The **Globus Nexus** identity and group management hub

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We live in a heterogeneous world

Many identity providers
- InCommon
- VeriSign
- Google
- XSEDE
- ...

Many relying parties
- Google Docs
- Globus transfer
- Amazon EC2
- XSEDE
- ...
- ...

Multiplicity of credentials of different types and from different providers
Multiplicity of relying parties using different federated identity protocols
An identity hub as a solution

Many identity providers

- InCommon
- VeriSign
- Google
- XSEDE
- ...

Many users

Reliable hosted service that maintains user-identity mappings
Speaks multiple protocols to simplify integration of IdPs, relying parties
Globus Nexus as identity hub

- Allows user to create Globus Online identity and **link with identities** from other federated IdPs
  - E.g., InCommon (SAML), Google (OpenID), XSEDE (OAuth MyProxy), ...
- Acts as **federated IdP** to third-party services
  - E.g., Web sites, Jira, Zendesk, Drupal, Confluence
  - Via various protocols: e.g., SAML, OAuth, OpenID
- Acts as **native IdP** for third party services
  - E.g., kBase uses Globus credential as its native credential
- Caches **delegated credentials** for unattended operation
  - From, e.g., linked IdPs (e.g., XSEDE), CILogon, resource provider MyProxy server
Select a different login

- GlobusOnline
- ARCS
- Argonne LCF
- Argonne MCS & LCRC
- BIRN
- CLI Transition
- ESG ANL
- Google
- InCommon / CIlogon
- LRZ
- NCSA
- NCSA Blue Waters
- NERSC
- UChicago CI
- UChicago iBi
- UK NGS
- WestGrid
- XSEDE
Transfer Summary
Requested Today
0 active transfers.
0 transfers completed successfully.
0 inactive transfers.
0 transfers failed.
Requested This Week
0 active transfers.
0 transfers completed successfully.
0 inactive transfers.
0 transfers failed.
Lifetime
0 active transfers.
131 transfers completed successfully.
0 inactive transfers.
49 transfers failed.

File Transfer
Use your browser to move data securely and reliably.
Start Transfer
View Transfers
Manage Endpoints

My Profile
View and change your account settings, including contact information and security credentials

Globus Connect
Use Globus Connect to transfer files between your computer and any Globus Online endpoint.

SC12 – Visit us in booth 4048
(Nov. 12 – 16): Join us for a first look at new capabilities that make large-scale research data management even easier!
Details...

8 Petabytes moved using Globus Transfer as of October 30th!
Thank you to all our users for your continued support.
### Manage Identities

<table>
<thead>
<tr>
<th>Alias</th>
<th>Type</th>
<th>Authentication Provider</th>
<th>View Details</th>
<th>Update</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>system-generated openid alias</td>
<td>openid</td>
<td>google.com</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI</td>
<td>myproxy</td>
<td>grid.ci.uchicago.edu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>myproxy</td>
<td>dev.esg.anl.gov:7512</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBook</td>
<td>ssh2</td>
<td>SSH Public Key</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>galaxy-climate</td>
<td>x509</td>
<td>/O=Grid/OU=DemoG...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>InCommon / CILogon Sign In</td>
<td>oauth</td>
<td>cilogon.org</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Activate Endpoint: xsede#trestles

The administrator of this endpoint, xsede#trestles, requires that you authenticate using their MyProxy OAuth server to activate the endpoint. When you click 'Continue' you will be redirected to their website.

Continue Cancel
Welcome to the XSEDE User Portal Authorization Page

Science Gateway Access
The XSEDE Science Gateway or Service below is requesting access to your XSEDE account. If you approve, please sign in with your XSEDE username and password.

Note: Only members of active XSEDE project allocations will be able to sign in on this page.

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**SCIENCE GATEWAY INFORMATION**

The XSEDE Science Gateway listed below is requesting access to your XSEDE account. If you approve, please sign in.

**Name:** Globus Online  
**URL:** https://www.globusonline.org/

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**SIGN IN**

<table>
<thead>
<tr>
<th>Username</th>
<th>ifoster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password</td>
<td>*********</td>
</tr>
</tbody>
</table>

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Please send any questions or comments about this site to help@xsede.org.
Globus Nexus as group hub

• A group links a set of Globus Online identities
  – Can then project into different linked identity spaces, if/when needed
• Allow users to **self-manage** groups
  – Naming, admission policies, membership, visibility
• Query and update via REST API
• Import and publish via LDAP
• Example uses
  – Basis for authorization in kBase
  – Manage sharing of Globus Online endpoints
<table>
<thead>
<tr>
<th>name</th>
<th>read</th>
<th>write</th>
<th>delegate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian Foster</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Path: /

Start typing a user account name or UUID to add to the list above.
Find Users & Groups

cvrg

- Josh Bryan
- Steve Tuecke
- Lisa Childers
- Daniel Morgan

BIRNCommunity

- managers
- members

« Back to Permissions List

Share Endpoint With Selected

- read
- write
- delegate
### Manage Permissions For  

**Source:** karlito@scdemo:~/

<table>
<thead>
<tr>
<th>name</th>
<th>read</th>
<th>write</th>
<th>delegate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian Foster</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>cvrg</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**cvrg added successfully.**

Start typing a user account name or UUID to add to the list above.
Hub as cyberinfrastructure service

• Operated as high-availability, professionally operated service
  – Runs on multiple Amazon availability zones
  – >99.9% availability

• Other services can outsource identity and group management to Globus Nexus, e.g.:
  – DOE systems biology knowledge base (kBase)
  – NIH Biomedical Informatics Research Network (BIRN)
  – Globus Online data management services
What Globus Nexus hub does not do

- Authorization (but groups and attributes provide a basis for authorization decisions)
- Provide interfaces to support extensible user attributes (but Nexus supports them)
- Support HIPAA data (but we want to)
Thank you!

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@globusonline

foster@anl.gov
foster@uchicago.edu