Applying concepts of Linked Data to local digital collections to enhance access & searchability

Current Structure
Existing digital collections have metadata in SQL databases which are:
• Not cross-searchable
• Not openly accessible
• Not all fields are fully searchable within each collection

Proposed Structure
Move collections and future content to Fedora platform
• Cross-searchable
• Open Access
• Linked Data capability (RDF) with local and universal URIs

Introduction
Currently, Kent State University Libraries is preparing to redesign its online digital exhibits and collections to a different content management system. The plan will entail migrating existing digital collections on to another platform, and in so, provide a more inclusive search mechanism to enhance access.

In order to prepare for this migration, we are currently mapping the SQL data from the existing digital collections into RDF using a tool called D2RQ. This move will take content out of a locally defined framework and into a more sustainable platform. This will enable cross-collection, consolidated search mechanism that is not currently available to users. Principles of Linked Data will also be applied to the structure and creation of RDF files. This paper will address the shift in the ideology of the new framework and highlight the benefits in this move.

Case Study
After initial investigation, connections between the content in the May 4 Digital Archive and the Kent State Shootings: Oral History were found. One example that highlights this issue of non-connectivity is between images by Crankshaft cartoonist Chuck Ayers in the May 4 Digital Archive (then KSU student photographer), and the oral history provided by the same individual in 2002. This is just one example how transitioning to a platform capable of cross-collection searching would be ideal to enhance discoverability for users.

Link to Digital Collections
Kent State University Digital Collections
http://www.library.kent.edu/digital-collections

Next steps
Once we have completed the base conversion from SQL to RDF, we then need to add URIs and define our thesauruses and models for Linked Data. Additionally, we would like to run the Oral History transcriptions through semantic analysis. We will also be interested to compare usage analytics over time to see if we can track an expected increase in traffic, and also see how people are using the collections.

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Literature cited