



18-01-2016

NA2 Training and Outreach: Libraries training needs interviews – summary report

Document Revision History

Version	Date	Description of change	Person
1	13-01-2016	First draft issued	G. Bueno de la Fuente
2	25-01-2016	Review of Interviews 3 and 5	Lalla Mantovani
3	10-06-2016	Short version without detailed answers provided	G. Bueno de la Fuente

Table of Contents

1	Introduction	4
2	Study methods	5
2.1	Objectives	5
2.2	Interviews design	5
2.3	Contacts selection	6
2.4	Organising interviews	6
3	Results ⁸	
3.1	Overall results	8
3.2	Main findings	9
3.2.1	Federated access adoption	10
3.2.2	Collections and services	10
3.2.3	Technical solutions	10
3.2.4	Preferred authentication method	11
3.2.5	Challenges for federated access adoption	11
3.2.6	Training and advocacy actions	12
3.2.7	Training needs and input from AARC project	12
4	Conclusions	13
	Appendix. Questionnaire	15

1 Introduction

This report summarises the process and results of interviewing library decision makers in order to get insight on their current AAI setting and their level of adoption of federated access solutions. Its main objective was to identify their training needs on federated access and the technical implementation of AAI technologies.

This work has been done as part of NA2 activities, led by LIBER officers with the contribution of many WP participants that participated in the interviews design, conduction and reporting.

A total of nine interviews were carried out during December 2015 and January 2016 allowing to gather detailed and very valuable information about the situations, perspectives, approaches and opinions from different kinds of research libraries and libraries organization representing several countries.

This document is structured in four main parts: first the study methods and preparation; after, a summary of the main results coming from the interviews answers analysis; some initial conclusions based on the main findings, and finally, two Appendices, with the full questionnaire used to carry out the interviews and the detailed answers for each of the nine interviews.

2 Study methods

2.1 Objectives

One of the objectives of AARC project is to satisfy the European Commission call on: "Training for libraries to enable them to replace IP-based access control". With this objective in mind AARC Working Package NA2 Training and Outreach has set some specific goals. The first goal is to make librarians aware about the benefits of federated access. This is a common goal for decision makers in general, so training and advocacy materials as Federation 101 course could contribute to meet this goal.

The second goal is make librarians aware that they can safely replace IP-based access control with federated access control. Decision makers in libraries fear that replacing IP-based access control with federated access is not safe for them. For this specific challenge, AARC project needs to convince library decision makers on the benefits of federated access over IP-based access, as well as provide training on those technical aspects regarding the transition from IP based systems to federated access.

For this purpose, it was decided to carry out a series of interviews to library decision makers and IT staff, that will allow AARC to identify training needs and challenges at the implementation of federated access to their collections and services. An expected outcome of these interviews is the basis for a Value Proposition document on federated access for decision makers at libraries, that could be reused in the future for funding agencies and other stakeholders.

2.2 Interviews design

Interviews were designed through an iterative process by NA2 partners, starting with a battery of questions proposed by LIBER staff. This first draft of questions was circulated among NA2 partners through the [na2-aarc] list.

NA2 tasks participants contributed to the question list by:

- editing the questions wording or repurposing them from Y/N questions to open ended ones based on context, relevance and need;
- adding new questions or suggesting the deletion of some of them;
- as well as highlighting those questions considered to be more important for the task objectives.

The final questionnaire including some of these comments is available at: <https://goo.gl/MloKfa>. It has been also included in this document as an [Appendix](#).

The stress was put on training needs, even if some basic information was needed from the interviewees about their authentication and authorization current setting, and level of knowledge on the topic. It was considered

important to gain understanding about how the resources are allocated by the library and who are the key stakeholders. This would be helpful to better approach decision makers with AARC solutions. Some final questions were included about participants' biggest challenges and wishes regarding federated access for their collections.

2.3 Contacts selection

NA2 partners agreed on carrying a series of interviews on a number around 6-10. In order to gather the appropriate contacts that could be interviewed, LIBER created a contact list and feed it with LIBER members:

- That have already showed some interest in the project, as they belong to LIBER Steering Committees or Working groups and were aware of the project goals.
- LIBER members that answered to an open call for collaboration, that was distributed through different channels.
- Other individual contacts made directly by LIBER officers trying to cover a wide spectrum of libraries and countries in Europe.

