

AMPPD Project Update

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#dlbb

AMPPD Project Team

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Melanie Yolles / NYPL

Metadata Generation

Mechanisms (MGM) Team:

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Tanya Clement / UT

Liz Fischer / UT

Bert Lyons / AVP



AUDIOVISUAL METADATA PLATFORM



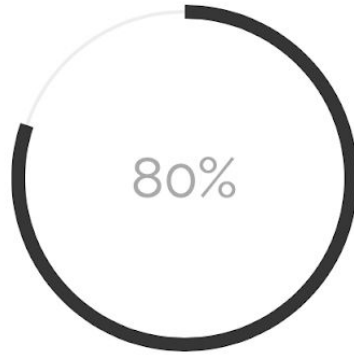
Media Digitization & Preservation Initiative

[HOME](#)[ABOUT](#)[PROCESS](#)[COLLECTIONS](#)[RESOURCES](#)[BLOG](#)[MEMNON-SONY
PARTNERSHIP](#)

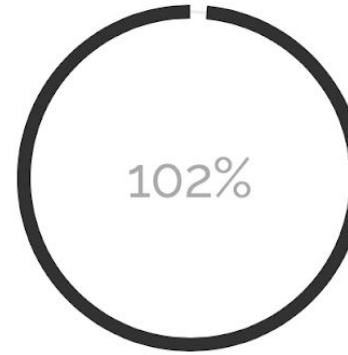
Indiana University's comprehensive work to preserve historical and cultural time-based media for the research, education, and enrichment of future generations

[What is MDPI?](#)

Digitization Progress to Date



20,008 out of 25000
Film Reels



330,031 out of 325000
Audio and Video

Featured collections



The Orson Welles materials

Orson Welles is regarded as one of the most significant figures of the 20th century. Known most for his 1938 radio broadcast of H. G. Wells' *The War of the Worlds* and film *Citizen Kane*, Welles acted and directed on stage, radio, film, and television, made numerous recordings, and authored plays, film scripts, and a newspaper column.

The Lilly Library at Indiana University is home to the Orson Welles materials —thousands of one-of-a-kind audio and film recordings, images, and

MDPI Internal Content Access

Browse

Manage Content Manage Groups Manage Selected Items (0) Playlists

Unpublish Edit Delete Push to MCO



The rake's progress a fable / by W.H. Auden and Chester Kallman ; music by Igor Stravinsky.

Date
2000

Main contributor
Weigel, Johan.

Contributors
Weigel, Johan.; Reich, Diane Thueson.; Oakden, Andrew.; Burchett, Christopher.; Valentine, Rebeckah.; Hauxwell-Hammond, Janice, 1962-; Mihalka, Toffer.; Sigmon, David.; Palló, Imre, 1941-; Liotta, Vincent.; Röthlisberger, Max.; Schwandt, Michael.; Stravinsky, Igor, 1882-1971. Rake's progress.; Indiana University Opera Theater.

Subject
Operas

Collection
William and Gayle Cook Music Library

Unit
William and Gayle Cook Music Library

Language
English

28:47 02:09:07 [play] [volume] [settings] [camera] [list] [full screen]



Share

Sections

1. VHS 1/1 Part 1 (40000001778846) (2:09:06)

- 1. Segment 1 (02:08)
- 2. Segment 2 (10:29)
- 3. Segment 3 (24:20)
- 4. Segment 4 (12:28)
- 5. Segment 5 (02:01)
- 6. **Segment 6 (18:16)**
- 7. Segment 7 (02:29)
- 8. Segment 8 (02:02)

Language

English

Physical Description

2 videocassettes : sd., col. ; 1/2 in.

Notes

Program bound separately as part 2.

CREATION/PRODUCTION CREDITS

Conductor, Imre Palló ; stage director, Vincent Liotta ; designer, Max Röthlisberger ; lighting designer, Michael Schwandt.

PERFORMERS

Johan Weigel, as Tom Rakewell ; Diane Thueson-Reich, as Anne ; Andrew Oakden, as Trulove ; Christopher Burchett, as Nick Shadow ; Rebeckah Valentine, as Mother Goose ; Janice Hauxwell, as Baba the Turk ; Kristoffer Mihalka, as Sellem ; David Sigmon, as Keeper of the madhouse ; Indiana University Opera Theater.

