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Deliverable D5.3

Prototype of the federated portal System for Access to Research Communities Tools and Cloud Services



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Periodical Progress Report

ELCIRA Deliverable: ELCIRA D05.3 – Prototype of the federated portal System for Access to Research Communities Tools and Cloud Services

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Abstract: The ELCIRA WP5 has completed a system for delivering, and administering services for NRENs. The system works as a cloud services model. The system location, overall description and brief explanation of the architecture are included in this report.



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For more information on ELCIRA, its partners and contributors please see <http://elcira.redclara.net> (this website will be available in October 1st 2012).

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DELIVERABLE ROUTE

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1.- INTRODUCTION

ELCIRA Work Package 5 is about Extending and Strengthening the Collaboration Platform. The Collaboration Platform is based on the deployment of service integration between Latin America and Europe. The main concept is to provide these services as a cloud platform where NRENs can obtain services for their users. The new platform integrates existing services like the communities' portal (Jomsocial-based), web-conference (MCONF), Wiki, and FileSender. The Work Package team has created the functional prototype of the system committed for Month 12 of the ELCIRA project. In this deliverable, the system provided allows an NREN administrator to enter and select services for the NREN's users, define the service layout, delegate administration, and approve communities. This report was developed in order to provide a source of information about the system, where it is located, and how it was implemented.

2.- EXECUTIVE SUMMARY

The WP5 team completed the prototype of the integrated system for delivering cloud services. The system consists of an administrative interface, and a set of instructions for integrating services onto the NREN's portal. The system uses web2.0 technologies. Using around five lines of HTML tags, any system administrator can easily integrate the services onto its portal. The service can be accessed using the login and password from federated identity providers such as Feide OpenIDP, CKLN and RedCLARA. NREN administrators can access the interface from <http://nrenadmin.redclara.net>. The services included in the first version of the system are the web-conference system, the communities' portal, the FileSender service, the wiki service, and the support service.

3.- OVERALL SERVICE DESCRIPTION

The ELCIRA Work Package 5 team defined the service concept as shown in the diagram below. This model is described in detail in the deliverable *ELCIRA D5.2 Service Definitions of a Communities Service Space between Latin-America and Europe*. In the service model, there are two main use cases, the end user and the NREN administrator. The end user can be an academic or researcher from Europe or Latin America. The end user obtains the services from his or her NREN or institution portal as shown in the top level of the figure. The NREN administrator is responsible for provisioning the services for the NREN, and integrate them onto the NREN portal. This is shown in the middle level. The bottom level shows the ELCIRA infrastructure as the base source of the services.



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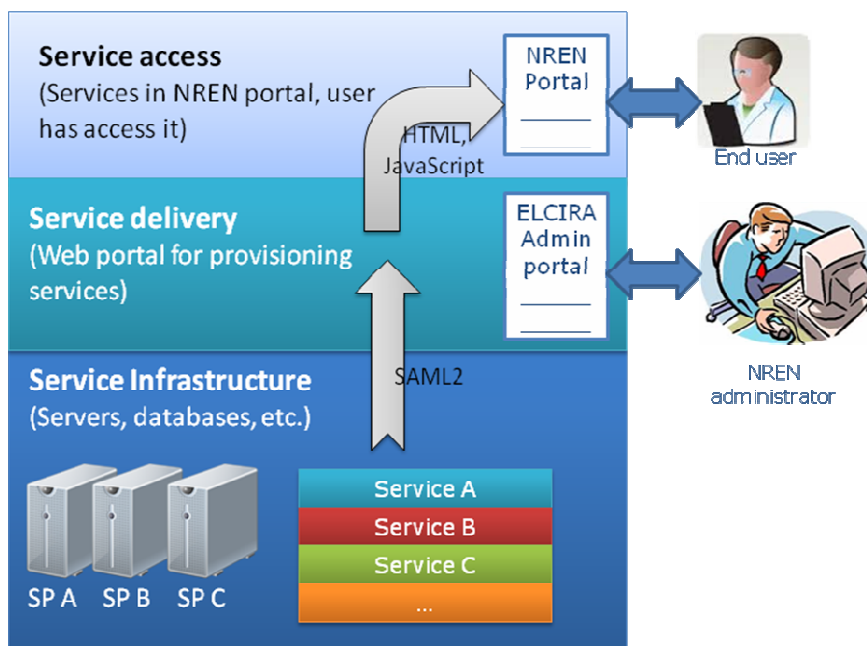


