Federating Digital Repositories to better serve Community Contexts
Digital Repositories Research Group, 18 March 2010, Munich, Germany
OGF28

"*Data Management has been one of the key topics in distributed and Grid computing for many years. The Digital Repositories Research Group is taking this topic to the next level exploring commonalities in different architectures and metadata handling. The outcome of this group will give a major push to interoperability of digital repositories and ease their exploitation in distributed computing environments*."
Erwin Laure, Director of PDC-HPC, Royal Institute of Technology (KTH), Sweden

Embedding repositories into community contexts
Thursday 18 March 2010, 13:30 – 15:00, Room: HGB-A 120
The success of existing repositories is inextricably bound up with how repository services link into the application context, thus driving community uptake. Like a (generic) database and (application-specific) database schemas and applications, repositories have generic infrastructure services and application-specific data models and services just like any generic database, application-specific database schemas and applications. This session looks at successful models for repository-based infrastructure projects and specifically at the interface of application-specific services and community-specific workflows.

"*By connecting the distributed computing, curation and repository communities, OGF's Digital Repository Research Group is working towards an architecture study and collection of metadata use cases. This will ultimately help us understand how current and emerging standards can bring about interoperability*", says **Nicholas Ferguson**, OGF.eeig and Co-chair of the DR-RG.

Agenda
13:30 – 13:50 Andreas Aschenbrenner, OGF DR-RG Co-Chair, *Achievements & Next Steps*
13:50 – 14:10 Holger Brocks, University of Hagen, *SHAMAN & DReSNET*
14:10 – 14:30 Harry Enke, Astrophysical Institute Postdam - *D-Grid and the Astronomy Community*
14:30 – 15:00 Roundtable Discussion

Evolving the architecture of grid-based repositories and repository federations – In synergy with the GRDI2020 Technological Working Group
Thursday 18 March 2010, 15:30 – 17:00, Room: HGB-A 120

GRDI2020
A Vision for Global Research Data Infrastructures

The competiveness of European research hinges on our ability to open up new research perspectives by ensuring diverse data repositories are accessible and interoperable across geographical and disciplinary boundaries and by overcoming fragmentation in the current landscape. A new European project, GRDI2020 is charting a course for data infrastructures that truly serve the needs of diverse domains, from science to culture, that are global in nature and that place Europe in a strong position to drive forward innovative research.

GRDI2020 is achieving its objectives through a focused governance model that harnesses the global expertise that exists through an Advisory board and two Working Groups investigating technical, organisational and policy issues. These experts will help pinpoint commonalities across diverse disciplines and bring into sharp relief best practices, leading to the GRDI2020 Roadmap to shape the global research data infrastructures for the decades ahead.

OGF28 provides the back-drop to the 1st brainstorming session of GRDI2020's Technological Working Group led by Erwin Laure, KTH, which is chartered with addressing technical impediments for GRDI and offering solutions to overcome them.

GRDI2020 - Towards a 10-year Vision for Global Research Data Infrastructures - www.grdi2020.eu
GRDI2020 is funded by GÉANT & Infrastructure unit of DG-INFSO of the European Commission under its 7th Framework Programme.

Agenda
15:30 - 15:50 Erwin Laure, KTH – An Introduction to GRDI2020
15:50 - 17:00 Brainstorming Session

REPRISE (Repository Preservation Interoperability) Workshop
2 December 2009, London, UK

"*Responsibilities of trusted repositories embrace both technical and organisational aspects. This workshop discussed organisational requirements for technical infrastructure, and fostered discussion between the e-Infrastructure and curation communities*". **Andreas Aschenbrenner**, Goettingen University & Co-chair of OGF's DR-RG

The REPRISE (Repository Preservation Infrastructures) Workshop, 2 December 2009 during the 5th International Conference on Digital Curation (ICDC2009) was a joint initiative of OGF-Europe, OGF's Digital Repository Research Group (DR-RG), D-GRID, WissGrid and DReSNet and the 6th in a series of one-day events exploring DR architectures and metadata challenges.

While object semantics are essential for interoperability within and between information environments, the community has developed various mechanisms to semantically annotate digital objects and deal with heterogeneity in these semantic annotations. The workshop therefore took these mechanisms for object semantics as its starting point, and focused on the semantics of preservation services, architectures and organisations.

Andrew Treloar Technology Director, Australian National Data Services (ANDS) - *The Australian National Data Service and loosely-coupled verb-based architectures*

John Kunze, Preservation Technologies Architect, University of California Curation Centre (UC3), Californian Digital Library – *Preservation is not a place*

Kevin Ashley, Head of Digital Archives Department, London University Computer Centre and expert in DL.org (Digital Library Interoperability, Best Practices & Modelling Foundations – www.dlorg.eu) Policy Working Group – *Audit, outsourcing and interoperability of preservation*

Ross King, Project Co-ordinator, Austrian Institute of Technology & the European project Planets - *The Planets Interoperability Framework: An Infrastructure for Digital Preservation Access*

Paolo Missier, Research Fellow, University of Manchester - *Research objects, myExperiment and Open Provenance for collaborative e-Science*

Insights were delivered by Andrew Treloar, Australian National Data Services (ANDS); John Kunze, Californian Digital Library; Ross King, Austrian Institute of Technology and representative of the European Planets project; Paolo Missier, University of Manchester and Kevin Ashley from the London University Computer Centre.

The workshop explored various approaches to design preservation environments such that they can deal with heterogeneous material, evolve over time, and be open to share services with other preservation environments: the focus on human actions ("verbs") rather than technical services in ANDS, Andrew Treloar, the micro-services in UC3 with John Kunze focusing on the robust basics in file systems, as well as a Java-based, cross-repository interoperability framework by Planets, as presented by Ross King.

A coherent and trustworthy preservation system emerges from these building blocks through horizontal mechanisms that are both technical, such as provenance, as cited by Paolo Missier and organisational, such as audit and outsourcing, as cited by Kevin Ashley, who brought into sharp relief the broader perspectives of interoperability, moving beyond metadata, APIs and wire protocols to encompass policies, comparability and markets with reference to DL.org.

"*DL.org's Policy Working Group is aimed at identifying and investigating crucial policy interoperability issues arising in the implementation of large-scale Digital Libraries; identifying the state of the art in policy solutions implemented in other contexts, such as through the initiatives supporting the WG, and at proposing policy solutions*". **Perla Innocenti**, HATII, University of Glasgow, Leader of the Policy Working Group.

Related European & National Initiatives