Secure Access to Research Infrastructure via the InCommon Federation

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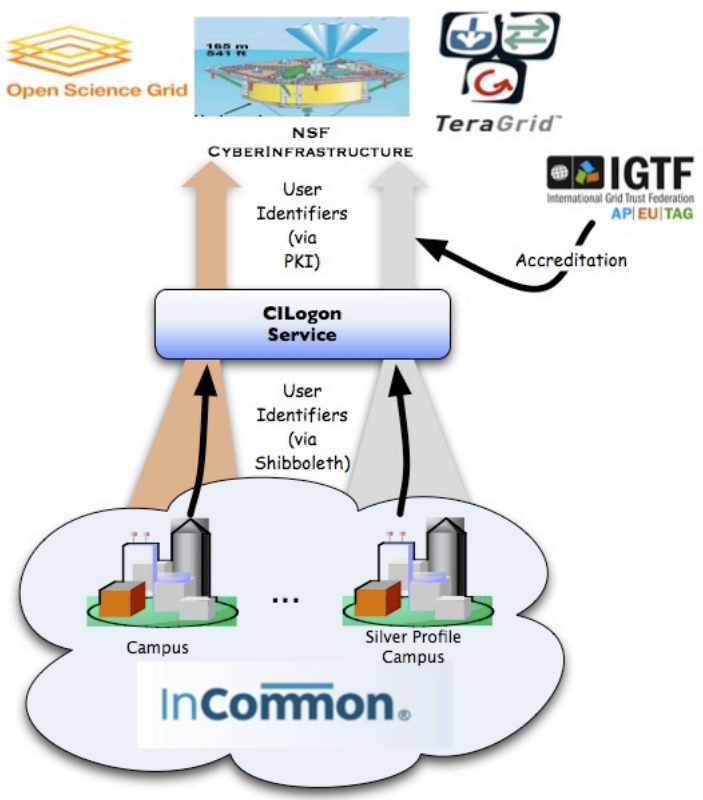
CILogon Project Goal

- Enable campus logon to CyberInfrastructure (CI)
  - Use researchers' existing security credentials at their home institution
  - Ease credential management for researchers and CI providers



InCommon Federation

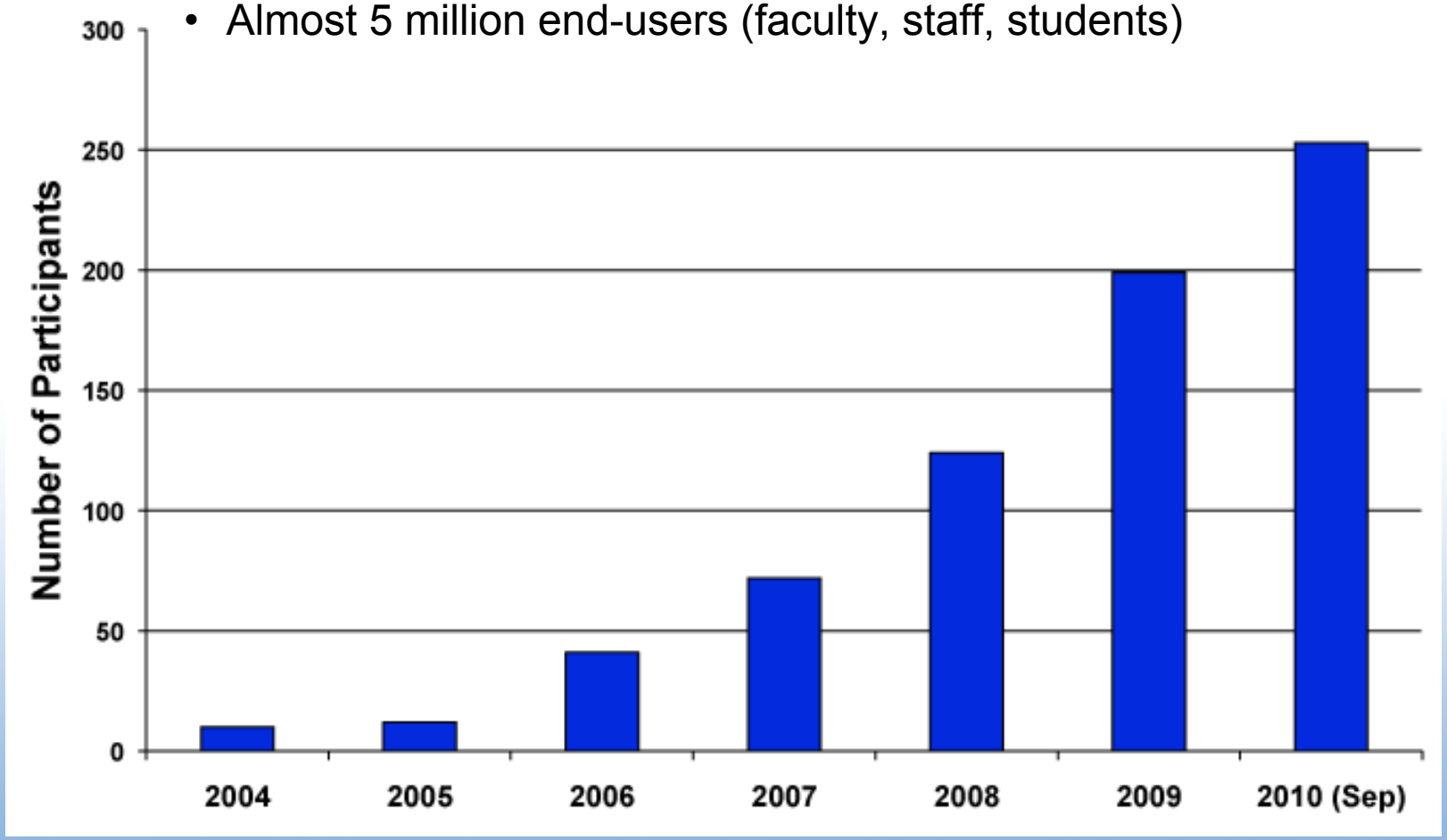
InCommon is the federation for U.S. research and education, providing higher education and their commercial and non-profit partners with a common trust framework for access to online resources.

