



LOCKSS

LOCKSS Program Update, January 2019

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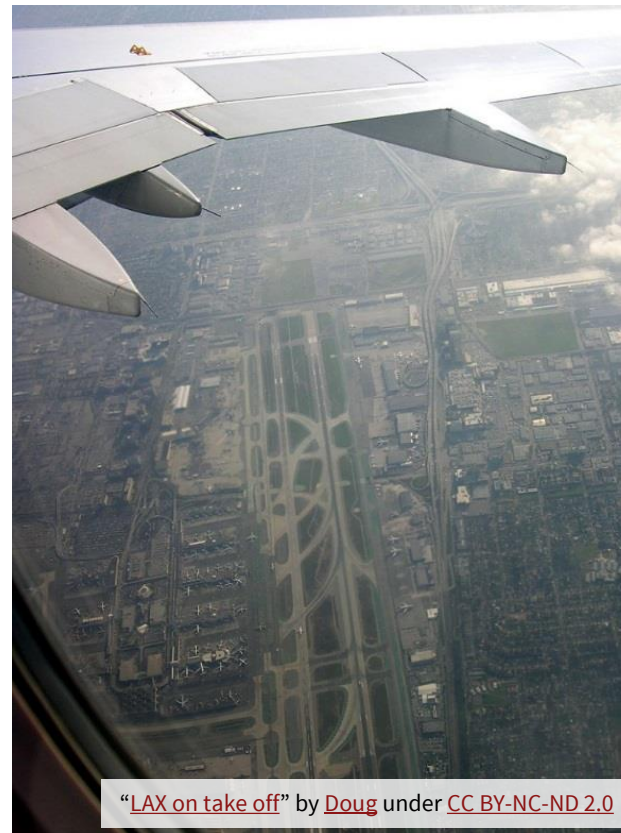
[LOCKSS community call](#)

22 January 2019



overview

- landscape position
- software re-architecture
- network activity
- presentation refresh
- lookahead



A high-speed photograph of a clear glass polygon, likely a prism, resting on a dark surface. The object is oriented in a 'landscape' position, meaning its flat faces are vertical. Bright light from the upper right corner strikes the top and side surfaces, creating a series of sharp, radiating light rays and a spectrum of colors (dispersion) visible on the dark surface below. The top face of the polygon is a dark, circular disc. The overall scene is a dramatic study of light and geometry.

Landscape Position

“High Speed Photography 40000 fps.....Some notes on the optical glass polygon..... E Bamber” by [aka.anzi](#) under [CC BY 2.0](#)



DPN sunset

Community Announcement - DPN Sunset

December 4, 2018

After careful analysis of the Digital Preservation Network's membership, operating model, and finances, the Board of Trustees of DPN passed a resolution to affect an orderly wind-down of DPN. The DPN Board carefully considered potential changes to DPN's current preservation and membership models and determined that it is not feasible to design and implement changes that would ensure sustainability.

The Digital Preservation Network has provided innovative digital preservation services and leadership to the cultural heritage community for the past six years. At its largest, DPN had 62 members and deposits from 27 institutions. However, membership has fallen to 31, a number insufficient to maintain the organization. The landscape of digital preservation services has changed considerably in the past six years, as have the community's preservation needs.

Our highest priority is to affect an orderly sunset for the organization's operations and for the disposition of its deposits.

Recently, DPN stopped accepting new deposits. As DPN implements sunset of the organization and services, each depositing member will work with DPN staff to plan for the disposition of their content. DPN staff will also assist with referral and data movement workflows.

We appreciate the community's support of DPN. We are grateful to the many knowledgeable and dedicated staff at member and node organizations who contributed to advancing the field of digital preservation through our collective work. The DPN board, staff, and nodes are committed to a graceful shutdown and to working with our members to assure that deposited content is transitioned successfully. We are also committed to the larger community in discussing lessons learned.

It is clear that there are numerous unforeseen challenges with our community-based organizations that need to be addressed. A number of organizations formed by our community are facing sustainability challenges, despite initial momentum. The DPN board and staff hope that the community enters into conversations that may help other organizations in the challenge of sustainability.

