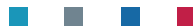


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Shibboleth Access to Licensed Library Resources Through InCommon

Andy Ingham
University Libraries
UNC-Chapel Hill
01-15-2010



WHAT I'D LIKE TO COVER

Overview of the problem area

InC-Library initiative - Background

InC-Library vendor subgroup

Progress thus far

Work still outstanding

Case study at UNC-Chapel Hill

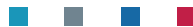


Overview of the problem area

Get ALL, but ONLY, the “right” University affiliates to licensed external library resources, even from the “open web,” effectively and efficiently.

OR

“How can the current proxy-server-centric model be improved?”



REMOTE USE (current EZproxy environment)

case 1 = un-mediated access

remote user → remote resource = FAILURE

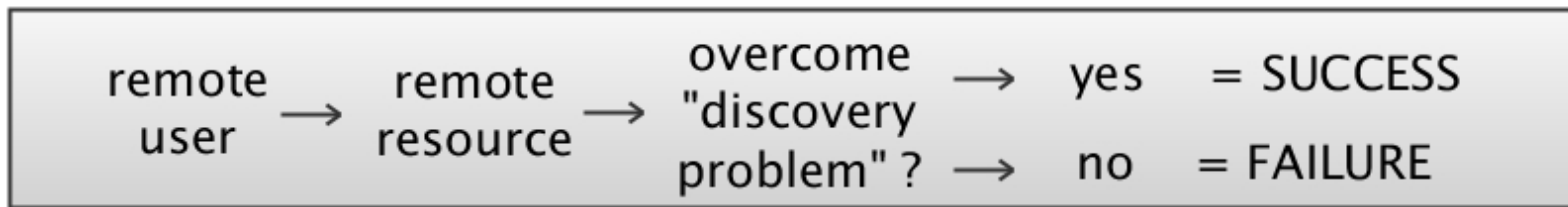
case 2 = mediated access

remote user → managed link → proxy server → remote resource = SUCCESS



REMOTE USE (Shibboleth environment)

case 1 = un-mediated access



case 2 = mediated access



Proxy versus Shibboleth

Benefit	Proxy	Shibboleth
Provides SSO for LIBRARY resources	X	X
Provides SSO (also) for other “campus” resources		X
Eliminates IP range management for LIBRARY		Only if force authn even ON-CAMPUS
Eliminates IP range management for VENDOR(S) (including need for library to keep list synced across all vendors)		X
Allows possibility for PERSONALIZATION streamlining across multiple vendors		X

Proxy

Needed to accommodate “location based” access model that is the de facto standard

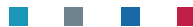
Shibboleth

Framework that allows an “user attribute based” access model



ARCHITECTURAL SHIFT

	Primary structural element	Secondary structural element
PROXY	LOCATION (IP address)	Attributes about the user (via proxy server authn / authz)
SHIBBOLETH	Attributes about the user (via IdP)	LOCATION (to accommodate "walk-ins")



InC-Library Initiative - what is it?



InC-Library Initiative - in a nutshell

"Access to library online resources and services has skyrocketed as opportunities for distance learning and the user expectations for availability of online information have increased. Providing access to these resources requires substantial time and resources by libraries, as well as often being complex for the users. **The InCommon Library Services collaboration formed in 2007 to explore implementing access to library services and electronic resources using Shibboleth authentication.**"

<https://spaces.internet2.edu/display/inclibrary/InC-Library>



InCommon

"The mission of the InCommon Federation is to create and support a common framework for trustworthy shared management of access to on-line resources in support of education and research in the United States. To achieve its mission, InCommon will facilitate development of a community-based common trust fabric sufficient to enable participants to make appropriate decisions about the release of identity information and the control of access to protected online resources. ”

<http://www.incommonfederation.org/about.cfm>



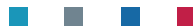
InC-Library Initiative

Phase I (Feb 2007– Dec 2008)

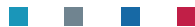
- Identify technical challenges and propose solutions
- Identify organizational needs
- Result: “Focus on the Shibboleth / EZproxy hybrid”

Phase II (March 2009- present)

- Encourage pilots of the technology solution
- Address specific organizational needs
- Build momentum in the community



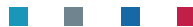
InC-Library Vendor subgroup



InC-Library Vendor subgroup

Task List

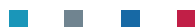
1. Identify a list of high priority vendors in Libraryland
2. Define best practices for both vendors and institutions
3. Document configuration information specific to vendors
4. Provide information about how to “connect the dots”
5. Recruit and sponsor new vendors into InCommon



