



The agINFRA Science Gateway to Grid and Cloud Infrastructures for Agricultural Sciences

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Outline

- The agINFRA project and its objectives
- The agINFRA Science Gateway architecture
- Some project applications:
 - AGROVOC Tagging
 - AGRIS XML2RDF
 - ISIS
 - AGLRTool
 - Soil Maps Browser/Annotator
- The agINFRA “social” Science Gateway
- Summary and Conclusions



The agINFRA Project

(www.aginfra.eu)

Project title:

A data infrastructure to support agricultural scientific communities. Promoting data sharing and development of trust in agricultural sciences

Funded by:

FP7 – Research Infrastructures, Capacities
Programme Objective INFRA 2011 1.2.2: Data
infrastructures for e-Science

Duration:

36 months

Start:

15/10/2011

End:

14/10/2014

Overall budget:

4.285.480 €

EC funding:

3.750.000 €



Objectives

Introduce the agricultural scientific communities into the vision of **open** and **participatory** data-intensive science

- **Scientific Goal**
 - *Increase sharing and federation of agricultural data*
 - *Efficient data management in the agricultural research process*
- **Technical Goal**
 - *Deployment of robust European service infrastructure for scientific agricultural data*
 - *High interoperability between agricultural and other data resources*



agINFRA consortium (1/3)

Partner	Country
1. UNIVERSIDAD DE ALCALA (UAH)	SPAIN
2. FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS FAO (FAO)	ITALY
3. ISTITUTO NAZIONALE DI FISICA NUCLEARE (INFN)	ITALY
4. SALZBURG RESEARCH FORSCHUNGSGESELLSCHAFT M.B.H. (SRFG)	AUSTRIA
5. INSTITUT ZA FIZIKU (IPB)	SERBIA
6. MAGYAR TUDOMANYOS AKADEMIA SZAMITASTECHNIKAI ES AUTOMATIZALASI KUTATO INTEZET (SZTAKI)	HUNGARY
7. AGRO-KNOW TECHNOLOGIES (AK)	GREECE



agINFRA consortium (2/3)

Partner	Country
8. 21C CONSULTANCY LIMITED (21c)	UK
9. CENTRO DE TRANSFERENCIA DE TECNOLOGIAS ESCUELA SUPERIOR POLITECNICA DEL LITORAL (ESPOL)	ECUADOR
10. AGRICULTURAL INFORMATION INSTITUTE OF CHINESE ACADEMY OF AGRICULTURAL SCIENCES (ALL)	CHINA
11. THE OPEN UNIVERSITY (OU)	UK
12. INDIAN STATISTICAL INSTITUTE (ISI) -TBC	INDIA
13. Third party - AGRICULTURE RESEARCH COUNCIL (CRA)	ITALY



agINFRA consortium (3/3)

Technical

INSTITUTE OF PHYSICS
BELGRADE



salzburg|research



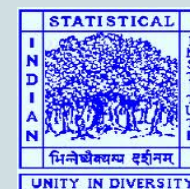
The Open University



Universidad
de Alcalá



Content



Dissemination



Users



What kind of agricultural research data ?

– Types of resources

- Experimental / statistical data
- Time series
- Maps / diagrams
- Observation records
- Multimedia documents
- Vocabularies for agriculture
- Peer-review publications
- Current research projects
- Funding schemas
- Research data
- Datasets

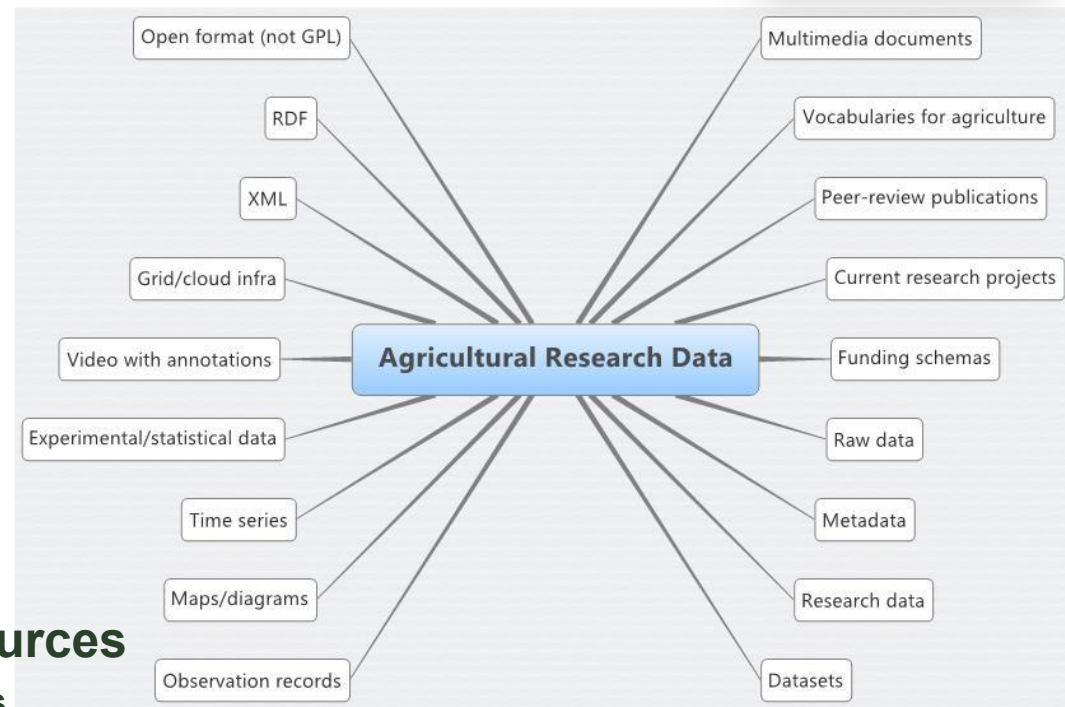


– Formats of resources

- Open format
- RDF
- XML
- Video with annotations
- Raw data
- Metadata

– Storage locations of resources

- Grid & Cloud infrastructures





What are the communities/stakeholders agINFRA can serve ?

– Education - related

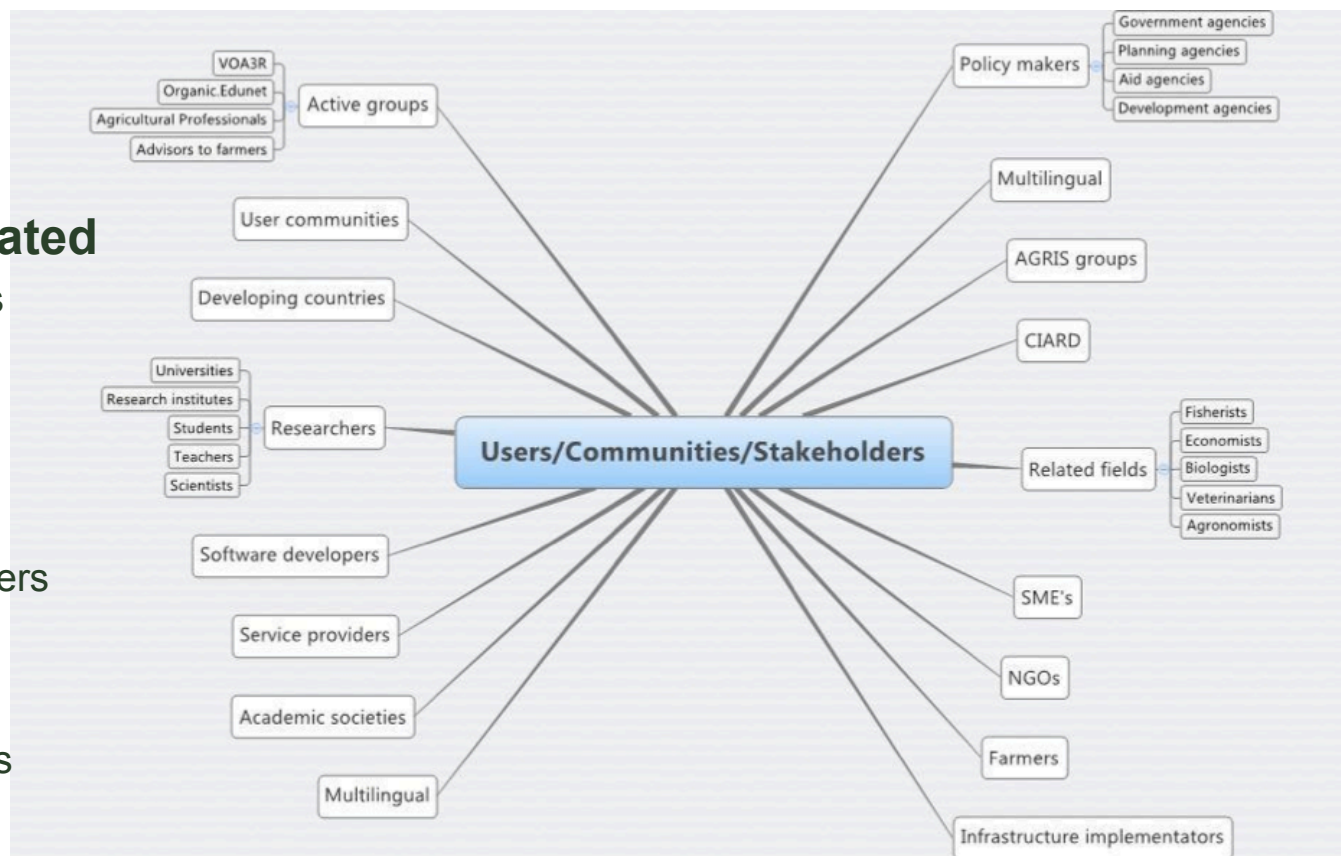
- Active groups
- Researchers
- Academic societies
- Related fields

– Professionals - related

- Software developers
- Service Providers
- AGRIS groups
- CIARD
- SME's
- Infrastructure providers

– Other

- User communities
- Developing countries
- Multilingual
- Policy makers
- NGO's
- Farmers





What is this infrastructure all about and looking like ?