Figure no. 1. ELCIRA Service model and layers

4.- FEDERATED ACCESS AND SYSTEM LOCATION

The ELCIRA system was deployed in such a way that it could benefit from federated authentication. Today, multiple European NRENs have identity federations which are integrated through the eduGAIN confederation. Latin American NRENs which currently have identity federations are RNP (Brazil) and REUNA (Chile). The ELCIRA NREN administration portal is available at the following address:

<http://nrenadmin.redclara.net>

The system is integrated with three Identity Providers (IdP): a) Feide OpenIdP, b) the RedCLARA IdP, and c) the Caribbean Knowledge and Learning Network (CKLN) IdP. Latin American users can access services using the RedCLARA portal. European users can use Feide OpenIdP.

The Service Interface is as can be seen in the screenshot below:



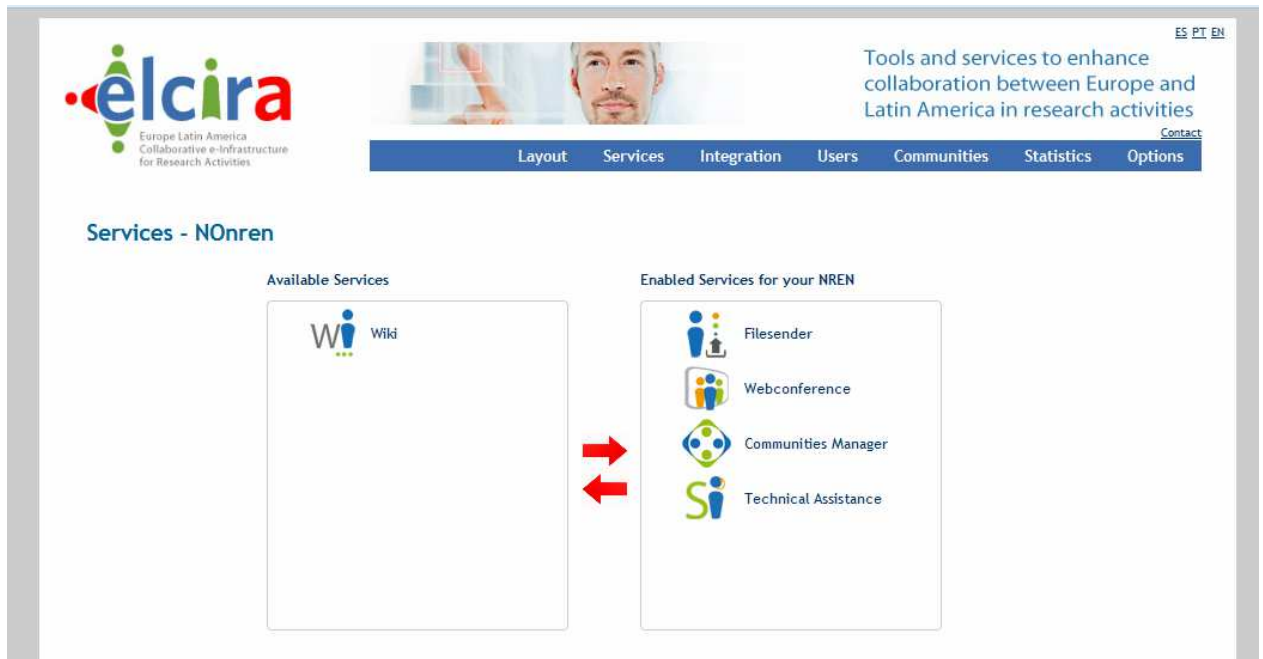


Figure no. 2. ELCIRA Administrator interface / service selection

5.- SYSTEM ARCHITECTURE AND COMPONENTS

The ELCIRA WP5 system architecture details can be found in the document "ELCIRA Service Model Architecture". The base system architecture components can be seen in the following figure:



Deployment Diagram

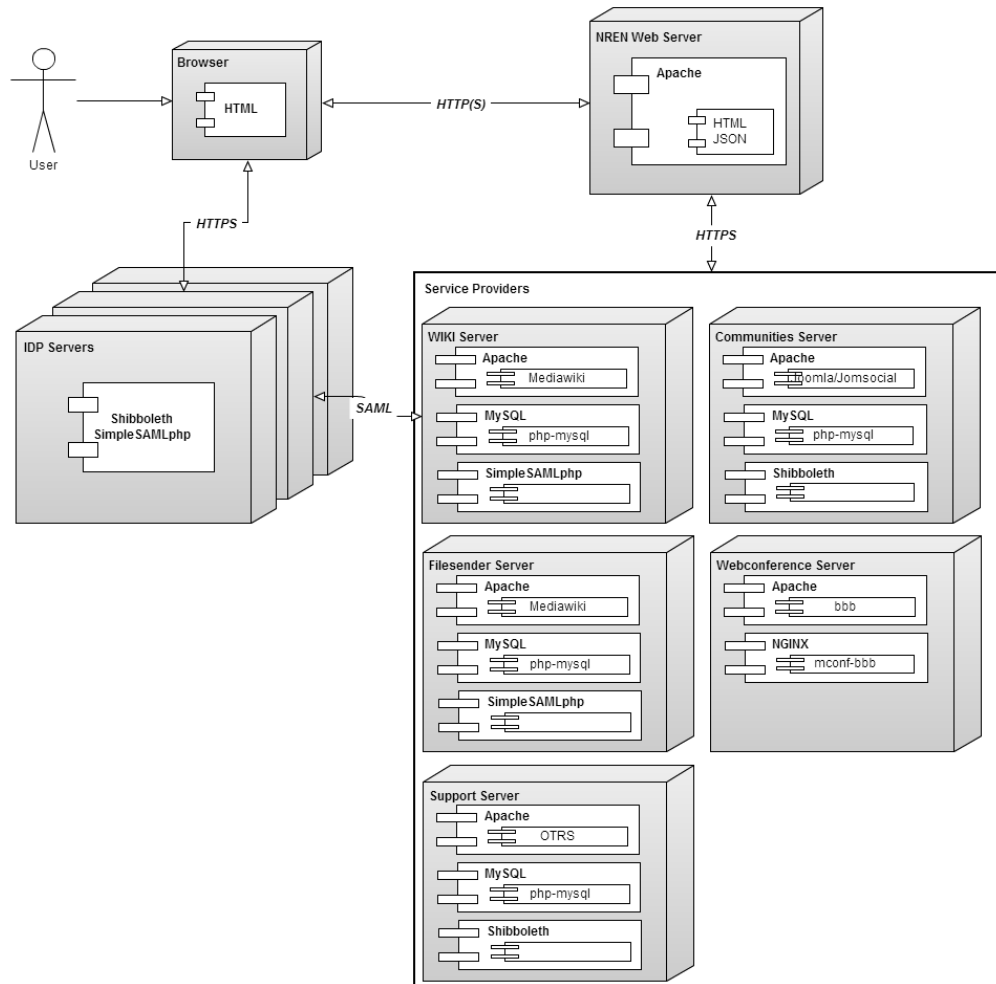


Figure no. 1. ELCIRA System architecture components

The above diagram shows how a set of "Service providers" deliver services through the HTTPS protocol to the NREN web server. The NREN web server is where the user will access the services. It is worth mentioning that all systems are based on open-source and free components such as Mysql, SimpleSAML, Apache, and Shibboleth.



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