Identify a list of vendors

<https://spaces.internet2.edu/display/inclibrary/TargetResources>

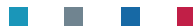
- Importance of the resource in the library marketplace
- Experience that participant libraries have with that vendor's tech support
- Experience that the VENDOR has with Shibboleth
- WHICH federation(s) the vendor is already a member of

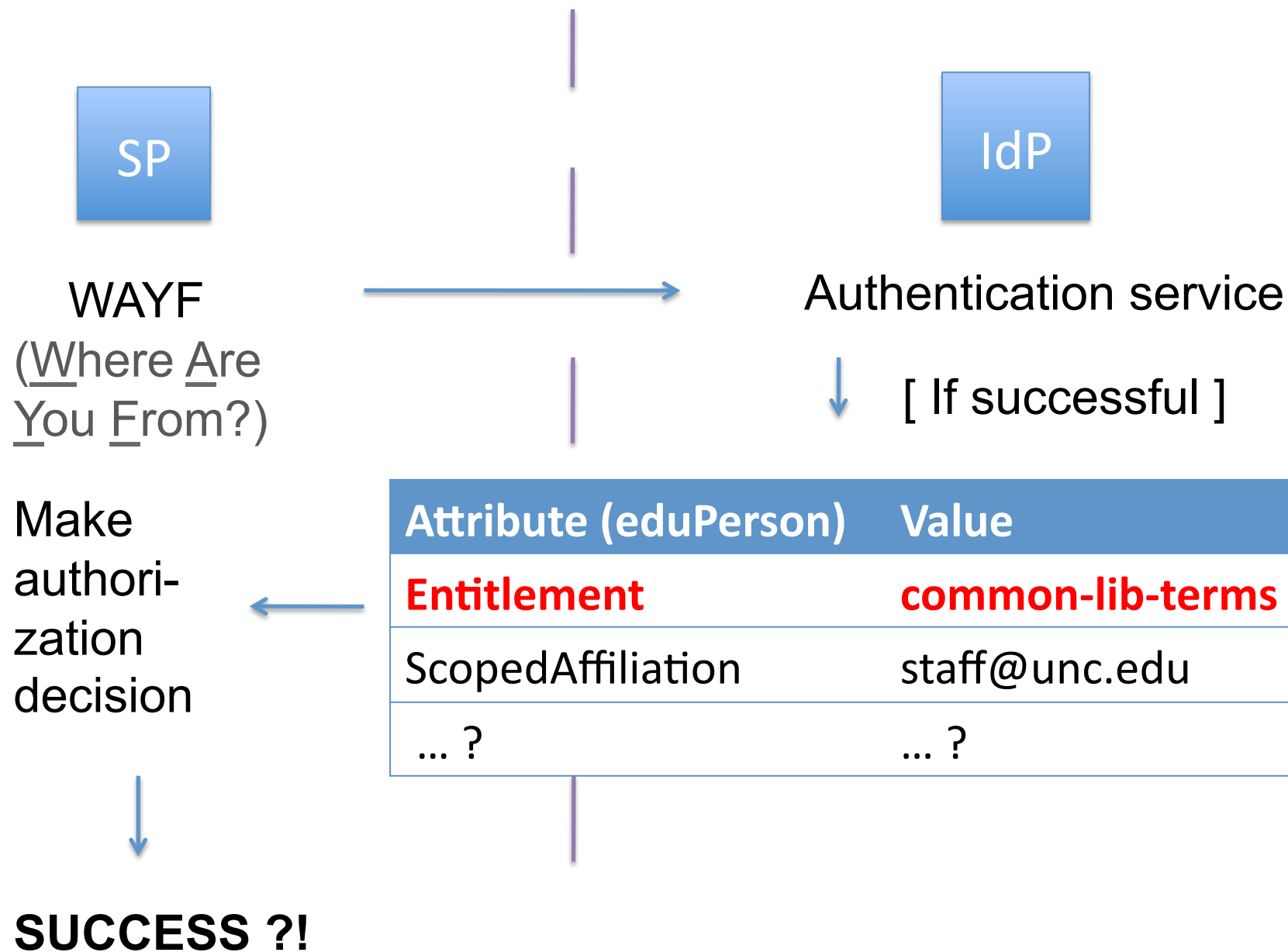


Discuss and document “best practices”

