

CILogon-HA: Higher Assurance Federated Identities for DOE Science


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CILogon – <https://cilogon.org/>

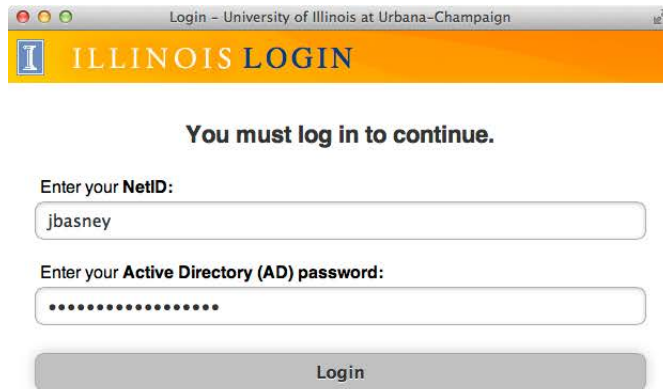
- Provides personal digital certificates for access to cyberinfrastructure
- Uses federated authentication for user identification



The screenshot shows a web browser window titled "Welcome To The CILogon Service". The page has a green header with the CILogon logo (a green square with a white 'C' and an upward arrow) and the text "CILogon Service". Below the header, there is a "Show Help" button in the top right corner. The main content area is titled "Select An Identity Provider:" and contains a list box with the following options: "University of Hawaii", "University of Illinois at Chicago", "University of Illinois At Springfield", and "University of Illinois at Urbana-Champaign". Below the list box is a "Search:" label followed by a text input field. Underneath the search field is a "Remember this selection:" label with an unchecked checkbox. A green "Log On" button is positioned below the checkbox. At the bottom of the main content area, a small text line reads: "By selecting 'Log On', you agree to [CILogon's privacy policy](#)." The footer of the page contains a text block: "For questions about this site, please see the [FAQs](#) or send email to help@cilogon.org. Know your responsibilities for using the CILogon Service. See acknowledgements of support for this site." and a blue circular help icon with a question mark on the right.

Federated Authentication

- Log on to CILogon using your campus (InCommon) or Google (OpenID) account



Login – University of Illinois at Urbana-Champaign

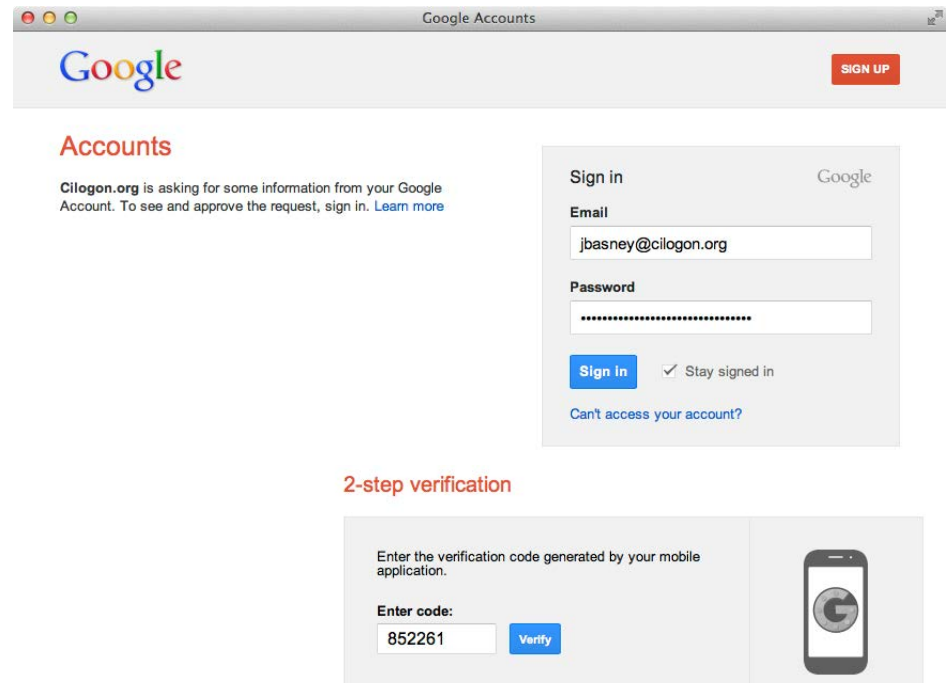
ILLINOIS LOGIN

You must log in to continue.