– Services - related

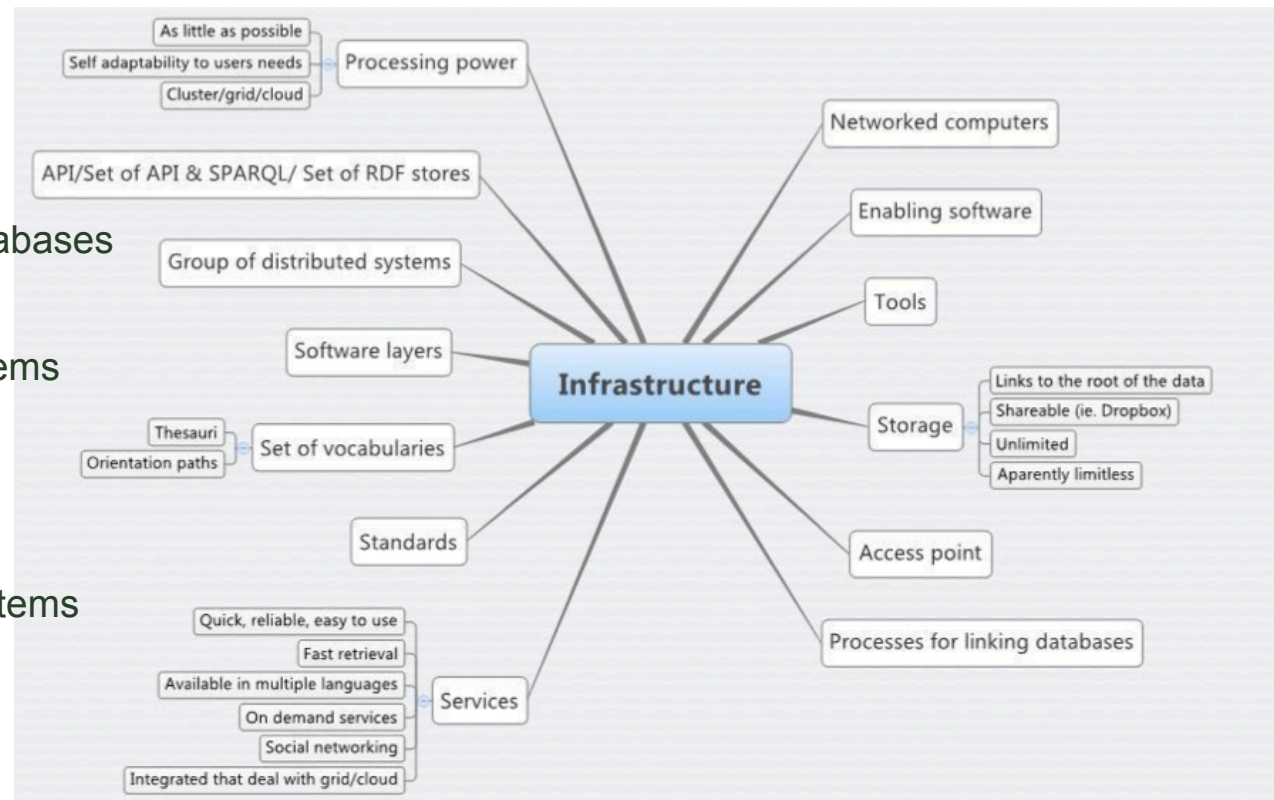
- API / Set of API & SPARQL / Set of RDF stores
- Software layers
- Set of vocabularies
- Standards
- Enabling software
- Tools
- Access points
- Processes for linking databases

– Computing – related

- Group of distributed systems
- Networked computers

– Storage – related

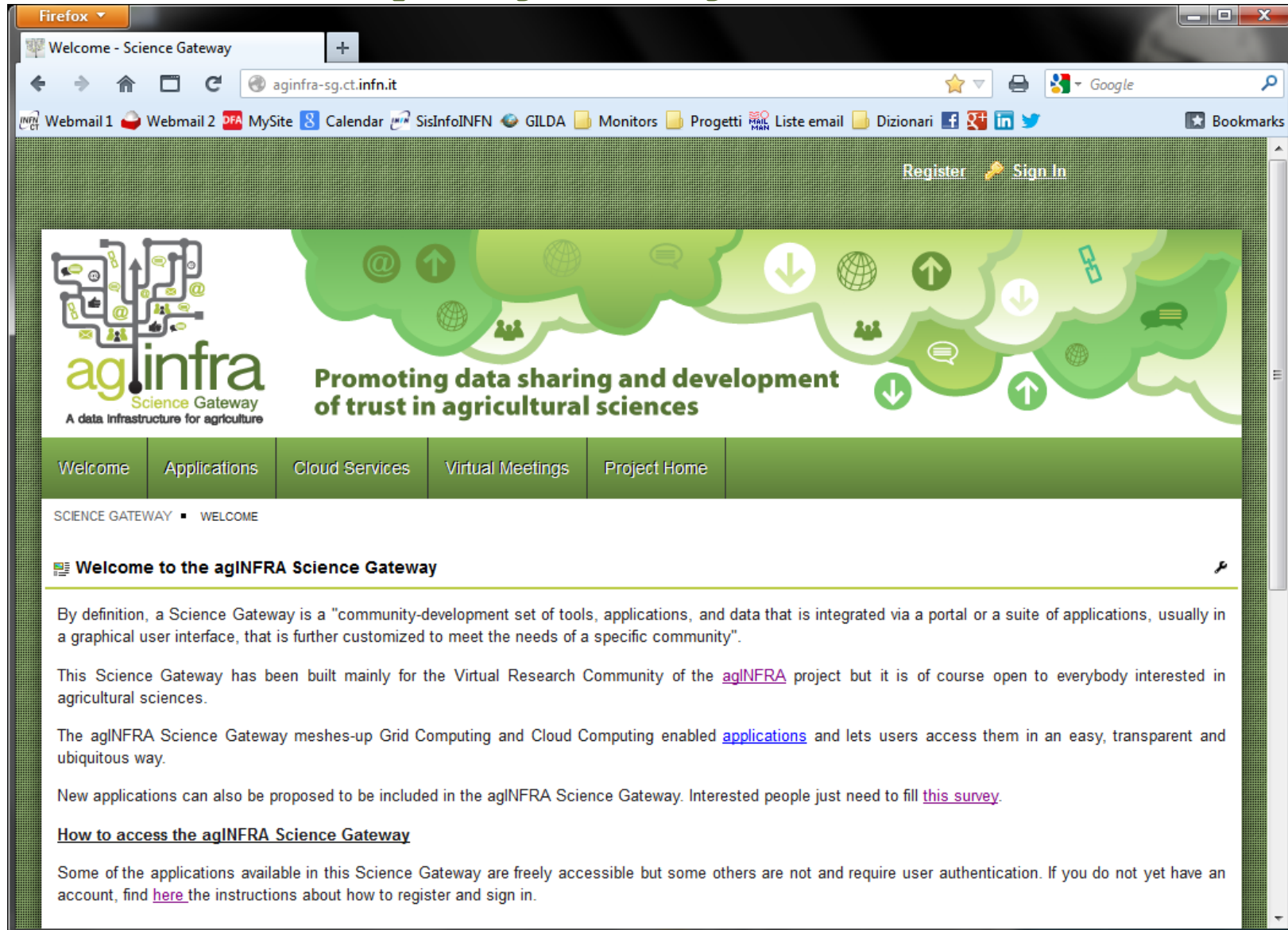
- Active groups
- Groups of distributed systems
- Networked computers
- Storage





The agINFRA Science Gateway

<http://aginfra-sg.ct.infn.it/>



The screenshot shows a Firefox browser window displaying the agINFRA Science Gateway website. The browser's address bar shows the URL aginfra-sg.ct.infn.it. The website's header features the aginfra logo and the tagline "Promoting data sharing and development of trust in agricultural sciences". Below the header is a navigation bar with links: Welcome, Applications, Cloud Services, Virtual Meetings, and Project Home. The main content area is titled "Welcome to the agINFRA Science Gateway" and contains a definition of a Science Gateway, information about the gateway's purpose, and instructions on how to access it. The website design uses a green color scheme with cloud-like shapes and icons.

Firefox Welcome - Science Gateway

aginfra-sg.ct.infn.it

Webmail 1 Webmail 2 MySite Calendar SisInfoINFN GILDA Monitors Progetti Liste email Dizionari f in

Register Sign In

aginfra
Science Gateway
A data infrastructure for agriculture

Promoting data sharing and development
of trust in agricultural sciences

Welcome Applications Cloud Services Virtual Meetings Project Home

SCIENCE GATEWAY ■ WELCOME

Welcome to the agINFRA Science Gateway

By definition, a Science Gateway is a "community-development set of tools, applications, and data that is integrated via a portal or a suite of applications, usually in a graphical user interface, that is further customized to meet the needs of a specific community".

This Science Gateway has been built mainly for the Virtual Research Community of the [agINFRA](#) project but it is of course open to everybody interested in agricultural sciences.

The agINFRA Science Gateway meshes-up Grid Computing and Cloud Computing enabled [applications](#) and lets users access them in an easy, transparent and ubiquitous way.

New applications can also be proposed to be included in the agINFRA Science Gateway. Interested people just need to fill [this survey](#).

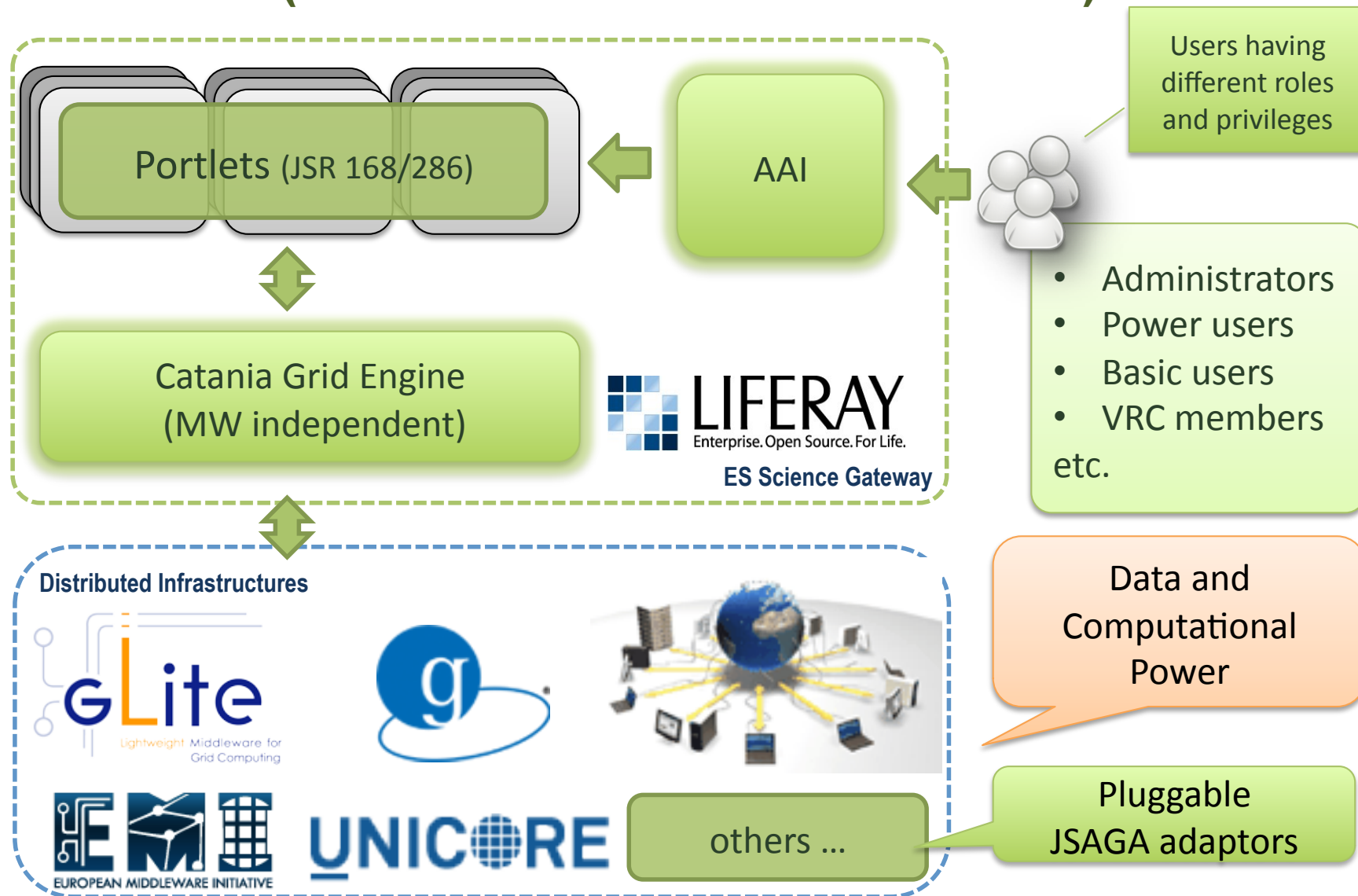
How to access the agINFRA Science Gateway

Some of the applications available in this Science Gateway are freely accessible but some others are not and require user authentication. If you do not yet have an account, find [here](#) the instructions about how to register and sign in.



