Best Practice Poster:  
A Library Catalog REST API Framework

Jason Thomale  
University of North Texas, United States  
jason.thomale@unt.edu

William Hicks  
University of North Texas, United States  
william.hicks@unt.edu

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Abstract

Within the archipelago of cultural memory data, library catalogs and systems still comprise some of the most isolated and least penetrable desert islands. Although the library world has made significant strides over the past decade to open its metadata, many individual libraries remain at the mercy of their ILS vendors to implement open protocols, standards, and APIs. At the University of North Texas Libraries, we have been developing a REST API framework for exposing our catalog and ILS metadata, taking our first steps toward breaking our data off this particular island.

Catalog resources that we’ve modeled so far include bibliographic records (modified from MARC), item-level records, branch location records, item type records, and item status records. We are also working on resources that support a shelf-list browser application, which mix user-supplied data with item and bibliographic metadata and demonstrate a real-world use for the API.

Our framework is not merely an API for our particular ILS. Rather, we are developing a toolset to allow us to extract and re-model our ILS data—to use data derived from our ILS but not necessarily to adhere to ILS data models—and expose the data as RESTful, linked resources. Although our initial efforts have focused on modeling resources that do closely align with ILS entities, future development will include extended models for work- and identity-related resources and possibly extending our APIs to expose linked data (using, e.g., JSON-LD).

Best practices in this area, exposing ILS metadata as RESTful resources, are hard to come by. Given the mixture of metadata practitioners, systems-oriented individuals, and web-oriented individuals that the Dublin Core Metadata Initiative (DCMI) conferences tend to attract, we hope that presenting a poster about the project in the Best Practices track might allow us to connect with others with whom we might dialog. Ultimately, we believe an exchange of information about our project so far—our approach and practices—would be valuable to us and to others in the DCMI community.