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# Variations On Video project update

DLF Fall Forum 2010

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# Variations Overview

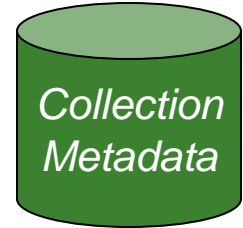
*content*



*digitized audio*



*scanned scores*

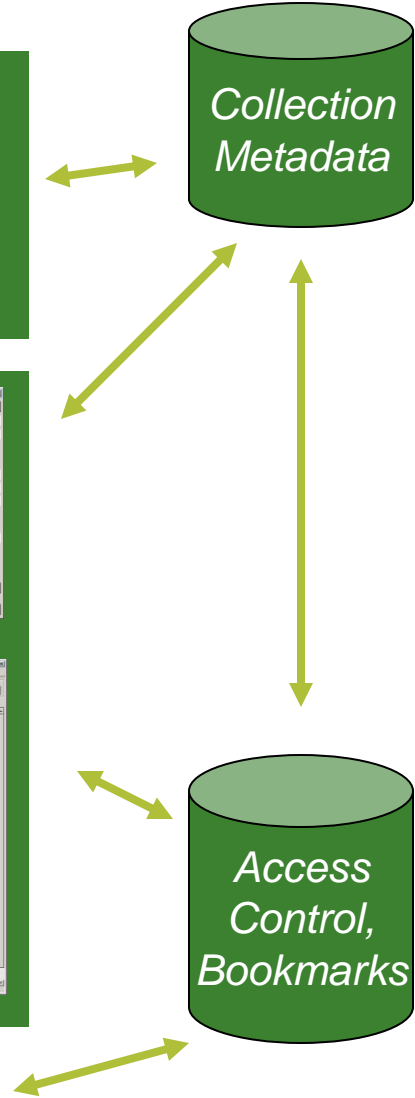


*user interface*



*users*

*faculty*      *students*      *librarians*





# Variations History

- Developed at Indiana from 1994-present
- Released as open source in 2009
  - [variations.sourceforge.net](http://variations.sourceforge.net)
- Six month planning grant from IMLS, August 2010



# Motivations

- Requests to expand Variations to support video
- Digital video services maturing, need scalable solutions
- Libraries have some unique needs in
  - Metadata
  - Integration
  - Access control



# Video content use cases

- Serving local communities of students and scholars
- Serving researchers everywhere
- All the quirky things that find their way into library video collections



# Legal issues

- Confusing mishmosh of exemptions
- Tradition of tiered pricing, PPR
- Expiring distribution rights, limited term licenses (Eyes on the Prize)
- TEACH
- DMCA
- Whither fair use?
- Rise of the digital license



# Variations on Video

Add online video access capabilities to Variations, providing equivalent access, annotation, and analysis tools to support teaching and learning.

- Initial planning grant, Aug 2010 – Jan 2011 from the Institute of Museum and Library Services
- IU & Northwestern are lead institutions
- Funding multi-institutional collaboration on functional and technical requirements
- Goal: Submit full implementation grant proposal to IMLS



