

DIY open source digital
preservation 4 n00bz:
Ethics and code joy

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IT'S FOSS

[Free and] Open Source Software

n. ~ Computer code that is developed and refined through public collaboration and distributed without charge but with the requirement that modifications must be distributed at no charge to promote further development.

source:

<https://www2.archivists.org/glossary/terms/o/open-source-software>

FFmpeg & MediaArea: AV heroes



➤ **ffmprovisr** ➤

<https://amiaopensource.github.io/ffmprovisr/>



Search or jump to...



[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)



AMIA Open Source

[Report abuse](#)

An organizational account for collaboration on resources that support the preservation and use of moving image media.

Repositories 51

People 10

Projects 0

Pinned repositories

[ffmprovizr](#)

Repository of useful FFmpeg commands for archivists!

HTML 120 31

[vrecord](#)

Vrecord is open-source software for capturing a video signal and turning it into a digital file.

Shell 51 11

[cable-bible](#)

A guide to cables and connectors used for audiovisual tech

HTML 36 12

[open-workflows](#)

List of open workflows and resources for A/V archiving

34 8

[time-based-media-art](#)

Resources on the care and preservation of time-based media art.

18 5

[analog-inspection](#)

List of analog media inspection templates/forms.

12 7

<https://github.com/amiaopensource>



Are you ready to join the Great (open source) Link?





+



= ?

Basic Specs

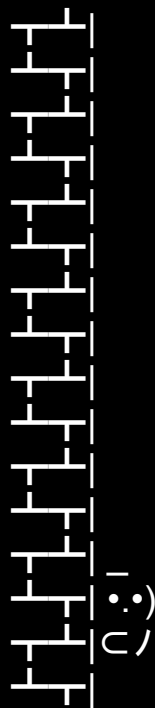
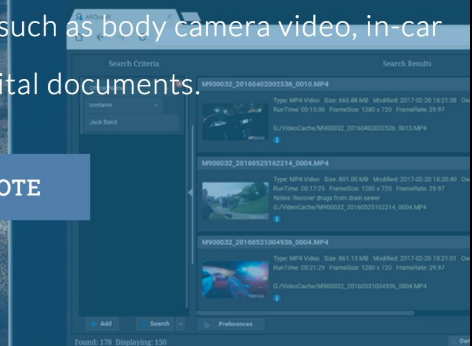
- Ingest preservation masters with descriptive metadata
- Store redundant master copies on LTO
- Make derivatives available

Evidence From Anywhere

Finally, a system that helps you manage ANY digital evidence such as body camera video, in-car video, surveillance footage, photos, and digital documents.

OUR APPROACH

GET A QUOTE



so creepy

Phoenix VCM Video Content Manager

Search Criteria

#1

Director


contains

beck

Add Search

Found: 21 (1 Selected)

Search Results




pfa_beck_easter-egg_16496.mov ▲

Type: QuickTime movie Size: 19.26 GB Modified: 2016/03/08 11:32:18 Owner: bampfa.staff Host: libraryencimac.dyn.berkeley.edu

RunTime: 01:05:45 BeginTimeCode: 00:00:00:00 FrameSize: 720 x 486

UsageType: Collection MediaSource: Digitized Tape StatusLog: false m_245a_Complete...

/Volumes/PFA/pfa_beck_easter-egg_16496.mov




pfa_beck_ex_pm0041008.mov ▲

Type: QuickTime movie Size: 9.80 GB Modified: 2014/11/20 12:38:50 Owner: bampfa.staff Host: libraryencimac.dyn.berkeley.edu

RunTime: 00:32:20 BeginTimeCode: 00:00:00:00 FrameSize: 720 x 486

UsageType: Collection MediaSource: Digitized Tape StatusLog: false m_245a_Complete...

/Volumes/PFA/pfa_beck_ex_pm0041008.mov




pfa_beck_horizontal_pm0041007.mov ▲

Type: QuickTime movie Size: 18.76 GB Modified: 2014/11/20 13:47:48 Owner: bampfa.staff Host: libraryencimac.dyn.berkeley.edu

RunTime: 01:01:03 BeginTimeCode: 00:00:00:00 FrameSize: 720 x 486

UsageType: Collection MediaSource: Digitized Tape StatusLog: false m_245a_Complete...

/Volumes/PFA/pfa_beck_horizontal_pm0041007.mov




pfa_beck_phenomena1-4_16490.mov ▲

Type: QuickTime movie Size: 8.84 GB Modified: 2016/03/01 10:52:09 Owner: bampfa.staff Host: libraryencimac.dyn.berkeley.edu

RunTime: 00:30:09 BeginTimeCode: 00:00:00:00 FrameSize: 720 x 486

UsageType: Collection MediaSource: Digitized Tape StatusLog: false m_245a_Complete...

