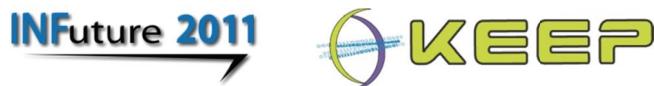


## **INFuture2011 and KEEP Project**



INFuture2011 conference has joined forces with KEEP Project in order to promote the importance of long-term preservation issues concerning digital materials. During the conference, KEEP Project's partners will disseminate their project results through the series of self-contained sessions, all together in the form of workshop.

### **About KEEP Project**

Coordinating organisation of the project is:

- Bibliothèque nationale de France

Other project partners are:

- Jocquin SAS, France
- Koninklijke Bibliotheek, The Netherlands
- Computerspiele Museum, Germany
- University of Portsmouth, United Kingdom
- Deutsche Nationalbibliothek, Germany
- Cross Czech a.s., Czech Republic
- Tessella, United Kingdom
- European Games Developer Federation, Germany

KEEP (Keeping Emulation Environments Portable) aims to develop emulation services (KEEP Emulation Services) to enable accurate rendering of both static and dynamic digital objects: text, sound, and image files; multimedia documents, websites, databases, videogames etc.

The overall aim of the project is to facilitate universal access to our cultural heritage by developing flexible tools for accessing and storing a wide range of digital objects. KEEP will also consider legal issues concerning the implementation of emulation-based systems and propose solutions which comply with European and national copyright laws.

The very success of computing technology, where machines are rapidly superseded, has created a serious and growing challenge of how to preserve access to digital material produced on obsolete machines. Cultural heritage organisations are particularly sensitive to the threat of major data loss resulting from technical obsolescence. KEEP will develop the KEEP Emulation Services to enable the accurate rendering of these objects, designed for a wide variety of computer systems, so that they can be securely accessed in the long term.

KEEP will address the problems of transferring digital objects stored on outdated computer media such as floppy discs onto current storage devices. This will involve the specification of file formats and the production of transfer tools exploited within a framework, and taking into account possible legal and technical issues. KEEP will address all aspects ranging from safeguarding the original bits from the carrier to offering online services to end-users via a highly portable emulation framework running on any possible device. In addition to producing a software package, the project will deliver understanding about how to integrate emulation-based solutions with an operational electronic deposit system. Existing metadata models will be researched and guidelines will be developed for mapping digital objects to emulated manifestations. KEEP will seek ways to integrate its work with the outputs of other digital preservation projects and software (for example Planets and Pronom). Overall, KEEP will contribute to the next generation of permanent access strategies based on emulation.

Although primarily aimed at those involved in Cultural Heritage, such as memory institutions and games museums, the KEEP Emulation Services can also serve the needs of a wide range of organisations and individuals because of its universal approach.<sup>1</sup>

## **KEEP sessions during the INFuture2011 conference**

### **1. Introduction to the Tools and Services of the KEEP Project, including Business Case Drivers and Legal Issues**

Members of the KEEP Project will provide an introduction to the project, explaining its purposes and how its tools and services provide a compelling Business Case for the use of emulation for certain aspects of Digital Preservation. There will also be an introduction to some of the legal issues which arise under international and European Law which have an effect on Digital Preservation.

### **2. Explanation of and hands-on workshop with the KEEP Emulation Framework**

A great many computer emulation programmes exist which might assist with access to old software and data on a variety of platforms. But these can sometimes require considerable expertise to select and configure before they can be used.

The KEEP Emulation Framework has automated much of these activities into a set of open tools which are much more user-friendly.

During this session, the KEEP Team will demonstrate, and then invite delegates to experiment with the tools in the Framework.

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<sup>1</sup> About KEEP, <http://www.keep-project.eu/ezpub2/index.php?/eng/About-KEEP>

### **3. Explanation of and hands-on workshop with the KEEP Data Transfer Framework and Mediabase**

Before old data can be accessed, it might be necessary to transfer it from old and obsolete data carriers – for example 5.25-inch floppy disks.

In this session, the KEEP Team will explain how their Data Transfer Framework will operate – both stand-alone and also as a service with the PLANETS suite of tools and services.

There will also be a demonstration of the KEEP Mediabase, which delegates will be able to experiment with themselves.

### **4. Metadata Considerations in Emulation and TOTEM database**

Although issues of Metadata in Digital Preservation are well-known and much-written about, different requirements arise when planning to retain the ability to emulate old systems. In this session, the KEEP Team will consider this topic in more detail and will introduce delegates to the TOTEM database, designed within KEEP to identify the components necessary to access different types of data and also the relationships between different hardware, software and operating systems. Delegates will have the opportunity to experience this tool through hands-on training and will retain access to it, via the Internet, after the end of the conference.

### **5. Planning for the future use of emulation using the KEEP Virtual Machine**

The KEEP Virtual Machine is an innovative piece of research which has produced software enabling emulation to provide a sustainable means to bridge the changes in hardware and operating systems which occur all too frequently. The KEEP Team will provide a detailed explanation of the technical approach which has been taken, and will demonstrate current prototypes. Delegates will have an opportunity to take part in some hands-on experimentation.