The open call was distributed through:

- a blog post published on LIBER website, *Seeking contributors to the AARC Project*¹, 18th Nov. 2015.
- a message to the LIBER-ALL mailing list, which has more than 700 subscribers, *Call to collaborate in AARC project*², sent 17th. Nov. 2015.
- a mention at LIBER November mailing³,
- LIBER and LIBER officers twitter accounts.

It was highlighted that we would like to contact those institutions that we do not know their situation regarding federated access, so those countries already engaged in the project were not considered to be interviewed.

2.4 Organising interviews

Interviews were initially scheduled for December 2015, and specific dates and time were agreed with each contact that expressed their interest and availability to contribute to the project.

It was decided that interviews should be carried out by one LIBER Office representative and another NA2 participant with a technical profile. A doodle poll was set to gather NA participants availability, and with this input, the interviews were scheduled.

¹ http://libereurope.eu/blog/2015/11/18/seeking_contributors_to_aarc

² <http://list.ecompass.nl/listserv/cgi-bin/wa?A2=ind1511&L=LIBER-ALL&F=&S=&X=13CE891092C55EBA3D&Y=gema.bueno%40kb.nl&P=770>

³ <http://libereurope.eu/libermailings/november-2015/>

Study methods

Due to late responses coming from contacts and other availability issues, it was not possible to set all the interviews at a time, so, new dates and times were proposed progressively along December and even January 2015.

Moreover, some contacts were reluctant to do the interview in English, so they were interviewed in Spanish or French just by LIBER Officer.

3 Results

3.1 Overall results

A total of nine interviews were conducted during December 2015 and January 2016, as detailed in table 1.

Table 1. List of interviews contacts, roles, institution and country.

Interview nr.	Contact name	Role	Institution	Country
1	Adoté Chilloh	Resp. Operational IT Security	Bibliothèque Nationale de France (BNF)	France
2	Mark Williams	JISC federator manager	JISC / UK Access Management Federation	United Kingdom
3	Emīls Klotiņš	Head of Library IT Department	National Library of Latvia (NLL)	Latvia
4	Gaspar Olmedo	Technical coordinator, Library	CSIC Libraries Network	Spain
4	Inmaculada Ramos	PAPI service and access to electronic resources	CSIC Libraries Network	Spain
5	Giannis Tsakonas	Head of Library	Patras University Library	Greece
6	Bjarne Andersen	Head of Library IT Department	Aarhus State and University Library	Denmark
7	Teresa Malo de Molina	Head of Library	University Carlos III of Madrid Library	Spain
8	Lluís Anglada	Head of Library and Information Department	CBUC/CSUC	Spain
8	Ramon Ros	Head of IT Department	CBUC/CSUC	Spain
9	Jeannette Frey	Library Director	Bibliothèque Cantonale et Universitaire de Laussane (BCUL)	Switzerland

A total of nine organizations from seven countries: France, United Kingdom, Latvia, Spain, Greece, Denmark, and Switzerland. The list of institution comprises:

- Bibliothèque Nationale de France (BNF).
- JISC UK Access Management Federation.
- National Library of Latvia (NLL).
- Consejo Superior de Investigaciones Científicas (CSIC) – Library Network, Spain.
- Patras University Library, Greece.
- Aarhus State and University Library, Denmark.
- University Carlos III of Madrid (UC3M), Spain.

Results

- Consorci de Biblioteques Universitaris de Catalunya (CBUC), part of Consorci de Serveis Universitaris de Catalunya (CBUC), Spain.
- Bibliothèque Cantonale et Universitaire de Laussane (BCUL), Switzerland.

The type of institutions and libraries that have participated is quite diverse, and includes:

- 2 national libraries: BNF, NLL.
- 2 state/regional libraries: Aarhus*, BCUL*.
- 1 library consortium: CBUC/CSUC.
- 4 university libraries: Patras, UC3M, Aarhus*, BCUL*.
- 1 library network: CSIC.
- 1 federation management desk, and electronic resources provider: JISC.

