CILogon
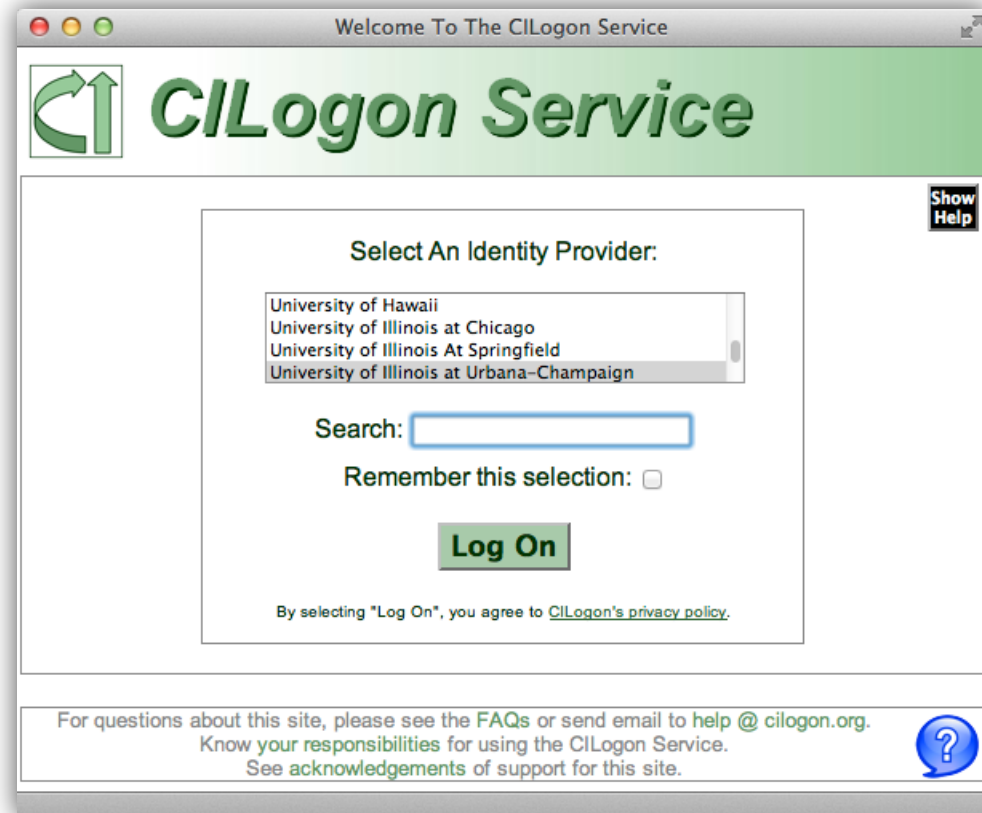
Case Studies in Identity Management for
Scientific Collaboration
2014 Technology Exchange
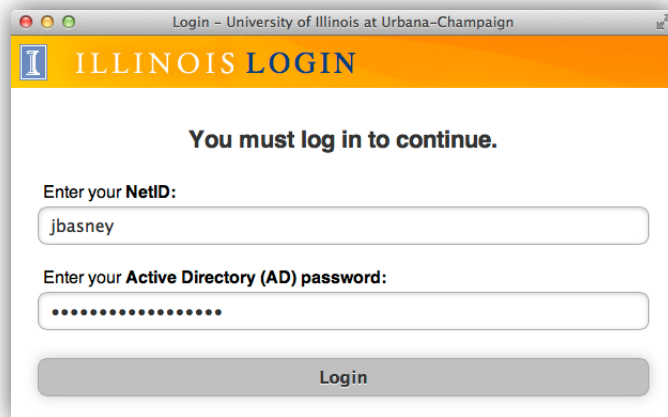
Jim Basney
jbasney@ncsa.illinois.edu

