







Digital Cultural Heritage Preservation

Antonella Fresa Promoter Srl DCH-RP Technical Coordinator



EGI-CF13 Manchester, 10/4/2013



Content



- Scope of the workshop
- Introduction to DCH-RP project



Scope of the workshop



- To bring together projects and initiatives in the domain of the digital preservation, with a specific focus on digital cultural heritage, digital arts, digital performances and digital humanities
- To identify common goals, strategies, to find synergies, to discuss opportunities for cooperation
- □ To progress towards establishing a Virtual Research Community for DCH and to prepare for Horizon2020.

Themes for discussion



- ☐ Envisaged architecture
- ☐ Federated identity services
- Standards
- ☐ Interoperability with other infrastructures
- How can the DCH community profit of the e-infrastructure we are building → networking, communication, stakeholders consultation
- ■To establish a common MoU



Digital Preservation



- Implementation of a preservation infrastructure is among the first priorities for the DCH sector
- Preservation is defined in this context as the combination of:
 - digitised content (the result of digitisation processes)
 - born-digital content (databases, catalogues, files, etc.) a
 - metadata
- Each digitisation programme is currently addressing the issue of preservation in a separate manner, while a **shared implementation** of common e-Infrastructure layers could be beneficial and cost effective to all



DCH-RP Project



- □ FP7 Coordination Action
 - 13 partners from 7 European Countries
- □ 24 months of duration
- ☐ Total effort: 118 person-months



Consortium



DCH and National Authorities

ICCU (IT)
BELSPO (BE)
RIKSARKIVET (SE)
EVK (EE)
CT (UK)

INTERNATIONAL ORGANISATIONS

TERENA (NL) EGI.eu (NL) MCA (BE) **E-INFRASTRUCTURES**

INFN (IT) PSNC (PL) NIIFI (HU)

PRIVATE SECTOR

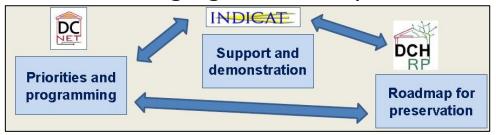
PROMOTER (IT) EDItEUR (UK)



Key features



Built upon the knowledge generated by DC-NET and INDICATE



- Focus on:
 - preservation of digital representation of cultural objects (not preservation of physical cultural objects)
 - storage phase, which includes both 'long-term preservation' (including dark archives) and 'short-term preservation' (storage for a relatively short period of access)
 - existing research e-infrastructure as an efficient channel for the delivery of advanced services to the digital cultural heritage



Expected outcomes



- The main outcome will be a Roadmap for the implementation of a preservation infrastructure for DCH
 - supplemented by **practical tools** for decision makers, including:
 - best practice to promote future interoperability and the adoption of common standards, tools, approaches and business models
 - the design of a new trust model suitable for the case of einfrastructures
 - recommendations for user authentication and access control system(s) and for engaging with commercial partners
 - validated through a range of proofs of concepts, where cultural institutions and e-Infrastructure providers will work together on concrete experiments
- DCH-RP Roadmap is intended as one instance of the Open Science Infrastructure for the research in the **digital humanities** in 2020



Preservation Roadmap



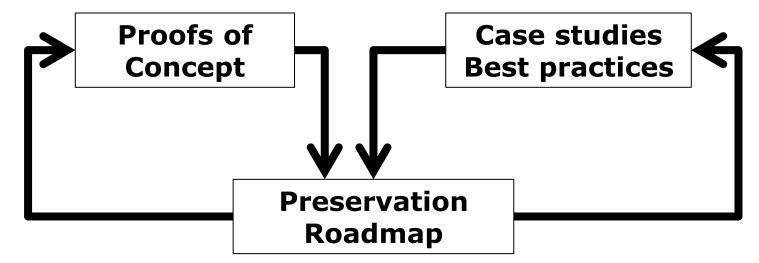
- Designing a preservation Roadmap for DCH implies:
 - to develop a registry of services and tools
 - to investigate how Infrastructure as a Service can contribute to digital preservation services for DCH
 - to explore the state of art in cultural heritage and e-Infrastructure
 - to consider how standards and interoperability principles can be adopted by the cultural heritage and e-Infrastructure communities
- □ DCH-RP Roadmap aims to remain valid for several years starting around 2015 until 2020
 - as much as possible independent of concrete current einfrastructure realisations and DCH contents
- Validated through proofs of concepts that will
 - allow the DCH community to provide requirements and feedbacks and contribute to steer the development of the Roadmap



A virtual cycle



□ Through the Proofs of Concepts cultural institutions and e-Infrastructure providers experiment the actual use of distributed computing and storage infrastructures (NREN, grids, clouds, newer data infrastructures) to store and manage cultural digital resources, starting from the targeted specific services identified in the Roadmap for preservation and from real scenarios and user stories provided by the cultural institutions





