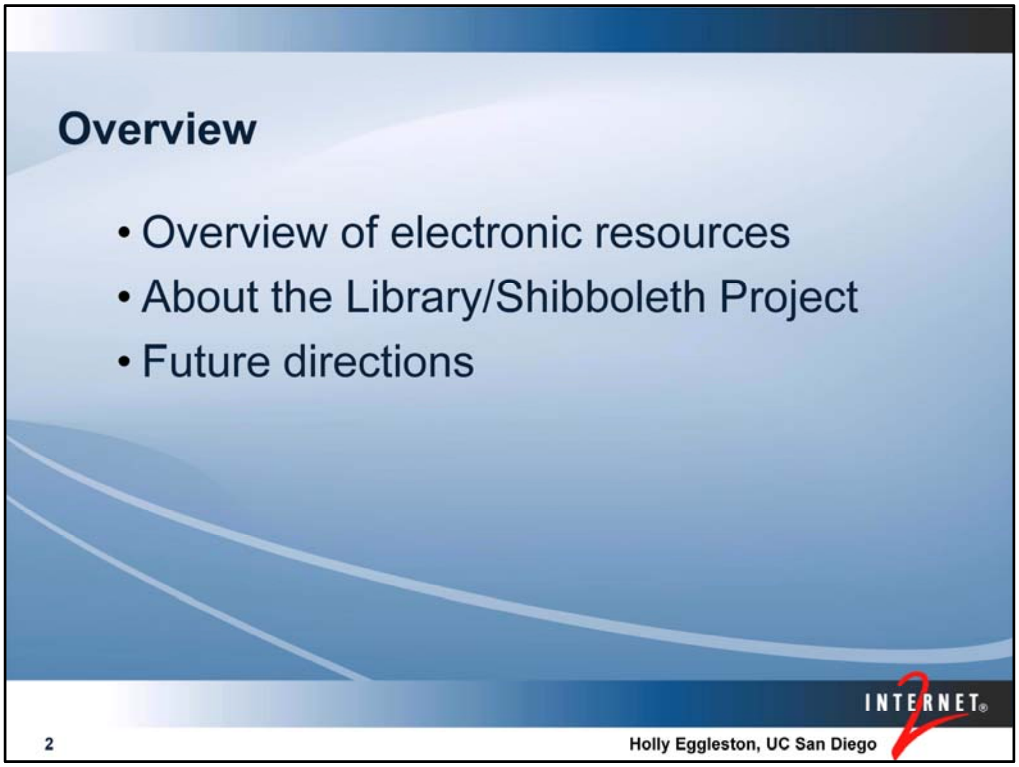
Shibboleth: Improving Access for Library Users

InCommon Library/Shibboleth Project
Holly Eggleston, UC San Diego



Overview

- Overview of electronic resources
- About the Library/Shibboleth Project
- Future directions

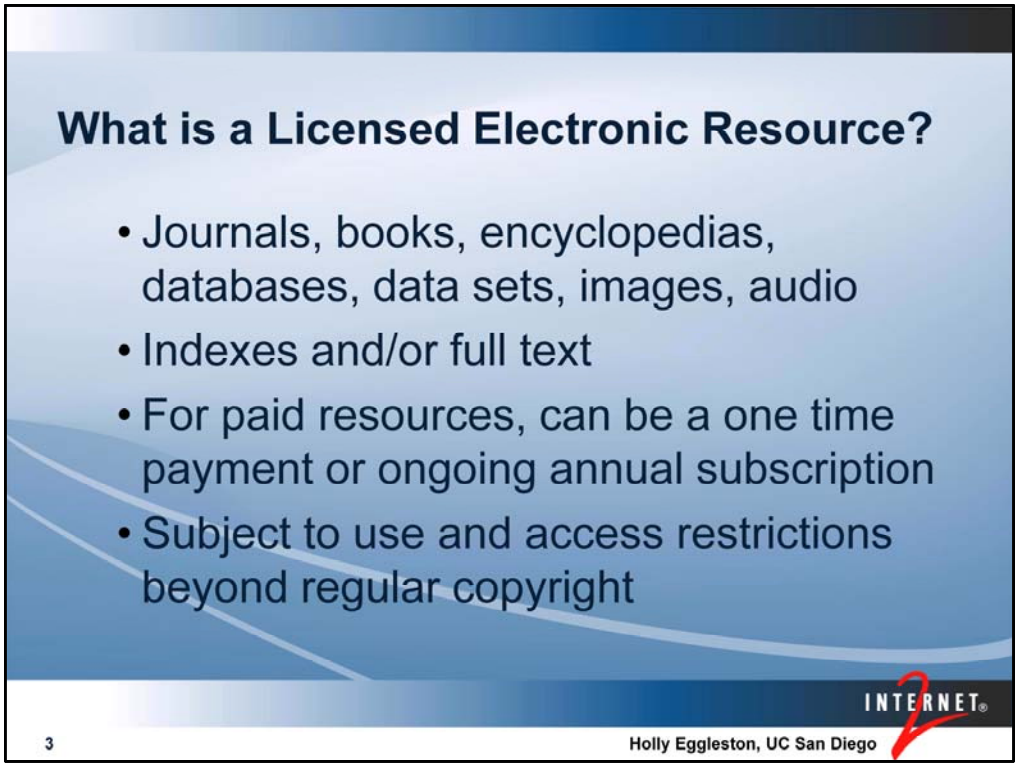
2

Holly Eggleston, UC San Diego

Overview of electronic resources
 - including how they work now

About the library shibboleth project
 - suggested technologies and how they work

Future directions
 - activities
 - issues needing resolution
 - additional participation.



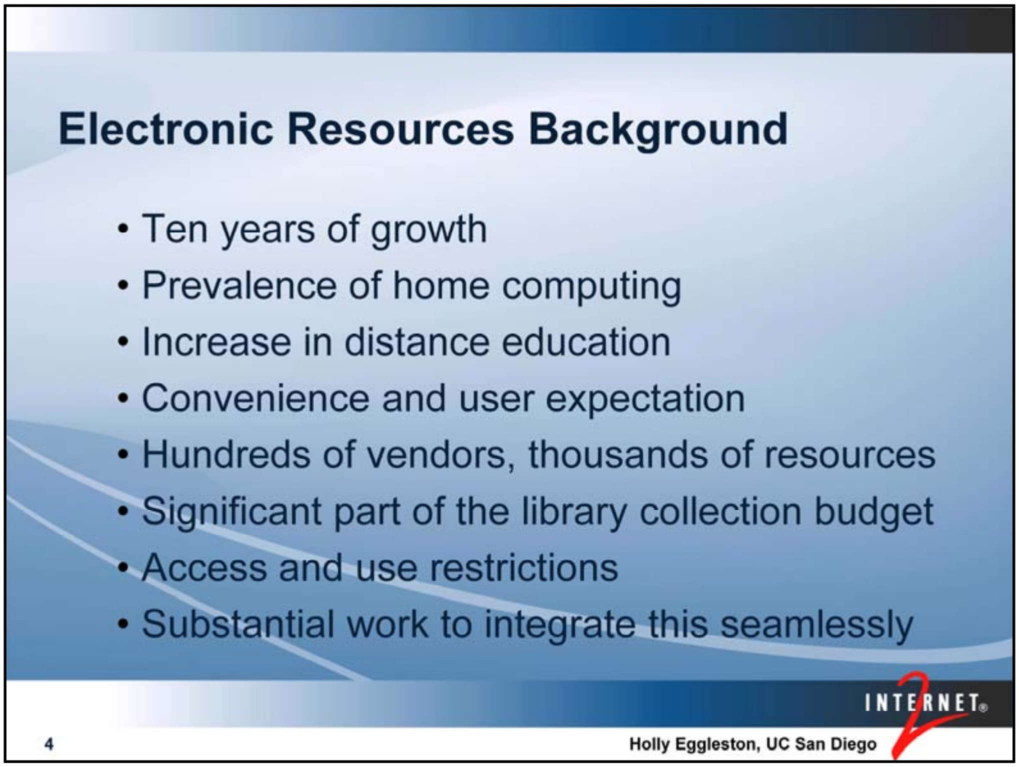
What is a Licensed Electronic Resource?

- Journals, books, encyclopedias, databases, data sets, images, audio
- Indexes and/or full text
- For paid resources, can be a one time payment or ongoing annual subscription
- Subject to use and access restrictions beyond regular copyright

Holly Eggleston, UC San Diego

•Indexes or full text – users can move between resources using “link resolver software” such as SFX or Metalib

•How many folks use online resources, such as Safari Tech Books? Good, because they were just added to the InCommon federation.



Electronic Resources Background

- Ten years of growth
- Prevalence of home computing
- Increase in distance education
- Convenience and user expectation
- Hundreds of vendors, thousands of resources
- Significant part of the library collection budget
- Access and use restrictions
- Substantial work to integrate this seamlessly

4

Holly Eggleston, UC San Diego

- Most institutions have been working with electronic resources for 10 years, some longer.

- Availability of home computing and increase in distance education make electronic resources practical and appealing

- Users expect information to be online and easy to access - they’ve been well trained with web searching.

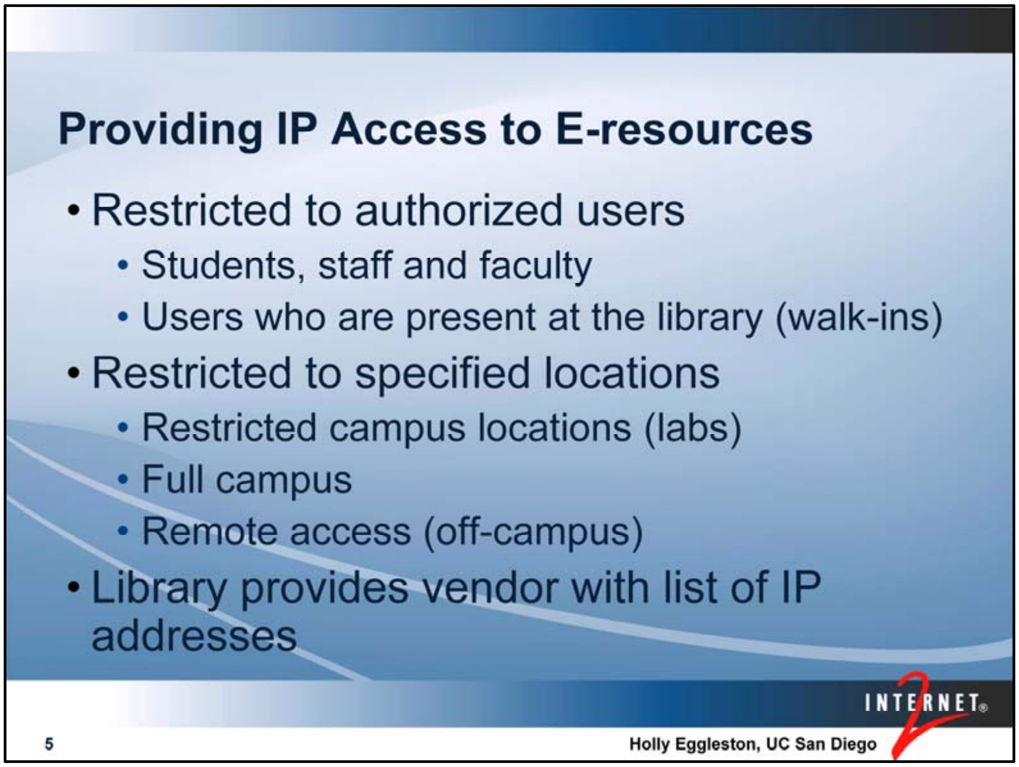
- Typical library licenses hundreds of vendors and publishers, with resources reaching into the thousands when including individual journals.

- Resources are expensive, and take up a large portion of most libraries' collections budgets

- Substantial staff time is allocated to ordering, maintaining and troubleshooting these resources

- These resources are predominantly leased, not purchased, which makes them subject to a large number of legal obligations - including who can access and from where, and how they can be used.

- Lots of work has been and continues to be done to target at integration of disparate electronic services -- including the rise of Google scholar, link resolver software such as sfx and serials solutions.



Providing IP Access to E-resources

- Restricted to authorized users
  - Students, staff and faculty
  - Users who are present at the library (walk-ins)
- Restricted to specified locations
  - Restricted campus locations (labs)
  - Full campus
  - Remote access (off-campus)
- Library provides vendor with list of IP addresses

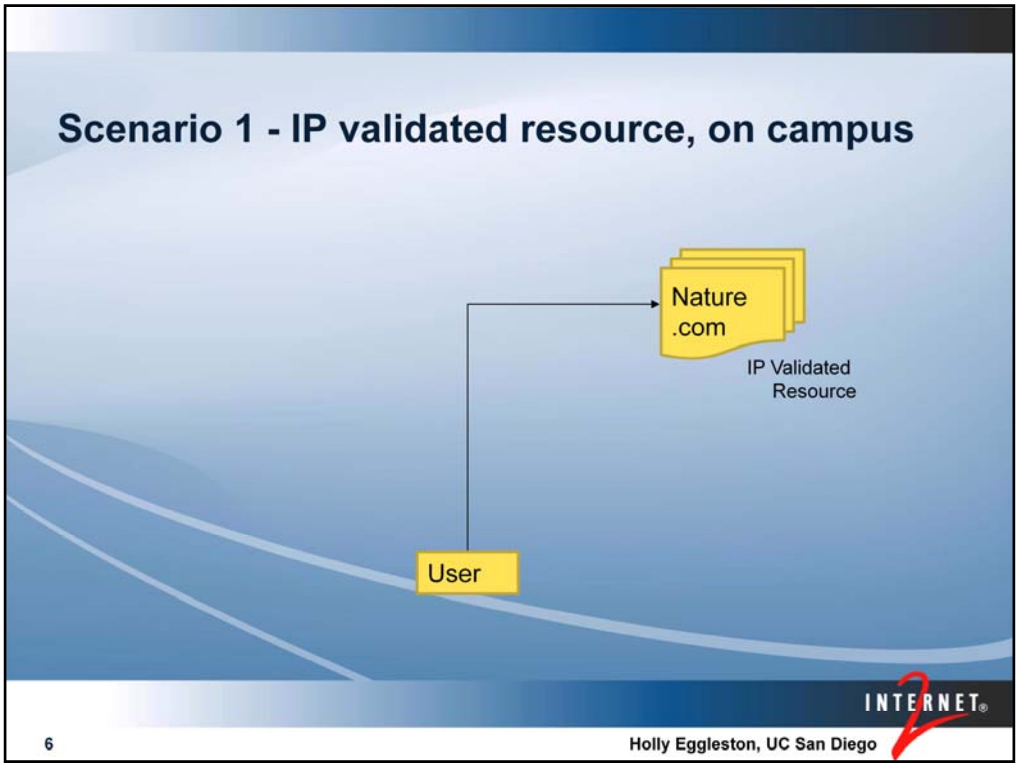
5

Holly Eggleston, UC San Diego

* Our licenses require defining our access and restricting to particular subsets of users

•Issues with providing IP

•Public machines – can be login or no login. In the case of login, walkin users obtain a guest username and password



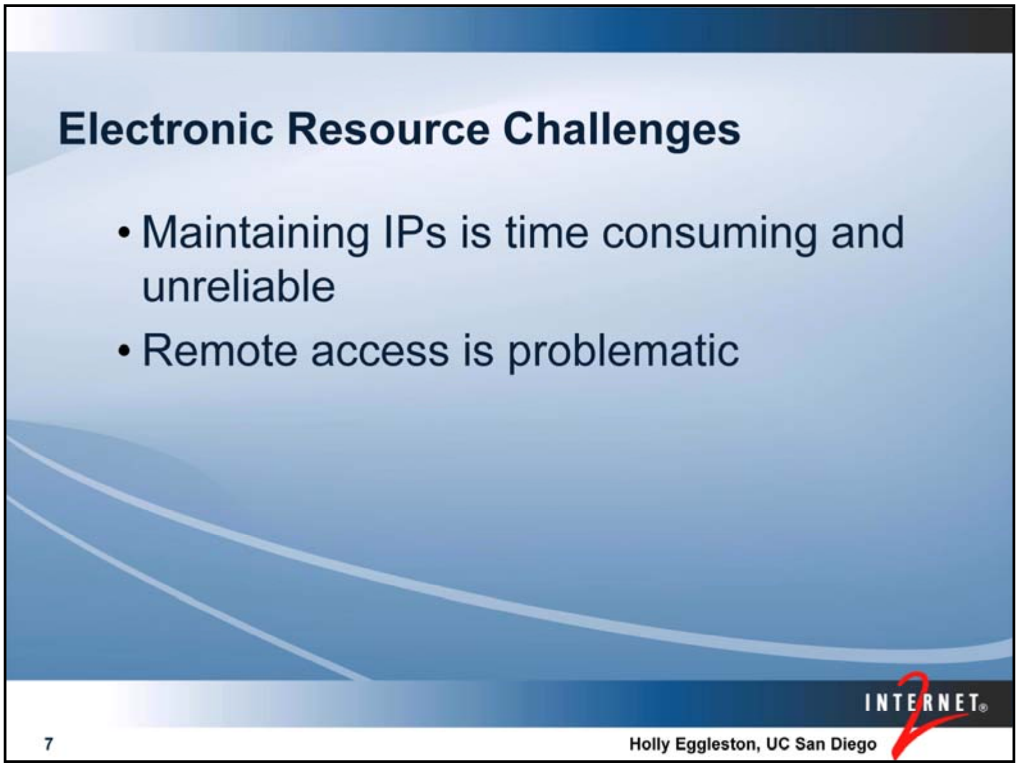
Scenario 1 - IP validated resource, on campus

6 Holly Eggleston, UC San Diego

- IP list is maintained with vendor
- Vendor detects campus IP
- User validated

- Note, if there is personalized functionality, for instance bookmarks, notes or customized alerts, vendor will require additional login.

- Maintaining IP lists with vendors is a chore -- mentioned resources numbering in the hundreds results in mass updates and relying on the vendors to incorporate the changes.



Electronic Resource Challenges

- Maintaining IPs is time consuming and unreliable
- Remote access is problematic

7 Holly Eggleston, UC San Diego

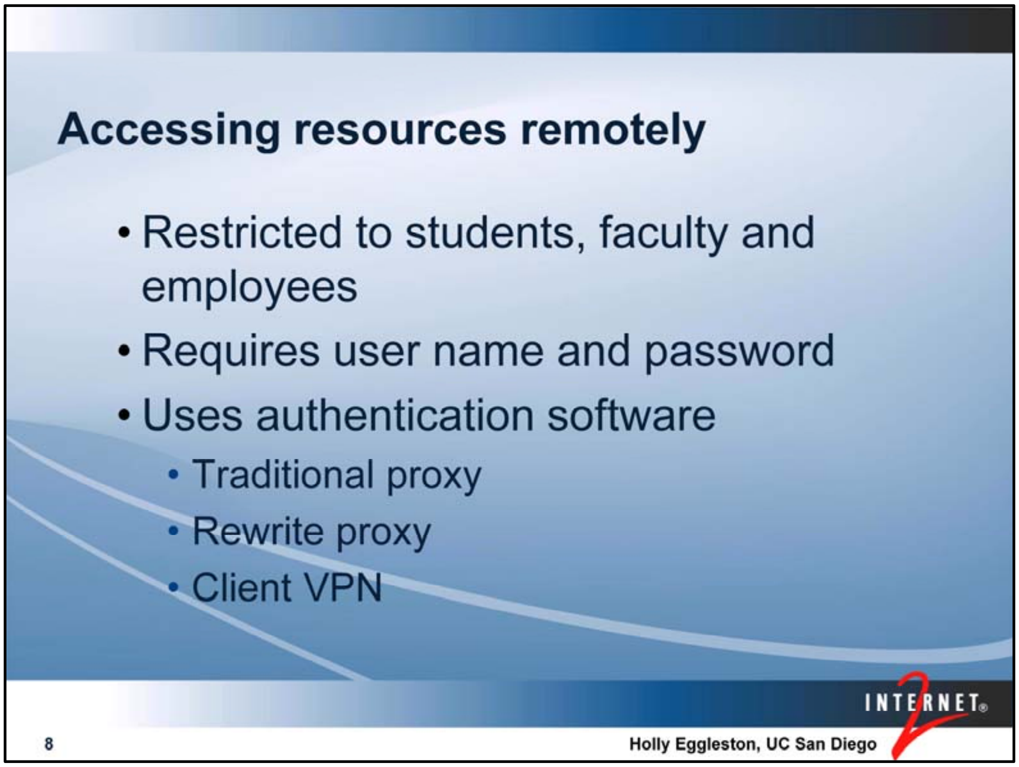
Why change?

For library technical services – IP maintenance.
-- Requires maintenance of list, contacting all vendors, hoping that they have updated the list.
-- This has ongoing concerns for reliability of access for the resource, legal implications in adherence to our licenses.
-- As my IT department likes to remind me, IP addresses aren't secure and can be easily spoofed

Remote access is one of the primary complaints.
- service integration that relies on IP address access control doesn't work from home
- Solutions to allow this traditionally rely on user-side configuration
-- User error
-- Browser compatibility
-- Firewalls
-- And other configuration conflicts

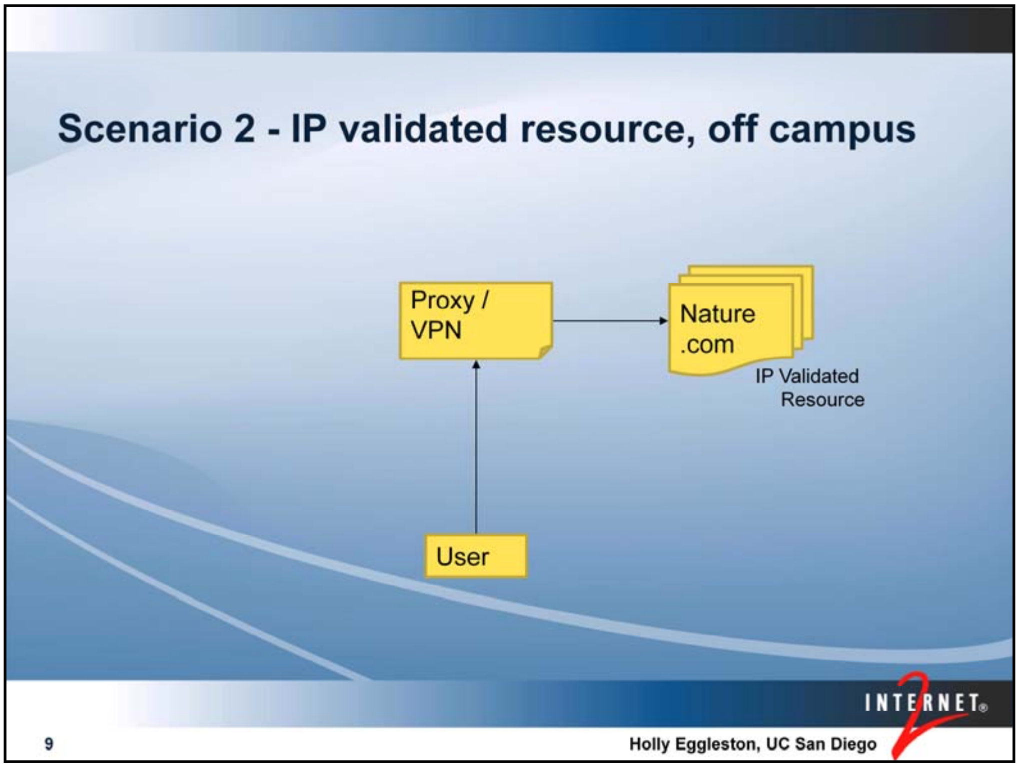
remembering passwords –
- the whole argument for single sign on.
-- Proxy
-- Personalized resource
-- Library account

Admitting this is preaching to the choir, linking into IT initiatives to address these types of problems.



