

Library of Congress

Designing Storage Architectures for Digital Collections 2026

Suggested Background Reading

In conjunction with the 2026 DSA Meeting at the Library of Congress, here are a few suggested background readings suggested by attendees. Please note, these items are not intended as exhaustive or prescriptive; they are merely intended to provide useful context related to the meeting topics. Also see previous meetings at: www.digitalpreservation.gov/meetings/.

Digital Preservation Community and Storage Users:

1. Resources collected by Digipres Commons
<http://www.digipres.org/>
2. “Digital Preservation Storage Criteria – version 4” (2024)
<https://osf.io/n32vm/>
3. “Global Bit List of Endangered Digital Materials 2025”, Digital Preservation Coalition
<https://bit-list.dpconline.org/>
4. “A Risk-Driven Approach to Bitstream Preservation”, Digital Preservation Coalition
<https://www.dpconline.org/docs/technology-watch-reports/2793-bitstreampreservationrisk/file>
5. “Archival Storage”, David SH Rosenthal blog
<https://blog.dshr.org/2025/03/archival-storage.html>
6. iPres – International Conference on Digital Preservation
<https://ipres-conference.org>
7. CERN – Archives, Library and Open Science Events
<https://indico.cern.ch/category/1280/>
<https://library.cern/events/library-science-talk-open-and-automated-workflows-preserving-digital-archives>
8. “Digital Archiving and the Global Memory Shortage”
<https://www.marketplace.org/episode/2026/03/03/digital-archiving-and-the-global-memory-shortage>

Storage Provider Community:

9. “Four Top Data Storage Trends for 2026”, TechTarget
<https://www.techtarget.com/searchstorage/tip/Top-data-storage-trends>
10. “Storage Trends for 2026” Infinidat

<https://www.infinidat.com/en/blog/storage-trends-2026>

11. “Magnetic Tape is Going Strong in the Age of AI, ITPro”
<https://www.itpro.com/hardware/storage/magnetic-tape-is-going-strong-in-the-age-of-ai-and-its-about-to-get-even-better-new-design-materials-and-capacity-boosts-mean-its-still-an-enterprise-favorite>
12. “Data Integrity – Storage Transfer Service – Google Cloud Documentation”
<https://docs.cloud.google.com>
13. “LTO-9 Technology and User Data Reliability Analysis”
<https://www.lto.org/wp-content/uploads/2022/08/LTO-UBER-Technical-Paper-August-2022.pdf>

Data Centers:

14. “Data Center Sustainability Trends”
<https://www.datacenterknowledge.com/sustainability/data-center-sustainability-trends-10-stories-that-defined-the-year>
15. “What is the carbon footprint of data storage”
<https://greenly.earth/en-us/blog/industries/what-is-the-carbon-footprint-of-data-storage>

Future and New Media:

16. “DOTS for long term storage”
<https://vimeo.com/group47/the-digital-preservation-challenge>
17. “Visual Solutions for Digital Archives”
<https://vimeo.com/group47/deep-dive-digital-dark-age-dots-smartvault-google-cloud>
18. “DNA Storage Review 2025”, DNA Data Storage Alliance
<https://www.snia.org/sites/default/files/DNA/SNIA-DNA-Data-Storage-Technology-Review-v1.0.pdf>
19. “Communicating with the Future”
<https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=11134674>
20. “BDT tape drive transparently runs pilot holographic storage drive”
<https://www.blocksandfiles.com/data-protection/2026/02/06/bdt-tape-library-transparently-runs-pilot-holographic-storage-drive/4090435>

21. “Laser writing in glass for dense, fast and efficient archival data storage”, Nature
<https://doi.org/10.1038/s41586-025-10042-w>

22. “Mission: Impossible – the Final Reckoning” gets surprise guest appearance: a revolutionary 360TB silica storage media”
<https://www.techradar.com/pro/mission-impossible-the-final-reckoning-gets-surprise-guest-appearance-a-revolutionary-360tb-silica-storage-media>