DELIVERABLE

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1 EXECUTIVE SUMMARY

Over its lifetime, DCH-RP has established many relationships with other projects and initiatives in Europe and beyond so to gather a huge base of recipients for the main outcome of the project, i.e. the Handbook on the Roadmap.

Nine (9) Memoranda of Understanding have been established with projects that are key actors in the European landscape of digital cultural heritage, open data, open access, data preservation and data infrastructures.

Coordinated activities have led to 10 workshops, some of which were co-located with high visibility events, such as the ICT 2013 Conference, and to presentations at very important events in the area of e-Infrastructures (such as the e-IRG Open Workshops) as well as in that of cultural heritage (such as TDPL and CIDOC Conferences).

On the technical side, collaborations with other projects and initiatives have led to the definition and execution of 5 Proofs of Concept:

- Experiment 1: EXPLORE THE SCAPE PROJECT'S MATCHBOX TOOL
- Experiment 2: INVESTIGATE THE SCIDIP-ES PROJECT'S HAPPI PLATFORM;
- Experiment 3: EVALUATE EUDAT STORAGE SERVICES;
- Experiment 4: RE-EVALUATE THE ECSG AND REMOTE GRID/CLOUD STORAGE SERVICES FROM POC1;
- Experiment 5: LONG-TERM DATA PRESERVATION PLATFORM,

all of which successfully completed and described in the Deliverable "D5.4 – Report on second Proof of Concept (update)".

Moreover, some of the components of the e-Culture Science Gateway, namely the gLibrary framework, has been included by INFN in one of the tasks of the DARIAH Competence Centre that will be part of the work plan of the EGI-Engage project and will aim at implementing digital repositories of DARIAH contents on the EGI Grid and Federated Cloud infrastructure.

Concerning standard uptake and best practices, the project has developed Open Access repositories compliant with the guidelines set up by the EU flagship OpenAIRE project.

Last, but not least, concerning data discovery and access, DCH-RP has contributed to the CHAIN-REDS Knowledge Base with many cultural heritage open access archives and has included in the e-Culture Science Gateway a Parallel Semantic Search Engine that allows users to make simultaneous searches on tens of millions of resources belonging to very important repositories worldwide, including Europeana.

2 INTRODUCTION

This deliverable describes the relationships established with other projects in Europe and worldwide on the theme of digital preservation and their outcomes. Some demonstrators of the integration of preservation priorities in existing e-Infrastructures are also given.

The document is organised as follows. Section 3 presents the projects DCH-RP has signed a memorandum of understanding (MoU) with, lists the coordinated activities planned and summarises the most important results. Section 4 provides a list of other projects and initiatives that DCH-RP has either collaborated with during its lifetime, together with a discussion of the most important results, or can be the target of future dissemination activities to be carried out by the partners of the DCH-RP consortium. Finally, Section 5 is more technical and presents the Parallel Semantic Search Engine developed by INFN in the context of the collaboration with the CHAIN-REDS project to exploit the identification of many standard-based cultural heritage repositories all over the world.

3 MEMORANDA OF UNDERSTANDING WITH OTHER PROJECTS AND OUTCOMES OF THE COLLABORATIONS

The cooperation of DCH-RP with other projects/initiatives has been framed in official Memoranda of Understanding (MoUs) based on a template that has been prepared and agreed at the beginning of the project. Each sub-section of the present Section provides general information about the collaborating project, the coordinated activities planned in the MoU and the main outcomes of the collaboration.

3.1 APARSEN

3.1.1 General information

APARSEN[1] is a Network of Excellence that brings together an extremely diverse set of practitioner organizations and researchers in order to bring coherence, cohesion and continuity to research into barriers to the long-term accessibility and usability of digital information and data, exploiting our diversity by building a long-lived Virtual Centre of Digital Preservation Excellence. The project aims to achieve:

- Significant advances in the ability to offer easily customizable access services to scientific and cultural digital
- Resources, improving their use, experiencing and understandings;
- Enforced capacity for organizations to preserve digital content in a more effective and cost-efficient manner, safeguarding the authenticity and integrity of these records;
- Significant reduction in the loss of irreplaceable information and new opportunities for its re-use, contributing to efficient knowledge production;
- The common vision, reduced fragmentation and common testing environment for all aspects of digital preservation, which will allow real competition between solution providers.

3.1.2 Coordinated activities

The topics of collaboration are:

- Setting-up of a Proof-of-Concept in DCH-RP, based on the work and prototypes developed in APARSEN, targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content; this work is planned to be carried out as follows:
    - Provide access to a community based, preservation-aware data management supporting curation of metadata. This component should support collaborative access, sharing, and gathering of provenance

[1] www.alliancepermanentaccess.org/index.php/aparsen

representational information prior to archival on EGI VM images and storage.
    - Integrate or adapt a number of select services for ingest, preservation, curation and access (i.e. persistent identifier services, preserved data access services) to the cloud and deploy these as a set of VM images on the EGI Federated Clouds infrastructure.
    - Provide services to represent, annotate, describe and authenticate information objects for preservation and identify gaps in the curation process to assure secure and trusted preservation.
    - Acquire sufficient federated distributed cloud storage to be used to preserve test data.
    - Link and integrate the test data in the cloud storage service with the preservation services deployed within the VM images.
    - Ensure that the test data is a representative sample of the projected productive data sets; e.g. 3D scans and visualisations, digital journal supplements, electronic books, scans of book pages, digitalised paintings, etc.
    - Provide task-based, collaborative search and information access portals, to enable efficient and effective access for the users of the representative sample and feed-back this information as further representation information into the archive.
- Development of a common registry of services and tools focused on digital preservation, which integrates the results and the achievements of the two projects and which will be badged as a joint collaboration DCH-RP & APARSEN. In particular:
    - The aim of the joint registry is to help a broad range of DCH communities, institutions and projects to plan implementation of their digital preservation processes implementation and understand commonly available options by offering them the integrated information from both projects. Therefore the registry will be located on a public webpage, with an open access, and will be available, sustainable and maintained beyond the lifetime of both projects.
    - Currently, the two registries offer different views on the similar data on many tools. While DCH-RP registry provides a comprehensive list (140+) of tools and services, the APARSEN's registry provides information structured according to 18 aspects related to digital preservation. The joint registry will combine these different views, in order to accomplish various user needs. Particularly, the registry will contain descriptions of common user scenarios as well as information about the tools that may be used to implement them. In addition it will support searching the tools database using several criteria. It will also provide assessments and reviews of most relevant tools.
- Promotion and presentation of the results of the concerned projects in the respective websites, events and publications
- Organization of joint events, such as workshops (general/specifics topics), networking sessions, webinars, training courses, etc.
- Organization of joint participation (with joint presentations and/or demonstrations) at specialised events and conferences organized by other institutions and projects

- Implementation of “clustering” activities, generation of internal workshops and symposia sessions for stimulating dissemination and collaboration among concerned projects´ participants
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.net)
- Posting joint news on third party websites, newsletters and social media channels
- Circulation of joint announcements/results via relevant mailing lists
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups.

