

metadata**Australia**2010

sharing data, sharing ideas

Canberra, Australia 26-27 May 2010

Metadata 2010 is the third conference to be held in Australia following the very successful International Metadata Forum, held in Sydney in May 2008, and “Sharing Data, Sharing Ideas” held at the Australian Bureau of Statistics in May 2009.

This third forum will be held at University House, Australian National University, Canberra.



Australian Government



Programme

Day 1 - Wednesday 26th May, 2010 (Hall Sessions)

Time	Foyer	Hall	Session Title
8:30 AM	Registration		
9:00 AM		Welcome and Introduction Don Bartley, Chair Metadata 2010	Conference overview and context
9:10 AM		Opening Address Senator Kate Lundy, Senator for the Australian Capital Territory	(Senator Lundy's presentation will be by "pre-recorded video")
9:20 AM		Metadata 2010 and the "Digital Brand" Michele Berkhout, Digital Brand	Digital Brand and Enterprise 2.0 - built on data and metadata
9:45 AM		KEYNOTE 1 - SEMANTICS AND GOV 2.0 Mills Davis, Project 10X - TBC	Semantics and Gov 2.0
10:30 AM	Morning tea		
11:00 AM		BIG STUFF Chair: Terry Hanisch, AGIMO	
		Speakers: Paul Madden, Director, Standard Business Reporting, Australian Treasury	SBR - Revolutionising Business Reporting
		Philip Dean, BSTTech Consulting	Sharing and Security - two sides of the metadata coin
		Michael Beahan, Australian Bureau of Statistics	Data Standards, or How I learned to Stop Worrying and Love Metadata
		Panel discussion	
12:30 AM	Lunch		
1:30 PM		INFORMATION OVERLOAD Chair: Jon Gray, NICTA	
		Speakers: Pierre Truter, Airservices Australia	International, regional and national focus on integrated Aeronautical Information Management Systems
		Ingrid Mason, Powerhouse Museum	Putting metadata online: practice change and technical innovation
		Kalantari Mohsen, University of Melbourne	Different approaches for automating spatial metadata and the impacts of these approaches on critical components
		Panel discussion	
3:00 PM	Afternoon tea		
3:30 PM		LINKED DATA AND SEMANTICS IN PRACTICE Chair: Don Bartley	
		Speakers: Seth van Hooland, University of Madrid, Spain	Optimizing metadata creation, re-use and preservation in the cultural heritage sector
		Phil Tickle, Geoscience Australia	NEDF Portal and Imagery Metadata tools
		Jack Wilmer, Defence Information Systems Agency, USA	Metadata Registry - Enabling Information Sharing
		Panel discussion	
		WHAT THE METADATA IS TELLING US - KEY THEMES FROM THE DAY	
4:30 PM		Anni Rowland-Campbell, Digital Brand Pty Ltd	Bringing linked data and organisations together
5:00 PM		Close	
17:00-18:00		Drinks - Fellow Bar	

Day 1 - Wednesday 26th May, 2010 (Common Room Sessions)

Time	Foyer	Common Room	Session Title
11:00 AM		FINDING WHAT YOU WANT	
		Chair: Doug Wilson, Department of Defence	
		Speakers: Paul Hagon, National Library of Australia	Searching by Colour
		Vanessa Scott, Department of Innovation, Industry and Regional Development (Vic)	Seek and ye shall find: information, directories & mapping tools.
		Holger Kohler, Defence Science & Technology Organisation	Intelligence Information Fusion Demonstration Environment
		Panel discussion	
12:30 AM	Lunch		
1:30 PM		LINKED DATA	
		Chair: Simon Wall, Australian Bureau of Statistics	
		Speakers: Warwick Graco, Australian Taxation Office	Semantic approaches to data matching, data mapping and data mining
		Vimal Mohindra, Maritec Digital Data	Open resource definition - a web application for capturing and linking data using natural language structures
		Leanne Fry, E8 Consulting	Government Transparency - how information linkage, semantic smarts and a focus on the customer could help children in care
		Mel Taylor, Australian Institute of Health & Welfare	National Minimum Data Sets in Health and Community Services
		Panel discussion	
3:00 PM	Afternoon tea		
3:30 PM		ACCESS FOR ALL	
		Chair: TBC	
		Speakers: Jacqui Begbie, Department of Finance and Deregulation, Australian Government Information Management Office	National Transition Strategy for WCAG 2.0
		Liddy Nevile, La Trobe University	Accessibility through metadata
		Henk Verhoeven, Intergen	Working with Charity
		Panel discussion	
4:30PM		To the Hall for session	Bringing linked data and organisations together

Programme

Day 2 - Thursday 27th May, 2010 (Hall Sessions)

Time	Foyer	Hall	Session Title
9:00 AM		RECAP FROM DAY ONE - KEY THEMES	
9:10 AM		KEYNOTE 2 - DATA LINKAGE	
		Chair: Don Bartley	
		Linton Besser, The Sydney Morning Herald	Bringing Government Data to Life
9:30 AM		DATA LINKAGE - PANEL and Discussion	
		Speakers:	
		Chris Beer, Department of Education, Employment and Workplace Relations	Government Publications - Satisfying the needs of the library and the Internet
		Peter Alexander, Department of Finance	Metadata in Service Delivery Reform
		Panel discussion	
10:30 AM	Morning tea		
11:00 AM		SOLVING PROBLEMS - PANEL AND DISCUSSION	
		Chair: Mark Barling, Fuji Xerox Australia	
		Speakers:	
		Dominique Murphy, Department of Defence	The CARO Digitisation Project
		Andrew Baker, Fuji Xerox Australia	
		Neville Shefe, Department of Justice and Attorney-General (Qld)	A Postcard from the future - the revitalisation of the Queensland Registry of Births, Deaths and Marriages
		Stephen Bedford, Department of Services, Technology and Administration (NSW)	Metadata and document management
		Panel discussion	
12:30 AM	Lunch		
1:30 PM		BUSINESS INTELLIGENCE - PLENARY	
		Chair: Michele Berkhout, Digital Brand	
		Speakers: Michael Dixon, PSMA Australia	
		Luciano Quadraccia - Centrelink	Practical Metadata and its Management for National Spatial Datasets
		Maarten ven der Kleij, Department of Veterans Affairs	Why is it so? Turning information into intelligence
		Guido Governatori, NICTA	Law, Metadata and Semantics
		Panel discussion	
3:00 PM	Afternoon tea		
3:30 PM		BRINGING IT ALL TOGETHER - LEAD IN TO CAMP	
		Don Bartley, Chair Metadata Australia 2010 Anni Rowland-Campbell, Digital Brand	"Lead in to Unconference - Friday 28th May" overview and links to conference
4:30 PM		Close	

Day 2 - Thursday 27th May, 2010 (Common Room Sessions)

Time	Foyer	Common Room	Session Title
11:00 AM		METADATA EXTRACTION AND CULTURAL RESOURCES Chair: Andrew Wilson, Australan National Data Service	
		Speakers: Pru Mitchell, Education Network Australia Euan Cochrane, Archives New Zealand	Metadata Extraction Projects for Education Network Australia
		Amanda Lawrence, Swinburne University	The generic nature of structured data →the possibility of documenting facts and observations from diverse disciplines using a single standard Social Policy Online
		Panel discussion	
12:30 AM	Lunch		
1:30 PM		BUILDING CAPABILITIES - PLENARY Anni Rowland-Campbell, Digital Brand	
		Speakers: Liz Marchant, ANZLIC the Spatial Information Council John Weaver, Australian Government Office of Spatial Data Management	The importance of building tools for the spatial data marketplace
		Laurent Lefort, CSIRO ICT Centre and W3C Australia Office	Semantically-Enabled Standard development
		Kathryn Moyle, University of Canberra	Building capacity: what can the Digital Education Revolution deliver?
		Panel discussion	
3.30PM	Afternoon Tea		

Speakers



Peter Alexander,
Department of Finance

Metadata in Service Delivery Reform

The recent Service Delivery Reforms announced by the Government <http://www.worksforyou.gov.au/> will require significant changes to the way that Medicare Australia, Centrelink, the Child Support program and the broader Department of Human Services deliver services to customers. Over time Centrelink, Medicare Australia and the Child Support Agency will be operating _as one_ so that, where possible, service delivery needs are met through a single contact. At the moment there is not a well co-ordinated and integrated service delivery system across governments and non-government organisations in Australia. As a result, people with more complex needs may not be aware of available government support, or may simply not have access to services they need. This also increases government program costs and prevent them from realising social inclusion policy outcomes. The use of metadata will critical in this transition to a more coordinated and integrated service delivery program.