Accessing resources remotely

- Restricted to students, faculty and employees
- Requires user name and password
- Uses authentication software
  - Traditional proxy
  - Rewrite proxy
  - Client VPN



Scenario 2 - IP validated resource, off campus

Proxy / VPN

Nature .com

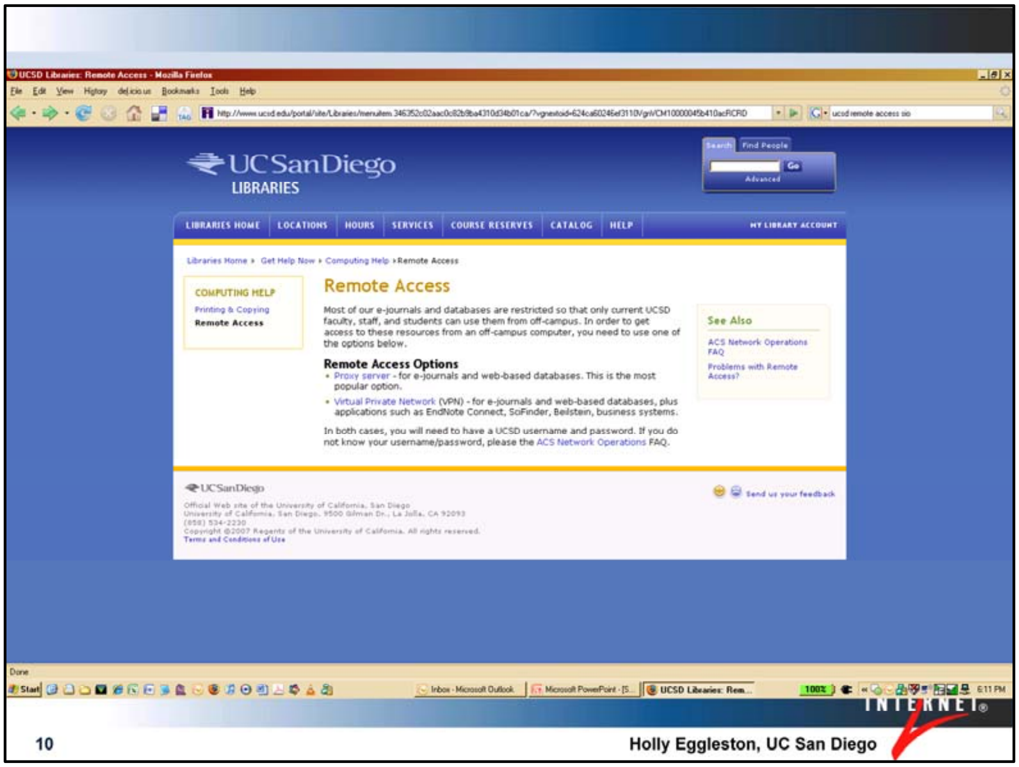
IP Validated Resource

User

9

Holly Eggleston, UC San Diego

- Similar situation as to the above, with the addition of Proxy or VPN, where the vendor has the IP addresses assigned by the proxy.


UCSD Libraries: Remote Access - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://www.ucsd.edu/portal/site/Libraries/menuitem.346352c02aac0c82b9ba4310d34b01ca/?vgnextoid=624ca60246ef3110VgnVCM10000045b410acRCRD
ucsd remote access sio
UC San Diego LIBRARIES
Search Find People
Go
Advanced
LIBRARIES HOME
LOCATIONS
HOURS
SERVICES
COURSE RESERVES
CATALOG
HELP
MY LIBRARY ACCOUNT
Libraries Home › Get Help Now › Computing Help › Remote Access
COMPUTING HELP
Printing & Copying
Remote Access
See Also
ACS Network Operations FAQ
Problems with Remote Access?
Send us your feedback
Done
Start
Inbox - Microsoft Outlook
Microsoft PowerPoint - [S...
UCSD Libraries: Rem...
100%
6:11 PM
INTERNET

Remote Access

Most of our e-journals and databases are restricted so that only current UCSD faculty, staff, and students can use them from off-campus. In order to get access to these resources from an off-campus computer, you need to use one of the options below.

Remote Access Options

- Proxy server - for e-journals and web-based databases. This is the most popular option.
- Virtual Private Network (VPN) - for e-journals and web-based databases, plus applications such as EndNote Connect, SciFinder, Beilstein, business systems.

In both cases, you will need to have a UCSD username and password. If you do not know your username/password, please the ACS Network Operations FAQ.

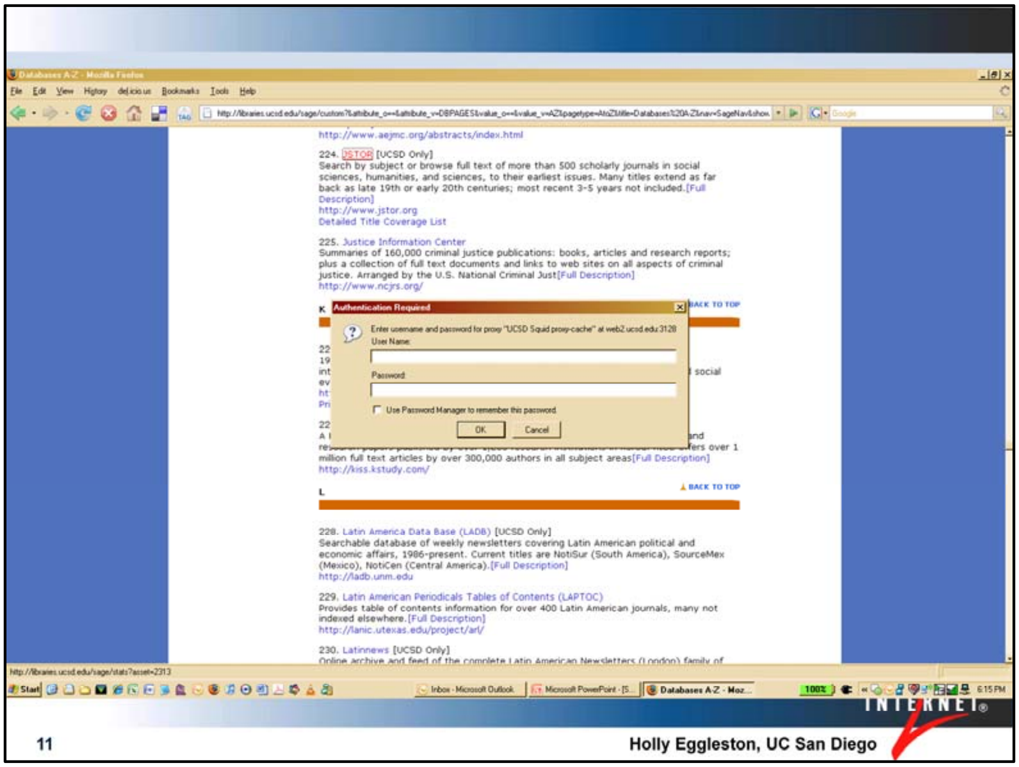
UC San Diego

Official Web site of the University of California, San Diego
University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093
(858) 534-2230

Terms and Conditions of Use

10 Holly Eggleston, UC San Diego

Now: Screenshot of Remote access page


Databases A-Z - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
Google

http://libraries.ucsd.edu/sage/custom?&attribute_o==&attribute_v=DBPAGES&value_o==&value_v=AZ&pagetype=AtoZ&title=Databases%20A-Z&nav=SageNav&show

http://www.aejmc.org/abstracts/index.html

224. JSTOR [UCSD Only]
Search by subject or browse full text of more than 500 scholarly journals in social sciences, humanities, and sciences, to their earliest issues. Many titles extend as far back as late 19th or early 20th centuries; most recent 3-5 years not included.[Full Description]
http://www.jstor.org
Detailed Title Coverage List

225. Justice Information Center
Summaries of 160,000 criminal justice publications: books, articles and research reports; plus a collection of full text documents and links to web sites on all aspects of criminal justice. Arranged by the U.S. National Criminal Just[Full Description]
http://www.ncjrs.org/

K

BACK TO TOP

Authentication Required

Enter username and password for proxy "UCSD Squid proxy-cache" at web2.ucsd.edu:3128

User Name:

Password:

☐ Use Password Manager to remember this password

OK Cancel

...fers over 1 million full text articles by over 300,000 authors in all subject areas[Full Description]
http://kiss.kstudy.com/

BACK TO TOP

L

228. Latin America Data Base (LADB) [UCSD Only]
Searchable database of weekly newsletters covering Latin American political and economic affairs, 1986-present. Current titles are NotiSur (South America), SourceMex (Mexico), NotiCen (Central America).[Full Description]
http://ladb.unm.edu

229. Latin American Periodicals Tables of Contents (LAPTOC)
Provides table of contents information for over 400 Latin American journals, many not indexed elsewhere.[Full Description]
http://lanic.utexas.edu/project/arl/

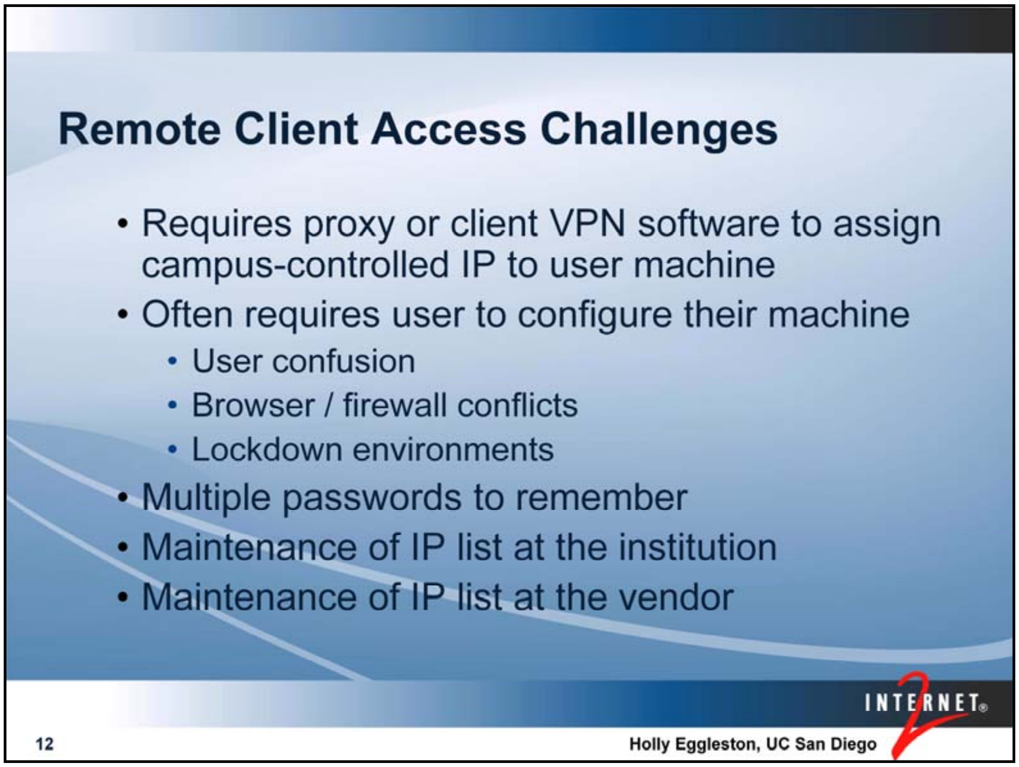
230. Latinnews [UCSD Only]
Online archive and feed of the complete Latin American Newsletters (London) family of

http://libraries.ucsd.edu/sage/stats?asset=2313

11

Holly Eggleston, UC San Diego

Now: Screenshot of proxy prompt



Remote Client Access Challenges

- Requires proxy or client VPN software to assign campus-controlled IP to user machine
- Often requires user to configure their machine
  - User confusion
  - Browser / firewall conflicts
  - Lockdown environments
- Multiple passwords to remember
- Maintenance of IP list at the institution
- Maintenance of IP list at the vendor

12

Holly Eggleston, UC San Diego

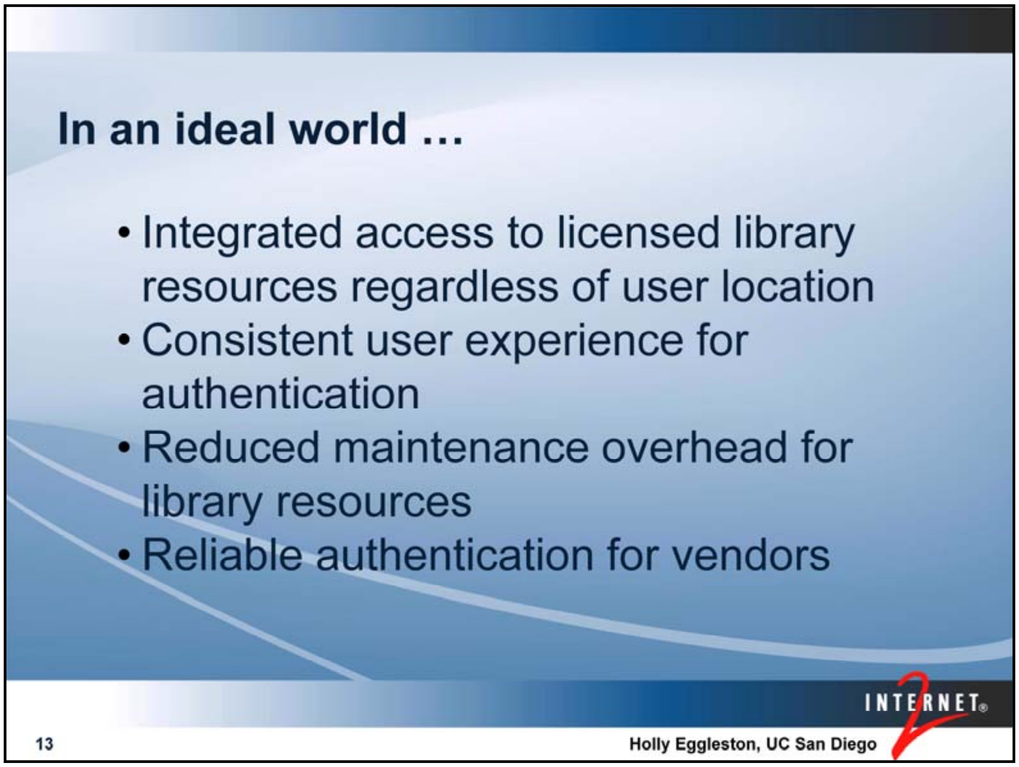
- Traditional proxy and regular VPN require users to configure their local machines and is browser dependant

- Both VPN and traditional proxy run into problems with local machine and firewall configurations.

- Also these logins are not single sign on, requiring yet more passwords

- If vendor has personalized functionality, user needs to login to resource in addition to logging in to proxy.

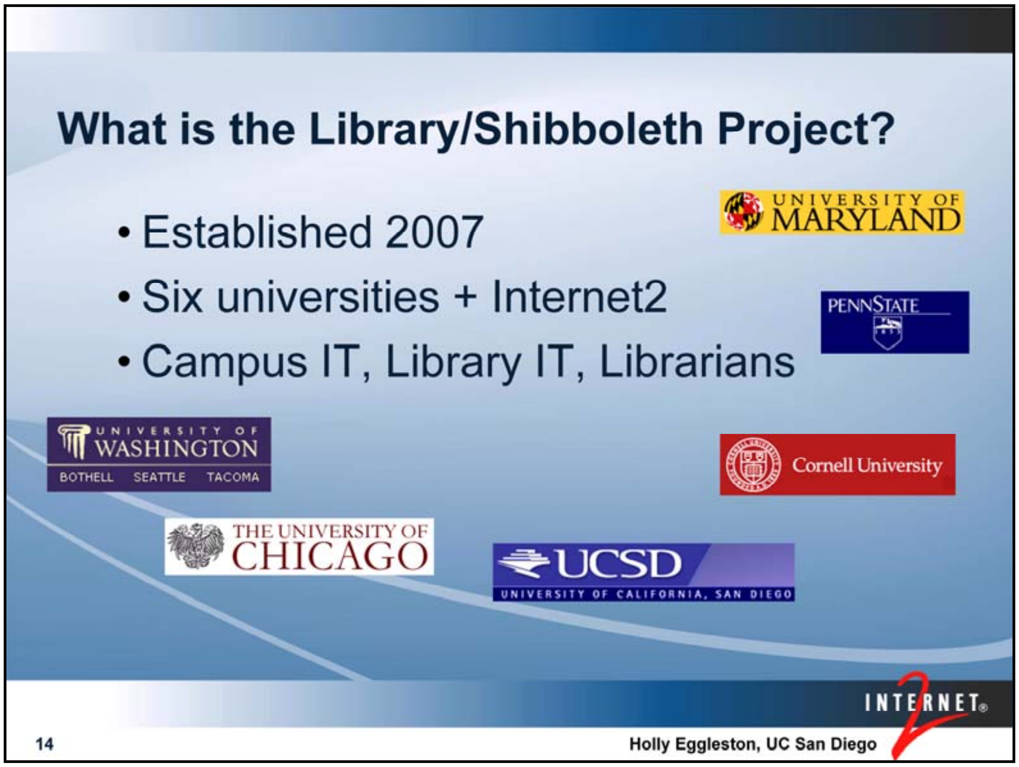
- So we're interested in getting away from both the need for user side configuration and vendor IP access



In an ideal world …

- Integrated access to licensed library resources regardless of user location
- Consistent user experience for authentication
- Reduced maintenance overhead for library resources
- Reliable authentication for vendors

- No user configuration of computers
- Use a single password for access to all resources
- No IP’s needed



What is the Library/Shibboleth Project?

- Established 2007
- Six universities + Internet2
- Campus IT, Library IT, Librarians

UNIVERSITY OF MARYLAND
PENNSTATE
UNIVERSITY OF WASHINGTON
BOTHELL SEATTLE TACOMA
Cornell University
THE UNIVERSITY OF CHICAGO
UCSD
UNIVERSITY OF CALIFORNIA, SAN DIEGO
INTERNET2

14 Holly Eggleston, UC San Diego

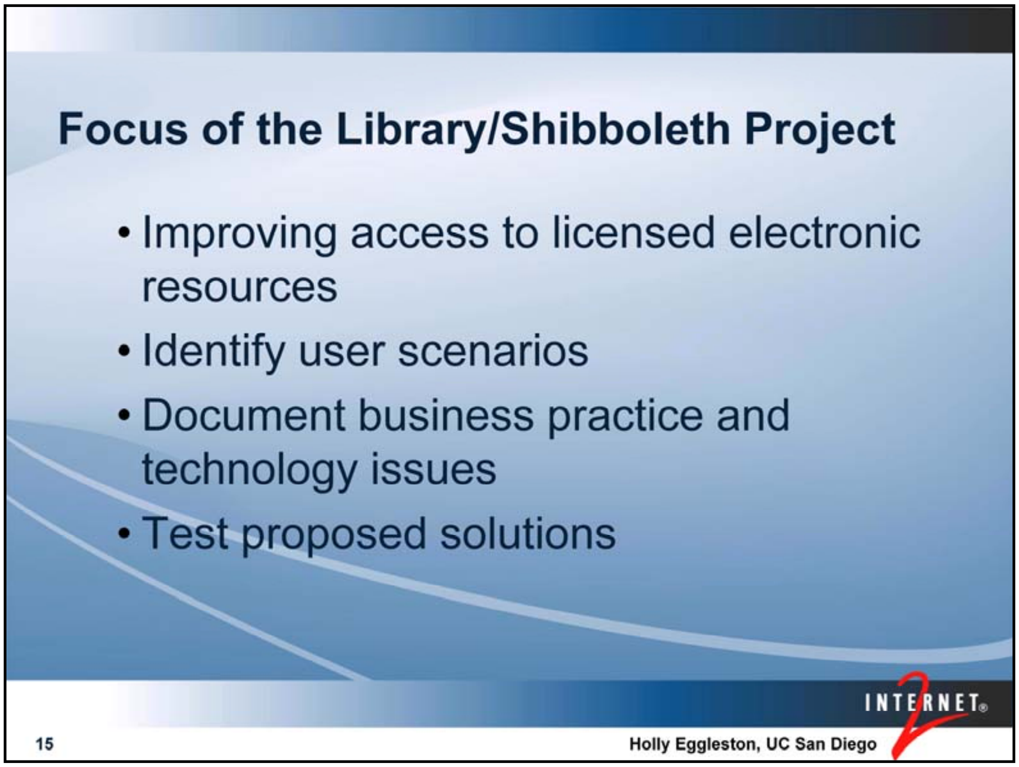
- Overview of Library/Shibboleth project
- Step by step through proposed user scenarios
- Identifying issues
- Progressively incorporating SSO and other technologies

- Result of discussions in InCommon Shibboleth group with Peter Brantley and Cliff Lynch

- Establishing a group of institutions willing to examine issues and pilot shibboleth solutions for library resources

- participate in biweekly phone calls

- Adding shibboleth to existing library services



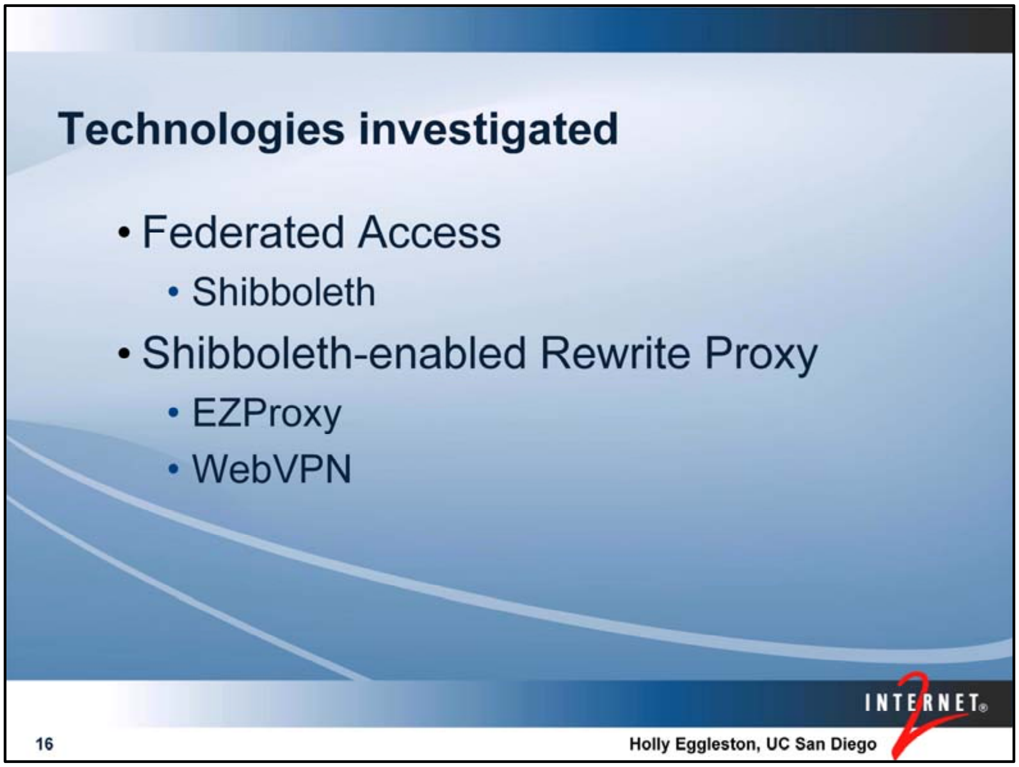
Focus of the Library/Shibboleth Project

- Improving access to licensed electronic resources
- Identify user scenarios
- Document business practice and technology issues
- Test proposed solutions

15

Holly Eggleston, UC San Diego

- Current focus is accessing library commercial resources
- Enumerating user scenarios
- Identifying issues both business and technical
- testing different solutions for proof of concept and eventually best practices.



