

Introduction

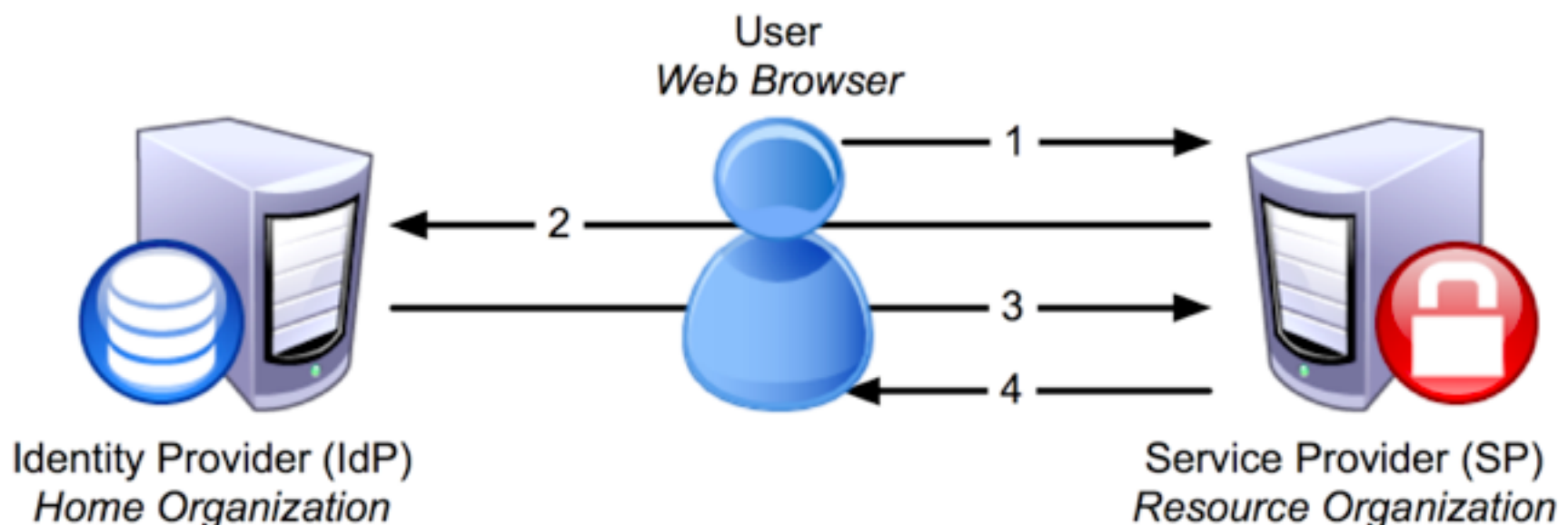


➤ What is Shibboleth?

“The Shibboleth System is a standards-based, open source software package for web single sign-on across or within organizational boundaries. It allows sites to make informed authorization decisions for individual access of protected online resources in a privacy-preserving manner. ”

(Source: <http://shibboleth.net/about/index.html>)

➤ How it works?



1. The SP detects the user attempting to access restricted content within the resource.
2. The SP generates an authentication request, then sends the request, and the user, to the user's IdP.
3. The IdP authenticates the user, then sends the authentication response, and the user, back to the SP.
4. The SP verifies the IdP's response and sends the request through to the resource which returns the originally requested content.

(Diagram courtesy:

<https://wiki.shibboleth.net/confluence/display/SHIB2/NewUnderstandingShibboleth>)

➤ **Shibboleth in Canada**

- ❖ **Canadian Access Federation (CAF)** provides a trusted access management environment for Canadian research and higher education communities, currently operated and managed by **CANARIE (Canada's Advanced Research and Innovation Network)**.
- ❖ 14 higher education institutions have enabled Shibboleth and joined the CAF; 10 electronic publishing service providers have registered with the CAF (as of October, 2012).