Some of these organizations represent more than one institution and multiple libraries, as is the case of JISC desk for federation management (over a thousand members)⁴; CBUC, as a regional library services consortium (10 university libraries that are CSUC members and other associated partners)⁵; and CSIC library and archives network (93 units)⁶.

Most of the interviewed were decision makers at different levels, both managerial and technical. In 4 cases, they were the library directors/head of library (Patras, UC3M, and BCUL). Other 4 interviewee were Head of IT departments or equivalent services (BNF, NLL, Aarhus, CSIC). In the case of CBUC/CSUC both the library consortium director and the Head of IT services were present, and for JISC, the main responsible for federated access in the country was interviewed.

3.2 Main findings

A preliminary analysis of interviews results offers an scattered situation regarding federated access at libraries. It is difficult to identify any pattern as the type of institutions, collections and end-users were diverse, and the overall context on each country was also significantly different.

The study participants reported on very heterogeneous settings, with various levels of federation adoption, technologies used and technical approaches, federated resources and services federated. Also, the level of technical capabilities, and general awareness of federated based access options and benefits varies among institutions.

⁴ <http://www.ukfederation.org.uk/content/Documents/MemberList>

⁵ <http://www.csuc.cat/en/libraries/university-union-catalogue-of-catalonia/ccuc-libraries>

⁶ <http://bibliotecas.csic.es/directorios-de-bibliotecas-y-archivos>

3.2.1 Federated access adoption

Most of the institutions have some sort of federated access for their collections, mainly as an Identity Provider, but also as a Service Provider.

The only participant with no federated access solution in place was the BNF, but they were considering the possibility of being a SP for their collections for registered and other types of users. Moreover, they were analysing their potential role for coordinating efforts with other institutions and offer services to other Identity Provider (e.g. research centres, universities, other institutions).

NLL has a federated solution for their digital library collections, acting as a SP, but this system has not been applied to their subscribed electronic resources.

3.2.2 Collections and services

At Libraries, federated access is generally adopted to grant access to subscription based resources, like e-journals, databases or e-books. However, this is usually limited to some resources or providers and there was no institution with a pure federated access model. For example UC3M has only fed access to WoS and Scopus because of a national agreement that has negotiated these resources licences.

It is common for libraries to depend on a national/regional body that negotiates licenses for electronic resources and coordinates access to them: JISC Collections in UK, FECYT in Spain, HEAL Link in Greece, WAYF in Denmark, CBUC in Catalonia, CODUL for French Switzerland.

NLL has adopted fed authentication at their digital library collections, but not for securing access to their resources as they are freely available. Authentication is used by NLL to offer some personal and interaction services to end-users.

3.2.3 Technical solutions

When asked about the technology used for federation, participants mentioned mainly Shibboleth, and other technologies based on SAML, as SAML PHP.

However, it was still very common to have IP-based authentication combined with VPN remote connexion for their subscribed electronic resources, as in the case of UC3M, Patras, Aarhus, BCUL, CBUC.

Some interviewed reported on specific solutions based on proxies (EZProzy for Aarhus) or other bridge technologies (BCUL), that try to avoid the user to go through a federated access interface and just recognise their privileges through their IP or user-password credentials.

Single sign-on solutions are currently running on many participants institutions, in some cases combined with federated authentication.

Results

Some institutions reported to have still some providers that just offer a password based access (small, local publishers), thus limiting their services and number of possible connections.

Also, some of these organizations (WAYF, HEAL Link) and others (SWITCHaaI in Switzerland, RedIRIS in Spain, UK Access Management Federation), are in charge of offering federated access solutions to these institutions, coordinating and also interfederating → eduGAIN. So many participant institutions profit from these national or state infrastructures and agreements.

Patras, UC3M, BCUL/UNIL and CSIC have their own IT staff, but they do not bear the entire responsibility of users authentication, or they do in cooperation with the university or institution computing service. For this reason, they were not able to answer some questions. Also, they could not decide on some things that were carried out by the computing department. They were focused on access to their resources. Some of these home institutions have a federated access solution running for some institutional platforms (e-learning platform, intranet), but it is not fully integrated with library platforms and resources. → challenge.

3.2.4 Preferred authentication method

IP-based access is still preferred at many libraries, as in the case of UC3M, Aarhus, BCUL, Patras. They considered it to be easier to control from the library point of view, also from the publishers side, and they had figured out some solutions to avoid IP-based access shortcomings as accessing outside the institution network or library facilities.