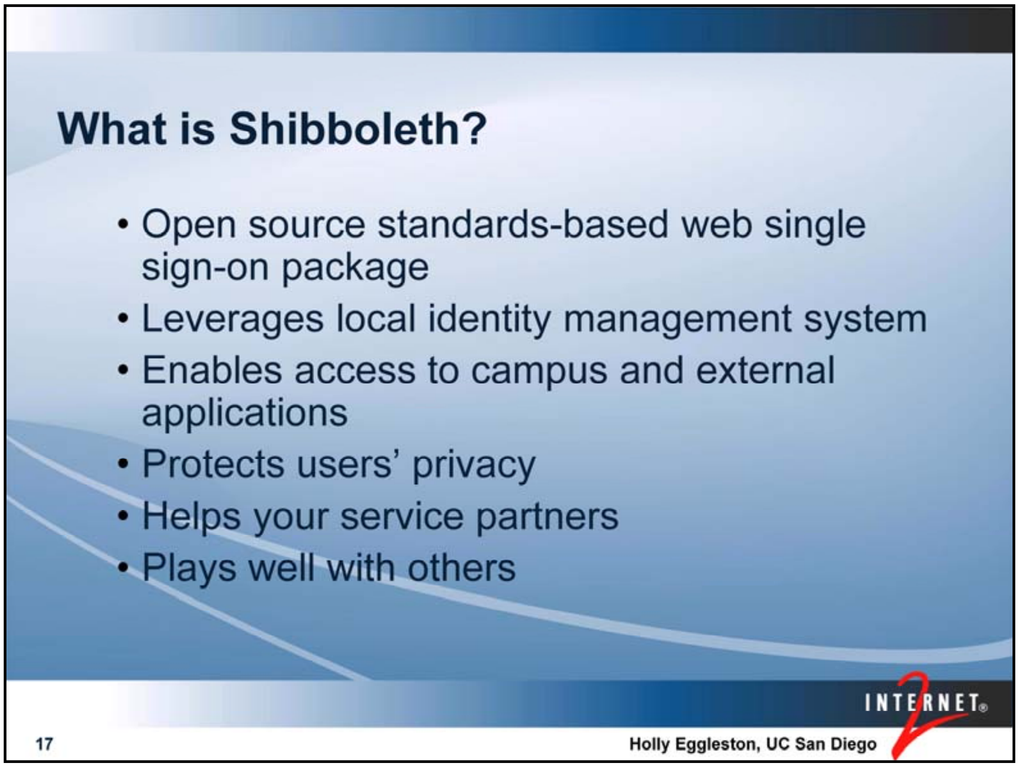
Technologies investigated

- Federated Access
  - Shibboleth
- Shibboleth-enabled Rewrite Proxy
  - EZProxy
  - WebVPN

16

Holly Eggleston, UC San Diego

We'll go into these with more detail.



What is Shibboleth?

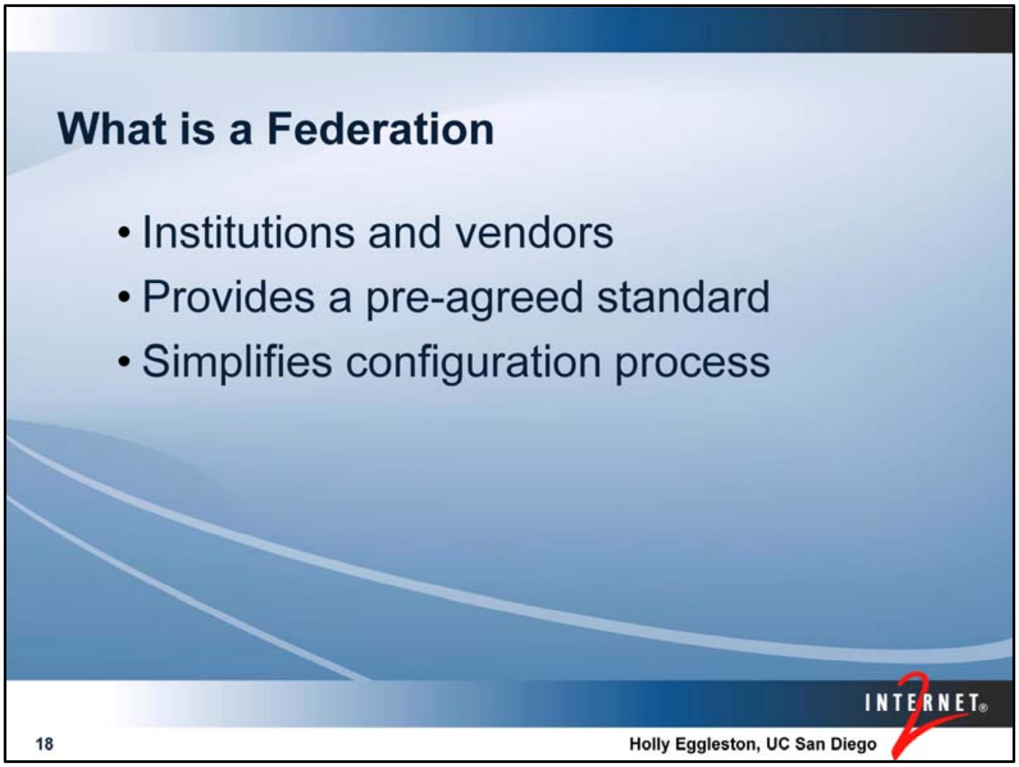
- Open source standards-based web single sign-on package
- Leverages local identity management system
- Enables access to campus and external applications
- Protects users' privacy
- Helps your service partners
- Plays well with others

17

Holly Eggleston, UC San Diego

- Shibboleth addresses many of these issues

- The authentication list is maintained locally
- The same login information is used for multiple resources
- It gives the ability to protect user privacy by sending a generic or anonomysed identifier while permitting personalized access to resources
- Provides ability to give selective access to resources based on criteria
- It removes the need for IP maintenance and increases authentication reliability on the vendor side
- Open standards assures compatibility with vendor implementations

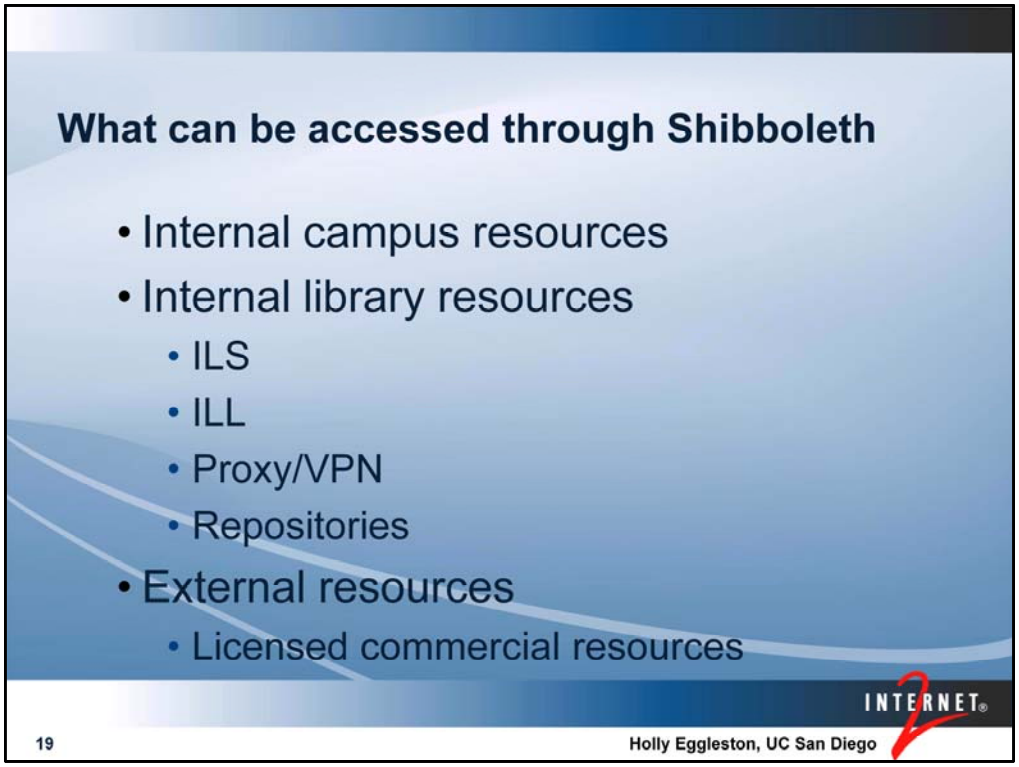


What is a Federation

- Institutions and vendors
- Provides a pre-agreed standard
- Simplifies configuration process

18 Holly Eggleston, UC San Diego

Federations provide a way for member institutions and vendors to define a standard for how Shibboleth authentication information will be transferred between member institutions. This saves time in the vendor negotiation process, as all attributes are agreed upon by the federation members.



What can be accessed through Shibboleth

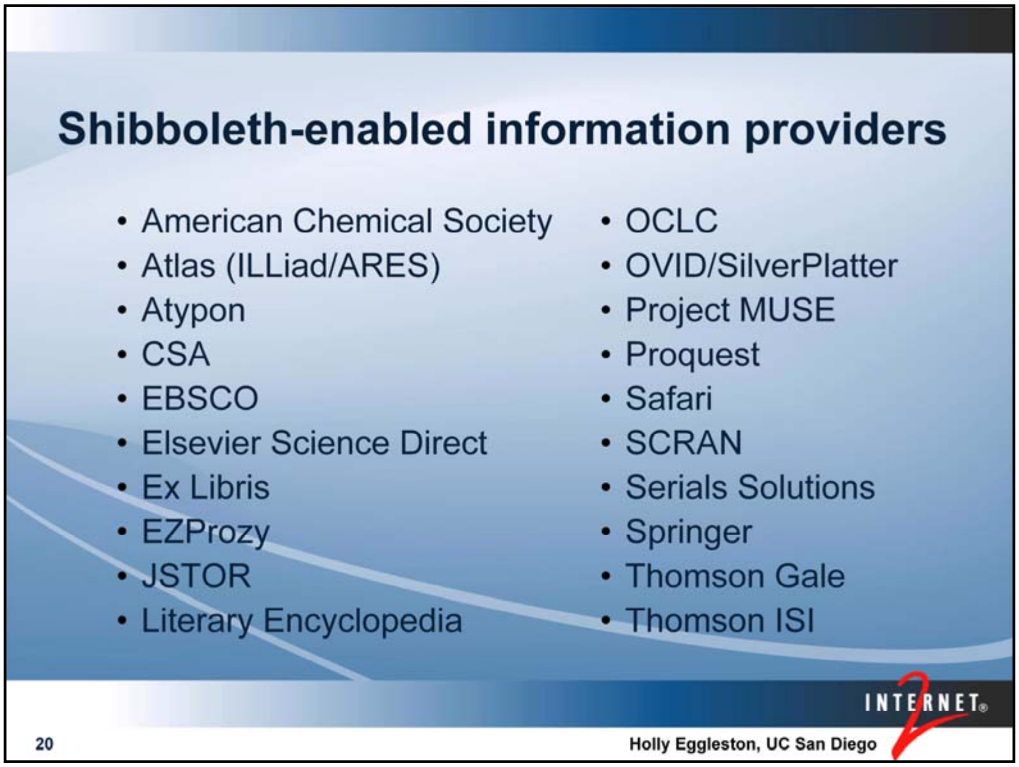
- Internal campus resources
- Internal library resources
  - ILS
  - ILL
  - Proxy/VPN
  - Repositories
- External resources
  - Licensed commercial resources

19

INTERNET2

Holly Eggleston, UC San Diego

Internal campus resources: leave balances, employee information, student registration information



Shibboleth-enabled information providers

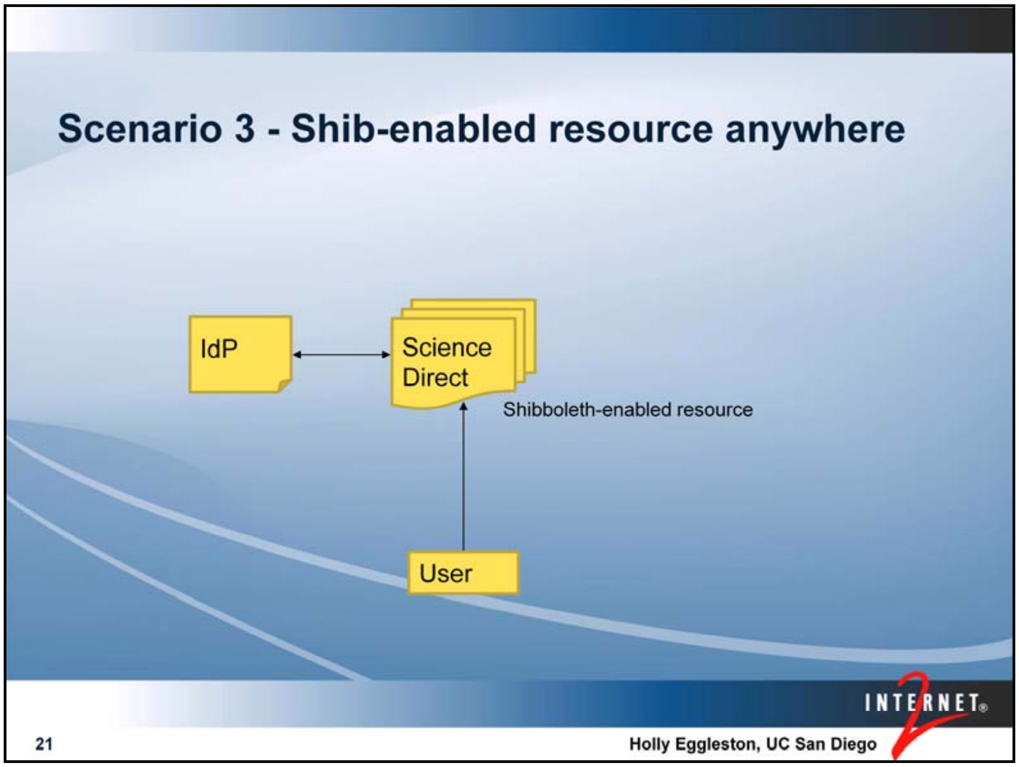
- American Chemical Society
- Atlas (ILLiad/ARES)
- Atypon
- CSA
- EBSCO
- Elsevier Science Direct
- Ex Libris
- EZProzy
- JSTOR
- Literary Encyclopedia
- OCLC
- OVID/SilverPlatter
- Project MUSE
- Proquest
- Safari
- SCRAN
- Serials Solutions
- Springer
- Thomson Gale
- Thomson ISI

20

Holly Eggleston, UC San Diego

These are vendors that are enabled for Shibboleth, but may or may not be part of the US federation.

A more comprehensive list of vendors and resources are on the information page at the end of this presentation.



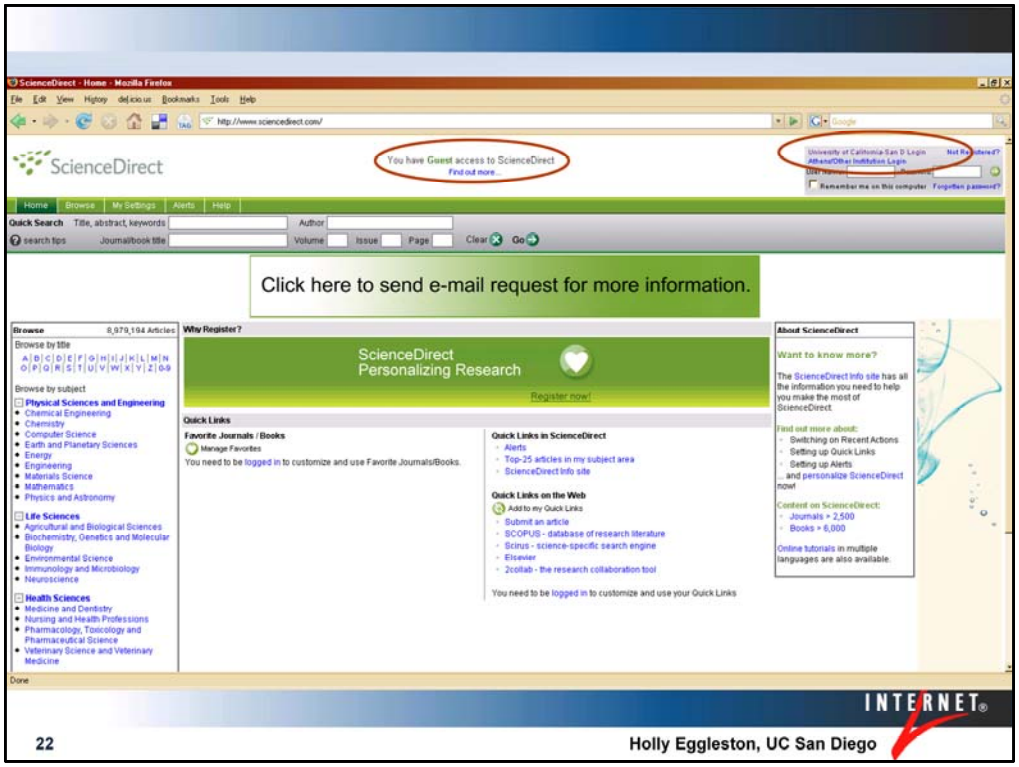
Scenario 3 - Shib-enabled resource anywhere

21

Holly Eggleston, UC San Diego

- For the authorized user, this is the ideal scenario.
- User accesses resource directly which invokes call to IdP - either directly or by clicking "login" link
- Allows for one login for both remote and personalized access

- Now this is great for the users that have accounts with the institution, but most libraries also allow for (and in cases of state institutions, are obligated to) provide access for patrons who may not be affiliated with the university, but who are on the premises -- otherwise known as "walk-in's"


ScienceDirect - Home - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://www.sciencedirect.com/
Google
ScienceDirect
Home Browse My Settings Alerts Help
Quick Search Title, abstract, keywords Author
search tips Journal/book title Volume Issue Page Clear Go
INTERNET®

You have Guest access to ScienceDirect
Find out more...

University of California-San D Login Not Registered?
Athens/Other Institution Login
User name: Password:
□ Remember me on this computer Forgotten password?

Click here to send e-mail request for more information.

Browse 8,979,194 Articles

Browse by title

A | B | C | D | E | F | G | H | I | J | K | L | M | N
O | P | Q | R | S | T | U | V | W | X | Y | Z | 0-9

Browse by subject

Physical Sciences and Engineering
- Chemical Engineering
- Chemistry
- Computer Science
- Earth and Planetary Sciences
- Energy
- Engineering
- Materials Science
- Mathematics
- Physics and Astronomy

Life Sciences
- Agricultural and Biological Sciences
- Biochemistry, Genetics and Molecular Biology
- Environmental Science
- Immunology and Microbiology
- Neuroscience

Health Sciences
- Medicine and Dentistry
- Nursing and Health Professions
- Pharmacology, Toxicology and Pharmaceutical Science
- Veterinary Science and Veterinary Medicine

Why Register?

ScienceDirect
Personalizing Research

Register now!

Quick Links

Favorite Journals / Books

Manage Favorites

You need to be logged in to customize and use Favorite Journals/Books.

Quick Links in ScienceDirect
- Alerts
- Top-25 articles in my subject area
- ScienceDirect Info site

Quick Links on the Web

Add to my Quick Links
- Submit an article
- SCOPUS - database of research literature
- Scirus - science-specific search engine
- Elsevier
- 2collab - the research collaboration tool

You need to be logged in to customize and use your Quick Links

About ScienceDirect

Want to know more?

The ScienceDirect Info site has all the information you need to help you make the most of ScienceDirect.

Find out more about:
- Switching on Recent Actions
- Setting up Quick Links
- Setting up Alerts

... and personalize ScienceDirect now!

Content on ScienceDirect:
- Journals > 2,500
- Books > 6,000

Online tutorials in multiple languages are also available.

Done

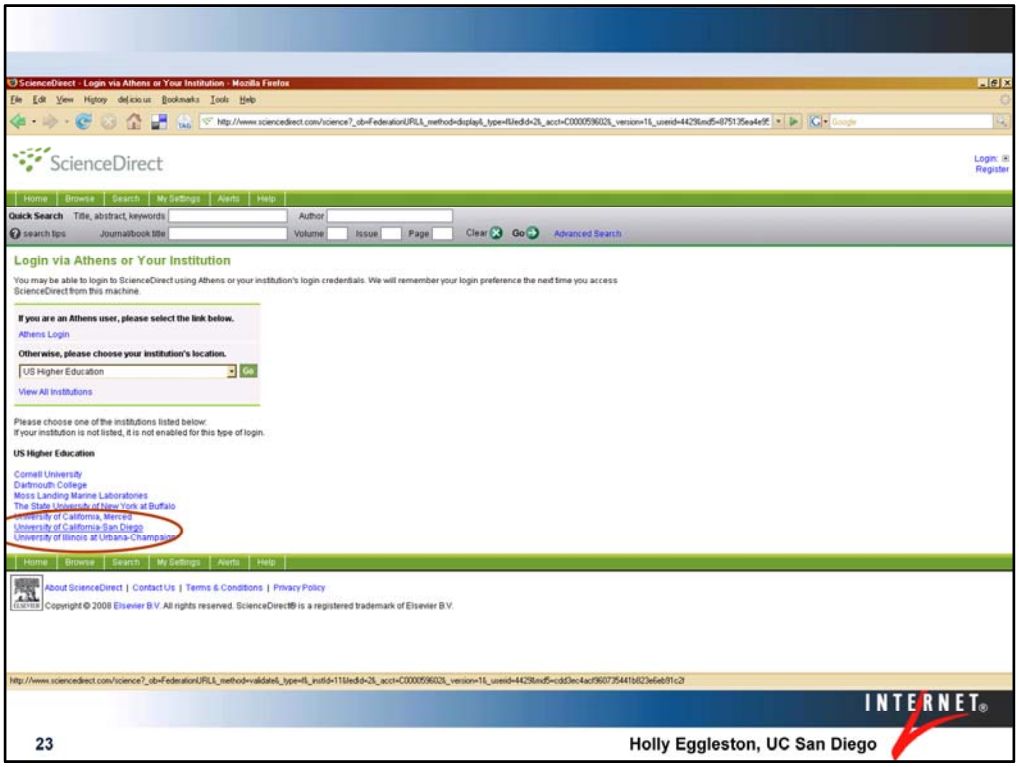
22

Holly Eggleston, UC San Diego

Screenshot: ScienceDirect remote access, no IP

Click to login

For the existing users, having to click the WAYF and login on the screens is a change.


