

Designing Storage Architectures for Preservation Collections
Library of Congress, September 26-27, 2011

Neighborhood Watch for Repository Quality Assurance

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Neighborhood watch

- A new metric, and community ethic, for repository reliability and trustworthiness
 - Objective
 - Repeatable
 - Independently verifiable
 - Simple

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Michele Truex, <http://www.flickr.com/photos/40348123@N02/3996348907>
<http://www.flickr.com/photos/striatic/2191404675>

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Lather, rinse, repeat...

<http://www.flickr.com/photos/yenzah/5017275397>

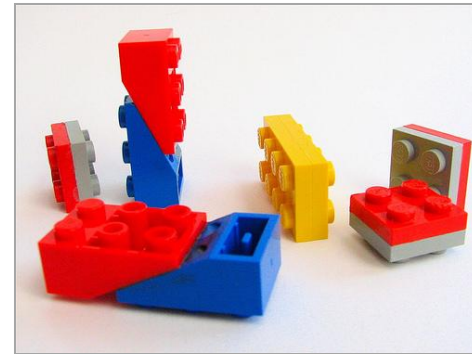
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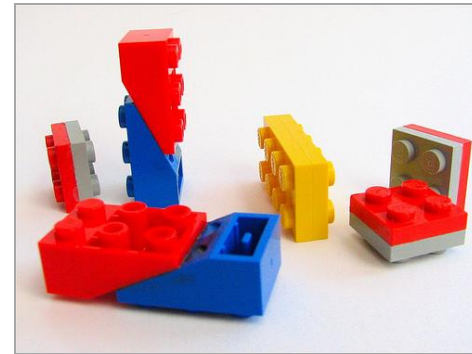


Windell Oskay, <http://www.flickr.com/photos/oskay/265899865>

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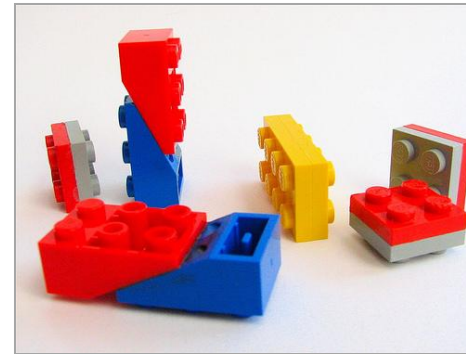
Windell Oskay, <http://www.flickr.com/photos/oskay/265899865>

- What is the fundamental obligation of a repository?
 - First, do no harm [*primum non nocere*]

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Windell Oskay, <http://www.flickr.com/photos/oskay/265899865>

- What is the fundamental obligation of a repository?

- First, save the bits
... before worrying about
added-value services



Digital Preservation Coalition

Neighborhood watch

- Based on information that is already readily available
 - Content retrieval via stable URLs
 - Content size and message digest

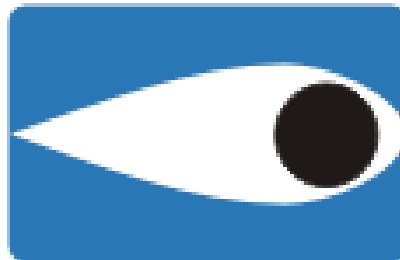
Neighborhood watch

- Based on information that is already readily available
 - Content retrieval via stable URLs
 - Content size and message digest
- An external agent that periodically retrieves content, verifies its bit-level integrity, and notifies the neighborhood
- Possible implementations
 - Merritt Fixity service
<http://www.cdlib.org/uc3/curation/fixity.html>
 - UMIACS ACE
<http://adapt.umiacs.umd.edu/ace>



How to be a good neighbor

- “Have an open door policy”
 - Repositories should provide access to all content
- “Don’t borrow too much sugar”
 - Verification agents should throttle requests
- “If you see something, say something”
 - Adhere to community standards for reporting and veracity



NEIGHBORHOOD WATCH
WE LOOK OUT FOR EACH OTHER

So ...

- Trust, but verify
- What you say about yourself is less interesting than what others say about you
- Be neighborly

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<http://www.flickr.com/photos/48304881@N05/5240756741>

So ...

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- What you say about yourself is less interesting than what others say about you
- Be neighborly



AFP/Getty Images, <http://www.britannica.com/bps/media-view/121436/1/0/0>



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National Neighborhood Watch Institute