CILogon – https://cilogon.org/

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

CILogon

www.cilogon.org

Federated Authentication

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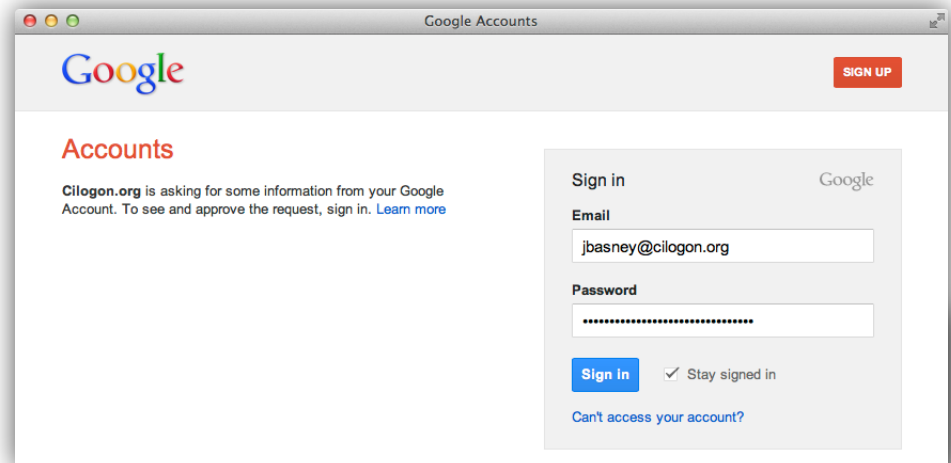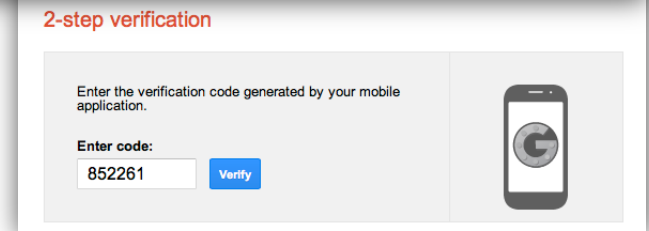
Bridging InCommon and IGTF

- Translating mechanism and policy across higher education and grid trust federations
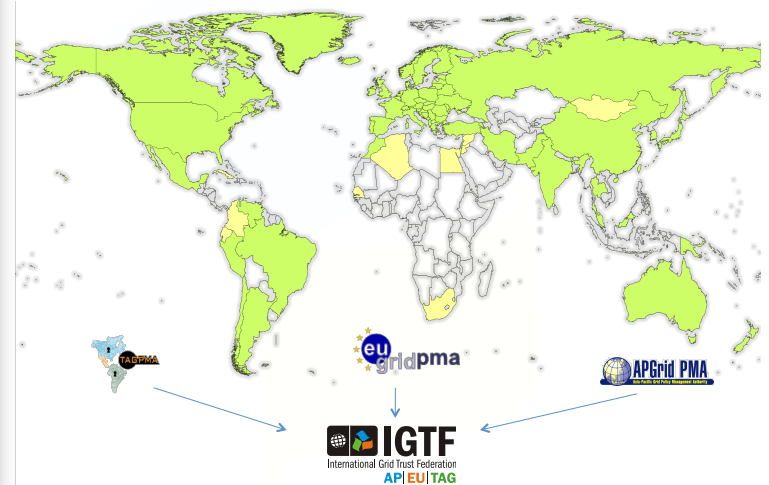
Multiple Levels of Assurance

- 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

Multiple Interfaces

- SAML/OpenID Web Browser SSO
  - PKCS12 certificate download
  - Certificate issuance via OAuth
  - Coming Soon:
    - OpenID Connect token issuance
- SAML ECP
  - Command-line certificate issuance

