

The Research Data Alliance

Stefanie Kethers¹, Mark Parsons², Andrew Treloar¹, Amir Aryani¹, Simon Cox³

¹ Australian National Data Service, Caulfield, VIC, Australia,
{Stefanie.Kethers|Andrew.Treloar|Amir.Aryani}@ands.org.au

² Rensselaer Polytechnic Institute, Troy, NY, USA, parsom3@rpi.edu

³ CSIRO Land and Water, Graham Road, Highett, VIC, Australia, Simon.Cox@csiro.au

DESCRIPTION

The current global research data landscape is highly fragmented, by disciplines or by domains, from oceanography, life sciences and health, to agriculture, space and climate. When it comes to cross-disciplinary activities, the notions of "building blocks" of common data infrastructures and building specific "data bridges" are becoming accepted metaphors for approaching the data complexity and enable data sharing. The Research Data Alliance (RDA, <http://rd-alliance.org>) aims to build the social and technical bridges that enable open sharing of data. The RDA vision is researchers and innovators openly sharing data across technologies, disciplines, and countries to address the grand challenges of society.

RDA enables data to be shared across barriers through focused Working Groups and Interest Groups, formed of experts from around the world – from academia, industry and government. Participation in RDA is open to anyone who agrees to its guiding principles of openness, consensus, balance, harmonisation, with a community driven and non-profit approach. It was started in 2013 by a core group of interested agencies – the Australian Government's [then] Department of Innovation, the European Commission, the US National Science Foundation and National Institute of Standards and Technology. RDA also has a broad, committed membership of individuals – now 1600 from 70+ countries since RDA was launched in March 2013 - dedicated to improving data exchange.

This BoF session first provides an overview of the Research Data Alliance. It then offers an opportunity for Australians involved in RDA to talk about the advantages of engaging in RDA Working and Interest Groups. The second part of the session will open the floor to ideas and questions from the audience to the panel, which will consist of:

- Mark Parsons (Secretary General, RDA) (TBC)
- Andrew Treloar (Co-Chair, RDA Technical Advisory Board)
- Amir Aryani (Co-Chair, RDA Working Group on Data Description Registry Interoperability)
- Simon Cox (Member, RDA Interest Groups on Marine Data Harmonization, Geospatial Information, Public Sector Information, Urban Data)

Outline of the session:

Session chair: Stefanie Kethers (RDA Secretariat)

Topic	Content	Speaker	Duration
A brief introduction to RDA	What is RDA, and how did it emerge?	Mark Parsons	10 mins
Working Groups	Perspective from a Working Group chair	Amir Aryani	5 mins
Interest Groups	Perspective from an Interest Group member	Simon Cox	5 mins
Ideas collection	Collection of topics that participants are interested in, which are (or are not yet) represented as RDA Working or Interest Groups	Facilitator: Stefanie Kethers (RDA Secretariat)	10 mins
Ideas analysis, discussion and questions from participants	Panel: Mark Parsons (RDA Secretary General) (TBC), Andrew Treloar (Co-Chair, RDA	Facilitator: Stefanie Kethers (RDA Secretariat)	30 mins

	Technical Advisory Board), Amir Aryani (Working Group Co-Chair), Simon Cox (Interest Group member),		
--	---	--	--

ABOUT THE SPEAKERS

For each speaker, please provide a short bio of 150-200 words.

Mark Parsons:

Before being appointed Secretary General of the Research Data Alliance, Mark was the Managing Director of the US Component of the Research Data Alliance and the Rensselaer Center for the Digital Society. He focusses on stewarding research data and making them more accessible and useful across different ways of knowing. He has been leading major data stewardship efforts for more than 20 years, and received the American Geophysical Union Charles S. Falkenberg Award as an advocate of robust data stewardship as a vital component of Earth system science and as an important profession in its own right.

