

Variations on Video: Building the Next Generation Library Media Management System

Proposal for IMLS National Leadership Grant

Indiana University

Project Abstract

The Indiana University Digital Library Program, in partnership with Northwestern University Libraries, proposes to lead a three-year project (October 1, 2011 – September 30, 2014) to develop an open source software system to support the needs of academic libraries and archives for managing digital audio and video collections and providing access to these collections to their patrons.

An IMLS planning grant (August 2010 – January 2011, extended through July 2011) has supported an investigation by Indiana University, Northwestern University and other participating institutions into how best to address the audio/video media ingest, management, and access needs of academic libraries. From those investigations it is clear that existing media systems, whether commercial or open source, do not adequately address the rapidly growing needs that academic libraries and archives have in these areas.

Development work will build on the past success of and lessons learned from Indiana University's development of the open source Variations digital music library system, supported in part by past IMLS funding and currently in use at over ten college and university libraries, and on Indiana University's and Northwestern University's extensive histories in providing access to digitized audio and video collections. Although development will primarily occur at Indiana and Northwestern, other universities have committed to testing and/or advising during development: University of California Berkeley, University of Connecticut, Harvard University, University of Miami, New York University, University of Virginia, Stanford University, and the University of York (UK). In addition, WGBH/Boston, the Hydra Project, and the Rock and Roll Hall of Fame Library and Archives have committed to testing and/or advisory roles.

The new system, to be named but currently referred to as Variations on Video, will support the ingest, media processing, management, and access-controlled delivery of library-managed video and audio collections. The system will work with several free and commercial media servers and will support both browser-based and mobile delivery. Moreover, system development will take advantage of technology from other collaborative efforts within higher education. Currently, Opencast Matterhorn is the likely basis for the media-processing pipeline and the choice of the Hydra architecture will let the system take advantage of Blacklight for discovery, Fedora as a content and metadata repository, and Hydrangea as a user interface for creating and editing metadata. The project plans to contribute development efforts back to these communities.

The development team will use the Scrum agile development process for the design, development, integration, test, and delivery of the system. Test sites will provide input on requirements, design, and evaluation as they install and use the software. Technical development of the system will be "front-loaded" within the proposed three-year grant timeframe, allowing a significant amount of time for system refinement and expansion of the community.

Community development and marketing have been planned as a significant portion of the grant activities in order to ensure product sustainability. Planned activities include the recruitment of third-party support and hosting providers, the development and distribution of marketing materials at conferences and other venues, the creation of easily trial-able versions of the product, and the affiliation with the most relevant open source development communities that already exist. The goal is to transition development and support to a self-sustaining open-source community by the end of the grant period.