3.1.3 Main outcomes

The main results of this cooperation include:

- The organisation of several joint events:
  - Workshop at the EGI Community Forum 2013: http://www.digitalmeetsculture.net/article/egi-community-forum-2013/;
  - Workshop at the Second EUDAT International Conference: http://www.digitalmeetsculture.net/article/digital-preservation-of-cultural-data/;
  - Networking session at the ICT 2013 Conference: http://www.digitalmeetsculture.net/article/a-virtual-research-community-for-the-preservation-of-digital-cultural-heritage/;
  - EGI-APARSEN workshop on Big Data: http://www.digitalmeetsculture.net/article/workshop-on-managing-computing-and-preserving-big-data-for-research/;
  - Workshop at the EGI Community Forum 2014: http://www.digitalmeetsculture.net/article/e-infrastructures-for-data-preservation-and-curation-egi-cf-2014-helsinki/;
  - Workshop at the JCDL/TPDL 2014 Conference: http://www.digitalmeetsculture.net/article/digital-preservation-sustainability-on-the-eu-policy-level/;
- The set-up of a Proof-of-Concept in DCH-RP, based on the work and prototypes developed in APARSEN. targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content. Further details on this experiment are available in the DCH-RP Deliverable D5.4, Experiment 5: LONG-TERM DATA PRESERVATION PLATFORM;
- The development of a common registry of services and tools focused on digital preservation, which integrates the results and the achievements of the two projects and which will be tagged as a joint collaboration DCH-RP & APARSEN.

3.2 ARIADNE

3.2.1 General information

The ARIADNE[2] project is funded by the European Commission's 7th Framework Programmel. It brings together and integrates existing archaeological research data infrastructures so that researchers can use the various distributed datasets and new and powerful technologies as an integral component of the archaeological research methodology. There is now a large availability of archaeological dgital datasets that, together, span different periods, domains and regions; more are continuously created as a result of the increasing use of IT. These are the accumulated outcome of the research of individuals, teams and institutions, but form a vast and fragmented corpus and their potential has been constrained by difficult access and non-homogenous perspectives.

3.2.2 Coordinated activities

The topics of collaboration are:

- Explore, analyse, discuss and share expertise on the topics of reciprocal interest in the field of digitisation;
- Present specific activities, tools, results and other outputs carried out in the framework of both projects;
- Illustrate relevant good practices in the topics of reciprocal interest;
- Contribute to disseminate the results of the projects in the framework of both communities of interest (e.g., in conferences, meetings, news and logos on the website, communication tools, etc.);
- To set up a Proof-of-Concept targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content.

3.2.3 Main outcomes

The results of the work carried out in collaboration include:

- Participation of ARIADNE's coordinator to:
  - The DCH-RP FOURTH PLENARY MEETING held in Catania on the 20th–21st of January 2014;
  - The Round Table "From the Roadmap to its implementation" held as part of the program of the DCH-RP Final Conference entitled "Preservation as an e-infrastructure service: a Roadmap for digital cultural heritage"[3];
- Dissemination of the DCH-RP Registry and the Survey on the Intermediate version of the Roadmap among the ARIADNE community;
- The set-up of a Proof-of-Concept in DCH-RP, based on the procedure of automatic upload of data into Grid/Cloud storage through eCSG, of a set of multi-format data

[2] www.ariadne-infrastructure.eu

[3] www.dch-rp.eu/index.php?en/70/events-archive/66/preservation-as-an-e-infrastructure-service-a-roadmap-for-digital-cultural-heritage-final-conference-of-dch-rp

belonging to SITAR[4]: the archaeological information system of the city of Rome provided by the Special Superintendence of Rome (SSBAR), involved in the ARIADNE project. Further details on this experiment are available in the DCH-RP Deliverable D5.4, Experiment 4: RE-EVALUATE THE ECSG AND REMOTE GRID/CLOUD STORAGE SERVICES FROM POC1.

3.3 CHAIN-REDS

3.3.1 General information

CHAIN-REDS[5] 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). The main objectives are:

- Extend and consolidate the international cooperation of Europe with other regions of the world in the domain of e-Infrastructures for R&E, thus reinforcing the scientific collaboration and broadening the impact of the European Research Area;
- Promote, coordinate and support the effort of a critical mass of non-European e Infrastructures for R&E to collaborate with Europe by addressing interoperability and interoperation of Grids and other DCIs such as potential upcoming Cloud federations and HPC centres;
- Study the opportunities of data sharing across different e-Infrastructures and continents thus widening the scope of the existing CHAIN Knowledge Base to Data Infrastructures and Cloud implementations;
- Promote trust-building towards open Scientific Data infrastructures across the world regions, including organisational, operational and technical aspects;
- Demonstrate the relevance of intercontinental cooperation in several scientific data fields addressing existing and emerging Virtual Research Communities and propose pragmatic approaches that could impact the everyday work of the single researcher, even if not structured in the framework of a Virtual Research;
- Foster the creation and promote the usage of Federations of Identity Providers as a further step towards the simplification of access to a large number of users to e-Infrastructure services and tools;
- Demonstrate the usability and value of Science Gateways as a tool to address the fast-track single researcher inclusions.

3.3.2 Coordinated activities

The topics of collaboration are:

[4] http://sitar.archeoroma.beniculturali.it

[5] www.chain-project.eu

- Promotion of the concerned projects and presentation of the respective results in the events organised or co-organised by the projects, in Europe and worldwide, focusing in particular on usefulness of e-Infrastructures and federated identity services for DCH and on the theme of digital preservation and use of e-Infrastructures as platforms to achieve it;
- Promotion of standard-based frameworks and paradigms, such as Science Gateways and Identity Inter-Federations, to access and use scalable and interoperable e-Infrastructures worldwide;
- Promotion of the concerned projects in the respective websites and publications;
- Organization of joint events, such as workshops (general/specifics topics), networking sessions, webinars, training courses, etc.;
- Organization of joint participation (with joint presentations and/or demonstrations) at specialised events and conferences organized by other institutions and projects worldwide;
- Implementation of “clustering” activities, generation of internal workshops and symposia sessions for stimulating dissemination and collaboration among concerned projects´ participants;
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.net);
- Posting joint news on third party websites, newsletters and social media channels;
- Circulation of joint announcements/results via relevant mailing lists;
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups;
- DCH-RP will encourage integration of Open Access repositories in DCH-RP partner countries into the CHAINREDS Knowledge Base, using the OAI-PMH standard and the Dublin Core metadata schema;
- DCH-RP will check the repositories already included in the CHAIN-REDS Knowledge Base and send CHAINREDS the URLs and the OAI-PMH endpoints of any other repositories which do not appear in the map;
- DCH-RP will contact digital libraries within its community not-supporting OAI-PMH access and promote the adoption of this standard, in order to include those libraries in the CHAIN-REDS Knowledge Base;
- DCH-RP will make use of the CHAIN-REDS Semantic Search Engine;
- CHAIN-REDS will integrate the Open Access repositories provided by DCH-RP into its Knowledge Base.

3.3.3 Main outcomes

The results of the work carried out in collaboration include:

- Digital Cultural Heritage and Digital Preservation in general were included by CHAIN-REDS in the list of Communities of Practice that were fostered in all the regions targeted by the project;

- DCH-RP contributed to identity several Open Access document and data repositories that were included in the CHAIN-REDS Knowledge Base[6] which counts about 3,300 repositories for a total of more than 30 million resources;
- The gLibrary framework that empowers the e-Culture Science Gateway has been enhanced with an OAI-PMH endpoint in order to be compliant with the standards fostered by CHAIN-REDS and to allow repositories included in the eCSG to be inserted in the CHAIN-REDS Knowledge Base and to be discoverable through the Semantic Search Engine developed by INFN;
- Thanks to the collaboration between DCH-RP and CHAIN-REDS important Cultural Heritage repositories, such as Cultura Italia, in Italy, ISIDORE, in France, and Europeana, at continental level, all providing SPARQL endpoints, have been integrated in the Semantic Search Engine (see Section 5).