INDIANA UNIVERSITY







NORTHWESTERN  
UNIVERSITY



INSTITUTE of  
**Museum and Library**  
SERVICES



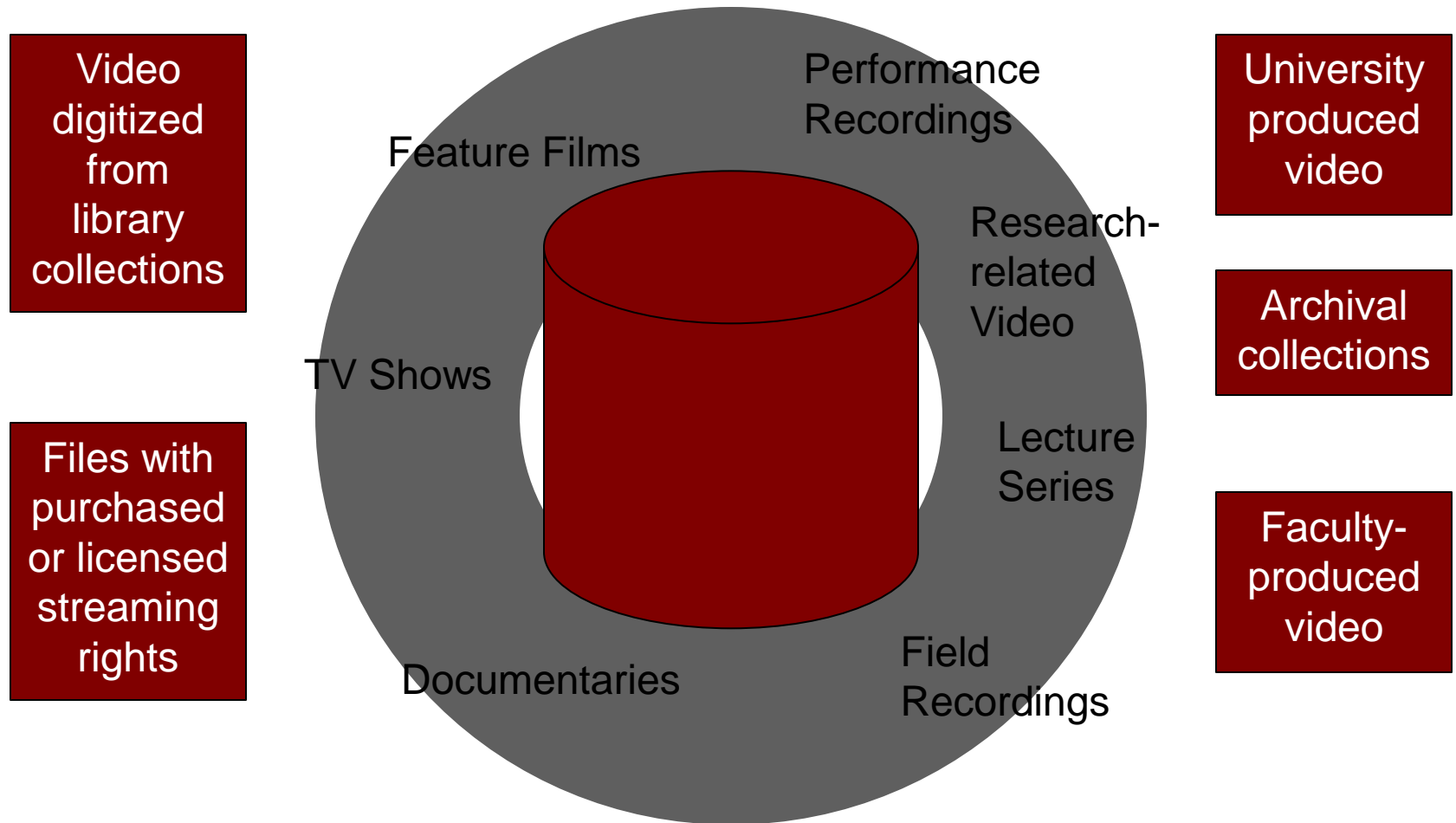
# Variations on Video: Scope

- Access to managed collections
  - Video, audio
  - Focus on libraries, archives
  - Research, teaching, and learning use
  - Variety of access control requirements
  - Integration with preservation repository services
  
- Ad-hoc faculty/student uploads 
- Classroom capture 
- Live streaming 
- Working digital assets – media production 





# Variations on Video: Content





# Current (Partial) Solutions

- Media servers
  - Adobe, Real, Apple, Microsoft, Wowza, etc.
- Digital asset management systems
  - OpenText/Artesia, NetXposure, etc.
- Classroom capture solutions
  - Echo360, Mediasite, Opencast Matterhorn, etc.
- Online video platforms
  - Kaltura
- Digital library repositories
  - Fedora, DSpace, ContentDM, etc.




# Gaps in Current Video Solutions

- Access control
- Integration with library digitization workflows
- Integration with library systems and metadata
- Long-term preservation
- Integration with course management systems
- Player functionality
  - Precision
  - Bookmarks, playlists




# Player Concept

Variations: <http://variations-host-dev.dlib.indiana.edu:8080/demo-ui/Player.do?containerID=145587>

 *Roméo et Juliette / Charles Gounod*  
Elapsed/Total: 0:00:05 / 150:20:03  
[View IUCAT Record](#)

Logged in as mnotess :: [Logout](#)  
[My Bookmarks](#)

▼ ▶ Charles Gounod, Roméo et Juliette  
▶▶ **Track 1. Overture (2:16)**  
▶▶ Track 2. Prologue: "Verone vit jadis deux familles rivales"  
▼ ▶ Act I  
▶▶ Track 3. "L'heure s'envole..." (3:23)  
▶▶ Track 4. "Eh bien! Cher Pâris" (3:20)  
▶▶ Track 5. "Ecoutez!... c'est le son des instruments"  
▶▶ Track 6. "Enfin la place est libre, mes amis!" (1:11)  
▶▶ Track 7. "Mab, la reine des mensonges" (2:58)  
▶▶ Track 8. "Eh bien!... que l'avertissement" (2:53)  
▶▶ Track 9. "Voyons, nourrice... Je veux vivre" (4:53)  
▶▶ Track 10. "Le nom de cette belle enfant?" (0:54)  
▶▶ Track 11. "Ange adorable" (4:20)  
▶▶ Track 12. "Quelq'un!" (5:56)  
▼ ▶ Act II  
▶▶ Track 13. "O nuit, sous tes ailes obscures" (4:23)  
▶▶ Track 14. "Ah! lève-toi soleil!" (3:11)  
▶▶ Track 15. "Hélas!... moi, le haïre" (5:39)



share  
HD  
is on

▶ Total ◯ CD/Side ◯ Track ◻ Repeat



# Grant Objectives

- Identify functional and technical requirements and define scope based on input from:
  - Librarians and technologists
  - Faculty and students
  - Technical investigation and gap analysis
- Develop high-level technical architecture and development plan
- Form partnership for development and ongoing maintenance
- Submit IMLS National Leadership Grant proposal (February 2011)



# Survey of Video Streaming in Academic Libraries

- Conducted online April 29 – June 5, 2010
- Sent primarily to library and DL lists
- ~150 responses
- ~90 currently streaming video
- Analysis of results:

Jon W. Dunn and Mark Notess. *A Survey of Video-Streaming Practice and Aspirations in Academic Libraries*. EDUCAUSE 2010 Annual Conference, Anaheim, October 2010.



# Project Participant Meeting

- Held October 5-6, 2010, at IU
- Institutions contributed usage scenarios to surface user requirements
- Analyzed scenarios and developed functional & technical requirements



# Other Planning Participants



NEW YORK UNIVERSITY



STANFORD  
UNIVERSITY



THE UNIVERSITY  
*of York*





# Preliminary Directions

- More likely to focus on ingest, management and delivery than on sophisticated analysis and annotation, at least initially
- Tending towards a modular approach
- Investigating opportunities to leverage work of other projects where possible, such as Opencast Matterhorn and Kaltura



# Interested?

- We are looking for partners
  - Requirements input
  - Development
  - Testing
- [www.dlib.indiana.edu/projects/vov](http://www.dlib.indiana.edu/projects/vov)
- [facebook.com/VarVideo](https://facebook.com/VarVideo)
- [twitter.com/VarVideo](https://twitter.com/VarVideo)