About InCommon

- Through InCommon, campuses leverage their identity databases to allow for the use of one set of credentials to access multiple resources.
- Online service providers no longer need to maintain user accounts.
- Identity providers manage the levels of their users' privacy and information exchange.
- InCommon uses SAML-based authentication and authorization systems (such as Shibboleth®) to enable scalable, trusted collaborations among its community of participants.

InCommon Participants Year-by-Year

- 253 InCommon Participants (Sept. 2010)
- Almost 5 million end-users (faculty, staff, students)



InCommon®

Join InCommon
Participants
IAM Online
Education and Training
Affiliates
Certificate Service
Policies and Practices
Technical Information
Software Guide
Metadata and WAYF
Site Administrator Info
Frequently Asked Questions
Benefits
Site Administrator Login
Collaboration Wiki
Glossary
Contact Us
About

Current InCommon Participants

A community of more than **4.5 million end users**.

(Source: Higher Education Students, Faculty, and Staff, Integrated Postsecondary Education Data System. Calculated April 2010.)

Higher Education Participants (180)	Government and Nonprofit Laboratories, Research Centers, and Agencies (7)	Sponsored Partners (66)
American University	Argonne National Laboratory	Absolute Software, Inc.
Arizona State University	Energy Sciences Network (ESNet)	ALEKS Corporation
Augsburg College	Lawrence Berkeley National Laboratory	Alexander Street Press
Baylor University	Moss Landing Marine Laboratories	Apple - iTunes U
Brown University	National Institutes of Health	Atlas Systems, Inc.
California Institute of Technology	National Science Foundation	BioOne, Inc.
California Maritime Academy	TeraGrid	Blatant Media Corporation
California Polytechnic State University, San Luis Obispo		Burton Group
California State Polytechnic University, Pomona		Cambridge University Press
California State University, Bakersfield		Cayuse, Inc.
California State University, Channel Islands		Cengage Learning, Inc.
		Colorado Alliance of Research Libraries
		CSO Research, Inc.
		Davie County Schools

Federated Resources

Resources available via InCommon are many and diverse

Business Functions

- Benefits
- Asset management
- Talent management
- Visas & INS compliance
- Mobile alerts
- Travel management
- Energy management
- Surveys and market analysis

Learning and Research

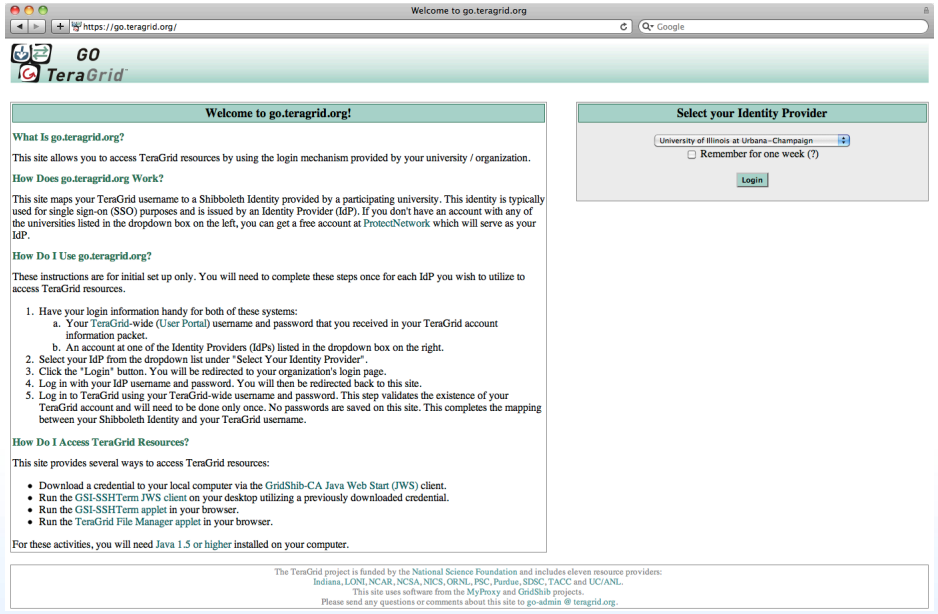
- Journals
- Databases and analytical tools
- Multi-media access
- Homework labs
- Quiz tools
- Plagiarism detection
- Software downloading
- Alcohol awareness education
- Student travel discounts
- Transportation and ride-share services.

