

DIGITALPRESERVATIONEUROPE
DIGITAL PRESERVATION EXCHANGE

EXCHANGE REPORT

Award holder	Hosting institution
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1 Introduction

This report details the overall set of activities that took place during the DigitalPreservationEurope Exchange Programme (DPEX) carried out at the Technical University of Vienna.

The exchange has been promoted by the DigitalPreservationEurope, the successor of ERPANET, a council supported by the European Union with funding under the Sixth Framework Programme, which aims at improving coordination, cooperation and consistency in current digital preservation and curation activities and to secure the longevity of digital assets and heritage.

The exchange took place between the 28th of October and the 10th of November.

2 Institutional context

The exchange took place at the Technical University of Vienna (TU Wien). This institution is located in the heart of Europe, in a cosmopolitan city of great cultural diversity. For nearly 200 years, the TU Wien has been a place of research, teaching and learning in the service of progress. The TU Wien is among the ten most successful technical universities in Europe and is Austria's largest scientific-technical research and educational institution [1].

The Technical University of Vienna is one of the partners of the Planets¹ project (Preservation and Long-term access through Networked Services). Planets is a four-year EU-Funded (FP6) Digital Preservation research and technology development project aiming at increasing Europe's ability to ensure long-term access to its cultural and scientific heritage. Its major goals are the development of:

- Preservation Planning services that empower organisations to define, evaluate, and execute preservation
- Methodologies, tools and services for the Characterisation of digital objects
- Innovative solutions for Preservation Actions tools which will transform and emulate obsolete digital assets
- An Interoperability Framework to seamlessly integrate tools and services in a distributed service network

¹ <http://www.planets-project.eu/>

- A Testbed to provide a consistent and coherent evidence-base for the objective evaluation of different protocols, tools, services and complete preservation plans
- A comprehensive Dissemination and Takeup program to ensure vendor adoption and effective user training.

3 Planets' team

The Planets' team with whom the award holder has had more contact with was composed by seven people. Andreas Rauber, the head of the project; Stephan Strodl, Hannes Kulovits, Christoph Becker and Robert Neumayer, the full-time research and developing team; and Kevin Stadler and Florian Motlik, part-time developers for the project.

4 Activities and results of the exchange

This section provides a detailed description of the events that took place during the exchange.

In the first day of the exchange, the award holder met the Planets team at the Technical University of Vienna. Afterwards, everyone head towards a nice introductory lunch where the award holder was able to get to know all the members of the project.

After lunch, an office with Internet access has been arranged for the award holder and preparations for the following day were initiated. An appropriate schedule for a series of presentations from both parties has been defined, hoping that this would instigate discussion and uncover common ground to guide following days of the exchange.

On the following day, the award holder presented the CRiB platform [2-5] to the Planets team during a 1h30 informal session. During the session an assortment of ideas on how to improve the platform have kindly been provided by the hosting team. Among these ideas was a novel way to calculate the Market Share of a given file format (a very important feature of the CRiB's format evaluation procedure). Stephan suggested using the Internet Archive, or any other Web archiving initiative, to build statistics on the availability and predominance of file formats.

The Planets team was eager to try the services provided by the CRiB so a preparation of a demo application has been initiated.

On the following days the award holder watched a demonstration of the PLATO platform, a very interesting web-based tool to assist preservation planners in the testing and benchmarking of new preservation strategies against a list of criteria and

sample objects. The award holder was very impressed with the large amount of evaluation criteria collected by the Planets team over the years on all sorts of digital materials.

Later on, the award holder assisted to a presentation given by Stephan Strodl on how the Planets Preservation Planning Approach can be accommodated within the current OAIS model. Very insightful work on the OAIS model and the inner workings of some of its deepest components were exposed by the Stephan.

In the evening, the whole team went out for a social programme in the city.

By the end of the first week, due to fact that it was a national holiday on the previous day, things were a bit slow on the office. The award holder spent most of the day reading papers and slides provided by the Planets team to better get acquainted with their work. Some of these papers had not yet been officially published.

On the following week, spent a couple of days exchanging ideas with Christoph Becker on how the new risk assessment services developed by PRONOM [6-8] are going to be integrated with PLATO and how the Preservation Planning framework is being updated to include the wholesome of features being developed by some of the project's partners.

A few hours were also dedicated to test and experiment with the CRiB's services. Planning is underway to include a few of the CRiB's services in the PLATO system.

On the following day two demonstrations were given by the Planets team on previous work developed on Music Information Retrieval. Their research on this subject enabled automatic recognition of style, genre or composer of a piece of music and the retrieval of similar music. Moreover, the information extracted by these methods forms the basis for novel ways of access to music collections.

The demonstrations included an overview of the feature extraction and clustering processes as well as innovative and ubiquitous graphical user interfaces to work with colour maps as means to create coherent music play lists.

On the next days, the award holder engaged on a technical discussion regarding similarity metrics for image comparison. Four different algorithms have been evaluated by the award holder and the results of that evaluation were of interest to the Planets team.

On the last day of the exchange, the award holder spent most of the time discussing ideas for the new DPE Preservation Challenge. The award holder agreed on writing one of the scenarios for the new challenge. Additionally, the award holder reviewed PLATO platform and provided some feedback on its best features and drawbacks.

5 Conclusions and practical information on the exchange

The award holder was very well received by the hosting institution at all possible levels, professional, social and recreational. The shallow planning of this exchange enabled the award holder and the members of the hosting institution to engage on insightful discussions without having to follow a strict plan or schedule. Discussions followed one another at the drift of emotion.

The exchange was very beneficial to award holder as he got to know the work developed by the hosting institution. Even though it was felt that some overlap existed between his personal research and the research being developed at the hosting institution, the general feeling that prevailed was that the research being developed by both parties is very relevant at an international level and that it supports each other. It was particularly gratifying for the award holder to realise that the hosting institution was knowledgeable about his research and that, in a certain sense, it contributed to their own developments.

References

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6 Appendix I

Miguel Ferreira

Miguel Ferreira is a Systems and Informatics Engineer, working as a consultant at the Oporto's Regional Archive and as a researcher at the University of Minho. Since 2003, has been publishing in the field of digital archives, libraries and preservation. Currently, Ferreira is developing work as a Ph.D. student and coordinating several research projects at the Oporto's Regional Archive, the Portuguese Centre of Photography and at the Portuguese National Archives.