

CILogon

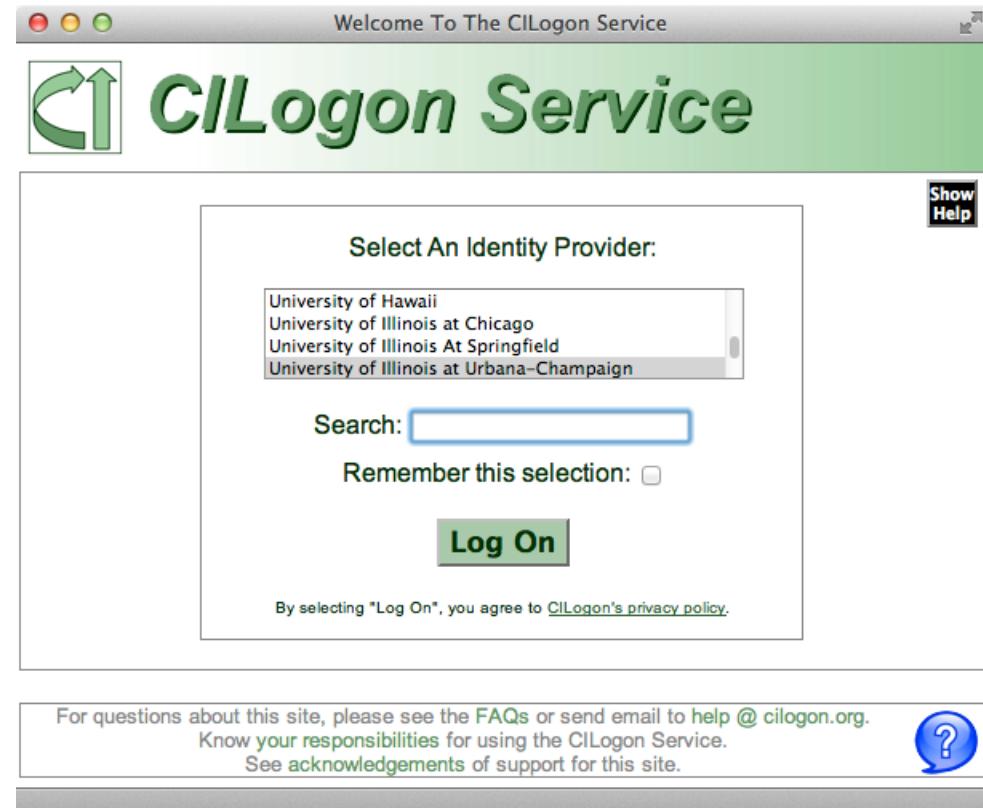
Middleware And Grid Interagency Coordination (MAGIC) at SC13

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CILogon – <https://cilogon.org/>

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



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:
jbasney

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: jbasney@cilogon.org

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: 852261 **Verify**



Bridging InCommon and IGTF

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

InCommon is operated by Internet2

INTERNET2

InCommon®

About Participants Join InCommon

Home Federation Certificates Assurance Multifactor

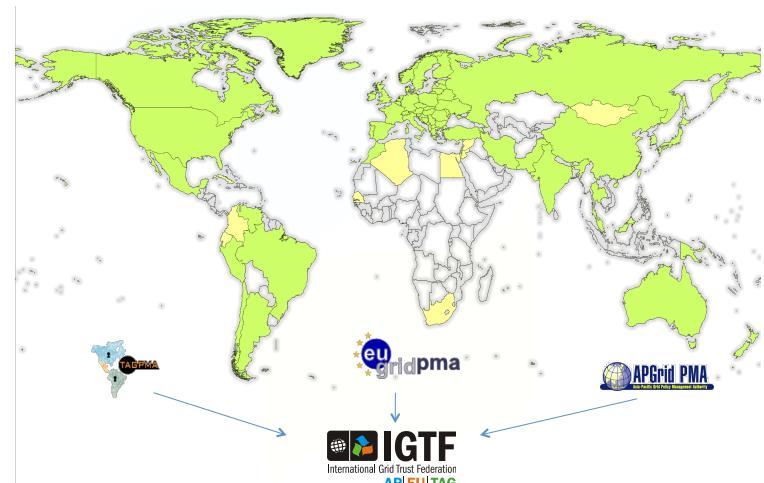
Current InCommon Participants

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 Augusta 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 AppointLink Portal Solutions, Inc. ARTstor Association for Computing Machinery AT&T Services AthenaOnline.com



Multiple Levels of Assurance

- CILogon Silver CA is accredited by IGTF
 - Using InCommon Silver (Level 2) identities
- IGTF IOTA profile for CILogon Basic under development
- Google Authenticator support for second authentication factor



A screenshot of a web browser showing the 'Google Authenticator Login' page for the 'CILogon Service'. The page has a green header with the CILogon logo and the text 'CILogon Service'. The main content area is titled 'Google Authenticator Login' and contains instructions: '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.' Below this are input fields for 'Account' (set to 'A534@cilogon.org') and 'Passcode' (containing '177799'), with a green 'Enter' button. At the bottom, there is a link 'Don't have your phone with you?'.

Identifier-Only Trust Assurance with Secured Infrastructure Authentication Profile

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- ↓ [Abstract](#)
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- ↓ [Identification](#)
 - ↓ [Persistency of name binding](#)
 - ↓ [Naming](#)
 - ↓ [Renewal and re-keying](#)
 - ↓ [Retention of records](#)
 - ↓ [Traceability Requirements](#)
- ↓ [Operational Requirements](#)
 - ↓ [Policy and practice statement](#)
 - ↓ [Certificate and CRL profile](#)
 - ↓ [Revocation](#)
- ↓ [Security Requirements](#)
 - ↓ [Third parties involved in identity management](#)
- ↓ [Publication and Repository responsibilities](#)
- ↓ [Audits](#)
- ↓ [Privacy and confidentiality](#)
- ↓ [Compromise and disaster recovery](#)
 - ↓ [Due diligence for subscribers](#)

Abstract

This is an Authentication Profile of the IGTF describing the minimum requirements on X.509 PKI authorities where the identity vetting is adequate to ensure unique, non-re-assigned identities, and generated by authorities using secured and trusted infrastructure. Such authorities are not required to collect more data than are necessary for fulfilling the uniqueness requirements, and credentials issued by authorities under this profile may not provide sufficient information to independently trace individual subscribers, and should be used in conjunction with complementary identification and vetting processes.