Prior to joining Rensselaer, Mark was a Senior Associate Scientist and the Lead Project Manager at the National Snow and Ice Data Center (NSIDC). While at NSIDC, he defined and implemented their overall data management process and led the data management effort for the ICSU/WMO International Polar Year 2007-2008. He is currently active in several international committees while helping lead the Research Data Alliance in its goal of accelerating innovation through data exchange. His research interests include the role of scientific social interaction in the success, development, and extension of data sharing networks.

Simon Cox:

Simon Cox is trained in geophysics, with a PhD from Columbia following degrees from Cambridge and Imperial College London. His engagement with informatics began in the Australian Geodynamics CRC, where Simon moved its reporting onto the emerging World Wide Web, including deployment of a web-mapping system for Australian geology and geophysics in 1995. The challenge of content management for the AGCRC led to an interest in metadata-based systems, and Simon's engagement with standards when he joined the Dublin Core Advisory Council. Work on XML for mineral exploration data led to leadership in the GeoSciML project in collaboration with a number of geological surveys. An interest in tying these into broader interoperability systems led to engagement with the Open Geospatial Consortium, where he co-edited the Geography Markup Language (GML) standard, and developed Observations and Measurements (O&M) as a common language for in situ, ex situ and remote sensing. O&M became an ISO standard and now forms the basis for operational systems in diverse fields including air-traffic, climate and weather, water data transfer and environmental monitoring applications. In 2009-10 he spent a year at the EC Joint Research Centre in Italy working on integration of GEOSS and INSPIRE. He has served on the council of the IUGS Commission for Geoscience Information and the International Association for Mathematical Geosciences, and amongst other roles currently serves on the OGC Architecture Board, the ISO/TC 211 Ontology Management Group, the steering committee of the Ocean Data Interoperability Platform (ODIP), the International GeoSample Number (IGSN) Implementing Organization, and the Australian Government Linked Data Working Group. Simon is a Senior Principal Research Scientist in CSIRO Land and Water, based in Melbourne, working on a variety of projects across environmental informatics and spatial data systems.

Amir Aryani:

Amir Aryani is a project manager at the Australian National Data Service (ANDS) located at the Australian National University (ANU). He has more than fifteen years of Information Technology experience across the full software development life cycle. He has completed his PhD in the field of software evolution at the school of computer science, RMIT university, and he has peer-reviewed publications in fields of Software Engineering, Software Evolution and Maintenance, Domain-Based System Analysis, eResearch and Data Mining.

Andrew Treloar:

Dr Andrew Treloar is the Director of Technology for the Australian National Data Service (ANDS) (<http://ands.org.au/>), with particular responsibility for demonstrating the value of bringing together data from different disciplines to answer new questions, and international engagement. In 2008 he led the project to establish ANDS. Prior to that he was associated with a number of e-research projects as Director or Technical Architect: ARCHER (<http://archer.edu.au/> - an e-Research support environment), DART (<http://dart.edu.au> - data acquisition and analysis), and ARROW

(<http://arrow.edu.au/> - institutional repository software), as well as the development of an Information Management Strategy for Monash University. His research interests include data management, institutional repositories and scholarly communication. He never seems to be able to make enough time for practising his 'cello, or reading, but does try to prioritise talking to his chickens and working in his vegetable garden and orchard. Further details at <http://andrew.treloar.net/> or follow him on Twitter as @atreloar.

Stefanie Kethers:

Stefanie Kethers is a Senior Business Analyst with the Australian National Data Service. Stefanie's background is in computer science, and she has a strong interest in supporting researchers within and across disciplines by bringing data and people together. Stefanie received her Dr. (PhD) from RWTH Aachen University, Germany, in 2000 with a thesis on modelling and analyzing cooperative processes. She worked as a researcher at CSIRO and Monash University, continuing her work on cooperative processes, before joining ANDS in 2009.

Stefanie has published more than 20 scientific papers and has reviewed papers for several international conferences and workshops. Her research interests include supporting group work, modelling cooperative processes, and investigating trust relationships in diverse settings.