

PREservation FORMAts for culture information/e-archives

Introduction to the PREFORMA project

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Contents



PREFORMA project

WHO we are - WHAT we are doing - HOW we are doing it? And FOR WHOM and WHEN.







Project Identity Card



- □ PREFORMA is a Pre-Commercial Procurement project co-funded by the European Commission under FP7-ICT Programme.
- ☐ Start date: 1 January 2014
- Duration: 48 month (end date: 31 December 2017)
- ☐ Total budget for the procurement: 2.805.000 EUR
- ☐ Website: www.preforma-project.eu
- **□** Contacts:
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 - Communication Coordinator: Claudio Prandoni, Promoter Srl, <u>prandoni@promoter.it</u>





Project Partners



- □ RIKSARKIVET, Sweden **Project Coordinator and memory institution**
- ☐ PROMOTER SRL, Italy **Technical and Communication Coordinator**

□ Technical partners

- PACKED EXPERTISECENTRUM DIGITAAL ERFGOED VZW, Belgium
- FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ÄNGEWANDTEN FORSCHUNG E.V, Germany
- HOGSKOLAN I SKOVDE (University of Skovde), Sweden
- UNIVERSITA DEGLI STUDI DI PADOVA, Italy

■ Memory institutions

- STICHTING NEDERLANDS INSTITUUT VOOR BEELD EN GELUID, Netherlands
- Koninklijk Instituut voor het Kunstpatrimonium, Belgium
- GREEK FILM CENTRE AE, Greece
- LOCAL GOVERNMENT MANAGEMENT AGENCY-AN GHNIOMHAIREACHT BAINISTIOCHTA RIALTAIS AITIUIL, Ireland
- STIFTUNG PREUSSISCHER KULTURBESITZ, Germany
- AYUNTAMIENTO DE GIRONA, Spain
- Eesti Vabariigi Kultuuriministeerium, Estonia
- KUNGLIGA BIBLIOTEKET, Sweden





Project Concept



- Memory institutions are facing increasing transfers of electronic documents and other digital media content for long-term preservation.
- □ Data content are normally stored in specific **file formats** for documents, images, sound, video etc., and these files are usually produced by software from different vendors.
- Even if the transferred files are in standard formats, **the correct implementation of standards** cannot be guaranteed:
 - The software used for the production of the electronic files is not in control neither by the institutions that produces them nor by the memory institutions.
 - Conformance tests of transfers are done by memory institutions, but are not totally reliable; different software for testing could end up in different results.
- This poses problems in long-term preservation. Data objects meant for preservation, passing through an uncontrolled generative process, can jeopardise the whole preservation exercise.





Vision



	Digital object	
Authenticity, interpretability "How to understand/interpret the data?"	conceptual object	Semantic Preservation
Object formats "How to open/render the file?"	logical object	Logical Preservation
Bit rot "How to keep the 1s and 0s ?"	physical object	Bit Preservation





Keynote speech



■ Marco De Niet, DEN Foundation:

The challenges of digital preservation as a public mission





Pre-Commercial Procurement (PCP)



- Pre-Commercial Procurement (PCP) is a competition-like procurement method. It enables public sector bodies to engage with innovative businesses and other interested parties in development projects heading at innovative solutions that address specific public sector challenges and needs.
- These innovative solutions are created through a phased procurement of development contracts to reduce risk.
- Pre-Commercial Procurement (PCP) is becoming more and more common within the public sectors of the European Union.





Project Aim and Objectives



- The aim: to implement good quality files in various standard formats for preserving content in a long term.
- The main objective: to give memory institutions full control of the process of conformity tests of files to be ingested into archives.
- The main objective of the PCP launched by PREFORMA: to develop an open source software for the management of the whole conformance testing process, supporting a range of standards, addressing the needs of any memory institution or other organisation with a preservation task.





Open Source Approach



- □ PREFORMA is following an open source approach, with the aim of establishing a sustainable research and development community comprising a wide range of contributors and users from different stakeholder groups.
- □ The open source nature ensures long-term availability of the software, beyond the memory institutions and suppliers involved in PREFORMA.

Licenses

- All software developed during the PREFORMA project will be provided under two specific open source licenses: "GPLv3 or later" and "MPLv2 or later".
- All digital assets developed during the PREFORMA project will be provided under Creative Commons CC-BY v4.0, and in open file formats.





Overall R&D Objective (The PREFORMA Challenge)



- □ Develop an open source conformance checker that:
 - checks if a file complies with standard specifications
 - checks if a file complies with the acceptance criteria of the memory institution
 - reports back to human and software agents
 - perform simple fixes
- Establish an ecosystem around an **open source reference implementation** that:
 - generates useful feedback for those who control software
 - advances improvement of the standard specification
 - advances development of new business cases for managing preservation files





Keynote speech



☐ Evelyn McLellan, Artefactual Systems Inc.:

Business models for open source projects





Target Users and Stakeholders



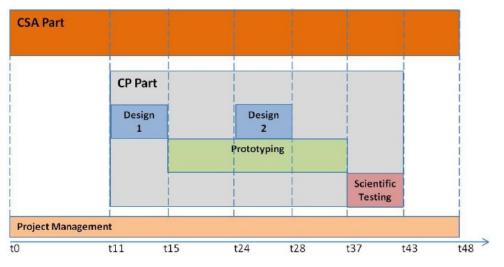
- Memory institutions and cultural heritage organisations, involved in (or planning) digital culture initiatives.
 Developers contributing code for the PREFORMA open
- □ **Developers** contributing code for the PREFORMA open source tools.
- **Research organisations** providing technical advice to cultural stakeholders.
- Standardisation bodies maintaining the technical specifications of the preservation formats covered by PREFORMA.
- **Funding agencies**, such as Ministries of Culture and national/regional administrations, that own and manage digitisation programmes and may endorse the use of the PREFORMA tools in the digitisation process.
- Other projects in the digital cultural heritage domain.
- ☐ Any other organisation planning for long-term preservation of digital content.





Project Implementation Schedule





- Design phase (4 months): November 2014 February 2015
- Prototyping phase (22 months): March 2015 December 2016
 - First prototypes: March 2015 October 2015
 - Re-design: November 2015 February 2016
 - Second prototypes: March 2016 January 2017
- Testing phase (6 months): February 2017 July 2017





PREFORMA Suppliers in the Prototyping Phase



- veraPDF Consortium (led by Open Preservation Foundation and PDF Association) – The PDF/A conformance checker accepted industry-wide (PDF/A)
- EasyInnova Digital Preservation Formats Manager (TIFF)
- MediaArea PREFORMA MediaConch CONformance CHecking for audiovisual files (MKV|FFV1|LPCM)





Need for Open Source Communities



Memory institutions have requirements for very long lifecycles of digital assets.

Therefore, it is necessary to establish sustainable communities related to each Open Source Software (OSS) solution in which open file formats are implemented.





Panel



☐ Chair and rapporteur: Melanie Imming, LIBER

Using the PREFORMA tools: impact and sustainability





Events



Today: Innovation Workshop in Padua in connection with prototype demonstrations.

Forthcoming:

- Training seminars and hands-on workshops planned for Spring 2017 in several European countries on the concept of conformance checking.
- Final Conference that will take place in Tallinn on 11-12 October 2017 to present the final results of the project.