<https://spaces.internet2.edu/display/inclibrary/Best+Practices>

1. Authorization via eduPerson attributes
2. Implement WAYFless URLs
3. Implement authenticated direct links to resources
4. Shibboleth/EZproxy hybrid compliance



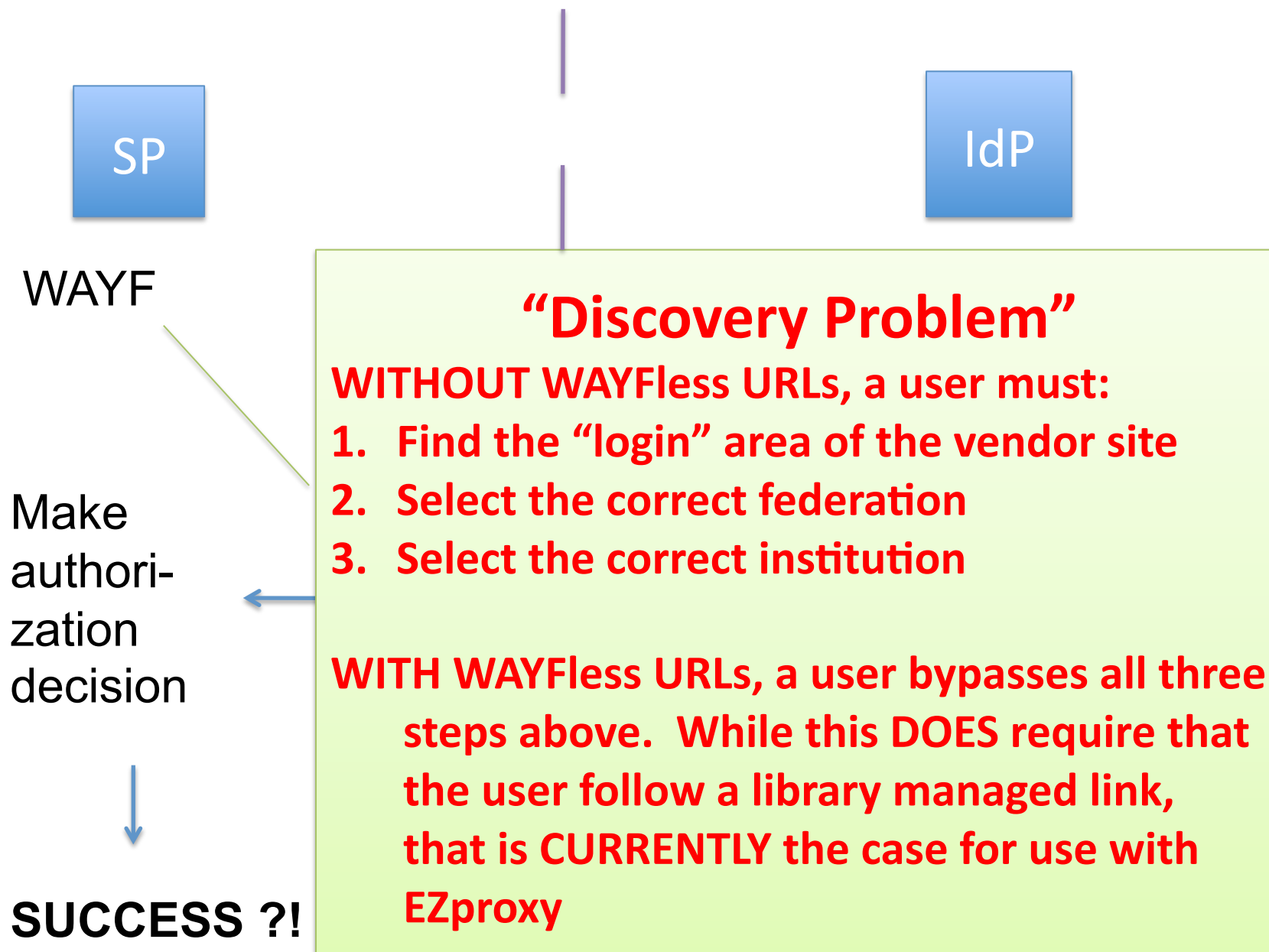


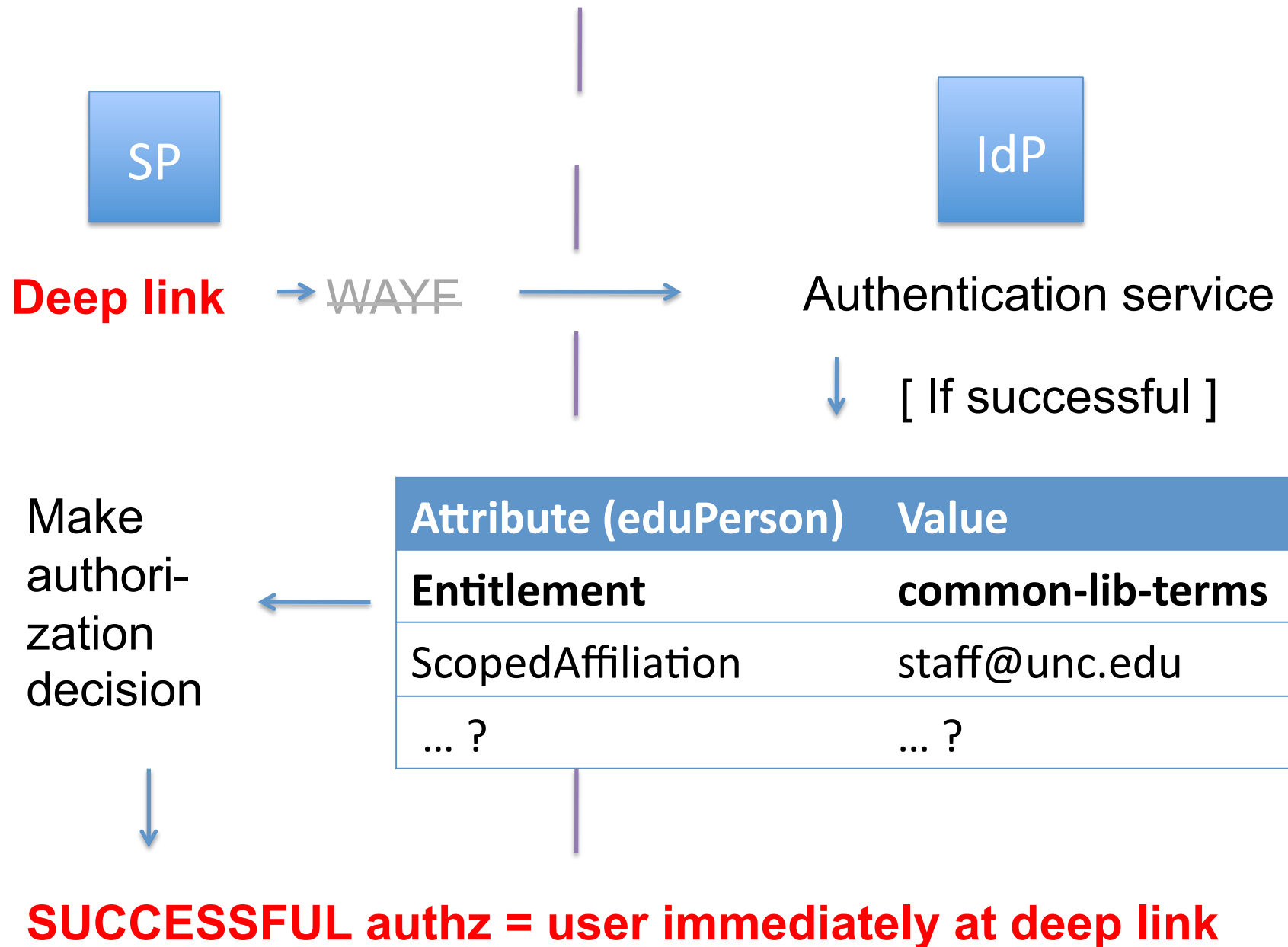
common-lib-terms

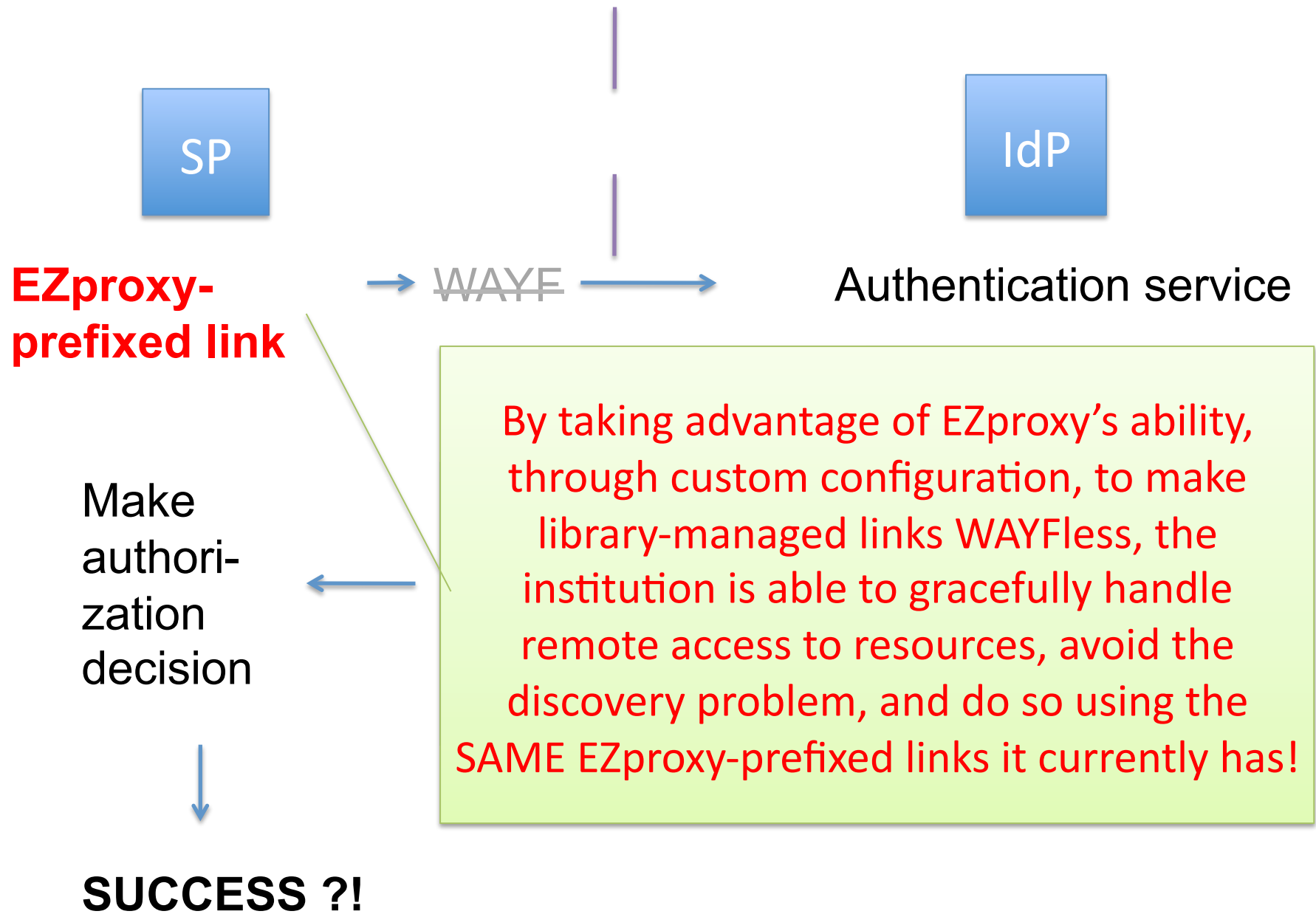
“Many contracts between higher education institutions and information publishers provide access to published information for a **standard higher-ed population consisting of regular full-time faculty, staff, and students (of a particular institution), also including anyone physically present in that institution's library regardless of affiliation.** This value is used to indicate that the holder of the entitlement has access to resources under those contract terms...”

<http://middleware.internet2.edu/urn-mace/urn-mace-dir-entitlement.html>





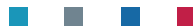




Document configuration information specific to vendors

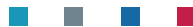
<https://spaces.internet2.edu/display/inclibrary/RegistryOfResources>

“Registry of resources” containing configuration specifics, compliance with best practices, vendor contact info, links to additional documentation, and EZproxy configuration examples.