Digital Preservation Network: ["Community Announcement - DPN Sunset"](#)



DPN sunset

challenges particular to DPN

- service definition maturation
- pricing model
- soft membership value buy-in

challenges general to digital preservation service providers

- ingest workflow kinks
- membership vs. market
- cloud storage fungibility

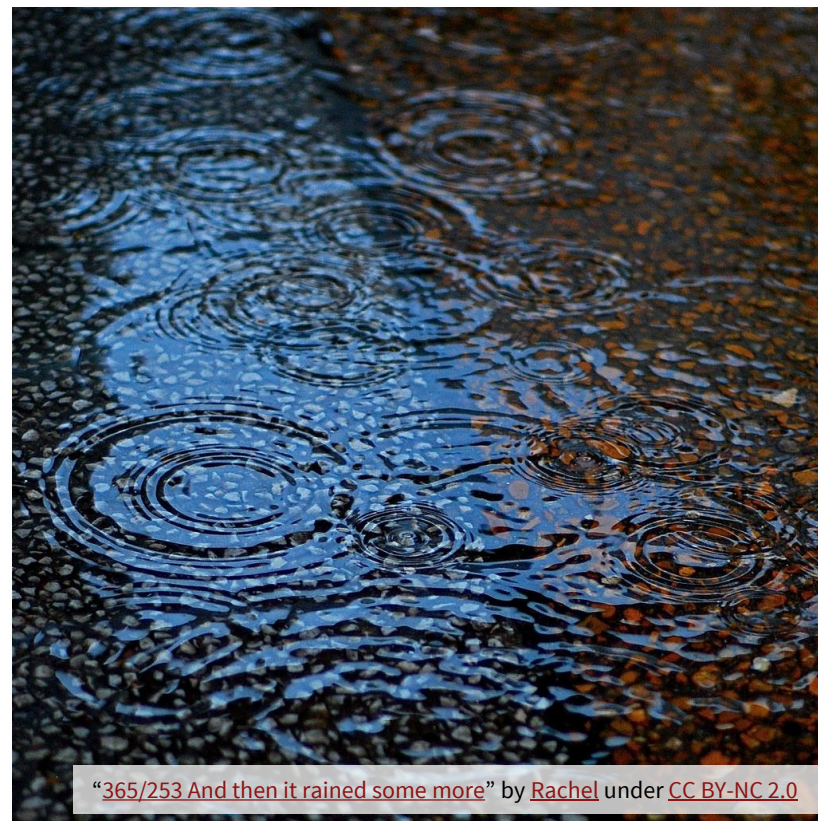
David S.H. Rosenthal: "[Digital Preservation Network Is No More](#)"

Roger Schonfeld: "[Why Is the Digital Preservation Network Disbanding?](#)"



implications for LOCKSS

- **diminished appetite** for community-based digital preservation infrastructure?
- **consolidation** means more community support for existing providers?
- **commodity cloud storage** increasingly viewed as sufficient?




"365/253 And then it rained some more" by [Rachel](#) under [CC BY-NC 2.0](#)



LOCKSS position

- our value proposition is **based on values**:
 - critical honesty about risks
 - local custody
 - community-based
 - sustain library as steward
- it's also **based on value**:
 - local, commodity storage is cheaper than cloud
- *no other platform **enables communities** to co-preserve content themselves, locally + w/ such a robust threat model*