3.4 EUDAT

3.4.1 General information

EUDAT[7] is a pan-European data initiative bringing together 26 research communities, national data and HPC centres, technology providers, and funding agencies from 13 countries. EUDAT aims to build a sustainable cross-disciplinary and cross-national data infrastructure providing a set of shared services to access and preserve research data. Europe's science and research communities from a wide range of scientific fields are faced with increasingly large amounts of valuable data that stem from new sources such as powerful new sensors and scientific instruments used in analyses, experiments and observations as well as growing volumes of data from simulations and from the digitization of library resources. In order to make the most of the new opportunities emerging from this "explosion" of data, the EUDAT consortium intends to build a sustainable pan-European infrastructure for scientific data. EUDAT is a new European initiative that will deliver a Collaborative Data Infrastructure (CDI) with the capacity and capability for meeting future researchers' needs in a sustainable way. Its design will reflect a comprehensive picture of the data service requirements of the research communities in Europe and beyond. This will become increasingly important over the next decade as we face the challenges of massive expansion in the volume of data being generated and preserved (the so called 'data tsunami') and in the complexity of that data and the systems required to provide access to it. Main objectives are:

- Help fulfilling the vision of a European Data e-infrastructure by providing a sustainable platform of technologies, tools and services driven by user needs;
- Engage users that can be individual researchers, universities, research labs, libraries, etc. in defining and shaping a platform for shared services that enables data-intensive research potentially crossing all disciplines of science;

[6] www.chain-project.eu/knowledge-base

[7] www.eudat.eu

- Produce the common low-level services required to provide the level of interoperation and trust of data necessary to support widespread access, long-term preservation for use and re-use;
- Ensure that the data infrastructure is sufficiently robust to keep pace with the expected acceleration of the scale and complexity of scientific data being generated within the ERA and beyond;
- Provide guidance and recommendations for roadmaps for long-term global collaboration in e-Infrastructures and harmonization of existing policies. These are envisaged to act as input to policy and decision-making mechanism, harmonized with the European Digital Agenda and Horizon 2020.

3.4.2 Coordinated activities

The topics of collaboration are:

- Setting-up of a Proof-of-Concept in DCH-RP based on the work and prototypes developed in EUDAT (in particular B2Share and B2Safe services) targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content;
- Promotion and presentation of the results of the collaboration activities in the respective websites, events and publications;
- Organization of joint events, such as workshops (general/specifics topics), networking sessions, webinars, and training courses relevant to the collaboration activities, etc.;
- Organization of joint participation (with joint presentations and/or demonstrations) at specialised events and conferences organized by other institutions and projects;
- Implementation of "clustering" activities, generation of internal workshops and symposia sessions for stimulating dissemination and collaboration among concerned projects' participants on the collaboration between the two initiatives;
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.net);
- Posting joint news on third party websites, newsletters and social media channels;
- Circulation of joint announcements/results via relevant mailing lists;
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups.

3.4.3 Main outcomes

The results of the work carried out in collaboration include:

- The organisation of several joint events:
- Workshop at EGI Community Forum 2013: http://www.digitalmeetsculture.net/article/egi-community-forum-2013/;
- Workshop at the Second EUDAT International Conference: http://www.digitalmeetsculture.net/article/digital-preservation-of-cultural-data/;
- Networking session at the ICT 2013 Conference: http://www.digitalmeetsculture.net/article/a-virtual-research-community-for-the-preservation-of-digital-cultural-heritage/;

- Participation of EUDAt at the DCH-RP e-infrastructures concertation meeting in Tallinn: http://www.digitalmeetsculture.net/article/dch-rp-e-infrastructure-concertation-workshop/;
- Workshop at the EGI Community Forum 2014: http://www.digitalmeetsculture.net/article/e-infrastructures-for-data-preservation-and-curation-egi-cf-2014-helsinki/;
- Joint DCH-RP – EUDAT workshop on digital preservation and trust building in Stockholm: http://www.digitalmeetsculture.net/article/joint-dch-rpeudat-workshops-on-digital-preservation/;
- Workshop at the JCDL/TPDL 2014 Conference: http://www.digitalmeetsculture.net/article/digital-preservation-sustainability-on-the-eu-policy-level/.
- The set up a Proof-of-Concept targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content. In this pilot the prototypes and the services developed in EUDAT, in particular B2Share and B2Safe services, were tested by the memory institutions participating to the DCH-RP Proof of Concepts, who tried to use them to safely store, access and preserve their digital cultural data. Further details on this experiment are available in the DCH-RP Deliverable D5.4, Experiment 3: EVALUATE EUDAT STORAGE SERVICES.

Concerning in particular the joint DCH-RP/EUDAT Workshops held in Stockholm, the first (on the 3rd of June), titled “Digital Cultural Heritage Roadmap for Preservation”, focussed on the possibilities and challenges connected to long-term digital preservation of:

- Holdings and collections at cultural heritage institutions and
- Research data.

The second workshop (on the 4th of June) had the title “The Concept of Trust – Research Data and Cultural heritage Data” and focussed on collaboration issues between DCH-RP and EUDAT projects regarding the concept of trust. The discussion was based on three case studies mirroring different situations involving cultural heritage information and research data.

Both workshop had a good press coverage and an example can be found here: http://digisam.se/index.php/hem/entry/europeiskt-samarbete-banar-vaeg-foer-bevarande.

3.5 LINKED HERITAGE

3.5.1 General information

Linked Heritage[8] is a 30 month EU project, the main goals of which are to contribute large quantities of new content to Europeana from both the public and private sectors; to demonstrate enhancement of quality of content, in terms of metadata richness, re-use potential and uniqueness to demonstrate enable improved search retrieval and use of Europeana content. The consortium includes representatives of all the key stakeholder

[8] www.linkedheritage.org

groups from 20 EU countries together with Israel and Russia. These include ministries and responsible government agencies, content providers and aggregators, leading research cenres, publishers and SMEs.

3.5.2 Coordinated activities

The topics of collaboration were:

- Explore, analyse, discuss and share expertise on the topics of reciprocal interest in the field of digitisation;
- Present specific activities, tools, results and other outputs carried out in the framework of both projects;
- Illustrate relevant good practices in the topics of reciprocal interest;
- Contribute to disseminate the results of the projects in the framework of both communities of interest (e.g., in conferences, meetings, news and logos on the website, communication tools, etc.).

3.5.3 Main outcomes

The Linked Heritage project ended on the 30th of September 2013. Nevertheless, the intermediate version of the DCH-RP Roadmap was distributed to the 38 beneficiaries, 10 affiliated partners and 12 additional external content providers and useful feedback was collected.

3.6 OPENAIRE

3.6.1 General information

OpenAIRE[9] (Open Access Infrastructure for Research in Europe) is an initiative supported by the European Commission under the FP7 e-Infrastructure Capacities Programme with the following main objectives:

Build support structures for researchers in depositing FP7 research publications through the establishment of the European Helpdesk and the outreach to all European member states through the operation and collaboration of 27 National Open Access Liaison Offices;

Establish and operate an electronic infrastructure for handling peer-reviewed articles as well as other important forms of publications (pre-prints or conference publications). This is achieved through a portal that is the gateway to all user-level services offered by the e-Infrastructure established, including access (search and browse) to scientific publications and other value-added functionality (post authoring tools, monitoring tools through analysis of document and usage statistics);

Work with several subject communities to explore the requirements, practices, incentives, workflows, data models, and technologies to deposit, access, and otherwise manipulate research datasets of various forms in combination with research publications.

