

WGBH

DuraCloud Pilot

Audio and video in the cloud

NSDL Annual Meeting
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What is DuraCloud? Storage and more

QuickTime™ and a
decompressor
are needed to see this picture.

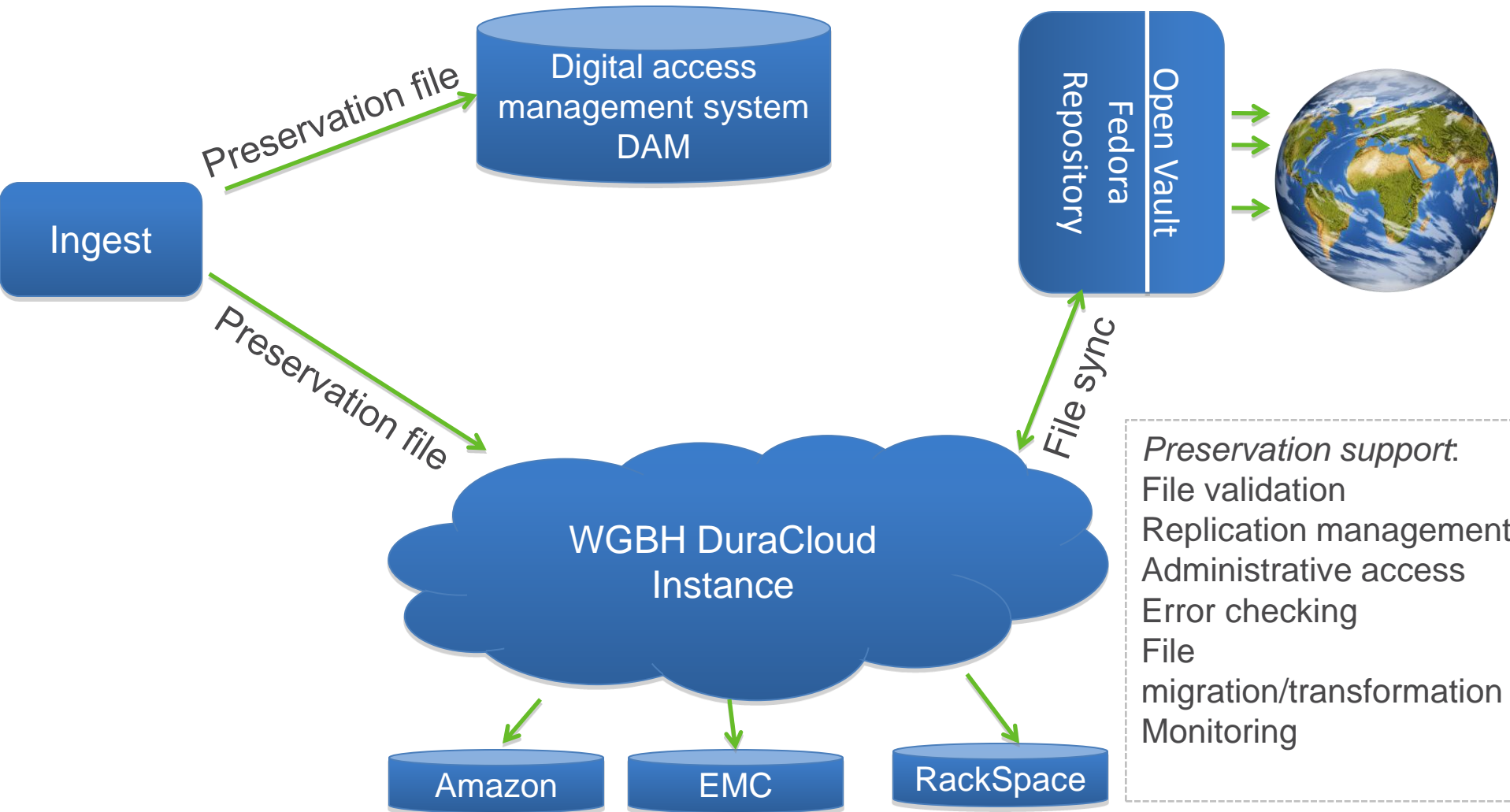
- Duplicate on Upload
- Duplicate on Demand
- Image Server
- Media Streamer
- Bit Integrity Checker
- Bulk Bit Integrity Checker
- Image Transformer
- Bulk Image Transformer
- System Transformer Utility
- System WebApp Utility