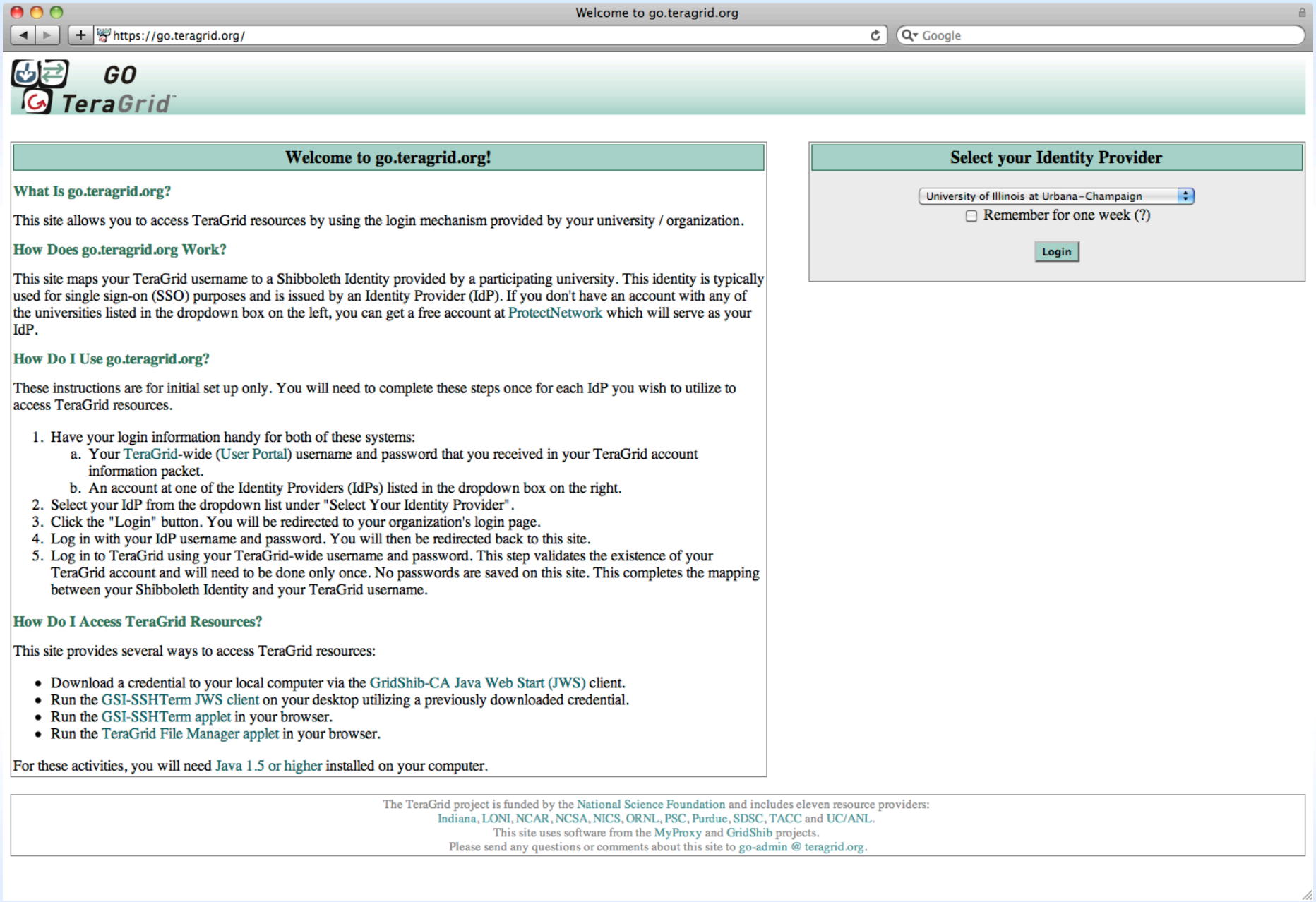
Strong support from key higher education partners, such as: Microsoft, Apple, National Student Clearinghouse, NSF, NIH, Gov-affiliated Labs

