

# Building a Campus Data Service with Globus

[www.globus.org](http://www.globus.org)

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globus online



# Campus Data Service Use Cases

- **“I need a good place to store or backup my (big) research data, at a reasonable price.”**
- **“I need to easily, quickly, and reliably move or mirror portions of my data to other places, including my campus HPC system, lab server, desktop, laptop, XSEDE, cloud, etc.”**
- **“I need a way to easily and securely share my data with my colleagues at other institutions.”**
- **“I want to publish my data so that its available long-term.”**
- **“I want to archive my data in case its needed sometime in the future.”**



# What is Globus?

Big data transfer  
and sharing...

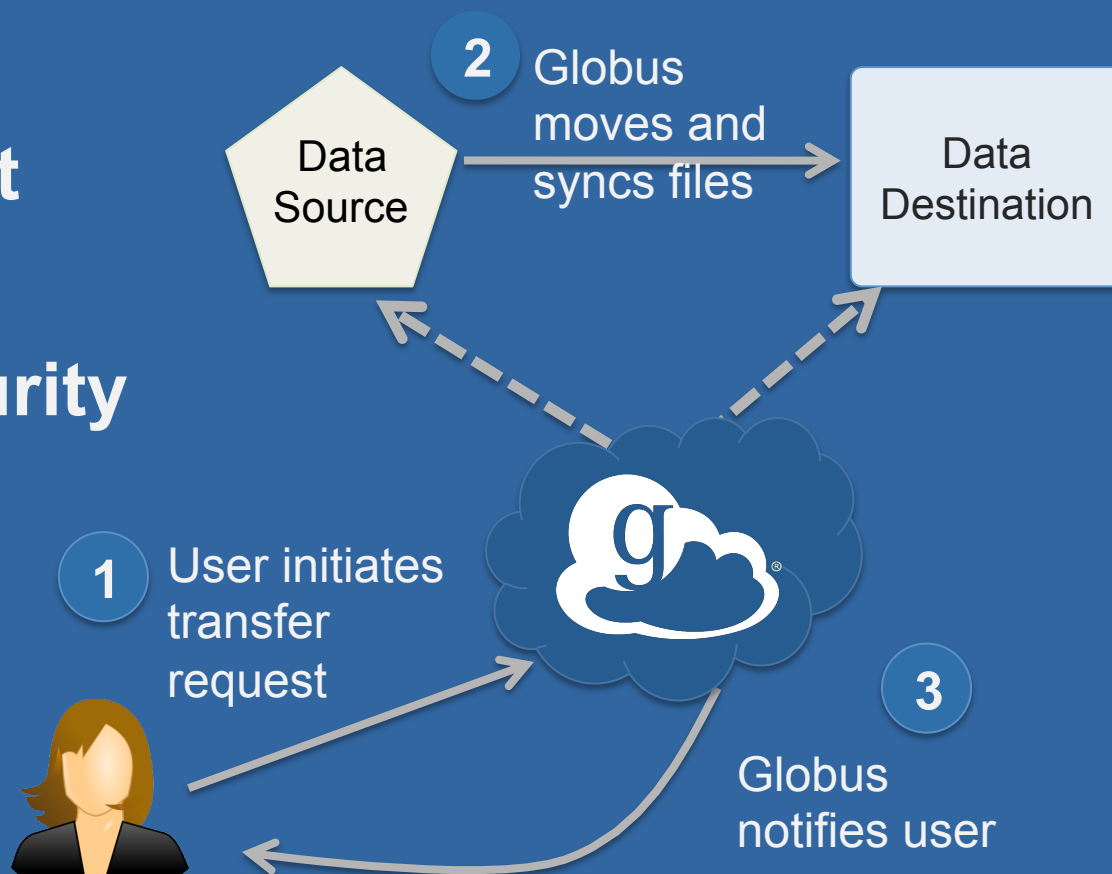
...with Dropbox-like  
simplicity...