DuraCloud Pilot Goals

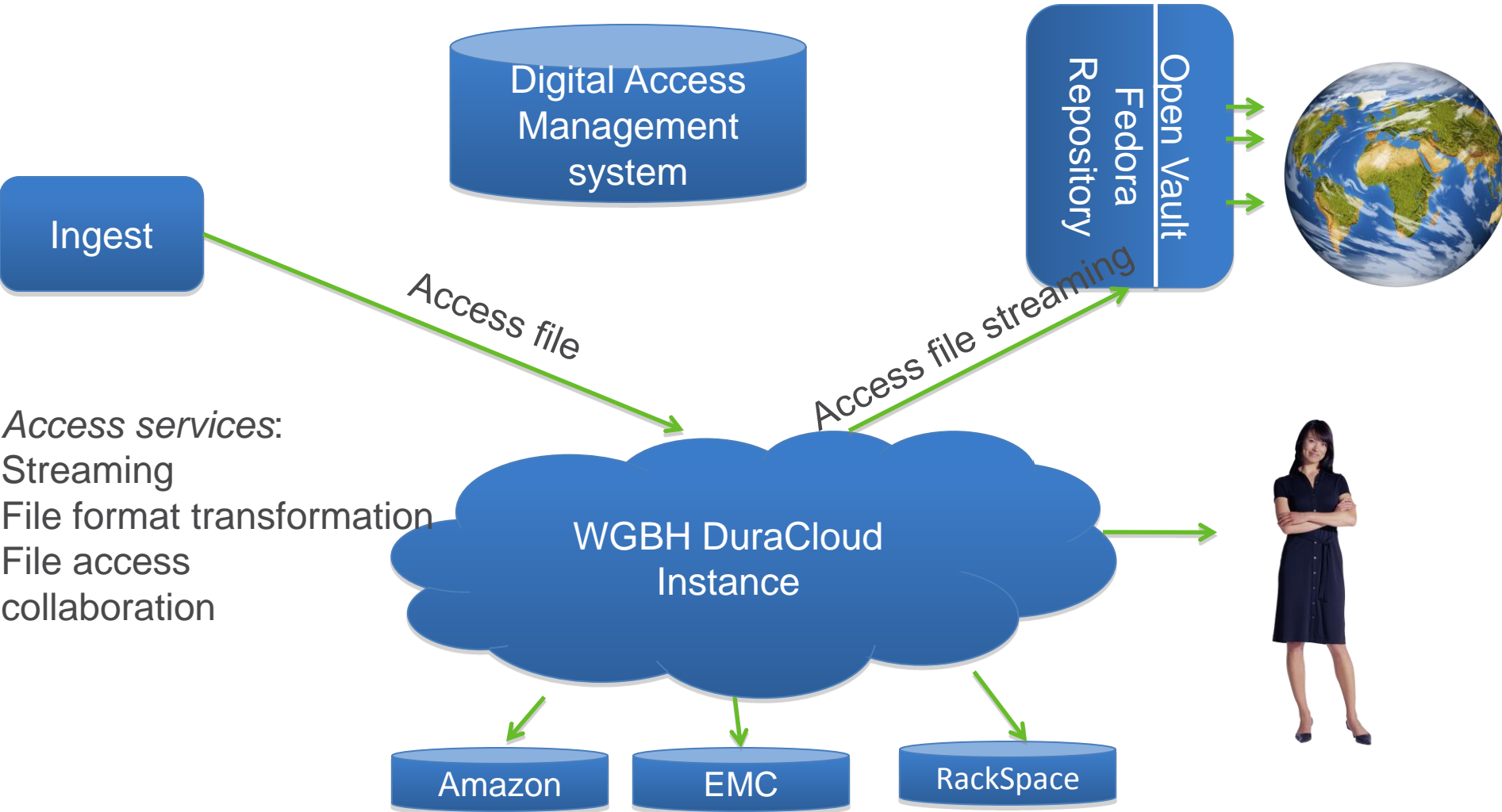
- Access
 - Streaming video
 - Integration with <http://openvault.wgbh.org>
 - Cost savings?
 - Improved sustainability?
- Preservation
 - Uncompressed audio and video storage
 - Cost Savings?
 - Improved reliability?
- Future Services