Recruit and sponsor new vendors into InCommon

1. Identify vendors of interest to the InCommon community
2. Identify institutions willing to lobby those vendors to join
3. Identify institutions willing to do the work of officially **SPONSORING** each vendor into InCommon



The InC-Library group would welcome participation in the process from other institutions:

- join one of the InC-Library sub-groups
- evaluate and comment on the Best Practices document
- add a case study to the website
- offer to assist with the sponsorship of new vendors into InCommon
- Implement Shibboleth auth to build momentum



Case study of UNC-Chapel Hill

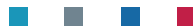
Putting the pieces together



InC-Library Vendor subgroup

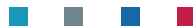
Task List

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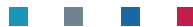
Provide information about how to “connect the dots”

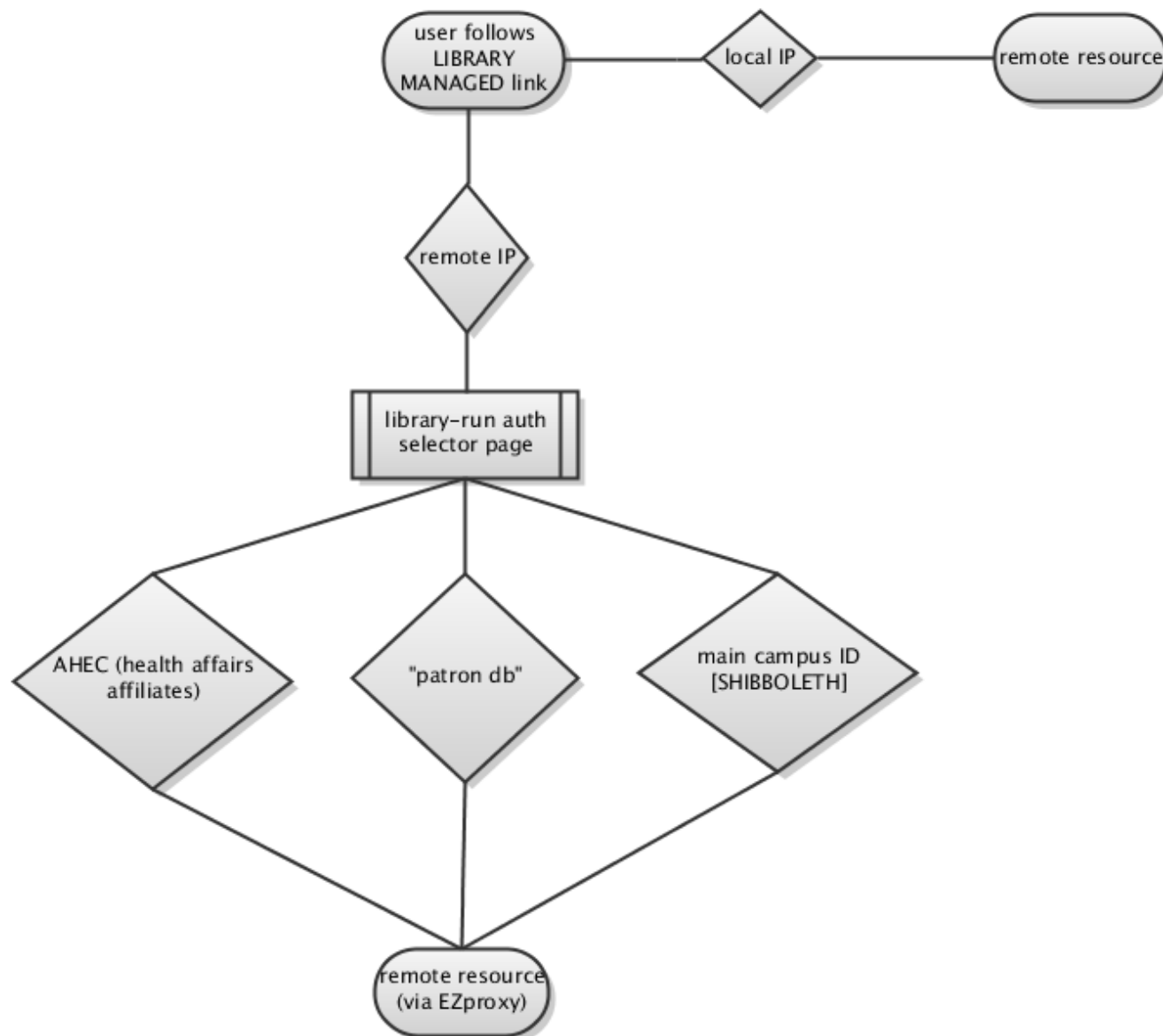
<https://spaces.internet2.edu/display/inclibrary/Shibboleth+-+EZproxy+HOW-TO>



Pre-requisite #1

An institution-wide (enterprise) directory service that contains information about the users for whom you wish to authorize access to electronic resources.