ligo-proxy-init using SAML 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

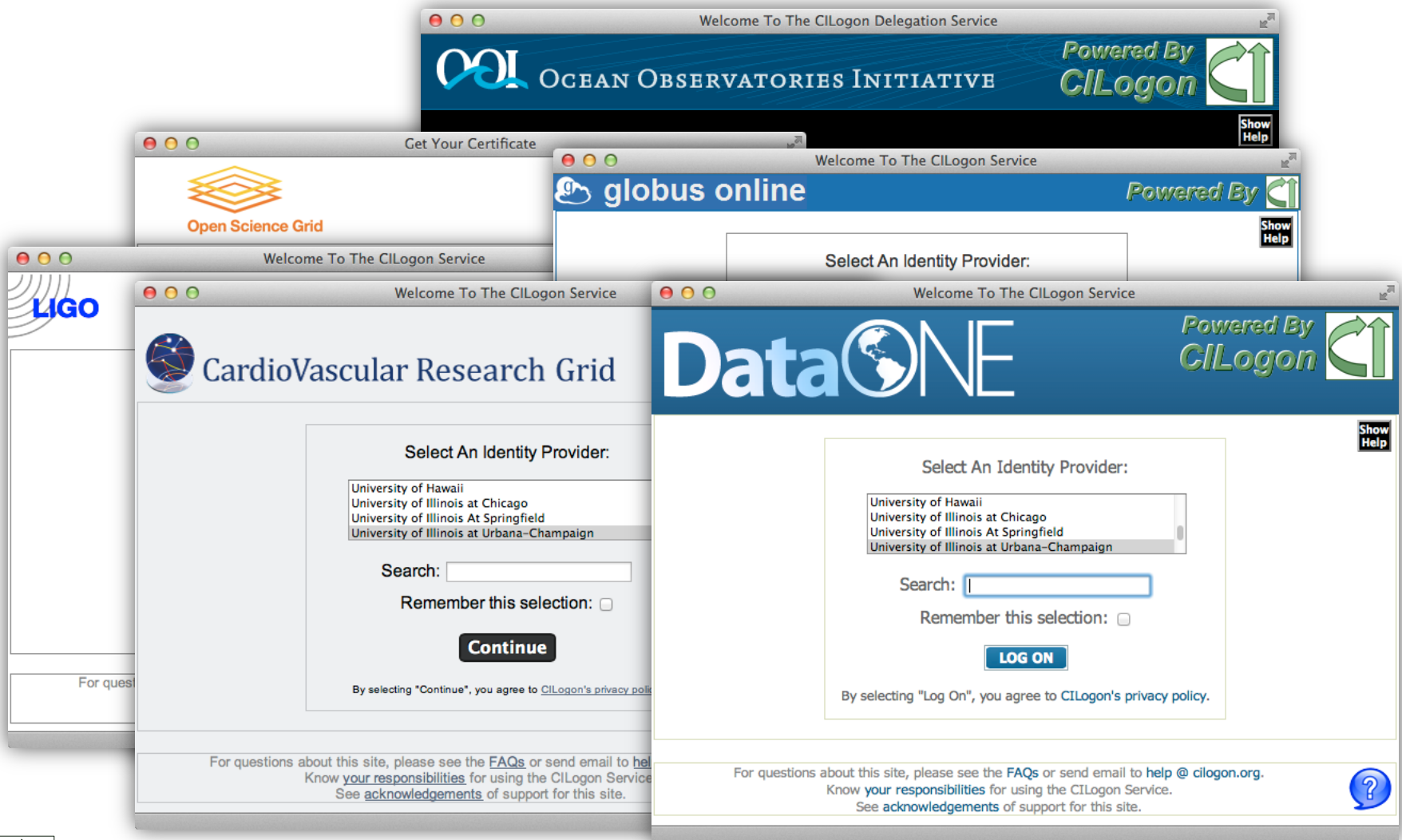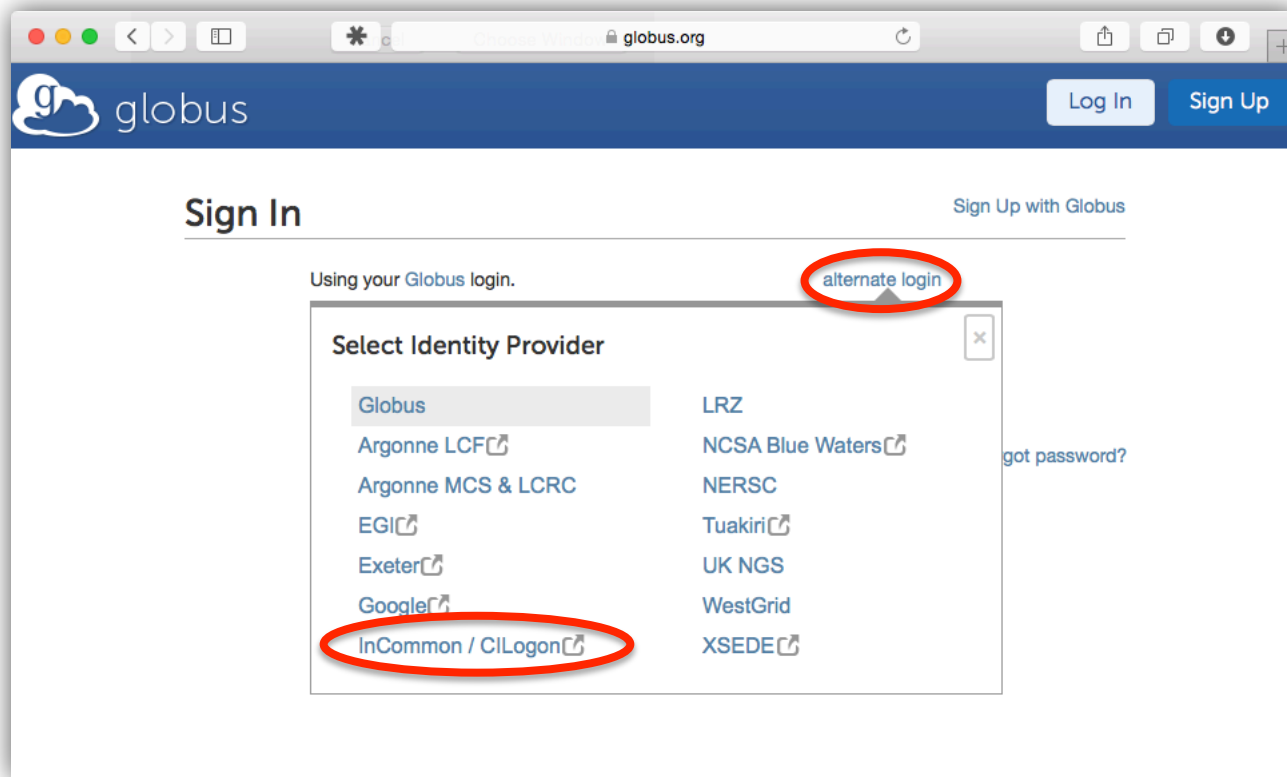type   : end entity credential

