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LNCS 8092

# Research and Advanced Technology for Digital Libraries

International Conference on Theory and Practice  
of Digital Libraries, TPDL 2013  
Valletta, Malta, September 2013, Proceedings

 Springer

*Commenced Publication in 1973*

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Proceedings



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ISSN 0302-9743                            e-ISSN 1611-3349  
ISBN 978-3-642-40500-6                e-ISBN 978-3-642-40501-3  
DOI 10.1007/978-3-642-40501-3  
Springer Heidelberg New York Dordrecht London

Library of Congress Control Number: 2013945880

CR Subject Classification (1998): H.2.8, H.3, I.7, H.2, I.2, H.4, H.5

LNCS Sublibrary: SL 3 – Information Systems and Application, incl. Internet/Web and HCI

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*Typesetting:* Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media ([www.springer.com](http://www.springer.com))

# e-Infrastructures for Digital Libraries □ the Future

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## 1 Background

The digital ICT revolution is profoundly changing the way knowledge is created, communicated and is being deployed. New research methods based on computing and "big data" enable new means and forms for scientific collaboration also through policy measures supporting open access to data and research results. The exponential growth of digital resources and services is supported by the deployment of e-Infrastructure, which allows researchers to access remote facilities, run complex simulations or to manage and exchange unprecedented amounts of digital data.

This panel will bring together leading e-Infrastructure experts coming from different subject domains addressing a range of different types of digital materials, services and collaborative tools supporting a variety of research communities to discuss with the Digital Libraries community the challenges modern research brings in terms of efficiency and relevance for an open research society.

## 2 Cultural Heritage Perspective

The numerous digitisation initiatives carried out by memory institutions (museums, libraries, archives) in Europe and world-wide have produced a large amount of cultural content\data, which is continuously growing. The existing services – e.g. the metadata aggregators, such as Europeana and the national cultural portals, play a key role to mobilise attention and resources on the general theme of the digitisation of cultural heritage. On the other hand, the research infrastructures (like Dariah) are currently missing most of the cultural heritage data, including the data that are held by local institutions.

The idea of a digital cultural heritage e-Infrastructure is to set-up a "common pot", where institutions can deliver safely their content, which can be seen as a

“continuum” by the users. On the cultural heritage side, the panel will showcase such initiatives as DCH-RP (Digital Cultural Heritage Roadmap for Preservation). It will also benefit from the analysis of evidence done within the ENUMERATE project which is gathering evidence and analysing the current state in digitisation, accessibility online and preservation across the cultural heritage institutions in Europe.

These examples will provide a basis to discuss how cultural institutions could be more proactive in expressing their needs in terms of e-Infrastructures, and how they could benefit in a bigger extent from the already established e-Structures.

### 3 Research Data Perspective

The panel will also discuss recent development within e-Infrastructures targeting support for the research communities. It will look into EUDAT, a project that brought together data infrastructure providers and practitioners to discuss current data infrastructure challenges and solutions, with a focus on interoperability, cross-disciplinary and cross-border collaboration; OpenAIREplus project which aims at bridging the missing link between the research articles, the data and the project funding. Building on the OpenAIRE portal and OpenAIRE compatible repositories, and EGId.eu which is a not-for-profit foundation established under Dutch law to coordinate and manage the European Grid Infrastructure (EGI) federation on behalf of its participants: National Grid Initiatives (NGIs) and European International Research Organisations (EIROs), as well as the “Coordination & Harmonisation of Advanced e-Infrastructures for Research and Education Data Sharing” (CHAIN-REDS) project and its activities to foster and support worldwide data infrastructures. Furthermore, Projects like APARSEN and SCIDIP-ES are bringing the perspectives of research data and cultural heritage infrastructures together.

### 4 Key Questions

The experts in the panel will provide their perspective on the following matters:

- What is the relation between the e-Infrastructure they are involved in and digital libraries research and development?
- What is their expectation on the capacity building impact of their e-Infrastructure?
- What support is needed for various stakeholders in relation to future e-Infrastructure developments?
- Which are the most critical factors for the success of e-Infrastructures' deployment?