Enter your **NetID**:

Enter your **Active Directory (AD) password**:

Login



Google Accounts

Google [SIGN UP](#)

Accounts

Cilogon.org is asking for some information from your Google Account. To see and approve the request, sign in. [Learn more](#)

Sign in Google

Email

Password


[Sign in](#) ☒ Stay signed in

[Can't access your account?](#)

2-step verification

Enter the verification code generated by your mobile application.

Enter code:
 [Verify](#)



Bridging InCommon and IGTF

- Translating mechanism and policy across higher education and grid trust federations

InCommon is operated by Internet2

InCommon

About Participants Join InCommon

Home Federation Certificates Assurance Multifactor

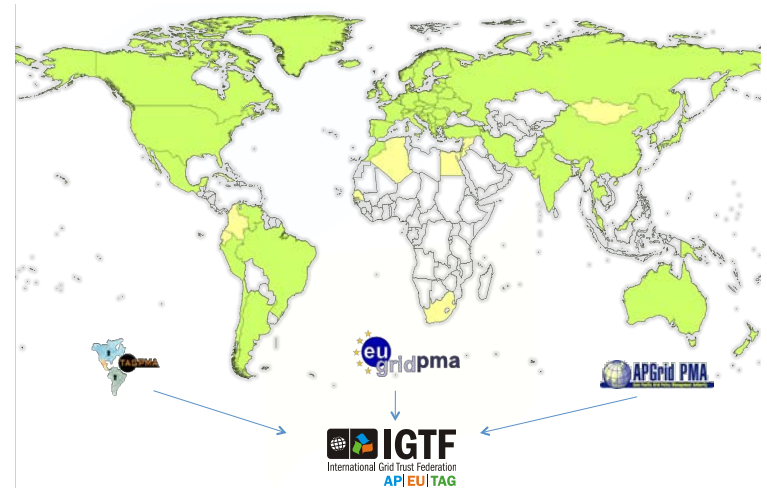
Current InCommon Participants

Below is a complete list of InCommon Participants. There are also lists available for:

- **Identity and Service Providers** deployed in the federation (and other metadata-driven pages)
- **Certificate Service** subscribers

The IdP and SP pages include links to more-detailed information on each entity—just go to the IdP or SP list and click on the name of the IdP or SP you are interested in. **InCommon serves almost 6 million end-users through federated identity management.**

| Higher Education Participants (372) | Government and Nonprofit Laboratories, Research Centers, and Agencies (28) | Sponsored Partners (148) |
|---|--|---|
| A. T. Still University Allegheny College American University Amherst College Arizona State University Arkansas State University Auburn University Augsburg College Azusa Pacific University Ball State University Barry University Bates College Bay De Noc Community College Baylor College of Medicine | Ames Laboratory Argonne National Laboratory Brookhaven National Laboratory ESnet Fermilab GENI Project Office Idaho National Laboratory Internet2 Jefferson Lab Lawrence Berkeley National Laboratory LIGO Scientific Collaboration LTERN (Long Term Ecological Research Network) | 9STAR Academic Works, Inc. Acatar Accessible Information Management, LLC Advantage Connect Pro Inc. ALEKS Corporation Alexander Street Press American Psychological Association Apple - iTunes U AppointmentLink Portal Solutions, Inc. ARTstor Association for Computing Machinery AT&T Services AthenaOnline.com |