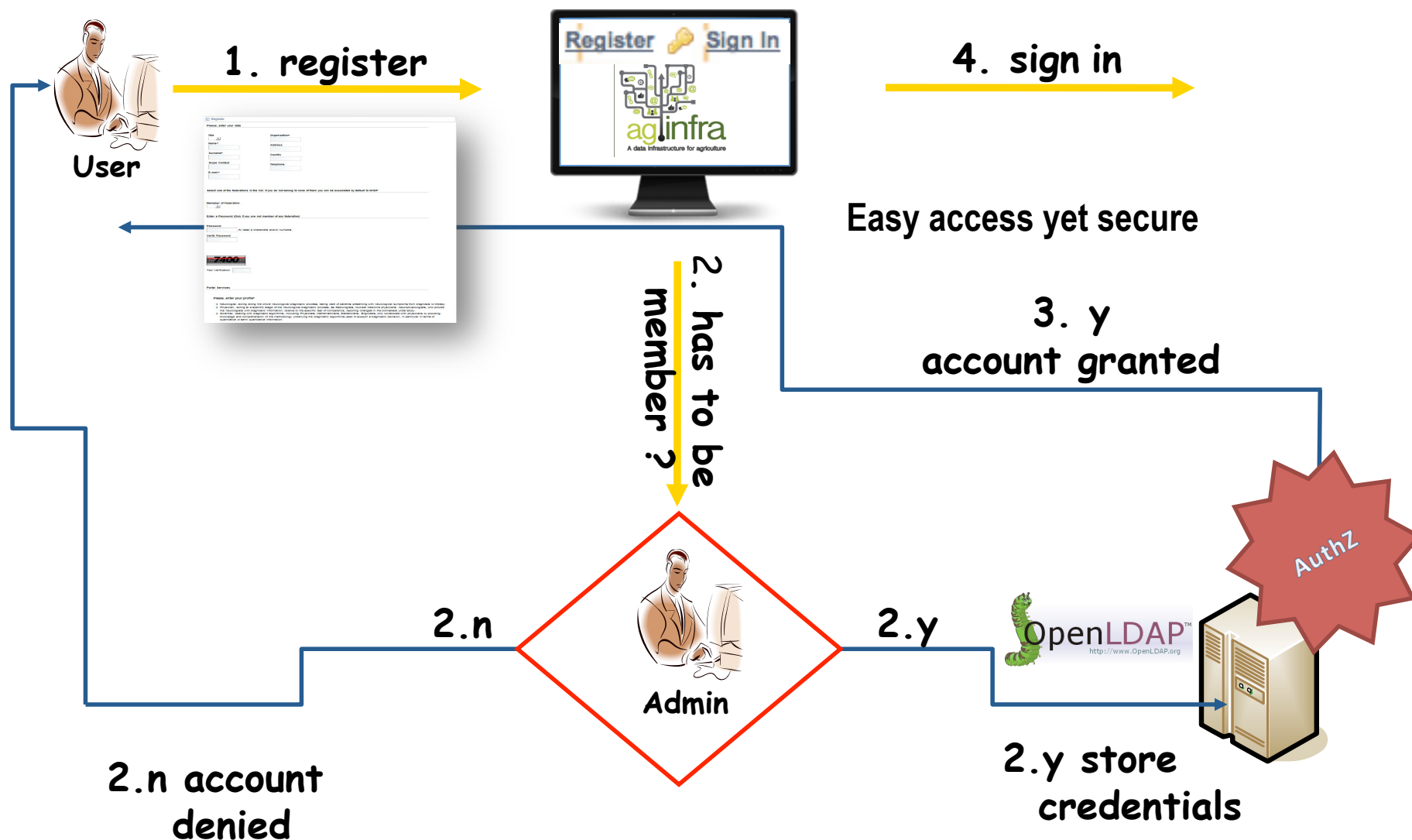
SG Architecture

(Based on the Catania SG Framework)

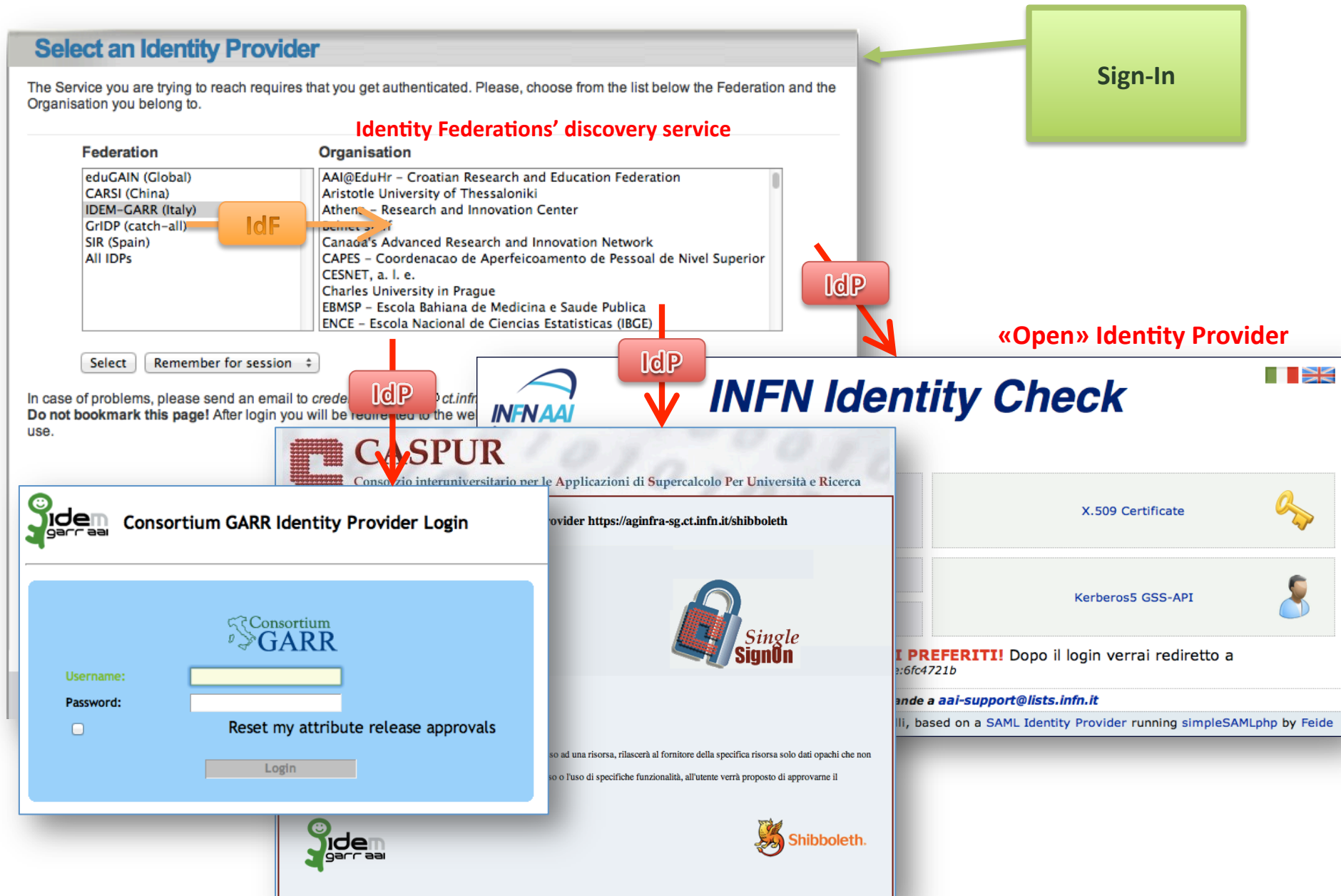




Register and Sign In



Authentication procedure





GrIDP - IDPCT and the Social Bridge IdP

Select an Identity Provider

The Service you are trying to reach requires that you get authenticated. Please, choose from the list below the Organisation you belong to.

Location	Organisation
(Brazil)	EGL.eu
OCIAIN (Global)	IDPCT (INFN Catania and COMETA)
EM-GARR (Italy)	Istituto Nazionale di Fisica Nucleare
GrIDP (catch-all)	maatG
SIR (Spain)	Social Networks' Bridge IdP
COFRE (Chile)	
RCTSaai (Portugal)	
All IDPs	

Catch All (orange starburst pointing to GrIDP)

Catch All (red starburst pointing to Social Networks' Bridge IdP)

IdP (red box with arrow pointing from Social Networks' Bridge IdP to the next screen)

IdF (orange box with arrow pointing from GrIDP to the next screen)

Select Remember for session

In case of problems, please send an email to credentials-admin@ct.infn.it. Do not bookmark this page! After login you will be redirected to the web page you use.

Identity Provider Catania

Access the portal <https://gisela-gw.ct.infn.it>, please enter your IDPCT credentials.

Lost/forgotten Credentials
In case of lost or forgotten credentials, please send an email to: credentials-admin@ct.infn.it

Do not bookmark this page!
After login you will be redirected to the portal you wanted to use.

User: brunor
Password:

Login

ISI INFN

Social Networks' Bridge Identity Provider

In order to use this service of the portal <https://gisela-gw.ct.infn.it>, please sign in using your account on the same social network you specified when you registered.

f g+ in Windows Y!

In case of problems, please send an email to credentials-admin@ct.infn.it with their description. Do not bookmark this page! After login you will be redirected to the web page containing the service of the portal you use.

REGISTRATI

<https://idsocial.ct.infn.it>

ISI INFN

Google

Accounts

idsocial.ct.infn.it sta chiedendo alcune informazioni dal tuo Account Google. Per vedere e approvare la richiesta, accedi. [Ulteriori informazioni](#)

