

*Co-ordination & Harmonisation of Advanced e-Infrastructures
for Research and Education Data Sharing*

CHAIN-REDS - Last achievements

Federico Ruggieri – INFN/GARR

ICT2013- 7 November 2013 – Vilnius

Research Infrastructures – Grant Agreement n. 306819



- ▶ Co-ordination & Harmonisation of Advanced e-Infrastructures for Research and Education Data Sharing
- ▶ Research Infrastructures – Support Action
- ▶ Grant Agreement n. 306819
- ▶ Total Costs of € 2.3 M
- ▶ Max. EC contribution: € 1.52 M
- ▶ Start date: 1 December 2012
- ▶ Duration: 30 Months

Partners and roles

- ▶ INFN (IT) – Coordinator
- ▶ CIEMAT (ES) – WP4 Leader
- ▶ GRNET (GR) – WP3 Leader
- ▶ CESNET (CZ) – WP5 Leader
- ▶ UBUNTUNET (MW) – Africa
- ▶ CLARA (UR) – Latin America
- ▶ **IHEP (+CNIC, PKU, BUAA) – China**
- ▶ ASREN (DE) – Arab States
- ▶ SIGMA-ORIONIS (FR) – WP2 Leader
- ▶ C-DAC (IN) - India



Institute of High Energy Physics
Chinese Academy of Sciences



DCI

Distributed Computing Infrastructure

- Provide ongoing support of the DCI road-map for intercontinental DCI collaboration, specified within the CHAIN project

ROC

Regional Operation Centres

- Support stability of existing and emerging Regional Operation Centres. Cooperate with other projects & initiatives (e.g. AfricaConnect, TEIN3) to support the development of eInfrastructures and key VRCs in Africa, Asia, Latin America and the Middle-east

Cloud

Clouds for Research and Education

- Support for coordination of Cloud developments for Research & Education with other regions (e.g. China, India, Latin America)

Data

Infrastructures and Repositories

- Extend the CHAIN Knowledge Base with information on Data Infrastructures: collecting issues, best practices and identifying data repositories of direct interest for VRCs
- Support the study of data infrastructures for a target subset of VRCs (e.g. Agriculture, Climate Change, Health, Biomedicine, etc.)

SG

Science Gateways

- Promote the usage of Science Gateways as a means for attracting new communities and promote the use of eInfrastructures for every researcher

IDF

Federations of Identity Providers

- Foster the creation of Identity Federations in cooperation with Certification Authorities; promote and coordinate their usage. Support integration of different AA approaches

Open Access Document Repositories (OADRs)



- ~2,500 repos
- >33 M docs

Red markers: info from DRIVER, OpenAIRE, and OpenDOAR

Yellow markers: new added by the project (e.g. La Referencia in Latin America)

[Registry of Open Access Repositories \(ROAR\)](#)



Data Repositories (DRs)

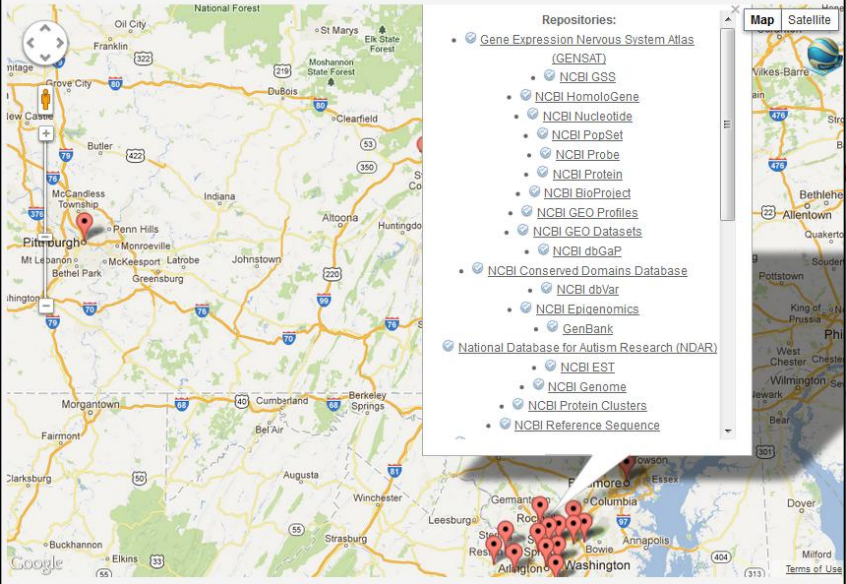
Country View DCI Site View DCI Table View OADR Site View OADR Table View **DR Site View** DR Table View

Click on a red marker to get more information on the corresponding Open Access Document Repository. Data are currently taken from the more than 500 data repositories included in [Databib](#) and [DataCite](#).

