

A night-time photograph of the Rock & Roll Hall of Fame building, a large glass pyramid structure, illuminated from within. In the foreground, a large crowd of people is gathered in a plaza. A sign that reads "LONG LIVE ROCK" is visible in the crowd. The sky is dark with some clouds, and city lights are visible in the background. The text "Storage Architecture and Digital Preservation at the Rock & Roll Hall of Fame" is overlaid in white on the top half of the image.

Storage Architecture and Digital Preservation at the Rock & Roll Hall of Fame

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About the Rock Hall

- First induction ceremony was in 1986
- Museum opened in 1995
- 501(c) (3) non-profit
- About 150 employees
- Sister organization: Rock & Roll Hall of Fame Foundation



Photographer: Kevin Mazur

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Museum Exhibits

- Annual Inductee Exhibit (2025 currently on display)
- SNL: 50 Years of Music
- Revolutionary Women in Music
- 1984 – Pop Music's Greatest Year Ever
- Paul McCartney and Wings (opening May 2026)



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Photographer: Amber Patrick

The Garage

Where you get to play and jam with your friends.



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Programming

- Summer Concert Series
- Toddler Rock
- K-12 on-site programming
- Rock Hall EDU
- Annual Internship Program
- Annual Artist in Residence Program
- Fan Vote
- Music Makes Us Podcast



Photographer: Amber Patrick

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Collections

Museum

- Over 30,000 objects

Library

- ~150,000 records (45s, LPs, 78s)
- ~2,500 periodical titles
- ~12,000+ books
- Over 250 published research guides

Archives

- Rock & Roll Hall of Fame Museum Records
- Rock & Roll Hall of Fame Foundation Records (induction ceremony records)
- 1400 manuscript collections