Integrated with CyberInfrastructure

The image displays five separate web browser windows, each representing a different scientific or research organization's identity provider, all integrated with the CILogon delegation service. The windows are arranged in a grid-like fashion.

- Top Left:** Ocean Observatories Initiative (OOI) - "Welcome To The CILogon Delegation Service". It features the OOI logo and the text "Powered By CILogon".
- Top Middle:** Open Science Grid - "Get Your Certificate". It features the Open Science Grid logo and the text "Powered By CILogon".
- Top Right:** globus online - "Welcome To The CILogon Service". It features the globus online logo and the text "Powered By CILogon".
- Middle Left:** LIGO - "Welcome To The CILogon Service". It features the LIGO logo and the text "Powered By CILogon".
- Middle Right:** CardioVascular Research Grid - "Welcome To The CILogon Service". It features the CardioVascular Research Grid logo and the text "Powered By CILogon".
- Bottom Center:** DataONE - "Welcome To The CILogon Service". It features the DataONE logo and the text "Powered By CILogon".

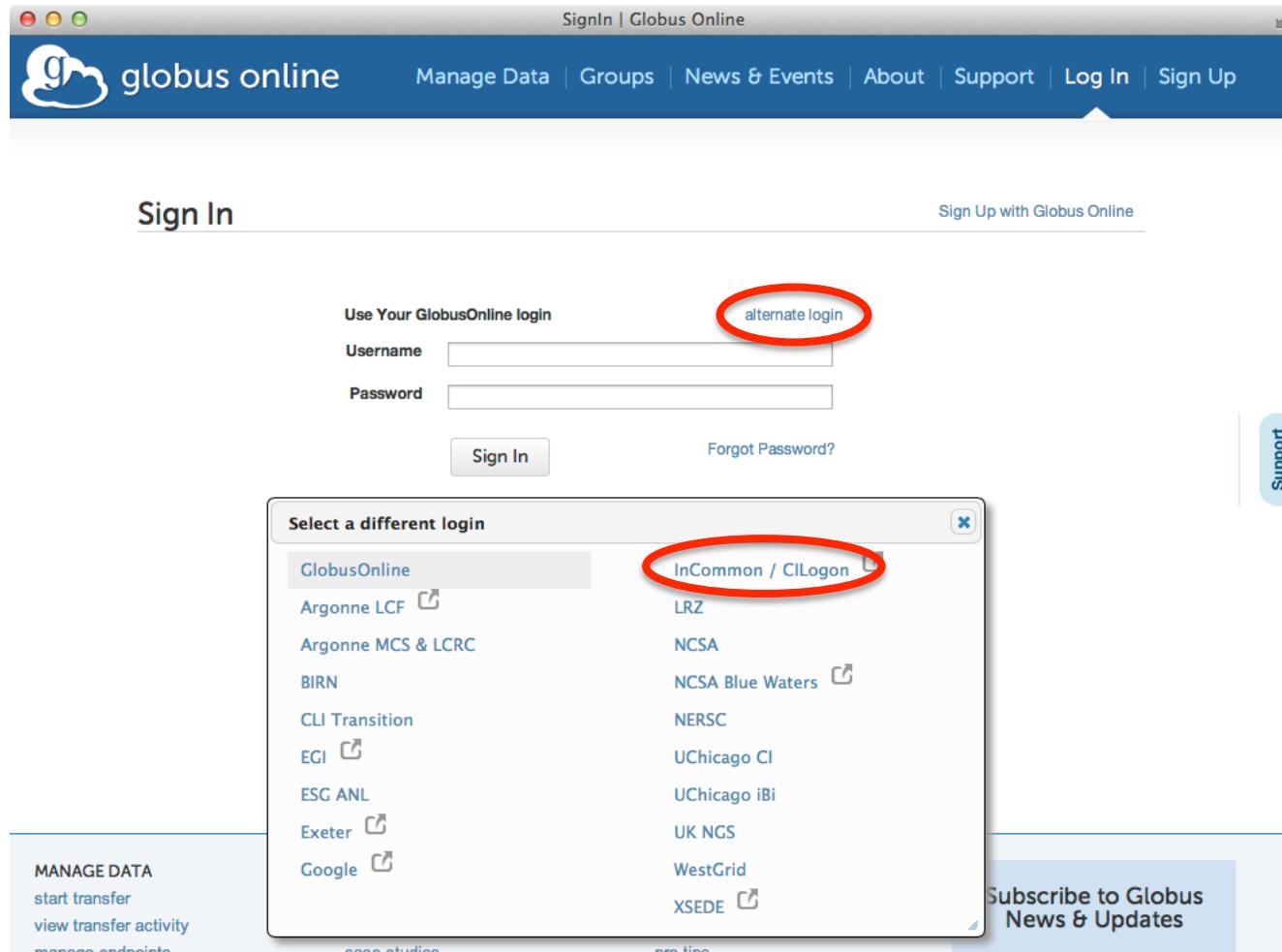
In all windows, there is a central "Select An Identity Provider:" dropdown menu containing the same four options:

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

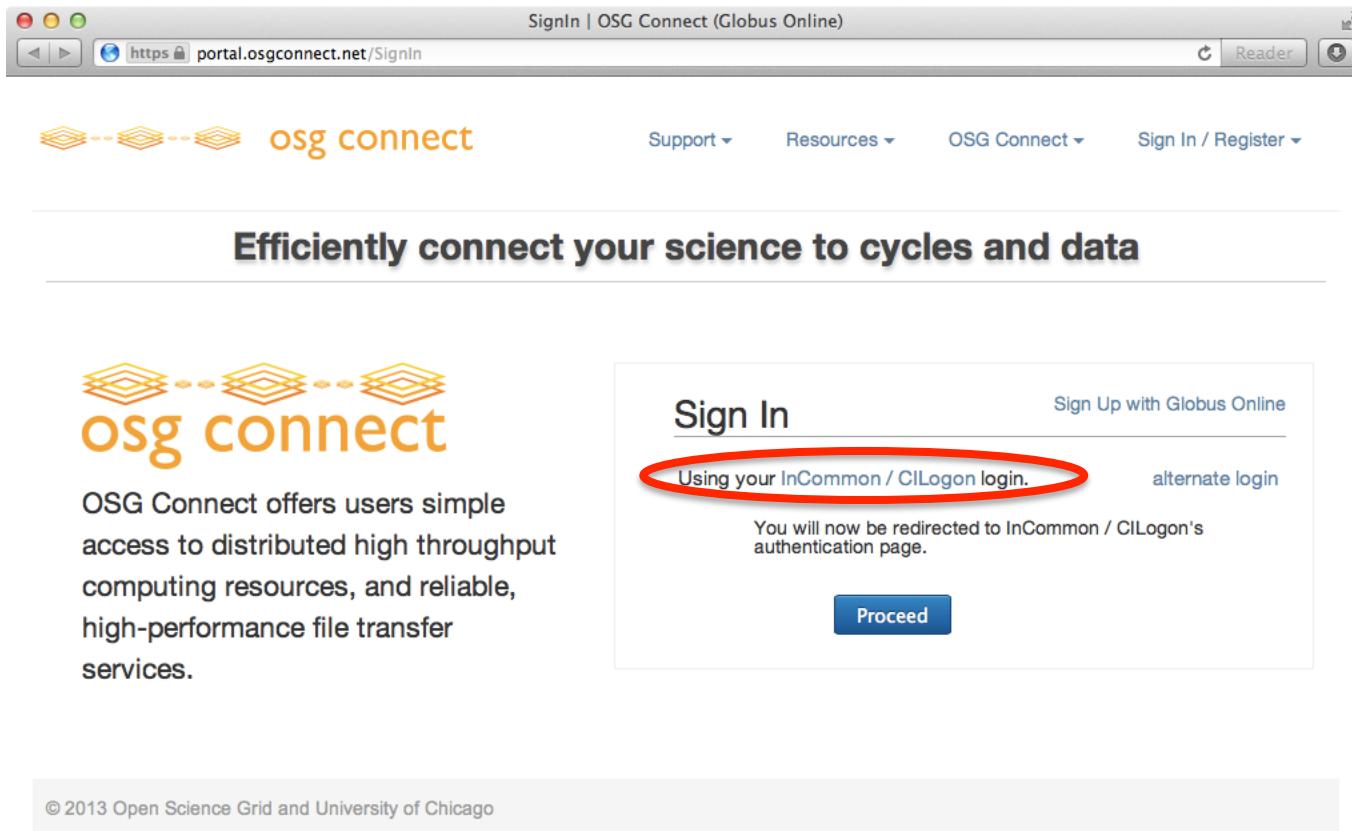
Below the dropdown are fields for "Search:" and "Remember this selection: ". A "Continue" button is present in the first three windows, while a "LOG ON" button is present in the last two. At the bottom of each window, there is a link to "CILogon's privacy policy".

At the very bottom of the entire collage, there is a footer bar with the CILogon logo and the website address www.cilogon.org.

Integrated with Globus Nexus



Used by OSG Connect



The screenshot shows a web browser window for the OSG Connect sign-in page at <https://portal.osgconnect.net/SignIn>. The page features the OSG Connect logo and a tagline: "Efficiently connect your science to cycles and data". On the right, there's a "Sign In" section with options for "Sign In / Register", "Support", "Resources", "OSG Connect", and "Sign Up with Globus Online". A red circle highlights the "Using your InCommon / CILogon login." link, which is described as redirecting to InCommon / CILogon's authentication page. A "Proceed" button is also visible.

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 CI Connect for Duke

The screenshot shows a web browser window with the following details:

- Header:** "SignIn | Duke Connect (Globus Online)"
- Logo:** Duke University CI CONNECT
- Navigation:** Support ▾, Resources ▾, Connect ▾, Log In or Register ▾
- Section Header:** "Efficiently connect your science to cycles and data"
- Text on the left:** "CI Connect for Duke offers users simple access to distributed high throughput computing resources, and reliable, high-performance file transfer services."
- Sign In Form:**
 - Sign In:** "Using your InCommon / CILogon login." "Sign Up with Globus"
 - Alternate Login:** "alternate login"
 - Authenticating:** "Click PROCEED to authenticate with InCommon / CILogon."
 - Proceed Button:** A blue button labeled "Proceed".

Powered by:



Integrated with DOE KBase

The screenshot shows the KBase sign-in interface. At the top, there's a navigation bar with icons for home, search, and user profile, followed by "SignIn | KBase". Below the header, the KBase logo is displayed with the text "DOE Systems Biology Knowledgebase". A black navigation bar contains "Log In" and "Sign Up" buttons. To the right of "Sign Up", there's a link "Sign Up with Globus". The main area is titled "Sign In" and includes a message "Using your Globus login.". A dropdown menu titled "Select Identity Provider" is open, listing various providers. The "Globus" provider is highlighted with a gray background. Other providers listed include 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. Two specific entries, "InCommon / CILogon" and "alternate login", are circled in red at the top of the list. At the bottom of the page, there's a "ENERGY Science" footer with social media icons, a note about sponsorship by the U.S. Department of Energy's Office of Biological and Environmental Research, a "Privacy and Security Notice" link, and a "powered by globus online" logo.

ligo-proxy-init using CILogon ECP

```
$ ligo-proxy-init scott.koranda
```

```
Your identity: scott.koranda@LIGO.ORG
```

```
Enter pass phrase for this identity:
```

```
Creating proxy ..... Done
```

```
Your proxy is valid until: Mar 5 13:45:16 2013 GMT
```

```
$ grid-proxy-info -all
```

```
subject : /DC=org/DC=cilogon/C=US/O=LIGO/CN=Scott Koranda scott.koranda@ligo.org
```

```
issuer : /DC=org/DC=cilogon/C=US/O=CILogon/CN=CILogon Basic CA 1
```

```
identity : /DC=org/DC=cilogon/C=US/O=LIGO/CN=Scott Koranda scott.koranda@ligo.org
```

```
type : end entity credential
```

```
strength : 2048 bits
```

