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Magic

Middleware for collaborative Applications
and Global virtual Communities

Deliverable D3.4

Pilot service with one application sharing group information and service catalogue

Progress Report

MAGIC Deliverable: D3.4 Pilot service with one application sharing group information and service catalogue

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Abstract: After planning and designing the requirements for the group management and inter-operations standards, a set of Group Managers were deployed, adapted or reconfigured to be compliant with them and be able to exchange data about the groups or their users. This document contains the result of this implementation and shows what services allow the users to use their group information even if that information resides in other NRENs.



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For more information on MAGIC, its partners and contributors please see <http://www.magic-project.eu>.

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1. INTRODUCTION

The WP3 activity on group management is oriented to deploy a pilot test of services sharing group information across two federated domains. The WP3 worked on studying and defining the standards required to do so. Once the standards were identified, the group chose the Pilot implementation and the structure of the components, including the set of services to demonstrate the use cases. The services selected were FileSender and Dokuwiki. The main goal was to have services where final users could access and develop activities based on their groups membership. The group sharing will be transparent, and regardless of the group location, whether it is located on the organizational group manager or on another partner institution. For example, a user from NREN A should be able to use a file transfer service from NREN B and in this system she/he should find the groups where she/he is registered, even if these groups were hosted in NREN A or B. This document describes the work regarding the Pilot developed, and shows the components, workflow design as well as the services implemented for its deployment.

2. DOCUMENT AMENDMENT PROCEDURE

Requests for amendments to this document must be made to the editor, Gustavo Garcia (RedCLARA), and copied to the Management of the MAGIC project.

3. GLOSSARY

AARNet	Australian NREN
BELNET	Belgium NREN
CEDIA	Ecuadorian NREN
CKLN	Caribbean Knowledge and Learning Network
CONARE	Costa Rica's NREN
EC	European Commission
EU	European Union
EU-LAC	Europe, Latin America and the Caribbean
DNS	Domain Name System



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HEAnet	Ireland NREN
NgREN	Nigerian Research and Education Network
NREN	National Research and Education Network
RENATA	Colombian NREN
SURFnet	The Netherlands NREN
UNINETT	Norway NREN
WACREN	West and Central Africa Research and Education Network

4. REFERENCES

[R1] MAGIC Website <http://www.magic-project.eu>

5. EXECUTIVE SUMMARY

In this deliverable, the work package 3 team provides the description of the development of the pilot on group management in federations. This pilot establishes a practical use case of sharing groups between NREN domains, managing the applications Filesender, Dokuwiki and SIVIC. Filesender is used to share big files between users through a web interface, Dokuwiki is an online collaborative edition platform that allows building web documents with multiple authors at the same time, and the SIVIC that is a video conference reservation system where users can schedule a conference, reserve resources and invite participants. The pilot implements actions for authorization for Filesender premium and Dokuwiki based on the group membership, so in Filesender, the members of group A will have the premium features like unlimited file size capacity and share multiple files at once. Furthermore, the sharing of group information is implemented in SIVIC in order to Invite members from a group to video-conference, by giving the group name to invite all of its members. The best result from this implementation is that it involves three organizations in different domains: RENATER in France, that hosts the Filesender application, CESNET in Czech Republic that hosts Dokuwiki, and RedCLARA that hosts the Colaboratorio and SIVIC applications in Latin-America.

In addition to the described result, the work package team also worked in the implementation of a service catalogue. The service catalogue will serve as the base for the registration of services and application in different domains. The