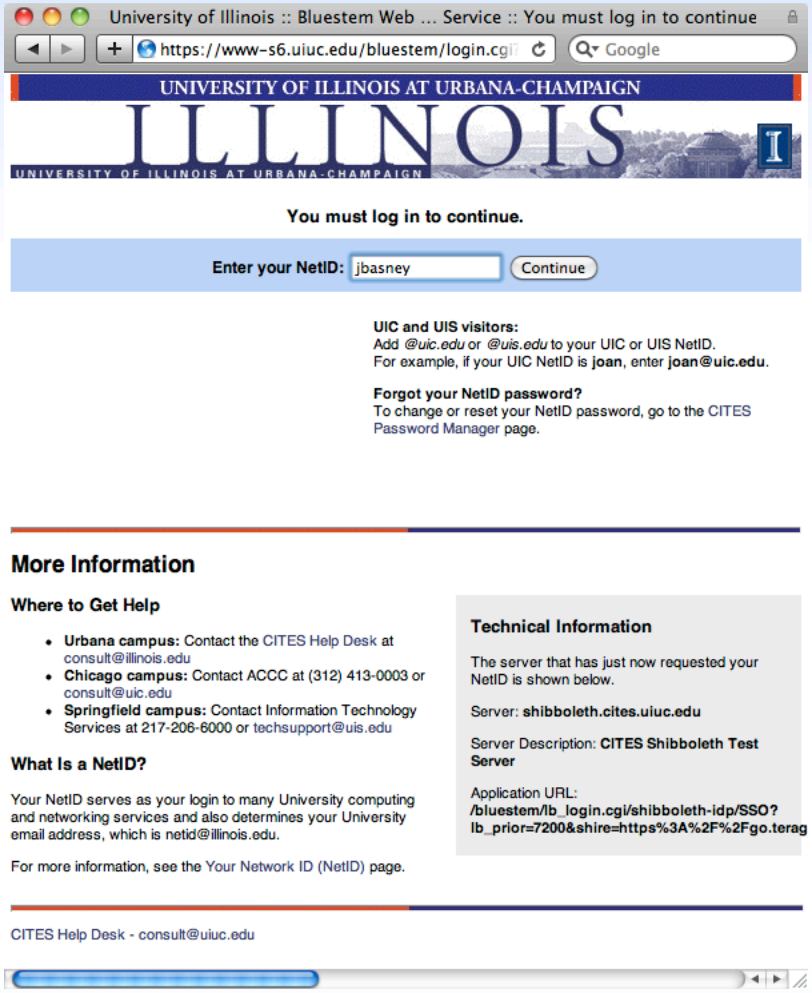
www.teragrid.org

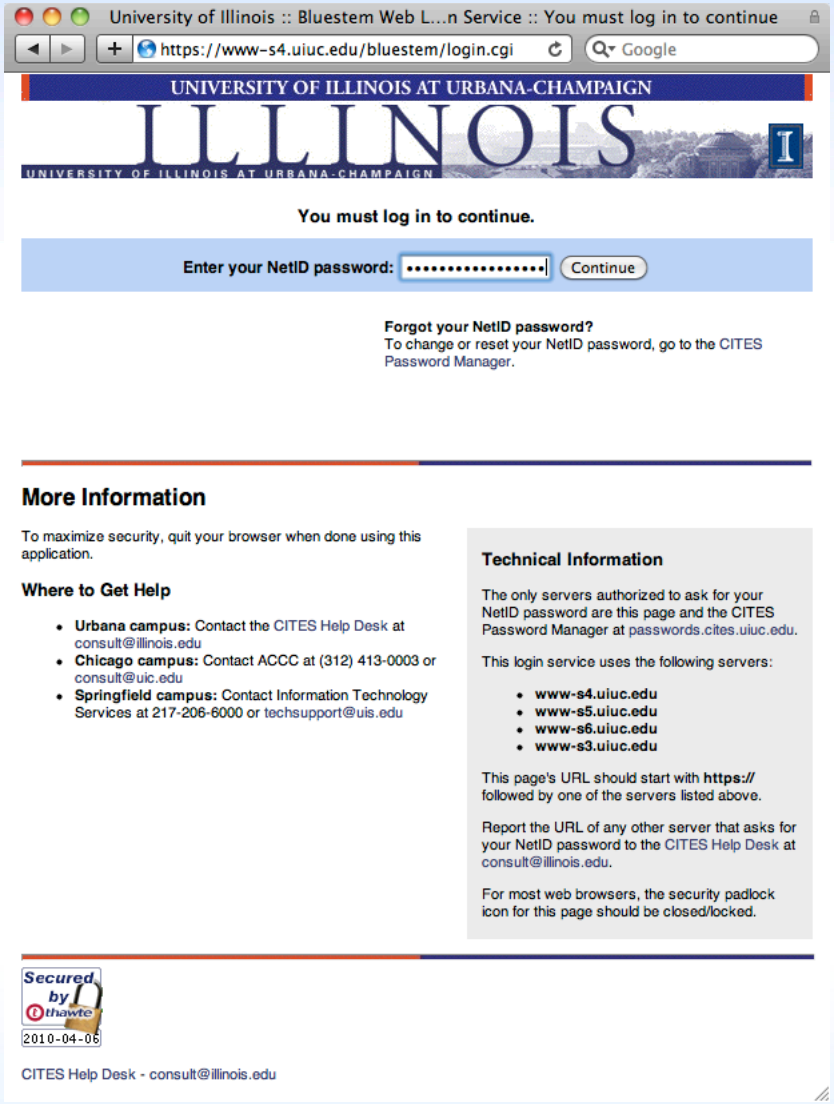
https://go.teragrid.org

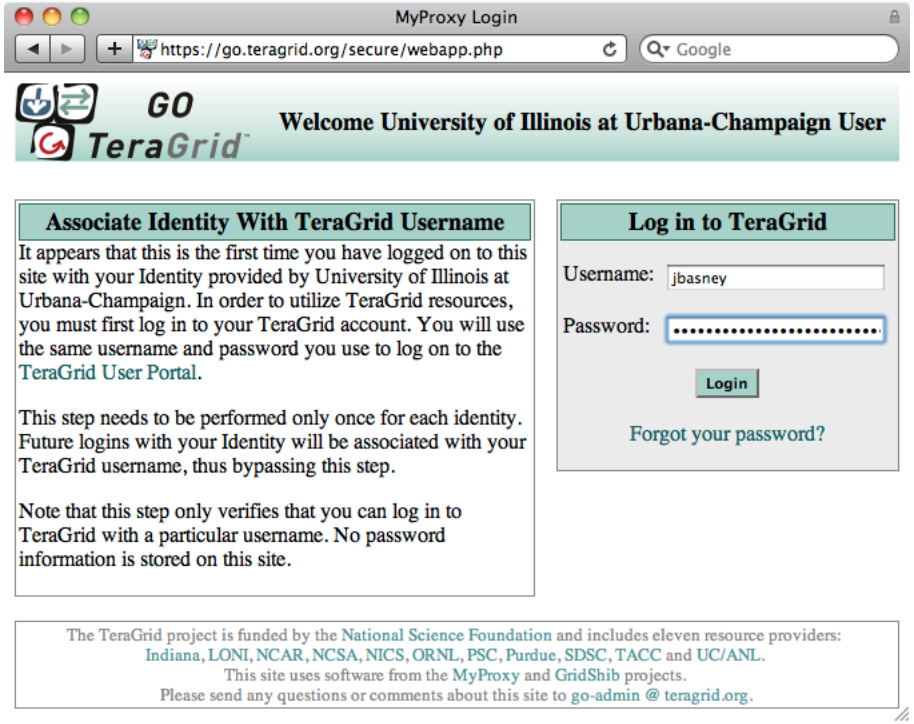
- Campus login to TeraGrid
- 35 campuses so far (including all CIC schools)
- Available since Sep 2009
- 1000+ logins by 65+ users (so far)
- Integration with portal.teragrid.org underway
- IDtrust 2010 paper: "Federated Login to TeraGrid" (http://middleware.internet2.edu/idtrust/2010/)