...directly from your own  
storage systems



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

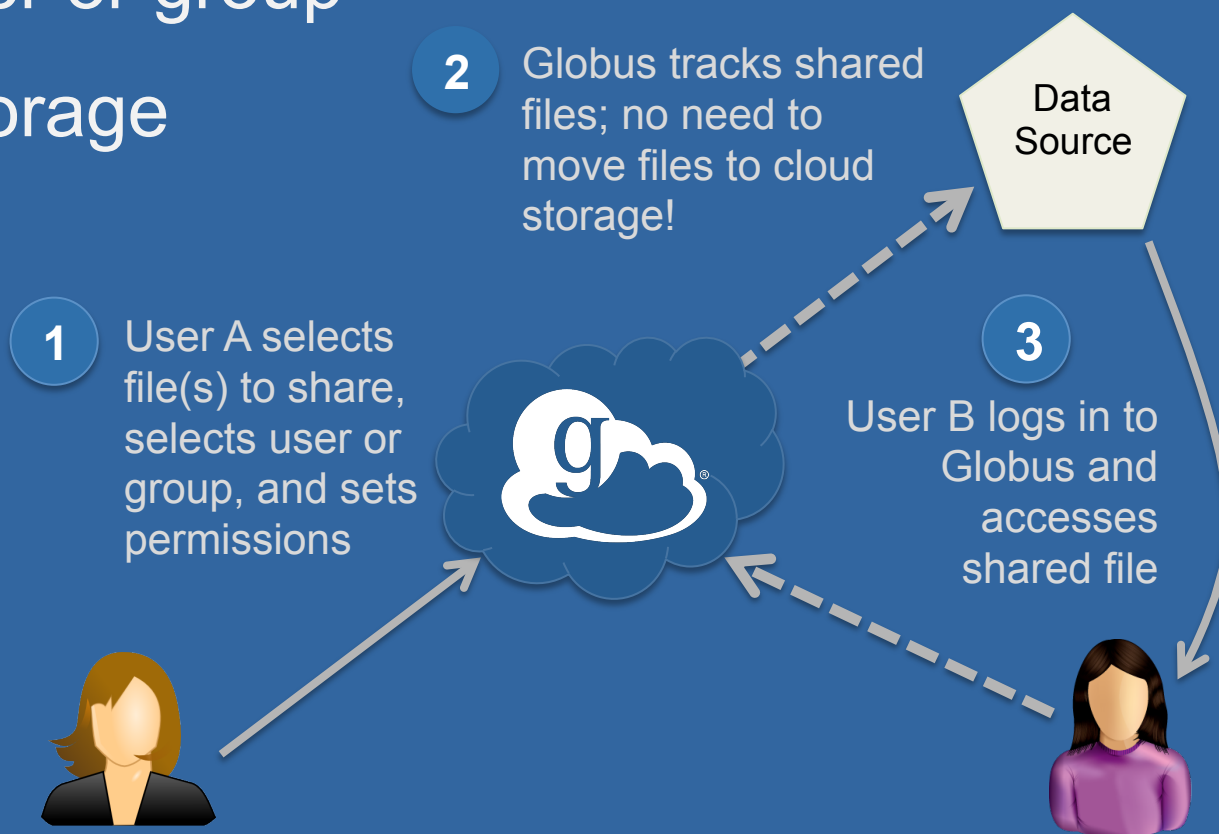
- “Fire-and-forget” transfers
- Automatic fault recovery
- Seamless security integration





# Simple, secure *sharing* off existing storage systems

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





# Globus 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**



# Creating a Campus Data Service

Pick your favorite storage...

...put it in your Science DMZ  
with Data Transfer Nodes...

...add Globus as the user  
interface...

(...optionally build specialized  
web applications on Globus)

