

Understanding and Implementing PREMIS

A Tutorial

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Abstract – This half day tutorial will provide participants with a short introduction to the PREMIS Data Dictionary [1]. There after the focus is implementation. It will give a basic overview of the standard and explore different models of implementation.

Keywords – preservation strategies, workflows, case studies, best practice, training and education

Conference Topics – Enhancing the Collaboration; Building the Capacity & Capability

I. Introduction

The PREMIS Data Dictionary for Preservation Metadata is a specification that provides a key piece of infrastructure for digital preservation activities, playing a vital role in enabling the effective management, discovery, and re-usability of digital information. Preservation metadata provides provenance information, documents preservation activity, identifies technical features, and aids in verifying the authenticity of digital objects. PREMIS is a core set of metadata elements (called “semantic units”) recommended for use in all preservation repositories regardless of the type of materials archived, the type of institution, and the preservation strategies employed.

II. Summary of the Tutorial

The PREMIS Data Dictionary was originally developed by the Preservation Metadata: Implementation Strategies (PREMIS) Working Group in 2005 and revised in 2008 and 2015. It is maintained by the PREMIS Editorial Committee and the PREMIS Maintenance Activity is managed by the Library of Congress [2].

We have seen a constant call for PREMIS to undertake tutorials, such as this, as more and more organizations come to grips with digital preservation.

This tutorial provides in its first part an introduction to PREMIS and its data model and an examination of the semantic units in the Data Dictionary organized by the entities in the PREMIS data model, objects, events, agents and rights. In the second part, we present how the preservation community can use PREMIS metadata

support tools for the implementation of software, repository systems and data management practices.

In the third segment we present present examples and case studies of PREMIS implementation, using PREMIS in XML and PREMIS in RDF, in relation to the PREMIS Ontology.

Throughout the content presentation, the tutors will include examples of implementation experiences made within their own respective institutions. The tutorial aims at developing and spreading awareness and knowledge about metadata to support the long-term preservation of digital objects.

III. Content Outline

The draft outline for the tutorial is outlined below.

A. *Introduction to PREMIS and community support tools*

1. *Background (brief history and rationale of PREMIS)*
2. *Benefits of implementing PREMIS*
3. *Website, PIG, id.loc.gov*

B. *Implementation*

1. *Outline of main Entities*
2. *Data Dictionary*
3. *Ontology*

C. *Implementation case studies*

1. *PREMIS in METS*
2. *PREMIS in XML*
3. *PREMIS Conformance and repository interoperability*

D. *Wrap up*

IV. Intended Audience

The tutorial will benefit individuals and institutions interested in implementing PREMIS metadata for the

long-term management and preservation of their digital information but who have limited experience in implementation. Potential audience includes cultural heritage operators, researchers and technology developers, professional educators, and others involved in management and preservation of digital resources.

V. Expected Learning Outcomes

A. Participants will understand:

1. *What PREMIS is and why it exists*
2. *The benefits of implementing PREMIS*
3. *The nature of the existing PREMIS community*
4. *The critical role PREMIS plays in the digital preservation community*

B. In addition participants will get insight into:

1. *How PREMIS may be used in conjunction with METS*
2. *How different organizations implement PREMIS within their own repositories*
3. *How PREMIS, deals with Semantic Web Technology*

VI. Short Biographies of Organizers

Karin Bredenberg is a Metadata Strategist at the municipality organization Sydarkivera. She currently serves as the chair of PREMIS EC, co-chair of TS EAS, chair of the DILCIS Board as well as a member of the METS Board. Currently Bredenberg act as the activity lead for specifications in the eArchiving Building block.

Eld Zierau is member of the PREMIS Editorial Committee, since 2013. She is a digital preservation researcher and specialist, with a PhD from 2011 within digital preservation. Originally, she is a computer scientist, and has worked with almost all aspects of IT in private

industries for 18 years, before starting in digital preservation in 2007. She has been working with many aspects of digital preservation, and she is involved as an architect or a consultant on major initiatives such a new digital repository including data modelling of metadata for preservation.

Micky Lindlar joined the PREMIS Editorial Committee in 2019. AT TIB, the German National Subject Library for Science and Technology, Micky leads the Digital Preservation Team, responsibilities of that role include the oversight of a digital preservation system which is used for TIB's own holdings as well as for a Digital-Preservation-as-a-Service solution. Micky has been serving on the Board of Directors of the Open Preservation Foundation since 2012, leads the Rosetta Digital Preservation Working group and is involved with various other national and international digital preservation working groups and initiatives

Acknowledgment

The PREMIS Editorial Committee would like to acknowledge the significant contribution that Angela Dappert has made to the preservation metadata standard. A PREMIS Editorial Committee member since 2007, Angela's passion for digital preservation and metadata have contributed greatly to making PREMIS what it is today. Angela Dappert passed away in July 2021. She will be greatly missed by the preservation metadata community.

References

- [1] PREMIS Editorial Committee, *PREMIS Data Dictionary for Preservation Metadata*, Version 3.0. 2015.
- [2] *PREMIS website*, Last accessed August 11th 2021. [Online]. Available: <http://www.loc.gov/standards/premis/index.html>.