Peter Alexander manages the Online Services Branch within the Australian Government Information Management Office a business group within the Department of Finance and Deregulation. The branch is responsible for delivering the Australian Government Online Service Point (AGOSP) program to upgrade australia.gov.au, is leading work on Government 2.0 approaches and Australian Government web site policy. Peter has worked in the Federal Government across several Departments including: the Department of Industry Tourism and Resources on business.gov.au, and the National Office for the Information Economy and Department of Finance and Deregulation on ICT procurement, ICT security, Web 2.0 development and whole of government website policy and development.



Andrew Baker
Fuji Xerox Australia

The CARO Digitisation Project

An overview case study in the conversion of hard copy records to soft copy whilst the project complexity increased and the metadata standard shifted. Following project approval and funding, a project team was established in 2007 to initiate and manage the digitisation of Army personnel records for discharged members. Having digitised an index to these records the project has commenced the digitisation of Vietnam service records. The presentation will also provide an overview of the imaging and workflow system designed to process these records with particular emphasis on the methods and challenges surrounding the capture of metadata.

Andrew is a Consultant with Fuji Xerox Global Services. Andrew specialises in information management and has over 20 years experience in the IT industry and Government sector.



Michael Beahan
Australian Bureau of Statistics

Data Standards or: How I Learned to Stop Worrying and Love Metadata

New standards to support new ambitions. The ABS is implementing DDI and SDMX as new data and metadata standards. This presentation will discuss the standards, the ABS ambition, what this means for those wanting better access to ABS data and the community benefits of a broader adoption of these standards

Michael Beahan is currently the Branch Manager for Data Management and Classification in the Australian Bureau of Statistics. Michael joined the Bureau seven years ago and his 20 year public service career has centred on data mining, computer modelling, data dissemination and information management.



Stephen Bedford,
Department of Services, Technology and Administration (NSW)

Metadata and document management

Metadata and document management A key issue with metadata and electronic documents in an office environment is that attribution is not done by information professionals, but potentially all staff of an organisation, leading to user resistance. This paper will discuss a tool in use in NSW Government (templates backed up with a macro) which extracts metadata from documents with no user involvement.

Stephen Bedford spent 10 years as an archivist at the Archives Authority of NSW, much of that time advising on records management matters. He then decided he probably should become a records manager, to understand what he was advising on. He has worked at the Reserve Bank of Australia, the NSW Department of Education and Training, the State Library of NSW, and the Australian Broadcasting Authority. He is a member of the Records Management Classification Subcommittee IT21-09 of Standards Australia, and currently works for the Department of Services Technology and Administration.



Chris Beer,
Department of Education, Employment and Workplace Relations

Government Publications - satisfying the needs of the library and the Internet

Starting with a legacy of over a hundred sites, tens of thousands of documents and little to no metadata, we trace the development of a search based centralised online publications repository from concept to production. This presentation will cover not only the development process, but also examine the hurdles, highlights, lessons learnt and implementation of potentially disparate metadata schemas that allows this system to meet the requirements of legislation and the library sector with specific regards to AGLS metadata and bibliographic metadata schemes such as Resource Description and Access (RDA) or MARC21.

Chris Beer is a Project Manager working in online communications delivery at the Australian Department of Education, Employment and Workplace Relations. He has over 15 years experience in ICT, both in the public, private and not-for-profit sectors. He has previously worked with extensively with online library and research systems for the Alcohol and other Drugs Council of Australia as a Systems Administrator, and as the Communications and Information Manager for the Forum for European-Australian Science and Technology. Chris also serves as an Invited Expert to the World Wide Web Consortiums' e-Government Interest Group and is the co-ordinator of the Best Practices in using Web Technologies to deliver Government Services Project Taskforce for the group.



Jacqui Begbie,
Department of Finance

National Transition Strategy for WCAG 2.0

Australia has endorsed the new web Content Accessibility Guidelines (version 2.) developed by the World Wide Web Consortium and requires that all Australian Government agencies comply with the guidelines set out by the end of 2014. http://www.financeminister.gov.au/media/2010/mr_052010_joint.html . This presentation on the draft National Transition Strategy for WCAG 2.0 outlines the proposed way forward for government and sets out an implementation plan for agencies to achieve compliance, making their websites more accessible by the end of 2014.

Jacqui is Director of Web Policy for Accessibility and Style at AGIMO in the department of Finance and Deregulation. She is responsible for developing strategy and policy for the Australian Governments web presence around accessibility and how the government uses new technologies to improve access to government information and services. Jacqui also manages the Australian Governments style publication. With a strategic management background working in e-commerce for Phillips Electronics, Macquarie Bank and News Corporation, she has lead the development of many prominent websites. Jacqui has formal qualifications in marketing and business and has a Master of Science in Strategic Foresight from Swinburne University of Technology.



Michele Berkhout
Digital Brand

Michele has framed her 20 plus years of marketing and communications experience within the context of technology, culture and society, both domestically and internationally, interpreting and influencing the interactions between consumers, technology and businesses and more personally, in the broader political environment. Her keen focus on delivering brands, processes and communications that provide exceptional customer experiences is driven by the belief that deep customer engagement and relevancy can only occur if organisations adopt and maintain an information driven, customer centric approach. Over the past few years Michele has designed

and initiated research into the dynamics of customer interactions relative to communities, businesses and media. Through this she has demonstrated that “respectful” conversations which recognise individuals and the community Gestalt as well as organisational authenticity have emerged as primary requirements to ongoing dialogue and customer engagement. She has also designed and implemented real-time engagement models that are sensitive to the dynamics of conversations, leveraging the world of data and digital and therefore enabling respectful conversations to occur. More recently she has worked on the application of semantic and other emerging web technologies within the Gov 2.0 space in particular with a paper as part of the Gov 2.0 Taskforce, and more recently working with the Metadata organising committee. “The ability to communicate to achieve mutually beneficial outcomes drives my passion to ask the right questions. With the right questions interrogating information, you can interpret complexity and diversity to bring understanding that translates into relevant results. I love the science of marketing, the application of data to drive communications that are relevant and the disruption that technology in the hands of consumers brings. I am very lucky to be in this field at a time when there is so much data, the technology to enable us to interpret it and such demanding circumstances.



Linton Besser
The Sydney Morning Herald

Bringing government data to life

The lack of government data available to the general public is often bemoaned by Australian journalists. Much of their work involves drawn-out battles with press secretaries for the most basic data, leaving less time for reflection and analysis. Unfortunately, raw, unfiltered information is a rarity in this country, particularly by comparison with other jurisdictions like the United States. But things are slowly changing. A modicum of government data is becoming available and it provides exciting opportunities for reporters, as well as the general public, to better scrutinise the

decisions of politicians and bureaucrats.

