Video Storage and Delivery Project

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Background material for interested parties

Description

There is a well-recognized need at Waterloo for a facility to manage video (and audio). A facility would allow upload of video, storage, and delivery on demand. Video storage and delivery system lifecycle requirements are similar to those for documents and images, that is, to store, manage, tag for searching, deliver, remove, and potentially to archive. The University is at risk for loss of such assets and for falling behind in the tremendous demand for video in almost every aspect of our digital content. Various storage and delivery solutions are in use for specific recordings (e.g., those captured through video and web conferencing systems, and the streaming server; video uploaded to LEARN, the online course system; Media Resources feature films streamed from vendor sites), but in general, these assets have no central location for discovery and re-use, and no long term storage plan.

The end state of the project would be a video and audio asset storage and delivery facility, which may involve a set of technology solutions, providing departments and users with services for their needs, and reducing risks of the loss or inefficient or ineffective use of these assets. The intent is to solve the "in use" scenario, and not necessarily the archive, though archival needs will be examined.

The system may run locally or on a hosted site, and will have significant storage requirements. It will need to integrate with campus infrastructure, including LEARN. It may interface to existing video sources described above, to catalogue those assets, even where they are stored separately.

Video (and audio) sources at Waterloo

- IST ITMS, Production Services productions (many studio and on-location recordings)
- Centre for Extended Learning
- Marketing and Strategic Communications
- IST Client Services, Media Resources (feature film and documentaries, move to streaming licensing and self-hosting)
- Creative Services
- Faculties
- Video services with recordings, such as video and web conferencing, streaming services
- Many others!

Solution space

There are many video solutions, with a few that are special purpose.

1. **"Ingest and share"**, like ShareStream, Kaltura. Multiple ingest formats, transcoding, delivery in different formats.
2. **"Manage and discover"** like Ensemble and Islandora, others? Focus on cataloguing?
3. **Lecture capture,** like Panopto, MediaSite, Echo 360, D2L Capture, and others. Classroom video capture, with PPT (or other) in playback, with thumbnails, timestamps, etc.
4. **Live streaming**.

Our search is more for (1/2), though we are interested in (3) and already provide (4). I am not sure if 1 and 2 are different from each other, except maybe Islandora and Ensemble are closer to "library" functions, and ShareStream and Kaltura are focused more on the delivery part. We will discover the primary needs for campus, and fit the solution to those.

Collected information from CUCCIO colleagues

I asked 15 questions in a poll of the ~40 Canadian University Council of CIOs and the associated instructional technologies SIG. I had responses from nine institutions, summarized below.

University & Contact	Solution(s)	Services	Hosting	LMS integration	Missing/Other
Laurier gwagner@ wlu.ca	FileMobile	Mostly for academic use	Vendor	D2L, manually embed code	Blocking on non-https server; scaling costs
Manitoba Doug.Stoyko@ umanitoba.ca	Helix, may add Ensemble	Convocation, some instructional, see more LMS	Self	Not yet, looking at Ensemble, Wowza and integrate those	What formats, browsers, plug-ins to support
McGill sharon.roy@ mcgill.ca	MS Office Video (expected)	instructional video, accessed via LMS	Self	D2L, fully integrated	Want more tools
Queen's harmsend@ queensu.ca	Ensemble, Wowza, Telestream Vantage	Instructional, licensed video	Self	Moodle: Ensemble plugin; Entrada, D2L: embed code	Streaming to Android; great search tools; jump to key locations
Royal Roads Vivian.1forssman @RoyalRoads.ca	MediaCore	All uses, except licensed films	Vendor	Moodle: LTI, working on more personalized	Evolving to BCNET shared service
Saskatchewan tyson.brown@ usask.ca	ShareStream (looking at MediaCore)	Videos used within the LMS, many sources	Vendor	Blackboard integration	One tool that does all (three now)
St. Boniface julie@ ustboniface.ca	Vimeo and Blackboard Collaborate	Courses and website, lecture capture	--	Moodle: embed links	--
Trent andrewbell@ trentu.ca	Panopto	Faculty upload, mostly lecture capture	Self	Blackboard, "incredible" integration	Costing models
Victoria cio@uvic.ca (Paul Stokes)	MediaCore	All types of uses	Vendor	Moodle	Recommend looking at this solution

Are you interested in participating?

Please contact me! I will be assembling a project team, and also gathering input. Please let me know what participation best fits your area.