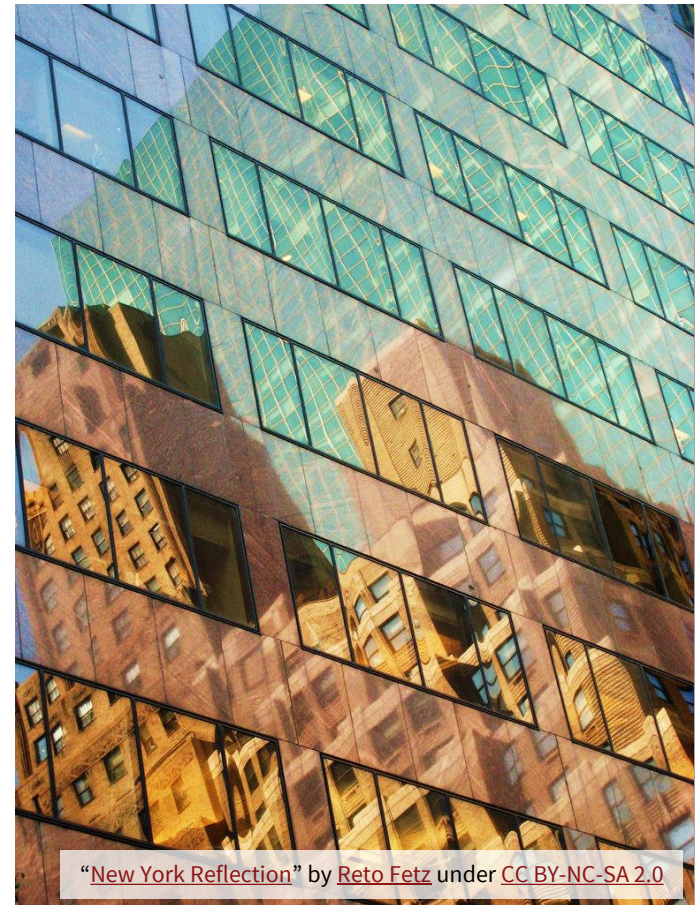
Software Re-Architecture

“The two bridges” by [Frank Schulenburg](#) under [BY-SA 2.0](#)



software re-architecture goals

- capitalize on **work of broader communities**
- de-silo + enable **external integrations**
- empower community of practice w/ **better documentation + well-defined APIs**
- evolve w/ web + **digital preservation ecosystem**





fixity service

- some content too big for lots of copies
- instead, make lots of copies of checksums
- subject to LOCKSS polling + repair
- provide API endpoint
- compare w/ hash result generated by external system
- will prototype + deploy this year





cloud friendl(ier)

- may enable some use cases; improve handling of others
- technically feasible, but not economically optimized
- explore using cloud in concert w/ fixity service
- benchmark cloud costs (revisiting prior research on LOCKSS in the cloud)
- leverage w/o ceding value of distributed, local content custody



“State-of-the-art cloud storage. 2015.” by Samarth Shyamanur under CC BY-NC 2.0



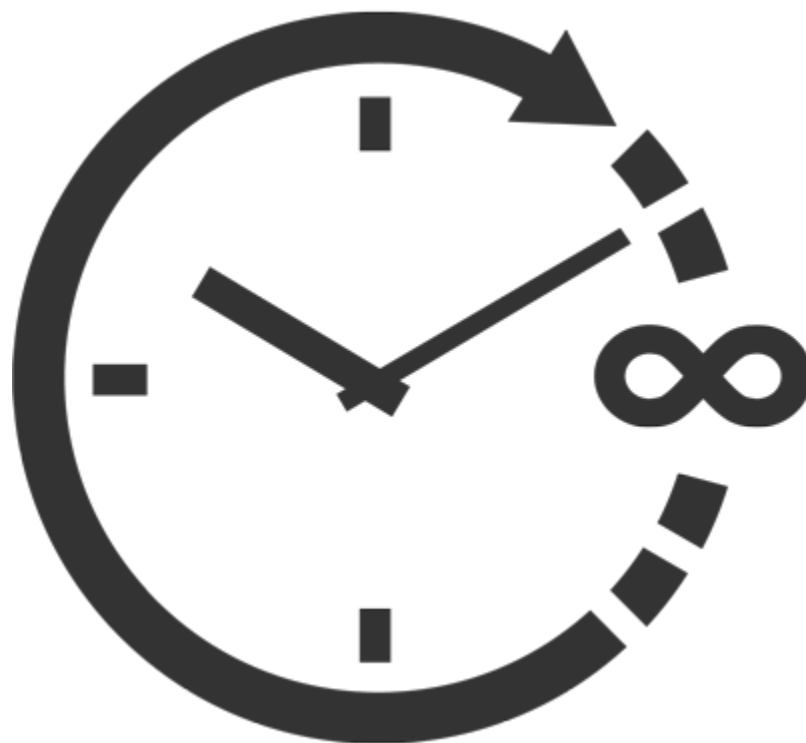
Network Activity

"CU981 Forest of Light" by [Charles Tilford](#) under [CC BY-NC-SA 2.0](#)