[9] www.openaire.eu

3.6.2 Coordinated activities

The topics of collaboration are:

- Reuse metadata made available by OpenAIRE in the Proof-of-Concepts organised by DCH-RP targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content. This consists of the following activities:
  - OpenAIRE will make available a set of metadata through an OAI-PMH server at a point in time when APIs are available;
  - DCH-RP will harvest the metadata to upload them in the e-Culture Science Gateway (http://ecsg.dch-rp.eu/) and to use them to test the use of Grid services in the relevant usage scenarios identified by the project (see http://www.digitalmeetsculture.net/heritageshowcases/dch-rp/dch-rp-roadmap-for-preservation/);
  - Data will not be handled as they are not available in OpenAIRE repository and special agreements are needed with the content owners;
- Promotion and presentation of the results of the concerned projects in the respective websites, events and publications;
- Involve each other in events such as workshops (general/specifics topics), networking sessions, webinars, training courses, etc.;
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.net);
- Posting joint news on third party websites, newsletters and social media channels;
- Circulation of joint announcements/results via relevant mailing lists;
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups.

3.6.3 Main outcomes

The results of the work carried out in collaboration include:

- Most of the repositories included in the list of OpenAIRE data providers[10] have been included in the CHAIN-REDS Knowledge Base (see above), harvested by the Semantic Search Engine developed by INFN and made available through the e-Culture Science Gateway (see Section 5);
- In the framework of DCH-RP, as well as in the context of other internal activities INFN has developed an Open Access Repository[11] as a pilot for its and other Italian Research Organisations' products (publications, software, data, etc.) and made it compliant with OpenAIRE guidelines[12]. This confirms the alignment between the OpenAIRE guidelines and the standards promoted by DCH-RP.
- OpenAIRE metadata were used in one of the experiments of the second round of PoCs, i.e. Experiment 5: A LONG TERM DATA PRESERVATION PLATFORM,

[10] https://www.openaire.eu/search/openaire-data-providers

[11] www.openaccessrepository.it

[12] https://guidelines.openaire.eu

which focused on the metadata package generation, including community metadata. A collection of 214 documents and their corresponding metadata was harvested from openaire.eu and the records were packaged into an OAIS-compliant service for long-term preservation and saved in a storage system that allows to search and download them. Further details on this experiment are available in the DCH-RP Deliverable D5.4.

3.7 SCAPE

3.7.1 General information

SCAPE[13] is a project co-funded by the European Union under FP7 ICT-2009.4.1 to develop scalable services for planning and execution of institutional preservation strategies on an open source platform that orchestrates semi-automated workflows for large-scale, heterogeneous collections of complex digital objects. SCAPE will enhance the state of the art of digital preservation in three ways: by developing infrastructure and tools for scalable preservation actions; by providing a framework for automated, quality-assured preservation workflows and by integrating these components with a policy-based preservation planning and watch system. These concrete project results will be validated within three large-scale testbeds from diverse application areas.

3.7.2 Coordinated activities

The topics of collaboration are:

- Promotion and presentation of the results of the concerned projects in the respective websites, events and publications;
- Organization of joint events, such as workshops (general/specifics topics), networking sessions, webinars, training courses, etc.;
- Organization of joint participation (with joint presentations and/or demonstrations) at specialised events and conferences organized by other institutions and projects;
- Implementation of “clustering” activities, generation of internal workshops and symposia sessions for stimulating dissemination and collaboration among concerned projects´ participants;
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.net);
- Posting joint news on third party websites, newsletters and social media channels;
- Circulation of joint announcements/results via relevant mailing lists;
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups.

3.7.3 Main outcomes

The results of the collaboration work include:

- The organisation of several joint events:

[13] www.scape-project.eu

  - Workshop at the Second EUDAT International Conference: http://www.digitalmeetsculture.net/article/digital-preservation-of-cultural-data/;
  - Networking session at the ICT 2013 Conference: http://www.digitalmeetsculture.net/article/a-virtual-research-community-for-the-preservation-of-digital-cultural-heritage/;
  - Workshop at the EGI Community Forum 2014: http://www.digitalmeetsculture.net/article/e-infrastructures-for-data-preservation-and-curation-egi-cf-2014-helsinki/;
  - Workshop at the JCDL/TPDL 2014 Conference: http://www.digitalmeetsculture.net/article/digital-preservation-sustainability-on-the-eu-policy-level/;
- The set-up of a Proof-of-Concept in DCH-RP based on the work and prototypes developed in SCAPE targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content. Further details on this experiment are available in the DCH-RP Deliverable D5.4, Experiment 1: EXPLORE THE SCAPE PROJECT'S MATCHBOX TOOL.

3.8 SCIDIP-ES

3.8.1 General information

The SCIDIP-ES[14] project is funded by the EU 7th Framework Program with the aim to deliver generic infrastructure services for science data preservation and to build on the experience of the ESA Earth Observation Long Term Data Preservation (LTDP) Program to favor the set-up of a European Framework for the long term preservation of Earth Science (ES) data through the definition of common preservation policies, the harmonization of metadata and semantics and the deployment of the generic infrastructure services in ES domain. The main objectives are delivering generic sustained services and toolkits for long-term preservation and usability as part of the data infrastructure for e-Science, harmonizing data preservation policies, approaches and tools in the Earth Science Domain and demonstrating the services through advanced test-beds.

3.8.2 Coordinated activities

The topics of collaboration are:

- Setting-up of a Proof-of-Concept in DCH-RP based on the work and prototypes developed in SCIDIP-ES targeted at demonstrating how e-Infrastructures can be of benefit for the DCH community, in particular for the preservation of digital cultural content;
- Promotion and presentation of the results of the concerned projects in the respective websites, events and publications;

[14] www.scidip-es.eu

- Organization of joint events, such as workshops (general/specifics topics), networking sessions, webinars, training courses, etc.;
- Organization of joint participation (with joint presentations and/or demonstrations) at specialises event and conferences organized by other institutions and projects;
- Implementation of "clustering" activities, generation of internal workshops and symposia sessions for stimulating dissemination and collaboration among concerned projects' participants;
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.net);
- Posting joint news on third party websites, newsletters and social media channels;
- Circulation of joint announcements/results via relevant mailing lists;
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups.

3.8.3 Main outcomes

The MoU between SCIDIP-ES and DCH-RP mainly concerned the collaboration and exchange of tools and services for digital preservation of – in this case – cultural assets.

Although the respective MoU was signed in September 2014, the actual work already began in July 2014. Engineering International Ltd. and EGI.eu prepared for deploying and testing the SCIDIP-ES HAPPI service on the EGI Federated Cloud infrastructure.

The planned outcome of this experiment was two-fold: Firstly, the DCH community was interested in the service itself as it implements a number of required capabilities in the DCH community, such as authenticity and provenance records for a given preserved data set. The community was also interested in how well the HAPPI service could be integrated with other services in the digital preservation community.

Secondly, in the context of the emerging “Preservation as a Service” approach to the digital preservation needs in the CH sector, EGI as an e-Infrastructure provider and Engineering Italy (coming from the SCIDIP-ES project) were interested in how well HAPPI would be suited to be deployed in a virtualized infrastructure, i.e. packaged into readily instantiable Virtual Machine images.