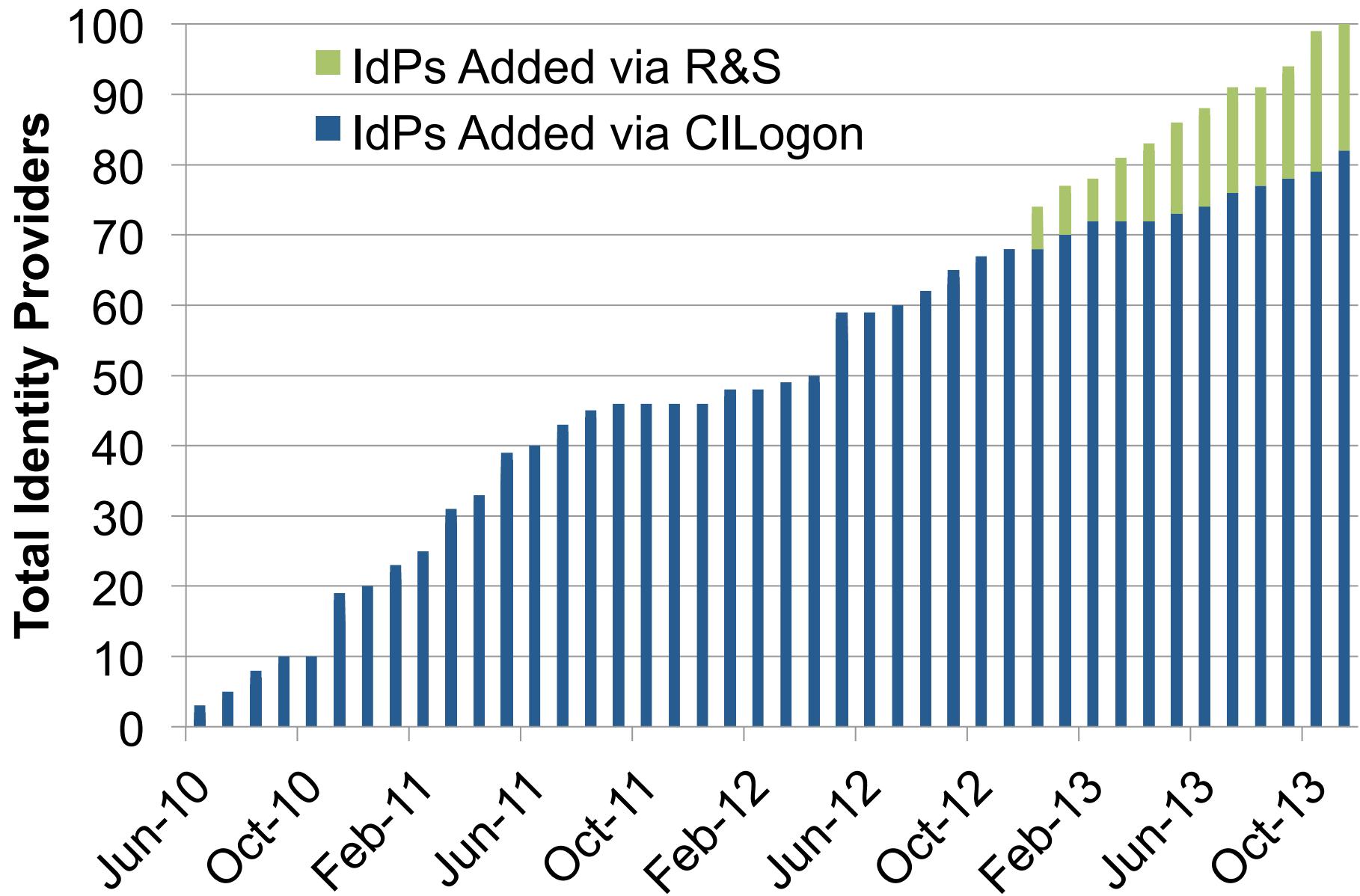
```
path : /tmp/x509up_u1000
```

```
timeleft : 71:59:52 (3.0 days)
```

CILogon and **XSEDE**

Extreme Science and Engineering
Discovery Environment

- CILogon is
 - a component in the XSEDE architecture
 - entering the XSEDE engineering process:
architecture, design, and security reviews and
operational acceptance tests
- XSEDE can provide sustained operational
support to CILogon users (DataONE, OOI,
OSG, LIGO, etc.)



Adding an IdP to CILogon

- Use self-service web application or contact us for assistance

<https://cilogon.org/requestidp/>

Contact Information

Your Name:

Email Address:

Home Organization

Select an Organization:

Don't See It? Enter Here:

Additional Information (Optional)

Please tell us more about yourself and your interest in the CILogon Service:

Submit

<https://cilogon.org/testidp/>

Verify SAML Attribute Release Policy

Thank you for your interest in the CILogon Service. This page allows the administrator of an Identity Provider (IdP) to verify that all necessary SAML attributes have been released to the CILogon Service Provider (SP). Below you will see the various attributes required by the CILogon Service and their values as released by your IdP. If all required attributes are present, you can add your IdP to the list of organizations available to the CILogon Service (assuming it has not already been added).

Summary

All required attributes have been released by your IdP. For details of the various attributes utilized by the CILogon Service and their current values, see the sections below.

Add Your IdP to the CILogon Service

SAML Attributes

Metadata Attributes

Federation Info: [About](#) [Organizations](#) [Entities](#)

Federation entities provide services to InCommon participants at their discretion and collaboration opportunities among InCommon participants. Our value as a c

InCommon Service Categories

InCommon Research and Scholarship program helps services connect with identity providers.