CLOCKSS Archive

- CRL TRAC re-certification:
 - [top CRL TRAC audit score](#)
 - perfect score for *Technologies, Technical Infrastructure, Security*
 - perfect score for *Organizational Infrastructure*
 - non-confidential documentation [available](#)
- succession plan ([press release](#))
- new content partners:
 - CrossRef ([press release](#))
 - Fulcrum ([press release](#))





network developments

- Digital Commons
LOCKSS Network sunset
- Germany pilot starting
- Ivy+ in pilot
- other possibilities
dependent on LAAWS-
specific functionality:
 - Data Life-Cycle
Management (DLCM)
 - Software Preservation
Network (SPN)



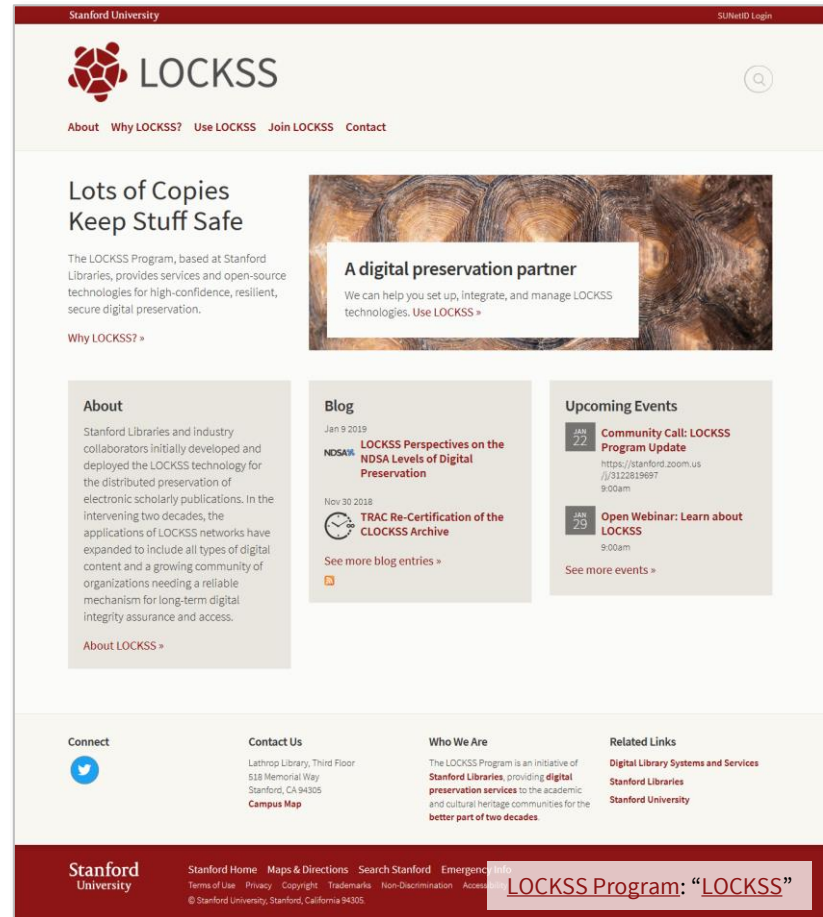


Presentation Refresh



updating the pitch

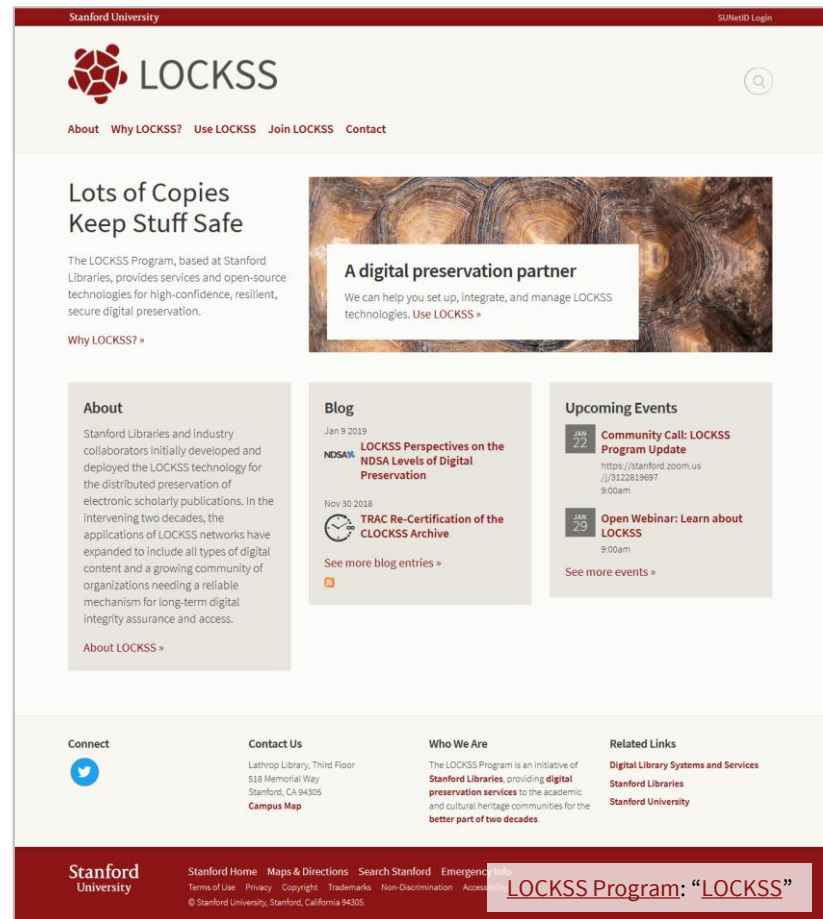
- advancing LOCKSS for general-purpose digital preservation
- explaining:
 - what LOCKSS is
 - how LOCKSS works
 - what community uses LOCKSS for
- making a (more accessible) case for LOCKSS





new content + features

- [Stanford visual identity](#)
- [logo](#)
- [faq](#)
- [blog](#)
- [events](#)
- [case studies](#)
- [documentation portal](#)
 - [API specifications](#)
- articulation of [preservation principles](#)
- [presentations + publications](#)
- Twitter ([@LOCKSS](#))