ScienceDirect - Login via Athens or Your Institution - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://www.sciencedirect.com/science?_ob=FederationURL&_method=display&_type=f&edId=2&_acct=C000059602&_version=1&_userid=4429&md5=875135ea4e95
ScienceDirect
Login
Register
Home Browse Search My Settings Alerts Help
Quick Search Title, abstract, keywords Author
search tips Journal/book title Volume Issue Page Clear Go Advanced Search

Login via Athens or Your Institution

You may be able to login to ScienceDirect using Athens or your institution's login credentials. We will remember your login preference the next time you access ScienceDirect from this machine.

If you are an Athens user, please select the link below.

Athens Login

Otherwise, please choose your institution's location.

US Higher Education Go

View All Institutions

Please choose one of the institutions listed below:
If your institution is not listed, it is not enabled for this type of login.

US Higher Education

Cornell University
Dartmouth College
Moss Landing Marine Laboratories
The State University of New York at Buffalo
University of California, Merced
University of California-San Diego
University of Illinois at Urbana-Champaign

Home Browse Search My Settings Alerts Help
About ScienceDirect | Contact Us | Terms & Conditions | Privacy Policy

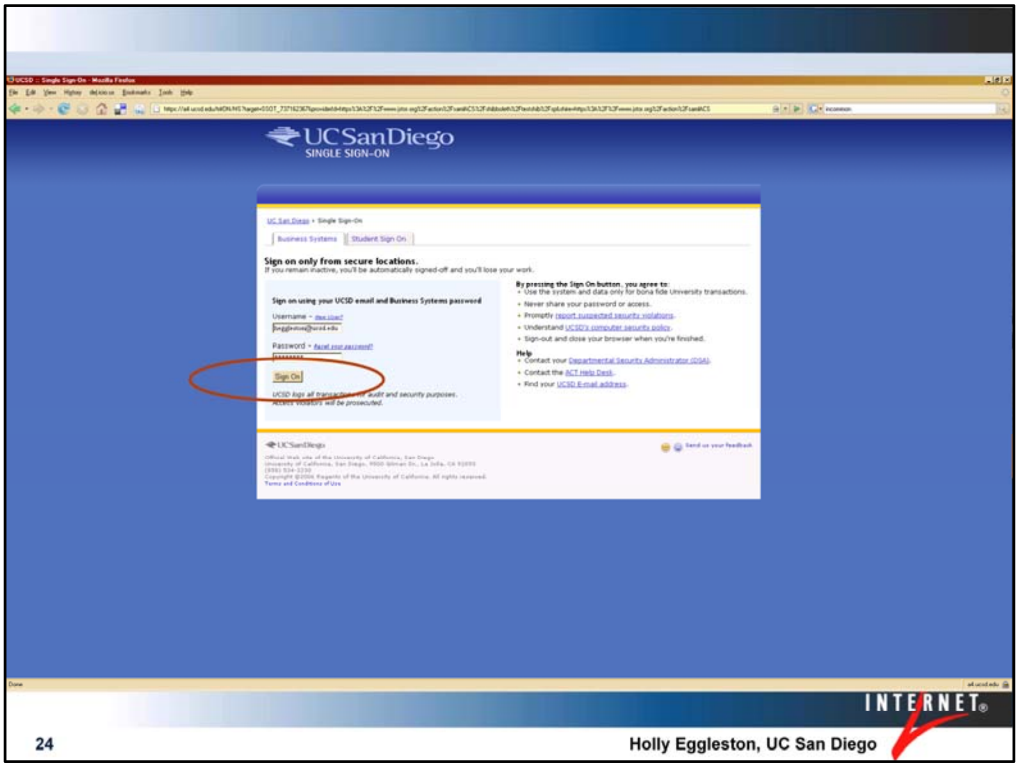
Copyright © 2008 Elsevier B.V. All rights reserved. ScienceDirect® is a registered trademark of Elsevier B.V.

http://www.sciencedirect.com/science?_ob=FederationURL&_method=validate&_type=f&_instId=11&edId=2&_acct=C000059602&_version=1&_userid=4429&md5=cdd3ec4acf960735441b823e6eb91c2f

23 Holly Eggleston, UC San Diego

Screenshot: ScienceDirect Shibboleth WAYF (where are you from) page

Select institution



UCSD :: Single Sign-On - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
UC San Diego
SINGLE SIGN-ON
UC San Diego › Single Sign-On
Business Systems
Student Sign On
Sign On
UC San Diego
Send us your feedback
Done
INTERNET

Sign on only from secure locations.
If you remain inactive, you'll be automatically signed-off and you'll lose your work.

Sign on using your UCSD email and Business Systems password

Username - New User?
heggleston@ucsd.edu

Password - Reset your password?
••••••••

UCSD logs all transactions for audit and security purposes.
Access violators will be prosecuted.

By pressing the Sign On button, you agree to:
- Use the system and data only for bona fide University transactions.
- Never share your password or access.
- Promptly report suspected security violations.
- Understand UCSD's computer security policy.
- Sign-out and close your browser when you're finished.

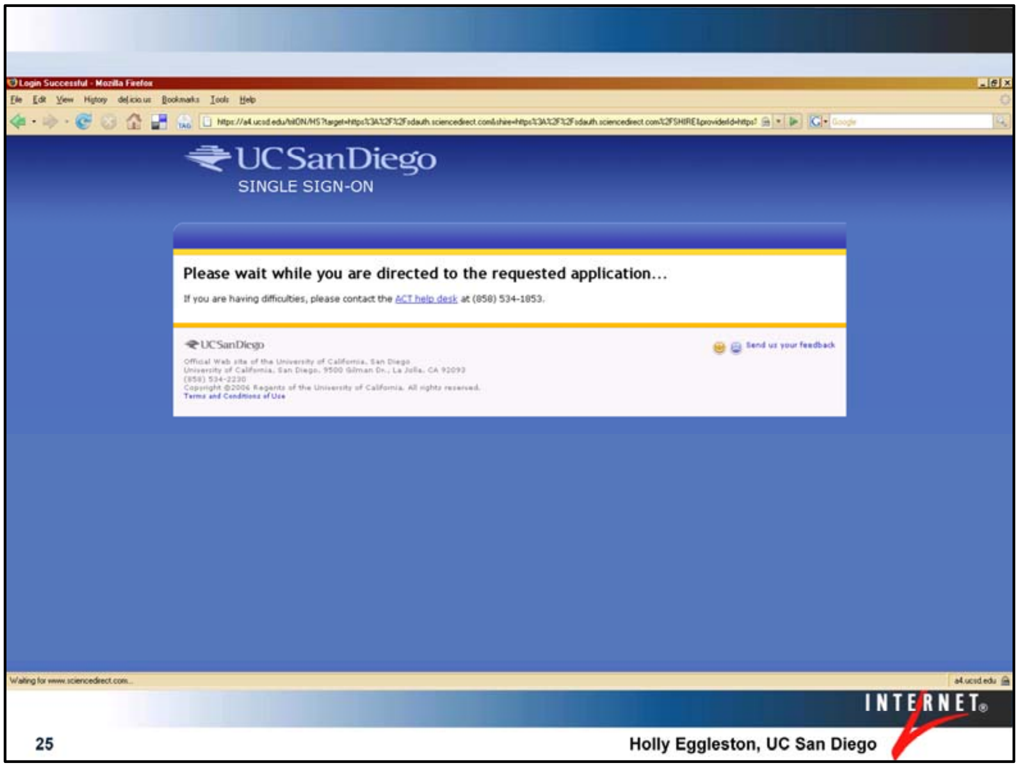
Help
- Contact your Departmental Security Administrator (DSA).
- Contact the ACT Help Desk.
- Find your UCSD E-mail address.

Official Web site of the University of California, San Diego
University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093
(858) 534-2230
Copyright ©2006 Regents of the University of California. All rights reserved.
Terms and Conditions of Use

24

Holly Eggleston, UC San Diego

Screenshot: UCSD Shibboleth login page



Login Successful - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
https://a4.ucsd.edu/tritON/HS?target=https%3A%2F%2Fsdauth.sciencedirect.com&shire=https%3A%2F%2Fsdauth.sciencedirect.com%2FSHIRE&providerId=https!
Google
UCSanDiego
SINGLE SIGN-ON
Send us your feedback
Terms and Conditions of Use
Waiting for www.sciencedirect.com...
a4.ucsd.edu
INTERNET

Please wait while you are directed to the requested application…

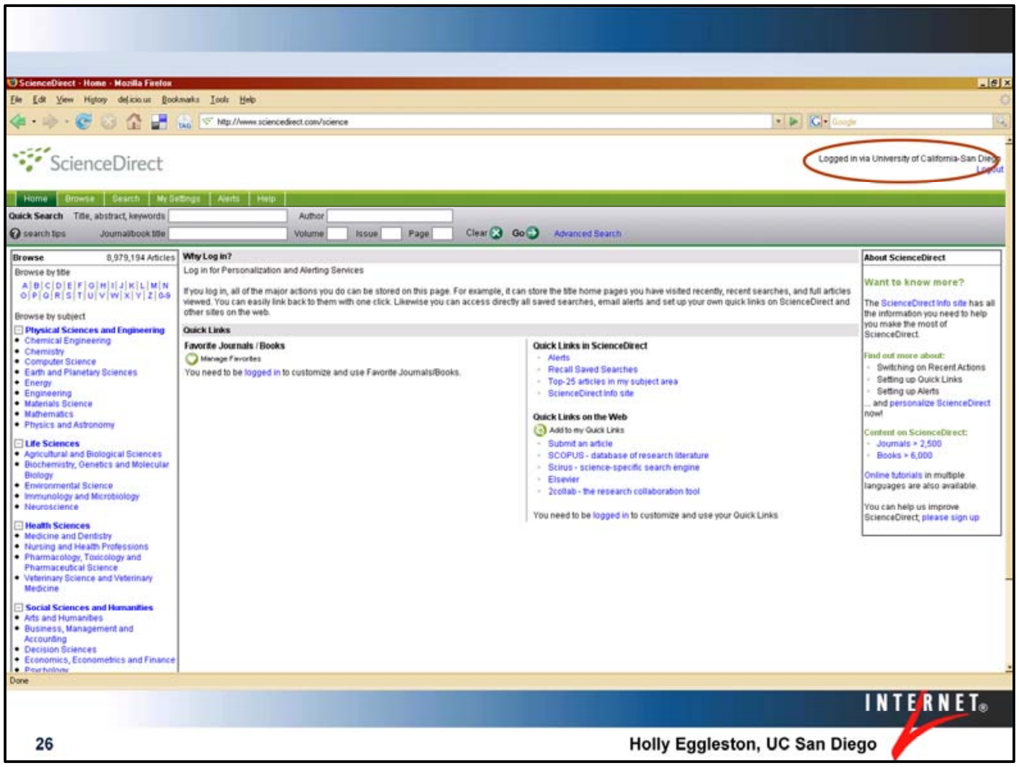
If you are having difficulties, please contact the ACT help desk at (858) 534-1853.

UCSanDiego
Official Web site of the University of California, San Diego
University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093
(858) 534-2230
Copyright ©2006 Regents of the University of California. All rights reserved.

25

Holly Eggleston, UC San Diego

Screenshot: UCSD Shibboleth Authentication



ScienceDirect - Home - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://www.sciencedirect.com/science
Google
ScienceDirect
Home Browse Search My Settings Alerts Help
Clear
Go
Advanced Search
Manage Favorites
Add to my Quick Links
Done
INTERNET®

Logged in via University of California-San Diego
Logout

Quick Search Title, abstract, keywords ______ Author ______
search tips Journal/book title ______ Volume ___ Issue ___ Page ___

Browse 8,979,194 Articles

Browse by title

A | B | C | D | E | F | G | H | I | J | K | L | M | N
O | P | Q | R | S | T | U | V | W | X | Y | Z | 0-9

Browse by subject

Physical Sciences and Engineering
- Chemical Engineering
- Chemistry
- Computer Science
- Earth and Planetary Sciences
- Energy
- Engineering
- Materials Science
- Mathematics
- Physics and Astronomy

Life Sciences
- Agricultural and Biological Sciences
- Biochemistry, Genetics and Molecular Biology
- Environmental Science
- Immunology and Microbiology
- Neuroscience

Health Sciences
- Medicine and Dentistry
- Nursing and Health Professions
- Pharmacology, Toxicology and Pharmaceutical Science
- Veterinary Science and Veterinary Medicine

Social Sciences and Humanities
- Arts and Humanities
- Business, Management and Accounting
- Decision Sciences
- Economics, Econometrics and Finance
- Psychology

Why Log in?

Log in for Personalization and Alerting Services

If you log in, all of the major actions you do can be stored on this page. For example, it can store the title home pages you have visited recently, recent searches, and full articles viewed. You can easily link back to them with one click. Likewise you can access directly all saved searches, email alerts and set up your own quick links on ScienceDirect and other sites on the web.

Quick Links

Favorite Journals / Books

You need to be logged in to customize and use Favorite Journals/Books.

Quick Links in ScienceDirect
- Alerts
- Recall Saved Searches
- Top-25 articles in my subject area
- ScienceDirect Info site

Quick Links on the Web
- Submit an article
- SCOPUS - database of research literature
- Scirus - science-specific search engine
- Elsevier
- 2collab - the research collaboration tool

You need to be logged in to customize and use your Quick Links

About ScienceDirect

Want to know more?

The ScienceDirect Info site has all the information you need to help you make the most of ScienceDirect.

Find out more about:
- Switching on Recent Actions
- Setting up Quick Links
- Setting up Alerts

... and personalize ScienceDirect now!

Content on ScienceDirect:
- Journals > 2,500
- Books > 6,000

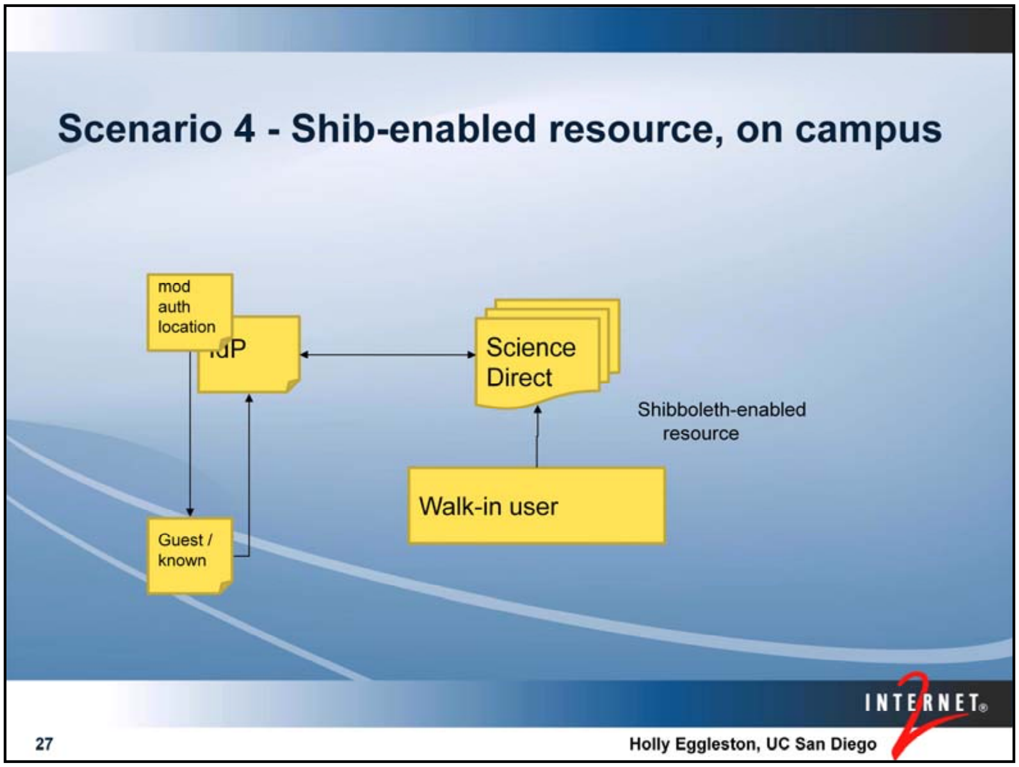
Online tutorials in multiple languages are also available.

You can help us improve ScienceDirect; please sign up

26

Holly Eggleston, UC San Diego

Screenshot: ScienceDirect



Scenario 4 - Shib-enabled resource, on campus

27

Holly Eggleston, UC San Diego

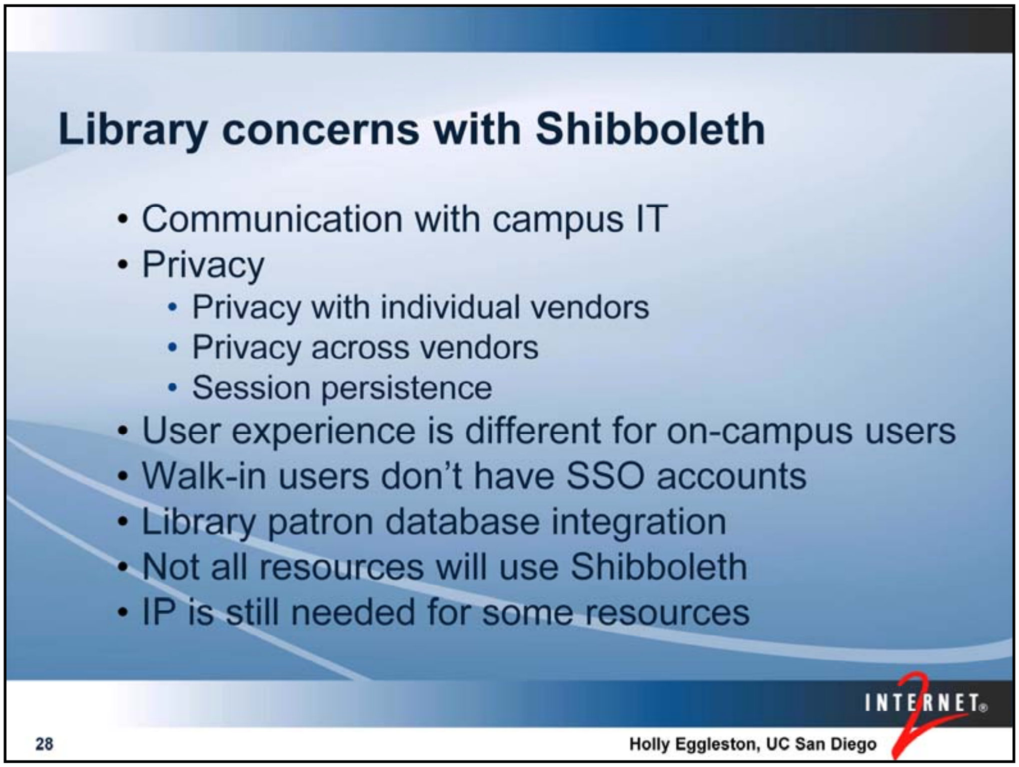
For users that do not have a user name/password, such as walk-ins,

- Enter mod_auth_location -- thanks to University of Washington

- At the time of IdP detection, the mod_auth_location Apache model can identify the user's IP and verifies against list of permitted addresses, allowing for login as a "generic user" -- just enough to be able to gain access to library resources while they're on the premises.

- However, this is problematic for authorized users that may be using one of these public machines to access their personalized resources (campus or library), so the user is actually given a choice to login with their personal login or be authenticated as a guest.

- Unfortunately, even in a best case scenario not all resources will be shibboleth enabled, which means we still need a method of authenticating users outside of the campus IP space.



Library concerns with Shibboleth

- Communication with campus IT
- Privacy
  - Privacy with individual vendors
  - Privacy across vendors
  - Session persistence
- User experience is different for on-campus users
- Walk-in users don't have SSO accounts
- Library patron database integration
- Not all resources will use Shibboleth
- IP is still needed for some resources

28 Holly Eggleston, UC San Diego

With thanks to Cliff Lynch and Peter Brantley

- IT Communication – communicating with libraries and bringing this to their attention

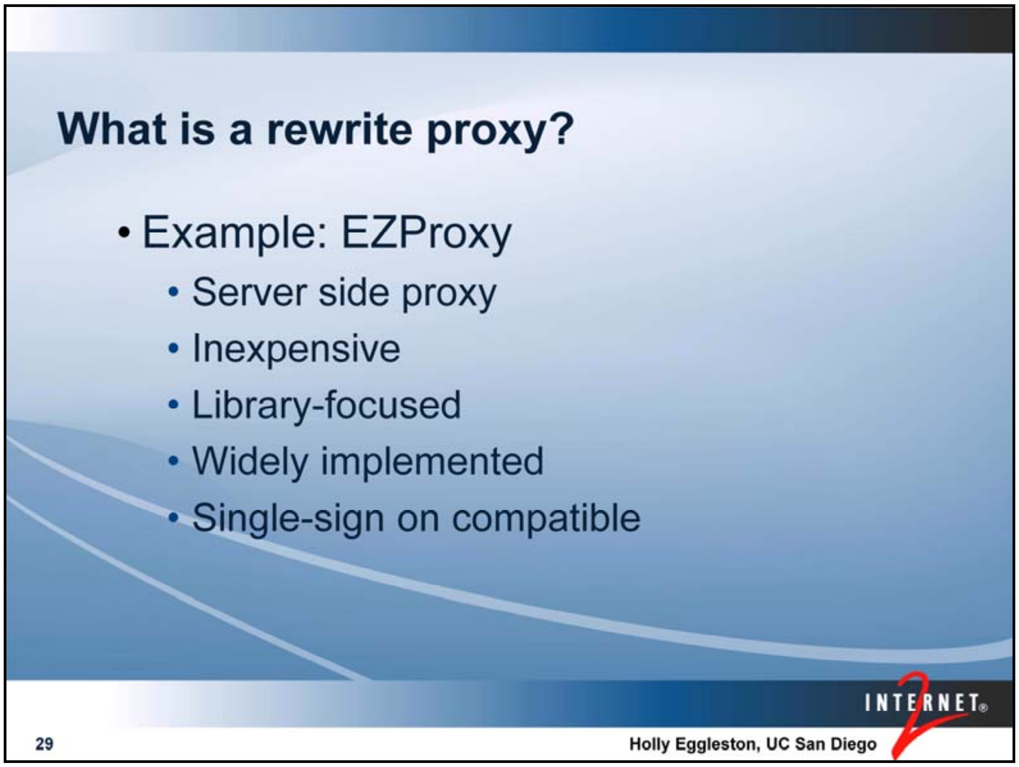
- Privacy - requires meeting campus and possibly federation standards for passing user-identifiable information
  -- How much information do we pass to vendors? As little as we can. However, may need to have user-individuation for allowing personalized functionality.
  -- Proposed "user confirmation of attributes" for IdP v. 2.2 would address this issue.
  -- Also concern about sending consistent identification to multiple vendors – EduPersonTargetedID in Shibboleth 2.0 makes this easier to maintain and generate.
  -- SSO in a public environment can be dangerous because of session persistence. Need to ensure a mechanism to close the browser or reboot the machine.

- User experience is different for on campus users – by default, they do not have automatic access by virtue of their location.

- Walk-in users - we addressed this as part of the scenarios

- Library patron database integration -- less of an issue for electronic resources, but essential if looking at enabling library services such as account management and ILL requests for single sign on.

- And as much work as is being done, there will always be resources that will continue to use IP access.



What is a rewrite proxy?