Proofs of concept



- Italy with e-Infrastructure facilities provided by INFN and data provided by ICCU
- Poland with e-Infrastructure facilities and data provided by PSNC
- Hungary with e-Infrastructure facilities provided by NIIFI and data provided by Hungarian Cultural Institutions that will cooperate with NIIFI
- Sweden, Belgium and Estonia, with e-Infrastructure facilities provided by the respective National Grid Initiatives exploiting the Memorandum of Understanding signed in the frame of DC-NET and data provided by DCH-RP partners



Target audience



www.promoter.it

- Content providers, who need the infrastructure to preserve their content and a solid Roadmap as a reference for taking decisions (e.g. cultural managers of national institutions and libraries, small institutions, private and public publishers, etc.).
- Policy makers and programme owners at different levels (national, regional and local), who invest in the construction of research infrastructures and need guidance before deciding on future actions.
- **Final users**, who need the infrastructure to get safe access to data for their research (e.g. researchers, practitioners, students and amateurs)
- The e-infrastructure providers and the R&D institutions active on digital preservation

Web presence



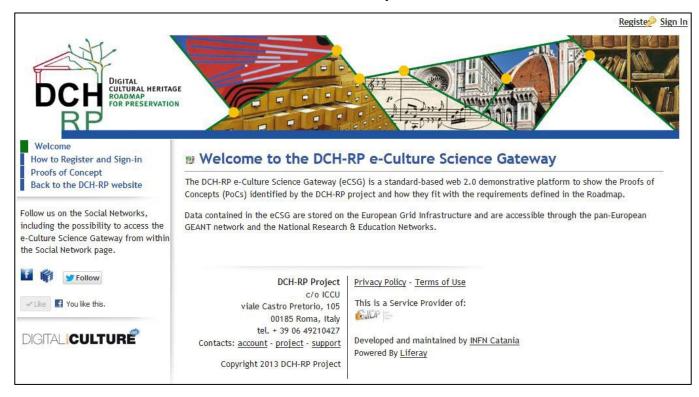
- DCH-RP has chosen a range of instruments to achieve a strong web presence, both for the cooperation among the partners and for the project's communication:
- eCulture Science Gateway: ecsq.dch-rp.eu
- Cooperation space at: documents.egi.eu
- □ Project website: www.dch-rp.eu
- Showcase at: <u>www.digitalmeetsculture.net</u>



eCulture Science Gateway



The ECSG will support the execution of the experiments carried out in the DCH-RP Proofs of Concept

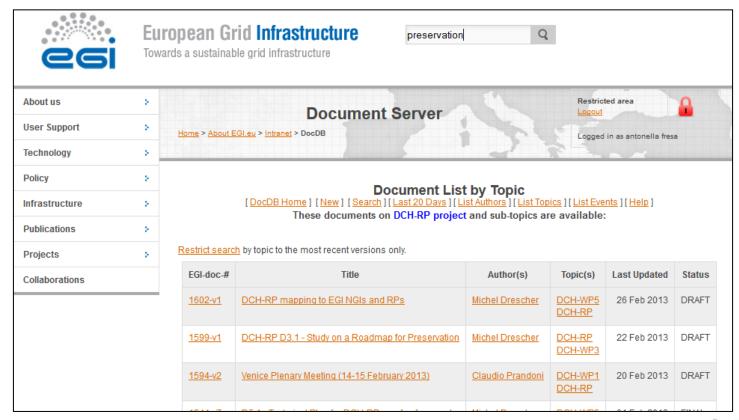




Cooperation space



■ The Cooperation space of DCH-RP is based on the cooperation services offered by EGI



Project web site



- The project website aims to present the project partners, objectives, activities and main results
- Target users: DCH experts from museums, archives, libraries and other cultural institutions, scientists, national authorities, content-contributing community, government and policy bodies, private (publishing) sector





DCH-RP Show-case on digitalmeetsculture.net



- www.digitalmeetsculture.net is an interactive online platform for cooperation and information in the field of digital technologies applied to cultural heritage and the arts
- The show-case of DCH-RP provides general information about the project, link to the project website and to each partner's website, contacts, autorefreshing news via RSS, articles on the project and on related topics





Conclusions



- DCH-RP is one step, belonging to a longer process.
- In the last decades, cultural institutions started to move their cultural content on the digital world. This has implied to know new instruments, new rules of access, new standards to exhibit digital heritage, new ways of communication.
- The amount of digital cultural content is now so valuable that the issue of preserving the digital cultural heritage is becoming as much urgent as the preservation of tangible heritage.
- The national policies about cultural preservation (digital and tangible) needs to re-use best practices, to share solutions, to avoid duplication of efforts.
- The use of the e-infrastructures is a pillar in this direction and the cultural heritage sector should progress towards its full integration in the new concept of open science.









Thank you!

Antonella Fresa Promoter Srl fresa@promoter.it