To that purpose, Engineering and EGI worked together to deploy HAPPI on the EGI federated Cloud infrastructure. Results of this experiment are available in Deliverable D5.4 “Report on the second Proofs of Concepts phase”.

Due to lack of time, the actual use of the HAPPI platform was tested only very briefly. However, EGI and Engineering are committed to keeping the service available for at least to the end of the SCIDIP-ES project, and continue actual functionality testing, which will be reported in the SCIDIP-ES deliverable D24.1 “Generic services assessment and evolution definition report” (due date M40 – Dec 2014).

3.9 SUCCEED

3.9.1 General information

SUCCEED[15] (Support Action Centre of Competence in Digitisation) is a support action funded by the European Union that promotes the take up and validation of research results in mass digitisation with focus on the textual content. Succeed improves the availability of tools and resources, fosters the transfer of knowledge, the creation of research consortia and explores the role of emerging business models, funding opportunities and public-private partnerships to improve large-scale text digitisation techniques. As a result, the following impacts will be achieved:

- Optimisation of digitisation resources through fostering pooling the efforts by cultural institutions, partnership (public/private sectors) and cross-border collaboration;
- Promotion of the use of common standards for digitisation tools and data;
- Sharing of best practices to set up Centres of Competence for European innovation & research and their business models, legal forms, implementation risks, funding opportunities, standardised governance models, contracts/license agreements;
- Definition of a roadmap towards a common infrastructure of Centres of Competence in the digital libraries research area;
- Raising awareness of results in the field by organising awards, contests and events, alongside a comprehensive dissemination strategy.

3.9.2 Coordinated activities

The topics of collaboration are:

- Promotion and presentation of the results and activities of the concerned projects in the respective websites, events and publications;
- Organization of joint events, such as workshops {general/specifics topics), networking sessions, webinars, training courses, etc.;
- Organization of joint participation (with joint presentations and/or demonstrations) at specialised events and conferences organized by other institutions and projects;
- Implementation of "clustering" activities, generation of internal workshops and symposia sessions for stimulating dissemination and collaboration among concerned projects' participants
- Publications of articles on the work and results of the concerned projects in scientific journals and in sector specific online publications, such as Digital Meets Culture (www.digitalmeetsculture.it);
- Posting joint news on third party websites, newsletters and social media channels, and relevant mailing lists;
- Pursuing the formulation of suggestions/recommendations/advice to relevant standardization bodies and special interest workgroups.

[15] www.succeed-project.eu

3.9.3 Main outcomes

The results of the collaboration with SUCCEED include:

- Dissemination of the surveys launched by Succeed on Text Digitisation Standards and Formats (http://www.digitalmeetsculture.net/article/latest-news-from-the-succeed-project/) and on content/tools licensing and innovative usages (http://www.digitalmeetsculture.net/article/succeed-survey-on-contenttools-licensing-and-innovative-usages/);
- Participation of Succeed to the DCH-RP networking session organised in Vilnius in the frame of the ICT 2013 Conference, further details can be found at http://www.digitalmeetsculture.net/article/a-virtual-research-community-for-the-preservation-of-digital-cultural-heritage/;
- Participation of DCH-RP at the forthcoming Succeed Technical Workshop on interoperability of digitisation platforms, further details can be found at http://www.digitalmeetsculture.net/article/succeed-technical-workshop-on-interoperability-of-digitisation-platforms/;
- Participation of DCH-RP at the forthcoming Succeed Final Conference “Succeed in digitisation. Spreading excellence”, further details can be found at http://www.digitalmeetsculture.net/article/succeed-in-digitisation-spreading-excellence/.

4 COLLABORATION WITH OTHER PROJECTS AND INITIATIVES

4.1 DARIAH

DARIAH[16], the Digital Research Infrastructure for the Arts and Humanities, aims to enhance and support digitally-enabled research and teaching across the humanities and arts.

DARIAH is meant to develop, maintain and operate an infrastructure in support of ICT-based research practices.

By working with communities of practice, DARIAH-EU will bring together individual state-of-the-art digital Arts and Humanities activities across Europe.

It will preserve, provide access to and disseminate research that stems from these collaborations and ensure that best practices, methodological and technical standards are followed. The DARIAH-EU infrastructure is also foreseen to be a connected network of tools, information, people and methodologies for investigating, exploring and supporting research across the broad spectrum of the Digital Humanities.

From the dissemination and outreach point of view, DARIAH is and will be a reference organisation for the work done in DCH-RP. DARIAH-IT (the Italian section) and DARIAH-FR (the French section) have already been approached.

On the 26th of May 2014, DCH-RP – via the Michael Culture Association – and DARIAH-FR participated to a meeting organised by French Ministry of Culture – DREST – in order to present themselves to French cultural institutions and to the staff of the ministry.

The DCH-RP partner did a presentation on the project with and focused on this audience awareness about DCH Roadmap for preservation and the participation of the communities. That meeting was also an opportunity to meet with DARIAH-FR representatives and invite them to participate to the surveys and to contribute to dissemination and sustainability of the Roadmap.

Results are that :

- DARIAH-FR is very interested in the DCH-RP project and its results;
- They contributed to the DCH-RP survey;
- They will disseminate the results of DCH RP (Roadmap, Advocacy Paper, etc.) both to the French and the whole European DARIAH network.

In Italy, DARIAH-IT is a project run by the Italian Research Infrastructure for the Humanities and the Cultural Heritage. The National Steering Committee (NSC) of DARIAH-IT is composed by representatives of the following national organisations:

- CNR - National Research Council of Italy;
- MiBACT - Ministry of Cultural Heritage and Activities, and Tourism;
- CINECA, non-profit Consortium , largest Italian computing centre;
- Cultural Institutes (e.g. AICI - Association of Italian Institutes of Culture);
- GARR - Italian Academic and Research Telecommunication Consortium;
- NFN - National Institute of Nuclear Physics;

[16] www.dariah.eu

- Museo Galileo, Florence;
- Universities (e.g. Florence, PIN - University Campus of Prato);
- SISMEL - International Society for the Study of Medieval Latin Culture.

ICCU, the coordinator of DCH-RP, represents MiBACT in the national Steering Committee and it manages a wide network of research institutes, restoration laboratories, cultural heritage governing bodies, museums, libraries and archives.

ICCU disseminated the DCH-RP project into the wide audience of DARIAH-EU and DARIAH-IT (DCH-RP Project was presented by Rossella Caffo in DARIAH-EU's 4th General Virtual Competence held in Rome on 17th-19th of September 2014). The Final version of the Roadmap, as main result of DCH-RP will be disseminated and shared within the whole DARIAH Community and, since it is a multinational collaboration with a stable legal form (ERIC), this may contribute to ensure the sustainability of the DCH-RP Roadmap.

From a more technical point of view, the DARIAH Competence Centre (DARIAH-CC) for EGI has been selected for inclusion in the EGI-Engage proposal which was submitted in the response to the call "EINFRA-1-2014 – Managing, preserving and computing with big research data" to address the topic *"(6) Support to the evolution of EGI (European Grid Infrastructure) towards a flexible compute/data infrastructure capable of federating and enabling the sharing of resources of any kind (public or private, grid or cloud, etc.) in order to offer computing and storage services to the whole European scientific community. The proposal will address operations for supplying services (IaaS, PaaS, SaaS) at European level, engagement of and tailoring of services to new user communities and dissemination activities"*.

