CILogon and InCommon: Technical Update

Jim Basney <jbasney@ncsa.illinois.edu>

This material is based upon work supported by the National Science Foundation under grant numbers 0943633 and 1053575 and by the Department of Energy under award number DE-SC0008597. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the United States Government or any agency thereof.
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.
Integrated with Globus
Integrated with XSEDE

www.cilogon.org/xsede
Integrated with Campus
Bridging InCommon and IGTF

• Translating mechanism and policy across higher education and grid trust federations
100+ InCommon Research and Scholarship Identity Providers

Arizona State University  
Boston University  
Brookhaven National Laboratory  
Brown University  
California Institute of Technology  
California State Polytechnic University, Pomona  
California State University, Fresno  
California State University, Fullerton  
Carleton College  
Carnegie Mellon University  
Clemson University  
Colorado School of Mines  
Colorado State University  
Columbia University  
Cornell University  
Florida International University  
George Mason University  
Georgia Institute of Technology  
GPN (Great Plains Network)  
Indiana University  
Indiana University of Pennsylvania  
Internet2  
Iowa State University  
Johns Hopkins University  
Kansas State University  
Lawrence Berkeley National Laboratory  
Lehigh University  
LIGO Scientific Collaboration  
Louisiana State University  
LTERN (Long Term Ecological Research Network)  
Massachusetts Institute of Technology  
Montana State University - Bozeman  
New York University  
North Carolina State University  
Northwestern University  
Ohio State University  
Ohio Technology Consortium (OH-TECH)  
Oregon State University  
Pomona College  
Purdue University Main Campus  
Reed College  
Rice University  
Rockefeller University  
Rutgers, The State University of New Jersey  
San Diego State University  
Southern Illinois University  
Southern Methodist University  
Steinmetz Institute of Technology  
Stony Brook University  
Syracuse University  
Texas A & M University  
The University of Arizona  
Towson University  
Tufts University  
University of Alabama at Birmingham  
University of Alaska Statewide System  
University of Arkansas  
University of California, Davis  
University of California, San Francisco  
University of California, Santa Cruz  
University of California-Irvine  
University of California-Los Angeles  
University of Central Florida  
University of Chicago  
University of Cincinnati Main Campus  
University of Colorado at Boulder  
University of Dayton  
University of Florida  
University of Hawaii  
University of Houston Libraries  
University of Illinois at Chicago  
University of Illinois at Springfield  
University of Illinois at Urbana-Champaign  
University of Iowa  
University of Kansas  
University of Maryland Baltimore  
University of Maryland Baltimore County  
University of Maryland College Park  
University of Massachusetts Amherst  
University of Michigan  
University of Minnesota  
University of Missouri System  
University of Nebraska-Lincoln  
University of North Carolina at Chapel Hill  
University of Oregon  
University of Pennsylvania  
University of Pittsburgh  
University of South Florida  
University of Southern California  
University of Utah  
University of Vermont  
University of Virginia  
University of Washington  
University of Wisconsin-Madison  
University of Wisconsin-Milwaukee  
Utah State University  
Utah Valley University  
Vanderbilt University  
Virginia Polytechnic Institute and State University  
Weill Cornell Medical College  
West Virginia University  
Western Michigan University  
Wheaton College (MA)  
Yale University

id.incommon.org/category/research-and-scholarship
International Federation: eduGAIN
International R&S: REFEDS

REFEDS Entity Category

Research and Scholarship

This version 1.2 replaces 1.1
published 28th November 2014.

Overview

Research and Education Federations are invited to use the REFEDS Research and Scholarship Entity Category with their members to support the release of attributes to Service Providers meeting the requirements described below. An implementation guide for federations will be made available shortly.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119]. This definition is written in compliance with the Entity Category SAML Entity Metadata Attribute Types specification [EntityCatTypes].

An FAQ for the Entity Category has been made available to help deployments [R&SFAQ].

1. Definition

Candidates for the Research and Scholarship (R&S) Category are Service Providers that are operated for the purpose of supporting research and scholarship interaction, collaboration or management, at least in part.
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
InCommon IGTF Server CA

IGTF Server Certificates

At the request of the community, InCommon is pleased to now offer IGTF server certificates for use by InCommon Certificate Service Subscribers who are also active with the IGTF grid community.

Note: Unless you are running a server as part of the IGTF grid (see the IGTF website) these certificates are NOT what you need. Request a normal InCommon server certificate instead.

IGTF Certificate Bundles
- IGTF CA Bundle
- IGTF CA Bundle Reversed

IGTF Certificate Documents
- IGTF Certificate Practices Statement (CPS) (PDF)
- SSL Subscriber Agreement [Word]
- SSL Relying Party Agreement [PDF]
- InCommon Certificate Service Policy Authority [PDF]
- InCommon IGTF SSL CA and Certificate Profiles [Word]

CRL URL: http://crl.incommon-igtf.org/InCommonIGTFServerCA.crl

Official contact email address: admin@incommon.org

Other contract information (including postal address):
https://www.incommon.org/contacts
Security Updates

SHA-1 → SHA-2
SSL → TLS
OAuth 1.0 → OAuth 2.0
OpenID 2.0 → OpenID Connect
Fifteen years of securing cyberinfrastructure

MyProxy is part of the Globus Toolkit and is included in Fedora and Debian Linux operating system package repositories. MyProxy is used by many grid projects including CiLogon, OSG, and XSEDE.

MyProxy Community Collaborators and Contributors:
- Jarek Gawor (ANL)
- Monte Goode (LBNL)
- Marty Humphrey (UVa)
- Daniel Kouril (CESNET, CZ)
- Alexandre Lossent (CERN)
- Neill Miller (ANL)
- Miroslav Ruda (CESNET/EGEE)
- Steve Traylen (CERN/EGEE)
- Benjamin Temko (IU)
- Steven Tuecke (ANL)
- Naotaka Yamamoto (AIST)

MyProxy was funded primarily by:
- National Science Foundation
  - via
  - NLANR
  - NSF Middleware Initiative
  - NCSA Core Award
  - TeraGrid
  - STCI
Thanks!

jbasney@ncsa.illinois.edu
@JimBasney