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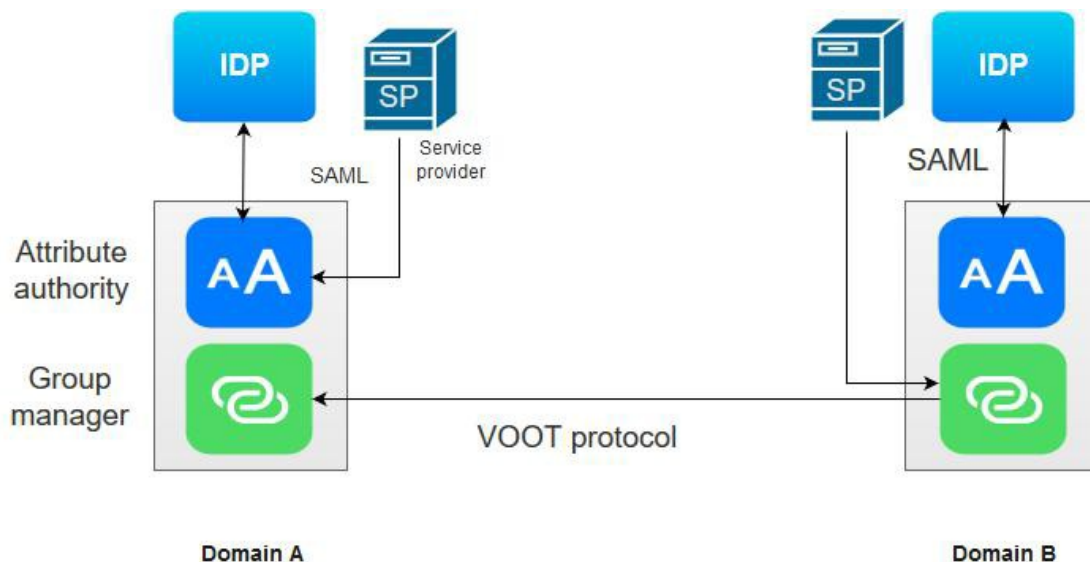


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catalogue is based on the GÉANT's, who kindly provide support, the base attributes and the application source code to facilitate the implementation.

6. PILOT IMPLEMENTATION ARCHITECTURE

MAGIC WP3 studied the group sharing technologies, and in the last face-to-face meeting agreed on the architecture for the group management in federations. The subject was also elaborated on in previous virtual meetings, and finalised face-to-face meeting with the definitions of services and structure for the pilot implementation. The pilot shall use a Group Management entity attached to an SAML Attribute Authority (AA) as summarized as in the following picture:



The main components of this schema are:

A) Service Providers (SP): The services themselves (file transfers, wiki managers, H323 Booking systems, etc).

B) Identity Providers (IdP): software components that allow the users to authenticate. This component is the one able to say to the service: "The user is the one that she/he claims to be".

C) Attribute Authorities (AA): components that will release the list of groups a user belong to. This is the component that says to the service: “The user belongs to all these groups”.

D) SAML: is the communication standard used to exchange information between the Service Providers, Identity Providers and Attribute Authorities.

E) Group Managers: software components that will hold the information of users and groups, that will feed the Attribute Authority and that will store the information from other Group Managers.

F) VOOT Protocol: is the chosen protocol for group information exchange between Group Managers.

7. PILOT USE CASES

The pilot implementation addresses the following use cases defined in the deliverable “D3.3 Planning and design requirements for the group management and inter-operations standards and pilot implementation”:

- a) **Service authorization based on groups:** A group established at domain A (RedCLARA Latin-America) accesses a service in domain B (CESNET), and they have an special permission (write documents) by validating the group.
- b) **Group members action:** A user application in domain A (Scheduling system SIVIC at RedCLARA) gets the members of a group from domains B/C (RENATER and CESNET), and executes an action over these members.
- c) **Group mailing list:** A user application in domain B (FileSender at RENATER) gets the name of the mail-list from a group in domain A (RedCLARA), and sends an invite using this address.

These pilot services in action are described in the following section.



8. SERVICES AVAILABLE

The following services were chosen and deployed.

8.1. CESNET'S DOCUWIKI

Service URL: <https://dokuwiki-magic.cesnet.cz>

Service Description: DokuWiki is a simple to use and versatile Open Source wiki.

Read access: Open.

Write access: Groups defined on RedCLARA's GM.

Use of Group Management: The standard was used to grant write access to the groups defined in a third-party Group Manager. So, although the service is being provided by CESNET, in Europe, the authorization is done by RedCLARA, in Latin-America.

How to use the service:

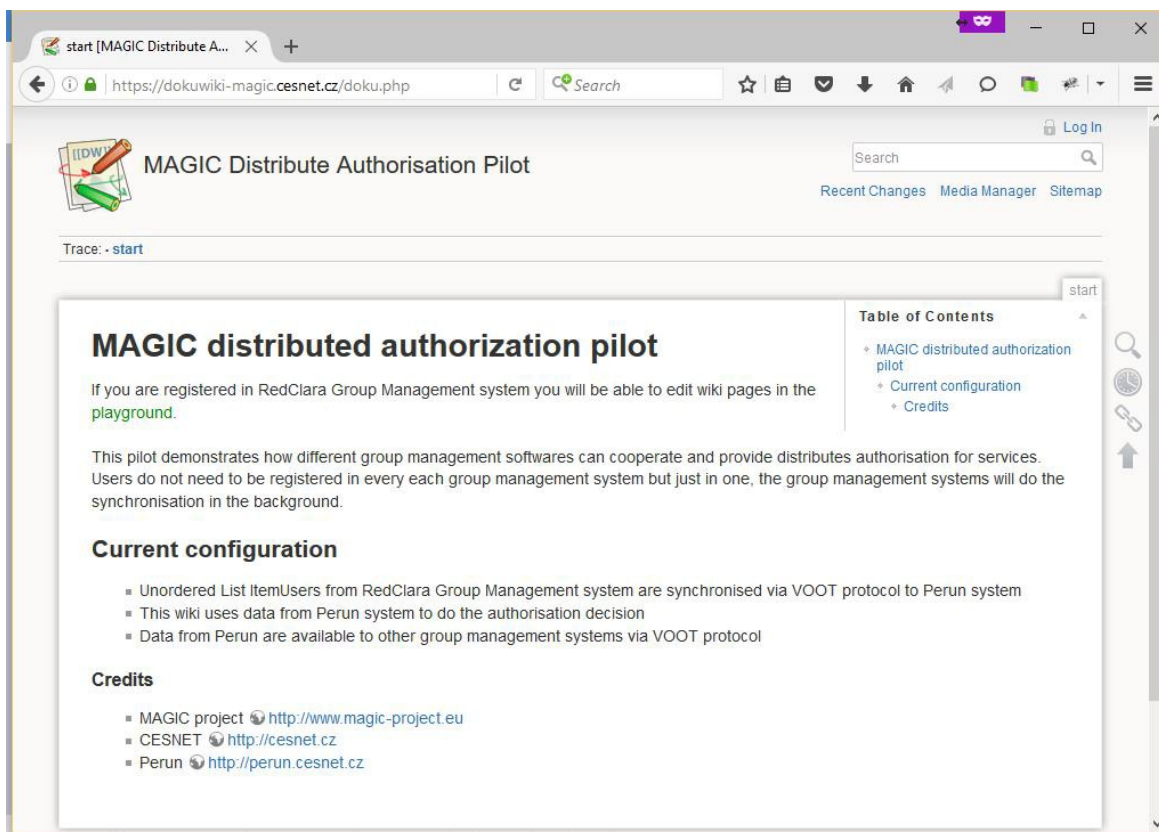
1. Go to the Service URL <https://dokuwiki-magic.cesnet.cz>



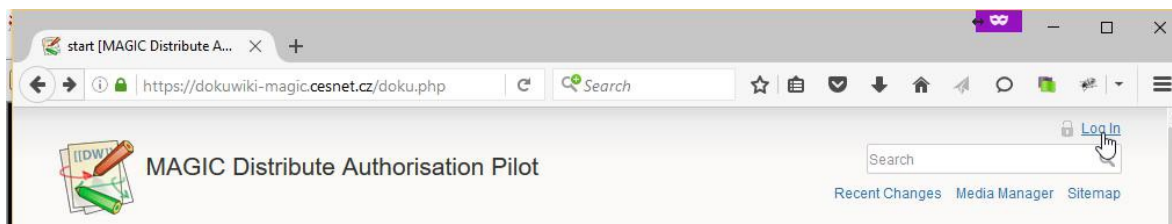
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2. Log in with your eduGAIN account. To test your edit permissions, use a RedCLARA's IdP account.