Pre-requisite #2

An Identity management environment (policies and business practices) that governs the management of identity information for the users in the enterprise directory. This is necessary to build and maintain the trust necessary to participate in a federation such as InCommon.



Pre-requisite #3

A Shibboleth IdP from which service providers (EZproxy itself, JSTOR, OCLC, Elsevier, etc) can obtain sufficient identity information about each user of their services who requests access.



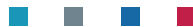
Pre-requisite #4

An EZproxy installation that provides authenticated remote access to library resources.



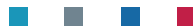
Pre-requisite #5

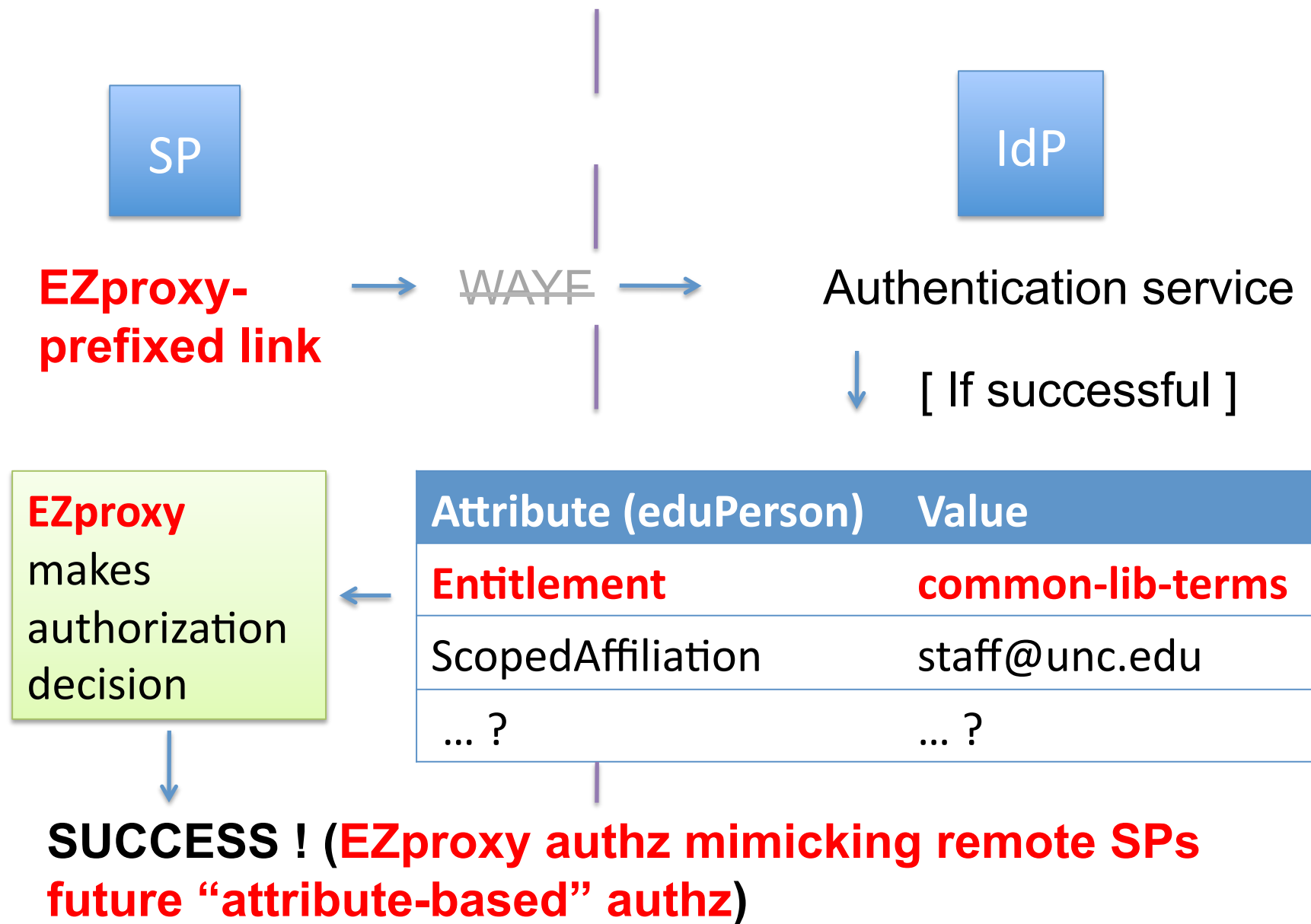
Institutional membership in a federation such as InCommon.