Linton Besser is a journalist at The Sydney Morning Herald, currently stationed in the newspaper’s investigative unit. He has previously worked for the ABC, Channel Nine and The Bulletin.

Speakers



Euan Cochrane
Archives New Zealand

The generic nature of structured data - the possibility of documenting facts and observations from diverse disciplines using a single standard

In order to fully realize the goals of the semantic web project large volumes of data need to be made available in well documented forms. Across all data intensive disciplines it is rare to find well documented datasets. It is likely that one of the reasons for this is a lack of tools to enable users to easily document their datasets in a way in which the meaning can be comprehended to any reasonably informed user. This in turn is likely caused by a high cost for tool developers due to a small market for any data documentation tool that is intended to address a single discipline. If a tool could be developed that enabled the documentation of data from across many disciplines then this would allow for developers to get a greater reward from their time investment as they would have a larger market to sell to. Given a greater potential pay back developers would be more likely to invest time making the tool user friendly and address helping to make it easier for individuals to document their data with the least amount of effort. In order to have such a tool it can be argued that one prerequisite would be a single standard in which to document data from across different disciplines. There are currently a number of standards for documenting data. De-facto standards include data capture software formats such as excel files, SAS, SQL, etc. In addition to these there are two primary standards for documenting statistical data that have been used for exchanging between different user groups (or across time): the Statistical Data and Metadata eXchange (SDMX) standard and the Data Documentation Initiative (DDI) standard. Along with these, geospatial data has its own standards as do meteorological and health data etc. Additionally, when scientists conduct their ad-hoc and sometimes long-term experiments that may create datasets of huge value, they often create de-facto standards that very few people end up understanding fully. In this paper/presentation I argue that there is a common set of metadata that could apply across many different data intensive disciplines and which can capture both the structure and, more importantly, the diverse meaning of the different datasets that are produced from these areas. Furthermore I show that this metadata set is more than just the Resource Description Framework (RDF) both literally and in its practical value.

Following completion of his masters in the philosophy and logic of science Euan started his career by joining Statistics New Zealand in what is now the Information Management team. While there he worked on developing the data archive for official statistics and developing the Statistics New Zealand concept model/metadata model. He recently presented papers on “The digital continuity action plan” at the official statistics forum 2010 in Wellington NZ, and on preservation metadata at the at the PREMIS fair held in October last year in San Francisco. Euan is currently leading project as part of the digital continuity action plan to identify risks pertaining to the preservation of digital information. He is a member of the Electronic Recordkeeping Metadata Standard development committee, and has a keen interest in digital preservation, in particular the areas of preservation tools/software, metadata standards, XML and Emulation as a digital preservation strategy. PREMIS fair held in October last year in San Francisco. Euan is currently leading project as part of the digital continuity action plan to identify risks pertaining to the preservation of digital information. He is a member of the Electronic Recordkeeping Metadata Standard development committee, and has a keen interest in digital preservation, in particular the areas of preservation tools/software, metadata standards, XML and Emulation as a digital preservation strategy.



Mills Davis,
Project 10X

Semantics and Government 2.0

This keynote examines two issues: 1. What are semantic technologies and where are they taking us? Semantic technologies are tools for marshaling a web of meanings and knowledge that both humans and machines can interpret and put to work. There are four ways we can think about semantic technologies, namely, as a: (a) global web of data from myriad sources that we can search and query like a database; (b) massive -- but messy -- knowledgebase that we can reason with; (c) powerful way to make our experience of the Web smarter and better; and (d) crucial set of system technologies for dealing with issues of exploding scale, mobility, diversity, complexity, and dynamism in time for the next Internet. 2. Where, how, and to what ends are semantic technologies being applied today in government? While semantic technologies and the Semantic Web are still a work in progress, numerous case examples exist that demonstrate both the maturity of development methodologies and technologies, and the value semantic approaches can deliver. Promising areas include: semantic search, query and navigation; semantic publishing and information sharing; social semantic web; collaborative knowledge systems; ontology-driven applications; semantic service oriented computing, process management, and security; and open information commons and linked data.

Mills Davis is founder and managing director of Project10X - a Washington, DC based research consultancy specializing in next wave semantic technologies, solutions, and business models. The firm's clients include technology manufacturers, global 2000 corporations, government agencies, and web 3.0 start-ups. A noted consultant and industry analyst, Mills has authored more than 100 reports, whitepapers, articles, and industry studies. He serves as principal investigator for the Semantic Wave research program. Current interests include semantic technologies for open data commons, open government, publishing, e-commerce, advertising and advocacy, social computing, knowledge management, collaborative work, mobile computing, and next generation internet. Mills is active in both government and industry-wide technology initiatives that are advancing semantic technologies. In the U.S., he co-chaired the Federal Semantic Interoperability Community of Practice (SICoP). Mills was a founding member of the AIIM interoperable enterprise content management (iECM) working group, and a founding member of the National Center for Ontology Research (NCOR). Also, advises several new ventures in the semantic space.



Luke Dearnley,
Powerhouse Museum

Luke Dearnley accidentally fell into computer support and systems administration while studying computer science at university. As the aeons passed he slowly escaped and started working in web development which made him much less likely to stab people. Currently he is the manager of the web department at the Powerhouse Museum in Sydney where he enjoys coding more than going to meetings and writing about himself in the third person.



Phillip Dean,
BSTTech Consulting

Sharing and Security - Two sides of the Metadata coin

Metadata and Whole of Government information sharing Metadata's traditional use has been for data description, discovery and record keeping. Once implemented, however, it can be a key enabler for information sharing across agencies and governments, between new and legacy systems, and between different security domains. A well thought out metadata implementation, integrated with appropriate business rules, is the spring board for an information management environment which meets Government's increasing demand for information sharing, as well as the relevant required demands of security and privacy. The presentation will cover: Leveraging metadata investments to achieve greater information sharing within and between organisations (also referring to Attribute Based Access Control - ABAC); Definition of Communities of Interest using metadata; A schema which integrates the requirements of the Australian Government Recordkeeping Metadata Standard Version 2.0 (AGRkMS); the USA Department of Defense Discovery Metadata Specification Version 2.0 (DDMS); the USA Office of the Director of National Intelligence Intelligence Community Standard Number 2007-500-2 (ICS); and the Australian Government Implementation Manual - AGLS Metadata Version 2.0 (AGLS). Assessing organisational readiness to leverage existing and planned metadata investments; and an overview of a Defence program where sophisticated use of metadata is being used to achieve levels of sharing previously thought impossible.

Phillip Dean is the Managing Director of BSTTech Consulting Pty Ltd, a thought leader in the design, implementation and support of information management solutions built on the smart use of metadata and business rules (sometimes referred to as Attribute Based Access Control (ABAC)). BSTTech has implemented a secure information management solution within the Department of Defence, and recently developed a baseline metadata schema to meet the information sharing needs of security and law enforcement agencies. The schema defines a number of entities to which metadata tags are applied, allowing flexibility and scalability to enable ABAC and secure information sharing.



Michael Dixon,
PSMA Australia

Practical Metadata and its Management for National Spatial Datasets

PSMA Australia produces fundamental national spatial datasets. These datasets have metadata statements that align with national standards developed and endorsed by ANZLIC. These standards are dataset based and largely used to assist with dataset discovery, and broadly speaking, enables a decision to effectively try or buy. These standards are very important, but what happens once you actually have the data? The focus for this presentation will be on object or feature level data metadata, information about every record within each dataset. Metadata at this level offers data users valuable additional information which may help with user decision making processes. The presentation will detail the information that is currently produced and the additional information that PSMA Australia is working towards into the future.

