

# Support to Data infrastructures in CHAIN-REDS

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## Impact

The adoption of standards has allowed any user to submit jobs to several infrastructures (Grid, local clusters, Cloud) in an easy way. By doing so, it is expected that researchers who do not belong to big communities will profit from a wide pool of computing resources. It has been possible because of the Science Gateway paradigm, which rely on Identity Federations for accessing them.

To apply the same philosophy to Data Infrastructures has a clear follow-up impact: to allow any user in the world to find and exploit open data stored world wide in a two steps process: allocate the data bases where the data are stored by consulting their metadata and lately retrieve the specific results.

## Summary

During the last two years, CHAIN project has supported several Virtual Research Communities (VRCs) and published a road-map of requirements to be provided by the Distributed Computing Infrastructures mainly based on sustainability and adoption of standards. Such a philosophy was demonstrated during the EGI TF 2012 by means of the interoperability demo.

Once that CHAIN is over and reached its objectives, CHAIN-REDS, tries to enhance the previous VRCs achievements focusing now on Data Infrastructures. The new aims and objectives of its associated Work Package will be presented, i.e. its collaborative Data Infrastructures and the work that will be done through the CHAIN-REDS lifetime by the adoption of standards for allowing the interoperability of Data Infrastructures.

## URL

<http://www.chain-project.eu>

## Description

During the last two years, till 30 Nov 2012, CHAIN project has supported several Virtual Research Communities (VRCs) belonging to different domains. It has collaborated with them by promoting them and by providing new interested users to them too. At the same time, these VRCs have provided CHAIN with valuable information that resulted, jointly with other actions, in a road-map of services to be provided by the Distributed Computing Infrastructures. A list of them can be found in the WP3 wiki page of CHAIN, but it should be mentioned here that two main items are a must and summarise them: sustainability and adoption of standards. Such a philosophy was demonstrated during the EGI TF 2012 by means of the interoperability demo, which counted on several middleware, applications and infrastructures, grouped all together in an easy access by the user by the Science Gateway paradigm. Such a demo allowed any user to unattendedly submit jobs to several infrastructures managed by different middleware thanks to the adoption of standards.

Once that CHAIN is over and reached its objectives, CHAIN-REDS, its second phase, tries to enhance the previous VRCs achievements in a thirty months project focusing now on Data Infrastructures. The new aims and objectives of its associated Work Package will be presented during the EGI CF 2013 as well as the way that it plans to extend the successfully VRCs adopted line of work to Data Infrastructures. This way, the collaborative Data Infrastructures will be presented as well as the work that will be done through the CHAIN-REDS lifetime by the adoption of standards for allowing the interoperability of Data Infrastructures. Even when there is a wide plethora of Data Infrastructures, as there is of VRCs, which count on their own ideas and developments, CHAIN-REDS aims to propose solutions that will make the access to their stored data as easier as possible for a final user as it did with the use of the codes employed by the VRCs during CHAIN

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