



Preservation of Open-Access Journals: Collaboration with Libraries

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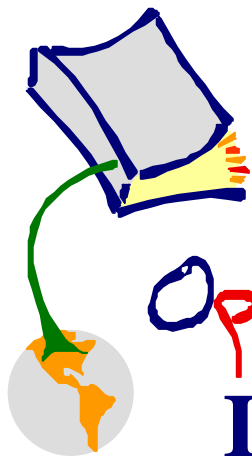
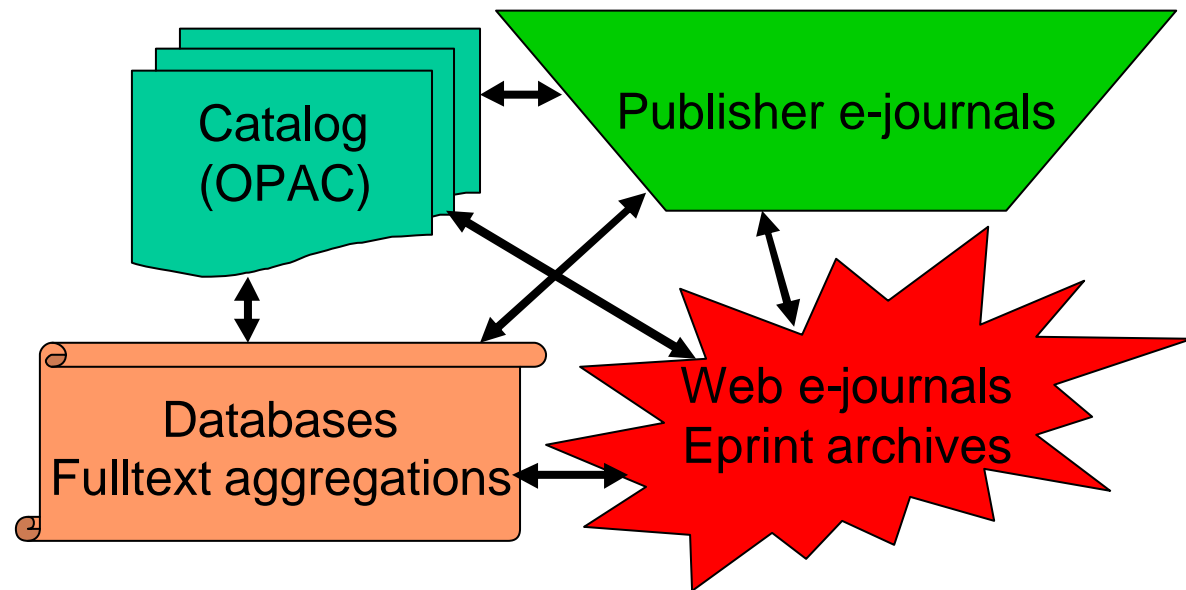
Outline

- Libraries and Open-Access Journals
- The Open-Access Journal Preservation Problem
- The Open-Access Journal Preservation Solution



How do libraries hold e-journals?

1. they have abstracts and fulltext in A&I databases
2. they subscribe to e-Journals from publishers
3. they point at free content on the web
4. they catalog them
5. they preserve them



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The open-access preservation problem

- Open-Access journals are in danger of being lost
- Few e-Journals have implemented plans for preservation

*Of 13,000 total e-journals we track, about 50 journals/month **disappear!***



How e-Journals disappear

- Founder gets bored/"hit by truck"
- Funding disappears
- Hard-disk crash
- Change of domain/reorganize web site
- Natural disaster
- Politics or Censorship
- Change from Open-Access to Subscription
- e-Journal has become a porn site