strength : 2048 bits

path   : /tmp/x509up_u1000

timeleft : 71:59:52 (3.0 days)

Integrated with CyberInfrastructure

Integrated with Globus
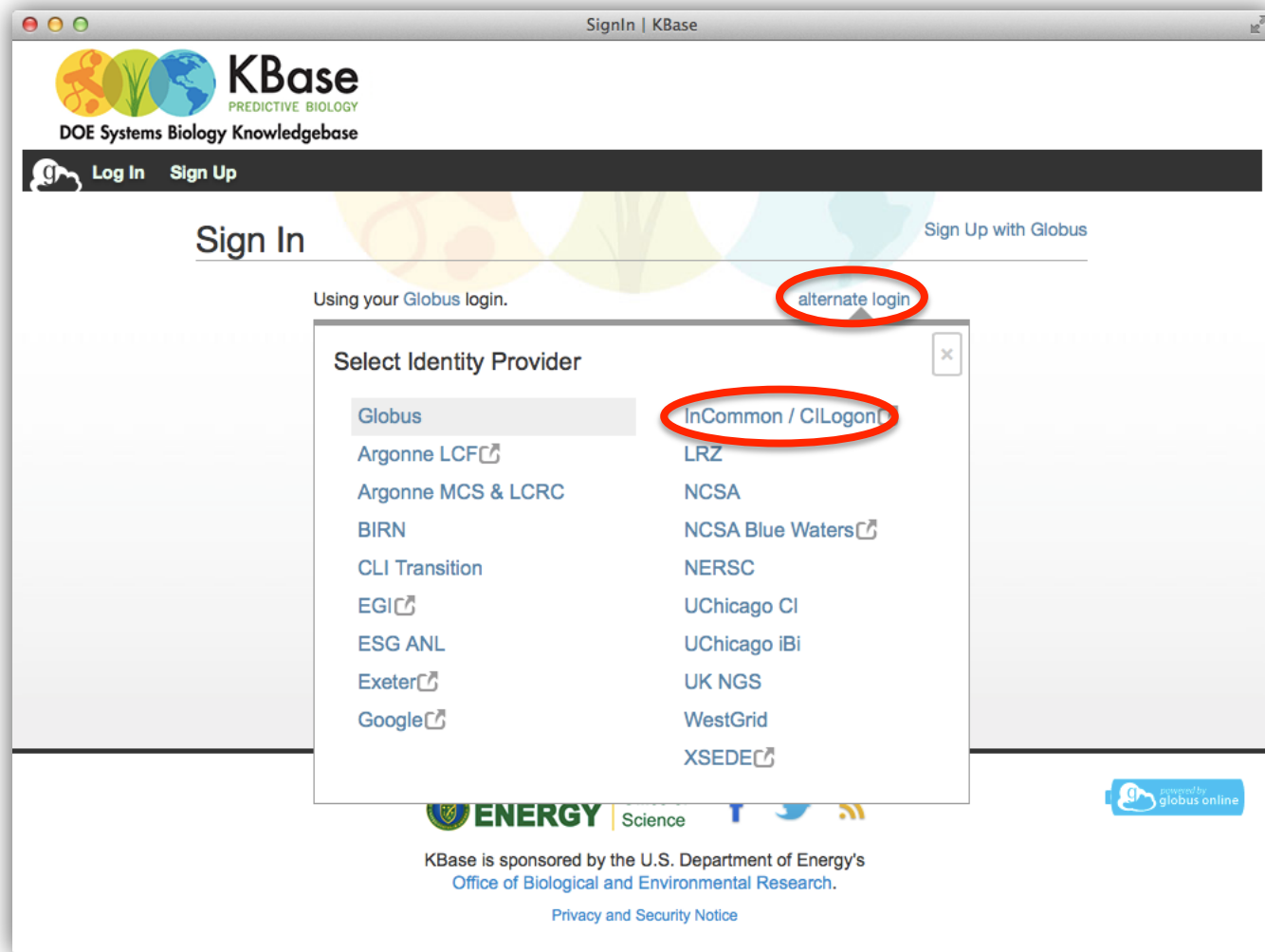