It is worth noting here that INFN, which is one of the technological partners of DCH-RP, is a member of the DARIAH-CC and that one of the tasks of the activity under INFN responsibility, called Storing and Accessing DARIAH contents on EGI (SADE), will aim at creating a digital repository of DARIAH contents based on the gLibrary framework (see fig. 1), the same powering the e-Culture Science Gateway of DCH-RP.

The DARIAH repository(ies) supported by SADE will be fully integrated with the existing EGI Grid and Cloud services in order to exploit their large capabilities. In particular, the exploitation of the cloud infrastructure will provide the capabilities of accessing data also in case of failure of a complete site, enabling the DARIAH users with a complete, redundant infrastructure in order to store and access data.

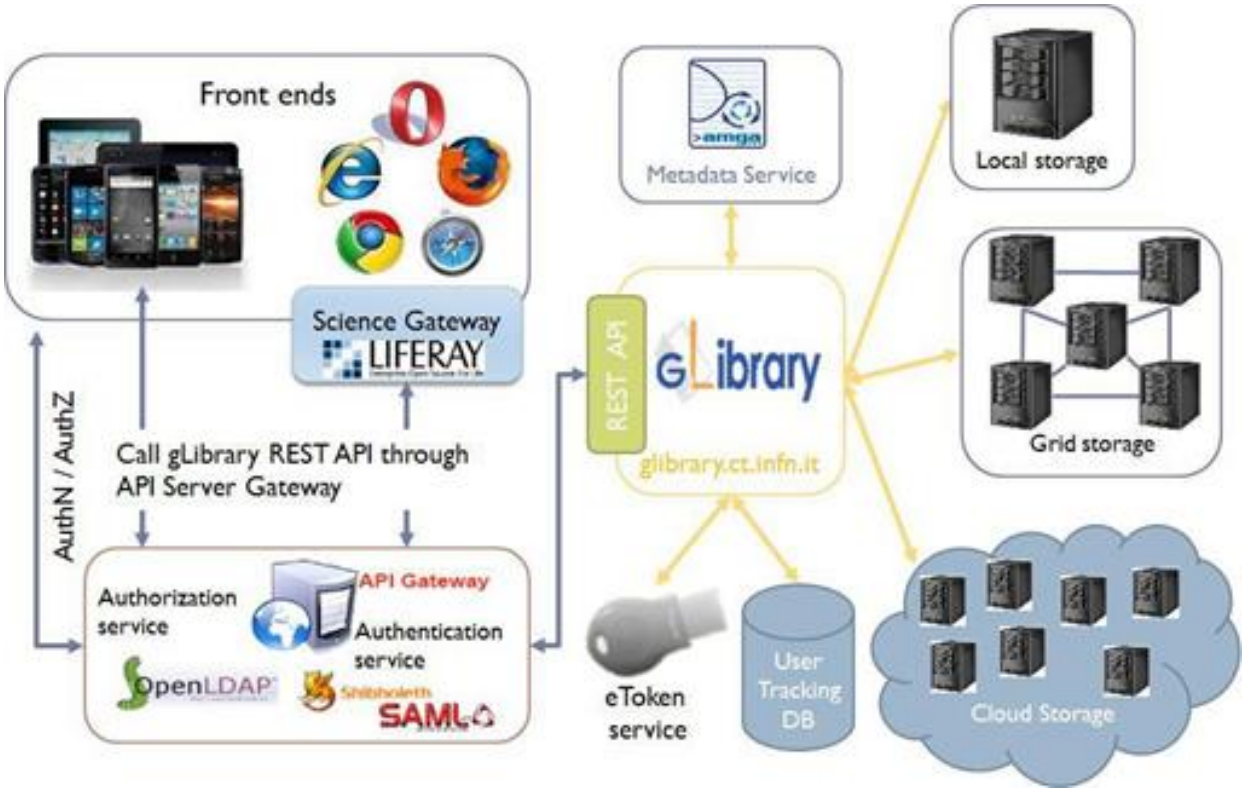

Figure 1: Schematic architecture of the gLibrary framework

4.2 E-IRG

The e-Infrastructure Reflection Group[17] (e-IRG) was founded to define and recommend best practices for the pan-European electronic infrastructure efforts. It consists of official government delegates from all the EU countries. The e-IRG produces white papers, roadmaps and recommendations, and analyses the future foundations of the European Knowledge Society.

Important issues within the e-IRG are currently:

- e-Infrastructures in European Commission's Framework Programmes;
- A policy for resource sharing;
- A registry/repository for European resources;
- Coordination of new national and EU funding programs;
- Better links and synergies between Europe and other regions (e.g. USA, Japan) engaged in similar activities.

The DCH-RP Technical Coordinator, Antonella Fresa, presented the DCH-RP project at the Open e-IRG Workshop held in Vilnius on the 4th and 5th of November 2013. A dedicated new was published here http://www.digitalmeetsculture.net/article/open-e-irg-workshop-to-discuss-infrastructures-and-e-infrastructures/ and the presentation on the DCH-RP project can be found at http://www.digitalmeetsculture.net/wp-

[17] www.e-irg.eu

content/uploads/2013/10/DCH-moving-towards-an-e-Infrastructure-based-approach-to-digital-preservation-by-Antonella-Fresa-@eIRG_Vilnius_04112013.pdf.

The next e-IRG Workshop and Meeting will take place in Rome on the 10th and 11th and on the 11th and 12th of November, respectively. They will be attended by DCH-RP representatives and both the DCH-RP Booklet and the DCH-RP Handbook on the Roadmap will be presented and distributed.

4.3 ESFRI

ESFRI[18], the European Strategy Forum on Research Infrastructures, is a strategic instrument to develop the scientific integration of Europe and to strengthen its international outreach. The competitive and open access to high quality Research Infrastructures supports and benchmarks the quality of the activities of European scientists, and attracts the best researchers from around the world.

The mission of ESFRI is to support a coherent and strategy-led approach to policy-making on research infrastructures in Europe, and to facilitate multilateral initiatives leading to the better use and development of research infrastructures, at EU and international level.

Currently, the ESFRI Strategy Working Group (SWG) on Social and Cultural Innovation is carrying on a "landscape analysis" of the research infrastructures in the domain of social sciences and humanities, in the framework of the preparation of the update of the ESFRI Roadmap planned in 2016. This was then the right moment to share with the SWG the main outcome of the DCH-RP project, i.e. the Handbook on the DCH Roadmap on Preservation, and to discuss its recognition as part of the landscape in the arts and humanities. The chair of the SWG attended the DCH-RP/e-Infrastructures concertation workshop on the intermediate roadmap held in Tallinn in April 2014. He emphasized in particular the challenges for the DCH sector and also for the DCH-RP Roadmap linked to inter-connecting data infrastructures (DARIAH, CLARIN, CESSDA, SHARE, ESSurvey).

4.4 EUROPEANA

Europeana[19] is the trusted source of European cultural heritage brought to the web by the Europeana Foundation and a large number of European cultural institutions, projects and partners.

Several DCH-RP partners have very good relations with Europeana and are involved in Europeana-linked projects. This will ensure that both the DCH-RP Booklet and the DCH-RP Handbook on the Roadmap will be shared with Europeana and all the organisations involved in it.

From a more technical point of view, the collaboration with Europeana has been key to establish the Parallel Semantic Search Engine described in the Section 5 and will for sure continue in the future.