Long-term worries

- Bit-rot
- Format migration



The Solution: Libraries and LOCKSS

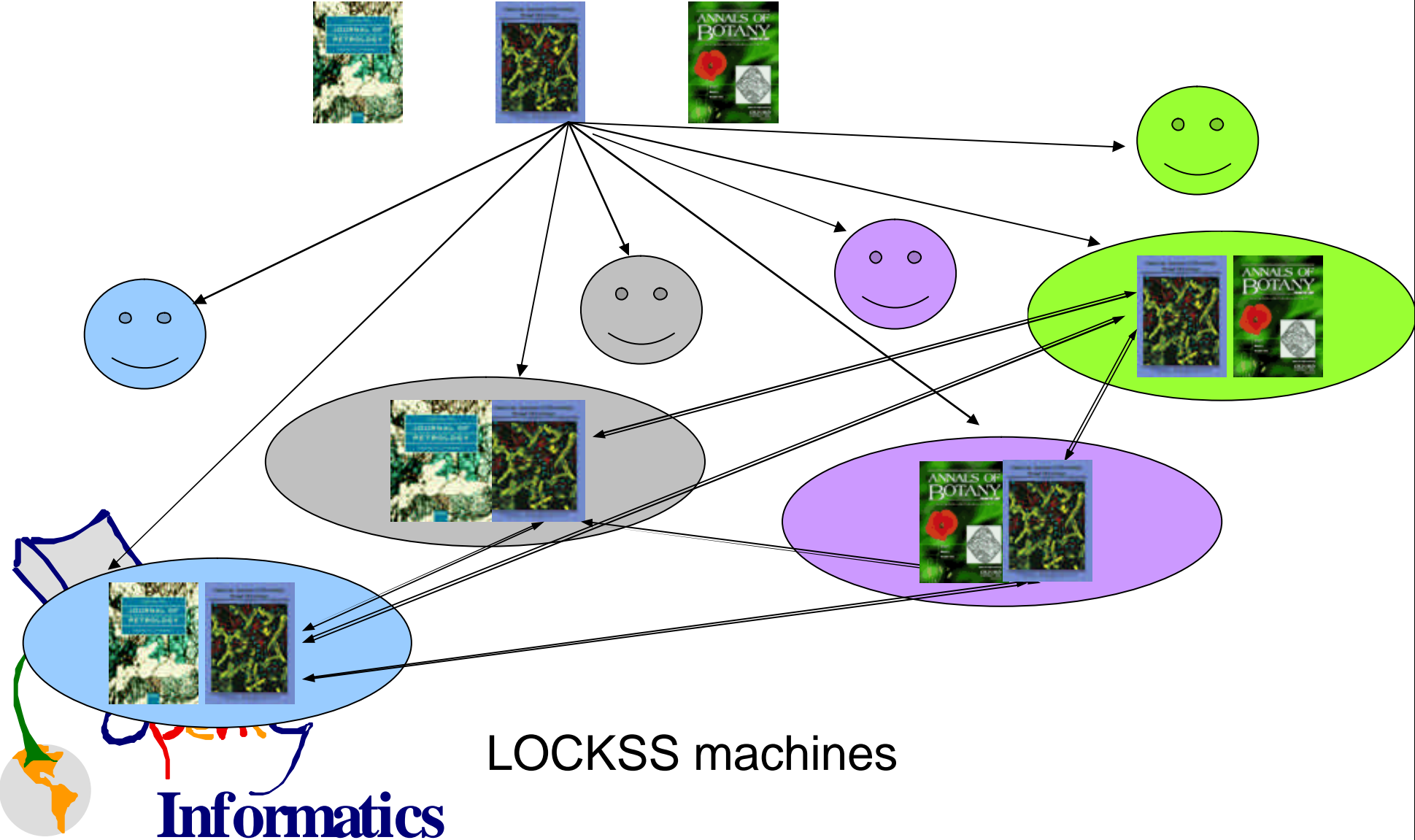
- Libraries have played traditional role in archiving and preservation of journals
- Libraries like to collect and "hold" information resources

LOCKSS: Lots Of Copies Keeps Stuff Safe

- Peer-to-peer transparent-cache architecture
- Open source software
- Project at Stanford University directed by Vicky Reich
- Based on redundant, inexpensive PCs
- Details at <http://lockss.stanford.edu/>