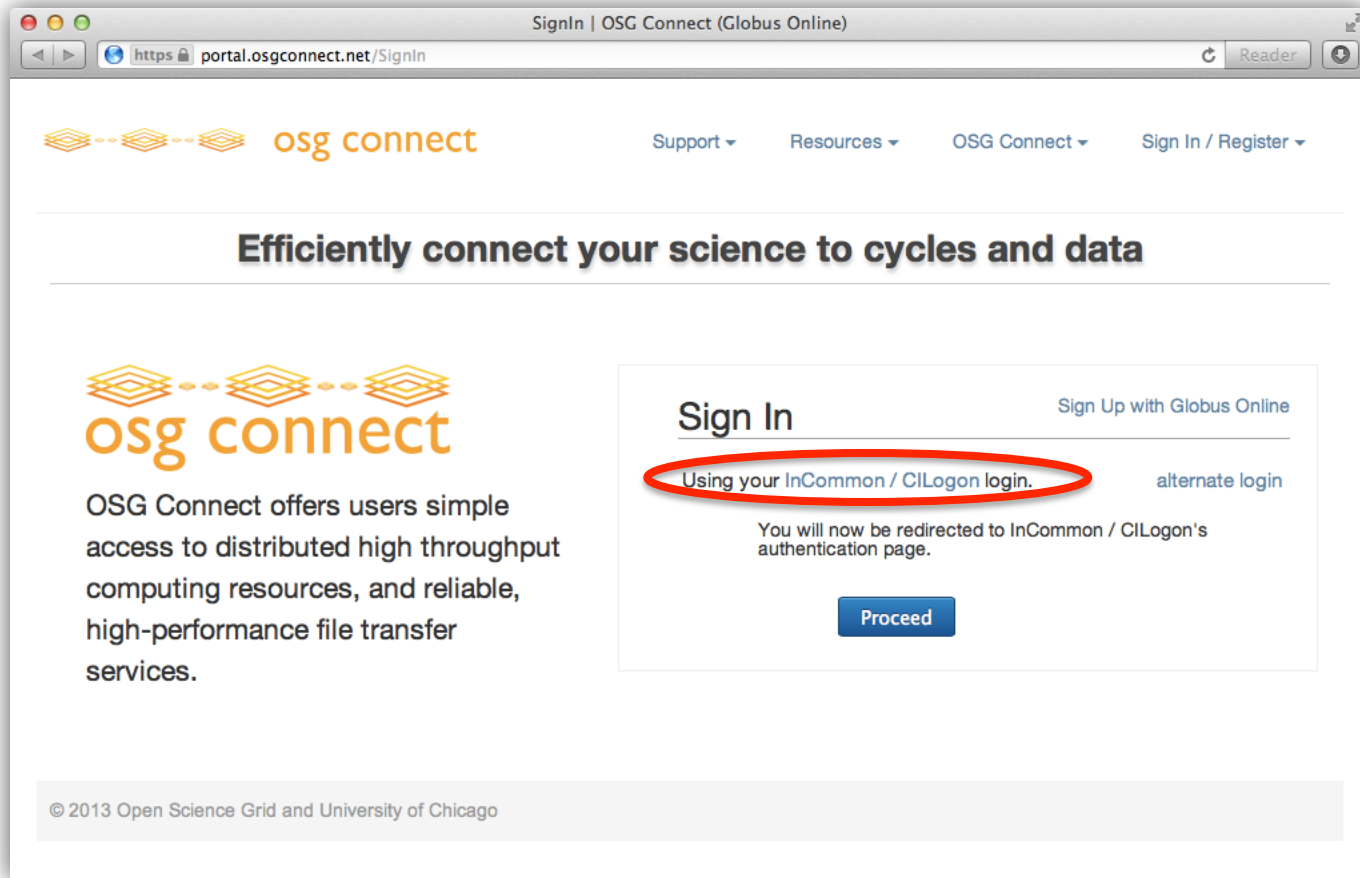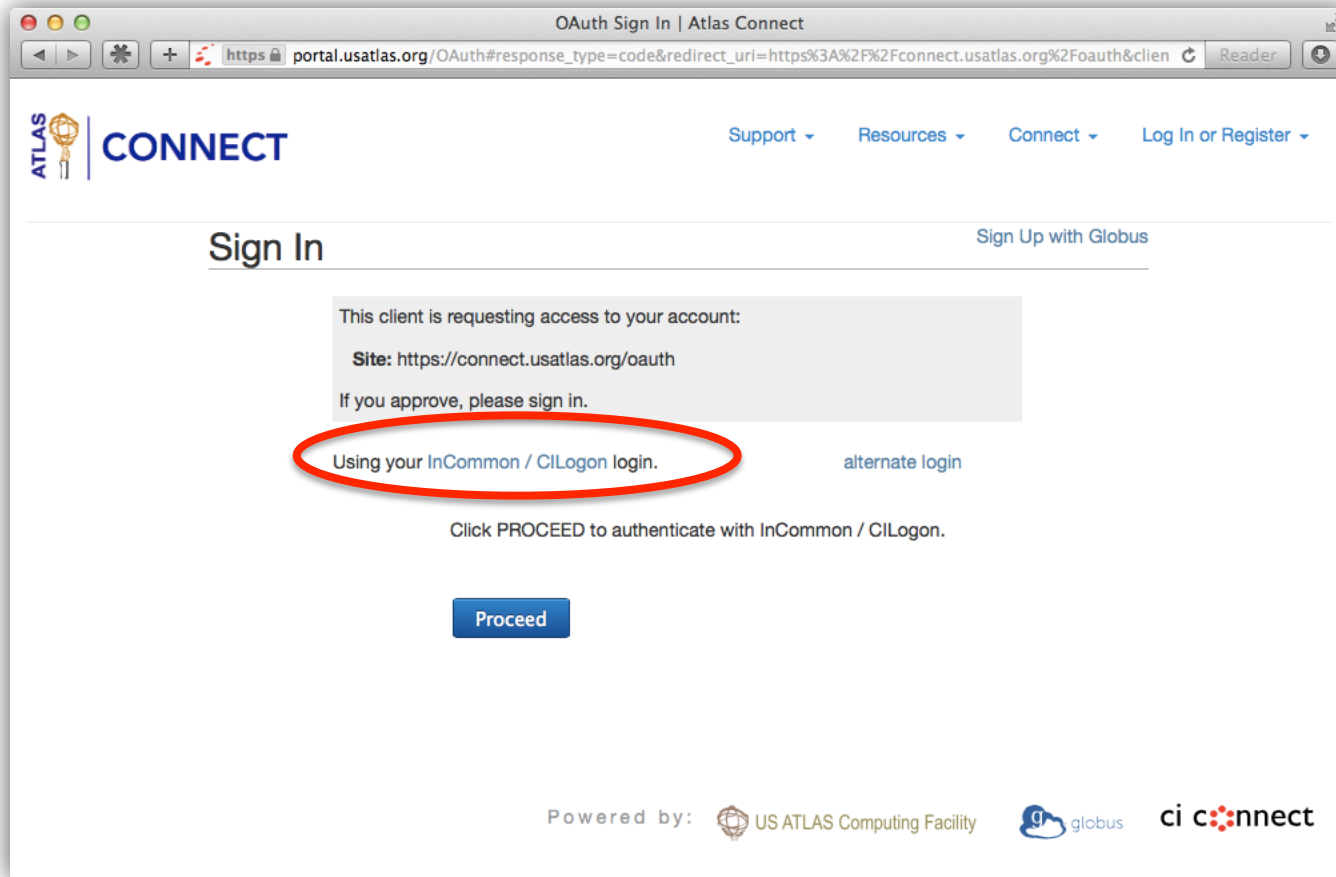
Used by DOE KBase