Multiple Levels of Assurance

- CILogon Silver CA
 - InCommon Silver IDs
 - IGTF accredited February 2011
- CILogon Basic CA
 - “Basic” InCommon IDs
 - IGTF accredited June 2014
- Google Authenticator provides second authentication factor

A screenshot of a web browser window titled 'Google Authenticator Login'. The page has a green header with the CILogon Service logo and name. Below the header, the title 'Google Authenticator Login' is displayed. A message states: 'Your account has been configured to use Google Authenticator as a second authentication factor. Enter a one-time passcode as generated by the app below.' A login form contains the text 'Account: A534@cilogon.org' and 'Passcode: 177799' with an input field for the passcode. An 'Enter' button is located below the passcode field. At the bottom of the form, there is a link that says 'Don't have your phone with you?'.

Integrated with CyberInfrastructure

Welcome To The CILogon Delegation Service

OCEAN OBSERVATORIES INITIATIVE

Powered By CILogon

Show Help

Get Your Certificate

Open Science Grid

Welcome To The CILogon Service

LIGO

Welcome To The CILogon Service

CardioVascular Research Grid

Select An Identity Provider:

University of Hawaii
University of Illinois at Chicago
University of Illinois At Springfield
University of Illinois at Urbana-Champaign

Search:

Remember this selection: ☐

Continue

By selecting "Continue", you agree to [CILogon's privacy policy](#).

For questions about this site, please see the [FAQs](#) or send email to [help @ cilogon.org](#).
Know [your responsibilities](#) for using the CILogon Service.
See [acknowledgements](#) of support for this site.

Welcome To The CILogon Service

globus online

Powered By CILogon

Show Help

Select An Identity Provider:

Welcome To The CILogon Service

DataONE

Powered By CILogon

Show Help

Select An Identity Provider:

University of Hawaii
University of Illinois at Chicago
University of Illinois At Springfield
University of Illinois at Urbana-Champaign

Search:

Remember this selection: ☐

LOG ON

By selecting "Log On", you agree to [CILogon's privacy policy](#).

For questions about this site, please see the [FAQs](#) or send email to [help @ cilogon.org](#).
Know [your responsibilities](#) for using the CILogon Service.
See [acknowledgements](#) of support for this site.

Integrated with Globus Nexus

The screenshot shows the Globus Online Sign In interface. At the top is a navigation bar with the Globus Online logo and links for Manage Data, Groups, News & Events, About, Support, Log In, and Sign Up. Below this is a 'Sign In' section with a 'Sign Up with Globus Online' link. The main login area has a 'Use Your GlobusOnline login' section with fields for Username and Password, and a 'Sign In' button. An 'alternate login' button is circled in red. A modal titled 'Select a different login' is open, showing a list of login providers. 'InCommon / CILogon' is circled in red. Other providers include GlobusOnline, Argonne LCF, Argonne MCS & LCRC, BIRN, CLI Transition, EGI, ESG ANL, Exeter, Google, LRZ, NCSA, NCSA Blue Waters, NERSC, UChicago CI, UChicago iBi, UK NGS, WestGrid, and XSEDE. The bottom of the page features a 'MANAGE DATA' section with links for start transfer, view transfer activity, and manage endpoints, as well as links for case studies and pro tips. A 'Subscribe to Globus News & Updates' button is also present.

Sign In | Globus Online

globus online Manage Data Groups News & Events About Support Log In Sign Up

Sign In Sign Up with Globus Online

Use Your GlobusOnline login alternate login

Username Password

Sign In Forgot Password?

