PROVisualizer: the journey, the tech and a demo!

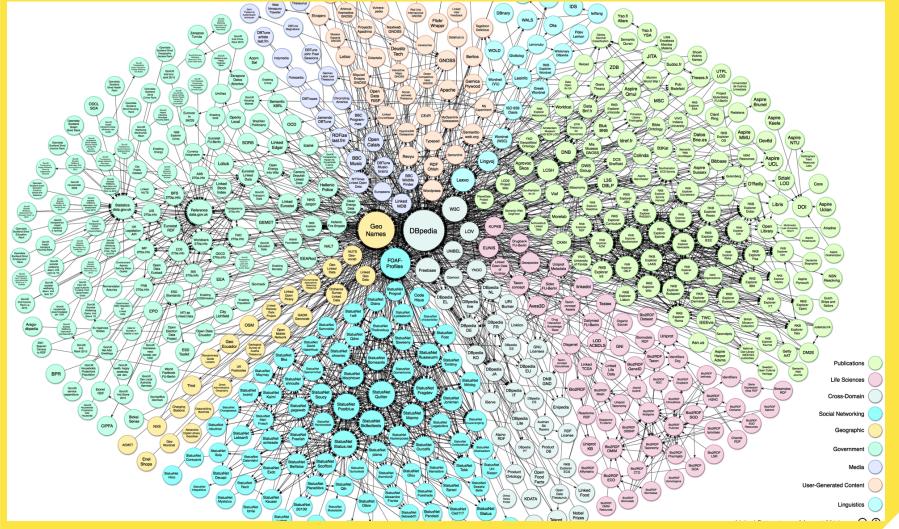
Charlie Farrugia Conal Tuohy Asa Letourneau







Archives are all about complex relationships







So why do we reduce them to lists?

PUBLIC RECORD OFFICE VICTORIA

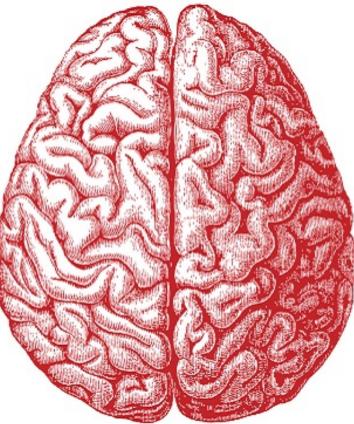
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Visualisations express spatial relationships and complex networks

I've always seen archives as repositories of relationships







Asa's Journey

Nov 2010 While on secondment to Deloiite, I started experimenting with an Excel template developed by NodeXL to create a network chart and produced the following visualisation showing connections between the Chief Secretary's Dept VA 475 and the 200 Series it created as well as a number of items within those series

<u>https://drive.google.com/file/d/0ByVdr3cge40gZWE2OWExYzctMTAzOS00YTZjLTg5ZDUtZmE1ZjA3</u> YmQ2ZDVh/view?usp=sharing&authkey=CKjytYYM

Nov 2014 Experimenting with Google Fusion Tables, I produced this network chart showing the connections between the Chief Secretary's Dept VA 475 and the 200 Series it created.

https://www.google.com/fusiontables/DataSource?docid=1cMU8B61ne8I-dfkr9p3lLGxiVZKyJ4wA 9Mpyw2uR

2015 PROVisualizer Phase 1 http://metadata.prov.vic.gov.au/provisualizer (Asa,Charlie, Conal)
Essential feedback? Hard to use, no context, visually confusing
2016 After a series of UAT sessions and further iterations we developed the final tool we will demo today after hearing from Charlie and Conal.