STATEMENT OF RESPONSIBILITY

by W.H. Auden and Chester Kallman ; music by Igor Stravinsky.

VENUE/EVENT DATE

Recorded on March 3, 2000, Musical Arts Center, Indiana University, Bloomington.

Other Identifiers

Catalog Key: 2812308; Other: GR00277701; Other: ARCHIVE VTP-S .S9126 A.3-20 v. 2; Other: ocm44875003; OCLC: ocm44875003; Catalog Key: CAK8960BM; MDPI Barcode: 40000001778846

[View Raw Metadata](#)

[View Fedora Objects](#)

MDPI Internal Content Access

Browse

Manage Content Manage Groups Manage Selected Items (0) Playlists

Unpublish Edit Delete Push to MCO



Tape B - Contains Digital Tapes 7-11

Date
unknown/unknown

Main contributor
Unknown

Collection
Office of University Archives and Records Management

Unit
Office of University Archives and Records Management

Other Identifiers
Other: GR00429921; Other: AV Box 32; MDPI Barcode: 40000003743053

Comments
[VHS 1/1 Part 1 (40000003743053)] Ingest: Signal - No HiFi Audio;

[View Raw Metadata](#)

[View Fedora Objects](#)



Language

English

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The Challenge

- Growing digital AV collections
 - Digitization
 - Explosion of born-digital
- Increased expectations for access
- Insufficient metadata
- Limited resources for cataloging



The Opportunity

- Emergence and continued improvement of machine learning and other automated tools
- New access tools (e.g. Avalon, Aviary) and standards (e.g. IIIF) that can leverage time-based metadata
- How can we leverage the best of automated tools and human expertise in flexible and configurable ways?
 - Diverse collections demand diverse workflows