Federated access was the best option for CSIC and CBUC (obviously, for JISC UK too). They had been promoting it for many years, and complained on not being able to adopt it extensively because of technical and political barriers.

UC3M, Aarhus, BCUL, Patras, were willing to change to a federated access model BUT under some conditions: affordable implementation (both technical and economic), robustness, easy for end-users, coordination at a national level, extended to most of resources and services, etc.

3.2.5 Challenges for federated access adoption

Many interviewed reported on technical difficulties in order to implement a federated access solution, due to the complexity of Shibboleth and other SAML compliant technologies. It was a problem recognised by JISC when talking about UK HE institutions, NLL in regards to subscription based electronic resources; Patras University Library; Aarhus State Library, or CBUC.

A recurrent problem was the fact of the publishers not offering federated access to their resources for an specific country (Spain, Latvia), or just not being able to offer the service (JISC UK, BCUL). The lack of coordinated efforts for lobbying on publishers was also mentioned several times (CSIC, CBUC in Spain), but also some participants did not blame on publishers as they had considered it to be their responsibility or to be too difficult to achieve so they prefer to rely on their own custom solutions (Patras, Aarhus).

3.2.6 Training and advocacy actions

In general, participants did not need to carry out training sessions addressed to their end-users and library staff.

Most of them have created very basic training or help materials, with brief explanations on how to access library resources and how to authenticate.

When a federated solution is in place, participants reported it to be easy for users.

However, CSIC complained on the fact of having multiple interfaces for accessing different platforms and that could be a barrier for end-users.

JISC UK federation manager reported on training sessions and materials for the institutions they serve for technical implementation, and just some support for publishers.

3.2.7 Training needs and input from AARC project

When asking participants about their training needs on federation they answered that no training sessions were needed.

It is true, however, that some of the interviewed are not responsible of the technical implementation of authentication systems at their institutions, or they are in conjunction with the institution IT staff. So maybe this training should be addressed directly to the institutional IT staff.

Participants would appreciate some training and self-study materials, in order to advocate federated authentication benefits, addressed to librarians and also to decision makers. Videos, short texts, flyers would be welcome. Federation 101 videos were much appreciated.

Regarding other help or contribution coming from AARC projects, participants insisted on:

- providing an easy to implement and robust solution for federated access.
- help on coordinating efforts at national level and beyond.
- lobbying for publishers.

4 Conclusions

Some conclusions can be drawn from the preliminary analysis of the interviews, such as the following:

- There is an heterogeneous situation of libraries in the European context in regards to authentication and authorization implementation, with clear differences among countries and regions.
- The type of libraries and the kind of services and resources they offer through secure-access is diverse (some act both as IdP and as SP), but the biggest challenge is posed by electronic resources collections subscribed from external providers.
- Technical implementation of federated authentication systems is a real challenge for libraries, that consider it to be too complex for them in comparison with IP-based authentication systems.
- IP-based authentication is still the preferred authentication method for many libraries, due to the technical complexity of other solutions but also to the lack of offer from publishers and content providers, specially local or small ones.
- AAI systems are generally implemented by IT departments at the institutional level, sometimes this is the same department as the Library IT service, but it is not always the case (e.g. academic libraries). In this case, library IT staff is not the responsible of AAI implementation and cannot take the last decision on this matter.
- Libraries benefit from consortia and national bodies in charge of licence negotiation for electronic resources, including the technical implementation for granting access to these resources. However, these bodies cannot force any particular implementation and just offer some support to institutions and, sometimes, service providers. They have limited power to force publishers to offer any technical solution.
- Publishers are constraining federated access implementation as they are reluctant to offer their resources through these technologies. For many of them it is complex at a technical level, and generally, they do not see the ROI until there is a critical mass of potential clients that demand these option.
- Some libraries do not see the added value of a federated AAI for their services, as their current solution is robust and easy enough. They asked for a clear value proposition on federated access benefits in order to consider a potential transition from their IP and proxies based model to a federated one.
- Libraries do not see the need for training sessions or materials in order to implement IdP or IdM. This could be related to the fact that they are not always responsible of this implementation. A further analysis could be done by checking on institutional IT departments, as well as national federated agencies (UK federator, RedIRIS, WAYF, HEAL Link, SWITCHaai).