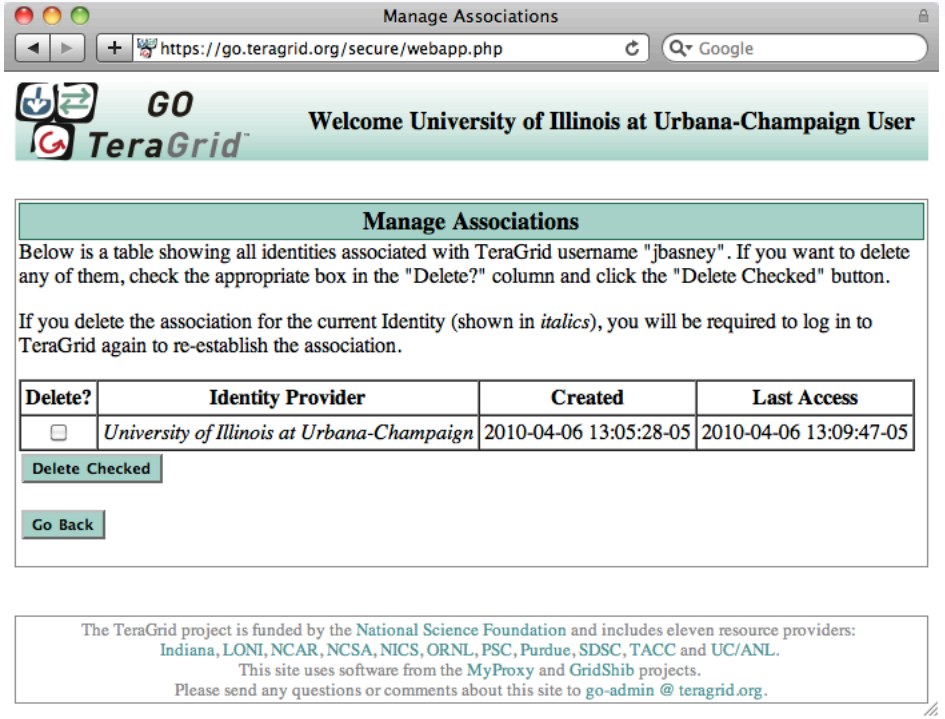



Welcome to go.teragrid.org
https://go.teragrid.org/
Google
GO
TeraGrid
Welcome to go.teragrid.org!
What Is go.teragrid.org?
This site allows you to access TeraGrid resources by using the login mechanism provided by your university / organization.
How Does go.teragrid.org Work?
This site maps your TeraGrid username to a Shibboleth Identity provided by a participating university. This identity is typically used for single sign-on (SSO) purposes and is issued by an Identity Provider (IdP). If you don't have an account with any of the universities listed in the dropdown box on the left, you can get a free account at ProtectNetwork which will serve as your IdP.
How Do I Use go.teragrid.org?
These instructions are for initial set up only. You will need to complete these steps once for each IdP you wish to utilize to access TeraGrid resources.
1. Have your login information handy for both of these systems:
a. Your TeraGrid-wide (User Portal) username and password that you received in your TeraGrid account information packet.
b. An account at one of the Identity Providers (IdPs) listed in the dropdown box on the right.
2. Select your IdP from the dropdown list under "Select Your Identity Provider".
3. Click the "Login" button. You will be redirected to your organization's login page.
4. Log in with your IdP username and password. You will then be redirected back to this site.
5. Log in to TeraGrid using your TeraGrid-wide username and password. This step validates the existence of your TeraGrid account and will need to be done only once. No passwords are saved on this site. This completes the mapping between your Shibboleth Identity and your TeraGrid username.
How Do I Access TeraGrid Resources?
This site provides several ways to access TeraGrid resources:
• Download a credential to your local computer via the GridShib-CA Java Web Start (JWS) client.
• Run the GSI-SSHTerm JWS client on your desktop utilizing a previously downloaded credential.
• Run the GSI-SSHTerm applet in your browser.
• Run the TeraGrid File Manager applet in your browser.
For these activities, you will need Java 1.5 or higher installed on your computer.
Select your Identity Provider
University of Illinois at Urbana-Champaign
Remember for one week (?)
Login
The TeraGrid project is funded by the National Science Foundation and includes eleven resource providers:
Indiana, LONI, NCAR, NCSA, NICS, ORNL, PSC, Purdue, SDSC, TACC and UC/ANL.
This site uses software from the MyProxy and GridShib projects.
Please send any questions or comments about this site to go-admin @ teragrid.org.