/Volumes/PFA/pfa_beck_phenomena1-4_16490.mov




pfa_beck_phenomena5-6_16491.mov ▲

Type: QuickTime movie Size: 4.40 GB Modified: 2016/03/01 11:11:00 Owner: bampfa.staff Host: libraryencimac.dyn.berkeley.edu

RunTime: 00:15:00 BeginTimeCode: 00:00:00:00 FrameSize: 720 x 486

UsageType: Collection MediaSource: Digitized Tape StatusLog: false m_245a_Complete...

/Volumes/PFA/pfa_beck_phenomena5-6_16491.mov



pfa_beck_phenomena7-8_16492.mov ▲

Type: QuickTime movie Size: 4.69 GB Modified: 2016/03/01 11:33:51 Owner: bampfa.staff Host: libraryencimac.dyn.berkeley.edu

RunTime: 00:15:35 BeginTimeCode: 00:00:00:00 FrameSize: 720 x 486

UsageType: Collection MediaSource: Digitized Tape StatusLog: false m_245a_Complete...

/Volumes/PFA/pfa_beck_phenomena7-8_16492.mov

Export Queue

Sort by: Filename Export: None

Phoenix UI

- Proprietary back-end database
- Proprietary TAR format
- Unreliable LTO duplication
- No public access to derivatives
- Poor UI/UX
- Supports police surveillance (badly)
- No metadata/ other APIs



Evidence From Anywhere

Finally, a system that helps you manage ANY digital evidence such as body camera video, in-car video, surveillance footage, photos, and digital documents.

[OUR APPROACH](#) [GET A QUOTE](#)



Search Criteria	Search Results
MP000032_2016405000536_0010.MP4	Type: MP4 Video Size: 642.88 KB Modified: 2017-02-20 18:21:08 RunTime: 00:13:00 FrameSize: 1280 x 720 FrameRate: 29.97
MP000032_2016405000536_0010.MP4	VideoCache/MP000032_2016405000536_0010.MP4
MP000032_201640525102214_0004.MP4	Type: MP4 Video Size: 851.00 KB Modified: 2017-02-20 18:20:40 RunTime: 00:17:25 FrameSize: 1280 x 720 FrameRate: 29.97
MP000032_201640525102214_0004.MP4	VideoCache/MP000032_201640525102214_0004.MP4
MP000032_20164051004924_0004.MP4	Type: MP4 Video Size: 851.13 KB Modified: 2017-02-20 18:21:01 RunTime: 00:21:29 FrameSize: 1280 x 720 FrameRate: 29.97
MP000032_20164051004924_0004.MP4	VideoCache/MP000032_20164051004924_0004.MP4

Microservices!



PHOENIX



ARCHIVEMATICA

Inspo Board

Software

- Mediamicroservices (@ CUNY)
- LTOpers
 - interface for LTFS-formatted LTO tapes
- IFIscripts (@ Irish Film Archive)
- UCSB
- FFmpeg
- MediaInfo

Metadata/Conceptual Frameworks

- OAIS
- PREMIS
- PBCore
- Local metadata schema(s)
- “Performance” of digital preservation
 - Ongoing
 - Iterative

Repurpose existing infrastructure

- Hardware:
 - LTO Decks
 - Network Attached Storage devices
 - Network hardware
 - Commandeer an unused server
- Workflows
 - Film collection digitization
 - DCP accessions (TBD)
 - Digital media/Communications Department productions
 - Library audio digitization



Basic Specs

(EXTENDED VERSION)

- Ingest into OAIS-based repository
- Checksums R cool
- AIPs stored on 2 x LTO
- Database records for repo contents, PREMIS events
- Derivatives (& masters) easily searched/accessed
- Transparency = 2 cool


```
MCQs-1Mac:~ michael$
```

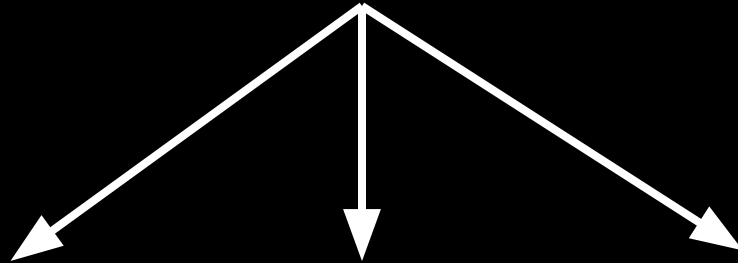
```
|
```

<https://github.com/mediamicroservices/mm>

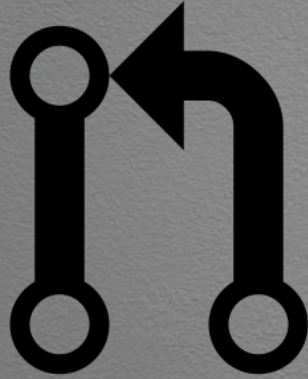
WEB INTERFACE



CONTROL SCRIPT



DIGITAL PRESERVATION MICROSERVICES



DIY

OR

DIE

sources:

<http://urbanbushbabes.com/a-behind-the-scenes-look-at-the-preview-diy-or-die-exhibit>

<https://octicons.github.com/img/og/git-pull-request.png>



ResourceSpace

API documentation = :)

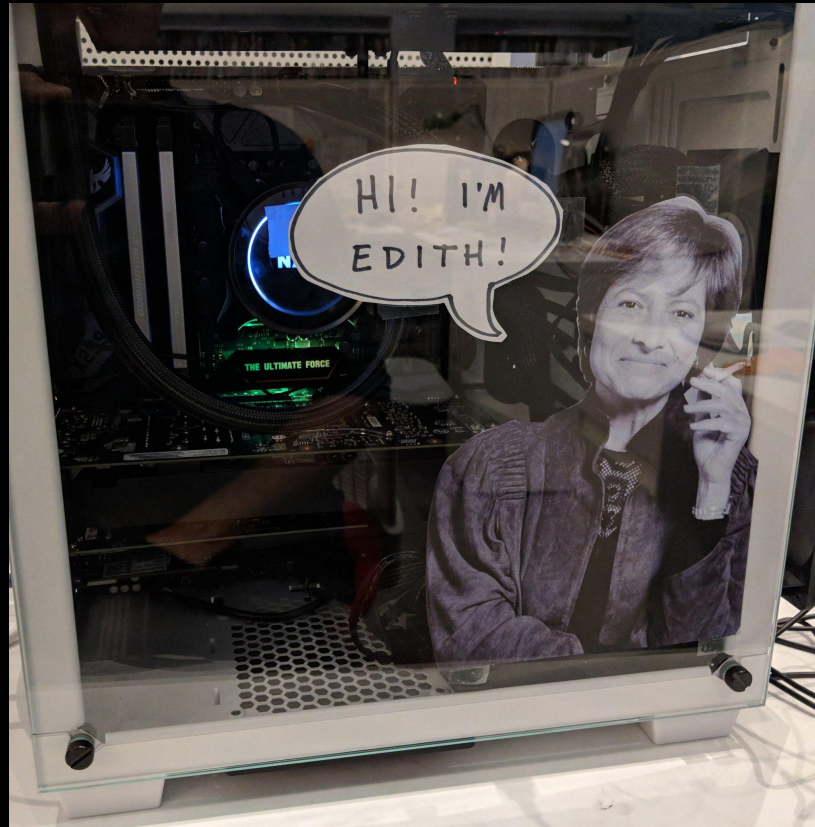
ResourceSpace: an open source DAMS

PS: If I may put forward a piece of my personal opinion, having a chain of php -> python -> bash is the worst coding style one can ever met, you may want to rewrite it into single language so it will be easier to track down further issues at least.

Best advice ever.



(`python3 flask.py`)



Hi, I'm EDITH!

REFRESH PAGE

Here are assets ready to ingest:

abc-politics-of-tourture_0598_PM0035639_R01of01

Ingest?

Concatenate reels?

ADD METADATA

FLOWER-THIEF_00809_pm0012330_R01of01.mov

Ingest?

Concatenate reels?

ADD METADATA

The ingest interface

What is our state of care?

How can we apply an
ethics of care?

Costs

- New stuff
 - Server (\$6K)
 - Drives
 - Cables
 - PCIe cards
 - Probably more?

Costs

- Staffing
 - Michael's time
 - Testing time
 - Training time
 - Planning meetings
 - Probably more?

Documentation is a
hug for the future

So is it worth it?

Resources

- AMIA Open Source
 - <https://github.com/amiaopensource>
- Mediamicroservices
 - <https://github.com/mediamicroservices/mm>
- IFIScripts
 - <https://github.com/kieranjol/IFIScripts>
- BAMPFA stuff
 - <https://github.com/BAM-PFA/pymm>
 - <https://github.com/BAM-PFA/edith>

More on ethics of care

- Michelle Caswell & Marika Cifor, 2016. *From Human Rights to Feminist Ethics: Radical Empathy in Archives.*
 - <https://escholarship.org/uc/item/0mb9568h>
- Rachel Mattson, 2016. *Can We Center An Ethics of Care in Audiovisual Archival Practice?*
 - <https://bit.ly/2fVcrsO>

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