Used by OSG Connect

Used by ATLAS Connect

Integrated with Campus

CILogon

www.cilogon.org

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.)
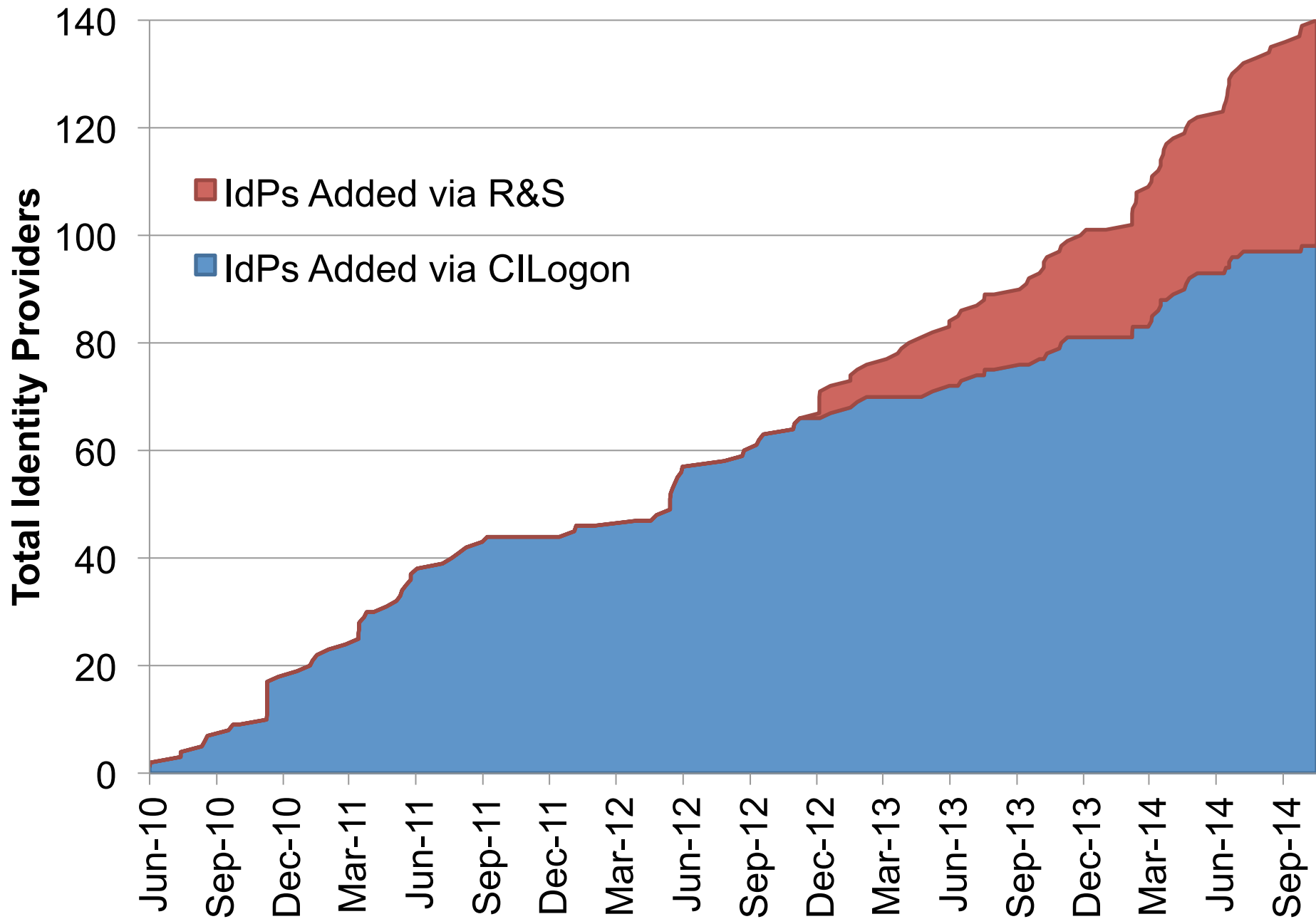- Including backup CILogon instance at NICS