- Example: EZProxy
  - Server side proxy
  - Inexpensive
  - Library-focused
  - Widely implemented
  - Single-sign on compatible

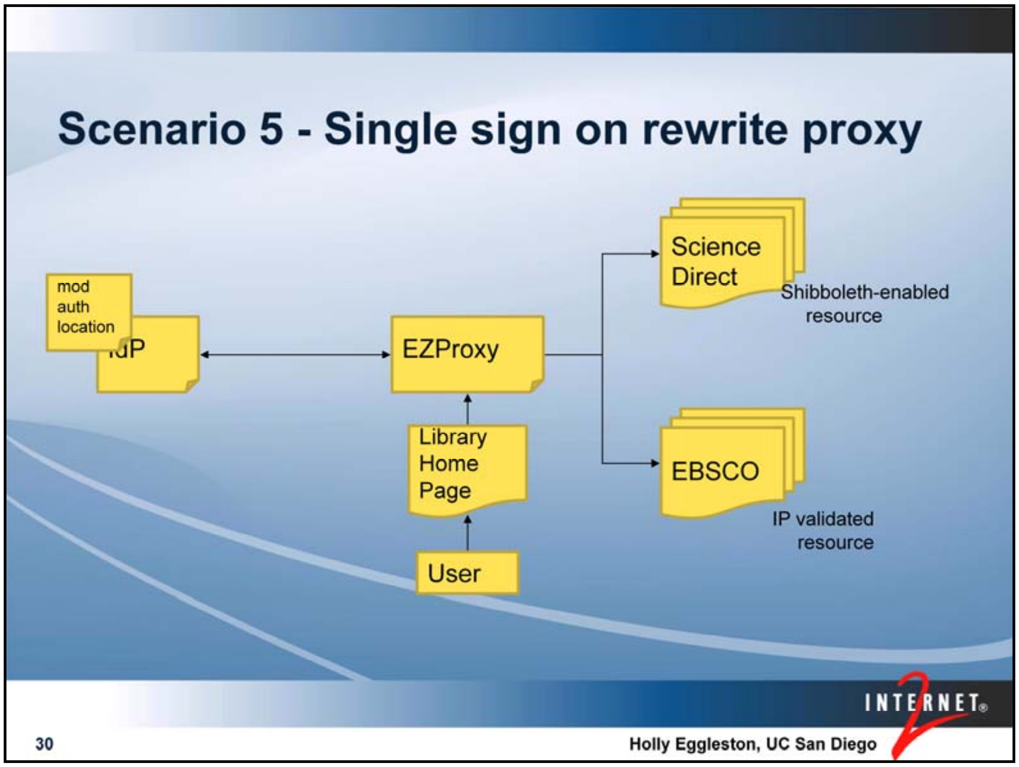
Holly Eggleston, UC San Diego

- A proxy by a different name

- Primarily a library-implemented solution to provide off-campus access to library resources.
- Inexpensive
- Many libraries already use this for remote access – I've had sessions where every hand in the room goes up when I ask who is using EZProxy.
- Server side proxy that acts as both a virtual server and virtual client by rewriting the resource URL's.

- Two main advantages
- Server side -- no user configuration needed
-Can be enabled for single sign on authentication

- UCSD is currently working with the WebVPN rewrite proxy from Cisco that is part of their new VPN client, but this is not as widely used, nor as inexpensive.



Scenario 5 - Single sign on rewrite proxy

mod auth location

IdP

EZProxy

Library Home Page

User

Science Direct

Shibboleth-enabled resource

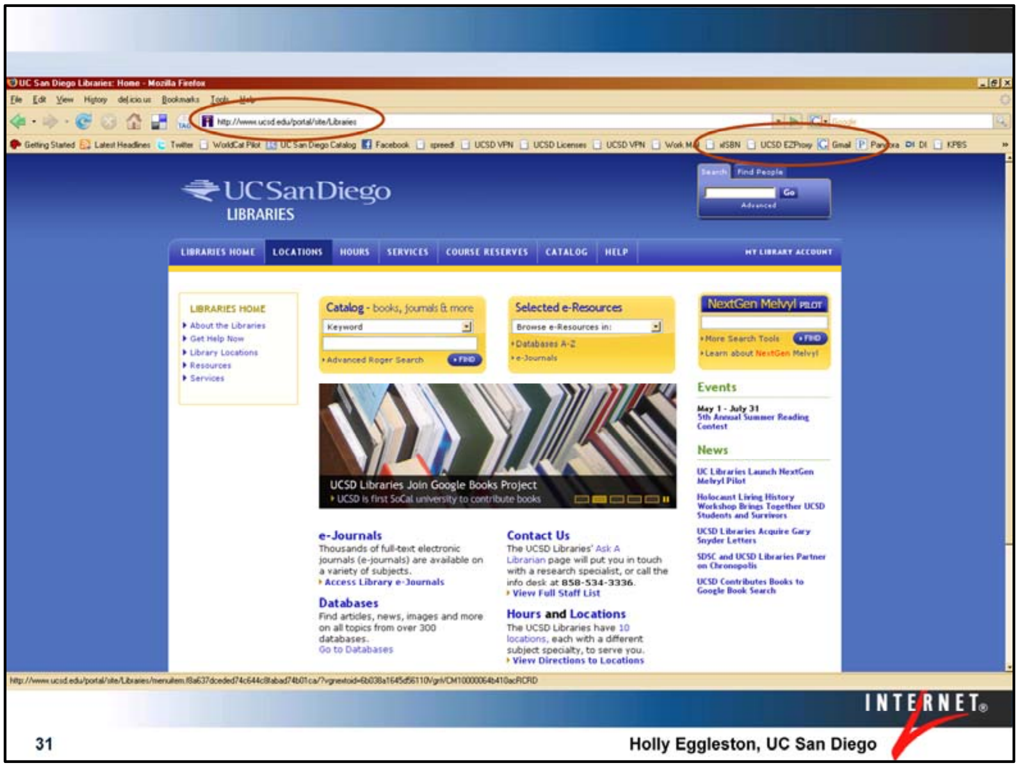
EBSCO

IP validated resource

Holly Eggleston, UC San Diego

INTERNET2

- User accesses library web page, clicks on resource
- Directed to EZProxy, which validates to the IdP
- If going to a Shib-enabled resource, user initiated login and WAYF, passed through and persistent identifier is detected, passing additional attributes as necessary
- If going to an IP validated resource, uses proxy to act as permitted IP address


UC San Diego Libraries: Home - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://www.ucsd.edu/portal/site/Libraries
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook spreed! UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI DI KPBS
Search Find People
Go
Advanced
UCSanDiego
LIBRARIES
LIBRARIES HOME
LOCATIONS
HOURS
SERVICES
COURSE RESERVES
CATALOG
HELP
MY LIBRARY ACCOUNT
LIBRARIES HOME
About the Libraries
Get Help Now
Library Locations
Resources
Services
Catalog - books, journals & more
Keyword
Advanced Roger Search
FIND
Selected e-Resources
Browse e-Resources in:
Databases A-Z
e-Journals
NextGen Melvyl PILOT
More Search Tools
FIND
Learn about NextGen Melvyl
UCSD Libraries Join Google Books Project
UCSD is first SoCal university to contribute books

e-Journals

Thousands of full-text electronic journals (e-journals) are available on a variety of subjects.

Access Library e-Journals

Databases

Find articles, news, images and more on all topics from over 300 databases.

Go to Databases

Contact Us

The UCSD Libraries' Ask A Librarian page will put you in touch with a research specialist, or call the info desk at 858-534-3336.

View Full Staff List

Hours and Locations

The UCSD Libraries have 10 locations, each with a different subject specialty, to serve you.

View Directions to Locations

Events

May 1 - July 31
5th Annual Summer Reading Contest

News

UC Libraries Launch NextGen Melvyl Pilot

Holocaust Living History Workshop Brings Together UCSD Students and Survivors

UCSD Libraries Acquire Gary Snyder Letters

SDSC and UCSD Libraries Partner on Chronopolis

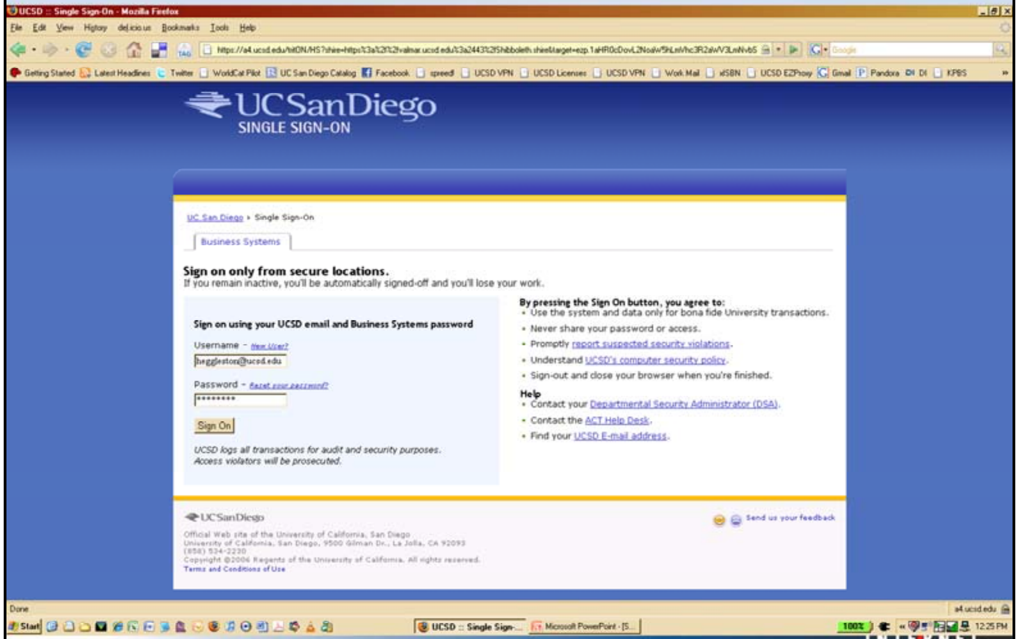
UCSD Contributes Books to Google Book Search

http://www.ucsd.edu/portal/site/Libraries/menuitem.f8a637dceded74c644c8tabad74b01ca/?vgnextoid=6b038a1645d56110VgnVCM10000064b410acRCRD

31

Holly Eggleston, UC San Diego

Screenshot: Library Webpage without Proxy authentication
Click bookmarklet or have embedded link on page to login to EZProxy


UCSD :: Single Sign-On - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
https://a4.ucsd.edu/tritON/HS?shire=https%3a%2f%2fvalmar.ucsd.edu%3a2443%2fShibboleth.shire&target=ezp.1aHR0cDovL2NoaW5hLmVhc3R2aWV3LmNvbS
Google
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook speed! UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI KPBS
UC San Diego
SINGLE SIGN-ON
UC San Diego › Single Sign-On
Business Systems
Done
a4.ucsd.edu
Start
UCSD :: Single Sign-...
Microsoft PowerPoint - [S...
100%
12:25 PM

Sign on only from secure locations.
If you remain inactive, you'll be automatically signed-off and you'll lose your work.

Sign on using your UCSD email and Business Systems password

Username - New User?
heggleston@ucsd.edu

Password - Reset your password?
****

Sign On

UCSD logs all transactions for audit and security purposes.
Access violators will be prosecuted.

By pressing the Sign On button, you agree to:

- Use the system and data only for bona fide University transactions.
- Never share your password or access.
- Promptly report suspected security violations.
- Understand UCSD's computer security policy.
- Sign-out and close your browser when you're finished.

Help

- Contact your Departmental Security Administrator (DSA).
- Contact the ACT Help Desk.
- Find your UCSD E-mail address.

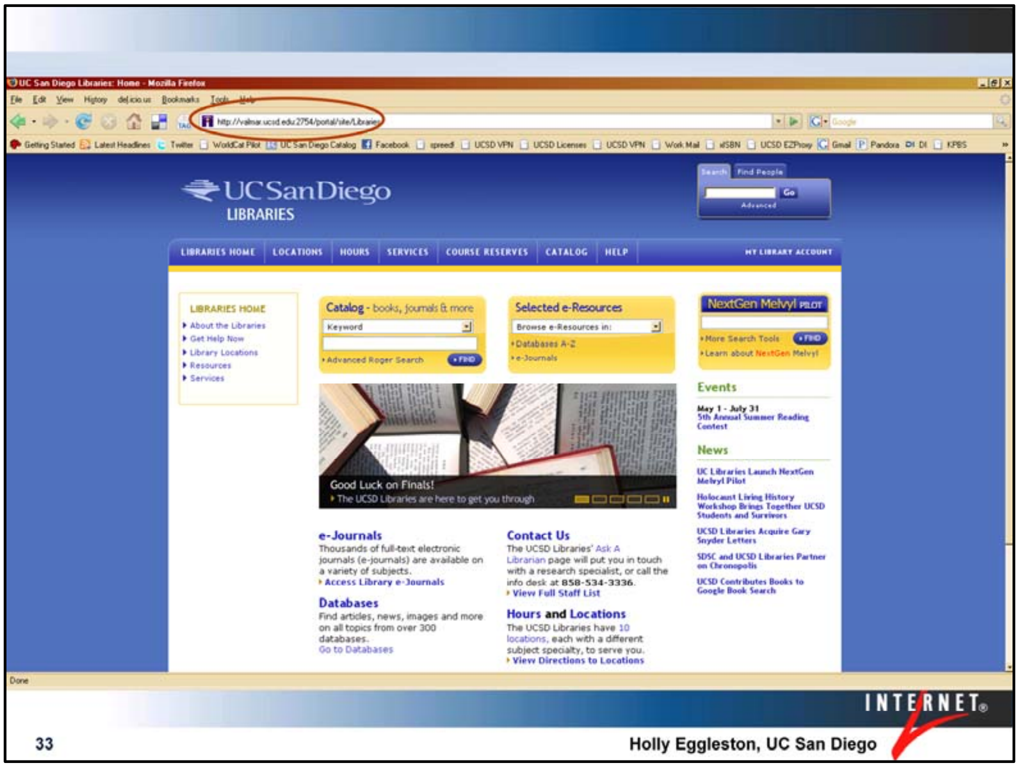
UC San Diego

Official Web site of the University of California, San Diego
University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093
(858) 534-2230
Copyright ©2006 Regents of the University of California. All rights reserved.
Terms and Conditions of Use

Send us your feedback

Holly Eggleston, UC San Diego

Screenshot: Shibboleth login for EZProxy


UC San Diego Libraries: Home - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook spreed! UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI KPBS
UCSanDiego
LIBRARIES
Search Find People
Go
Advanced
LIBRARIES HOME LOCATIONS HOURS SERVICES COURSE RESERVES CATALOG HELP MY LIBRARY ACCOUNT
LIBRARIES HOME
About the Libraries
Get Help Now
Library Locations
Resources
Services
Catalog - books, journals & more
Keyword
Advanced Roger Search
FIND
Selected e-Resources
Browse e-Resources in:
Databases A-Z
e-Journals
NextGen Melvyl PILOT
More Search Tools
FIND
Learn about NextGen Melvyl
Good Luck on Finals!
The UCSD Libraries are here to get you through
Done
INTERNET

http://valmar.ucsd.edu:2754/portal/site/Libraries

e-Journals
Thousands of full-text electronic journals (e-journals) are available on a variety of subjects.
Access Library e-Journals

Databases
Find articles, news, images and more on all topics from over 300 databases.
Go to Databases

Contact Us
The UCSD Libraries' Ask A Librarian page will put you in touch with a research specialist, or call the info desk at 858-534-3336.
View Full Staff List

Hours and Locations
The UCSD Libraries have 10 locations, each with a different subject specialty, to serve you.
View Directions to Locations

Events
May 1 - July 31
5th Annual Summer Reading Contest

News
UC Libraries Launch NextGen Melvyl Pilot
Holocaust Living History Workshop Brings Together UCSD Students and Survivors
UCSD Libraries Acquire Gary Snyder Letters
SDSC and UCSD Libraries Partner on Chronopolis
UCSD Contributes Books to Google Book Search

33 Holly Eggleston, UC San Diego

Screenshot: Proxied Library Page

There are some user training issues for those that have not implemented a rewrite proxy:
-Rewrite proxies are dependent on having an explicitly written URL and clicking links from the current page

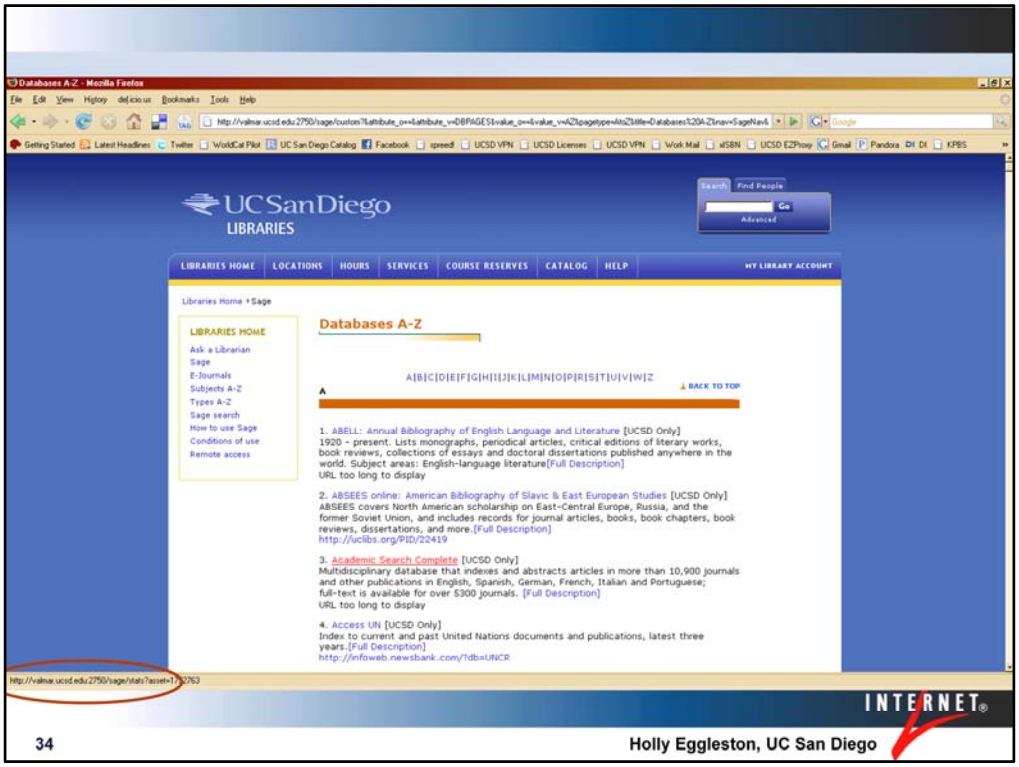
-If user manually types a URL or clicks an external link, they need a quick way to get validated (bookmarklet)

-Depending on your configuration, you can create modified URL's in existing links, or (as we've done in our example), included our catalog and SFX as proxied sites, so it automatically provides a passthrough.

- As a rewriting proxy modifies the URL change, it can get tripped up by programming variations outside of the HTTP stream or on different ports.

- Rewriting proxies do not work on "client software" based resources such as Scifinder Scholar. In both of these cases, a VPN is a better choice.

The institutions that have implemented this resource have used a combination of technological solutions and user education to address these issues, but it is a consideration for those libraries that have not adopted a server-side proxy.


Databases A-Z - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://valmar.ucsd.edu:2750/sage/custom?&attribute_o=&attribute_v=DBPAGES&value_o=&value_v=AZ&pagetype=AtoZ&title=Databases%20A-Z&nav=SageNav&
Google
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook spreed! UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI KPBS
UC San Diego
LIBRARIES
Search Find People
Go
Advanced
LIBRARIES HOME
LOCATIONS
HOURS
SERVICES
COURSE RESERVES
CATALOG
HELP
MY LIBRARY ACCOUNT
Libraries Home › Sage
LIBRARIES HOME
Ask a Librarian
Sage
E-Journals
Subjects A-Z
Types A-Z
Sage search
How to use Sage
Conditions of use
Remote access

Databases A-Z

A|B|C|D|E|F|G|H|I|J|K|L|M|N|O|P|R|S|T|U|V|W|Z

BACK TO TOP

A

1. ABELL: Annual Bibliography of English Language and Literature [UCSD Only]
1920 - present. Lists monographs, periodical articles, critical editions of literary works, book reviews, collections of essays and doctoral dissertations published anywhere in the world. Subject areas: English-language literature[Full Description]
URL too long to display

2. ABSEES online: American Bibliography of Slavic & East European Studies [UCSD Only]
ABSEES covers North American scholarship on East-Central Europe, Russia, and the former Soviet Union, and includes records for journal articles, books, book chapters, book reviews, dissertations, and more.[Full Description]
http://uclibs.org/PID/22419

3. Academic Search Complete [UCSD Only]
Multidisciplinary database that indexes and abstracts articles in more than 10,900 journals and other publications in English, Spanish, German, French, Italian and Portuguese; full-text is available for over 5300 journals. [Full Description]
URL too long to display

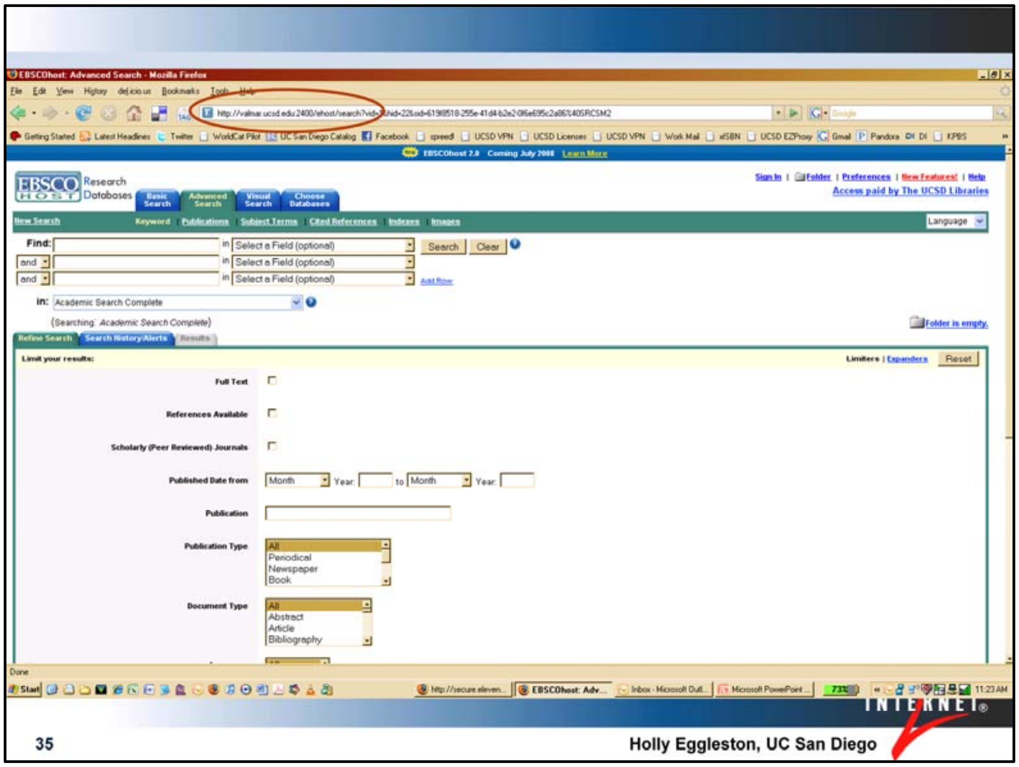
4. Access UN [UCSD Only]
Index to current and past United Nations documents and publications, latest three years.[Full Description]
http://infoweb.newsbank.com/?db=UNCR

http://valmar.ucsd.edu:2750/sage/stats?asset=17[illegible]2763

34

Holly Eggleston, UC San Diego

Screenshot: UCSD links to resources



EBSCOhost: Advanced Search - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook speed! UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI KPBS
EBSCOhost 2.0 Coming July 2008 Learn More
EBSCO HOST Research Databases
Basic Search
Advanced Search
Visual Search
Choose Databases
Sign In | Folder | Preferences | New Features! | Help
Access paid by The UCSD Libraries
New Search
Keyword | Publications | Subject Terms | Cited References | Indexes | Images
Language
Search
Clear
Add Row
Folder is empty.
Refine Search
Search History/Alerts
Results
Limiters | Expanders
Reset
Done
Start

http://valmar.ucsd.edu:2400/ehost/search?vid=3&hid=22&sid=6198518-255e-41d4-b2e2-0f6e695c2a86%40SRCSM2