Support

Select a different login

GlobusOnline InCommon / CILogon

Argonne LCF LRZ

Argonne MCS & LCRC NCSA

BIRN NCSA Blue Waters

CLI Transition NERSC

EGI UChicago CI

ESG ANL UChicago iBi

Exeter UK NGS

Google WestGrid

XSEDE

MANAGE DATA

start transfer

view transfer activity

manage endpoints

case studies pro tips

Subscribe to Globus News & Updates

Used by DOE KBase

Sign In | KBase

KBase
PREDICTIVE BIOLOGY
DOE Systems Biology Knowledgebase

Log In Sign Up

Sign In [Sign Up with Globus](#)

Using your [Globus](#) login. [alternate login](#)

Select Identity Provider

| | |
|--------------------|---------------------------|
| Globus | InCommon / CILogon |
| Argonne LCF | LRZ |
| Argonne MCS & LCRC | NCSA |
| BIRN | NCSA Blue Waters |
| CLI Transition | NERSC |
| EGI | UChicago CI |
| ESG ANL | UChicago iBi |
| Exeter | UK NGS |
| Google | WestGrid |
| | XSEDE |

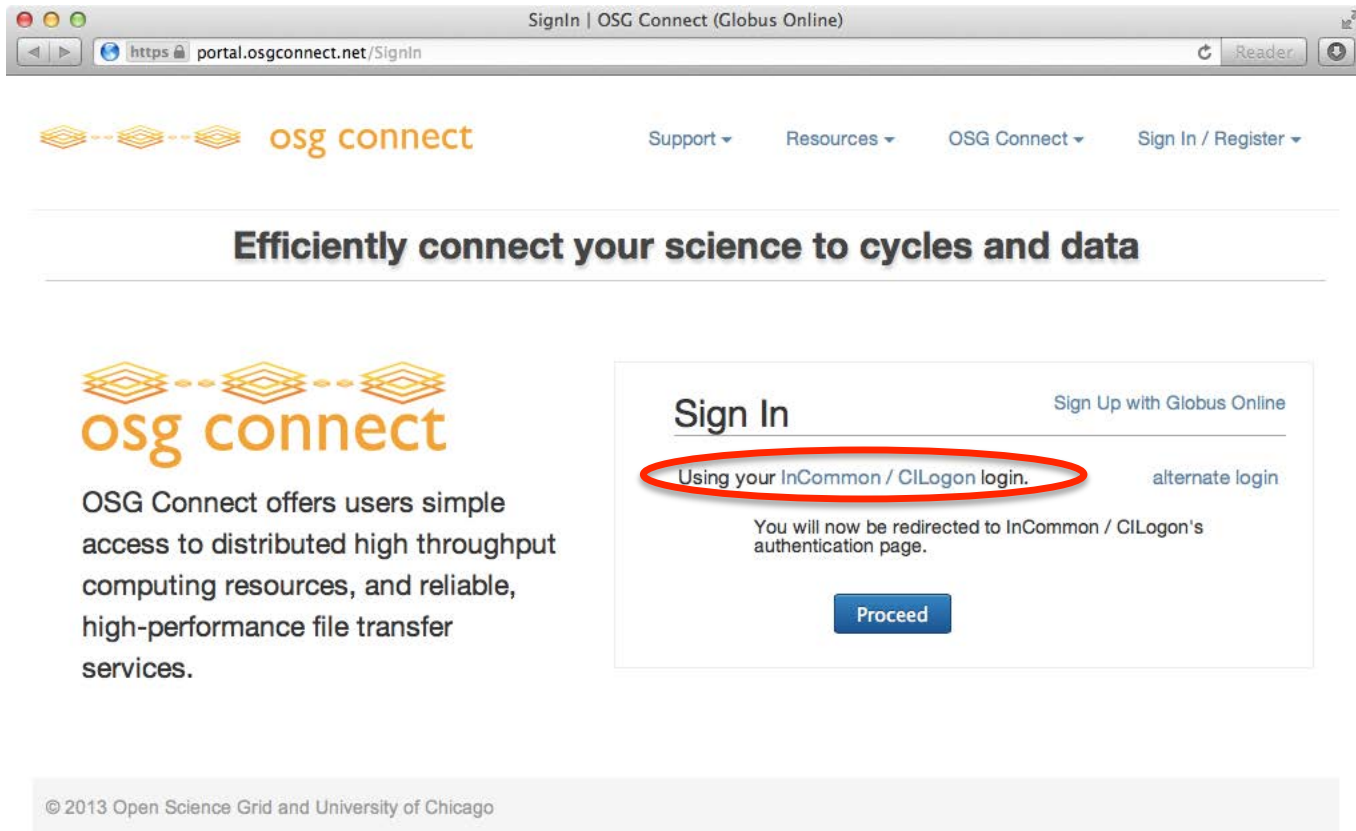
DOE ENERGY Science

KBase is sponsored by the U.S. Department of Energy's
Office of Biological and Environmental Research.