Michael is the manager of the group responsible for the maintenance and delivery of PSMA Australia data products and services. He oversees the internal and external resources utilised in the data production cycle and has responsibility for the ongoing provision of products and services to PSMA Australia clients. He is also responsible for projects relating to the enhancements of existing products and the development of new products and services for PSMA Australia. Michael has over 10 years experience in the delivery of geospatial applications, products and services from a local to a commonwealth level. He has a Bachelor Degree in Science and a Masters Degree in Science and Technology.



Leanne Fry,
Foster caring in Australia - information linkage, greater transparency and semantic smarts to benefit the end customer

When so much of the push for greater transparency is coming from within departments, or from the technical community, I'd like to see some focus on 'not forgetting the customer' - how they operate, what they really need, what will drive the best outcomes according to need. There are assumptions made all the time about what the customers want and how they will operate. Here's an 'out there suggestion': Anni knows I have a particular interest in the issue of children in care. Every week globally there are reports of systemic failure to safeguard children; the issue is that it involves multiple departments and organisations. If ever there was a case crying out for information linkage, greater transparency and semantic smarts that would be it.

A lawyer by profession, Leanne has worked in senior corporate and business roles for over 20 years. These roles have ranged from business (project management and marketing), to legal (corporate governance and company secretarial) to communications (investor relations and corporate affairs) to IT (web development, strategic sourcing, knowledge management). She has worked at Board level, understands corporate dynamics, and also the challenge to drive value from IT investment. Leanne has used collaboration and now social networking tools in all her roles. She is passionate about business improvement, communication and information sharing, and also about the role communities play in corporate and personal life. She implemented a number of social networking tools for a major client to address information and knowledge management challenges, and recently completed projects 2 and 3 for the Government 2.0 Taskforce on the adoption, barriers, best practice and recommendations for web 2.0 in government. Leanne has been involved in foster care for over 30 years and is keen to see technology and information management better support children in care.

Speakers



Guido Governatori,
NICTA

Law, Metadata and Semantics

Since its inception one of the aims of legal informatics has been to provide tools to support and improve the day to day activities of legal and normative practice and a better understanding of legal reasoning. The internet revolutions, where more and more daily activities are routinely performed with the support of ITC tools, offers new opportunities to legal informatics. We argue that the current technology begins to be mature enough to embrace in the challenge to make intelligent ICT support widespread in the legal and normative domain. On of the key elements is metadata, in

the sense that it enables to have multiple representations of one and the same legal document: one representation, a textual one, for human understanding and a formal logical one for machine consumption. Furthermore, we envision that the logical metadata representation of a legal document can be used as an unambiguous interpretation of the document itself. We show how to put the logical metadata representation at work in two applications: e-contracts and regulatory compliance of business process models.

Guido Governatori is a senior researcher and associate education director at NICTA, Queensland Research Laboratory, where he leads the Business Process Compliance research activity. He received his PhD in Legal Informatics in 1997 from the University of Bologna (Italy). His research interests include formal model of normative reasoning and applications to e-commerce and regulatory compliance for business process models, and semantic web. He is a member of the editorial board of Artificial Intelligence and Law, and he has served as chair for major conferences on logic and normative reasoning (Jurix, DEON, RuleML).



Warwick Graco,
Australian Taxation Office

Semantic approaches to data matching, data mapping and data mining

Semantic approaches to data matching, data mapping and data mining are gaining prominence. These approaches have the common denominator that the functions are performed at the semantic or meaning level rather than the data level. For example instead of matching items on the basis of literal names (data level), they are matched at the meaning level such as linking two sisters with different married names. While progress is being made, there are still some significant obstacles to be overcome before semantic approaches will become commercial realities. This

presentation outlines progress with semantic approaches and the challenges that remain. Warwick has worked in defence, health and taxation and has been involved in information technology and analytics for over 20 years. He is currently Senior Director of Operational Analytics in the Office of the Chief Knowledge Officer at the Australian Taxation Office. His responsible for assisting with the embedding of modelling solutions within the business of the ATO. He has a BSc from the University of New South Wales and a PhD from the University of New England Australia. He is a member of both the College of Organizational Psychologists of the Australian Psychological Society and the Institute of Analytics Professionals Australia - a professional association that represents practising data miners and modellers. His professional interests include enterprise decision making, knowledge acquisition and analytics.

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Paul Hagon,
National Library of Australia

Searching by Colour

Is it enough to rely on human interpretation for cataloguing cultural institutions collections? Image searches now analyse the pixel-by-pixel colour values of an image, allowing searching by colour. Consumer-grade photo management software incorporates facial recognition, allowing us to identify individuals. How could the National Library of Australia use these technologies to enhance the metadata and access to their collections.

Paul is a Canberra based Web designer and developer and currently I'm the Senior Web Designer at the National Library of Australia and have been working on the web in cultural institutions since 1999. I find cultural institutions fascinating because of what they bring to society, they are rich resources of information and provide vast potential for exploring hidden treasures. I enjoy making these items available and telling their stories in ways that may not be the most obvious. I like to use technology in a relevant way to enrich the way we can interact with these resources. In 2010 he was named a "Mover and Shaker" of the library world by Library Journal.



Mohsen Kalantari,
University of Melbourne

Metadata plays a key role to facilitate accessing to up-to-date spatial information and plays an important aspect in finding and delivering high quality spatial information services to users. In particular, metadata is an important element in functioning and facilitating spatial data infrastructure (SDI) initiatives. With huge amount of spatial information being generated, a spatial application must be sufficiently flexible to extract and update spatial metadata automatically. By contrast, in current applications, the extract and update process is undertaken manually, making changes to spatial metadata relatively more difficult and expensive. This paper explores different approaches for automating spatial metadata and the impacts of these approaches on critical components of metadata such as

standards, data model so that the process of updating or extracting spatial metadata _ where feasible _ becomes automatic. This approach distinguishes between already existing methods by emphasising on new technologies like Web 2.0. Within a metadata application, different approaches of data modelling including integrated spatial data and metadata model, user generated tags and metadata standards will be presented and discussed.

Mohsen Kalantari is working as a research fellow with the Centre for SDIs and Land Administration, Department of Geomatics, the University of Melbourne. He is currently leading the Australian Research Council linkage project on Automation of Spatial Metadata. Mohsen finished his PhD from the University of Melbourne in 2008. He has a bachelor degree in surveying engineering and master degree in GIS engineering from KNT University of Technology, Iran. Also, Mohsen is a project coordinator at Land Victoria, Department of Sustainability and Environment, Victoria. Mohsen has several publications on eLand administration, cadastral data modelling, spatial metadata.



Holger Kohler,
Department of Defence

Intelligence Information Fusion Demonstration Environment

The presentation will describe the Intelligence Information Fusion Demonstration Environment (IInFusDE). IInFusDE is a DSTO research project that aims to demonstrate a capability where a corpus of unstructured documents can be processed with a combination of information extraction and entity resolution technology to automatically produce an OWL/RDF knowledge base that is suitable for analysis. Extracted information includes key entities, their attributes, their relationships and events of interest. Information is aggregated and fused across all available evidence, both

structured and unstructured. This work does not attempt to logically represent the full content of a document, nor does it merely extract semantics as metadata for search indexing. It focuses on logically representing only the extractable semantics available from information extraction tools, aggregated across many documents. The knowledge base produced can be used for: gisting (browsing, visualising or summarising the available information); querying to answer specific questions; running rules to assert implicit information explicitly; or alerting users to patterns of interest.