Approximate Data Flows

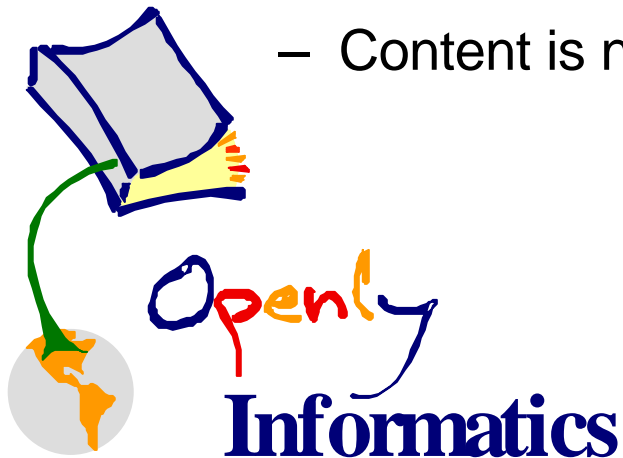


LOCKSS machines

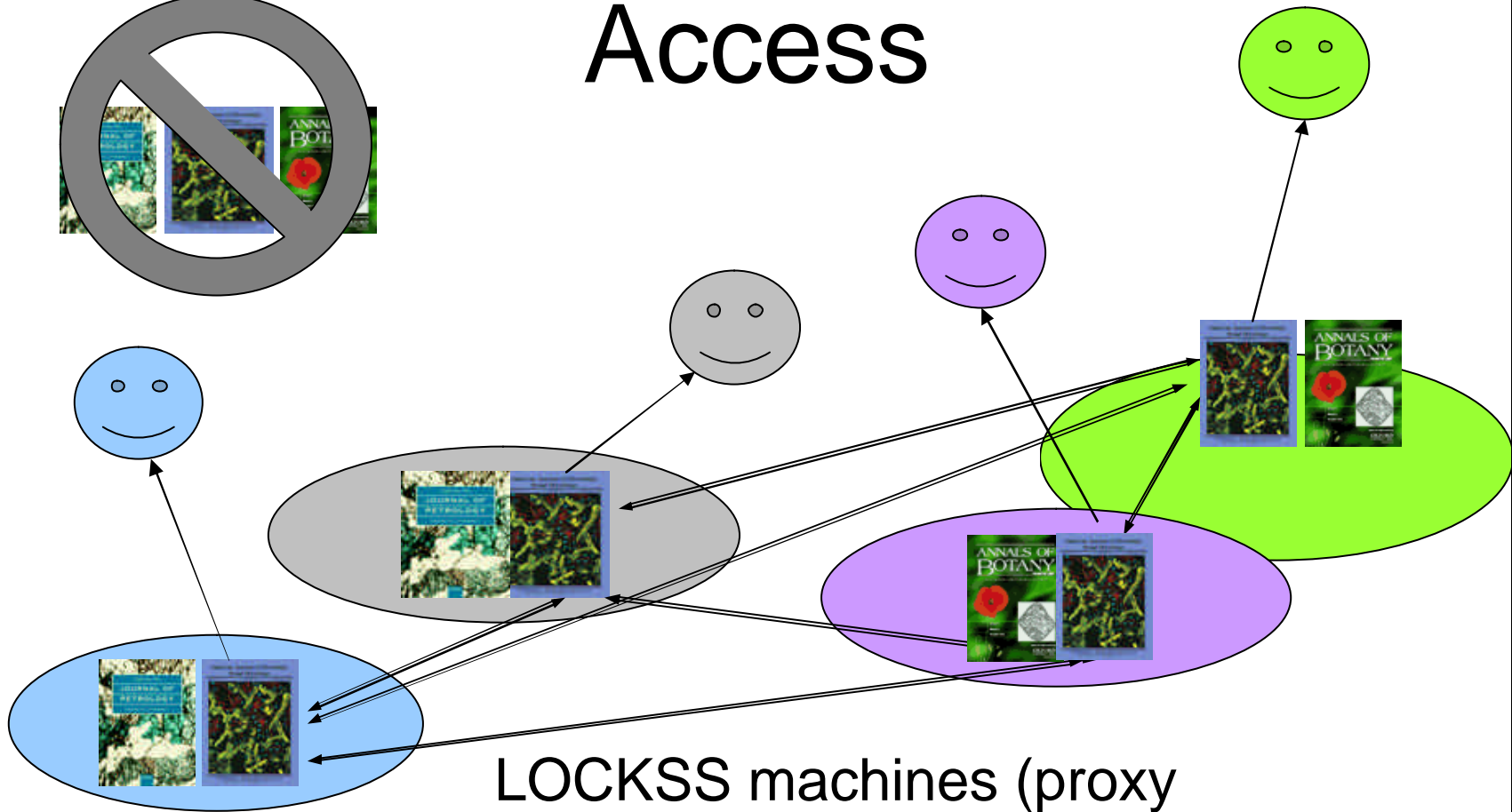
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LOCKSS Caches

- Crawls and collects HTTP content
 - All formats (PDF, HTML, JPEG, TIF, Audio, Video)
- Preserves content integrity
 - Independent collection
 - Cooperate to audit and repair damage
- Provides access
 - Via web browser
 - Content is never “dark”

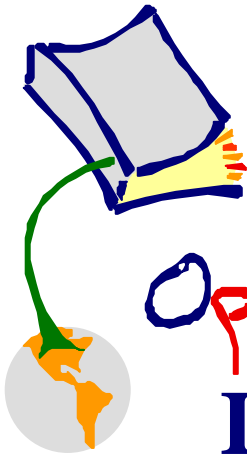


Access



LOCKSS machines (proxy servers)

*Prevents the publisher from
revoking access rights to back content*



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Implementing LOCKSS

- Publisher **MUST** give permission to preserve content
 - Even open-access journals must give permission
- Do it **NOW!**



Libraries and Open Access

- Libraries can help open-access journals
 - Link to full text (OpenURL) (see full talk!)
 - Help users find journals (A-Z, catalog)