[Privacy and Security Notice](#)

powered by
globus online

Used by OSG Connect



The screenshot shows a web browser window with the address bar displaying "https://portal.osgconnect.net/SignIn". The page title is "SignIn | OSG Connect (Globus Online)". The navigation bar includes the "osg connect" logo and links for "Support", "Resources", "OSG Connect", and "Sign In / Register". The main heading is "Efficiently connect your science to cycles and data". On the left, the "osg connect" logo is repeated, followed by the text: "OSG Connect offers users simple access to distributed high throughput computing resources, and reliable, high-performance file transfer services." On the right, the "Sign In" section is highlighted with a red circle around the text "Using your InCommon / CILogon login." and a link for "alternate login". Below this, a message states: "You will now be redirected to InCommon / CILogon's authentication page." and a "Proceed" button is visible. The footer contains the copyright notice: "© 2013 Open Science Grid and University of Chicago".

SignIn | OSG Connect (Globus Online)

https://portal.osgconnect.net/SignIn

osg connect

Support ▾ Resources ▾ OSG Connect ▾ Sign In / Register ▾

Efficiently connect your science to cycles and data

osg connect

OSG Connect offers users simple access to distributed high throughput computing resources, and reliable, high-performance file transfer services.

Sign In [Sign Up with Globus Online](#)

Using your InCommon / CILogon login. [alternate login](#)

You will now be redirected to InCommon / CILogon's authentication page.

[Proceed](#)

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Used by ATLAS Connect

OAuth Sign In | Atlas Connect

portal.usatlas.org/OAuth#response_type=code&redirect_uri=https%3A%2F%2Fconnect.usatlas.org%2Foauth&client_id=...

ATLAS CONNECT

Support ▾ Resources ▾ Connect ▾ Log In or Register ▾

Sign In [Sign Up with Globus](#)

This client is requesting access to your account:
Site: https://connect.usatlas.org/oauth
If you approve, please sign in.

Using your InCommon / CILogon login. [alternate login](#)

Click PROCEED to authenticate with InCommon / CILogon.