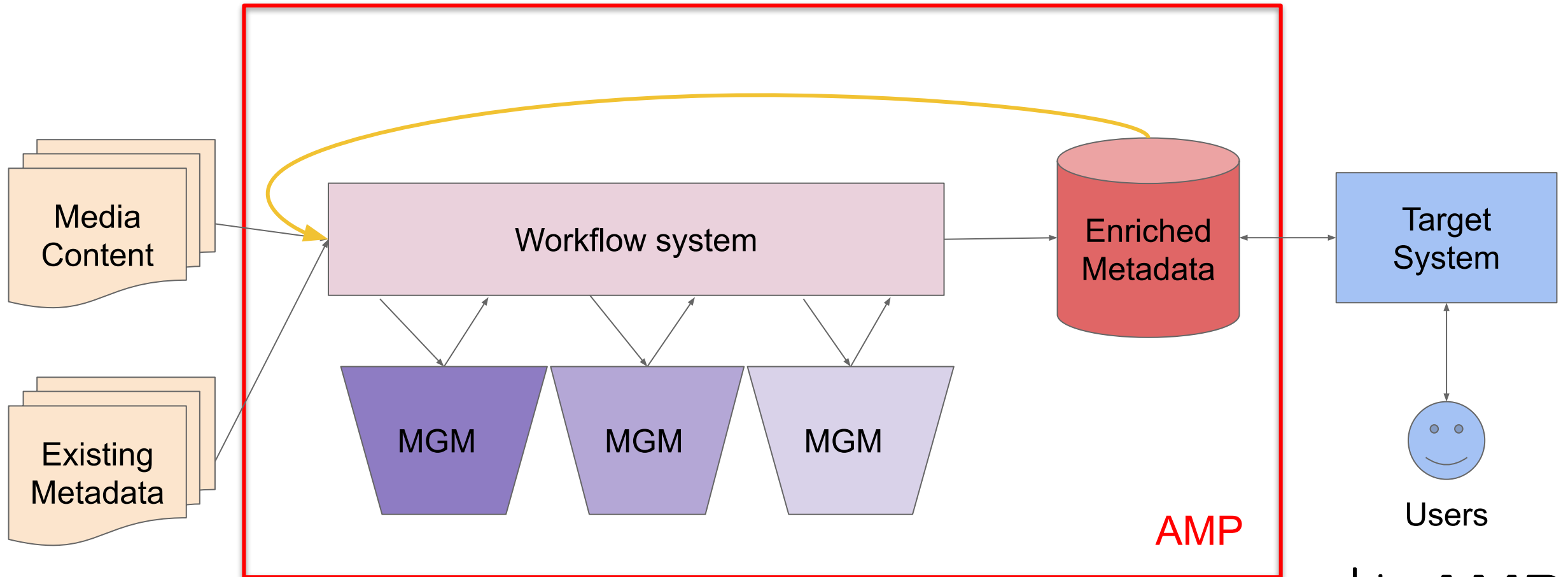


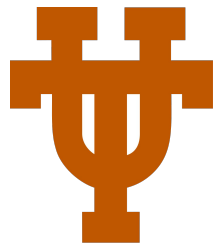
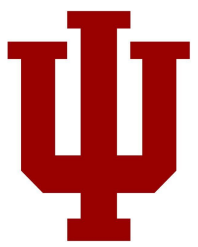
AMP: Audiovisual Metadata Platform

- Open source software platform to support metadata creation for AV collections
- Design and execute workflows combining automated and human steps: *Metadata Generation Mechanisms (MGMs)*
- Delivery of metadata to variety of target systems, e.g. online access systems, library catalogs, etc.



AMP Concept





New York
Public
Library

THE
ANDREW W.
MELLON
FOUNDATION

2017-2018: AMP Planning Project



2018-2020(21?): AMP Pilot Development (AMPPD)