Find: [ ] in Select a Field (optional)
and [ ] in Select a Field (optional)
and [ ] in Select a Field (optional)

in: Academic Search Complete

(Searching: *Academic Search Complete*)

Limit your results:

Full Text □

References Available □

Scholarly (Peer Reviewed) Journals □

Published Date from Month Year: [ ] to Month Year: [ ]

Publication [ ]

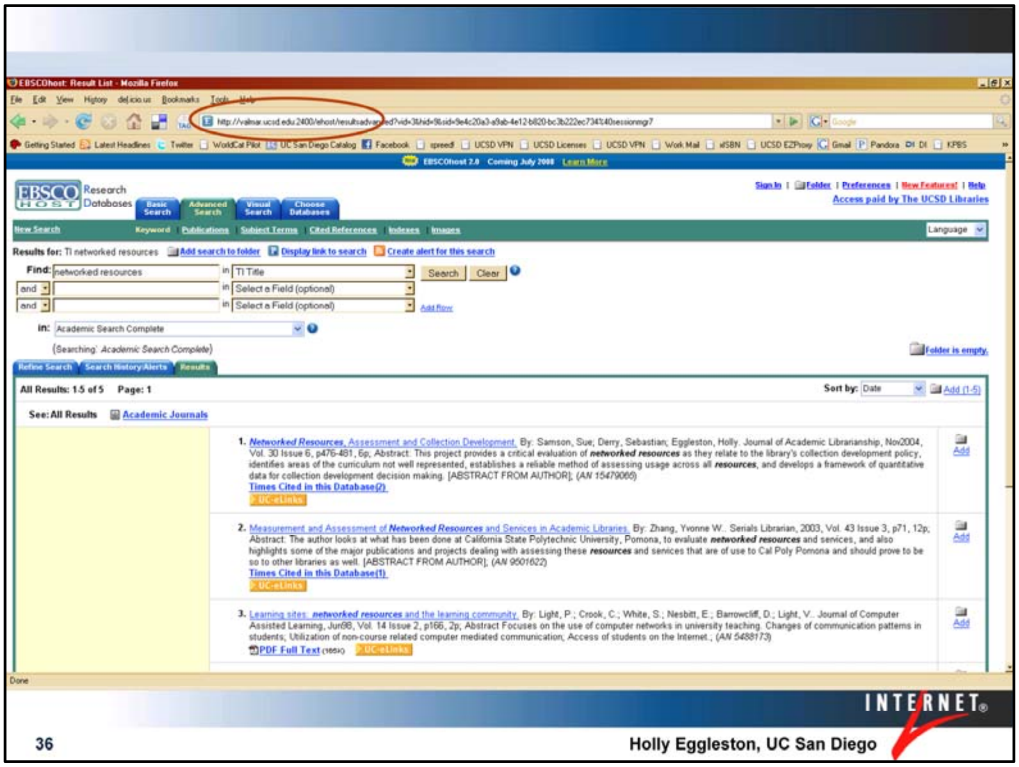
Publication Type: All, Periodical, Newspaper, Book

Document Type: All, Abstract, Article, Bibliography

35

Holly Eggleston, UC San Diego

Screenshot: Ebsco authenticated with EZProxy SSO Login


EBSCOhost: Result List - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook spreed UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI KPBS
EBSCOhost 2.0 Coming July 2008 Learn More
EBSCO HOST Research Databases
Basic Search
Advanced Search
Visual Search
Choose Databases
Sign In | Folder | Preferences | New Features! | Help
Access paid by The UCSD Libraries
New Search
Keyword | Publications | Subject Terms | Cited References | Indexes | Images
Language
Add search to folder
Display link to search
Create alert for this search
Search
Clear
Add Row
Folder is empty.
Refine Search
Search History/Alerts
Results
Add (1-5)
Add
Done
INTERNET
36
Holly Eggleston, UC San Diego

http://valmar.ucsd.edu:2400/ehost/resultsadvanced?vid=3&hid=9&sid=9e4c20a3-a9ab-4e12-b820-bc3b222ec734%40sessionmgr7

Results for: TI networked resources

Find: networked resources in TI Title

and in Select a Field (optional)

and in Select a Field (optional)

in: Academic Search Complete

(Searching: *Academic Search Complete*)

All Results: 1-5 of 5 Page: 1

Sort by: Date

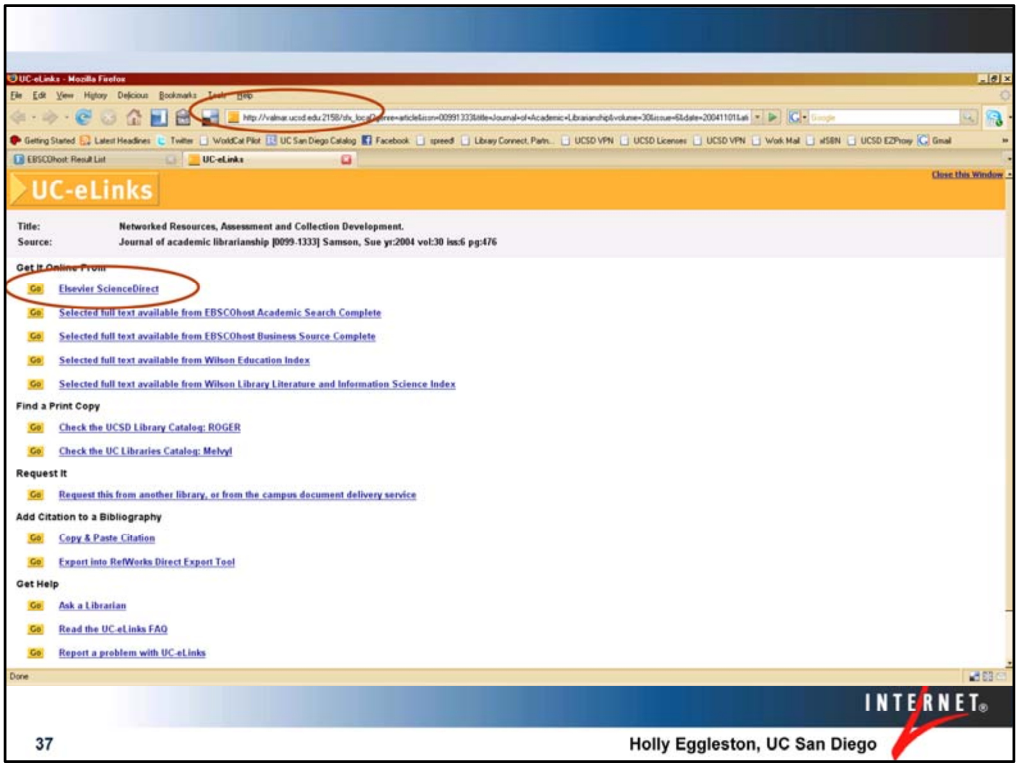
See: All Results Academic Journals

1. ***Networked Resources***, Assessment and Collection Development. By: Samson, Sue; Derry, Sebastian; Eggleston, Holly. Journal of Academic Librarianship, Nov2004, Vol. 30 Issue 6, p476-481, 6p; Abstract: This project provides a critical evaluation of ***networked resources*** as they relate to the library's collection development policy, identifies areas of the curriculum not well represented, establishes a reliable method of assessing usage across all ***resources***, and develops a framework of quantitative data for collection development decision making. [ABSTRACT FROM AUTHOR]; *(AN 15479066)*
   Times Cited in this Database(2)
   UC-eLinks

2. Measurement and Assessment of ***Networked Resources*** and Services in Academic Libraries. By: Zhang, Yvonne W.. Serials Librarian, 2003, Vol. 43 Issue 3, p71, 12p; Abstract: The author looks at what has been done at California State Polytechnic University, Pomona, to evaluate ***networked resources*** and services, and also highlights some of the major publications and projects dealing with assessing these ***resources*** and services that are of use to Cal Poly Pomona and should prove to be so to other libraries as well. [ABSTRACT FROM AUTHOR]; *(AN 9501622)*
   Times Cited in this Database(1)
   UC-eLinks

3. Learning sites: ***networked resources*** and the learning community. By: Light, P.; Crook, C.; White, S.; Nesbitt, E.; Barrowcliff, D.; Light, V.. Journal of Computer Assisted Learning, Jun98, Vol. 14 Issue 2, p166, 2p; Abstract Focuses on the use of computer networks in university teaching. Changes of communication patterns in students; Utilization of non-course related computer mediated communication; Access of students on the Internet.; *(AN 5488173)*
   PDF Full Text (165K) UC-eLinks

Screenshot: Search for article in ScienceDirect



UC-eLinks - Mozilla Firefox

http://valmar.ucsd.edu:2158/sfx_local?genre=article&issn=00991333&title=Journal+of+Academic+Librarianship&volume=30&issue=6&date=20041101&at

UC-eLinks

Title: Networked Resources, Assessment and Collection Development.

Source: Journal of academic librarianship [0099-1333] Samson, Sue yr:2004 vol:30 iss:6 pg:476

Get It Online From

- Go Elsevier ScienceDirect
- Go Selected full text available from EBSCOhost Academic Search Complete
- Go Selected full text available from EBSCOhost Business Source Complete
- Go Selected full text available from Wilson Education Index
- Go Selected full text available from Wilson Library Literature and Information Science Index

Find a Print Copy

- Go Check the UCSD Library Catalog: ROGER
- Go Check the UC Libraries Catalog: Melvyl

Request It

- Go Request this from another library, or from the campus document delivery service

Add Citation to a Bibliography

- Go Copy & Paste Citation
- Go Export into RefWorks Direct Export Tool

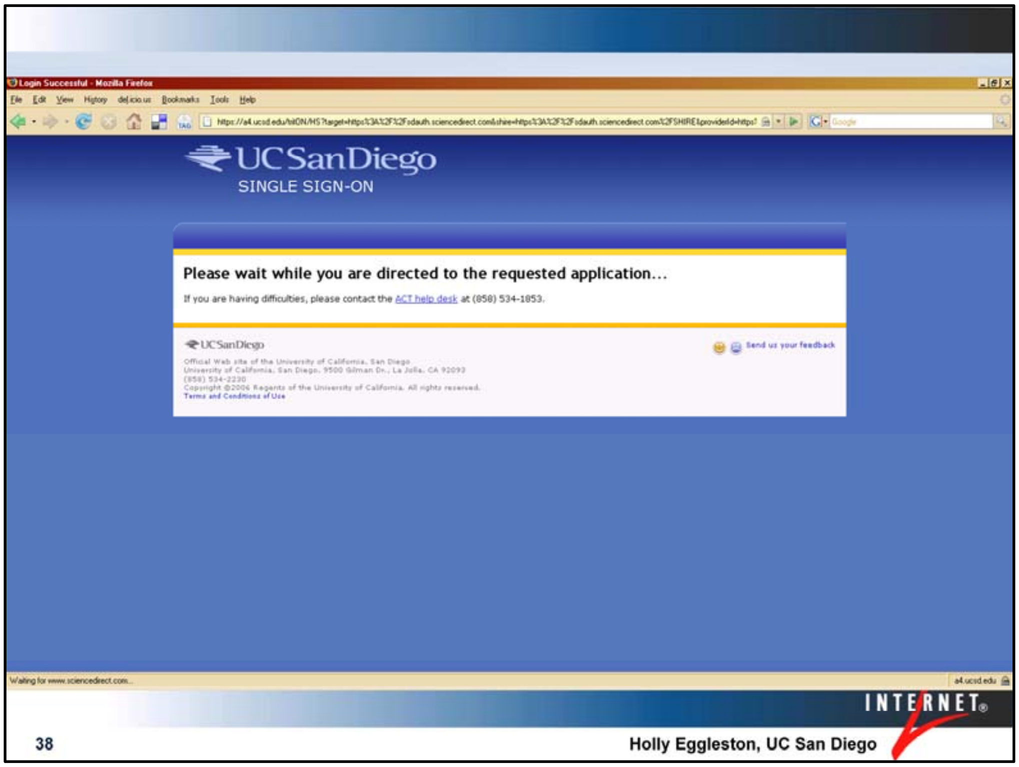
Get Help

- Go Ask a Librarian
- Go Read the UC-eLinks FAQ
- Go Report a problem with UC-eLinks

37

Holly Eggleston, UC San Diego

Screenshot: Passthrough to UC Elinks (SFX), using a WAYF-less URL



Login Successful - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
https://a4.ucsd.edu/tritON/HS?target=https%3A%2F%2Fsdauth.sciencedirect.com&shire=https%3A%2F%2Fsdauth.sciencedirect.com%2FSHIRE&providerId=https!
Google
UCSanDiego
SINGLE SIGN-ON

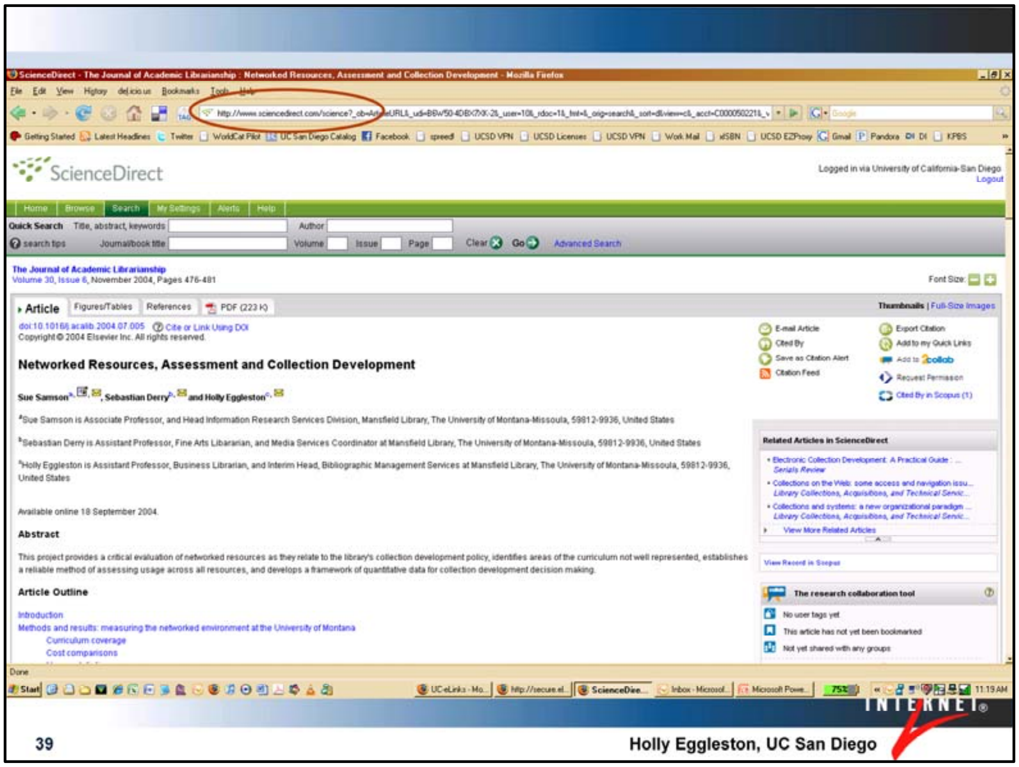
Please wait while you are directed to the requested application...

If you are having difficulties, please contact the ACT help desk at (858) 534-1853.

Official Web site of the University of California, San Diego
University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093
(858) 534-2230
Copyright ©2006 Regents of the University of California. All rights reserved.
Terms and Conditions of Use

Holly Eggleston, UC San Diego

Screenshot: UCSD Shibboleth Authentication


ScienceDirect - The Journal of Academic Librarianship : Networked Resources, Assessment and Collection Development - Mozilla Firefox
File Edit View History del.icio.us Bookmarks Tools Help
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6W50-4DBX7XX-2&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_v
Getting Started Latest Headlines Twitter WorldCat Pilot UC San Diego Catalog Facebook spreed! UCSD VPN UCSD Licenses UCSD VPN Work Mail xISBN UCSD EZProxy Gmail Pandora DI KPBS
ScienceDirect
Home Browse Search My Settings Alerts Help
Quick Search Title, abstract, keywords Author
search tips Journal/book title Volume Issue Page Clear Go Advanced Search
Font Size:
Article Figures/Tables References PDF (223 K)
Thumbnails | Full-Size Images
E-mail Article
Cited By
Save as Citation Alert
Citation Feed
Export Citation
Add to my Quick Links
Add to 2collab
Request Permission
Cited By in Scopus (1)
View Record in Scopus
Done
Start
UC-eLinks - Mo...
http://secure.el...
ScienceDire...
Inbox - Microsof...
Microsoft Powe...
75%
11:19 AM
INTERNET

Logged in via University of California-San Diego
Logout

The Journal of Academic Librarianship
Volume 30, Issue 6, November 2004, Pages 476-481

doi:10.1016/j.acalib.2004.07.005 Cite or Link Using DOI
Copyright © 2004 Elsevier Inc. All rights reserved.

Networked Resources, Assessment and Collection Development

Sue Samson[a], Sebastian Derry[b], and Holly Eggleston[c]

[a]Sue Samson is Associate Professor, and Head Information Research Services Division, Mansfield Library, The University of Montana-Missoula, 59812-9936, United States

[b]Sebastian Derry is Assistant Professor, Fine Arts Libararian, and Media Services Coordinator at Mansfield Library, The University of Montana-Missoula, 59812-9936, United States

[c]Holly Eggleston is Assistant Professor, Business Librarian, and Interim Head, Bibliographic Management Services at Mansfield Library, The University of Montana-Missoula, 59812-9936, United States

Available online 18 September 2004.

Abstract

This project provides a critical evaluation of networked resources as they relate to the library's collection development policy, identifies areas of the curriculum not well represented, establishes a reliable method of assessing usage across all resources, and develops a framework of quantitative data for collection development decision making.

Article Outline

Introduction
Methods and results: measuring the networked environment at the University of Montana
Curriculum coverage
Cost comparisons

Related Articles in ScienceDirect

- Electronic Collection Development: A Practical Guide : ... *Serials Review*
- Collections on the Web: some access and navigation issu... *Library Collections, Acquisitions, and Technical Servic...*
- Collections and systems: a new organizational paradigm ... *Library Collections, Acquisitions, and Technical Servic...*
- View More Related Articles

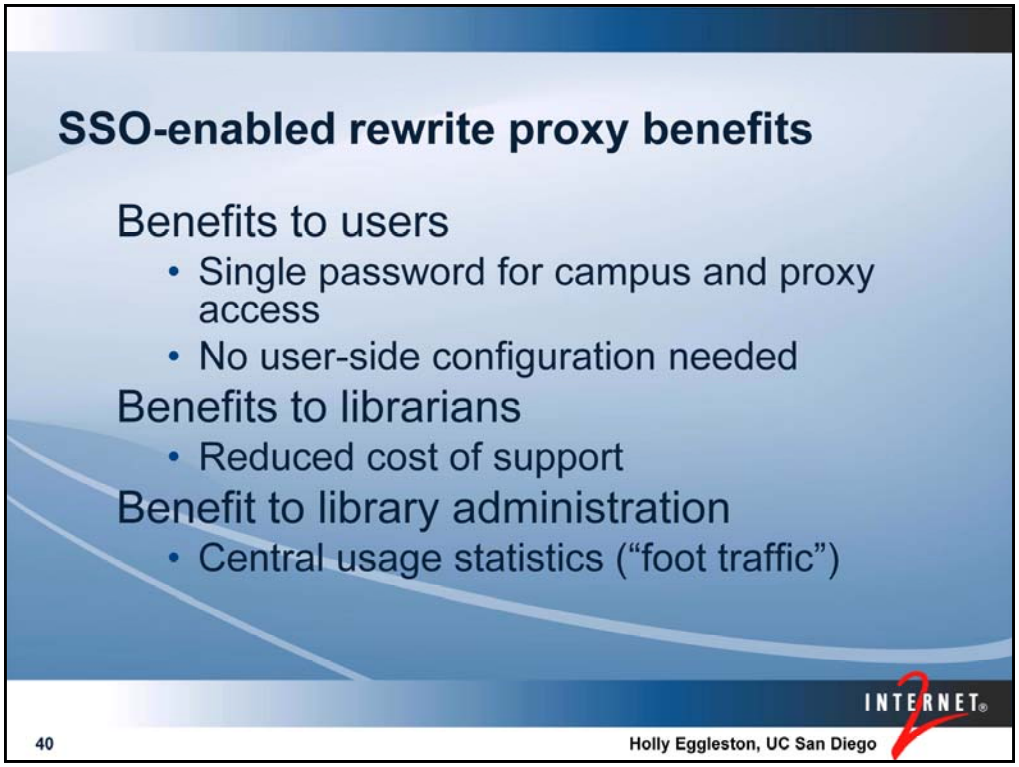
The research collaboration tool

No user tags yet
This article has not yet been bookmarked
Not yet shared with any groups

39 Holly Eggleston, UC San Diego

Screenshot: ScienceDirect authenticated with Shibboleth information provided at EZProxy login.

In the case that a resource is entirely Shibboleth enabled, you can still pass the resource through EZProxy (to maintain the rewrite functionality), but as IP’s are no longer maintained with the vendor, the authentication will occur with the Shibboleth credentials, not the IP address.