[IdPs](#) [SPs](#)

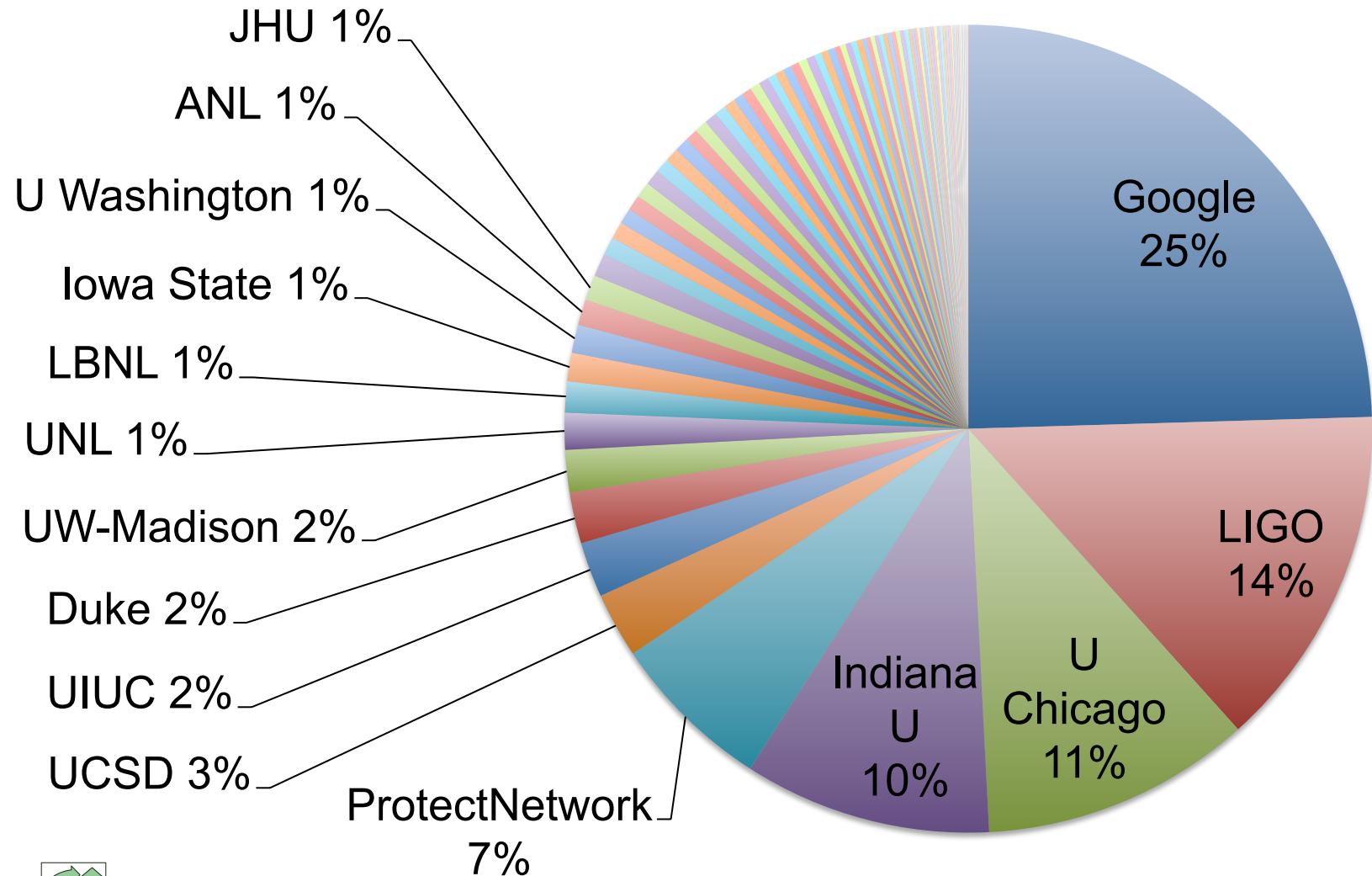
The following service providers belong to the indicated service category:

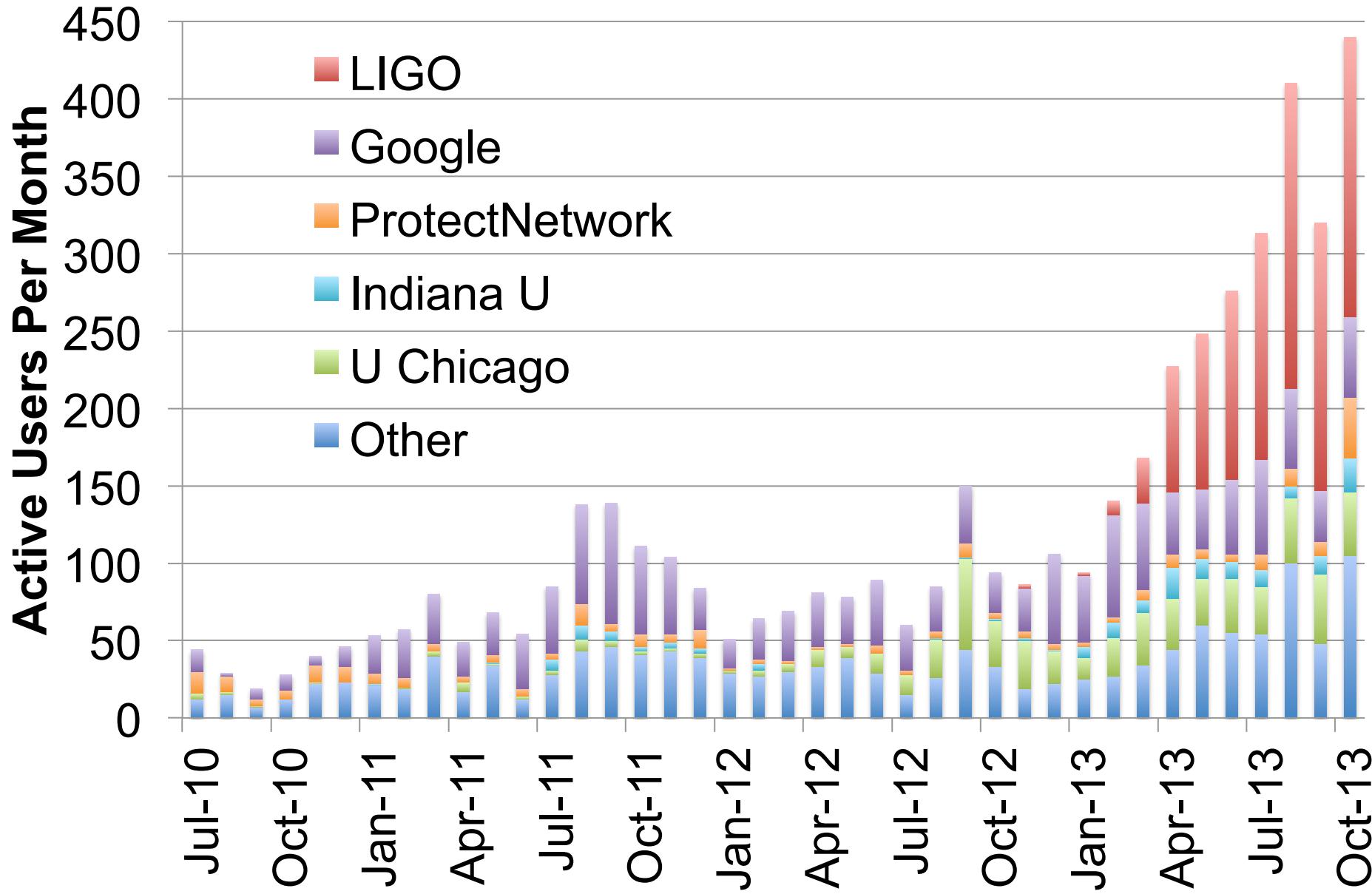
Service Provider Name	Service Category
CarmenWiki	research-and-scholarship
CILogon	research-and-scholarship
Collaboration Wiki Spaces at Internet2	research-and-scholarship
FileSender	research-and-scholarship
GENI Experimenter Portal	research-and-scholarship
GPN/UM Dropoff Services	research-and-scholarship
Indiana CTSI HUB	research-and-scholarship
LIGO CBC Wiki	research-and-scholarship
LIGO Wiki	research-and-scholarship
Multi-Factor Authentication (MFA) Cohortium Registry	research-and-scholarship
Multi-Factor Authentication (MFA) Cohortium Wiki	research-and-scholarship
Narada Metrics	research-and-scholarship
Open Science Data Cloud Console	research-and-scholarship