- There is a need of training materials or basic information resources about what is federated access and which are the real benefits for libraries. Videos, social media publications, leaflets and other easy to use resources would be appreciated by librarians.
- Libraries consider that they could benefit from AARC project support in the process of harmonization of federated AAI technologies and implementations, lowering the barriers for their adoption. The main barriers are mainly technical, and therefore economic as the implementation is considered to be expensive, but also political, as the publishers position is considered to be a major constraint.
- Libraries would be in favour of adopting a federated access model but it has to prove to be easy, robust, stable and unified and widely accepted.

Appendix. Questionnaire

(In bold, most important ones, on basic information and related to training needs)

- 1. Do you have already some sort of federated access implemented at your organization?**

NB: Affirmative answer, go to question 2, Negative answer go to question 12.

- 2. Do you know which technology used for federation at your institution?**
- 3. Which collection, type of resources, or services does this federated access cover?**
- 4. Is Federated access the only method to access resources, or there are other methods available for protected resources? Which ones? Make an ordered list from the most preferred access method to the less one.**

Comment - This is a fundamental question. We are aware that together with federated access, libraries have IP-based access, VPN, Proxies. This question help to understand which choices are already done in the libraries.

- 5. Why federated access is the /most/less/ preferred?**

Comment - This is a very important question to understand which barriers prevent the federated access adoption in the libraries

- 6. Regarding those resources that are not accessible via federated access (yet), which are the main reasons - challenges?** (see Annex I. Barriers for librarians in day by day support towards end users)
7. Have you encountered any problem when implementing federated access? And if so, of which kind (Technical, Economical, Organizational, Others?)
8. Has the decision been taken at the institutional-level or as part of a consortium agreement? Which kind (regional, national)?

Given that one of the top priorities of AARC is "Approach entities negotiating licenses for the libraries to add a non-negotiable clause for publishers to offer federated access" (see <https://aarc-project.eu/checkpoint-meeting-in-brussels/>), this question should be in bold

- 9. When implementing the federated access at your organization, how did you approach the users? Did you need to carry out some kind of training? Did you create any tutorial or how-to-do info at your library website?**
- 10. And, how did you approach the library staff? Did you need to give some training? On which aspects?**
11. Would you like to be able to extend the federated access to every password protected resource at your organization? Which are the three resources that you would like to see enabled at first?
- 12. Have you ever tried to implement this approach at your institution?**
- 13. Do you have technical staff with the competencies or the ability to set up an IdP?**
- 14. Which is the level of awareness of the decision-makers / managers at your organization of the need of having a IdP? Do they consider it as a priority?**

- 15. Which is the level of knowledge/understanding of your users and staff of your organization on federated access?**
- 16. What are the main barriers that in your opinion/experience, may prevent federated access approach at your institution? (after, classify them under technical, economic, political, cultural, other...)**

NB: from here could be applicable for both settings.

- 17. Describe the typical use cases of a user who uses protected services at your library.**
- 18. Describe, in the use cases above, when authentication/user recognition comes into play.**
- 19. In your use cases the described services run inside or outside (outsourced) the library? If outsourced, who runs them?**
- 20. How do you manage guest users in your library? How do you manage walk-in-users in your library? Which is the difference between guests and walk-in-users?**
- 21. What help would you need in order to promote federated access at your organization?**
- *Training sessions / materials, support and advice*
 - *Dissemination and advocacy materials for decision-makers to show the economic advantages of identity federations*
 - *Technical support and advice*
 - *Coordination support and advice*
- 22. In case you may need some training, in which areas or topics would it be needed and more valuable?**
- *How-tos and training to implement IdM and IdP.*
 - *Explanations on how federated access to resources works from the library point of view.*
 - *Explanation on the workflow to access resources via federated access.*
 - *Clarification on the instruments and systems needed by libraries to set up a IdP*
 - *Training sessions and materials that could be reused to train end-users*
- 23. Is there someone at your organization that would be available to be contacted in the future for further questions on technical details, policy development, etc.? Could you provide us the contact information?**