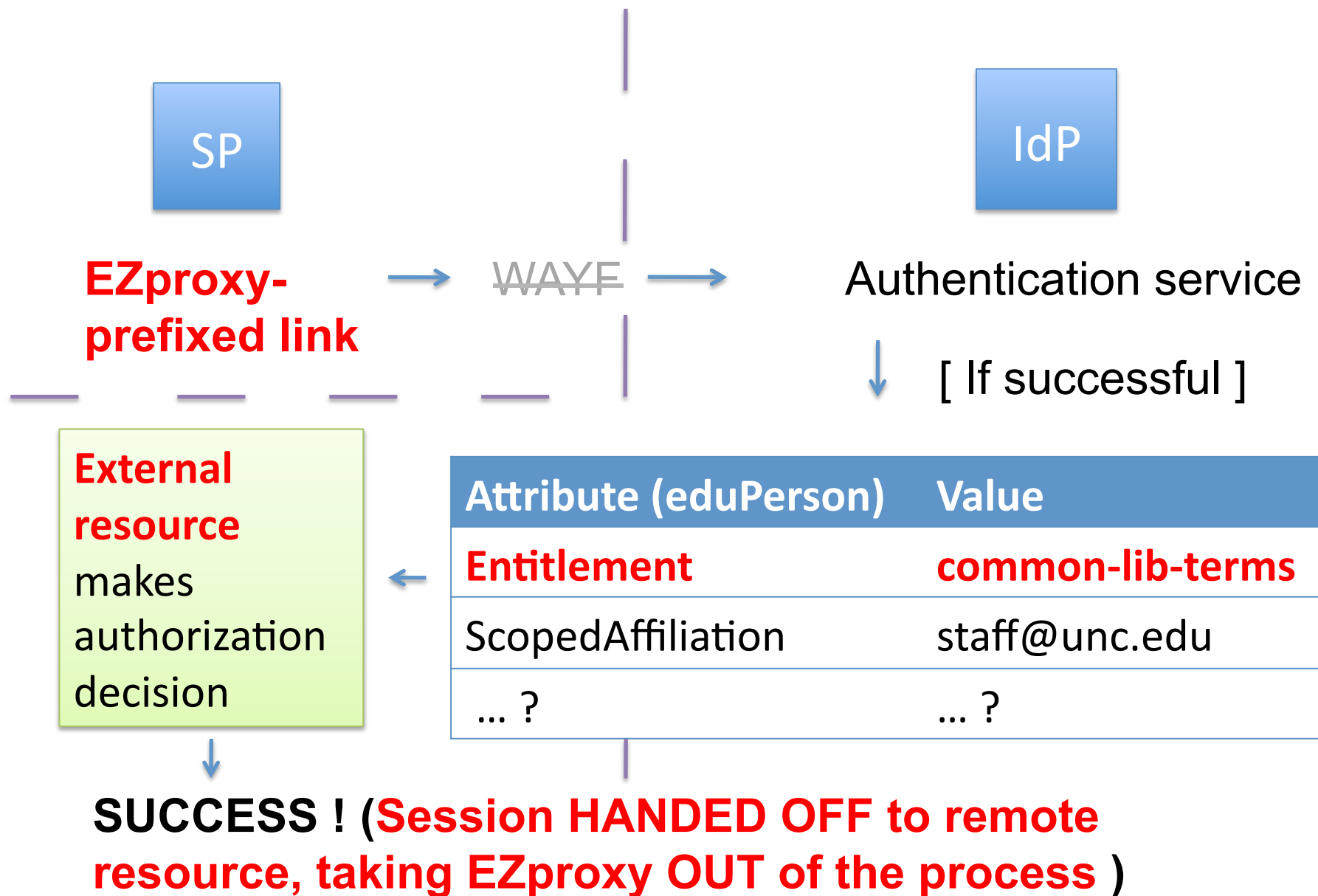


Implementation steps:

1. Configure IdP to release standard entitlement attributes (eduPersonEntitlement)
2. Shibboleth enable the EZproxy installation
3. Setup EZproxy authorization based on eduPersonEntitlement
4. Configure Shibboleth access to resource providers via EZproxy's support for WAYFless URLs







THANK YOU

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