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Country View DCI Site View DCI Table View OADR Site View OADR Table View **DR Site View** DR Table View

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Repositories:


- Gene Expression Nervous System Atlas (GENSAT)
 - NCBI GSS
 - NCBI HomoloGene
 - NCBI Nucleotide
 - NCBI PopSet
 - NCBI Probe
 - NCBI Protein
 - NCBI BioProject
 - NCBI GEO Profiles
 - NCBI GEO Datasets
 - NCBI dbGaP
- NCBI Conserved Domains Database
 - NCBI dbVar
 - NCBI Epigenomics
 - GenBank
- National Database for Autism Research (NDAR)
 - NCBI EST
 - NCBI Genome
 - NCBI Protein Clusters
 - NCBI Reference Sequence




- ~ 600 repos
- Lots of data !

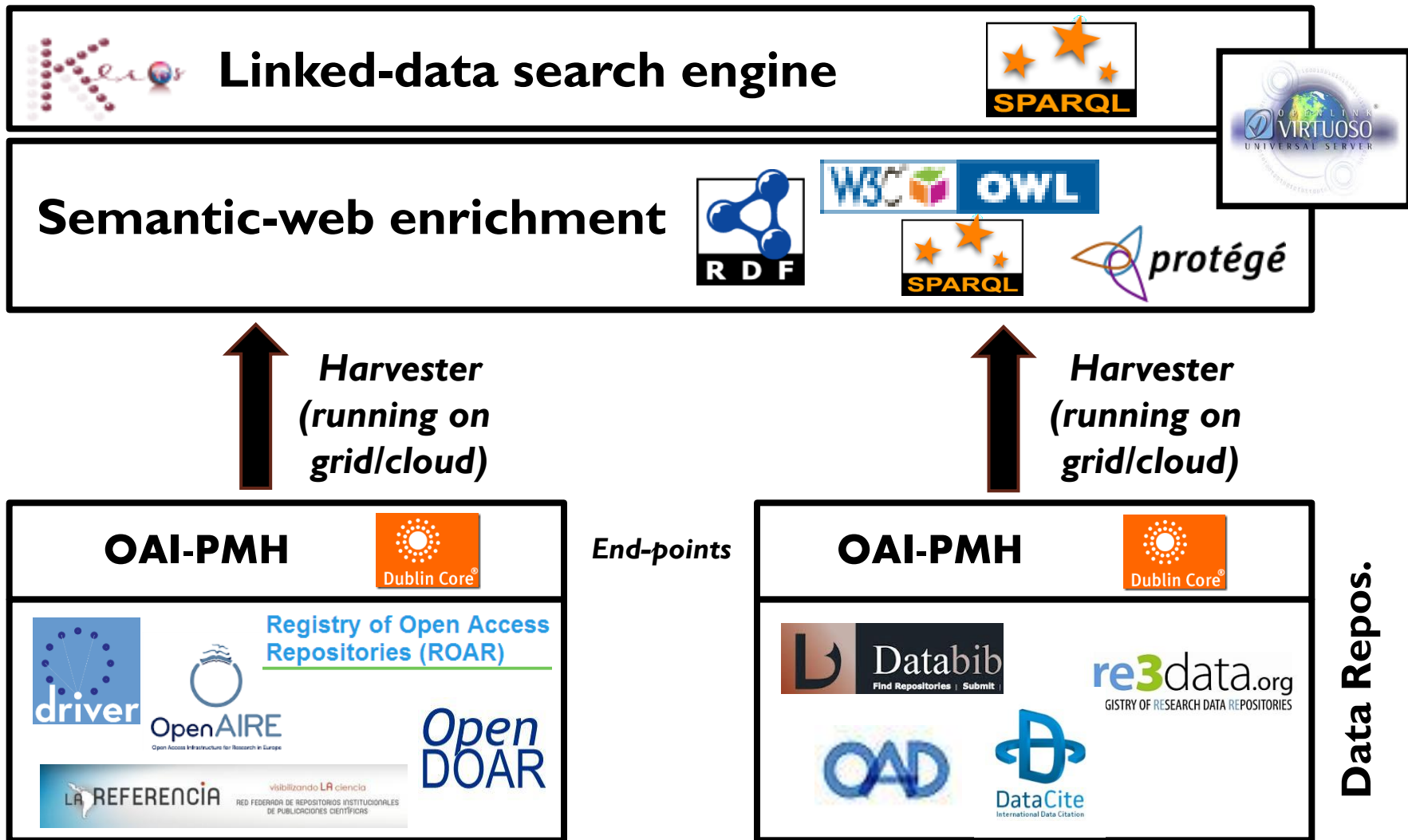




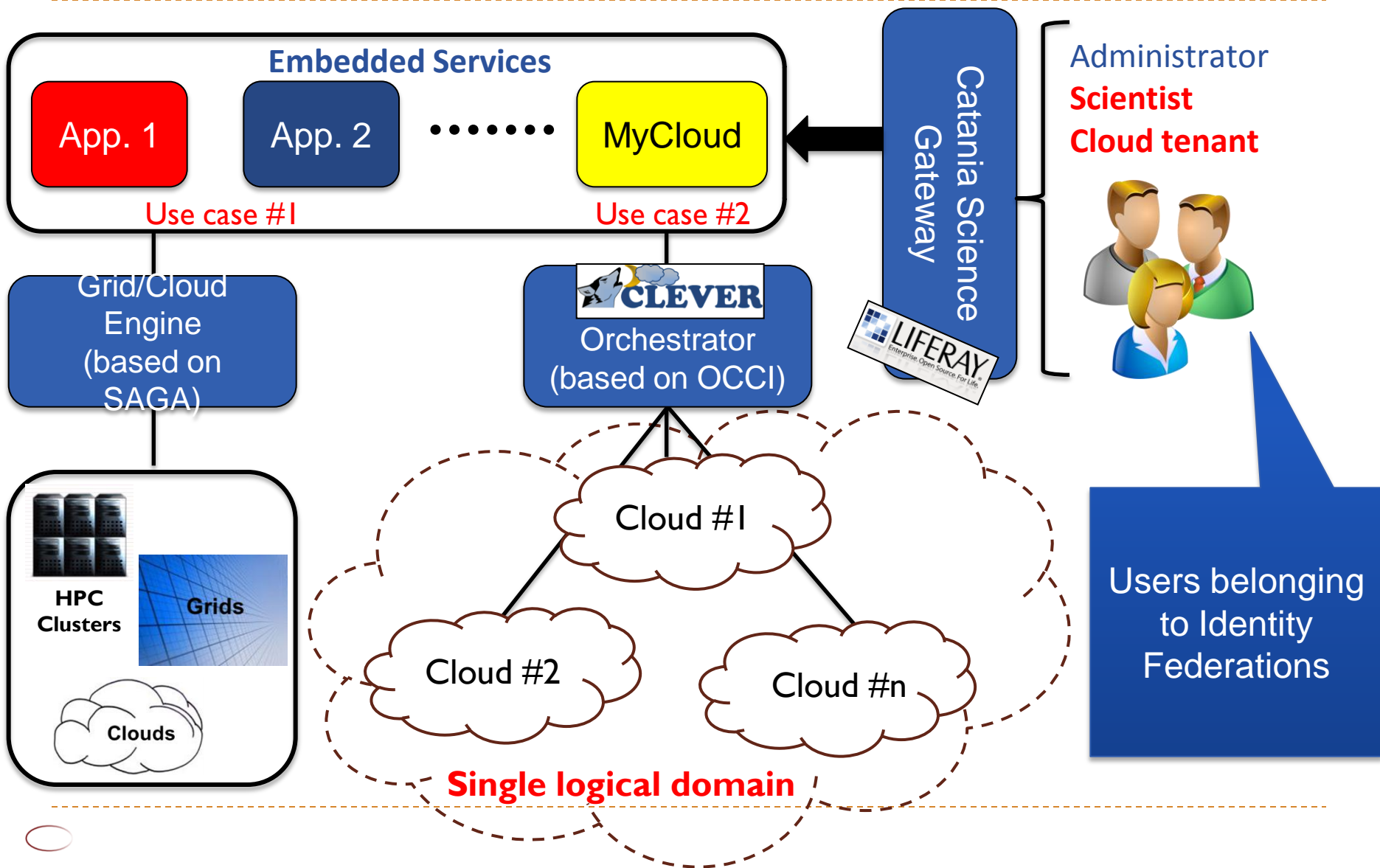




Terms of Use



Promote the Science Gateway model



Co-ordination & Harmonisation of Advanced e-Infrastructures for Research and Education Data Sharing



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- Project Area
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- Linked Data
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CHAIN-REDS is a FP7 project co-funded by the European Commission (DG CONNECT) aiming at promoting and supporting technological and scientific collaboration across different e-Infrastructures established and operated in various continents, in order to define a path towards a global e-Infrastructure ecosystem that will allow Virtual Research Communities (VRCs), research groups and even single researchers to access and efficiently use worldwide distributed resources (i.e., computing, storage, data, services, tools, applications).



Harmonisation of e-Infrastructures

- Harmonisation of e-Infrastructures
- Knowledge Base
- Semantic Search on Linked Data
- Application Registry

 **News**

- 
 CHAIN-REDS workshop at ISGC 2013
[View Event](#)
- 
 MoU CHAIN-Reds and ENGAGE
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***Co-ordination & Harmonisation of Advanced e-Infrastructures
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Thank you !

Research Infrastructures – Grant Agreement n. 306819



www.chain-project.eu
proj-office@chain-project.eu

