Transitioning Long-Term Storage

at WGBH Media Library and Archives



The Archive

- ~1 PB of born-digital and digitized material
- Annual growth rate: ~350 TB
 - legacy digital material on outdated media
 - new material ingested from productions



- Each file currently stored on two geographically separated LTO 6 tapes (WGBH Vault and offsite storage)
- Proxies for audio and video stored on AWS & viewable through preservation database



4 LTO 6 stations with 7 (aging) standalone decks

 2 staff dedicating 30-50% of their time to digital preservation & storage workflows

 Media delivered from productions on drives or over shared network Migrate forward current collections from LTO 6 to a contemporary storage format (~1.3 PB)

- Digitize and ingest 83,000 at-risk media assets (~2.5 PB)
- Improve born-digital ingest from productions onsite



3-Year Goals

- Digital media stored in three ways and three different locations
 - 1 local, online copy on Cloudian Enterprise Object Storage
 - 1 local, offline copy on LTO 8
 - 1 cloud-based, offline copy on Amazon Glacier
- Metadata travels with media
 - Required metadata fields for uploading content to Cloudian
 - Metadata stored as key value pairs in Cloudian and on Glacier, and exported to digital preservation database as PBCore
- Proxies immediately available for all digital media
 - Automatically generated on ingest to Cloudian
 - Stored in Amazon S3 (tiered with Cloudian)
 - Accessible through MLA's Avalon Media System and through institutional Cloudian front end

Processes (in development)

- Migrate forward current collections from LTO 6 to a contemporary storage format (~1.3 PB)
 - vendor or in-house?
- Digitize and ingest 83,000 at-risk media assets (~2.5 PB)
 - files delivered and QCed on physical media before ingest, or directly uploaded to object storage?
- Improve born-digital ingest from productions onsite
 - workflows for verifying and documenting file integrity from creation on?
 - minimum metadata requirements for Cloudian front end?

Ideas and discussion welcome!

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