[18] http://ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri

[19] www.europeana.eu

4.5 ISIDORE

ISIDORE[20] is an open access research platform built in France by the Huma-Num Research Infrastructure which allows access to data and documents belonging to Social and Humanistic Sciences. The collaboration with ISIDORE has been very important to establish the Parallel Semantic Search Engine described in the Section 5 and will for sure continue in the future.

4.6 OTHERS

Besides those mentioned above, the DCH-RP main outcome, i.e. the Roadmap, will also be shared with other very relevant initiatives such as CIDOC[21], the Digital Preservation Coalition[22] (DPC) and the Research Data Alliance[23], and feedback will be carefully collected and taken into account. In the case of CIDOC and DPC this is actually already happening:

- Gordon McKenna, a representative of Collections Trust, one of the partners of DCH-RP, presented the project and the Roadmap at the CIDOC Conference held in Dresden on the 9th of September; a dedicated new has been published at http://www.digitalmeetsculture.net/article/dch-rp-cidoc-2014-conference/ and the presentation can be downloaded from http://www.digitalmeetsculture.net/wp-content/uploads/2014/05/CIDOC-Conference-DCH-RP.pdf;
- The Executive Director of DPC, William Kilbride, attended as keynote speaker the DCH-RP Final Conference held in Rome on the 22nd of September; the presentation can be downloaded from http://dch-rp.eu/getFile.php?id=376.

[20] www.rechercheisidore.fr

[21] http://network.icom.museum/cidoc/

[22] www.dpconline.org

[23] https://rd-alliance.org/

5 THE PARALLEL SEMANTIC SEARCH ENGINE

The CHAIN-REDS Knowledge Base is one of the largest existing e-Infrastructure-related digital information systems. It currently contains information, gathered both from dedicated surveys and other web and documental sources, for more than half of the countries in the world.

Information is presented to visitors through geographic maps and tables that show and list e-Infrastructure, sites, services, and applications. In addition, the Knowledge Base publishes information about Open Access Document Repositories (OADRs) and Data Repositories (DRs) in both geo- and table-view. As an example, figure 2 shows the geographic map of the OADRs currently included in the Knowledge Base (upper panel) and the first elements of the list of OADRs publishing cultural heritage related contents (lower panel).

The yellow markers in the map, and the rows highlighted in yellow in the table, refer to those repositories (about 225 so far) that have been identified thanks to the outreach activities of the project and, in particular for the humanistic sector, thanks to the collaboration with DCH-RP.

On top of the Knowledge Base INFN has developed a Semantic Search Engine to semantically enrich the metadata of the more than 30 million resources included in the Knowledge Base and allow the discovery of new correlations about document and data and, ultimately, the creation of new knowledge. The queries to the Semantic Search Engine can be made in more than 110 languages (including those not based on the latin alphabet) and the results are ranked according to the latest issue (July 2014) of Ranking Web of Repositories[24]. Moreover, they are connected, whenever the information is available, to Google Scholar in order to provide users with additional information about versions and citations of a given resource found by the query.

In the context of the activities related to the Memorandum of Understanding between CHAIN-REDS and DCH-RP, INFN (that is the coordinator of the former project and technological partner of the latter) has integrated the Semantic Search Engine in the e-Culture Science Gateway and “parallelized” it allowing multiple simultaneous searches across the CHAIN-REDS Knowledge Base, Cultura Italia, ISIDORE and the whole Europeana. This has been done exploiting the SPARQL endpoints of the four above repositories.

An example of output of a query is reported in fig. 3 where the various panels refers to the 4 archives mentioned above.

[24] http://repositories.webometrics.info

Copy Print Save

Search: heritage

Show 10 entries

First Previous 1 Next Last

Country	Name	Domain	Organization
Germany	European Cultural Heritage Online	Fine and Performing Arts,Geography and Regional Studies,History and Archaeology	Max-Planck-Institut fÃ¼r Wissenschaftsgeschichte
Italy	Culturaltalia	Cultural heritage	Ministero per i Beni e le Attivita Culturali
Norway	Riksantikvarens vitenarkiv	Architecture,History and Archaeology	Riksantikvaren (Directorate for Cultural Heritage in Norway)
Poland	Virtual Archive of Polish Armenians	Fine and Performing Arts,Geography and Regional Studies,History and Archaeology	Fundatorem Fundacji Kultury i Dziedzictwa Ormian Polskich (Foundation of Culture And Heritage of Polish Armenians)
Spain	Biblioteca Virtual del Patrimonio BibliogrÃ¡fico (Virtual Library of Bibliographical Heritage)	Multidisciplinary	Ministerio de Cultura
United Kingdom	English Heritage ViewFinder	History and Archaeology	English Heritage

Figure 2: Geo-map of the Open Access Document Repositories included in the CHAIN-REDS Knowledge Base

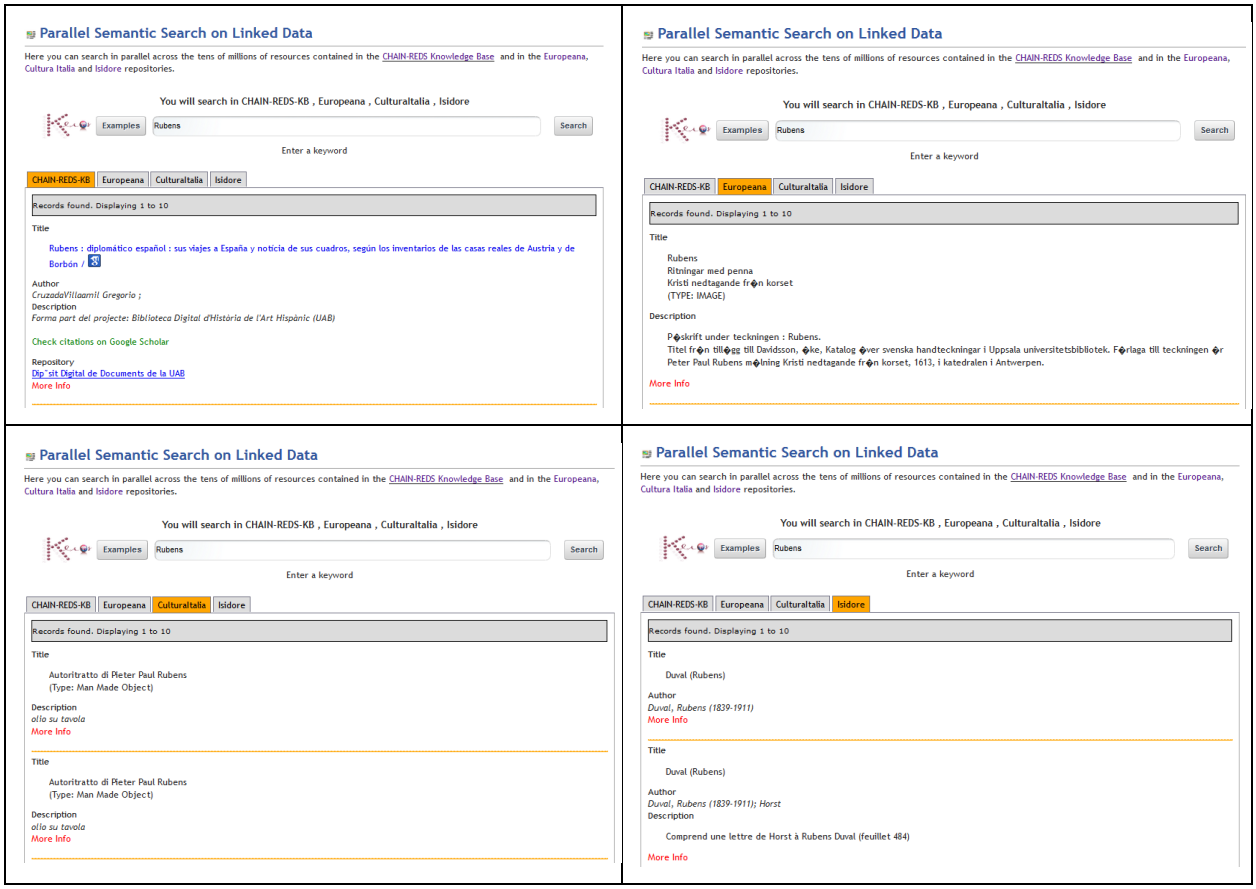

Figure 3: Example of results of a query to the Parallel Semantic Search Engine

For each result, users can get “More Info” simply clicking on the corresponding link. This will display a page where additional information is displayed. An example of “More Info” page is reported in fig. 4.