CILogon   *www.cilogon.org*

InCommon R&S SP

Total Identity Providers

IdPs Added via R&S

IdPs Added via CILogon

CILogon

www.cilogon.org

CILogon — www.cilogon.org

Replicating CILogon Internationally

CILogon
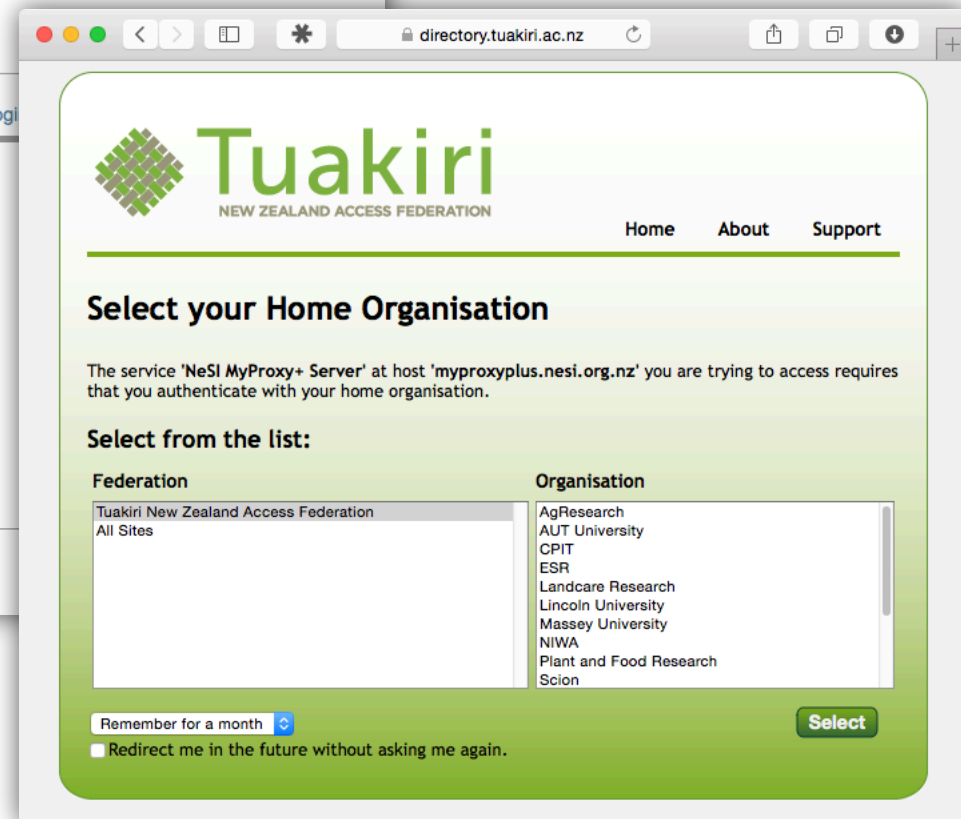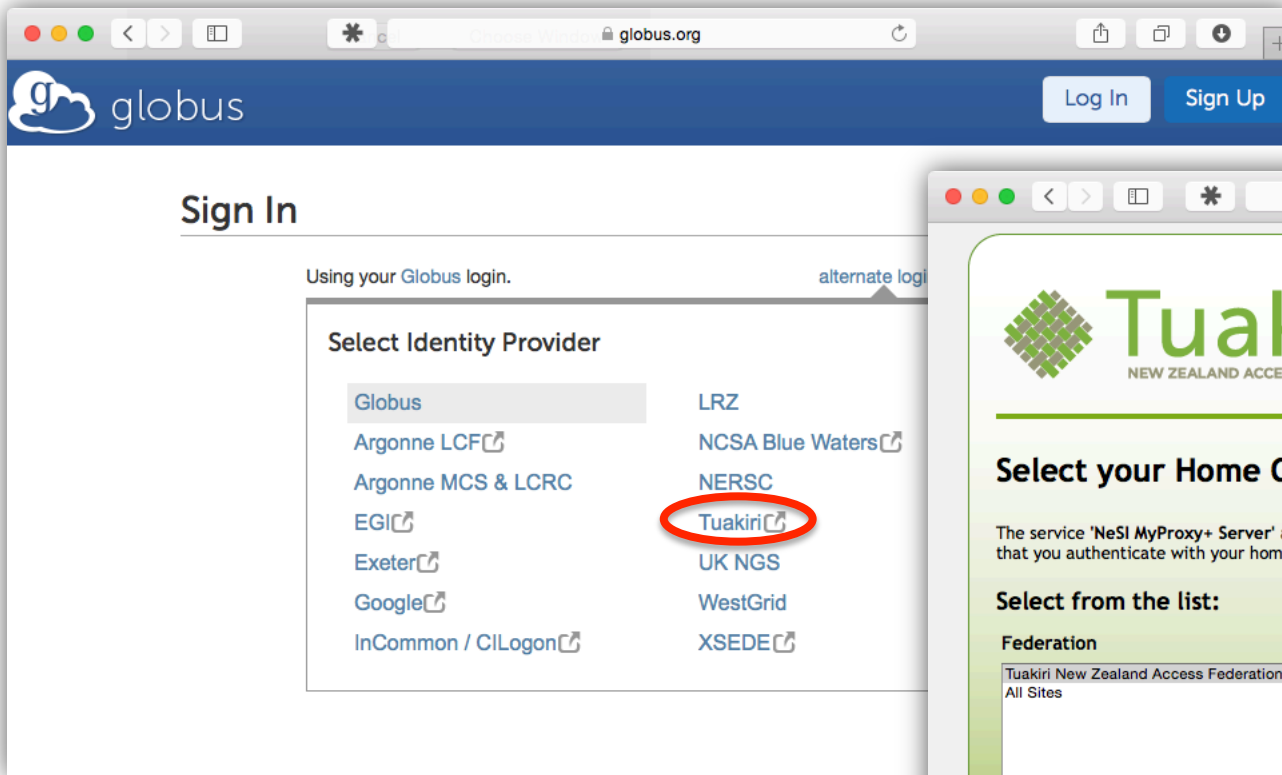
www.cilogon.org

Thanks!

jbasney@ncsa.illinois.edu

www.cilogon.org