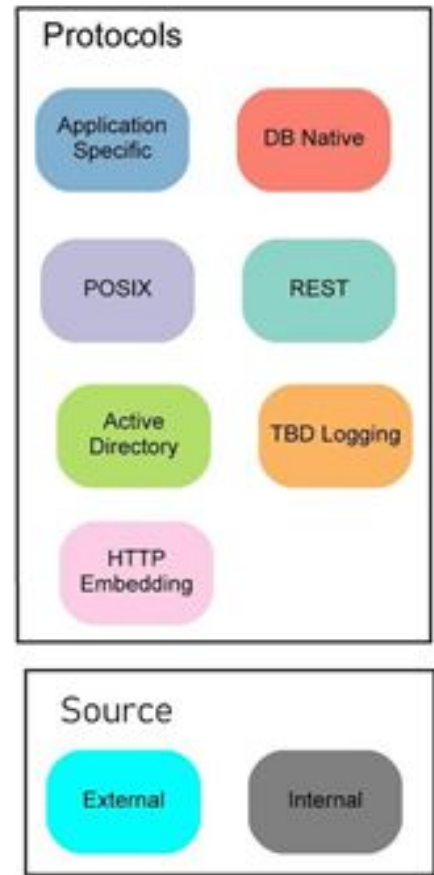
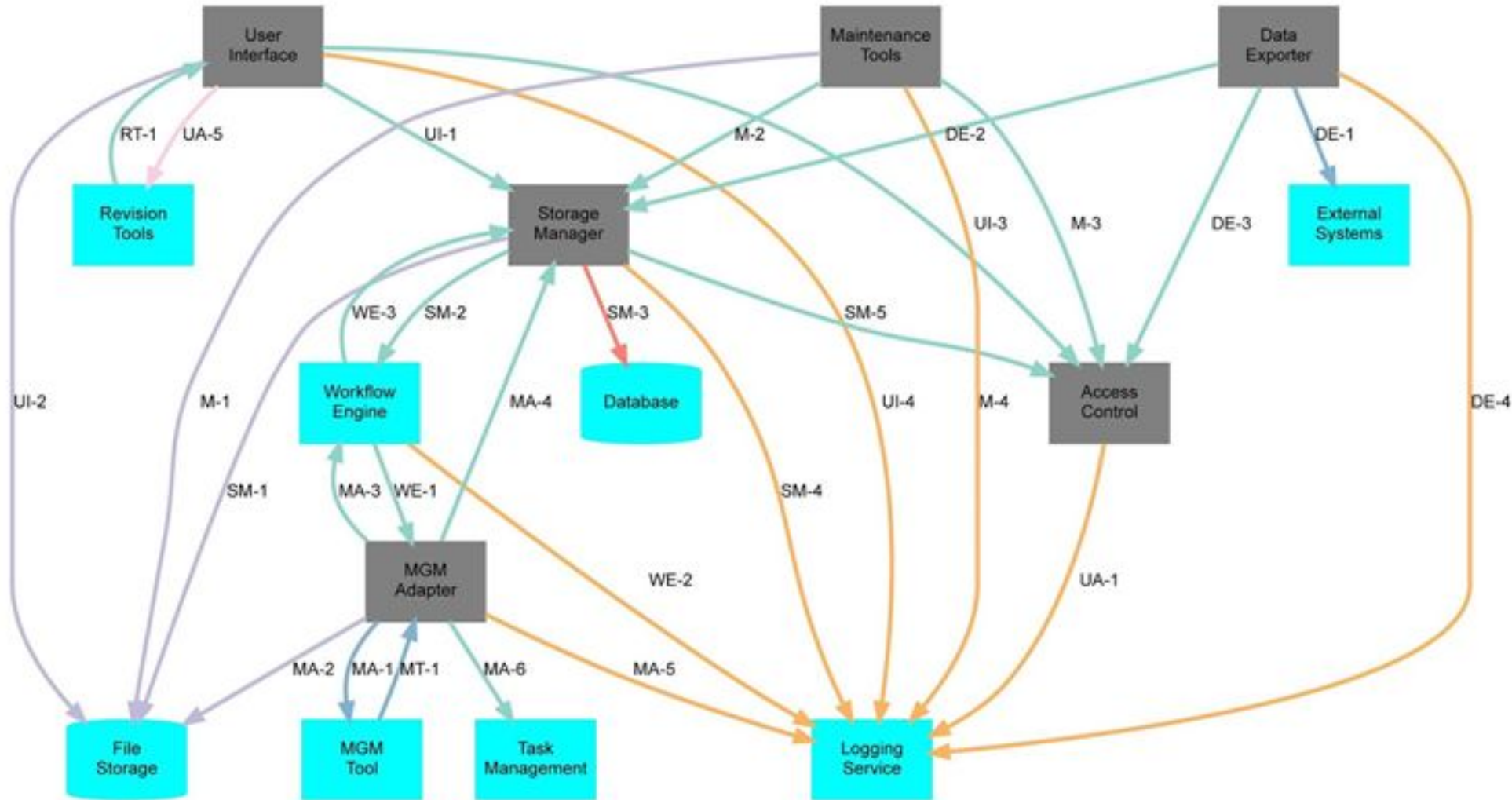
Future: AMP Implementation



AMP

AUDIOVISUAL METADATA PLATFORM

AMPPD System Design and Workflows



AMP Demo

Successes

- **Galaxy**
 - APIs and documentation
 - Separation between AMP code and Galaxy
 - Architecting Galaxy tools using AMP wrappers
- **Use of an external Task Management tool**
 - JIRA
 - Open source option: Redmine or OpenProject

Challenges

- **HMGMs**

- Setting up in Galaxy
- Selection of and integration with revision tools.

Currently using:

- BBC Transcript Editor
- Avalon Timeliner - for NER output

Plan to use:

- Avalon Structural Metadata Editor - for Segmentation output

Research needed:

- Shot and Scene detection
- Any music-related MGM

AMPPD Collections

IU Archives

- Bloomington Faculty Council Minutes
- Russian and East European Institute
- Focus Black America
- Herman B Wells

75hrs video

25hrs
audio

IU Music Library

- Jazz Ensemble
- Solo Recitals
- Orchestra Performances
- Opera Performances

80hrs video

20hrs
audio

New York Public Library

Gay Men's Health Crisis

- Protests
- Speaker Events
- Interviews
- Focus Groups

80hrs video

20hrs
audio

AMPPD Collection Needs

Common needs: Transcripts & Subject terms



Archives:
People & locations



Music:
Works performed



NYPL:
Content boundaries

Evaluating MGMS

MGM Team set up and tested multiple candidates per MGM

Transcript MGM:

- Mozilla Deep Speech
- **AWS Transcribe**
- Google Speech-to-text
- **Kaldi**
- CMUSphinx

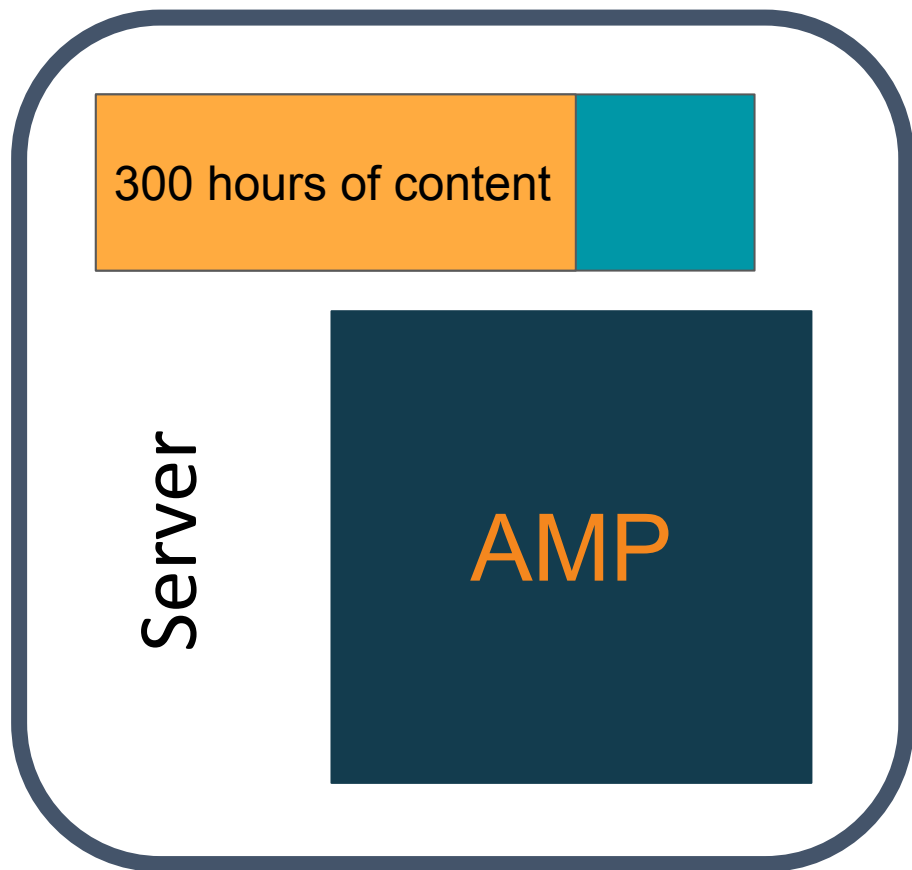
Compared outputs for multiple MGMS

- Transcripts
- Named entity recognition
- Video OCR
- Genre detection
- Music analysis
- Shot detection
- Segmentation
- Structured OCR
- Facial recognition

Deciding on Workflows

- University Archives
 - Segmentation > Transcript > NER
 - Facial Recognition
- Music
 - Segmentation > Instrument detection
 - Shot detection
 - (Structured OCR)
- NYPL
 - Segmentation > Transcript > NER
 - Segmentation > Transcript > NER with supplied vocab (Homosaurus)
 - Shot detection

Testing Results (so far)



YOU ARE HERE!



OUTPUTS

Archives: transcript, NER list of terms, contact sheets for Wells and Nelms

Music: Musical work segments, instrumentation, contact sheet of shots

NYPL: transcript, NER list of terms, NER list of terms from special vocab, contact sheet of shots

Working together: Challenges and successes

- Multiple partners
- Distributed team
- Importance of planning stage
- Evolving sub-teams
- Value of in-person meetings for building trust and cohesion
 - Added an unplanned meeting mid-2019
 - How do we replace this in the age of COVID?



Questions? Comments!

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Maria Whitaker: mcwhitak@iu.edu

Read more at the project wiki:
<https://go.iu.edu/amppd>

Updates at [@AVMetadata](https://twitter.com/AVMetadata)



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