14 higher education institutions

McGill University
Queen's University
Sheridan College
Simon Fraser University
Université du Québec à Montréal
University of Alberta
University of British Columbia
University of Calgary
University of Guelph
University of Manitoba
University of Saskatchewan
University of Toronto
University of Waterloo
University of Western Ontario

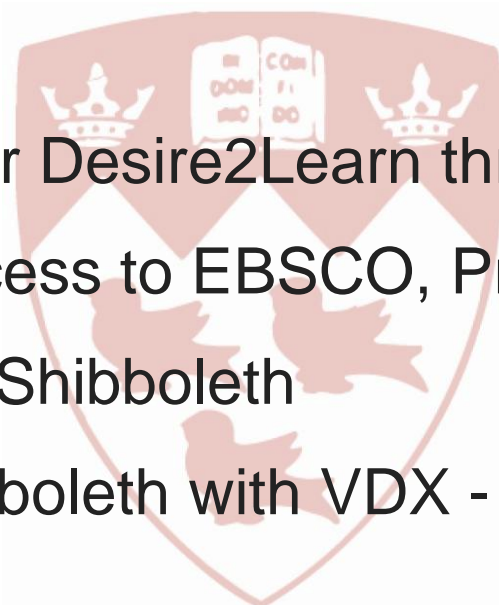
10 e-publishing service providers

EBSCO
ProQuest
Elsevier (ScienceDirect, Scopus)
Scholars Portal
Kuali
Chide.it
lynda.com
Microsoft DreamSpark
SciQuest
e-academy

(Source: <http://www.canarie.ca/en/caf/participants>)

➤ **Shibboleth at McGill**

- ❖ Enabled access for Desire2Learn through Shibboleth
- ❖ Enabled direct access to EBSCO, ProQuest, Elsevier, and Hathi Trust through Shibboleth
- ❖ Integration of Shibboleth with VDX - currently underway



Needs Analysis

- Learning Management System (LMS)
 - ❖ Linking to licensed online resources through LMS required an extra login step
- Interlibrary Loan (ILL)
 - ❖ ILL users register to VDX through an online form
 - ❖ Use of VDX requires a different set of credentials from campus login
- Hathi Trust supports Shibboleth authentication only
 - ❖ Inter-institution authentication requirement
- Issues with IP-based authentication
 - ❖ Vendors maintain a database of IP ranges for all subscribers
 - ❖ Security and privacy concerns
- Option of direct access to vendor sites from off-campus
 - ❖ Many vendors offer Shibboleth authentication option, such as, EBSCO, ProQuest, Elsevier, etc.

The screenshot shows the EBSCO Support Site login interface. On the left, there is a login form with fields for 'User ID' and 'Password', a 'Login' button, and links for 'Shibboleth Login' and 'Athens Login'. Below the form, it lists 'Supported Browsers' and 'Recommended minimum screen resolution: 1024x768'. On the right, there is a circular graphic with the 'EBSCO HOST' logo in the center, surrounded by various vendor logos including DynaMed, EBSCO, and others. At the bottom right, there is a link to 'Learn more about EBSCO Publishing's Product & Services'.

Issues and Challenges

- One service, many applications
 - ❖ Integrations with LMS, ILL, EZproxy, etc.
 - ❖ Custom integrations
- Lack of CAF participant vendors due to
 - ❖ CAF membership requirements (fee, sponsorship, etc.)
 - ❖ Little interest in joining the CAF for some US vendors since their default federation is InCommon, not CAF

InCommon®

vs.



- ❖ Do not see much benefits by joining the CAF
- ❖ Lack of technical staff to implement and support Shibboleth
- ❖ Possible ways of bypassing the CAF
- Technical challenges with the hybrid environment
 - ❖ Co-existence of IP-based and identity-based systems
 - ❖ Complex access management
- Administrative challenges with access management on campus
 - ❖ Shibboleth (plus LDAP) and EZproxy servers are managed by campus IT and library respectively
 - Campus IT's involvement in e-resource access management
 - potential inconsistent restriction rules in two systems
- Impact on end users
 - ❖ Service promotion and user education

Moving Forward

- Re-defining roles and responsibilities for the stakeholders
 - ❖ CAF
 - Initiate and build a platform for information sharing and collaboration
 - Build connections with other federations and standards organizations to promote best practices
 - Encourage and support more e-publishing service providers to join the CAF by simplifying the process and reducing or waiving membership fee
 - Work with CRKN and CANARIE to streamline access for Canadian Universities to electronic publication services.
 - ❖ Institutions
 - Adopt Shibboleth and join the CAF
 - Offer sponsorship for vendors to join the CAF
 - Set up a joint committee of library-campus IT personnel to address campus-wide access management issues
 - Offer professional development opportunities to staff working in this area
 - ❖ Service providers
 - Support Shibboleth and join the CAF
 - ❖ System vendors
 - Support standards for Shibboleth integration
- Communication, sharing and collaboration among stakeholders
- Learn from best practices

References

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