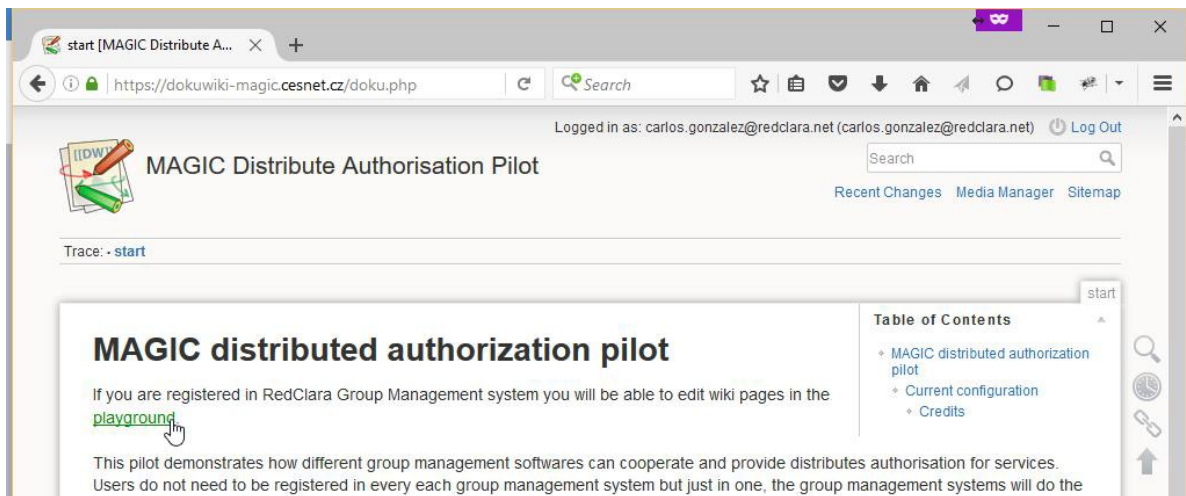
3. After login, go to the space configured for the pilot: "playground"



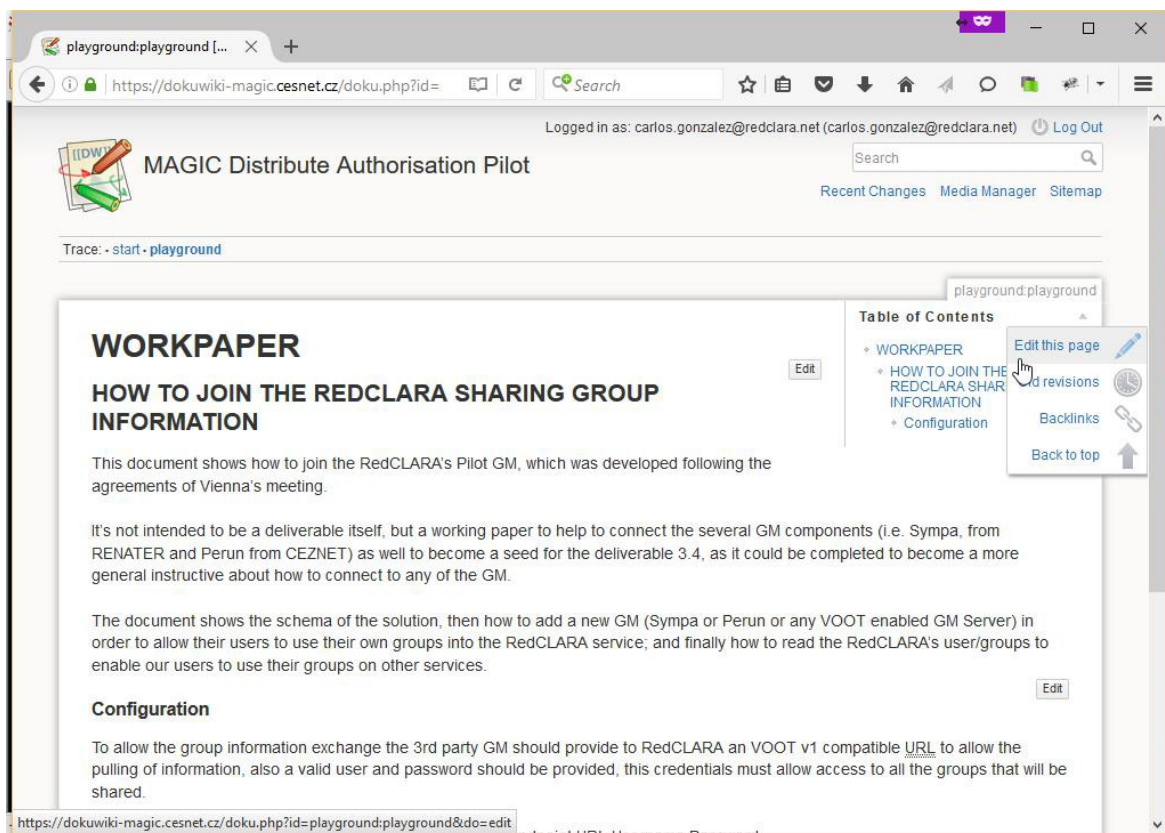
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4. If your account is part of one of the RedCLARA's group, you will be able to edit the wiki pages, and to use the edition option.



8.2. SIVIC'S COLABORATORIO BY REDCLARA

Service URL: <https://colaboratorio.redclara.net>

Service Description: Sivic is a system for booking H323 Latin-American infrastructure.