Photo Credit: Dave Aron

Miho

Yuka

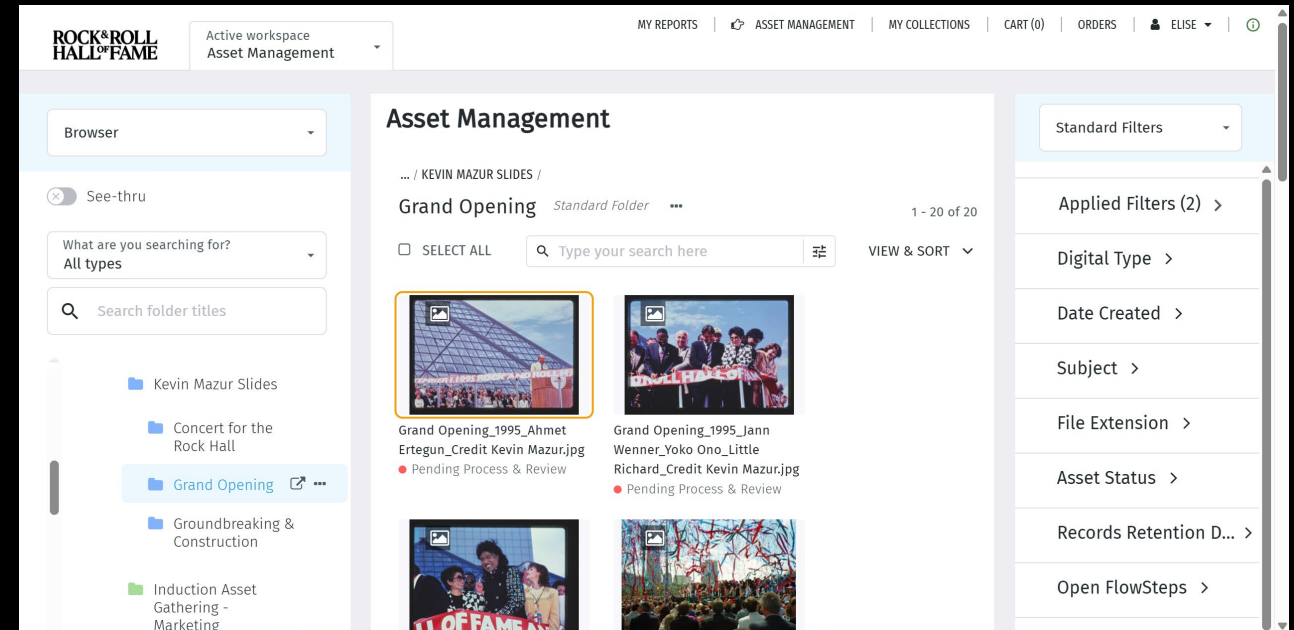
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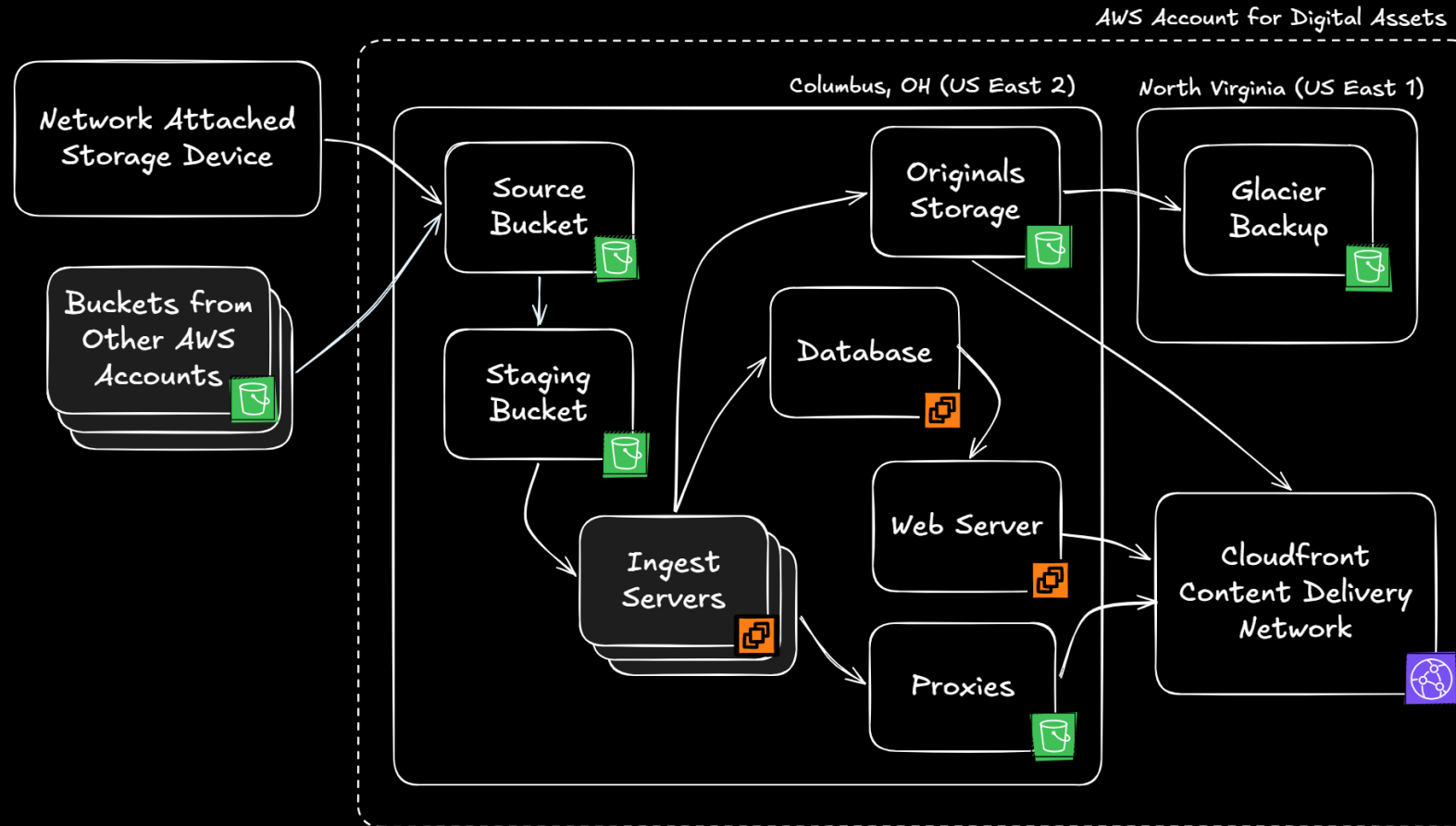
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Digital Asset Management System (DAMS)