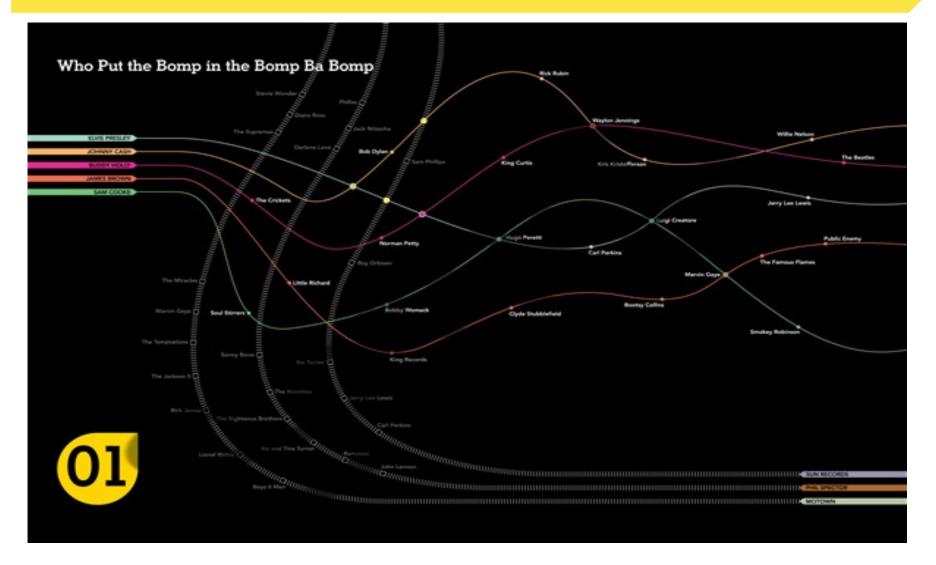
Charlie's journey

Started with a challenge to visually represent administrative change





Rock Connections by Bruno MacDonald







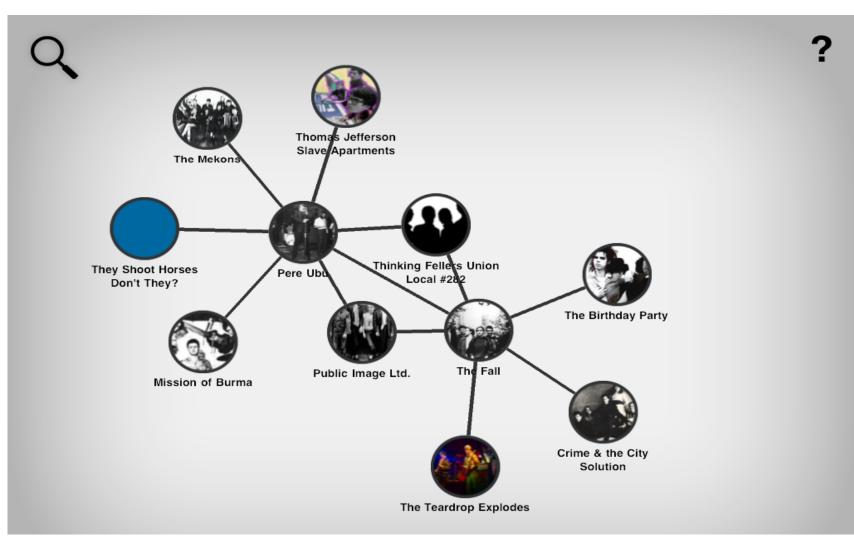
DiscovR Music







A DiscovR Search Result



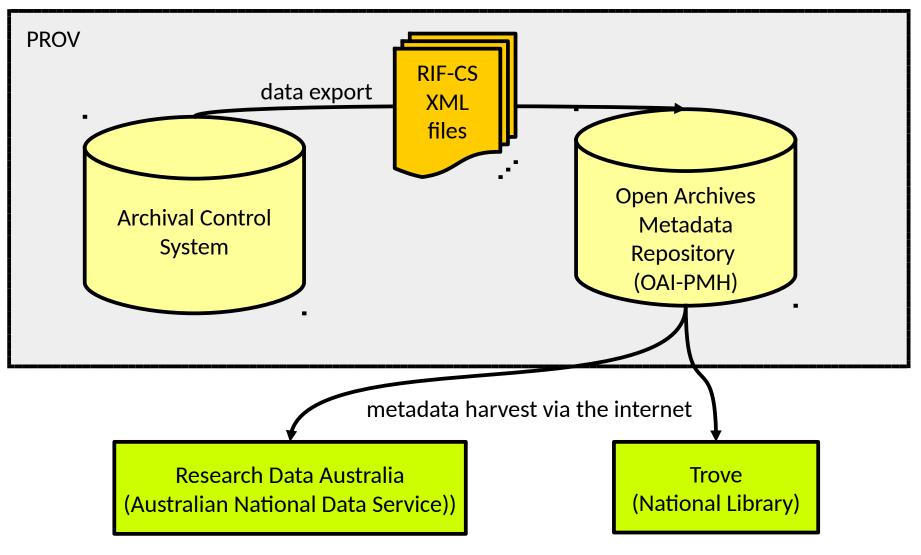




Charlie's Non Tech Savvy Attempt

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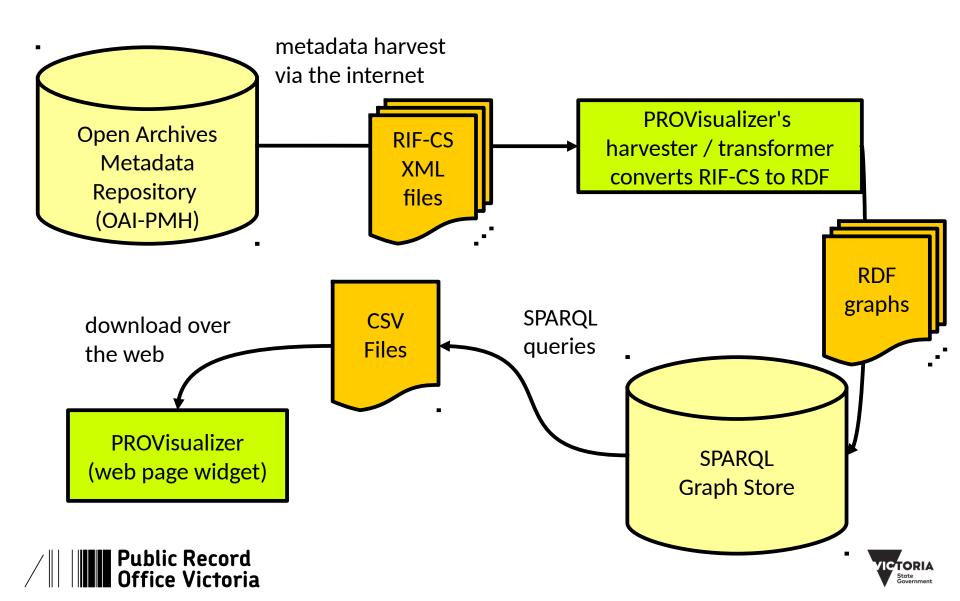
PROV's public data feed







PROVisualizer's data pipeline



Enterprise Architecture

Factors relevant to the system architecture:

- PROV lacks in-house semantic web expertise
- PROV's strategy is to move applications to the cloud
- PROV's Archival Control System is under review and may change
- PROV's OAI-PMH repository is a long-term commitment to the National Library and Australian National Data Service

http://conaltuohy.com/blog/visualizing-government-archives-through-linked-data/





Linked Data prospects

Using RDF and a SPARQL store was only one way to produce the data PROV isualizer needed; but RDF is an open technology that also offers:

- Interoperability with other archives and cultural heritage institutions (especially so given ICA's imminent RDF schema for Records in Context)
- Federated search across all archives
- SPARQL access for large-scale data analysis
- Enhancement of more of PROV's web real estate with relevant data drawn from the SPARQL store
- Integration of more of PROV's metadata collection





Demo

PROVisualizer can be seen at PROV's new website (which is still in beta):

http://beta.prov.vic.gov.au/explore-collection

Also viewable as a full page at: http://prov-data.conaltuohy.com/