SSO-enabled rewrite proxy benefits

Benefits to users
- Single password for campus and proxy access
- No user-side configuration needed

Benefits to librarians
- Reduced cost of support

Benefit to library administration
- Central usage statistics (“foot traffic”)

40

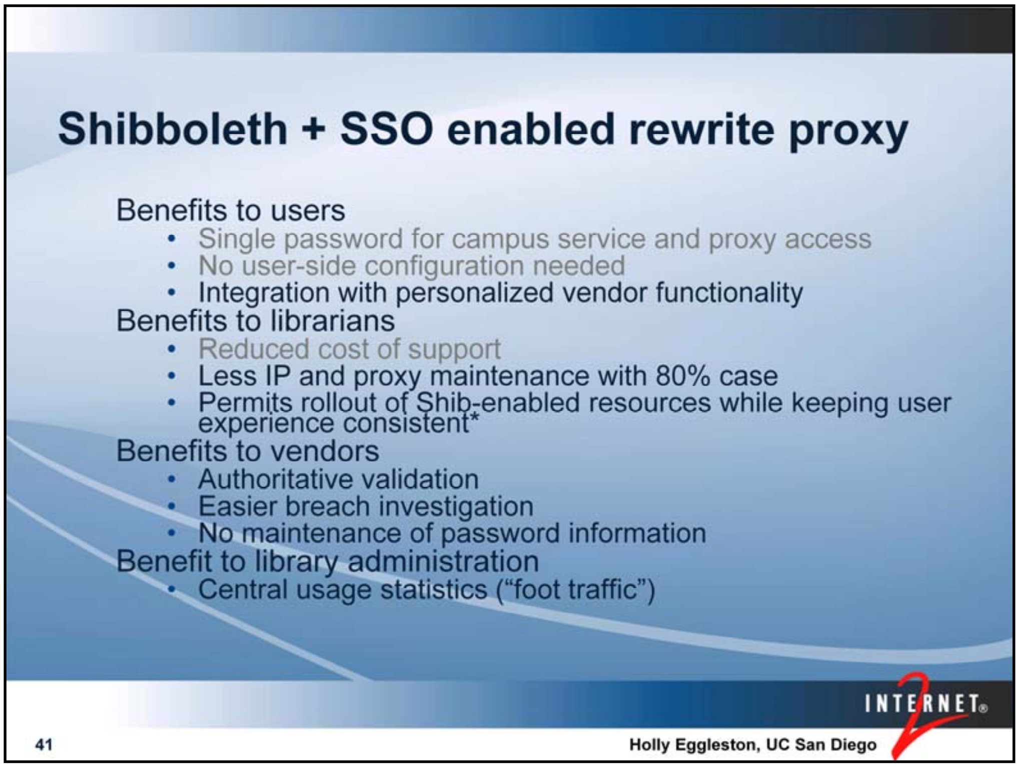
Holly Eggleston, UC San Diego

An SSO enabled rewrite proxy by itself has a number of advantages

Benefits to our users:
- Single password
- As it’s server side, users don’t need to modify their local machines – a bonus for users in lockdown environments.
- User experience – seamless access, personalization and consistent behavior on and off campus

Benefits to our librarians
- Support – reduction in help tickets

Benefit to library administration
- Local foot traffic log



Shibboleth + SSO enabled rewrite proxy

Benefits to users
- Single password for campus service and proxy access
- No user-side configuration needed
- Integration with personalized vendor functionality

Benefits to librarians
- Reduced cost of support
- Less IP and proxy maintenance with 80% case
- Permits rollout of Shib-enabled resources while keeping user experience consistent*

Benefits to vendors
- Authoritative validation
- Easier breach investigation
- No maintenance of password information

Benefit to library administration
- Central usage statistics (“foot traffic”)

41 Holly Eggleston, UC San Diego

So if I have a shib-enabled rewrite proxy, why should I take the extra step and access my resources through shibboleth?

Don’t have to maintain IP’s with shib resources, if 80% case is handled through shib, possible to route the rest of the functionality through a router, effectively eliminating the need for IP maintenance

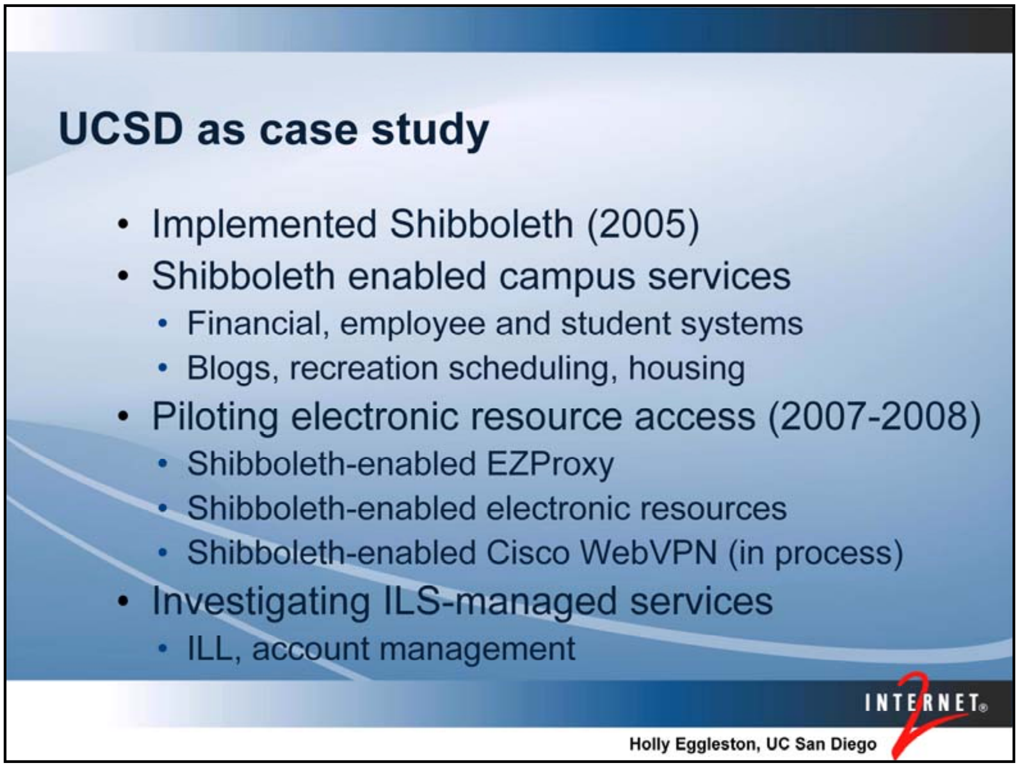
To recap, what are the benefits that these technologies can provide to the libraries?

Benefits to our users:
- In addition to a single password for remote access, now a single password to also access their personalized features

Benefits to our librarians
- By using shibboleth for the high traffic resources, can route all traffic through local proxy, reducing the need to maintain large IP lists with the vendor.
- SSO enabled proxy allows for gradual integration of shibboleth-enabled resources with a minimum of impact to the user – this is not perfect, we’ll be talking about this in a later slide.

Benefits to Vendors
- Authoritative validation – I talked about IT concerns with the security of IP-based access
- Being able to more quickly identify and resolve breach issues is useful for both Vendors and Libraries
- No maintenance of passwords by the vendor

Benefit to library administration
- Depending on your data collection and privacy policies, the proxy provides a central foot traffic log, as does shibboleth. In addition, shibboleth can provide additional data to permit summarizing demographic information.



UCSD as case study

- Implemented Shibboleth (2005)
- Shibboleth enabled campus services
  - Financial, employee and student systems
  - Blogs, recreation scheduling, housing
- Piloting electronic resource access (2007-2008)
  - Shibboleth-enabled EZProxy
  - Shibboleth-enabled electronic resources
  - Shibboleth-enabled Cisco WebVPN (in process)
- Investigating ILS-managed services
  - ILL, account management

Holly Eggleston, UC San Diego

Implemented Shibboleth with the release of 1.0
Initially focused on campus services, currently in production
Currently piloting electronic resource access using hybrid EZProxy solution
- high use
- programmatically complex
- historically problematic

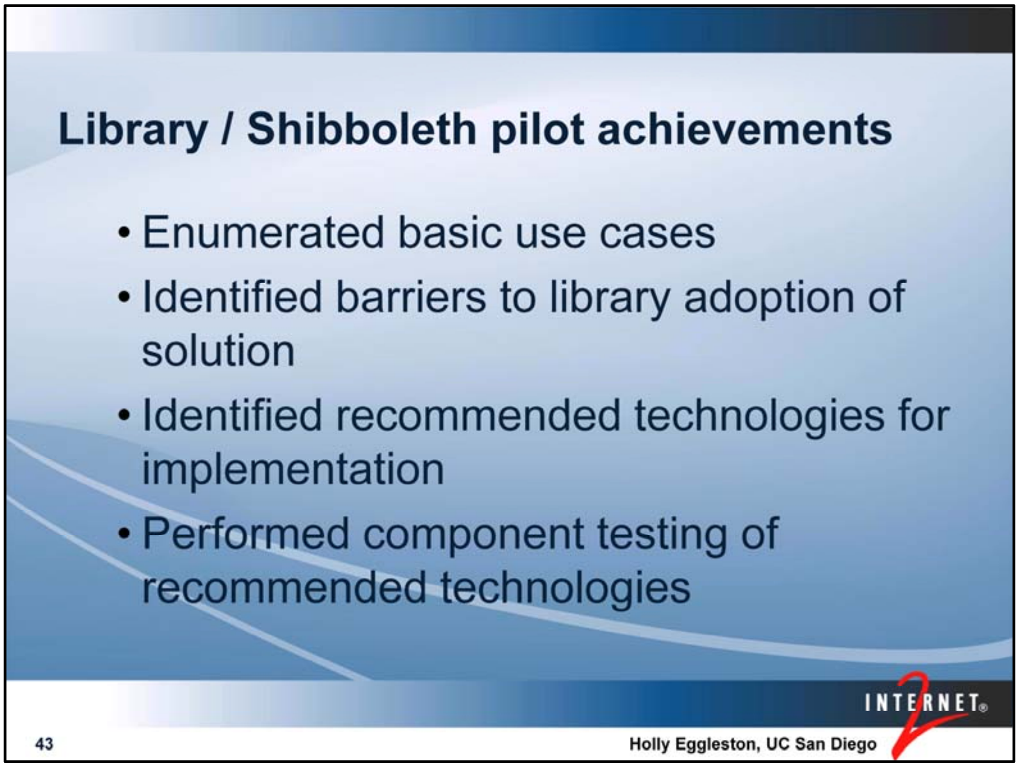
Production rollout for resources for historically problematic populations (biomed)

We are a III shop, and are in discussions with them for shibboleth compatibility with ILS services

Also working on how to integrate this as participants of the larger UC system - some of the solutions implemented by single systems create conflict with our multi-campus cataloging/shared SFX database.

UCSD recently implemented Cisco WebVPN – another rewrite proxy, and are working on integrating Shibboleth login to provide an alternate option for the hybrid environment.

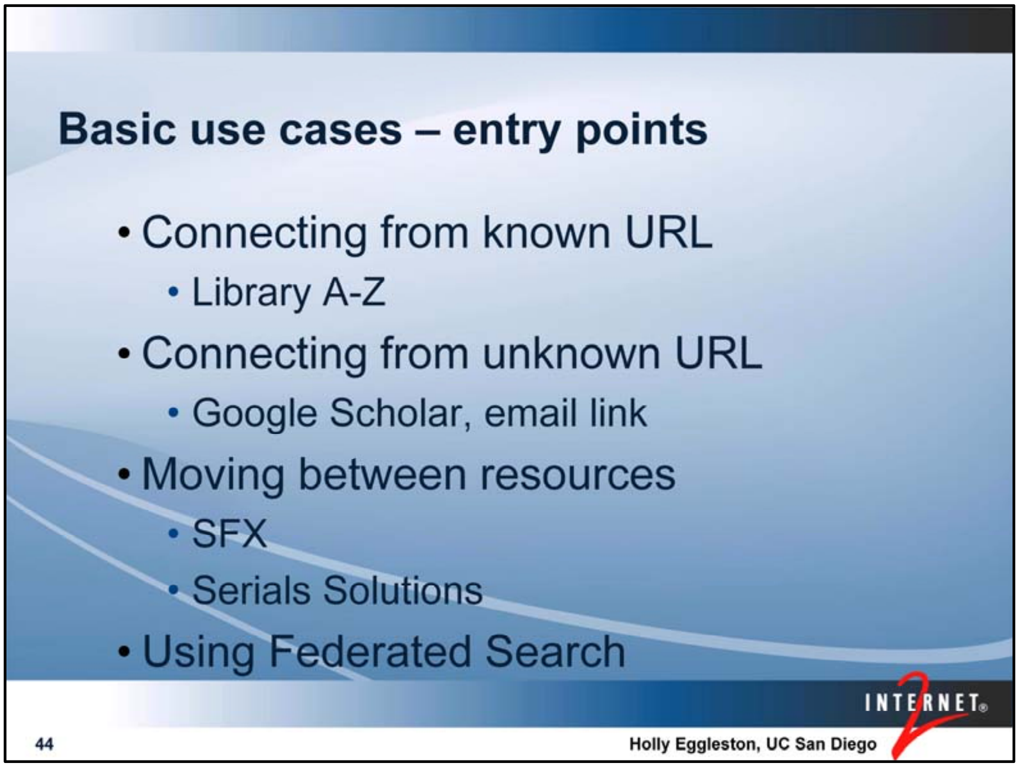
Other participants are further along in their production library implementations such as University of Maryland, who has a production environment using EZProxy, SFX, shib enabled library services and campus portal.



Library / Shibboleth pilot achievements

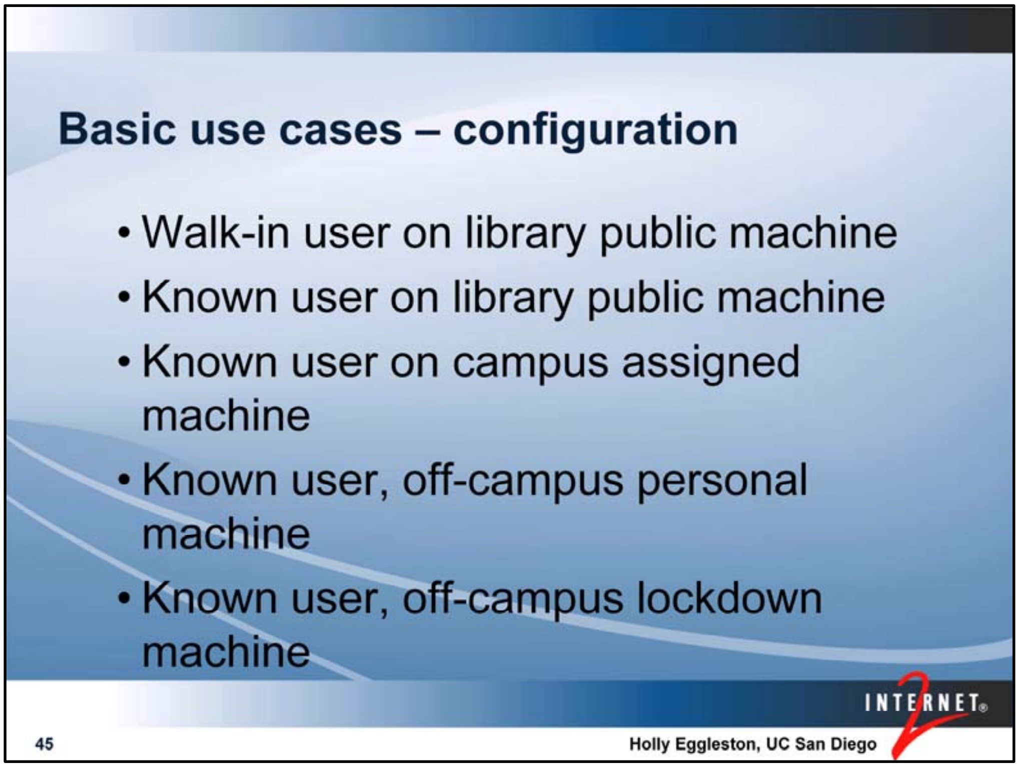
- Enumerated basic use cases
- Identified barriers to library adoption of solution
- Identified recommended technologies for implementation
- Performed component testing of recommended technologies

Performed initial testing with individual SP’s
Tested feasibility of individual solutions
Maryland testing with Ebsco
Chicago / Washington testing Refworks



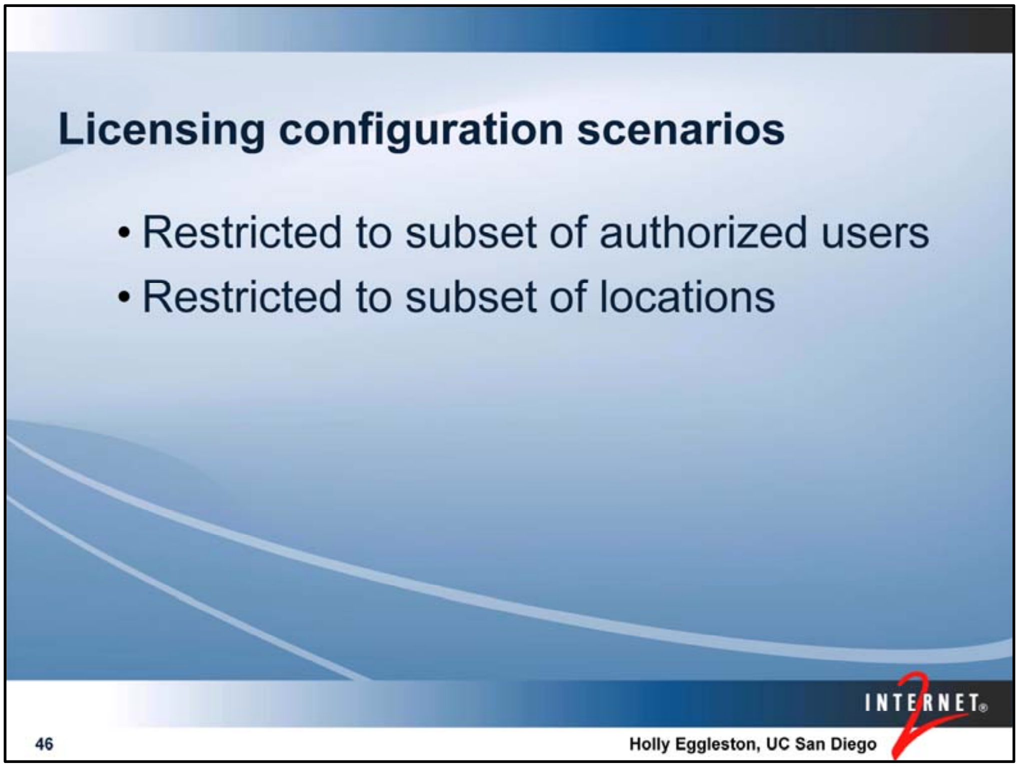
Basic use cases – entry points

- Connecting from known URL
  - Library A-Z
- Connecting from unknown URL
  - Google Scholar, email link
- Moving between resources
  - SFX
  - Serials Solutions
- Using Federated Search



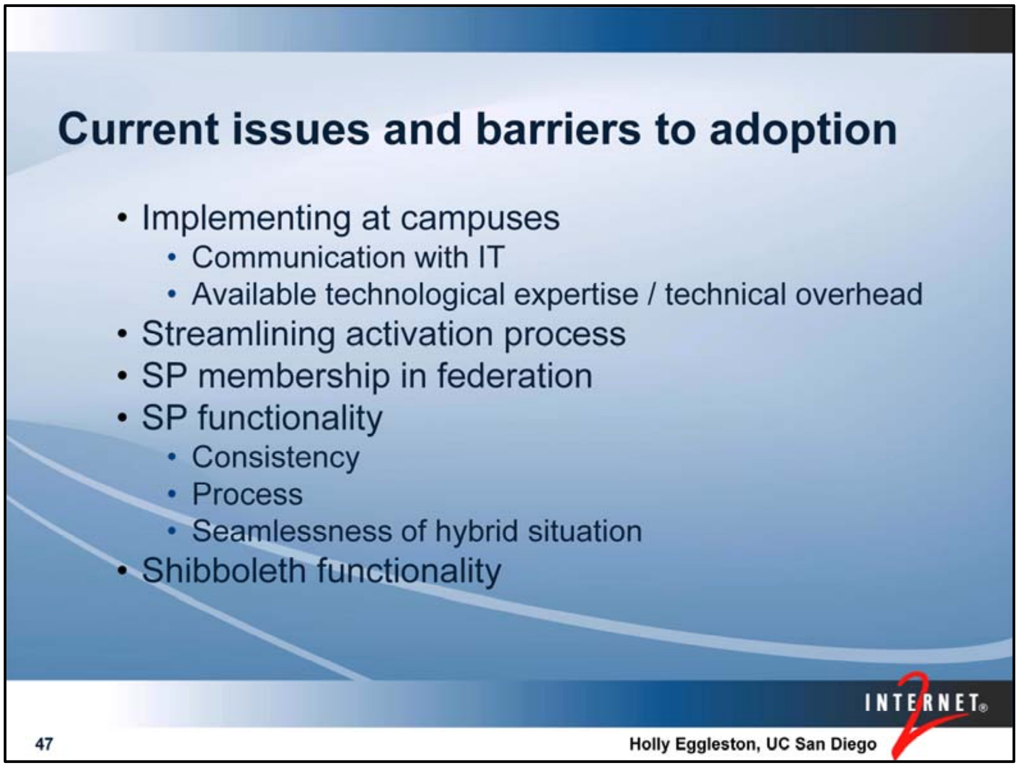
Basic use cases – configuration

- Walk-in user on library public machine
- Known user on library public machine
- Known user on campus assigned machine
- Known user, off-campus personal machine
- Known user, off-campus lockdown machine



Licensing configuration scenarios

- Restricted to subset of authorized users
- Restricted to subset of locations



Current issues and barriers to adoption

- Implementing at campuses
  - Communication with IT
  - Available technological expertise / technical overhead
- Streamlining activation process
- SP membership in federation
- SP functionality
  - Consistency
  - Process
  - Seamlessness of hybrid situation
- Shibboleth functionality

47 Holly Eggleston, UC San Diego

Shibboleth has lots of potential for addressing these ongoing problems encountered by libraries. The hybrid solution is necessary for making this work. The current situation is good for beta testing or small pilots, but it’s not ready for production implementation.

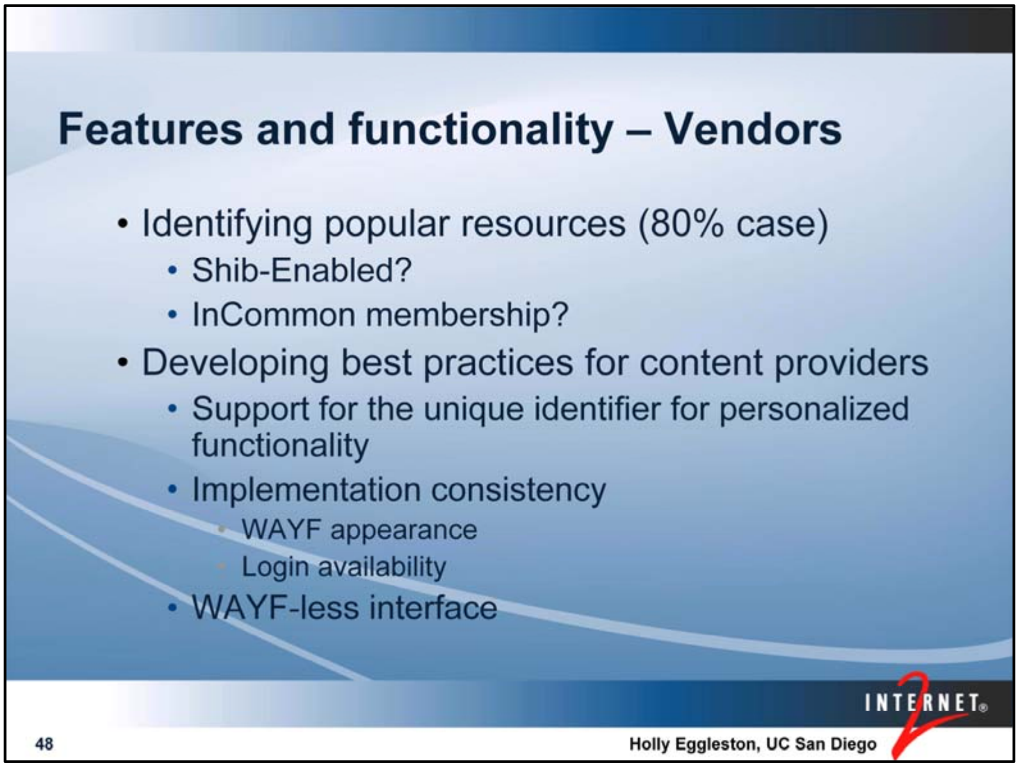
Beginning to enumerate issues and possible useful functionality, anticipate that this will happen as pilot testing continues.