Accedi Google

Email

Password

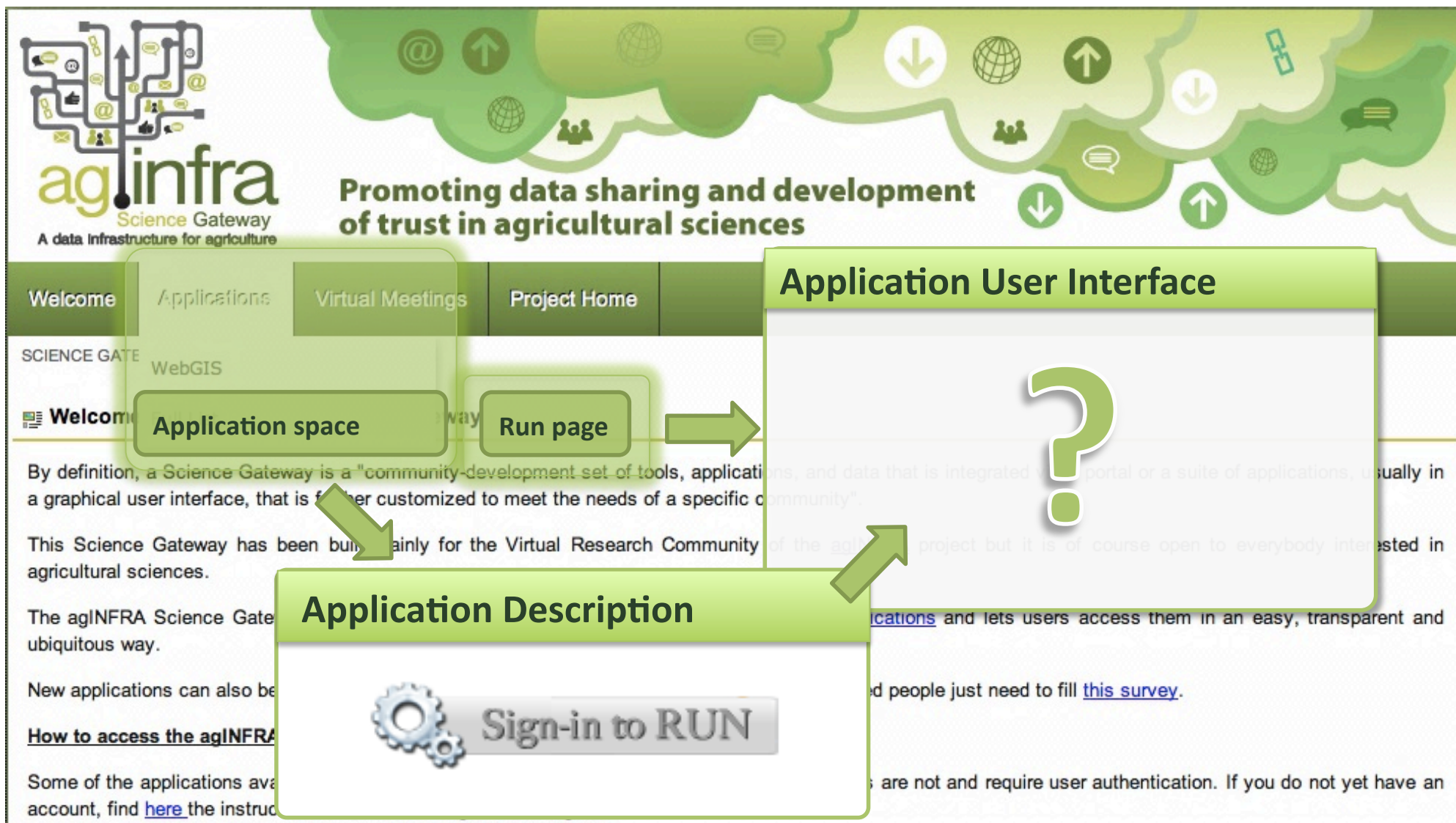
Accedi ☐ Resta connesso

Non riesci ad accedere al tuo account?

For more information watch:
www.youtube.com/watch?v=w6wfuGUwVVU



Application Space



The screenshot shows the aginfra Science Gateway website. The header includes the aginfra logo and the tagline "Promoting data sharing and development of trust in agricultural sciences". A navigation bar contains links: Welcome, Applications, Virtual Meetings, and Project Home. Below the navigation bar, there is a section titled "Application space" with a "Run page" button. A large green box labeled "Application User Interface" is overlaid on the right side of the page, containing a large question mark. A green box labeled "Application Description" is overlaid on the bottom left, containing a "Sign-in to RUN" button. Arrows indicate the flow from the "Application space" section to the "Application User Interface" and the "Application Description" box.

aginfra Science Gateway
A data infrastructure for agriculture

Promoting data sharing and development
of trust in agricultural sciences

Welcome Applications Virtual Meetings Project Home

SCIENCE GATE WebGIS

Application space Run page

Application User Interface

Application Description

Sign-in to RUN

By definition, a Science Gateway is a "community-development set of tools, applications, and data that is integrated with a portal or a suite of applications, usually in a graphical user interface, that is further customized to meet the needs of a specific community".

This Science Gateway has been built mainly for the Virtual Research Community of agricultural sciences.

The agINFRA Science Gateway provides a ubiquitous way.

New applications can also be

How to access the agINFRA

Some of the applications available are not and require user authentication. If you do not yet have an account, find [here](#) the instructions.



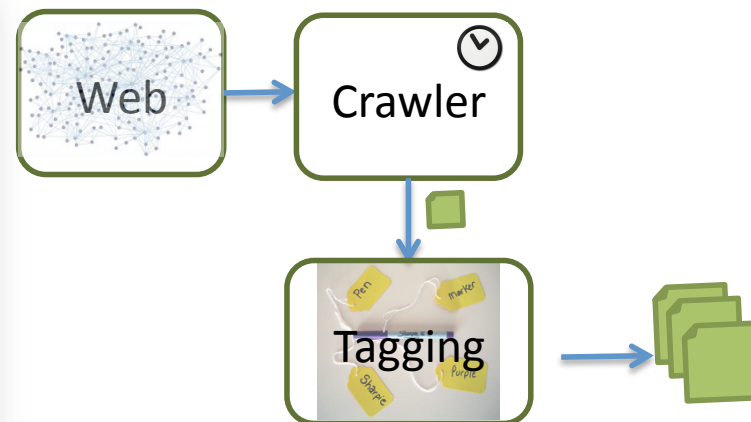
AGROVOC Tagging

AGROVOC

AGROVOC
Multilingual Agricultural Thesaurus

Tagging
AGROVOC Tagging application takes as input the output file generated by the AGROVOC crawler application.

View the application demo

AGROVOC Tagging

AGROVOC
Multilingual Agricultural Thesaurus

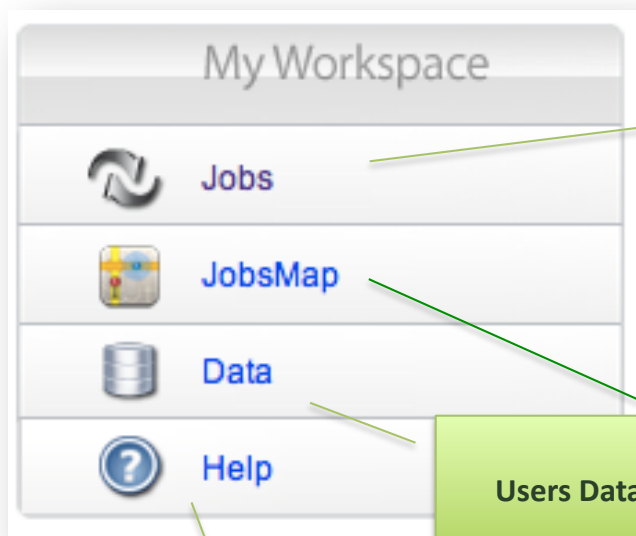
Please upload the crawler generated file and then press the '**SUBMIT**' button to execute this application.
Pressing the '**Reset**' Button all input fields will be initialized.
Pressing the '**About**' Button information about the application will be shown

Crawler generated file no file selected

Insert below your **job identifier**



My Workspace



User Jobs

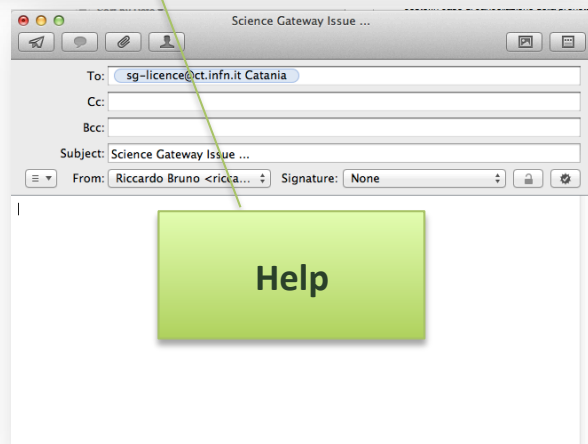
Save Download Job output Search:

entries	User Description	Started on (UTC)	Status
22222	convert_job_rdf	2012-11-09 15:05:51.0	
agris-APXML2RDF	22222	2012-11-09 14:40:41.0	SUBMITTED
agris-APXML2RDF	22222	2012-11-09 14:40:40.0	SUBMITTED
agris-APXML2RDF	11111	2012-11-09 14:33:12.0	SUBMITTED
agris-APXML2RDF	11111	2012-11-09 14:33:12.0	SUBMITTED
agris-APXML2RDF	222 convert_job_rdf	2012-11-09 11:34:57.0	SUBMITTED
agris-APXML2RDF	222 convert_job_rdf	2012-11-09 11:34:57.0	SUBMITTED
AGROVOC Tagging	AGROVOC Tagging 2	2012-11-09 10:47:37.0	SUBMITTED
AGROVOC Tagging	AGROVOC Tagging 1	2012-11-09 08:54:21.0	SUBMITTED
AGROVOC Tagging	AGROVOC Tagging	2012-11-09 08:10:01.0	SUBMITTED

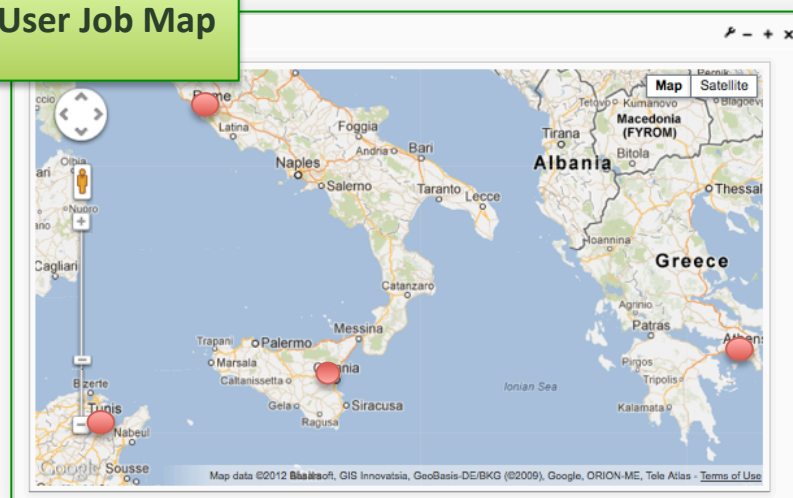
Showing 1 to 10 of 10 entries

Users Data

User Job Map



Help





MyJobs

MyJobs

Active Jobs List [Done Jobs List](#)

The table below shows the status of your jobs.

Statuses are automatically updated every 15 minutes so there is no need to reload this page more frequently. However, if you don't see your jobs in the table within a reasonable amount of time (a couple of hours at most), click on Help in the MyWorkspace portlet and notify us the problem.


Once your jobs have finished, you have 96 hours to retrieve their output. Beyond that time, the output of your jobs will automatically be deleted from the Science Gateway in order not to fill its storage with undesired stuff.