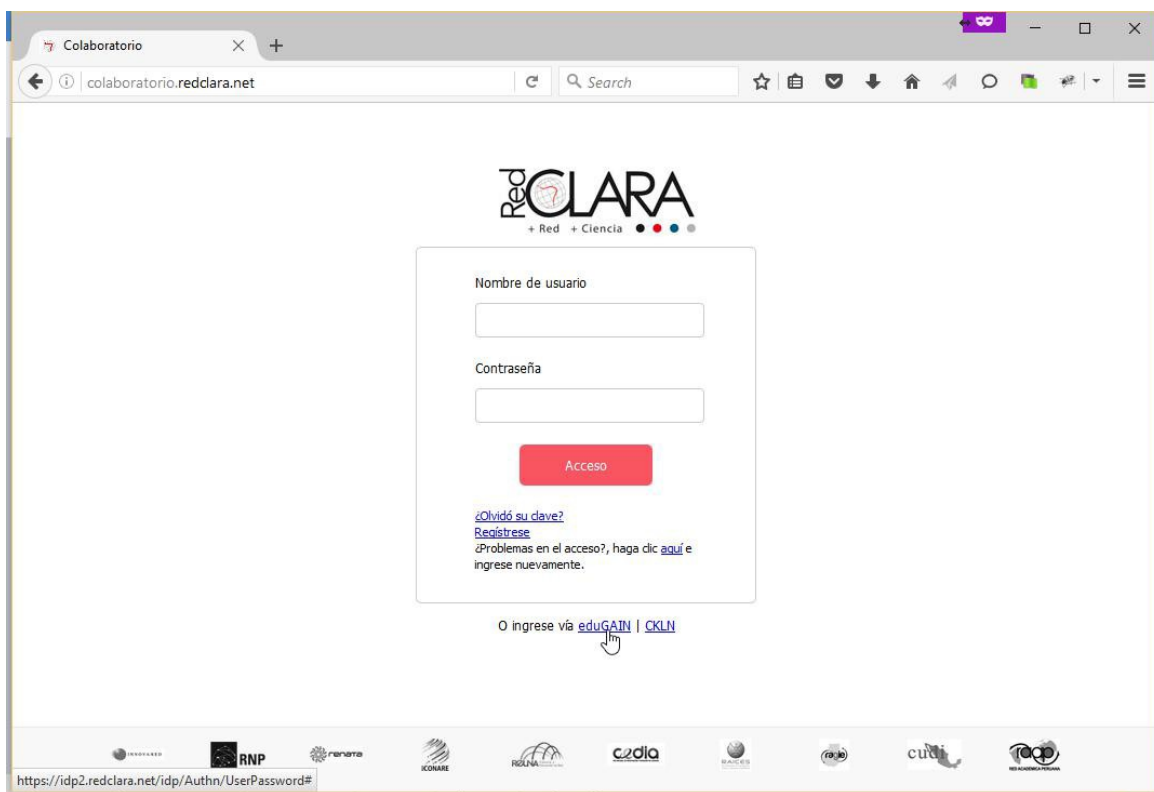
Read access: Everyone on edugain.

Write access: Everyone on edugain.

Use of Group Management: The standard was used to allow the users that book a conference to see their groups, no matter if they're on RedCLARA's, WACREN's or RENATER's Group Manager.

How to use the service:

1. Go to the Service's URL and login using your RedCLARA's or edugain account

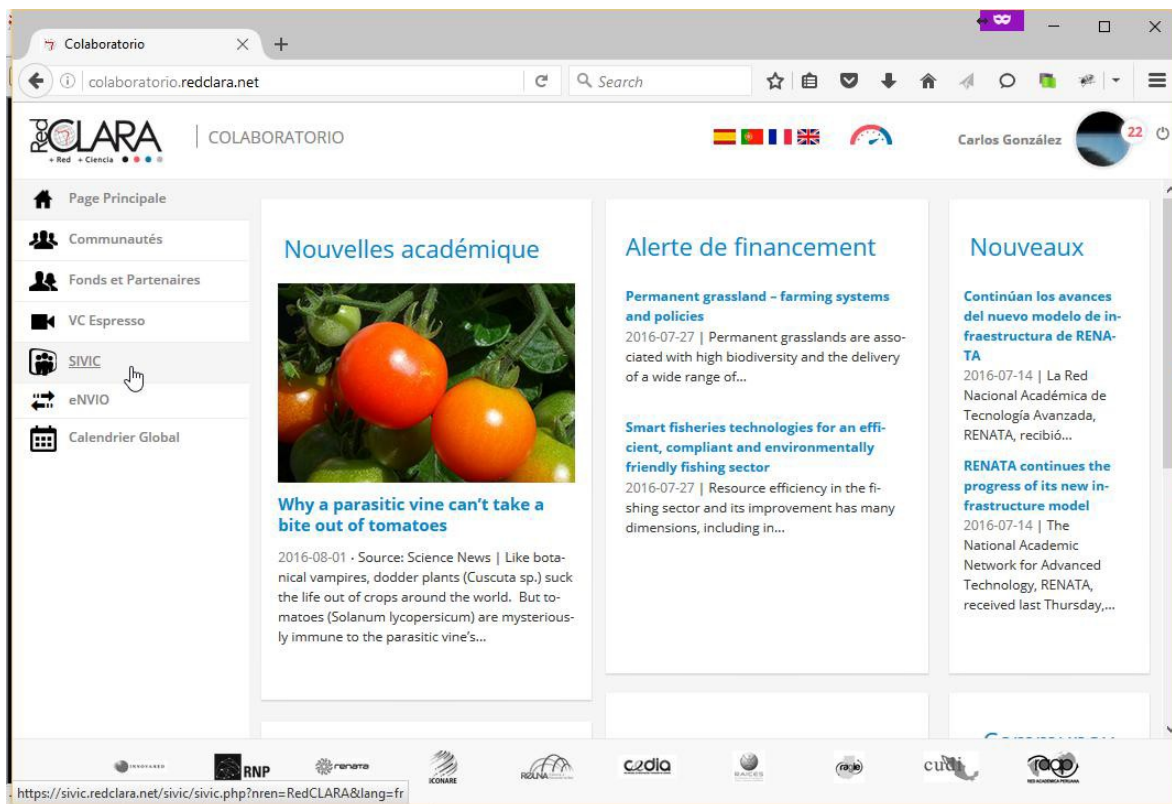


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2. Click on SIVIC link



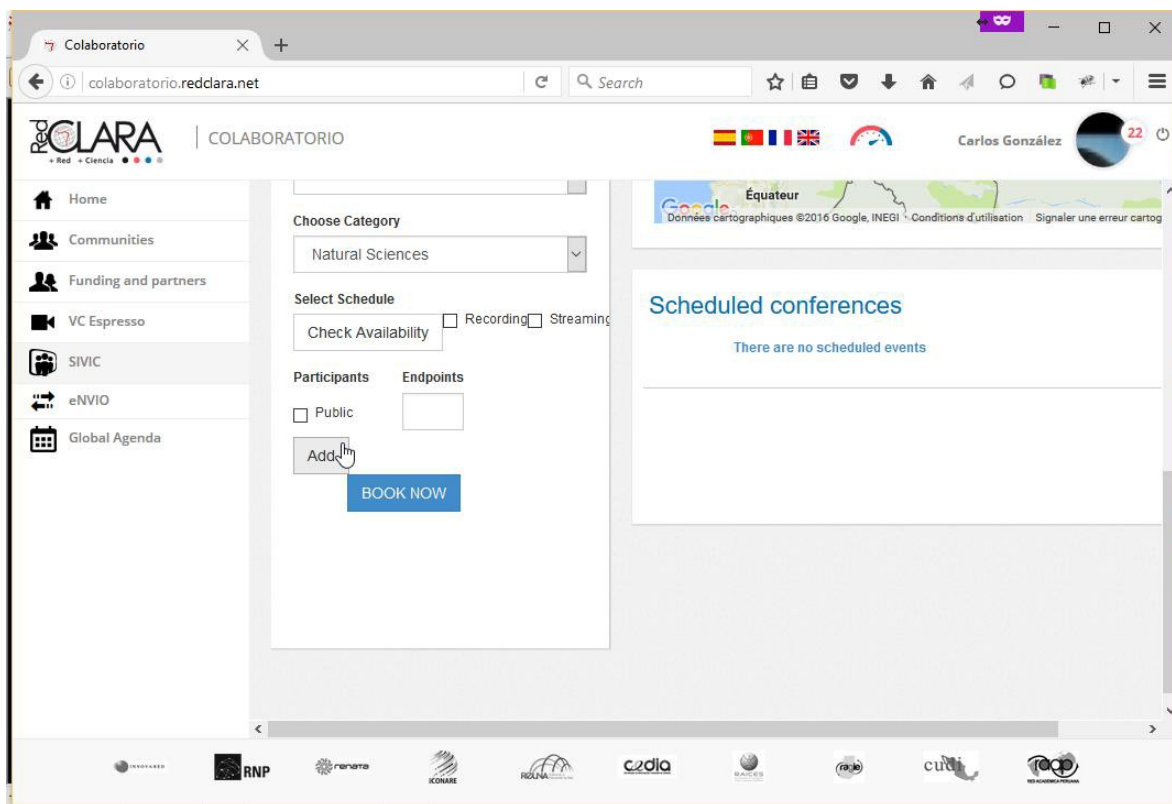
3. Book a conference. When booking, click on “Add” to add invitees.



