



Cornell University

# LOCKSS at Cornell

DLF Spring 2005 Forum

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# Topics

- System Administration
- Adding a journal—Plug-ins
- Retrieving items from the local system
- Costs
- Another use for LOCKSS



# System Administration

- It's a snap to install
  - First time: couple of hours
  - After that, almost automatic—the install process uses the previous, site-specific configuration
  - watch over it, do what it asks—write protect the floppy
  - ½ to 1 hour—one eye on the process.



## Story—ACL Horrors

- Early days—Cornell had no firewall
- ACL put on individual subnets
  - ACL is the list of holes through the firewall
  - A list—specific protocols allowed at specific ports
    - TCP/IP—8080, 8081/ UDP – 5555, 5554
  - Intent: Block Off-campus traffic into Cornell
- Changed the machine IP—no more incoming traffic
  - Bad for the LOCKSS system, but I'm not worried—it repairs itself
  - Central IT folks say it's not their fault; Tom says it's not the LOCKSS system
  - Two months of back and forth, not every day, because I don't want to insult anyone
  - Email from CIT: "Oops."



## Anecdotal plug-in writing experience

- First time—maybe two hours, as I learned how the harvesting rules worked, and a back and forth with Tom
- After that—less than half an hour
- I don't do it frequently enough to remember what's required for each element
- The Building a Plug-in tutorial is very helpful.



# What's not so clear about plug-in writing

- What is the atomic unit for the journal—a volume, an issue, a year?
- Should there be a plug-in for each unit?
- Some publishers change directory naming conventions over the years.
- How many plug-ins to build?



# Retrieving items from the local system

- The LOCKSS Winter 2005 Card
- <http://libdev.library.cornell.edu/lockss>



# Time Costs

- Time
  - Selector
    - Selection decision—15 minutes to 1 hour
    - Conversation with publisher—30 minutes to 1 hour
  - Techie
    - Evaluate journal for technical feasibility—30 minutes to 1 hour
    - Write plug-in—15 minutes to 1 hour
    - Converse with publisher techie and LOCKSS team—30 minutes
- Total—2 to 4 ½ hours





## Network Costs

Date	Conversations	Traffic (MB)	Charge
2004-11	3680	470.98	\$3.00
2004-12	3253	1630.97	\$3.00
2005-03	2140	7262.98	\$13.43
My desktop 2005-03	2826	716.35	\$3.00



## Another Use for LOCKSS

- Ensuring Access to Mathematics Over Time  
<http://www.library.cornell.edu/dlit/EATMOT>
- OAIS information model lacks a level of metadata that describes partnerships in collaborative archives.
- EATMOT repository: XML-encoded metadata about the partnership members, rights agreements, storage capabilities, preservation policies.
- LOCKSS for the repository—inexpensive, format-agnostic, self-repairing, no one owns it.