Holger Kohler has spent the last 11 years working at Defence Science Technology Organisation (DSTO) in Edinburgh, South Australia. During that time he has worked on a variety of prototype systems that have helped Defence and National Security clients better understand their existing and future requirements. His work areas have covered information management, information fusion, geospatial information systems, natural language processing, and ontologies. His academic interests have included an eclectic mix of biology, teaching, information technology and cognitive science.



Amanda Lawrence,
Australian Policy Online

The future for this kind of grey literature information portal in the face of rapidly changing search and retrieval platforms

In order for research to have an impact on topical public policy issue much of it is published as grey literature. Australian Policy Online (apo.org.au) is the largest aggregator of public policy research in Australia and in 2009 the site was upgraded including new information architecture and additional metadata collection. But what is the future

for this kind of grey literature information portal in the face of rapidly changing search and retrieval platforms? This paper considers the current situation with grey literature publishing in the public policy area and the kinds of standards and metadata that could be applied in order to maximise the impact of that research and its interoperability

Amanda Lawrence is managing editor of Australian Policy Online (apo.org.au) at the Institute for Social Research, Swinburne University of Technology. She was project manager on the redesign of the site in 2009. She manages the website of the ARC Centre of Excellence for Creative Industries and Innovation and its Creative Economy newsletter. Amanda is currently completing a Graduate Diploma of Library and Information Management at RMIT. She has a Bachelor of Arts (Hons) from the University of Melbourne and was Manager of the Literature Program at the University's Asialink Centre from 1996 - 2005.

Speakers



Laurent Lefort ,
CSIRO ICT Centre and W3C Office

Semantically-Enabled Standard development

Most standard development organisations routinely use XML technologies to define semi-normative parts of web standards. Leading consortia like W3C, OGC or OASIS are exploring how to add Semantic Web technologies (ontologies, RDF, linked data) to their standard development toolbox for a number of reasons: richer expressivity, web-ification of shared resources, and basis for harmonisation. The Semantic Sensor Network Incubator Activity (SSN-XG), a W3C working group chaired by CSIRO is chartered to combine semantic web and sensor web standards

with two tasks: develop ontologies superseding the currently available Sensor Web standards like SensorML and specify semantic annotation mechanisms to enable more flexible usage of sensor services based on other OGC standards.

Laurent Lefort is a researcher from the CSIRO ICT Centre in Canberra. He is an ontologist in the team working on the application of semantic web technologies to develop environmental sensor networks for biodiversity, water and climate change research. His current research interests include the design of ontologies, linked datasets, semantic mashups and their use in data-intensive research service infrastructures. He is a participant to the W3C's Semantic Sensor Network Incubator Group (XG) and has also served as the W3C Australia Office manager.



Kate Lundy,
Senator for the Australian Capital Territory

Senator Kate Lundy has represented the Australian Capital Territory in the Senate in the Australian Federal Parliament since 1996. She held many portfolios in opposition including Information Technology, Manufacturing, Consumer Affairs, Local Government, Sport and Health Promotion. Senator Lundy is currently Chair of the Joint Standing Committee for the National Capital and External Territories and a long-standing active member of the Senate Environment, Communications and the Arts Committee. She is also one of the Federal Parliament's representatives on the Advisory Council of the National Archive of Australia. Senator Lundy has participated in every Senate Inquiry

relating to telecommunications and Information Technology over the last fourteen years, and spearheaded Gov 2.0 initiatives such as her Public Sphere events which facilitate online public collaboration on policy development. In September 2009 Senator Lundy was recognised for her leadership in Gov2.0 online innovation with her Public Sphere initiative when she was ranked 13th in a short list of 25 global leaders by the International Centre for E-democracy and Politics Online. Senator Lundy continues to be a strong advocate for the use of the internet, digital technology and ICT innovation to strengthen the Australian economy for future growth, to transform public engagement in government processes and to enhance social inclusion within our communities. Senator Lundy is also patron for CASE: Computer Assistance Support Education, a non-profit group that provides smart, open technology support to community organisations.



Paul Madden,
Standard Business Reporting, Australian Treasury

SBR - Revolutionising Business Reporting

Metadata - the core of a single language The SBR Program has developed a single set of definitions that captures the business reporting needs of 12 agencies _ the SBR Taxonomy. The definitions have been "harmonised" based on the metadata to identify and remove those elements which are duplicated concepts. The Taxonomy will enable the transformation of business/accounting data to information required by government within the businesses

own accounting system. SBR will also enable the businesses own accounting system to exchange electronic information with the agencies - becoming their portal for government reporting. SBR will be available for business to report through from 1 July 2010.

Paul Madden is the Program Director for Standard Business Reporting (SBR) which is being led from within the Australian Treasury. The SBR Program is being developed in partnership between the government, software developers, accountants and busienss. Paul co-ordinates the work of teams across 12 government agencies in this complex program, which will deliver a single financial reporting language (taxonomy) for Australian businesses to report to government. The SBR Program will also provide a new electronic channel for business to report electronically to government from their business software, and a single sign on for business to access secure government on-line services. Prior to taking up this role, Paul was a First Assistant Commissioner with the Australian Tax Office responsible for the overall design of systems and business process to support policy and administrative reforms with a client experience focus. Within the Tax Office, Paul has also had responsibility for delivering a range of whole of government service delivery activities, systems development and management of many large change projects.



Liz Marchant,
ANZLIC, The Spatial Information Council

The importance of building tools for the spatial data marketplace

ANZLIC's Resource Discovery Access Program; and 2. Their development of the ANZMet Lite metadata entry tool. And how important these two tools are to the development of a spatial data marketplace.

Ms Liz Marchant commenced as Executive Director in the ANZLIC National Office on 9 February 2009. Prior to joining ANZLIC, Liz worked with the Government Information Management Office (AGIMO) as the Director, Project Coordination and Benchmarking, Operations Review Branch. Liz has extensive experience in government policy and strategic development issues having served in a number of positions, including Manager for the eGovernment Facilitation, Tasmanian Department of Premier and Cabinet; Business Manager, eHealth Implementation Group, Australian Government Department of Health and Ageing, and her former position with AGIMO. Liz's recent cross agency and stakeholder engagement work has included her participation in key areas including: Spatial Data Management Group, National Spatial and Information Management Group, and the Cross Jurisdictional Interoperability Group. In 2007 Liz represented the Australian Government at the United Nations-sponsored Permanent Committee on Geographical Information Systems Infrastructure for Asia and the Pacific in Seoul, Korea.



Ingrid Mason,
Powerhouse Museum

The need for practice change in terms of technical innovation - the implications of putting metadata online

Some discussion on the need for practice change needs to be brought into the discussion of technical innovation - and - seen as a *vital* part of culture change (and improvements to and advances in putting metadata up online) as a community commitment within the public sector. Leadership like this shown by the Powerhouse is often seen,

but not often is the next part of the equation, ensuring community buy-in and take-up, understood to be a part of improving the quality, quantity and therefore value of the metadata out there. Where domains are self-organised, driven by consensus and community buy-in, their efforts are consolidated and their outcomes more likely to deliver value. The schema I've developed has been documented and will be made available within the next month from Collections Australia Network (CAN) website. Blurb Collection Level Description Announces its GLAM-Australia Comeback Tour For the first time metadata describing the Powerhouse Museum's (Sydney, NSW) special collections will be made available online on the Museum's website and through Research Data Australia. A new metadata schema has been developed that maps galleries, libraries, archives and museums' (GLAM) collection level metadata to Research Data Australia's collection metadata schemas. The new schema was developed for the GLAM sector and is being tested out by the Powerhouse Museum. The new schema enables the supply of the Museum's metadata to RDA in a meaningful and useful way. Spatial, temporal, analytical, interpretive cultural heritage metadata, including significance statements, available within the Museum's collection system is utilised and repurposed to meet with the requirements of RDA and provide broad intellectual access to the Museum's special collections. The impact of providing collection level data from GLAMs in this way will flatten the currently uneven amount of Australian cultural heritage collection metadata available online at collection level. Outside collected archives it is rare that collection level data is coordinated into metadata schemas in Australia. There is currently a very small proportion of GLAMs that provide descriptive data schematically or for OAI-PMH harvesting. With a change in practice and a wide range of GLAMs contributing collection level data the constitution and nature of the cultural heritage collections across Australia will become more apparent and where rich deposits of cultural heritage material is available. Opportunities will then arise for targeted digitisation and item level description to meet researchers' needs - and - enrich the semantic web Australian cultural heritage data and metadata. See: <http://www.dlib.org/dlib/september00/dunn/09dunn.html> for the Canadian example.

