

A Roadmap for the Preservation of Digital Cultural Content

Börje Justrell
Riksarkivet (National Archives of Sweden)
Helsinki 2014-05-20

Background

- Digital preservation is (still) an area where workflows and easily applicable universal toolkits are not widely available, although the toolbox is constantly being topped up.
- Current solutions normally require adaptation to the specific mandate of the individual cultural heritage institution, its existing technological infrastructure and the competences of its staff.

Background

- The cultural heritage sector is producing a large volume of digital content that needs to be safely stored, permanently accessed and easily re-used over time by different end-user groups.
- This sector has on top of that the challenge of the complexity of the information itself.

Background

- The so-called ‘hard sciences’ are already demonstrating that research can advance its capability by the use of e-Infrastructures.
- A basic assumption is, therefore, that existing e-Infrastructures for research and academia (including NREN, NGI and other data infrastructures) could be efficient channels also for the delivery of advanced services to the cultural heritage sector in the field of digital preservation.

Background

- Another assumption is that it will be possible to establish **common policies**, processes and protocols which will allow cultural heritage organisations to access e-Infrastructures, despite the fact that NRENs and NGIs are national entities, often with different policies and procedures for access and usage.

The aim of the DCH-RP project

- The aim of the DCH-RP project is to develop a roadmap to implement a preservation infrastructure for digital cultural heritage.
- The roadmap should be **coherent and realistic** in order to
 - help policy makers and programme owners to plan ahead
 - and also assist managerial teams of cultural heritage institutions in taking decisions related to digital preservation.
- The design of the roadmap will be supported by practical experiments (proofs of concept) in the project partners' countries

The aim of the DCH-RP project

- Focus of the Roadmap: digital preservation services for digital cultural heritage collections and holdings.
- The roadmap should define an action plan with a realistic timeframe for the implementation of its stages (short term, medium term and long term)
- The short term part of the plan should be addressed by the DCH-RP project.

The overall work plan for the Roadmap

Result: The Intermediate Roadmap



The overall work plan for the Roadmap

The intermediate roadmap (deliverable D3.4)

- Main objective: provide a first description of what the roadmap will look like.
- Targets primarily two main communities: cultural heritage institutions and e-Infrastructure already including digital archiving functions in their preservation programmes

The overall work plan for the Roadmap

The intermediate roadmap

- Describes a working model for the implementation of distributed digital preservation services for the cultural heritage community, including an action plan for
 - concrete steps to take (short term)
 - which services to address
- Three annexes:
 - An outline for a trust model
 - An analyses of Infrastructure as a Service (IaaS)
 - Examples of current use of distributed digital preservation

Step 1: Where are we now and where do we want to get to?

Before starting planning for the use of distributed digital preservation solutions, there are some basic considerations:

- Agree on a vision - what will distributed digital preservation look like? (see section 4.3.1)
- Decide about challenges to target (see section 5.1.1)
- Have a clear understanding of advantages to explore (see section 5.1.2)

Step 2: Take actions in identified major areas of the roadmap

Harmonise data storage and preservation (see section 5.2.1)

- Define critical system requirements (general and specific) – understand and articulate your requirements
- Choose a suitable AA control system
- Look into IaaS

Improve interoperability (see section 5.2.2)

- Review best practice and how-to guides (avoid inventing the wheel again)
- Consider aspects of internal interoperability to avoid building digital silos within the organisation – set up a mandate

Establish conditions for cross-sector integration (see section 5.2.3)

- Decide about standards to use and look into available tools for guidance
- Use the DCH-RP registry of preservation tools to find what suits your organisation best

Establish a governance model for infrastructure integration (see section 5.2.4)

Decide about a

- General governance model
- Trust model
- Business model

Step 3: Choose services to address

Decide about addressing services according to:

- Functional areas (see section 5.3.1)
- Services types and objects (see section 5.3.2)
- Type of architecture (see section 5.3.3)
- Level of maturity (see section 5.3.4)
- License conditions (see section 5.3.5)

From an intermediate version to a final version

Together with additional input from the rest of the project, like a study on trustbuilding and results from on-going proofs of concept, the Roadmap will be finalised by the end of September 2014.



Some lessons learned from the Intermediate Roadmap

- What is needed in digital preservation is a readiness for handling perpetual change.
- When summarising the work on the DCH-RP projects road map, so far, the use of e-Infrastructure in meeting the demands on digital preservation looks promising!

Some lessons learned from the Intermediate Roadmap

A ground breaking part of the concept is the possibilities to customise the services provided by e-Infrastructure, i.e. tailoring the service portfolio and characteristics to the actual preservation tasks and requirements.

The general conclusion must be that the market for distributed digital preservation services is still in its infancy.

Some lessons learned from the Intermediate Roadmap

An important issue is the level of maturity in the DCH sector to handle distributed digital preservation solutions. E-Infrastructures can reach their maximum potential in serving the DCH preservation practice only if the DCH sector is prepared to exploit the opportunities of the e-Infrastructure. This is obviously not the case today.

Börje Justrell
borje.justrell@riksarkivet.se