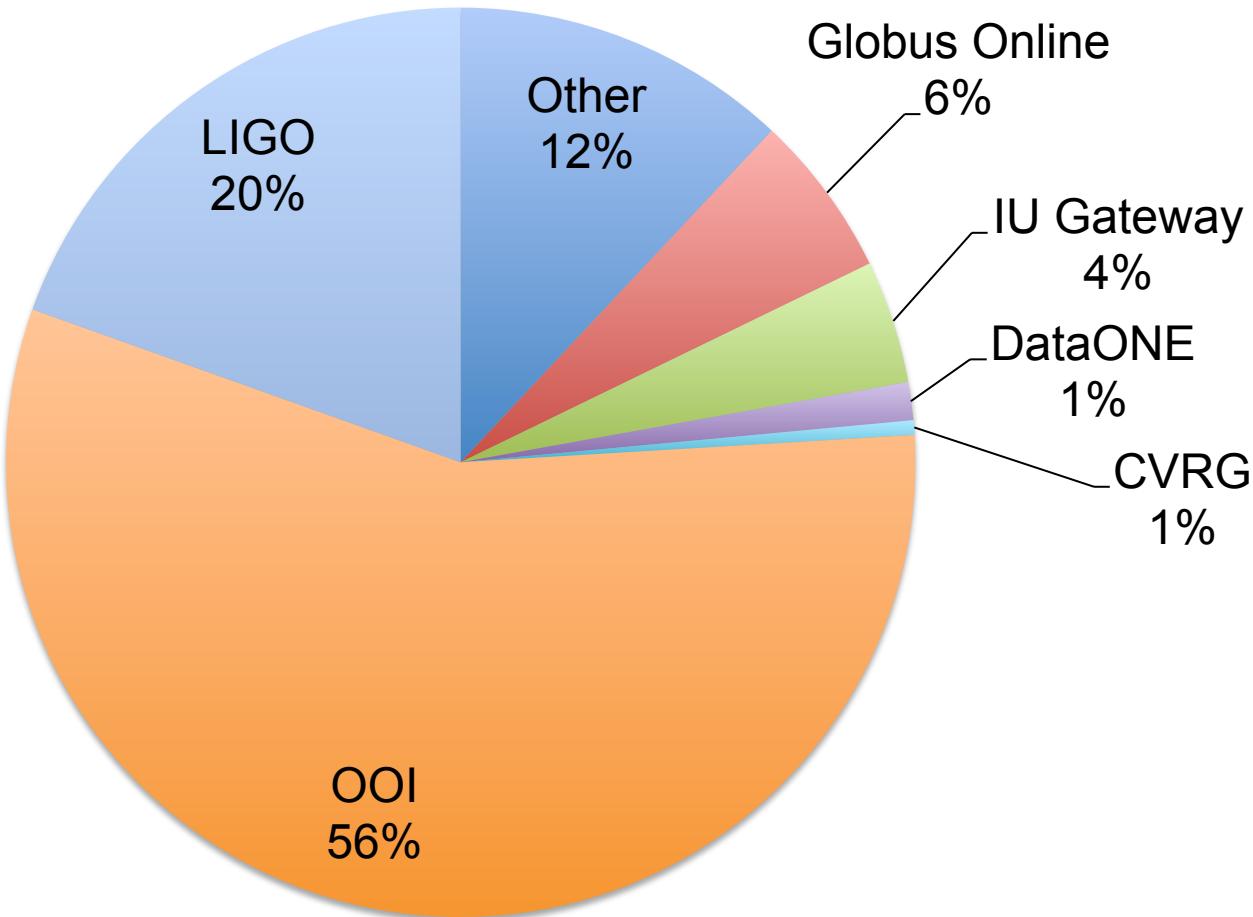
Service Category	# of SPs	# of IdPs
research-and-scholarship	15	60

