Archiving High Definition Video at the School of Journalism

http://www.interpares.org
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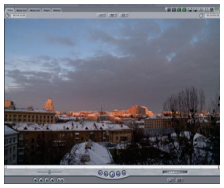
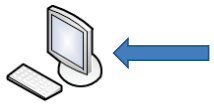
InterPARES 3 Project
International Research on Permanent Authentic Records in Electronic Systems

THE UNIVERSITY OF BRITISH COLUMBIA
SLAIS
SCHOOL OF LIBRARY, ARCHIVAL & INFORMATION STUDIES

Capture

Students in the International Reporting course take a semester-long broadcast or multimedia reporting class that begins with a week-long trip to a foreign destination. In the field, students shoot between ten and 100 hours of raw footage on High Definition camcorders. Back at UBC, they use the raw footage to create the final project using Final Cut Pro 6.0.





Video Editing Station

Was

- 2009
  - Tape1
  - Tape2
  - Tape3
  - Tape1
  - And so on...
- 2008
  - Tape1
  - Tape2
  - Tape3
  - Tape4
  - And so on...

Prior to the start of the project, the tapes with the raw footage were digitized as a single video file an hour long, even if they contained many unrelated shots. An index of the clips was maintained in a separate system. With no controls over the labeling of the tapes, occasionally multiple tapes would be given the same name; nor were there any controls on how to describe the individual shots.

Is

- Pain Treatment
  - Kiev
  - Uganda
  - Ukraine
  - US
    - Kiev timelapse of sunrise 1; Maidan Square, Kiev, Ukraine, 10Dec2010.mov
    - Interview of Dr. Elena Ivanyuta by Sarah Klien; Isida Clinic, Kiev, Ukraine, 14Dec2010.mov

Now, the raw footage is divided into individual video clips through the log and capture process with descriptive metadata – including formal names, dates and locations – embedded into the files with sufficient technical metadata to allow for future migration. Each sub-team has a folder in which to store their individual assets Future planning will allow for scanned images of the intellectual property waiver forms to be stored with the clips.

This case study considers the High Definition digital videotapes and files created by the School's students as part of their course projects and theses; specifically, the study examines the students' finished video documentaries and the raw footage produced in the course of making them. While the videos are pieces of artistic expression, they also provide evidence of one component of the students' coursework for which they are graded and they also reflect the quality of education each student receives from the program.

The main objectives of the case study are: to establish a digital video archive of High Definition video footage created by the School's students; devise means to ensure the preservation of the raw footage of student projects; and create policies allowing for the footage to be used internally and externally.

Describe

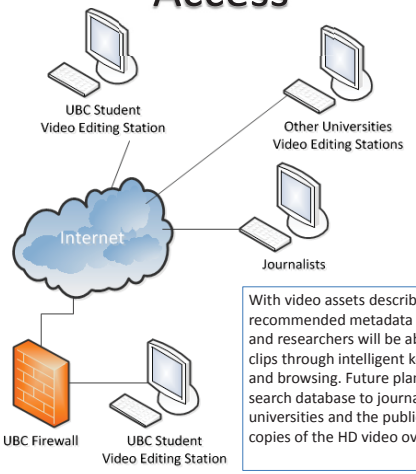
	Field Type	Metadata Element	Example
	DD	Creator	International Reporting Class 2009/2010
	FF	Keyword	Olympics
		Keyword	Vancouver 2010
		Keyword	Ceremonies
		Keyword	Gretzky, Wayne
	DD	Category	Sports
O	DD	Subcategory	Olympics
	DD	Form/ Footage Type	Subclip
R	FF	Version Number	0.1
R	FF	Classification	public
O	FF	Description	WS Footage of Wayne Gretzky lighting the Olympic cauldron at the opening ceremonies
	FF	Coverage - Spatial	Vancouver, British Columbia, Canada
	FF	Coverage - Temporal	February 12, 2010
	DD	Languages	English; Mandarin
	DD	Project Name	2010 Olympics

R = Required O = Optional DD = Drop Down controlled language 'pick list' FF = Free Form fields with recommended guidelines

	Metadata Element	Example
	Title	According to naming convention
	Author	UBC School of Journalism
	Rights Summary	Copyright - Creative Commons license
	Date of Creation	2010-02-12
	Filing Date	2009-10-02
R	Attachments	none
R	Access Restrictions	none
	Format - Physical	DV Mini
	Format - Digital	Video/mpeg
	Format - Media Type	Moving Image
	Format - File Size	471234854 bytes
	Format - Time Start	00:00:00
	Format - Duration	00:12:45
	Format - Data Rate	Total 1584 kilobits/sec; Video 1384 kilobits/sec; Audio 200 kilobits/sec
	Format - Bit Depth	8-bit
	Format - Sampling Rate	Audio 44.1 kHz
	Format - Frame Size	640x480
	Format - Aspect Ratio	0.16875
	Format - Frame Rate	29.97 fps
	Format - Colours	Colour
	Format - Tracks	1 video and 1 audio
	Format - Channel Configuration	Stereo audio

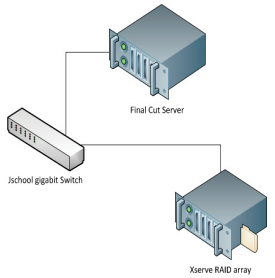
PBCore is the metadata standard for describing audio-visual media developed for and by public broadcasting. Based on Dublin Core and first released in 2005, PBCore has been adopted by users in public media, film archives, academic institutions, and other audio-visual collections and archives. The metadata schema recommended to the School of Journalism by the InterPARES 3 Project combines elements from PBCore and the InterPARES Chain of Preservation.

Access



With video assets described using the recommended metadata schema, students and researchers will be able find HD video clips through intelligent keyword searching and browsing. Future plans are to expose a search database to journalists, other universities and the public while streaming copies of the HD video over the internet.

Preserve



HD video clips will be protected through a combination of :

- ✓ Policies
- ✓ Training
- ✓ Backups
- ✓ XML Output

As migration to newer and better file formats becomes necessary to avoid technological obsolescence, the technical metadata embedded in the files will allow for intelligent, data-based decisions on when and what files need migrating.

Previously, the digitized raw HD video was stored on removable USB hard drives (with no backup) that 'lived' in the HD edit suite workroom on UBC campus, although the tapes often took trips to students' homes. Now the clips are stored on a Storage Area Network, with RAID 5 redundancy and backup tapes. Access to the system, and the assets, will be controlled through physical and network security protocols. The servers will be secured in the UBC IT data center on campus – providing redundant power, cooling and internet access.

A special thanks to all the GRA who have worked on this project over the years: Karine Burger, Kerry-ellen Canning, Donald Force, Donald Johnson, Adrienne Lai, Shamin Malmas, Karen Moxley, and Elizabeth Walker