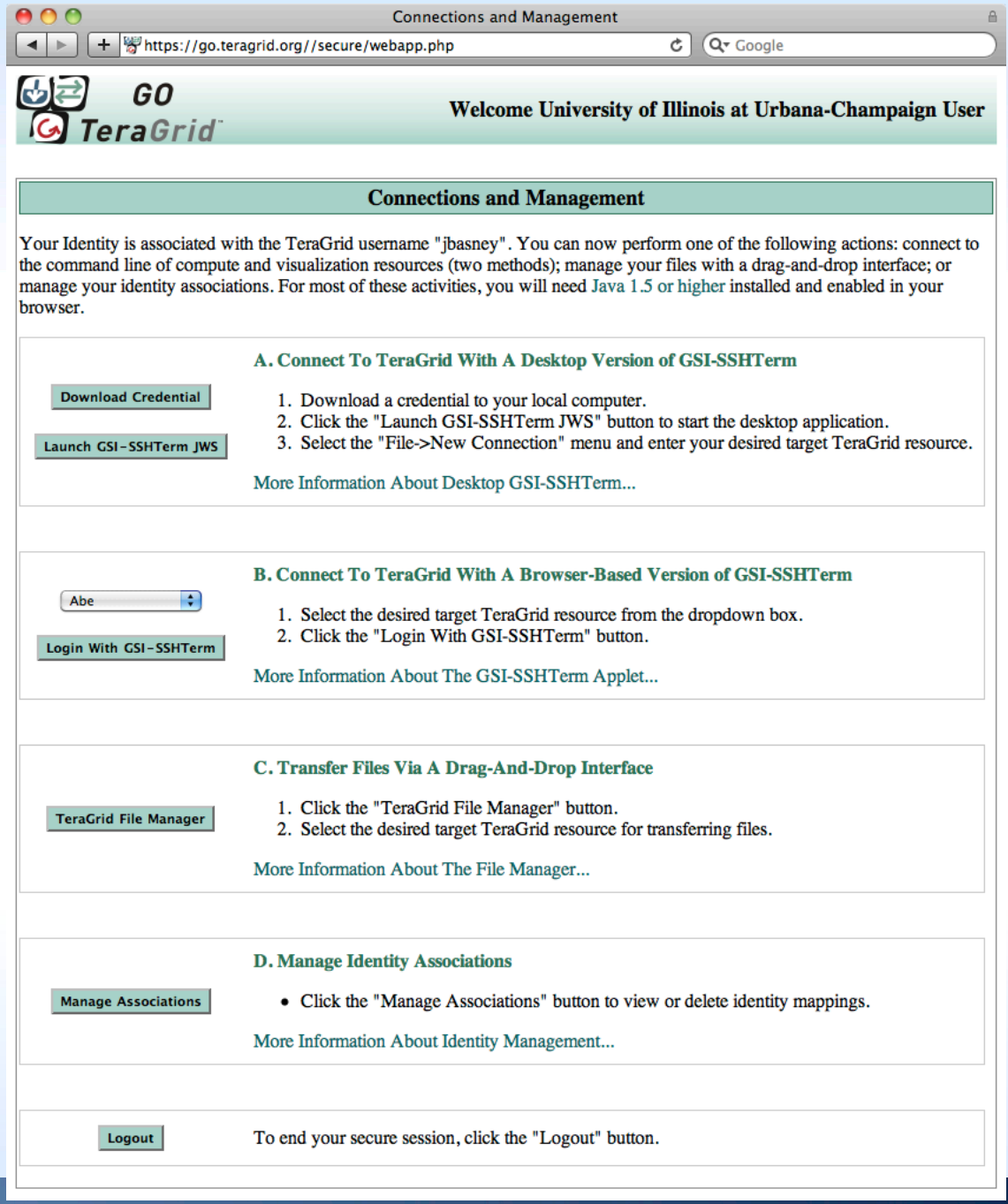

University of Illinois :: Bluestem Web ... Service :: You must log in to continue
https://www-s6.uiuc.edu/bluestem/login.cgi
Google
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
You must log in to continue.
Enter your NetID: jbasney
Continue
UIC and UIS visitors:
Add @uic.edu or @uis.edu to your UIC or UIS NetID.
For example, if your UIC NetID is joan, enter joan@uic.edu.
Forgot your NetID password?
To change or reset your NetID password, go to the CITES Password Manager page.
More Information
Where to Get Help
Urbana campus: Contact the CITES Help Desk at consult@illinois.edu
Chicago campus: Contact ACCC at (312) 413-0003 or consult@uic.edu
Springfield campus: Contact Information Technology Services at 217-206-6000 or techsupport@uis.edu
What Is a NetID?
Your NetID serves as your login to many University computing and networking services and also determines your University email address, which is netid@illinois.edu.
For more information, see the Your Network ID (NetID) page.
Technical Information
The server that has just now requested your NetID is shown below.
Server: shibboleth.cites.uiuc.edu
Server Description: CITES Shibboleth Test Server
Application URL:
/bluestem/lb_login.cgi/shibboleth-idp/SSO?lb_prior=7200&shire=https%3A%2F%2Fgo.terag
CITES Help Desk - consult@uiuc.edu