Ingrid Mason is a self-professed metadata nerd who never realised that she'd found a work-space that could satisfy her interests in the humanities, semantics and the web. Ingrid has interests in technology and research and a background in digital cultural heritage and business development. Ingrid works as a digital project manager for the Powerhouse Museum - currently she's managing Collections Australia Network. Prior to taking up this role she project managed in the Digital Innovation Unit (University of Sydney), managed a university digital repository, led a web archiving team, and contributed to developing the requirements for the National Digital Heritage Archive in New Zealand.

Speakers



Pru Mitchell,
Education Services Australia

Metadata Extraction Projects for Education Network Australia

This paper describes some different but related proof of concept projects for Education Network Australia (edna) which undertake metadata extraction from a range of sources to facilitate the semantic annotation of collections of learning resources for Australian educators. A team of educators and librarians at edna is responsible for building and maintaining a collection of web-based learning resources with associated metadata. In an attempt to enhance the relevance and efficiency of this collection, a two-pronged approach has been taken: on the one hand harvesting user selection and evaluation and metadata through social bookmarking tools, and on the other employing some automated metadata creation tools to increase efficiency and discoverability of education resources.

Pru Mitchell holds dual post-graduate qualifications as an educator and a librarian and has worked in school, technical college and university libraries as well as in the ABC Sound Library. She has worked with Education.au for the past seven years, and the new Education Services Australia for 3 months. Over that time she has been responsible for metadata and content development and support for a wide range of sites using the Education Network Australia infrastructure, including AusAID's Global Education website, Technical Standards and the Australian ICT in Education Committee's website. She is a member of the Schools Catalogue Information Service (SCIS) Consultative Group, and the Schools Online Thesaurus (ScOT) Management committee. As part of the team with responsibility for edna's metadata quality and development, she has been closely involved in edna's innovations projects on personalisation, social tagging and personal learning environments and metadata enhancement. Outside Education Services Australia Pru works a weekly shift on the reference desk at the University of Adelaide Library, is Vice-President of the School Library Association of South Australia active in library professional associations and in recent years has coordinated two national projects responsible for publishing guidelines for school libraries: Learning for the Future: developing information services in schools', and 'Professional Standards for Teacher Librarians. Her writing includes the chapter on 'Wikis in education' for the 2006 book.



Vimal Mohindra,
Maritec Digital Data

The core functionality of a web application, which has been developed as an open resource definition system to allow capture of data using natural language constructs

About the presentation The presentation will briefly describe and demonstrate the core functionality of a web application, which has been developed as an _open resource definition system_ to allow capture of data using natural language constructs. Though the work is largely (but loosely) inspired by the core concepts of the Semantic Web and N3 notation, it does not strictly adhere to the RDF/RDFS/OWL specifications; rather it attempts to allow the user to map data using the N3 type information structures in the front end, into a MySQL/MS SQL Server relational database at the back end.

The presenter is a professional naval architect with masters and undergraduate degrees from London University and IIT Kharagpur, India respectively. Following his voluntary retirement from the Indian Navy in 1994 after a 25 year career, he has undertaken various consultancy assignments relating to industrial projects and software / product design. He currently manages his own firm which provides document/information management products and services. He has followed the ideas underlying the semantic web technologies and undertook development of a software application to explore the limits of these ideas and the possible benefits that could be derived from them.



Kathryn Moyle,
University of Canberra

Building capacity: what can the Digital Education Revolution deliver?

The main priority of the the Australian Government's Digital Education Revolution program is to achieve a computer to student ratio of 1 to 1 for all students in years 9 to 12 in all Australian schools, by 31 December 2011. To support the deployment of nearly a million computers into schools between 2007 and 2011, the Australian Government has committed \$40 million to support a Digital Strategy for Teachers and School Leaders. In this session issues and strategies for building the capacity of educators in schools and universities will be discussed against the national policy backdrop of the Digital Education Revolution.

Dr Kathryn Moyle is an Associate Professor at the University of Canberra. Between 2006 and 2009 she was also the Director of the Secretariat for the Australian Information and Communications Technology Education Committee (AICTEC), the peak policy advisory committee in Australia concerning ICT issues in the schools, vocational education and training and higher education sectors. Kathryn is internationally recognised for her research concerning school leadership, education policy and learning with technologies. Kathryn is a member of a number of advisory committees to government and non-government agencies at national and international levels, and she is regularly invited to provide policy and strategic advice about teaching and learning with technologies.



Dominique Murphy,
Department of Defence

The CARO Digitisation Project

An overview case study in the conversion of hard copy records to soft copy whilst the project complexity increased and the metadata standard shifted. Following project approval and funding, a project team was established in 2007 to initiate and manage the digitisation of Army personnel records for discharged members. Having digitised an index to these records the project has commenced the digitisation of Vietnam service records. The presentation will also provide an overview of the imaging and workflow system designed to process these records with particular emphasis on the methods and challenges surrounding the capture of metadata.

Dominique is a qualified librarian, who after working with the Defence Library Service for sixteen years, changed focus to records management commencing work in an area where digitisation was being discussed. Having had exposure to contracting within the Library Service she transitioned into digitisation contract management/project management at the initiation of the Army digitisation project in 2007. A joint presentation with the Department of Defence and Fuji Xerox Australia.



Liddy Nevile,
La Trobe University

Accessibility through Metadata

After a decade of work coordinated by W3C that determines how information can be made accessible to people with a wide range of devices, including assistive technologies for people with disabilities, a new complementary approach using metadata has been developed. The main reason for the metadata is that users need a way to find resources that will be accessible to them and this includes both cases where the resource is 'universally' accessible and so likely to be good for them and where the resource is not 'universally' accessible but nevertheless might be optimised for them. Metadata can enable 'cumulative' accessibility where both the original publisher and others can provide alternatives to the original resource. Metadata can also enable 'just-in-time' accessibility and so has potential to significantly ease the task for publishers and thus increase the overall accessibility of the Web. This presentation will cover the theory behind the new approach, use cases and developments, and the standardisation of the metadata.

Liddy Nevile, BJuris/LLB, MEd, PhD, is an Adjunct Associate Professor at La Trobe University. She has worked with people with special needs for technology since the early 1980's; with the problems of accessibility to the Web and digital resources in general and on PICS and then Dublin Core metadata for the Web since the early days of the Web. Recently, with colleagues, Liddy has been bringing together accessibility and metadata to increase the accessibility of digital resources and the Web to all in the context of ISO/IEC standards, W3C Specifications and the Dublin Core Metadata Initiative.