[Copy](#) [Print](#) [Save](#) [Download Job output](#)

Search:





Show **10** entries

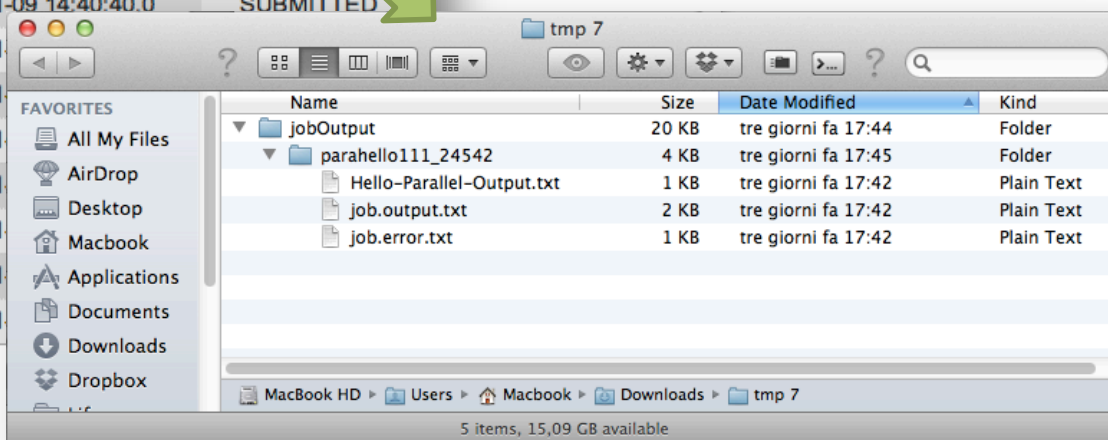
[First](#) [Previous](#) [1](#) [Next](#) [Last](#)

Application Name	User Description	Started on (UTC)	Status
agris-APXML2RDF	convert_job_rdf	2012-11-09 15:05:51.0	
agris-APXML2RDF	22222	2012-11-09 14:40:41.0	SUBMITT
agris-APXML2RDF	22222	2012-11-09 14:40:40.0	SUBMITTED
agris-APXML2RDF	11111	2012-11-	
agris-APXML2RDF	11111	2012-11-	
agris-APXML2RDF	222 convert_job_rdf	2012-11-	
agris-APXML2RDF	222 convert_job_rdf	2012-11-	
AGROVOC Tagging	AGROVOC Tagging 2	2012-11-	
AGROVOC Tagging	AGROVOC Tagging 1	2012-11-	
AGROVOC Tagging	AGROVOC Tagging	2012-11-	

Showing 1 to 10 of 10 entries

My Workspace

-  [Jobs](#)
-  [JobsMap](#)
-  [Data](#)
-  [Help](#)



tmp 7

Name	Size	Date Modified	Kind
jobOutput	20 KB	tre giorni fa 17:44	Folder
parahello111_24542	4 KB	tre giorni fa 17:45	Folder
Hello-Parallel-Output.txt	1 KB	tre giorni fa 17:42	Plain Text
job.output.txt	2 KB	tre giorni fa 17:42	Plain Text
job.error.txt	1 KB	tre giorni fa 17:42	Plain Text

MacBook HD > Users > MacBook > Downloads > tmp 7

5 items, 15,09 GB available



AGRIS XML2RDF

AGRIS AP XML to RDF



AGRIS AP XML to RDF

This application converts the AGRIS AP XML files into the corresponding RDF format infrastructure.

[View the application demo](#)

DEMO
VIDEO



Sign-in to RUN

Application developed during
the 1st agINFRA Training Event
held in Belgrade (1-3/10/2012)

AP XML to RDF



This application converts **FAO' AGRIS AP XML** files to the RDF format

Pressing the '**Reset**' Button all input fields will be initialized.

Pressing the '**About**' Button information about the application will be shown

Application' input file no file selected

Insert below your **job identifier**

convert_job_rdf

Copy Print Save Download Job output

Search:

Show 10 entries

Application Name	User Description	Started on (UTC)	Status
agris-APXML2RDF	convert_job_rdf	2012-11-09 15:05:51.0	
agris-APXML2RDF	22222	2012-11-09 14:40:41.0	SUBMITTED
agris-APXML2RDF	22222	2012-11-09 14:40:40.0	SUBMITTED
agris-APXML2RDF	11111	2012-11-09 14:33:12.0	SUBMITTED
agris-APXML2RDF	11111	2012-11-09 14:33:12.0	SUBMITTED
agris-APXML2RDF	222 convert_job_rdf	2012-11-09 11:34:57.0	SUBMITTED
agris-APXML2RDF	222 convert_job_rdf	2012-11-09 11:34:57.0	SUBMITTED
AGROVOC Tagging	AGROVOC Tagging 2	2012-11-09 10:47:37.0	SUBMITTED
AGROVOC Tagging	AGROVOC Tagging 1	2012-11-09 08:54:21.0	SUBMITTED
AGROVOC Tagging	AGROVOC Tagging	2012-11-09 08:10:01.0	SUBMITTED

Showing 1 to 10 of 10 entries

First Previous 1 Next Last



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This Science Gateway has been built mainly for the Virtual Research Commu agricultural sciences.

The agINFRA Science Gateway meshes-up Grid Computing and Cloud Computi ubiquitous way.


New applications can also be proposed to be included in the agINFRA Science G

How to access the agINFRA Science Gateway

Some of the applications available in this Science Gateway are freely accessible account, find [here](#) the instructions about how to register and sign in.

Italian Soil Information System (ISIS)

Welcome to the ISIS service



The WebGIS and Cloud Computing enabled ISIS service is running for online Italian soil data consultation. ISIS is made up of a hierarchy of geo-databases which include soil regions and aim at correlating the soils of Italy with those of other European countries with respect to soil typological units (STUs), at national level, and soil sub-systems, at regional level.

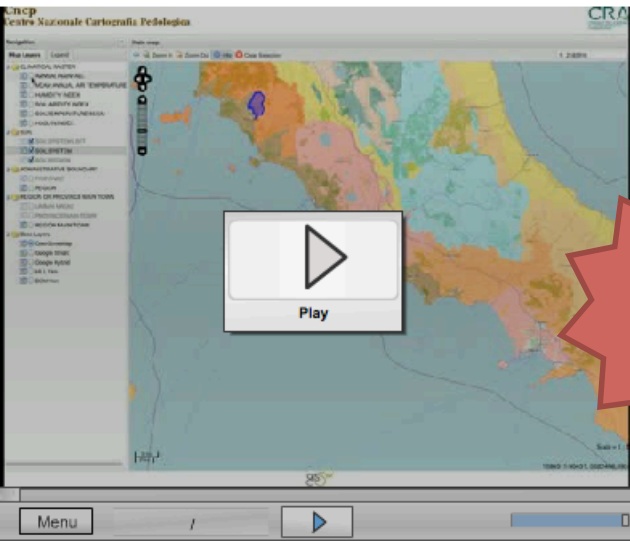
This service offers two different operational modes:

Demo Access A reduced set of ISIS services will be freely accessible

Full Access The full set of services, including the possibility to query the geo-databases to get information on the sites stored therein, can be accessed by this link. This requires user authentication and authorisation. If you do not yet have an account, find [here](#) the instructions about how to register and sign in.

The full set of services, including the possibility to query the geo-databases to get information on the sites stored therein, can be accessed by this link. This requires user authentication and authorisation. If you do not yet have an account, find [here](#) the instructions about how to register and sign in.

Watch the demo

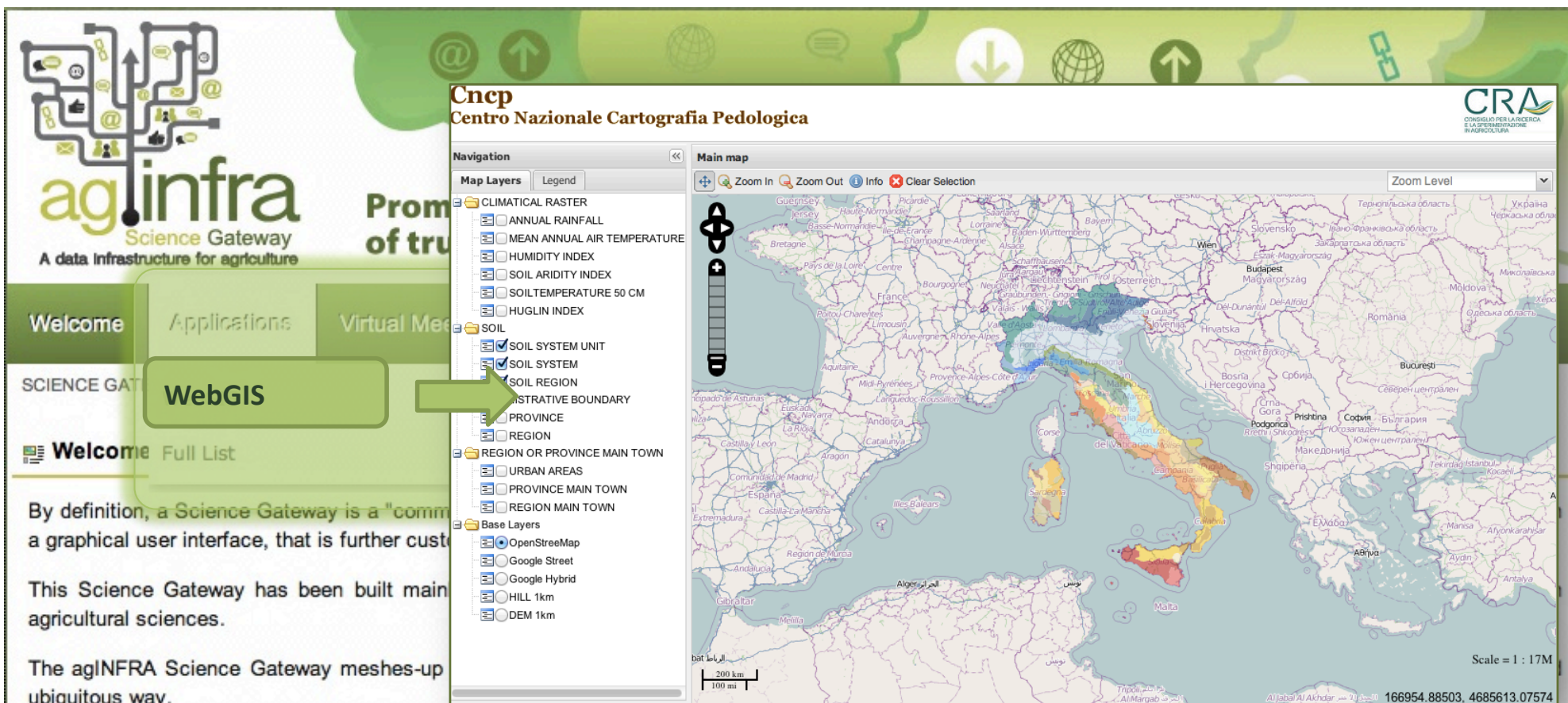


Menu

DEMO VIDEO



ISIS is developed by CRA – Demo version



The screenshot displays the aginfra Science Gateway WebGIS interface. On the left, a sidebar contains the aginfra logo, navigation tabs (Welcome, Applications, Virtual Meeting), and a 'WebGIS' button. The main area shows a map of Europe with various layers and navigation tools. The 'Map Layers' panel on the left lists several categories: CLIMATICAL RASTER (ANNUAL RAINFALL, MEAN ANNUAL AIR TEMPERATURE, HUMIDITY INDEX, SOIL ARIDITY INDEX, SOILTEMPERATURE 50 CM, HUGLIN INDEX), SOIL (SOIL SYSTEM UNIT, SOIL SYSTEM, SOIL REGION, ADMINISTRATIVE BOUNDARY, PROVINCE, REGION, REGION OR PROVINCE MAIN TOWN, URBAN AREAS, PROVINCE MAIN TOWN, REGION MAIN TOWN), and Base Layers (OpenStreetMap, Google Street, Google Hybrid, HILL 1km, DEM 1km). The 'Main map' panel on the right shows a map of Europe with a scale bar and a zoom level of 1:17M. The CRA logo is visible in the top right corner.

New applications can also be proposed to be included in the agINFRA Science Gateway. Interested people just need to fill [this survey](#).