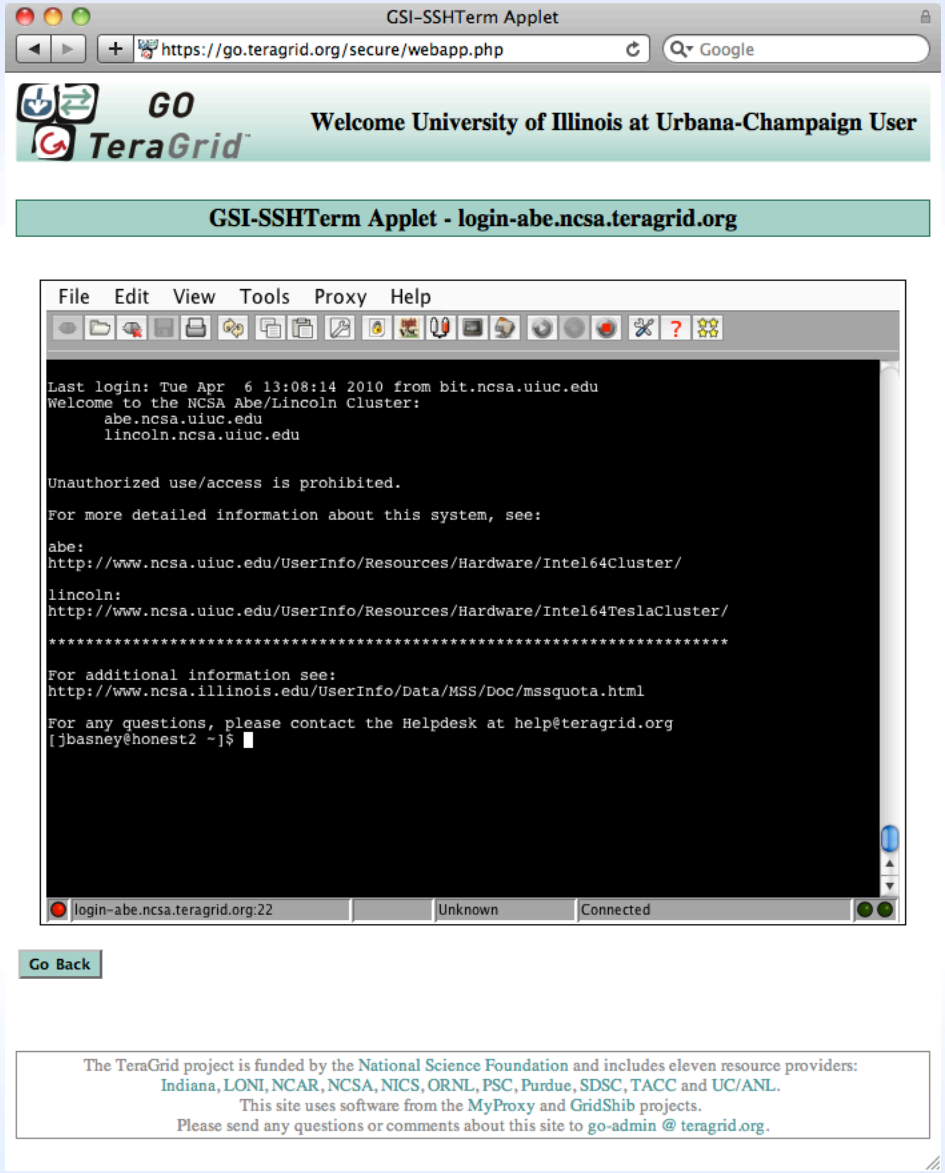

University of Illinois :: Bluestem Web L...n Service :: You must log in to continue
https://www-s4.uiuc.edu/bluestem/login.cgi
Google
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
You must log in to continue.
Enter your NetID password:
Continue
Forgot your NetID password?
To change or reset your NetID password, go to the CITES Password Manager.
More Information
To maximize security, quit your browser when done using this application.
Where to Get Help
Urbana campus: Contact the CITES Help Desk at consult@illinois.edu
Chicago campus: Contact ACCC at (312) 413-0003 or consult@uic.edu
Springfield campus: Contact Information Technology Services at 217-206-6000 or techsupport@uis.edu
Technical Information
The only servers authorized to ask for your NetID password are this page and the CITES Password Manager at passwords.cites.uiuc.edu.
This login service uses the following servers:
www-s4.uiuc.edu
www-s5.uiuc.edu
www-s6.uiuc.edu
www-s3.uiuc.edu
This page's URL should start with https:// followed by one of the servers listed above.
Report the URL of any other server that asks for your NetID password to the CITES Help Desk at consult@illinois.edu.
For most web browsers, the security padlock icon for this page should be closed/locked.
Secured by thawte
2010-04-06
CITES Help Desk - consult@illinois.edu





(one-time only)


Connections and Management
https://go.teragrid.org//secure/webapp.php
Google
GO TeraGrid
Welcome University of Illinois at Urbana-Champaign User
Connections and Management
Your Identity is associated with the TeraGrid username "jbasney". You can now perform one of the following actions: connect to the command line of compute and visualization resources (two methods); manage your files with a drag-and-drop interface; or manage your identity associations. For most of these activities, you will need Java 1.5 or higher installed and enabled in your browser.
Download Credential
Launch GSI-SSHTerm JWS
A. Connect To TeraGrid With A Desktop Version of GSI-SSHTerm
1. Download a credential to your local computer.
2. Click the "Launch GSI-SSHTerm JWS" button to start the desktop application.
3. Select the "File->New Connection" menu and enter your desired target TeraGrid resource.
More Information About Desktop GSI-SSHTerm...
Abe
Login With GSI-SSHTerm
B. Connect To TeraGrid With A Browser-Based Version of GSI-SSHTerm
1. Select the desired target TeraGrid resource from the dropdown box.
2. Click the "Login With GSI-SSHTerm" button.
More Information About The GSI-SSHTerm Applet...
TeraGrid File Manager
C. Transfer Files Via A Drag-And-Drop Interface
1. Click the "TeraGrid File Manager" button.
2. Select the desired target TeraGrid resource for transferring files.
More Information About The File Manager...
Manage Associations
D. Manage Identity Associations
• Click the "Manage Associations" button to view or delete identity mappings.
More Information About Identity Management...
Logout
To end your secure session, click the "Logout" button.