- Orange DAM (formerly Cortex) by Orange Logic
- Implemented in 2022
 - Goal: Back up files and create a central repository for active use
 - Aspirations: Leverage the DAMS for monetization opportunities
- Contains around 1 million assets
 - Images: 850,000+
 - Video: 26,000+
 - Documents: 24,000+
 - Audio: 7,300+
- About 460 TBs of data
- Pulls some data from Axiell Collections via API



DAMS Storage Architecture



DAMS & Digital Preservation

- What it does “well”
 - Storage redundancy
 - Fixity
 - Audit trails
- Where it falls short
 - Files are immediately deleted from Source bucket upon ingest, making it impossible to perform fixity checking prior to DAMS ingest
 - No mechanism for migration/normalization
 - Analysis/reporting tools are difficult to use
- Areas of concern
 - DAMS ingest process changes folder structure and file names in AWS
 - Stores original structure and names in database, separate from the files

The screenshot shows the AWS S3 console interface. The breadcrumb navigation indicates the path: Amazon S3 > Buckets > bucketname > RHF/ > TRX/ > 0a/ > 06/ > 47/ > bb/ > 36/ > v1_RR1/. The 'Objects' tab is active, showing a table with one object: RR1TFDW.tif. An orange box highlights the filename, and an arrow points to a text box labeled 'Renamed file'. Below the console, the CloudShell terminal shows a command: `echo bucketname/RHF/TRX/0a/06/47/bb/36/v1_RR1/RR1TFDW.tif | tr '/' '\n' | awk 'NR>1{printf "%s%s\n", (NR-2)*2, "", $0}'`. The output shows a tree-like structure of the path: RHF, TRX, 0a, 06, 47, bb, 36, v1_RR1, and RR1TFDW.tif. An orange box highlights this output, and an arrow points to a text box labeled 'Changed folder structure'.

Efforts so far

- AWS improvements
 - Cost savings
 - Implemented AWS Intelligent Tiering
 - Compute committed use discounts
 - Started using S3 Batch Operations for pre-ingest
 - Started using S3 Data Transfer tool
- Data analysis and reporting
 - S3 Storage Lens
 - MotherDuck
 - AI Analysis Tools
 - ChatGPT/Claude
 - Hex
- Exploring our digital preservation options
 - DAMS vs In-House vs Enterprise Service
 - Packaging and ingest methods
 - Alternative workflows to ingesting directly into Source bucket
 - Options for packaging files to preserve original order and file-naming (bags, disk image, zip, etc.)

The screenshot shows a Hex notebook interface with a SQL query and a table of results. The query filters for files not in the top 100 largest files and groups them by location. The table below shows the results of this query.

	A digishare_location	# file_count	# total_size_mb	# total_size_gb	# avg_size_mb	# max_size_mb
0	Institutional Records, -2015	158357	685127.74	669.07	4.33	429.5
1	Induction Preservation Files	4	15427.18	15.07	3856.8	7713.5
2	IMAGES Preservation	1706	14695.98	14.35	8.61	354.3

Future Plans

- Select a digital preservation solution
 - Make the DAMS work for our digital preservation needs
 - Collaborate with Orange Logic to improve product
 - Hybrid approach: DAMS + external tools
 - Create/manage our own system and workflows
 - Manage open source product like Archivematica
 - Create our own system/workflow
 - Invest in an enterprise digital preservation solution
 - Preservica
- Continue exploring tools, including AI, for automation, efficiency, and integration
- Continue assisting Archives with their born-digital processing workflows
- Write Digital Preservation Policy



Photographer: Jeff Rusnak

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Thank you!

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