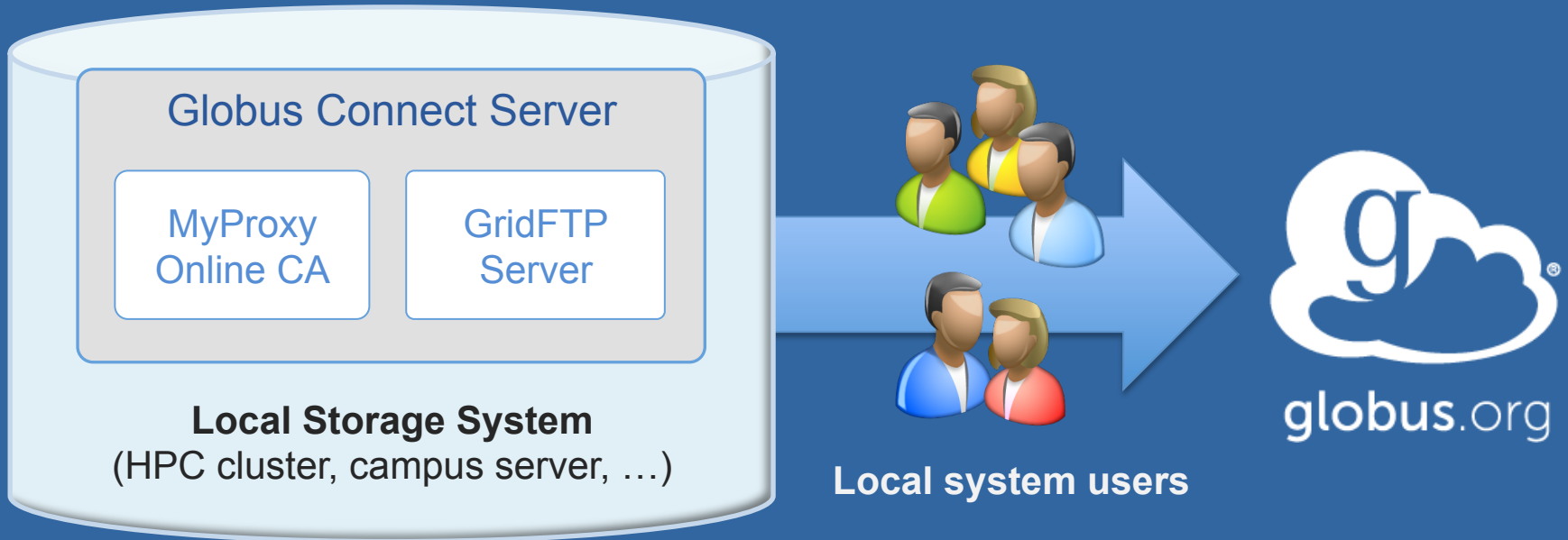


# Demonstration





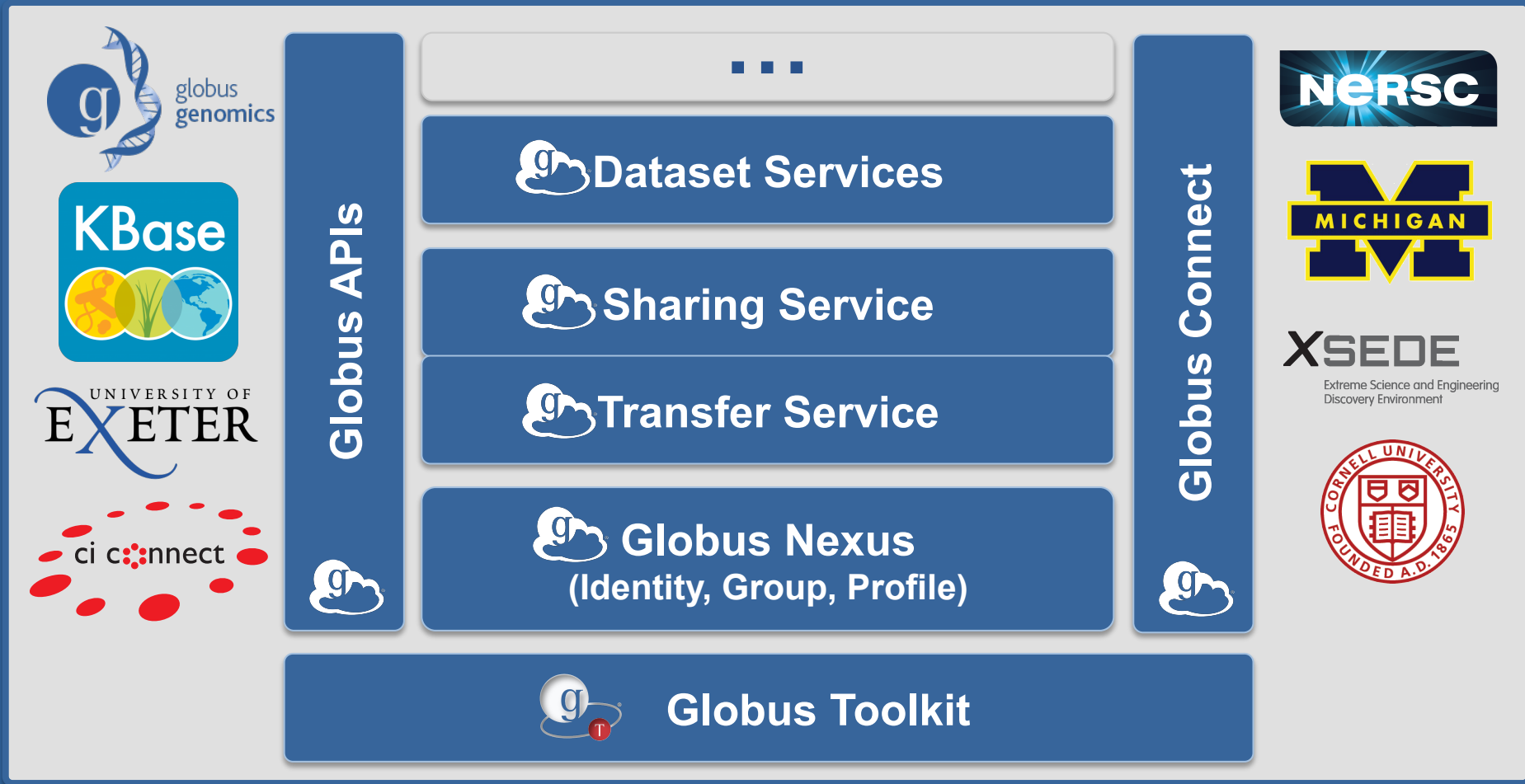
# Globus Connect Server



- **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**



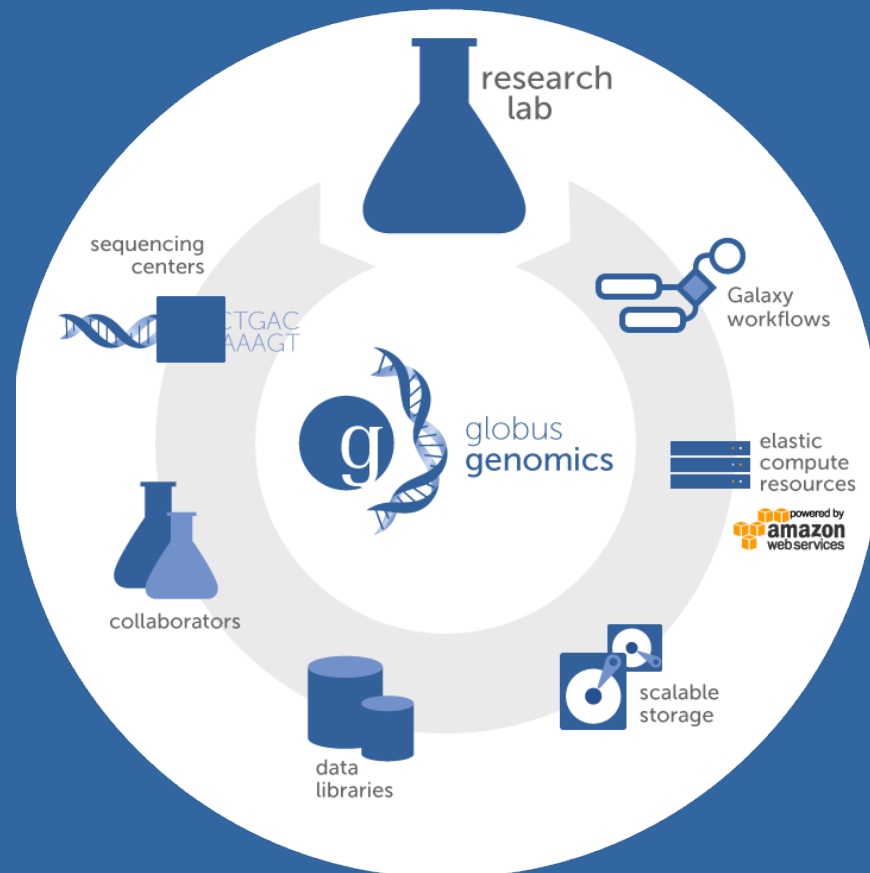
# Globus Platform-as-a-Service





# Globus Genomics

- 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 End User Subscriptions (for non-profit research & education)

- **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
- **Commercial pricing also available**



# Globus Provider Subscriptions

- **Managed Endpoint**
  - Support, management console, usage reports
- **Plus Packs (10, 50, 200, 1000)**
- **Branded Web Site**
- **Alternate Identity Provider**
- **Data Distribution**
- **Platform Support**
  
- **Commercial, non-profit research and education, and NET+ pricing available**



# Globus based Campus Data Service

- **Provides great user experience**
- **Very low administrative burden**
- **You control and manage the storage**
- **Extend with your own applications**
- **Supported**





# Move. Sync. Share. It's easy.

- **Signup: [globusonline.org/signup](https://globusonline.org/signup)**
- **Connect your system:  
[globusonline.org/globus\\_connect](https://globusonline.org/globus_connect)**
- **Learn: [support.globusonline.org/forums](https://support.globusonline.org/forums)**
- **Need help? [support.globusonline.org](https://support.globusonline.org)**
- **Follow us: [@globusonline](https://twitter.com/globusonline)**