GSI-SSHTerm Applet
https://go.teragrid.org/secure/webapp.php
Google
GO TeraGrid
Welcome University of Illinois at Urbana-Champaign User
GSI-SSHTerm Applet - login-abe.ncsa.teragrid.org
File Edit View Tools Proxy Help
Last login: Tue Apr 6 13:08:14 2010 from bit.ncsa.uiuc.edu
Welcome to the NCSA Abe/Lincoln Cluster:
abe.ncsa.uiuc.edu
lincoln.ncsa.uiuc.edu
Unauthorized use/access is prohibited.
For more detailed information about this system, see:
abe:
http://www.ncsa.uiuc.edu/UserInfo/Resources/Hardware/Intel64Cluster/
lincoln:
http://www.ncsa.uiuc.edu/UserInfo/Resources/Hardware/Intel64TeslaCluster/
For additional information see:
http://www.ncsa.illinois.edu/UserInfo/Data/MSS/Doc/mssquota.html
For any questions, please contact the Helpdesk at help@teragrid.org
[jbasney@honest2 ~]$
login-abe.ncsa.teragrid.org:22
Unknown
Connected
Go Back
The TeraGrid project is funded by the National Science Foundation and includes eleven resource providers:
Indiana, LONI, NCAR, NCSA, NICS, ORNL, PSC, Purdue, SDSC, TACC and UC/ANL.
This site uses software from the MyProxy and GridShib projects.
Please send any questions or comments about this site to go-admin @ teragrid.org.

CILogon: Beyond TeraGrid

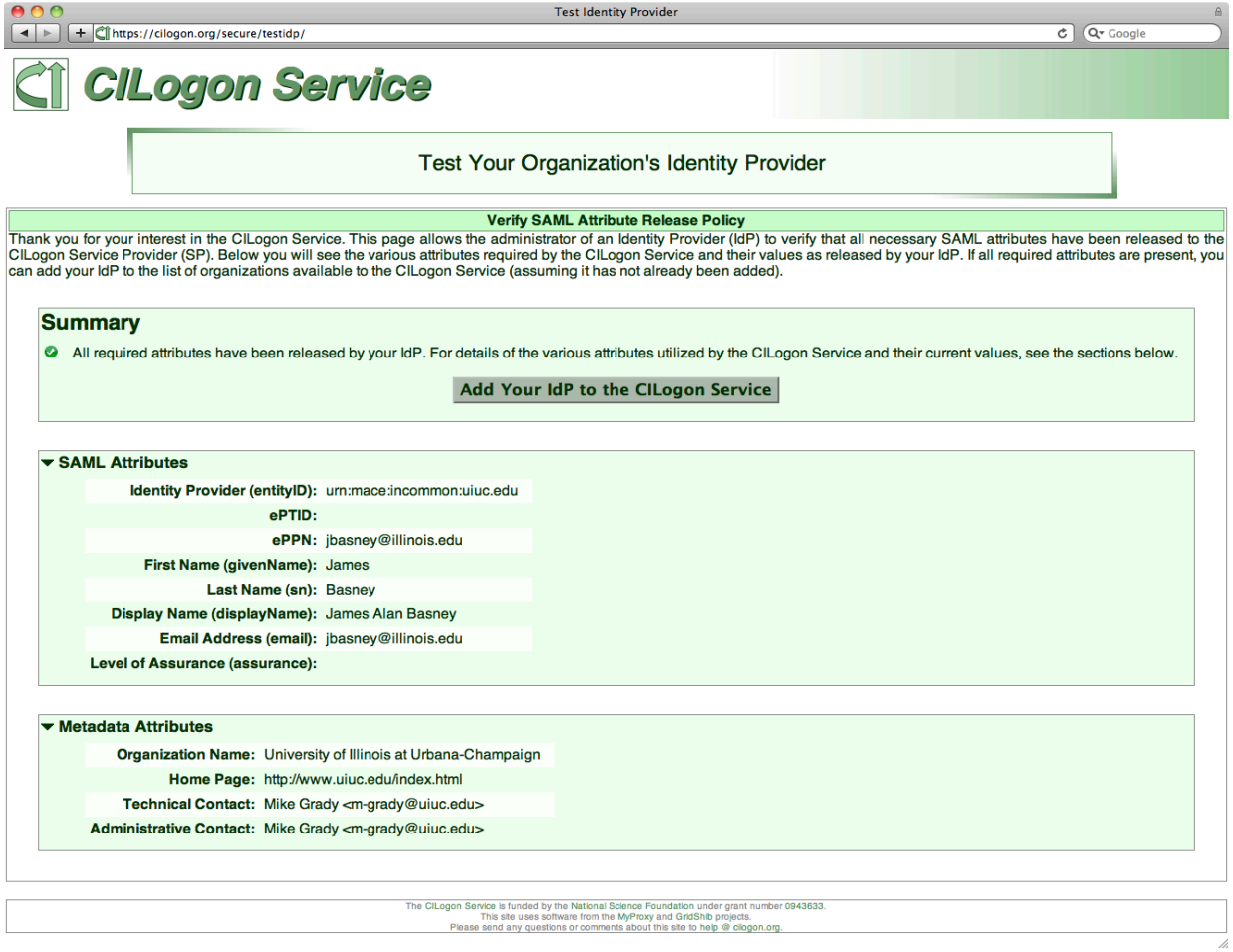
DataONE

OCEAN OBSERVATORIES INITIATIVE

Open Science Grid

LSC LIGO Scientific Collaboration

Challenge: Federating with Many Campuses



Roadmap for using NSF CI with InCommon

- A practical guide under development now
- For current draft, visit:

  https://spaces.internet2.edu/display/nsfciinc

Thanks!

- Questions? Comments?
- Have I convinced you that Notre Dame should join InCommon? ☺
- Contact: jbasney@illinois.edu