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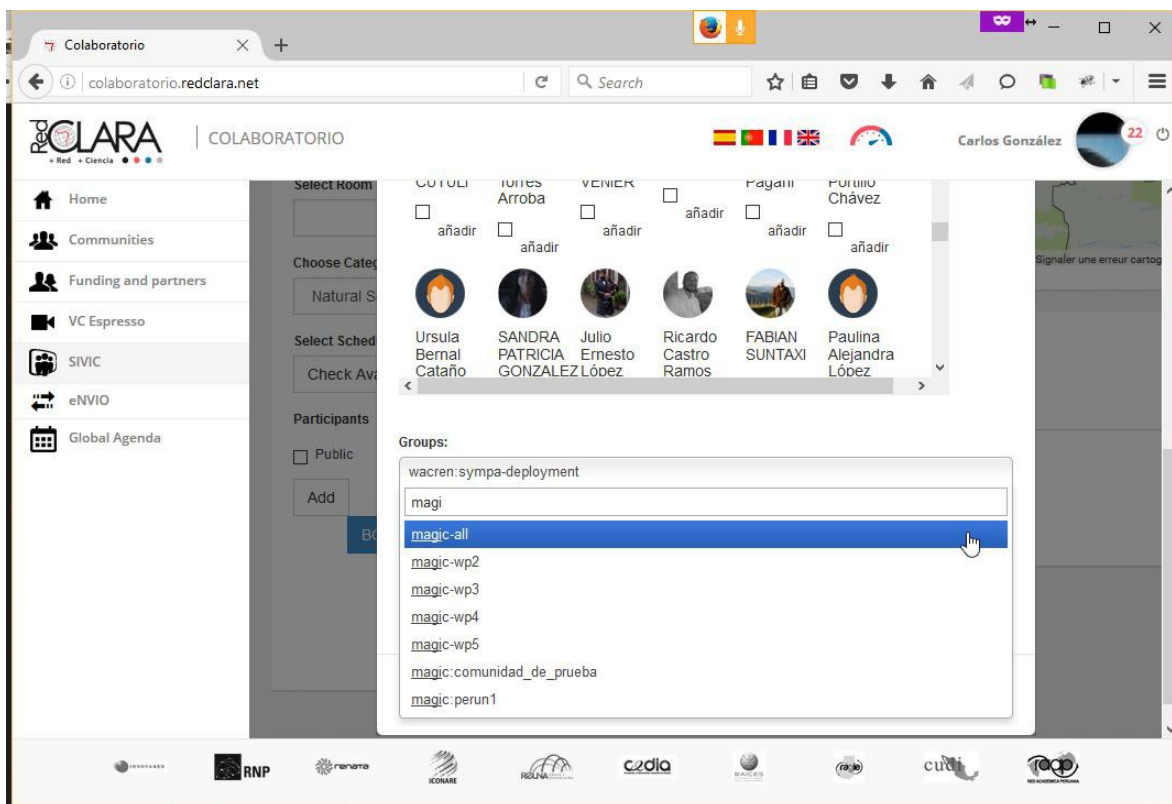
4. You'll be able to see your groups and pick one of them. If you book the conference, an e-mail with the data of the H323 conference will be sent to the members of the group.



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8.3. FILESENDER PREMIUM FROM RENATER

Service URL: <https://filesender-premium.renater.fr>

Service Description: This is a secure way to share large files with anyone. It is based on FileSender and hosted for members of the RENATER community.

Read access: RENATER community and other on-demand authorized edugain's members.

Write access: RENATER community and other on-demand authorized edugain's members.