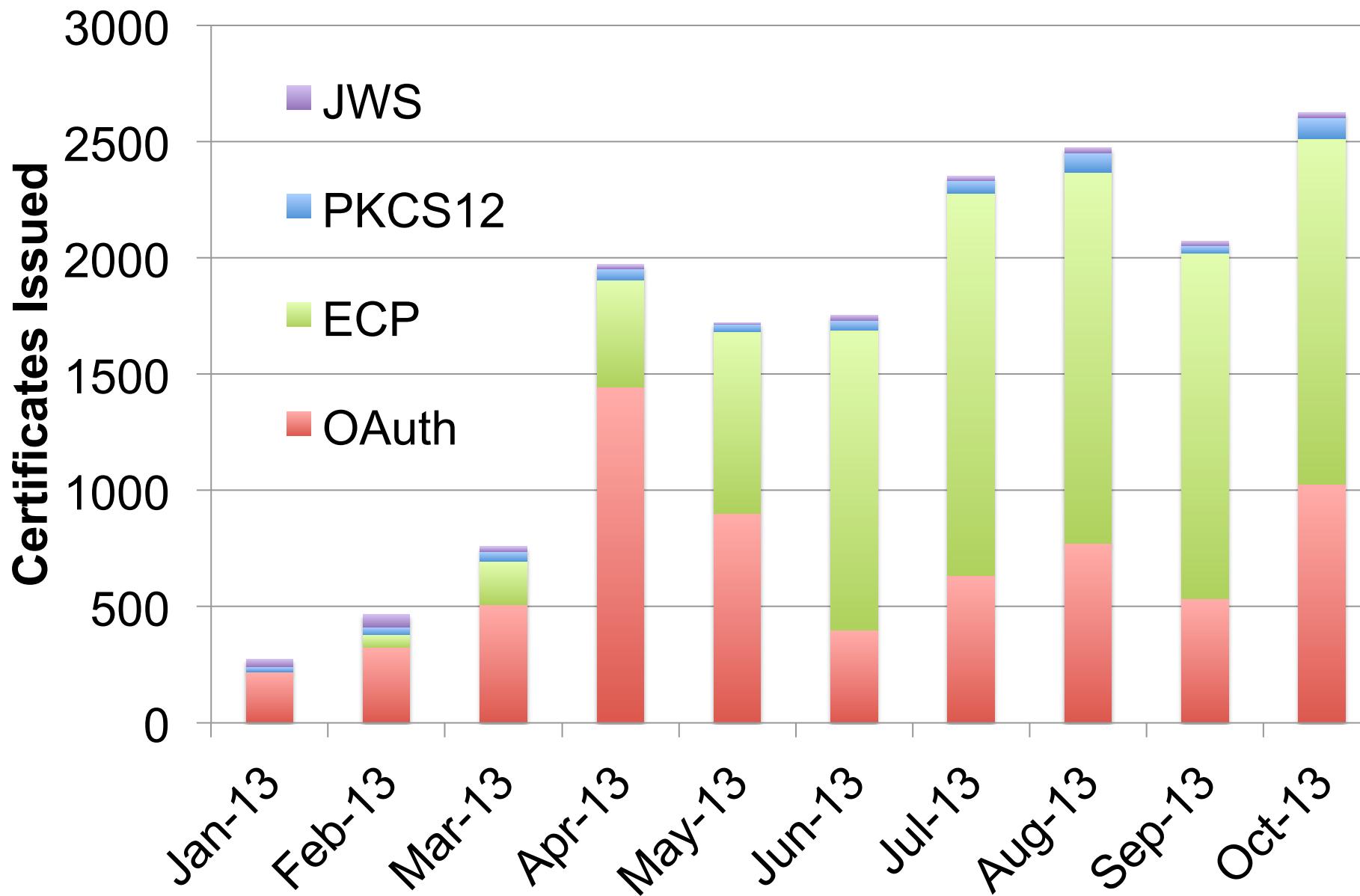
Registered Users Per IdP





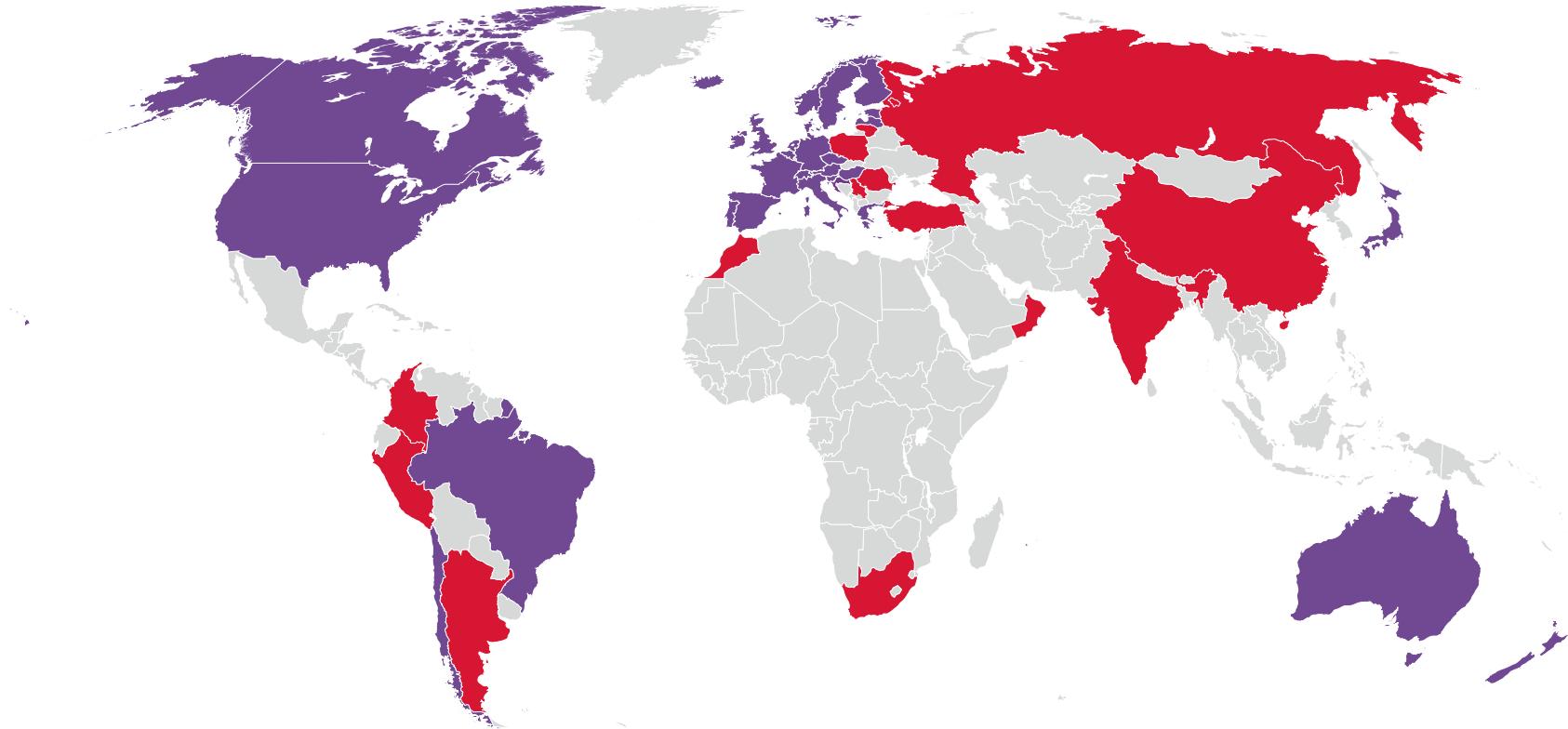
% of Total Certificates Issued





What's Next

- SAML interfederation
 - InCommon joining eduGAIN this year
 - International attribute release
- Growth of federated online CAs
 - <http://redmine.ogf.org/projects/idel-wg>
- Level of Assurance (continued)
 - IGTF IOTA profile
 - Int'l adoption of Kantara standards
 - Security incident handling
 - Multi-factor authentication



