Poster Proposal for Open Repository 2009
Customizing DSpace Manakin for Educational Video Collections to Enhance User Experience

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Abstract
The poster reports our experience of using DSpace Manakin for Starlink[1] Video Repository[2]. The project is a cooperation between STARLINK (Richardson, TX) and TxCDK[3] of University of North Texas, under the supervision of Dr. William Moen. The project uses DSpace v.1.5 Manakin to create a dynamic digital repository system to store, manage and present STARLINK's various video collections. STARLINK has recently successfully launched its Ideas Collection with the new depository with much improved user interface and seamless integration with STARLINK's existing web site. More collection will be added to the depository for more streamlined operation. The project showcases DSpace as a low-cost and flexible platform appropriate for educational institution like STARLINK to run a web-based depository system for better resource sharing and user interaction. The poster will also discuss the challenges the project faced in customizing DSpace to provide different types of access for subscription and non-subscription users, and DSpace Manakin's better interface design functionalities.

STARLINK and its video collections
Starlink provides innovative ideas, cutting-edge experts, and state-of-the-art training to higher education professionals via DVD and the Internet. It delivers its institutional subscribers various educational/training videos through the Web. As its collections grow, its delivery media seem to have fallen behind -- it has only had a static list of videos on its web site, with little or no interactive features for users to browse or search the contents of the video. The information about the videos is sketchy and not in standardized form. This situation limited its ability to promote its collections to attract and retain subscribers.

Benefits of DSpace Manakin Implemented for STARLINK's Streaming Video Library

User Access and System Security
- The system creates three-tier server architecture to connect to video repository based on DSpace 1.5 platform with the process of authentication on the STARLINK's web site and streaming video sources sitting at a different location/server;
- The system uses DSpace *bitstream* feature to solve the problem of limited access vs. open access by using video link as *bitstream* file; and
- The system provides open access to collection's metadata to expose the repository to a larger audience to attract more subscribers and for future harvesters and aggregators, and limited access to protect STARLINK's licensing agreement with its subscribers.

Metadata
- DSpace's metadata registry allows for mix and match namespaces to better represent the characteristics of a collection – as educational materials (using DC and DC Education), and as digital object (using IEEE LOR);
- Systematic approach in the selection and representation of metadata elements;
- Using standardized encoding scheme and locally created thesaurus to ensure metadata quality and consistency; and
- The process of creating metadata and using standard encoding scheme in the repository promotes more standard approach to manage the video collections.

Interface Design

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[1] STARLINK is acronym for State of Texas Academic Resource Link, http://www.starlinktraining.org/
[2] Starlink Video Repository (http://starlink.southplainscollege.edu/starlink/ project is funded by STARLINK and under the supervision of Dr. William E. Moen, Director of TxCDK, & Associate Professor at Department of Library and Information Science, College of Information, Library Science, and Technologies, University of North Texas.
[3] TxCDK: Texas Center for Digital Knowledge, http://www.txcdk.org/

- Customization of the interface to retain or develop a cohesive branding identity (color scheme, logo, images);
- Ability to change the organizational structure and add new features tailored to Starlink's specific needs (addition of a Help feature, and moving the streaming video link to a more effective place);
- Using three tiers to customize Manakin: Style Tier (XHTML + CSS), Theme Tier (XSL + XHTML + CSS), and Aspect Tier (Java). (We did not create completely new themes or aspects, but just modified existing themes and aspects);
- Better browsing in terms of simple item display and browsing by title, author, topics, categories and publication date;
- Better searching – simple search and the ability to expand advanced search; and
- Better content delivery to enhance user experience – users can interact with the contents of the collection.

Conclusion
By the time of the conference, we may have more to report as new collections are entered into the repository.

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