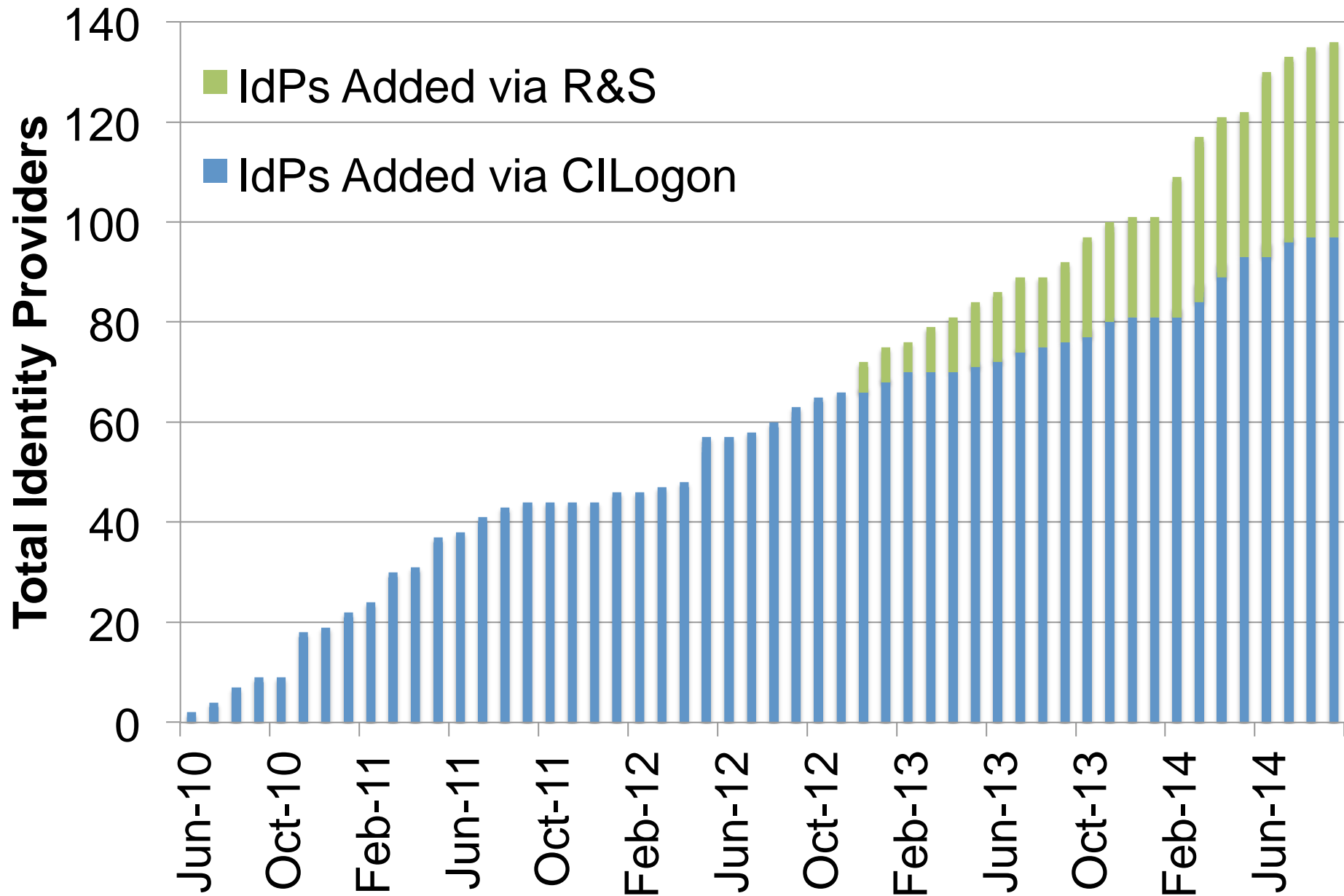
[Proceed](#)