Use of Group Management: The standard was used to allow the users that upload a file, to see their groups, no matter if they're on RedCLARA's or RENATER's Group Manager and to pick one of them to inform their members there's a file for them.

How to use the service:

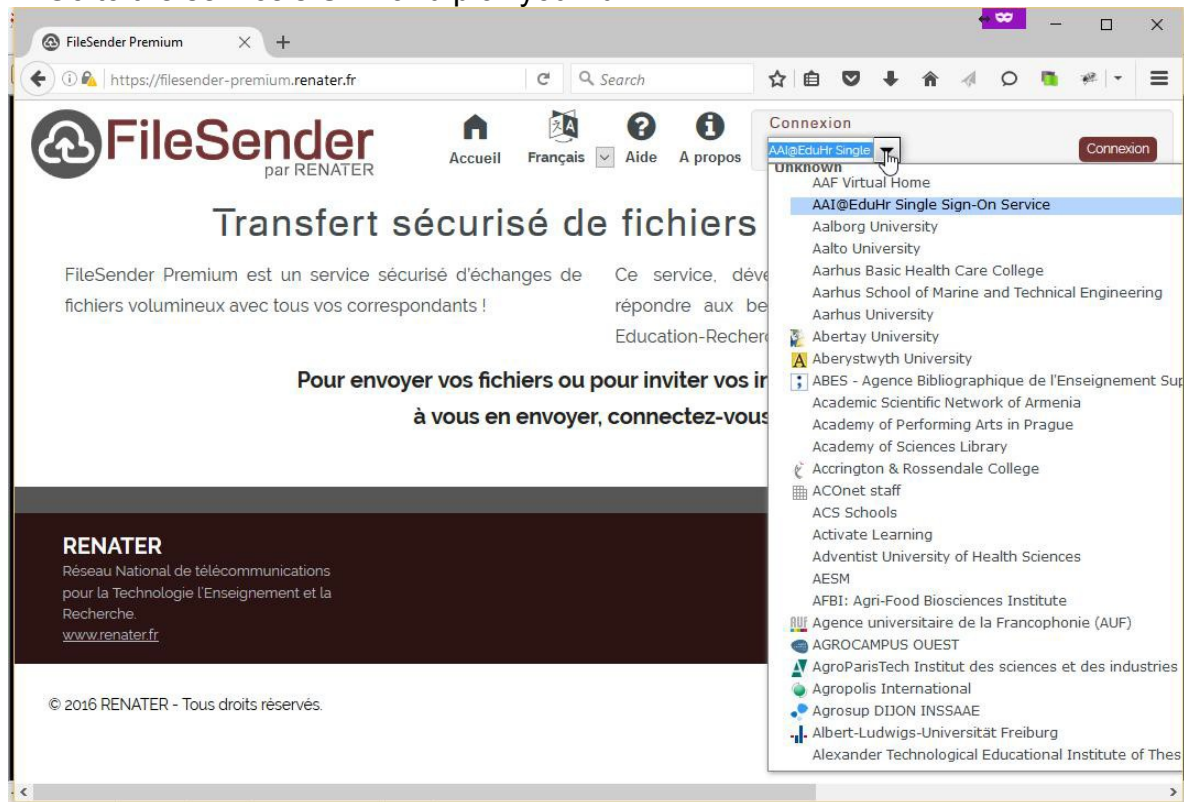


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1. Go to the service's URL and pick your IdP.



8.4. A WORD ABOUT THE GROUP MANAGERS PROVIDERS

All the described services are reachable via eduGAIN, as required by the D3.3. *Designing the requirements for the group management and inter-operations standards.*

Also, the organizations that will deliver information about groups to these services are:

1. CESNET's Perun
2. RedCLARA's Colaboratorio
3. RENATER's Sympa
4. WACREN's Sympa



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9. SERVICE DIRECTORY

WP3 also worked on the design and initial implementation of a service catalogue for MAGIC. The idea of this tool is to have a central information point where NRENs, end-users, and communities can find the services existing in other NRENs and organizations. The application and the service attributes are based on the existing GÉANT service catalogue. The catalogue was deployed and installed at:

<http://catalogo.redclara.net:8000>

The services registered on this catalogue are:

- Colaboratorio
- VCEspresso
- SIVIC
- FileSender at RedCLARA
- MediaWiki
- Funding and partners
- LReferencia
- Sakai
- VC - CUDI
- SNAAC RENATA



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