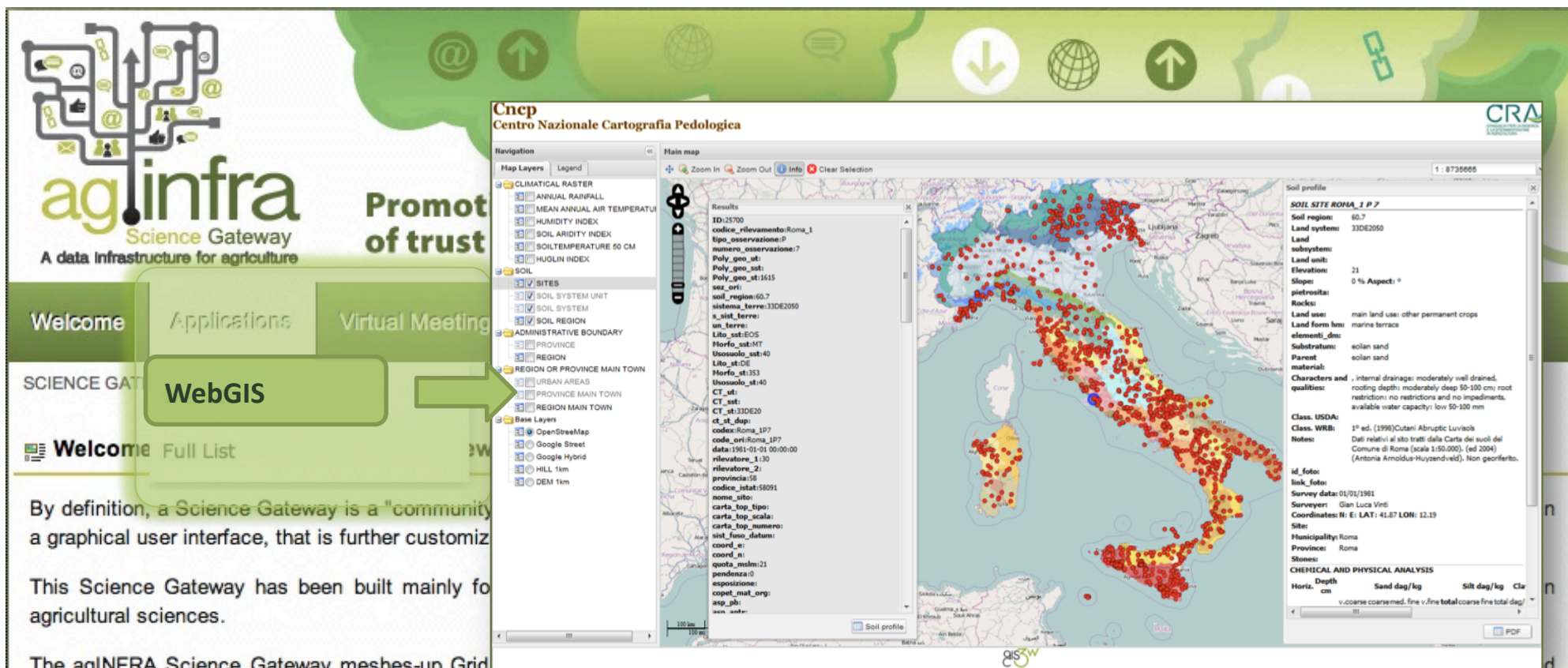
DEMO

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ISIS - Full version



aginfra Science Gateway
A data infrastructure for agriculture

WebGIS

Cnecp
Centro Nazionale Cartografia Pedologica

Navigation
Map Layers Legend
CLIMATICAL RASTER
ANNUAL RAINFALL
MEAN ANNUAL AIR TEMPERATURE
HUMIDITY INDEX
SOIL ARIDITY INDEX
SOIL TEMPERATURE 50 CM
HUGLIN INDEX
SOIL
SITES
SOIL SYSTEM UNIT
SOIL SYSTEM
SOIL REGION
ADMINISTRATIVE BOUNDARY
PROVINCE
REGION
REGION OR PROVINCE MAIN TOWN
URBAN AREAS
PROVINCE MAIN TOWN
REGION MAIN TOWN
Base Layers
OpenStreetMap
Google Street
Google Hybrid
HILL 1km
DEM 1km

Results
ID:25700
codice_rilevamento:Roma_1
tipo_osservazione:P
numero_osservazione:7
Poly_geo_st:1615
sez_ori:
soil_region:60.7
sistema_terre:33DE2050
s_sist_terre:
un_terre:
Lito_sist_EOS
Horfo_sist:MT
Ussuolo_sist:40
Lito_st:DE
Horfo_st:353
Ussuolo_st:40
CT_sist:
CT_st:
CT_sist:
CT_st:
ct_st_dep:
code:Roma_1P7
data:1981-01-01 00:00:00
rilevatore_1:30
rilevatore_2:
provincia:58
codice_instat:58091
nome_sito:
carta_top_tipo:
carta_top_scala:
carta_top_numero:
sist_foto_datum:
coord_n:
quota_nslm:21
pendenza:0
esposizione:
copet_mat_org:
asp_ph:
acc_anter:

Soil profile
SOIL SITE ROMA_1 P 7
Soil region: 60.7
Land system: 33DE2050
Land subsystem:
Land unit:
Elevation: 21
Slope: 0 % Aspect: 4
Pietrosita:
Rocks:
Land use: main land use: other permanent crops
Land form hsi:
elementi_dms:
Substratum: eolian sand
Parent material: eolian sand
Characters and qualities: , internal drainage: moderately well drained, rooting depth: moderately deep 50-100 cm; root restriction: no restrictions and no impediments, available water capacity: low 50-100 mm
Class. USDA:
Class. WRB: 1st ed. (1996)Cutani Abruptic Luvisols
Notes: Dati relativi al sito tratti dalla Carta dei suoli del Comune di Roma (scala 1:50.000). (ed 2004) (Antonia Arnoldus-Huyzendveld). Non georeferito.
id_foto:
link_foto:
Survey data: 01/01/1981
Surveyer: Gian Luca Vinti
Coordinates: N: E: LAT: 41.87 LON: 12.19
Site:
Municipality: Roma
Province: Roma
Stations:
CHEMICAL AND PHYSICAL ANALYSIS
Horiz. Depth cm Sand dag/kg Silt dag/kg Clay dag/kg
v.coarse coarse med. fine v.fine total coarse fine total dag/kg

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The agINFRA Science Gateway meshes-up Grid computing and the ubiquitous way.

New applications can also be proposed to be included in the agINFRA Science Gateway. Interested people just need to fill [this survey](#).

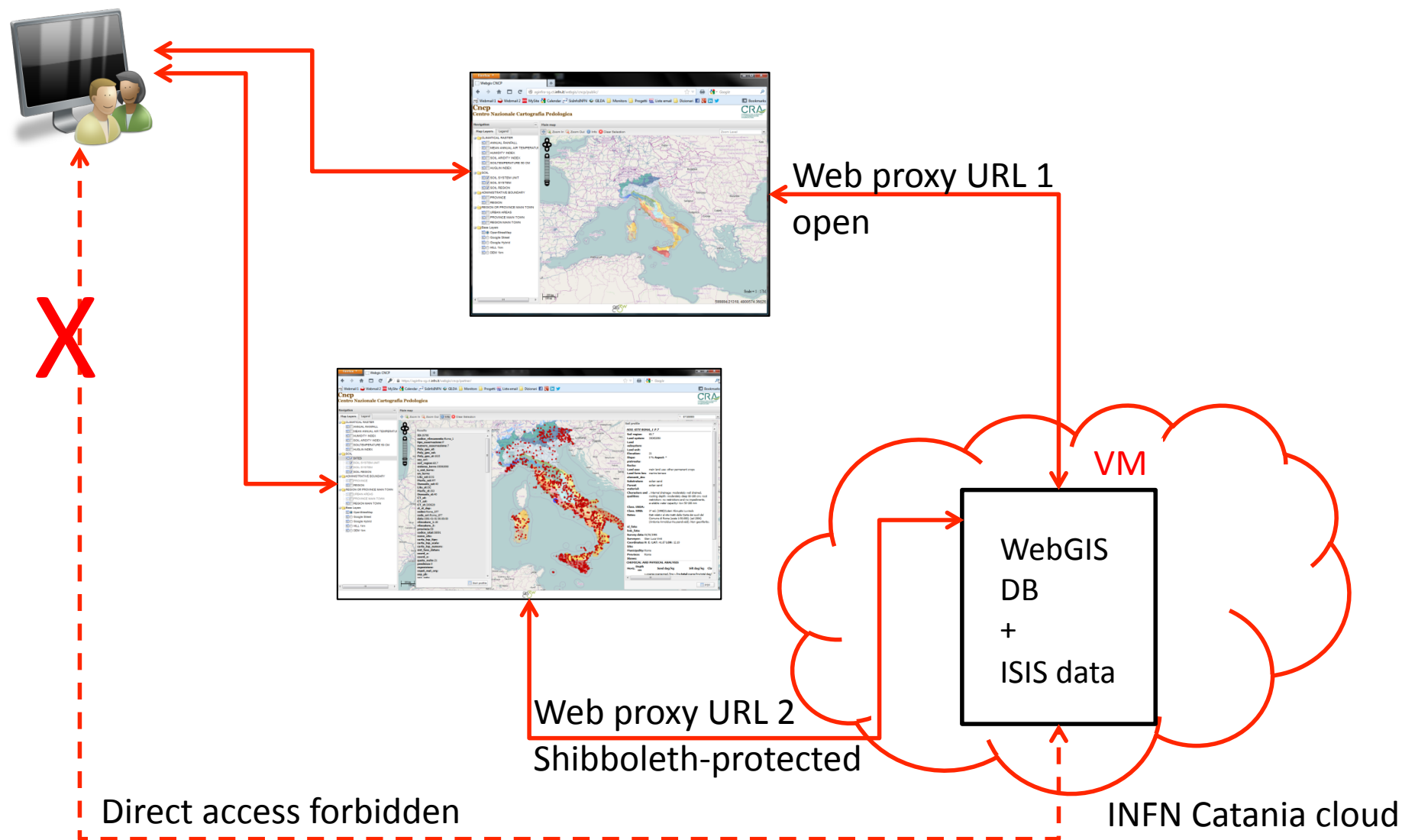
How to access the agINFRA Science Gateway

Some of the applications available in this Science Gateway are freely accessible but some others are not and require user authentication. If you do not yet have an account, find [here](#) the instructions about how to register and sign in.

Full ACCESS



ISIS integration architecture (reusable!)