Powered by: US ATLAS Computing Facility globus ci connect

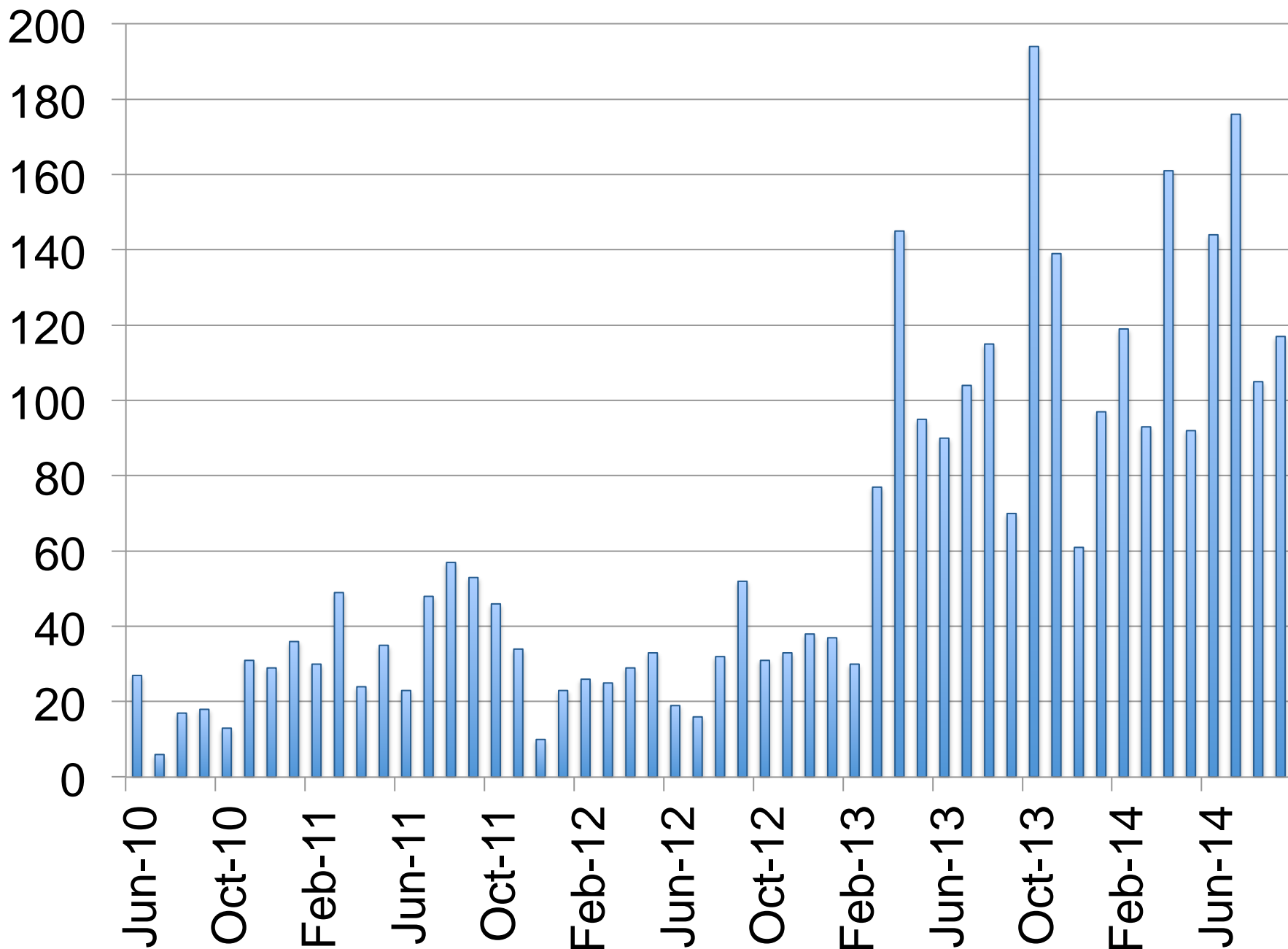
CILogon and XSEDE

Extreme Science and Engineering
Discovery Environment

- CILogon is
 - a component in the XSEDE architecture
 - following the XSEDE engineering process:
architecture, design, and security reviews and
operational acceptance tests
- XSEDE provides sustained operational support to CILogon users (ATLAS, DataONE, OOI, OSG, KBASE, LIGO, etc.)
- Including backup CILogon instance at NICS



Total New Users Per Month



Our Journal Article

Jim Basney, Terry Fleury, and Jeff Gaynor,
"CILogon: A Federated X.509 Certification Authority
for CyberInfrastructure Logon," Concurrency and
Computation: Practice and Experience, Volume 26,
Issue 13, pages 2225-2239, September 2014.
<http://dx.doi.org/10.1002/cpe.3265>



“What question does your research motivate you to now ask?”

- What models are effective for exchange of user information in distributed systems?
 - need user info for authentication, authorization, accounting, incident response, troubleshooting
 - models: virtual organization, gateways/hubs, user consent/control, certification (InCommon R&S, IGTF), self-asserted compliance (InCommon Bronze, REFEDS CoC)
 - challenges: regulatory, scaling, information quality/timeliness, misaligned goals
 - Who owns/controls the data?

Thanks!

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www.cilogon.org