Luciano Quadraccia,
Centrelink

Centrelink's plan to establish an enterprise metadata management system

Centrelink's plan to establish an enterprise metadata management system, which will be capable of capturing, managing and exploiting all metadata across the Systems Development Lifecycle including Business Intelligence. Business, technical and certain operational metadata are within scope. The goal is to maximise the automation of the construction, management and operation of Centrelink's IT and BI spaces. From this we would expect a significant improvement in costs, quality, ability to deliver and exchange data.

Luciano is a Solutions Architect at Centrelink. He has been in IT for 40 years and has been a major designer and developer in these fields: statistical tabulation tools, metadata and configuration management tools, OLTP business applications, and data warehousing. In particular he designed and built Centrelink's metadata repository. This repository now holds the bulk of the technical metadata for Centrelink's main OLTP application, and it provides sophisticated version control for both metadata and software. It provides all the configuration data to the tools that daily build dozens of development and test environments, and to the release management tools, whilst supporting a very high level of parallel development for more than 500 users.

Speakers



Anni Rowland-Campbell,
Digital Brand

Anni has worked in a range of organisations and industries including the arts, politics, government, non-profit associations, printing and publishing and more recently information and communications technologies. Since 2006 Anni has been leading Fuji Xerox Australia's ARC funded research into emerging web technologies, and through that has developed networks with research organisations around the world. Anni's work has always involved bringing new ideas to teams and organisations in order to help them see things differently, and to utilise emerging technologies in order to enhance communications and knowledge and information management. She is currently undertaking a PhD

focusing on the impact of the evolving "digital brand" on how organisations operate throughout their value networks and is very interested in the implications of this for governance and government.



Neville Schefe,
Department of Justice and Attorney General (Queensland)

A Postcard from the future - the revitalisation of the Queensland Registry of Births, Deaths and Marriages

The transformation from a compliance driven repository of registrations to a commercially focussed, value driven organisation has commenced in Queensland. Its success will be driven by a clear vision, committed sponsors and lastly some technology refresh. My presentation will take you on a journey defined in the blueprint and allow you to

share in the excitement (and suspense) of the program of work.

Nev Schefe has formal qualifications in knowledge management, education and IT and a career spanning secondary education, TAFE educational leadership and public sector management. He continues to respond to the challenge of justifying technology spend in an era of reduced real funding and increased accountability of the public sector. A realisation that knowledge strategy has the potential to improve service quality while reducing actual costs led him to investigate public sector practices and the business impact of such strategies. He is currently Director, Births, Deaths and Marriages Revitalisation Program in the Queensland Department of Justice and Attorney-General.



Vanessa Scott,
Department of Innovation, Industry and Regional Development, Victoria

Seek and ye shall find: information, directories & mapping tools

Different information can be found in different ways on Victoria Online. Vanessa will talk about the recent switch to Google CSE, the new online directory (to be launched very soon) and a proof-of-concept mapping tool.

Vanessa has worked in the information management field for 19 years. She is currently working within Information Victoria at the Department of Innovation, Industry and Regional Development. For the last 7 years she has been Content Manager for Victoria Online - the Victorian Government portal. During that time she has seen Victoria Online been redesigned and switched over to an open-source CMS, integrating web 2.0 and now getting ready for another redesign. She is responsible for maintaining the Victoria Online Thesaurus - a subject-based thesaurus and administers a whole-of-Victorian-Government Seminar Series to promote best practice in the online space. Last year she started up a whole-of-Victorian-Government email newsletter group to bring together newsletter editors to share information and promote efficiencies across government in email newsletter management. In her spare time, Vanessa is renovating her house with her husband.



Mel Taylor,
Australian Institute of Health and Welfare

The health and community services systems require more skilled informaticians, professionals conversant in classification systems, data management, languages and terminologies that form the basis of electronic health records and health statistics. Changes in Information availability, such as countries moving toward interoperable standards means that more datasets are becoming more comparable than ever before. The underpinning metadata required to allow cross jurisdictional data analysis is now of significant importance to those who administer the systems where data are stored. Data suppliers are acknowledging the usefulness of national standards which are inculcated into systems development work for data collection activity significantly improving the quality of data coming various initiatives. The importance of metadata surrounding the data sets used to formulate policy and assist researchers has gained some purchase in government and private sector health and community services delivery agencies. This presentation will discuss the current suite of National Minimum Data sets in both the Health and Community Services sectors and their usefulness in providing information for policy and decision makers. It will briefly introduce the conference participants to METeOR (The AIHW's on line 11179 registry) and discuss the future plans for the systems.

Ms Taylor joined the AIHW in 2009 and leads the Metadata Information Services Unit. The Unit plays an important role in Australia's system of national data standards and data development across the health and community services sectors. The Unit works with a variety of government and non-government stakeholders and produces the National Health Data Dictionary and National Community Services Data Dictionary. It manages the METeOR metadata registry based on the international standard, ISO 11179. The unit takes a leading role in projects such as the investigation of the implications of eHealth for health statistics. Ms Taylor has many years experience in both the development and active management of data and metadata, having previously been involved in many surveys and development activities in prior roles at the Australian Bureau of Statistics.



Philip Tickle,
Geoscience Australia

NEDF Portal and Imagery Metadata tools

Digital elevation data which describes Australia's landforms and seabed is crucial for addressing issues relating to the impacts of climate change, disaster management, water security, environmental management, urban planning and infrastructure design. ANZLIC - the Spatial Information Council, the Department of Climate Change (DCC), the Cooperative Research Centre for Spatial Information (CRCSI) and Geoscience Australia are coordinating the development of the National Elevation Data Framework (NEDF) in partnership with Australian, State and local government agencies, and industry. Over the last 3 years the NEDF partners have been addressing issues relating to: Governance; Mechanisms for funding; Technical standards and product development; and Access, distribution and use arrangements. In mid 2010 Geoscience Australia will be launching the National Elevation Data Framework (NEDF) Portal. For the first time in Australia, users will be able to discover, view, licence and access elevation and image data ranging from the national DEM through to 15cm LiDAR data. The NEDF-Portal is has been developed using the latest OGC compliant Web-Services technologies and an implementation of the ISO19115-Part 2: extension for imagery and gridded data. The NEDF-Portal not only offers new capabilities in terms of discovery and access to Australian Government and industry data holdings, but also significant improvements in internal data management. This seminar will provide an overview of capabilities of the NEDF-Portal, describe a practical implementation of the ISO19115-Part 2 metadata standard and a preview of data and services that will be soon available through the Portal.

Philip Tickle is the Director of Landscape Information Infrastructure within Geoscience Australia's National Mapping and Information Group. He has a Bachelor of Science degree in natural resource management and over 22 years professional experience in the application of Remote Sensing, GIS and Spatial Modelling to a range of issues in relation to natural resource management, forestry, agriculture, emergency management and topographic mapping. During this time Philip has worked in Government undertaking applied research, science-policy and program implementation, and also in the private remote sensing industry for several years.

Speakers



Pierre Truter,
Air Services Australia

Aeronautical Information Management (AIM) Systems

International, regional and national focus on integrated Aeronautical Information Management (AIM) systems is accelerating. The limitations of existing legacy systems, the impact of emerging digital technology, the vast increase in volume and nature of data to be transferred, data integrity concerns and the increasing fragmentation and diversity of interested organisations are all complex and serious issues. By way of example, Europe and the USA are already trialling digital NOTAMs with a view to full implementation by 2012. At the same time, the global pressures on manufacturers, service providers and regulators to work cooperatively to achieve global solutions are both real and immediate. Airservices has taken on the challenge to implement this AIM environment by focussing on the implementation of the international standards in aviation data (AIXM) and metrological data (WXXM). This paper will discuss the issues relating to legacy systems and the information overload in the movement from NOTAMS (Notice to Airman) to future digital NOTAMS.