Among the information provided there is the link to original resource. For the sake of completeness, an example related to the query shown in fig. 3 is reported in fig. 5

Rubens : diplomático español : sus viajes a España y notícia de sus cuadros, según los inventarios de las casas reales de Austria y de Borbón /

General Information

Authors: CruzadaVillaamil Gregorio

Description : Forma part del projecte: Biblioteca Digital d Història de l Art Hispànic (UAB)

Description : Study on the Dutch painter Peter Paul Rubens (1577-1640) written by Gregorio Cruzada Villaamil (1832-1884). Monograph which deals especially with the link between the famous painter and Spain, in relation to his travels and paintings according to the inventories of the Spanish Royal Houses

Description : Data de publicació obtinguda de la dedicatòria impresa

Description : Monografia dedicada al pintor holandès Peter Paul Rubens (1577-1640) escrita per Gregorio Cruzada Villaamil (1832-1884). L'estudi tracta especialment el vincle del cèlebre pintor amb España relacionant els seus viatges i quadres segons els inventaris de les cases reials espanyoles

Description : Estudio dedicado al pintor holandés Peter Paul Rubens (1577-1640) escrito por Gregorio Cruzada Villaamil (1832-1884). La monografía trata especialmente el vínculo del célebre pintor con España relacionando sus viajes con los cuadros, según los inventarios de las casas reales españolas

Publisher : Madrid : Casa Editorial de Medina y Navarro,

Identifier : oai:ddd.uab.cat:72365

Identifier : http://ddd.uab.cat/record/72365

Identifier : catuab-b4916387

Identifier : catuab-b1841059

Subject : Rubens, Peter Paul, Sir, 1577-1640

Language : spa

Contributor : Casa Editorial de Medina y Navarro (Madrid, Madrid)

Rights : http://creativecommons.org/publicdomain/mark/1.0/deed.ca

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Date Information

Dataset Information

Repository Information

Information from Google Scholar

Figure 4: "More info" page of the result of a query

dipòsit digital de documents de la UAB

UAB Universitat Autònoma de Barcelona

guest :: login

Search Submit Help Personalize Servei de Biblioteques Sobre el DDD Català English Español

Home > Books and collections > Books > Rubens :

Information Discussion (0) Usage statistics To cite this record: http://ddd.uab.cat/record/72365

Rubens : diplomático español : sus viajes a España y notícia de sus cuadros, según los inventarios de las casas reales de Austria y de Borbón / por Cruzada Villaamil

Cruzada Villaamil, Gregorio, 1832-1884

Casa Editorial de Medina y Navarro (Madrid, Madrid)

Imprint: Madrid : Casa Editorial de Medina y Navarro, [1874?]

Description: 383 p.; 17 cm

Abstract: Monografia dedicada al pintor holandès Peter Paul Rubens (1577-1640) escrita per Gregorio Cruzada Villaamil (1832-1884). L'estudi tracta especialment el vincle del cèlebre pintor amb España relacionant els seus viatges i quadres segons els inventaris de les cases reials espanyoles.

Abstract: Estudio dedicado al pintor holandés Peter Paul Rubens (1577-1640) escrito por Gregorio Cruzada Villaamil (1832-1884). La monografía trata especialmente el vínculo del célebre pintor con España relacionando sus viajes con los cuadros, según los inventarios de las casas reales españolas.

Abstract: Study on the Dutch painter Peter Paul Rubens (1577-1640) written by Gregorio Cruzada Villaamil (1832-1884). Monograph which deals especially with the link between the famous painter and Spain, in relation to his travels and paintings according to the inventories of the Spanish Royal Houses.

Note: Forma part del projecte: Biblioteca Digital d'Història de l'Art Hispànic (UAB)

Note: Data de publicació obtinguda de la dedicatòria impresa

Note: Reproducció electrònica. Bellaterra : Universitat Autònoma de Barcelona. Servei de Biblioteques, 2011. Reproducció de l'original de la Biblioteca del Museu Nacional d'Art de Catalunya

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Language: Castellà.

Document: Llibres electrònics ; Text ; book

Subject: Espanya ; Política i govern ; S. XVII ; Regne Unit Rubens, Peter Paul, Punts de vista polítics i socials 1577-1640 Sir,

Figure 5: Page containing the result of a query

6 CONCLUSION

Roadmaps towards important objectives are realistic only if they are shared and validated. When defining its Roadmap, the DCH-RP project has paid a lot of care and attention to define and implement real life use cases (addressed as Proofs of Concept and their latest update are provided in the Deliverable D5.4 - Report on second Proof of Concept (update)) and to share vision and outcomes with other projects and initiatives that are key actors in the European landscape of digital cultural heritage, open data, open access, data preservation and data infrastructures.

Nine (9) MoUs have been signed and coordinated activities planned in such MoUs have led to 10 workshops, some of which were co-located with high visibility events.

Collaborations have led to the definition and execution of 5 Proofs of Concept, all of which successfully completed.

Moreover, some of the technical components of the adopted services have been included in the workplans of new projects and will survive well beyond the end of the DCH-RP project.

The dissemination and cooperation will not end of the 30th of September 2014. The main outcomes of the project and the Handbook on the Roadmap are already planned to be presented at the following events:

- 2nd of October 2014: The Hague (The Netherlands):
  - SUCCEED technical workshop on interoperability of digitisation platforms;
- 6th-10th of October 2014: Frankfurt (Germany) :
  - Frankfurt Book Fair 2014;
- 10th-12th of November 2014: Rome (Italy) :
  - e-IRG workshop (10/11/2014) and delegates meeting (11/11/2014) ;
- 13th-14th of November 2014: Rome (Italy) :
  - Event of the Italian EU Presidency;
- 17th-18th of November 2014: London (UK) :
  - DPC and 4C conference 'Investing in Opportunity: Policy Practice and Planning for a Sustainable Digital Future';
- 16th-21st of November 2014: New Orleans (USA) :
  - Supercompunting Conference 2014;
- 28th of November 2014: Paris (France) :
  - SUCCEED Final Conference;
- 10th-11th of December 2014: Rome (Italy) :
  - National Aggregators' Conference;
- 10th-11th of December 2014: Muscat (Oman) :
  - 4th International Platform on Integrating Arab e-Infrastructure in a Global Environment, e-AGE 2014;
- 17th of December 2014: Guwahati (India) :
  - CHAIN-REDS Workshop at the NKN Conference.