- CPB pilot project, 20 stations including WGBH
 - civil rights era and World War II
 - Stations responsible for preservation & hosting
- Preservation
 - 110 hrs of video, 8.5 TB
 - 120 hrs of audio, 150 GB
- Access (streaming)
 - 12GB of H.264 video
 - 4GB of mp3 audio

Preservation using DuraCloud



Access using DuraCloud

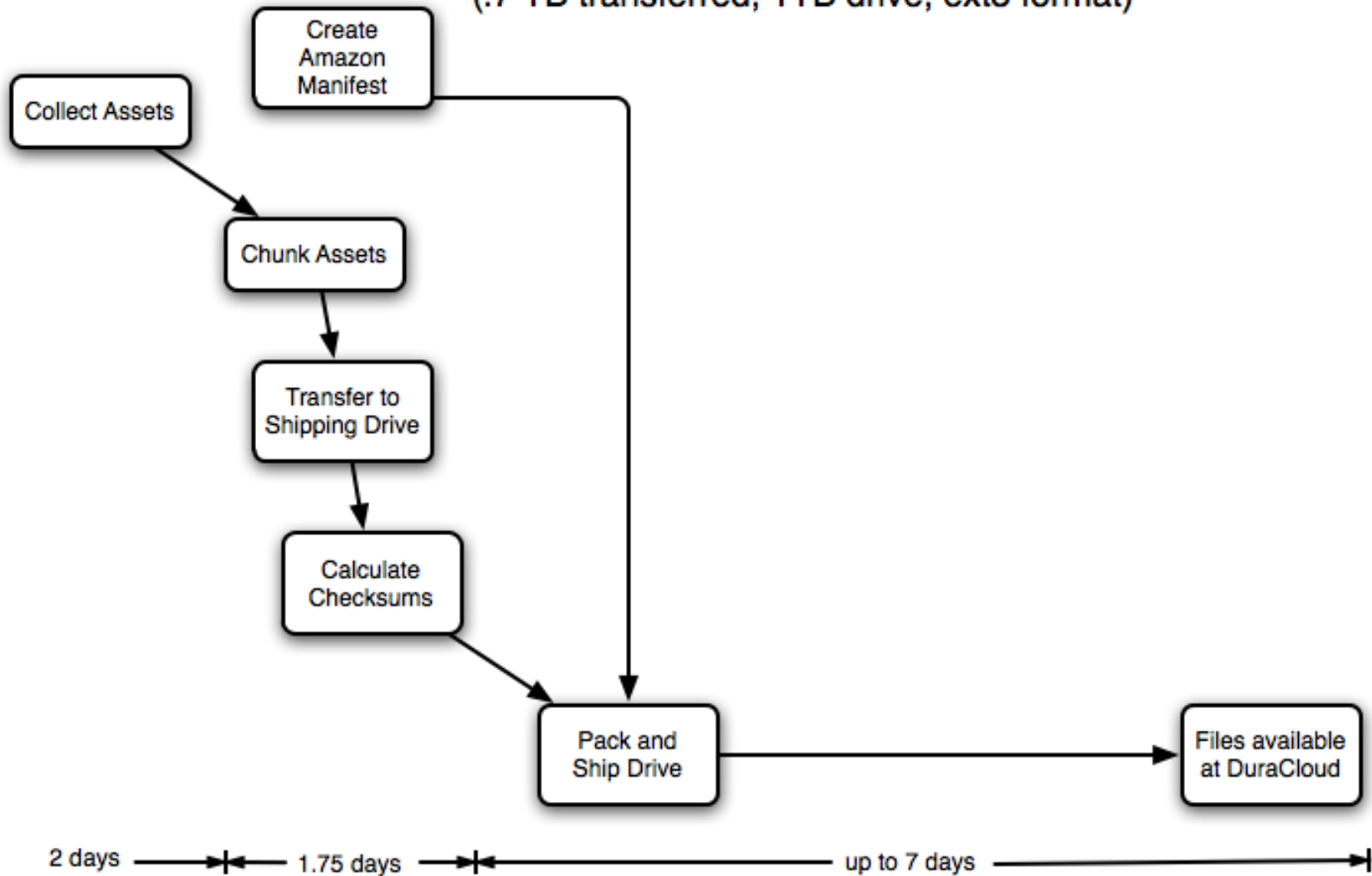


Access services:
Streaming
File format transformation
File access
collaboration

Lessons Learned

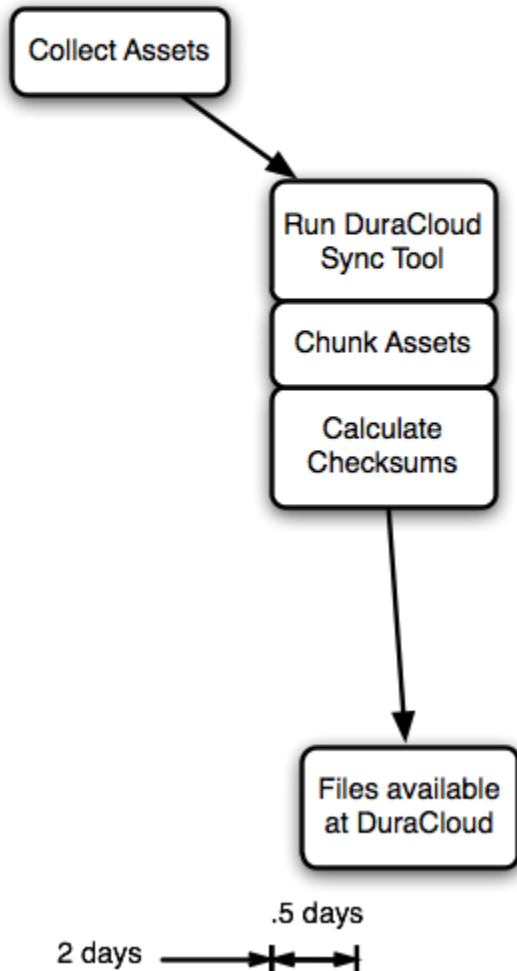
Sending disks to the cloud

WGBH Delivery to DuraCloud via Hard Drive (.7 TB) (.7 TB transferred, 1TB drive, ext3 format)



Using tubes and wires

WGBH Delivery to DuraCloud via Internet (.7 TB transferred, 300Mbps pipe)



- Gathering data
- Sunk costs
 - DAM (including hierarchical storage)
 - Bandwidth (to the cloud)
- Incremental costs
 - Off-line storage
 - Cloud storage
 - Streaming bandwidth (+1 for cloud)

Cost Comparisons

	In-house	Cloud
Bandwidth to storage	n/a	“free”
Bandwidth for access	\$1 per GB transferred	17¢ per GB transferred
Storage	8.8¢ per GB	15¢ per GB per month

- 5.5 TB of audio & video uploaded
 - Preservation and access files
- Still working with sync tool
- Streaming service works
 - But still need to integrate with Open Vault web site (for access)

- Complete integration with Open Vault site
- Dealing with file size limits
 - Editing (clipping)
- Transcode services?
 - Proposal with NCSA
- Speech to text?
 - Transcript alignment
- Recommend for American Archive when it moves to preservation phase of project

Questions?

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