CLEVER: a Virtual Infrastructure Manager

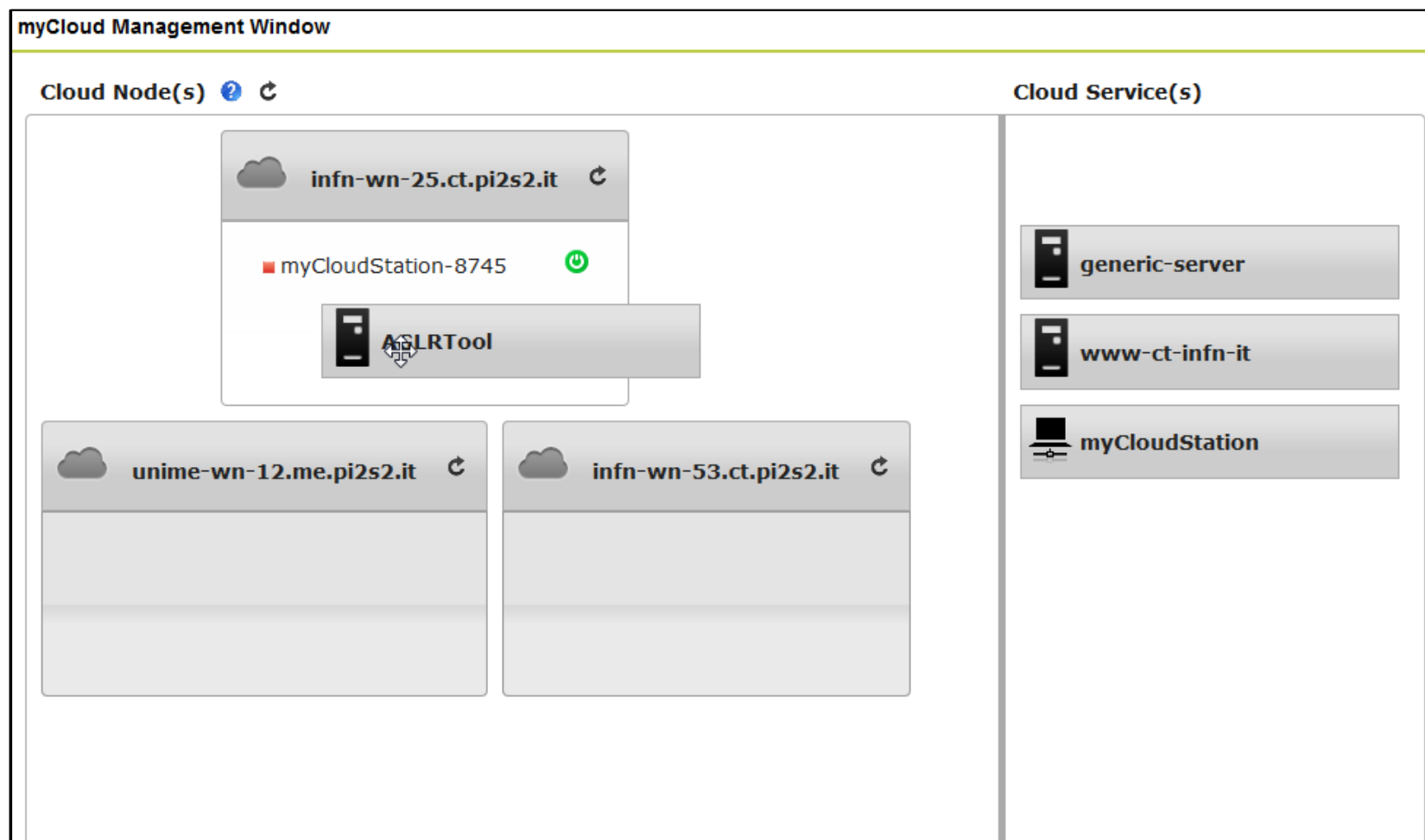
- CLEVER: A CCloud-Enabled Virtual EnviRonment
 - developed by Univ. of Messina in collaboration with INFN Catania):
- Simplifies the access and management of private/hybrid clouds
- Provides simple and easily accessible interfaces to interact with different “interconnected” clouds, deploying Virtual Machines and performing load balancing through migration





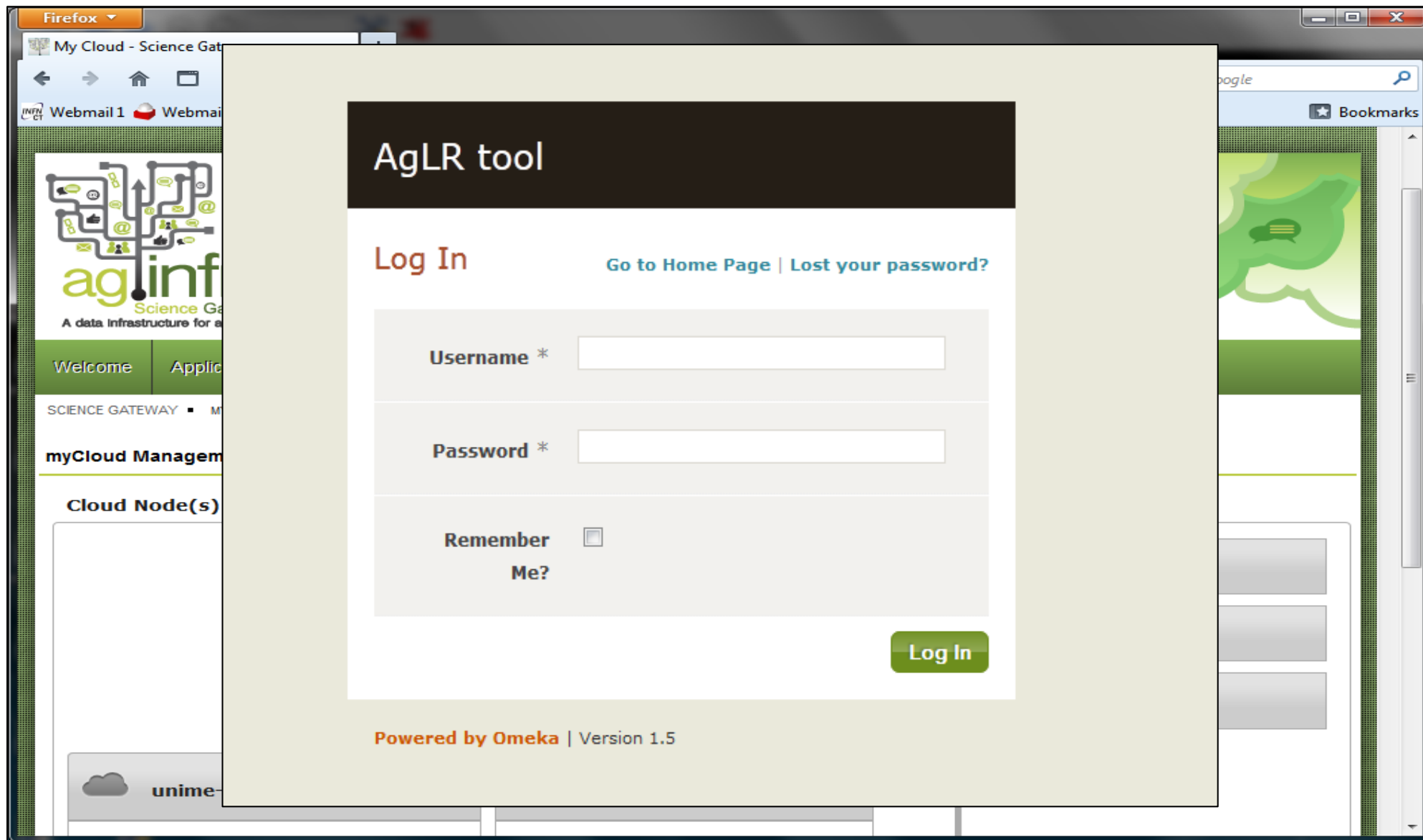
AgLR Tool (MyCloud service)

- MyCloud allows intuitive access to and management of the resources on the INFN Catania cloud powered by CLEVER
 - CloudManagers can deploy services on the cloud by simply dragging them on available nodes





AgLR Tool (MyCloud service)



The screenshot shows a web browser window with the title "My Cloud - Science Gateway". The address bar shows "Webmail 1" and "Webmail". The page features the aginfra logo and the text "Science Gateway A data infrastructure for agriculture". Below this, there are links for "Welcome" and "Applications". The main content area is titled "myCloud Management" and includes a section for "Cloud Node(s)". A large, semi-transparent login form is overlaid on the page. The form has a dark header with the text "AgLR tool". Below the header, there is a "Log In" link and a "Go to Home Page | Lost your password?" link. The form contains three input fields: "Username *" with an asterisk, "Password *" with an asterisk, and a "Remember Me?" checkbox. A green "Log In" button is located at the bottom right of the form. At the bottom of the page, there is a footer that reads "Powered by Omeka | Version 1.5".

Firefox

My Cloud - Science Gateway

Webmail 1 Webmail

aginfra
Science Gateway
A data infrastructure for agriculture

Welcome Applications

SCIENCE GATEWAY

myCloud Management

Cloud Node(s)

unime

AgLR tool

[Log In](#) [Go to Home Page | Lost your password?](#)

Username *


Password *

Remember Me? ☐

[Log In](#)

Powered by Omeka | Version 1.5

Soil Maps Browser/Annotator

aginfra
Science Gateway
A data infrastructure for agriculture

Welcome Applications Cloud Services

SCIENCE GATEWAY ■ APPLICATIONS ■ SOIL MAPS ■ BROWSE

Soil Maps

Welcome to the Soil Maps service

Text to be written...

This service offers two different options:

Browse To browse soil maps

Annotate To annotate soil maps

The possibility to annotate soil maps requires users to register and sign in.



aginfra
Science Gateway
A data infrastructure for agriculture

Promoting data sharing and development
of trust in agricultural sciences

Welcome Applications Cloud Services Virtual Meetings My Workspace My Cloud Project Home

SCIENCE GATEWAY ■ APPLICATIONS ■ SOIL MAPS ■ BROWSE

Soil Maps Browser

Thumb	title	creator	subject	description
	CNCP 3.0 software	Giovanni Trapatoni	software management	CNCP 3.0 software is the tool for storing, managing and observing soil data.
	Benchmark at Beccanello dome, Sarteano (SI)	Edoardo A. C. Costantini	soil analysis map	Form: Soil analysis map
	ITALIAN SOIL INFORMATION	Costantino E.A.C. L'Abbate	soil map	The WebGIS and Cloud Computing enabled ISIS service is running for online Italian soil data consultation. ISIS is made up of a hierarchy of geo-databases which include soil regions and aim at correlating the soils

☐ Soil Maps Annotator

Directions

- If you need additional copies of a given field, click the plus sign to the upper-right of the tag's name to add an additional copy of it.
- Click the minus sign to delete any unneeded additional copies -- don't worry about removing tags you don't intend to use, the system will ignore any empty tags (and you can't delete the first row anyway).
- If you are unsure how a specific tag works, you can click the question mark next to the tag's name to see the tag's entry in Diane Hilman's wonderful guide "Using Dublin Core -- The Elements."