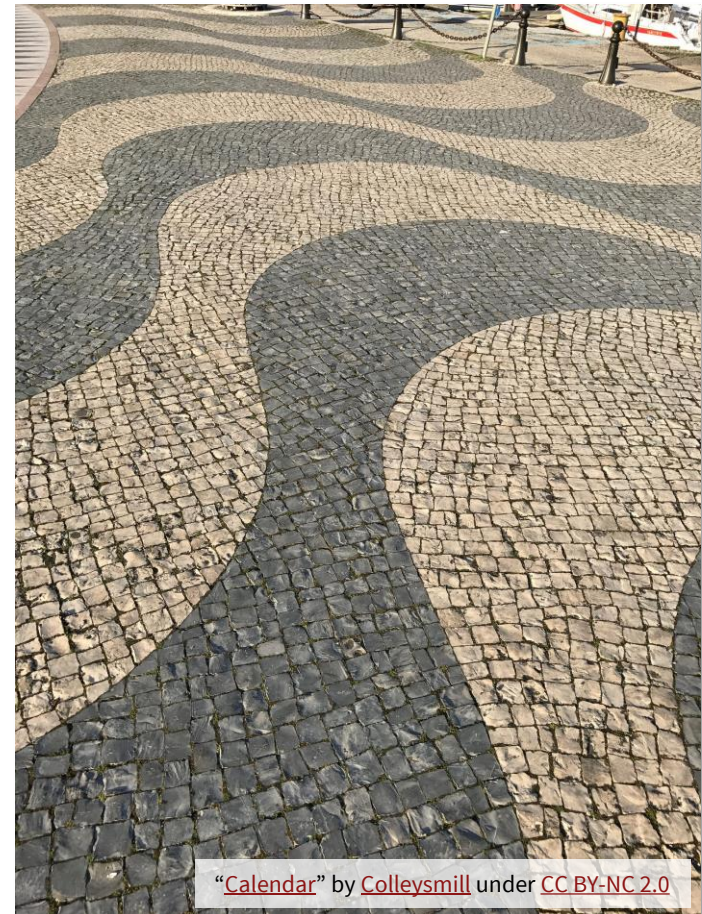
Lookahead

"NPP Delta II Launch (201110280002HQ) (explored)" by NASA HQ PHOTO under [CC BY-NC-ND 2.0](#)



2019 events

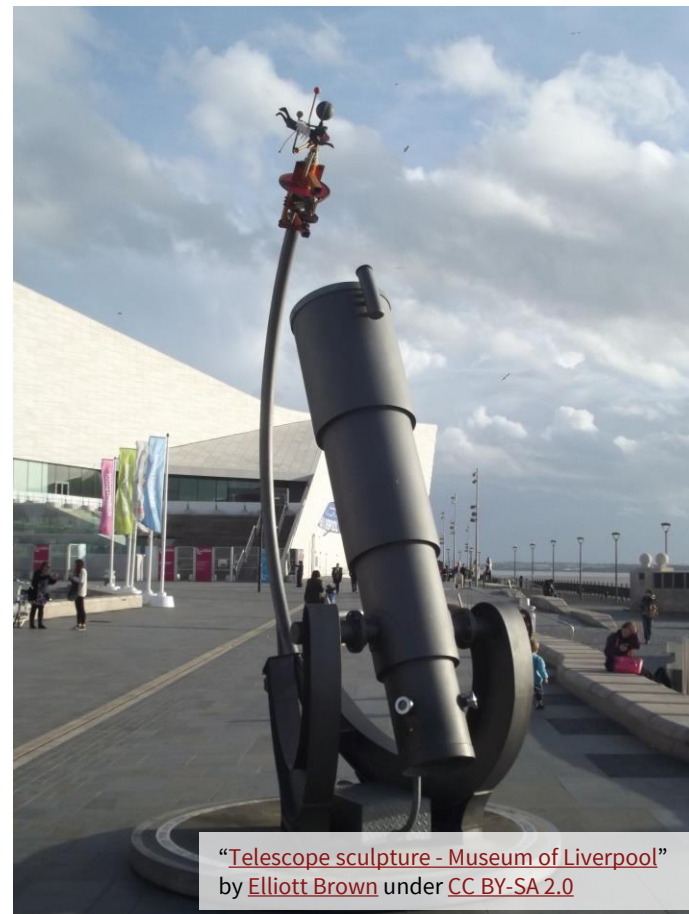
- planned:
 - [PASIG](#) – 11-14 Feb., Mexico City
 - [LDCX](#) – 25-27 Mar., Stanford
 - [LOCKSS Alliance Meeting](#) – 28-29 Mar., Stanford
- unconfirmed:
 - [CNI Spring Membership Meeting](#) – 8-9 Apr., St. Louis
 - [Best Practices Exchange](#) – 29 Apr.-1 May, Columbus





2019 plans

- re-architected software
 - alpha (mid Q1)
 - beta (late Q1)
 - rollout (Q2 on)
- GLN survey
- systems support specialist (re-)recruitment
- Beyond the Repository-related project work
- technical roadmap:
 - cloud benchmarking
 - fixity service
 - network management + monitoring





Questions

"Any Questions?" by Matthias Ripp under [CC BY 2.0](#)