As Information Communication Technology (ICT) Planning Manager at Airservices Australia, Pierre plans and determines the strategic direction for all Information Technology projects and actively manages Airservices Enterprise Architecture international co-operation. Pierre is actively involved in planning the migration from legacy systems to an integrated Aeronautical Information Management (AIM) environment and preparing Airservices for a complete net-centric environment to support future ATC operations in Australia. Drawing on over 21 years of corporate IT background, Pierre has extensive experience in the planning and delivery of large scale technology solutions for military, private and government organisations. His diverse background and experience with the digital revolution from analogue to digital based systems, large enterprise architecture implementations and being involved in planning net-centric warfare systems, gives him a unique insight to lead Airservices into the future AIM net-centric aviation environment. Pierre's tertiary qualifications include a B.Sc in Computer and Information Science and a MBA from Bond University in Australia.



Maarten van der Kleij,
Department of Veterans Affairs

Why is it so? Turning information into intelligence

The Department of Veterans' Affairs meets almost all of the health costs of eligible veterans and their dependants. Most of these costs are paid through Medicare Australia which, in turn, provides data to DVA. Essentially, who did what to whom? 250 million lines of data about 280,000 clients by 80,000 providers annually covering primary health and community service delivery represents a mountain of potentially very rich information. To mine this information, DVA has invested heavily in data warehouse technology and business intelligence software. Turning information into intelligence requires a mix of health program knowledge, data manipulation skills, and insight into how to best present result to generate understanding and action. Furthermore, it is essential that users can easily pursue the question "Why is it so?", focussing on the results rather than struggling with technology. DVA has developed a fully functional suite of linked analytical reports to assist users to not only have the information "Who did what to whom?" but also the "Why is it so?" question "what is driving demand, what is driving supply? These reports can provide an evidence base for both policy development, service delivery and contract management intervention. This presentation will demonstrate how DVA's business intelligence systems change millions of lines of data into understandable and actionable intelligence using tables, charts and linked reports. The reports will be de-identified to maintain client and service provider confidentiality. DVA uses IBM Cognos 8.3 Report Studio Professional to create reports from a DB2 data package powered by an IBM AIX server.

Maarten van der Kleij who has worked with DVA for eight years as a data analyst and business intelligence expert. He has a background in policy development, program management, economics and service delivery in the health sector.



Henk Verhoeven,
Intergen

Henk is an Architect and Consultant within Intergen's Innovation, Strategy and Solutions team. He has over 15 years of international experience in the IT industry proposing, building and integrating strategically focused solutions in the insurance, government, telecoms, pharmaceutical and forensic science industries spanning the United States, New Zealand, South African and Namibia. He consults with New Zealand Department of Internal Affairs regarding their open data initiatives and helps government organisations participate in the open data frameworks and guidelines.



Seth van Hooland,
Universidad Carlos III de Madrid

Optimizing metadata creation, re-use and preservation in the cultural heritage sector

Optimizing metadata creation, re-use and preservation in the cultural heritage sector : making the case for Collective Access. Abstract of the presentation: Metadata creation and management is a notoriously expensive and time-consuming activity. Confronted with limited funding, the cultural heritage sector therefore needs affordable and pragmatic tools which allow to streamline the metadata creation process and to make optimal re-use of existing resources. CollectiveAccess is a highly configurable cataloging tool and web-based application for museums, archives and digital collections. Available free of charge under the GPL open-source license, it requires little to no custom programming to support a variety of metadata standards, external data sources and repositories, as well as most popular media formats. Current users include representatives from a wide range of fields : fine art, anthropology, film, oral history, local history, architecture, material culture, biodiversity conservation, libraries, corporate archives, digital asset management, and many more. The presentation will focus on how the software allows the configuration of metadata schemas, the use of external data sources and services for cataloging and data display, and the importation of controlled vocabularies such as thesauri and taxonomies. Preservation of resources and their metadata can be facilitated through the integration with external digital repository systems such as Fedora and IRODS.

Seth van Hooland holds the chair in Digital Information at the Information and Communication Science department of the Universit_ Libre de Bruxelles (ULB), Belgium, where he obtained his PhD on the topic of metadata quality in the cultural heritage sector. During the current academic year, he works as a visiting professor at the Library and Information Science department of the Carlos III university of Madrid, Spain. Van Hooland worked in the past as an account manager for a digital imaging company and currently combines his academic position with consultancy work as an external expert for the European Commission and other national and local institutions. He is a member of the Dublin Core Metadata Initiative (DCMI) Advisory Board, co-chair of the DCMI Tools Community and member of the editorial board of Cataloging and Classification Quarterly.



John Weaver,
Australian Government Office of Spatial Data Management

The importance of building tools for the spatial data marketplace

ANZLIC's Resource Discovery Access Program; and 2. Their development of the ANZMet Lite metadata entry tool. And how important these two tools are to the development of a spatial data marketplace.

John started his working career with the Metropolitan Water Sewerage and Drainage Board in 1972, first in their Sydney office and then in Wollongong. In 1980 he went to work for the Engineering Department of Shoalhaven City Council, designing water and sewerage reticulation schemes for the councils coastal townships. In 1981 John was one of the team that introduced CAD tools to the engineering department and developed the digital cadastral database for the Council. He was instrumental in developing applications and protocols for the use of CAD and a key member of the training team that spread the CAD expertise throughout the organisation. In 1990 John comenced work for what is now the ACT Planning and Land Authority (ACTPLA). One of his first tasks was to develop a user environment for their CAD system and to provide guidance on its effective use. John was spatial data manager for ACTPLA for 10 years. Since 1991 he has represented the ACT on a number of standards development groups including the ANZLIC sponsored Metadata Working Group. Since April 2008 John has been employed in the Office of Spatial Data Management where his role includes the facilitation of open access to government managed spatial data and highlighting the need to effectively implement systems using appropriate national and international standards. He has managed the development of the ANZMet Lite metadata collection tool on behalf of ANZLIC and chairs both the Australian Government and ANZLIC Spatial Resource Discovery and Acces Program (previously known as Metadata) working groups. John has been Chair of the ACT chapters of the GDS User Group, AURISA and SSI and has taught GIS to students at the Canberra Institute of Technology.



Jack Wilmer,
US Department of Defence

Metadata Registry - Enabling Information Sharing

Mr. Jack Wilmer; Technical Director, Program Executive Office, Global Information Grid Enterprise Services, for the Defense Information Systems Agency, discusses the design and evolution of the US DoD Metadata Registry in support of the US DoD Net-Centric Information Sharing strategies and objectives.

Prior to his position as Technical Director, PEO GES, Mr. Wilmer served as Vice President, Integrated Defense Systems for FGM, Inc. He was responsible for all operations, including budget, resource and program management, and strategic planning, and he reported directly to the chief executive officer. In addition, Mr. Wilmer continued to serve as an architect, supporting his customers at DISA in the design and governance of net-centric systems. During his time at FGM Mr Wilmer held the positions of Software Development lead, Business Unit Director, Enterprise Services, and Integrated Defense Systems Deputy Director. He contributed significantly to both the technical and business success of the company with a primary focus on the conversion of legacy systems to Java programming language. He is a member of the Armed Forces Communications and Electronics Association (AFCEA), a past winner of their Meritorious Service Award, a graduate of their Leadership Forum and a member of their Intelligence Committee. He graduated with Honours from Princeton University where he achieved a Bachelor of Science in Engineering degree in Computer Science.

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sharing data, sharing ideas



Australian Government