Dublin Core Metadata

Title? [+][-]

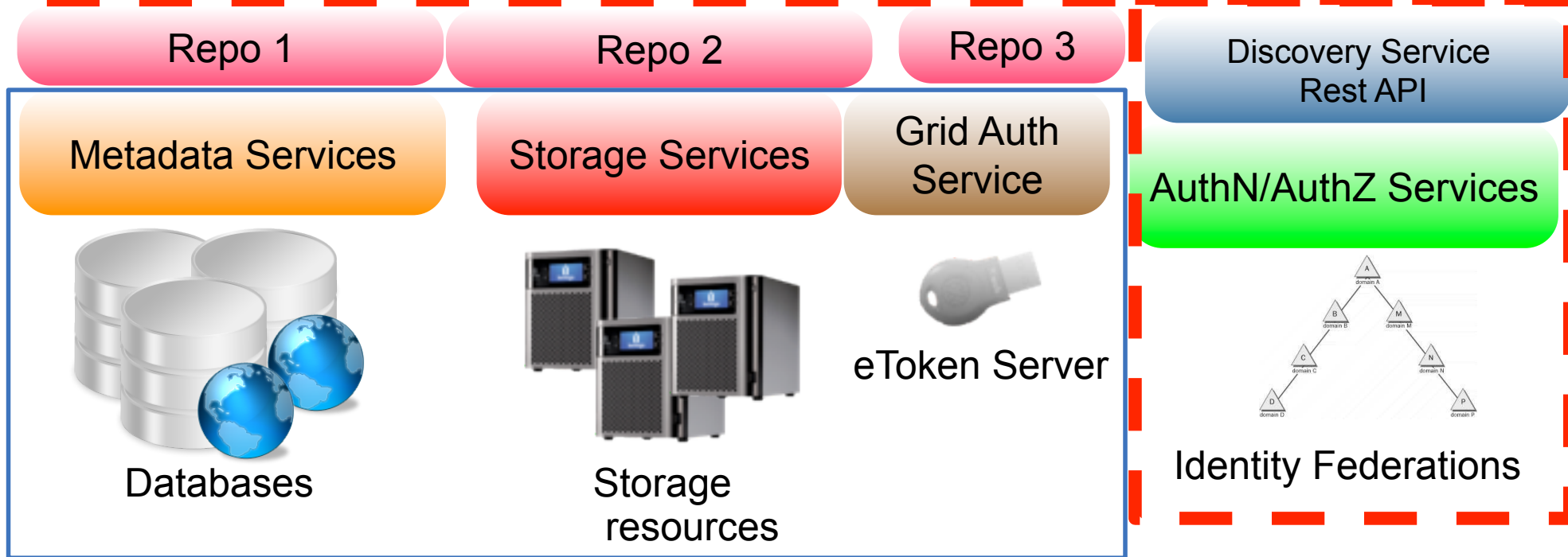
Creator? [+][-]

Exportable in OAI-PMH fmt.

Available verbs:

- [Identify](#)
- [ListRecords](#)

gLibrary





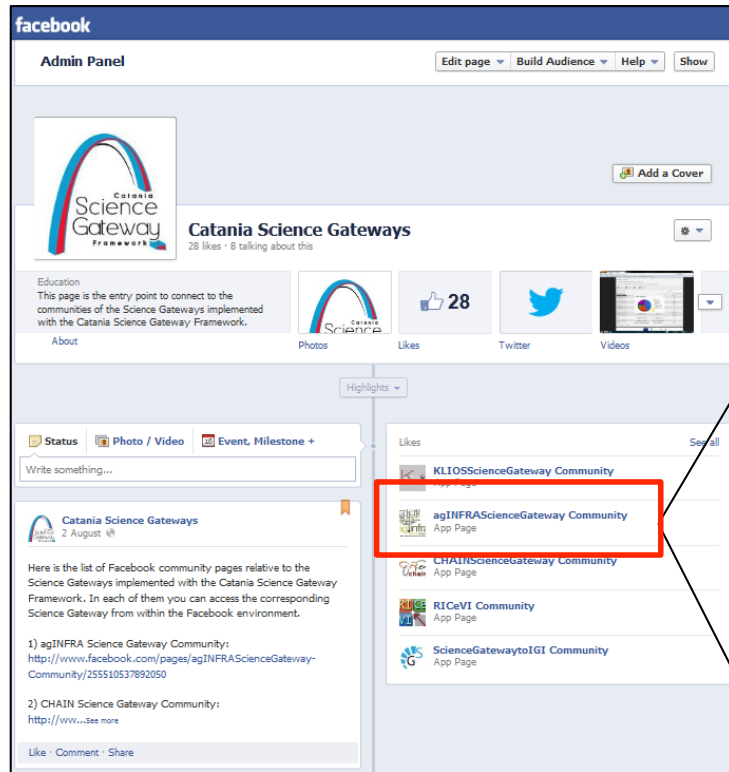
Some considerations

- About 1 billion people have accounts on the existing Social Networks (many of the researchers we are targeting with e-Infrastructures are among them)
- Web-based social networking accounts for more than 10-15% of the total time spent online in the whole world
- Social Networks' are by far the most used (liked) virtual environments in the world



“Social” Science Gateways

(<http://www.facebook.com/pages/Catania-Science-Gateways/220075701389624>)



facebook

Admin Panel Edit page Build Audience Help Show

Catania Science Gateways
29 likes · 8 talking about this

Education
This page is the entry point to connect to the communities of the Science Gateways implemented with the Catania Science Gateway Framework.

About Photos Likes Twitter Videos

Highlights

Status Photo / Video Event, Milestone +
Write something...

Catania Science Gateways
2 August

Here is the list of Facebook community pages relative to the Science Gateways implemented with the Catania Science Gateway Framework. In each of them you can access the corresponding Science Gateway from within the Facebook environment.

1) agINFRA Science Gateway Community:
<http://www.facebook.com/pages/agINFRAScienceGateway-Community/255510537892050>

2) CHAIN Science Gateway Community:
<http://www...See more>

Like · Comment · Share

Likes

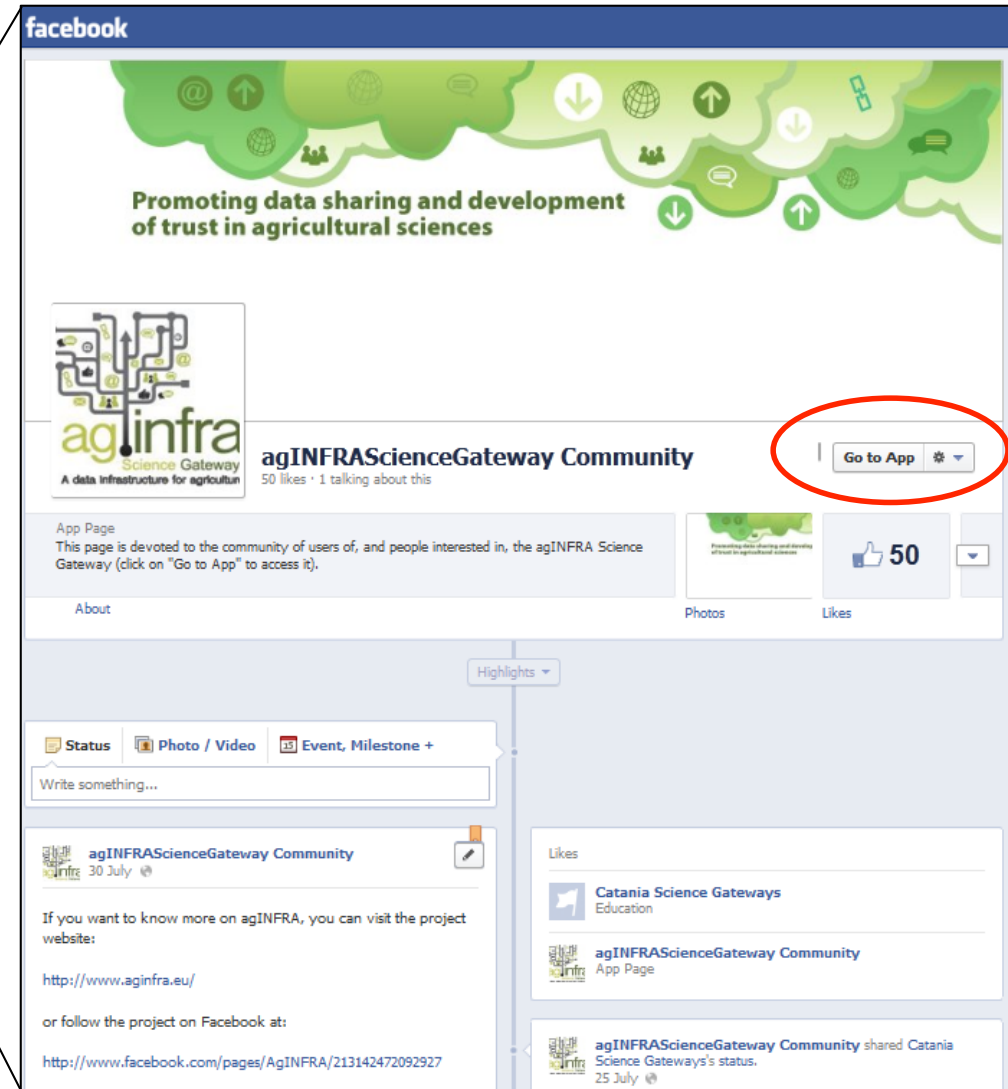
KLIOSScienceGateway Community
App Page

agINFRAScienceGateway Community
App Page

CHAINScienceGateway Community
App Page

RICEVI Community
App Page

ScienceGatewaytoIGI Community
App Page



facebook

Promoting data sharing and development
of trust in agricultural sciences

aginfra
Science Gateway
A data infrastructure for agriculture

agINFRAScienceGateway Community
50 likes · 1 talking about this

App Page
This page is devoted to the community of users of, and people interested in, the agINFRA Science Gateway (click on "Go to App" to access it).

About Photos Likes

Highlights

Status Photo / Video Event, Milestone +
Write something...

agINFRAScienceGateway Community
30 July

If you want to know more on agINFRA, you can visit the project website:
<http://www.aginfra.eu/>

or follow the project on Facebook at:
<http://www.facebook.com/pages/AgINFRA/213142472092927>

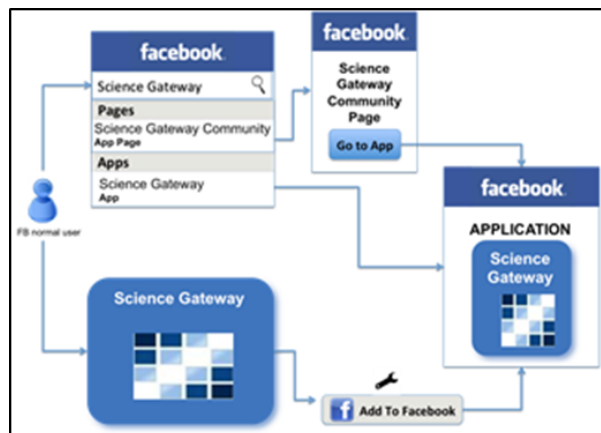
Likes

Catania Science Gateways
Education

agINFRAScienceGateway Community
App Page

agINFRAScienceGateway Community shared Catania Science Gateways's status.
25 July

Go to App






The agInfra SG as a FB app

facebook

Register Sign In



Promoting data sharing and development
of trust in agricultural sciences

Welcome Applications Cloud Services Virtual Meetings Project Home

SCIENCE GATEWAY ■ WELCOME

 **Welcome to the agINFRA Science Gateway**

By definition, a Science Gateway is a "community-development set of tools, applications, and data that is integrated via a portal or a suite of applications, user graphical user interface, that is further customized to meet the needs of a specific community".

This Science Gateway has been built mainly for the Virtual Research Community of the [agINFRA](#) project but it is also intended to be used in agricultural sciences.

The agINFRA Science Gateway meshes-up Grid Computing and Cloud Computing to allow users access them in an easy, transparent and ubiquitous way.

New applications can also be proposed to the Science Gateway. Interested people just need to fill [this survey](#).

How to [register and sign in](#)

Some applications available in this Science Gateway are freely accessible but some others are not and require user authentication. If you do not yet have an account, and [here](#) the instructions about how to register and sign in.

SSO possible through the Social Networks' Bridge IdP



Summary and conclusions

- agINFRA is only at project month 13 (out of 36) but thanks to the adoption of the SG paradigm, Grid and Cloud access has been made easy for the community
- Several applications already deployed, many others planned to be integrated
- ISIS cloud-based approach replicable for many other service providers
- A good level of dissemination ensured by the inclusion of the SG as an app of the most famous social network
- Sustainability of the SG guaranteed by the adoption of well known standards (JSR286, SAGA, etc.)