

Library of Congress

Storage Architectures for Digital Collections 2017

Background Reading for Attendees: September 18-19, 2017

(These items are not intended as exhaustive or prescriptive; they are representative of material and projects that might be useful for context related to the meeting topics. The first five items were submitted by presenters as relevant to their presentations.)

1. [The Challenges of Rescuing Federal Data: Thoughts and Lessons," Data Dispatch. Andrew Battista and Stephen Balogh \(blog post\)](https://data-services.hosting.nyu.edu/the-challenge-of-rescuing-federal-data-thoughts-and-lessons/)
<https://data-services.hosting.nyu.edu/the-challenge-of-rescuing-federal-data-thoughts-and-lessons/>
2. "Rethinking Institutional Repository Strategies: Report of a CNI Executive Roundtable"
<https://www.cni.org/wp-content/uploads/2017/05/CNI-rethinking-irs-exec-rndtbl.report.S17.v1.pdf>
3. "Bit Plane Image Archiving"
<https://vimeo.com/group47/bit-plane-image-archiving>
4. "Preservation Storage Criteria – version 2."
<http://www.trumantechologies.com/news/digital-preservation-storage-criteria-v2-ready-public-comment>
[or](http://go.ucsd.edu/2xSLGQ6)
<http://go.ucsd.edu/2xSLGQ6>
5. "A Unified Framework for Measuring Stewardship Practices Applied to Digital Environmental Datasets": <https://datascience.codata.org/articles/abstract/10.2481/dsj.14-049/>
6. Internet Archive (IA) Item Structure: <http://blog.archive.org/2011/03/31/how-archive-org-items-are-structured/>
Internet Archive (IA) Item identifiers and
Permissions: https://docs.google.com/presentation/d/1osTQh2d0gyohO2Qu1Z_Hw3nM_Sk92-Rb89r9tXlb0o/edit#slide=id.gc6fa3c898_0_70
Blog post on IA data storage practices: <http://blog.archive.org/2016/10/25/20000-hard-drives-on-a-mission>

Reference article on software optimization of HDD and SSD:

<https://www.usenix.org/system/files/conference/fast17/fast17-aghayev.pdf>

7. "Economic Model of Long Term Storage"
<http://blog.dshr.org/2017/08/economic-model-of-long-term-storage.html>
8. "Open Scholarship Initiative: Report from the Repositories and Preservation Workgroup",
<http://dx.doi.org/10.13021/G89W24>
9. NIST Special Publication 800-171 Revision 1 (December 2016)
"Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations "
<http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-171r1.pdf>
10. "Biohackers Encoded Malware in a Strand of DNA"
<https://www.wired.com/story/malware-dna-hack/>
11. "Blockchain: A New Architecture for Digital Content"
<http://www.econtentmag.com/Articles/Editorial/Commentary/Blockchain-A-New-Architecture-for-Digital-Content-114161.htm>
12. "Crashplan crashes out of cloudy consumer backup caper"
http://www.theregister.co.uk/2017/08/23/crashplan_ends_consumer_plans/
13. "Storing data in monomers using mass spectroscopy"
http://www.theregister.co.uk/2017/10/18/storing_data_in_monomers_read_through_mass_spectroscopy/