate login](#)

Username

Password

I have read the [Privacy Policy](#) and by logging in I agree to the terms therein.
Specifically, I understand and agree that this service may store data on servers worldwide, including the University of Chicago through Globus Online's central servers in the United States.

[Sign In](#) [Forgot Password?](#)

Partners



- EU Cookie Law compliant
- Consent to store data in US
- EU-friendly identity providers
- EU relevant endpoints

Privacy Policy.' At the bottom, it says: 'By clicking the Enter Site button, I accept cookies from this website.' and there is an 'Enter Site' button."/>

Cookies are used on this site

This website uses cookies so that we can improve our website and enhance your user experience. To find out more about cookies and their use by us, please see the "Cookies" section in our [Privacy Policy](#).

By clicking the Enter Site button, I accept cookies from this website.

[Enter Site](#)



For More Information

- Visit <https://www.globusonline.org/signup> to:
 - Get a free account and start moving files
- Visit www.globusonline.org for:
 - Tutorials, FAQs, Pro Tips, Troubleshooting
 - Papers, Case Studies
- Visit support.globusonline.org or contact support@globusonline.org for:
 - Help
 - Forums
- Follow us at [@globusonline](https://twitter.com/globusonline) on Twitter and [Globus Online](https://www.facebook.com/GlobusOnline) on Facebook