Identity Federations in production

AT	ACOnet Identity Federation
AU	Australian Access Federation AAF
BE	Belnet R&E Federation
BR	CAFe
CA	Canadian Access Federation CAF
CH	SWITCHaaI
CL	COFRe
CZ	edulD.cz
DE	DFN-AAI
DK	WAYF
EE	TAAT
ES	SIR
FI	Haka
FR	Fédération Éducation-Recherche
GR	GRNET
HR	AAl@EduHr
HU	edulD.hu
IE	Edugate
IT	IDEM
JP	GakuNin
LV	LAIFE

NL	SURFconext
NO	FEIDE
NZ	Tuakiri New Zealand Access Federation
PT	RCTSaai
SE	SWAMID
SI	ArnesAAI Slovenska
UK	UK Access Management Federation for Education and Research
US	InCommon
int	IGTF

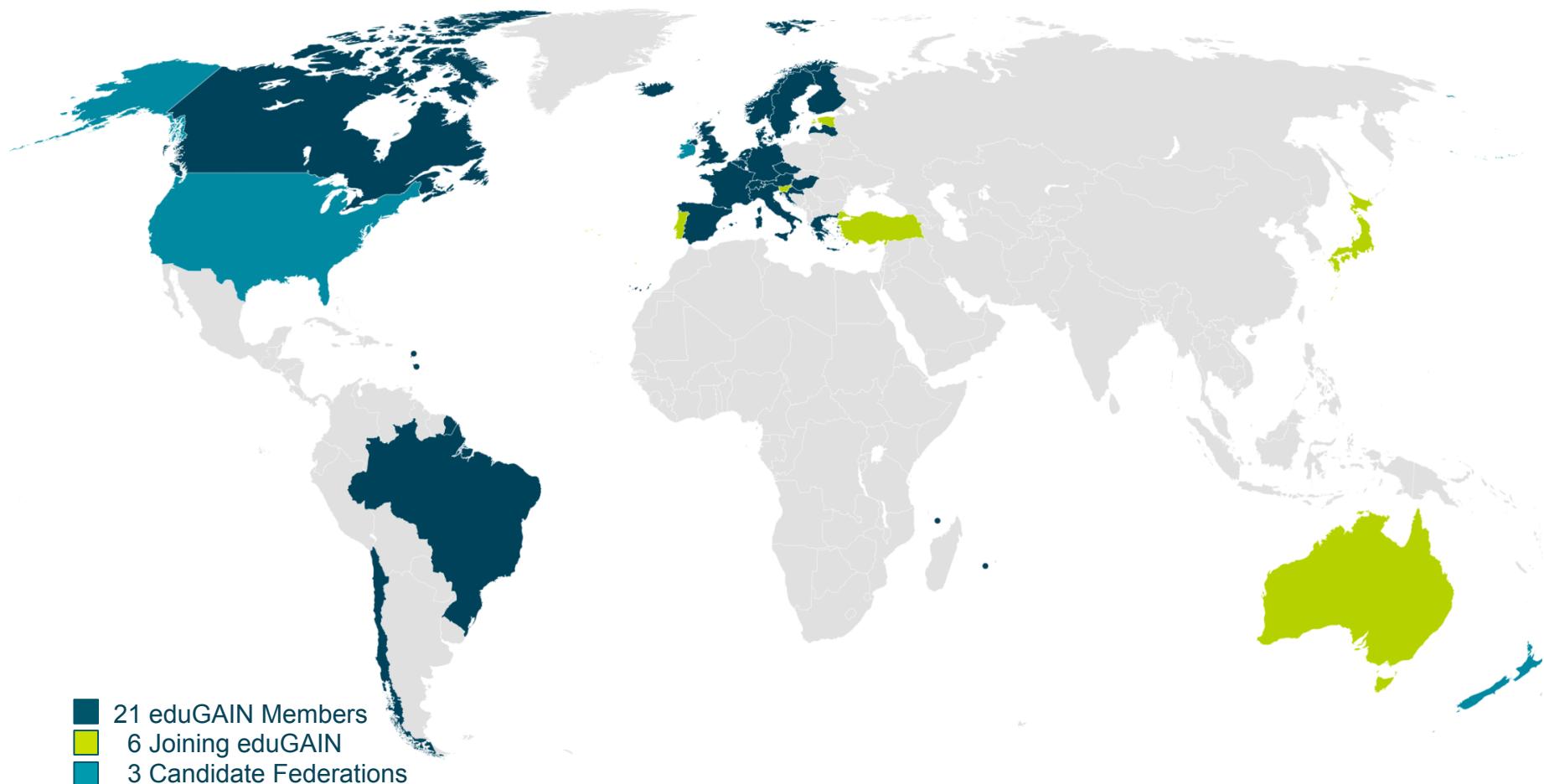
Identity Federations in pilot

AR	MATE	PL	PIONIERid
CN	CARSI	RO	RoEduNet Federation
COL	COLFIRE	RS	iAMRES
IN	INFED	RU	ΦΕΔΥρις AAI
LT	LEFT	TR	YETKIM
PE	INCA	ZA	SAIF
MA	edulDM	OM	Oman Knowledge ID Federation

This map is intended to provide a high-level overview of countries with identity federations.

Last update: 14 October 2013

eduGAIN Interfederation Participants



edugain.org

Thanks!

info@cilogon.org

jbasney@ncsa.illinois.edu

www.cilogon.org/faq

dx.doi.org/10.1145/2484762.2484791