Implementing at campuses
    Communication with IT
    Available technological expertise / technical overhead
Streamlining activation process
 - ensuring that institutions have all the information they need to activate with SP’s

SP membership in federation
 - continuing to work with SP’s for membership

SP functionality
 - SP’s have taken the big step to adopt the technology, but the implementations vary widely between vendors. To make this compelling and easy for users, the experience needs to be consistent and intuitive.

Next slide



Features and functionality – Vendors

- Identifying popular resources (80% case)
  - Shib-Enabled?
  - InCommon membership?
- Developing best practices for content providers
  - Support for the unique identifier for personalized functionality
  - Implementation consistency
    - WAYF appearance
    - Login availability
  - WAYF-less interface

48

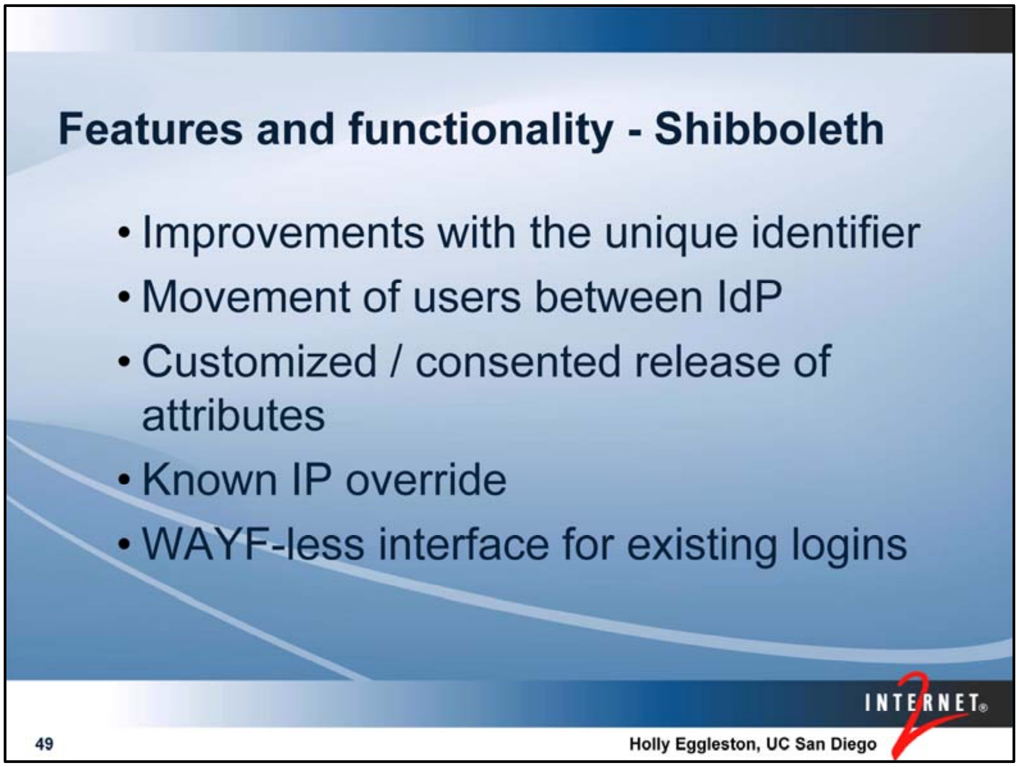
Holly Eggleston, UC San Diego

Step for us: Where do we want ot focus our efforts. Identifying the common licensed library vendors (probably 15-18) that represent 80-90 percent of the traffic for most libraries. Determining whether those vendors are Shib-enabled (many probably are through the UK federation), working with those vendors to join InCommon, and promoting federating among these vendors and libraries.

Advocating to service providers about the basic technology of federating and providing the use cases to support this.

Advocating to service providers on standards needed to federate to make it easy for users.

Adam Chandler reported that NISO (National Information Standards Organization) has been exploring something similar. He and Oliver Pesch of NISO are drafting a work item for NISO in this area. As well, we're communicating with the UK federation for sharing ideas and open issues.



Features and functionality - Shibboleth

- Improvements with the unique identifier
- Movement of users between IdP
- Customized / consented release of attributes
- Known IP override
- WAYF-less interface for existing logins

INTERNET2

49

Holly Eggleston, UC San Diego

The question – should be focus on creating solutions with supporting technology to make this work, or are there features that shibboleth can/should implement to make the real-life solution easier?

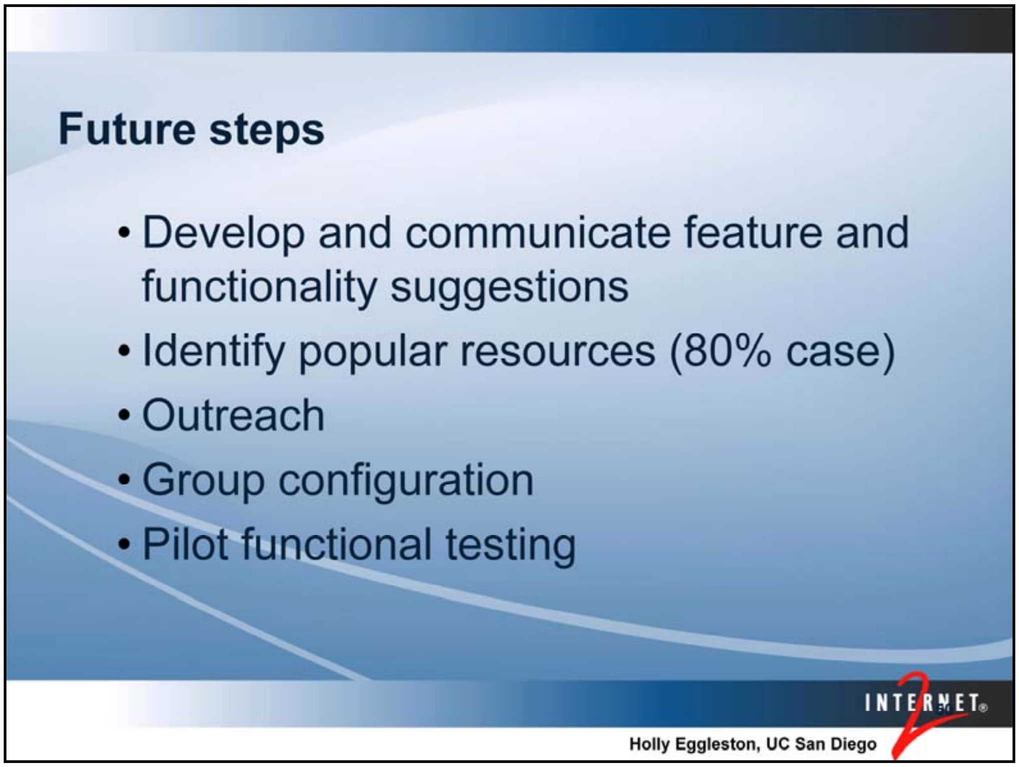
Are these problems that shibboleth can address?

Movement of users between IdP's – as faculty and students move between institutions, how can they maintain access to resources that provide personalized services such as alerts, bookmarks, markup? This is addressed via an external management solution by the Swiss federation, are there other ways this can be implemented?

Consented release of attributes – mentioned as a possible feature for 2.2.

WAYF-less interface addressed by use of the WAYF-less URL – will this address our concerns for the use cases?

This is just the emphasis that the conversations need to happen at a more technical level – we have the issues, but need to identify where it is most appropriate to be addressed.



Future steps

- Develop and communicate feature and functionality suggestions
- Identify popular resources (80% case)
- Outreach
- Group configuration
- Pilot functional testing

Holly Eggleston, UC San Diego

Communicate features and functionality
 - continue to develop functionality requests lists and identify appropriate venues for promotion and communication

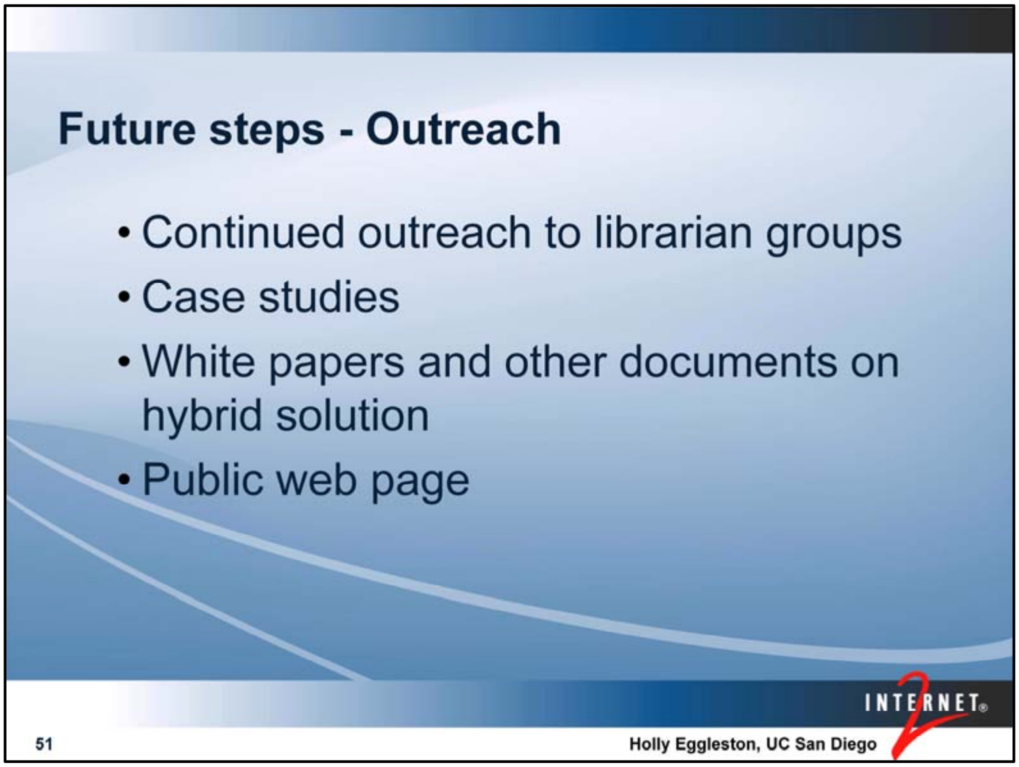
Identifying the common licensed library vendors (probably 15-18) that represent 80-90 percent of the traffic for most libraries. Determining whether those vendors are Shib-enabled (many probably are through the UK federation), working with those vendors to join InCommon, and promoting federating among these vendors and libraries.

Continue outreach to librarian groups, write up case studies, white papers on hybrid solution and creating public web page

Opening the group to additional participants and establishing a wider affiliation
 - actively partner with UK federation to share our mutual experiences
 - opportunities for national level collaboration – EDUCAUSE, NISO, CNI
 - library organizations

Outline the remaining questions related to proposed solutions and conduct tests to determine answers
 - More functional testing
 - Expand technologies and vendors tested

Expand pilot efforts to include concurrent shibboleth related projects and interested institutions.

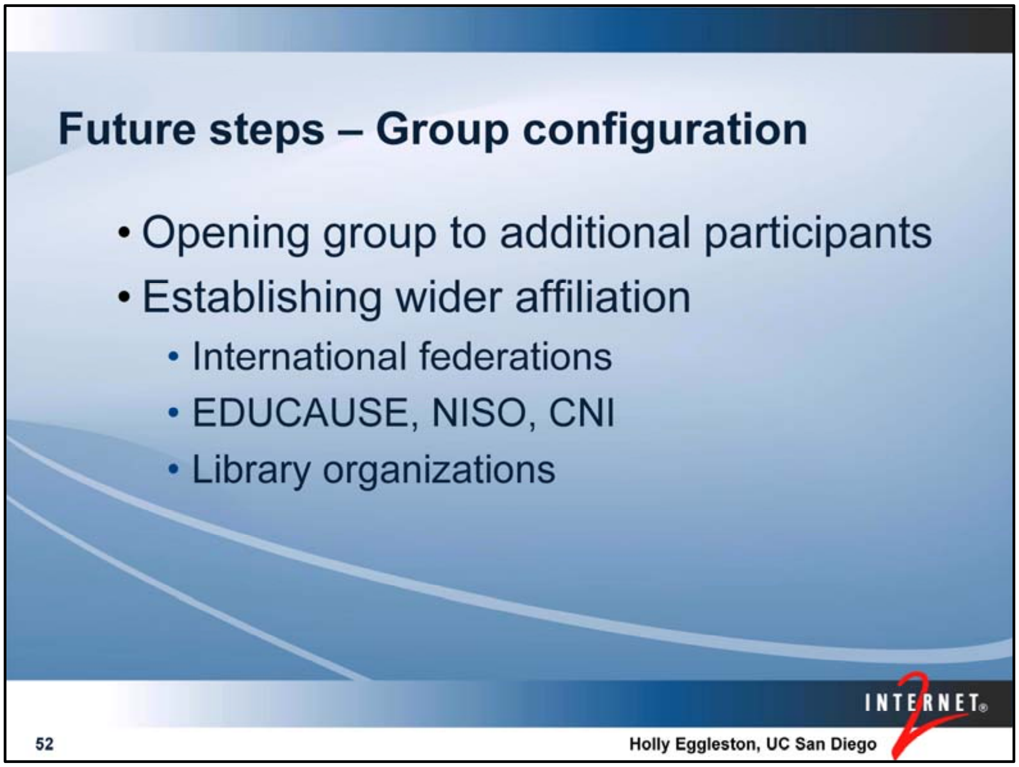


Future steps - Outreach

- Continued outreach to librarian groups
- Case studies
- White papers and other documents on hybrid solution
- Public web page

51 Holly Eggleston, UC San Diego

- Developing information (such as white papers, use cases or other documents) on the hybrid Shibboleth/EZProxy solution to library access.
- Sharing case studies, documenting what works and what doesn't.
- Mapping the presentations (which are on the wiki) into more generic reports, suggestions and recommendations.
- Public web page



Future steps – Group configuration

- Opening group to additional participants
- Establishing wider affiliation
  - International federations
  - EDUCAUSE, NISO, CNI
  - Library organizations

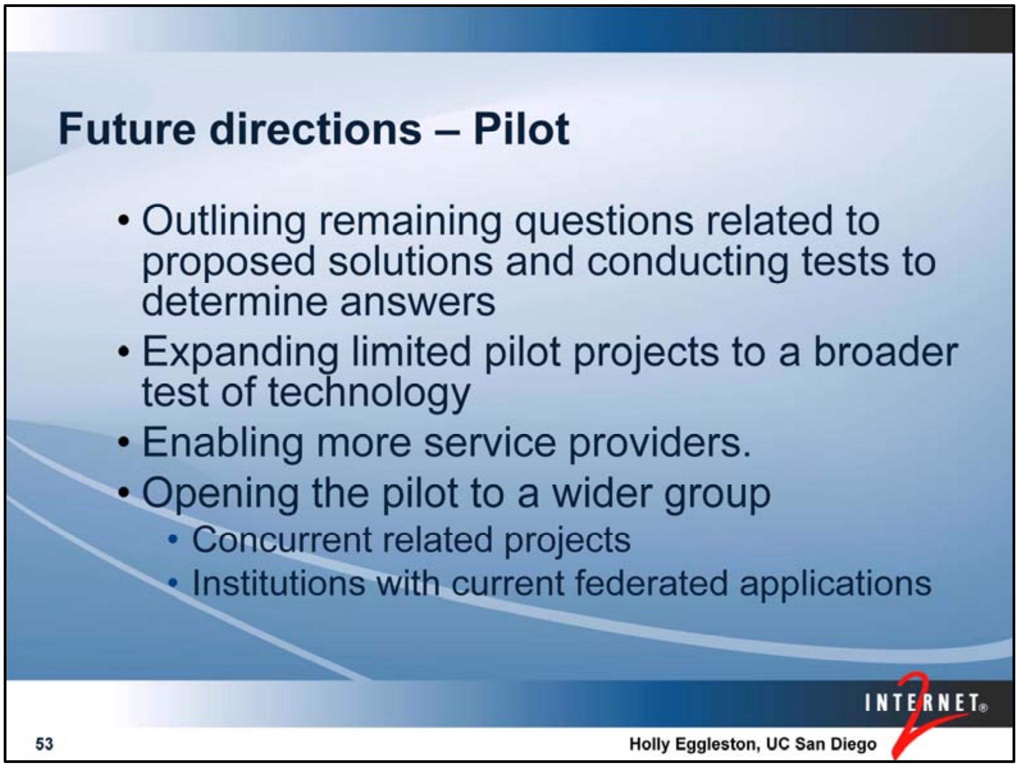
52

Holly Eggleston, UC San Diego

- Determining whether to open this group to a wider audience and, if so, when and how.
- Monitoring email lists of other groups

- Making contacts with peers in Europe to share experiences and use cases.

There are a number of email lists which may help identify likely candidates.
It may be useful for members of this working group to monitor those email lists, gathering information about general trends and identifying people with whom we might collaborate.



Future directions – Pilot

- Outlining remaining questions related to proposed solutions and conducting tests to determine answers
- Expanding limited pilot projects to a broader test of technology
- Enabling more service providers.
- Opening the pilot to a wider group
  - Concurrent related projects
  - Institutions with current federated applications

53 Holly Eggleston, UC San Diego

We’ve done a lot of component testing, but its down to how it all works together for the users.

Continuing to identify questions and test solutions

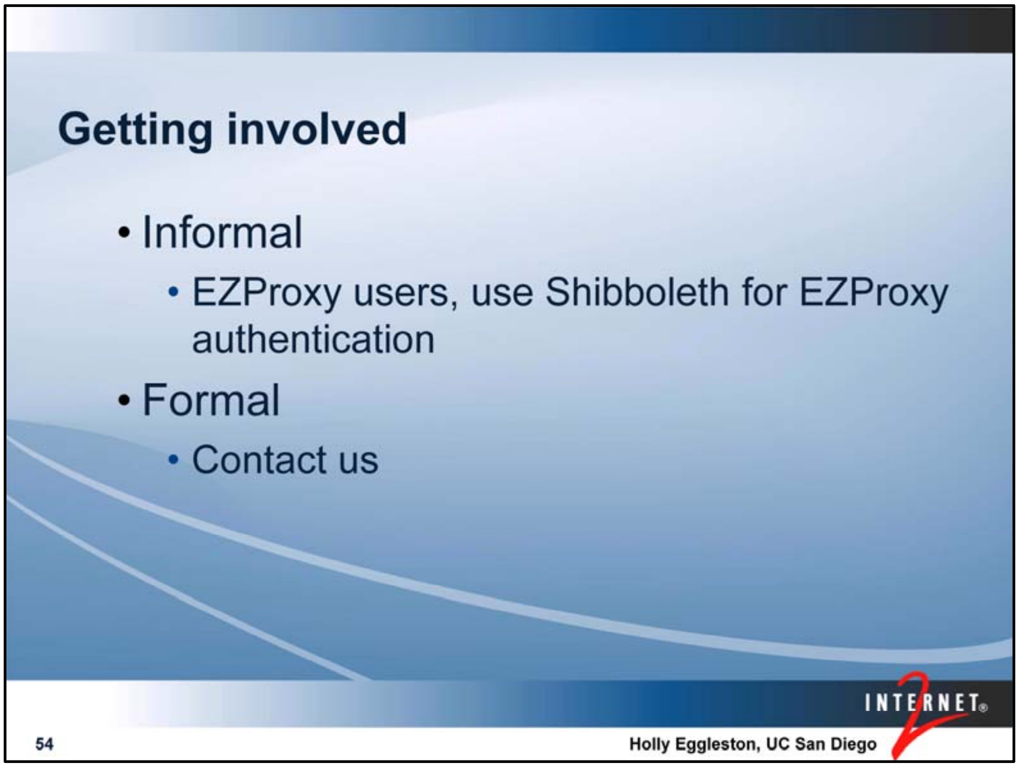
Testing other technologies, SP’s

Enabling more service providers

Opening the pilot to a wider group

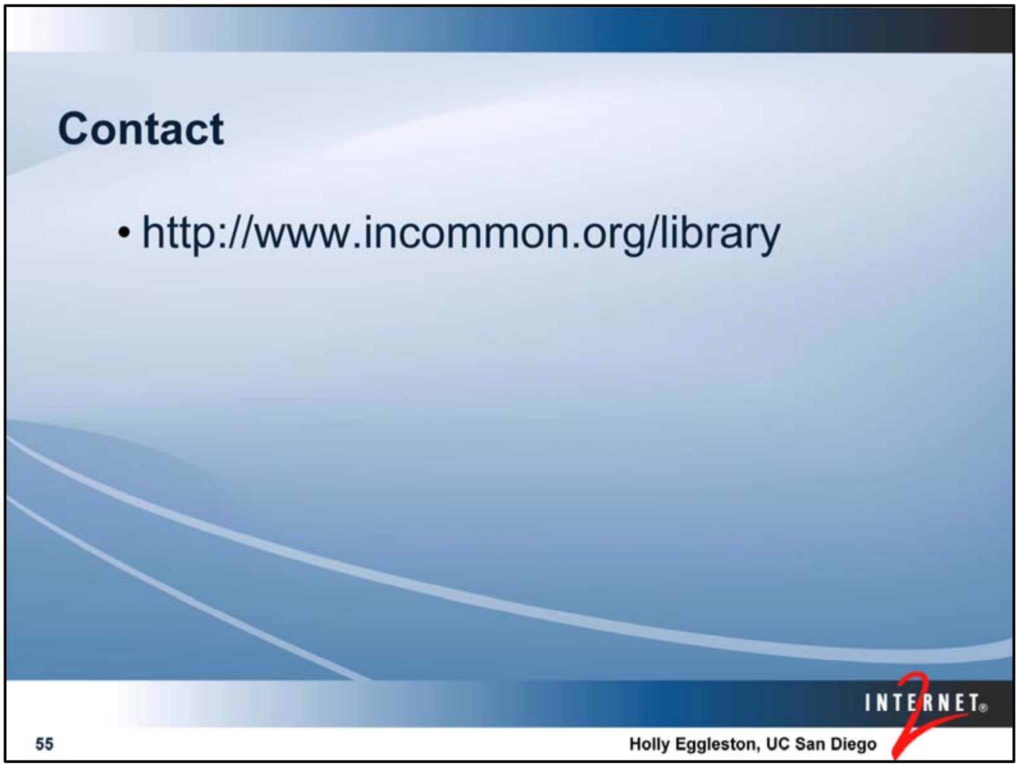
JISC
CIC Digital Repository
NJEdge
Ohiolink
NCMC (North Carolina) – k-20 initiatives

the University of Chicago is moving forward. Applications in production (using Shibboleth and EZProxy) include RefWorks and Elsevier (Scopus and Science Direct).



Getting involved

- Informal
  - EZProxy users, use Shibboleth for EZProxy authentication
- Formal
  - Contact us



Contact

- http://www.incommon.org/library