
Research Support
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* And co-conspirators
Related Work

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Managing copies can be challenging.
Verified geographically-distributed replication of content is an essential component of any comprehensive digital preservation plan.

The requirement has emerged as a necessity for recognition and certification as a trusted repository.
Centralize Network Auditing
SafeArchive provides the reliability of a top-down replication system with the resiliency of a peer-to-peer model.

- SafeArchive automates high-level replication and distribution policies
- SafeArchive automates multi-institutional replication
- SafeArchive facilitates sharing TRAC policies
- SafeArchive verification and audit trails for replication policies
- SafeArchive is Open Source, and integrates with LOCKSS, and the Dataverse Network
- SafeArchive is Standards-Based, and supports DDI, OAI-PMH, and TRAC
SafeArchive automates high-level replication policies and helps institutions to collaborate in preserving digital content. GUI-based tools are designed for librarians and archivists—not systems administrators.

**Operationally, system users can:**
- Analyze any LOCKSS network
- Check that collections are replicated, valid, and up-to-date
- Create formal replication policies
- Replicate content from web sites or digital repository systems
- Audit the network for current and historical audit compliance
- Automatically manage and repair a LOCKSS network based on a specific replication policy

SafeArchive provides the reliability of a top-down replication system with the resiliency of a peer-to-peer model.
• **Analyze** any existing set of public LOCKSS systems or Private LOCKSS Network
  - *which collections are replicated?*
  - *when were they last verified, and updated?*
  - *identify potential problems with the storage network*

• **Create** formal TRAC policies
  - *create operational policies for replication and distribution*
  - *create advisory policies for all TRAC criteria*

• **Audit** your storage network against your policies
  - *verify that collections are currently replicated, verified, updated*
  - *create historical audit trails and evidence of long-term compliance*

• **Replicate** content from web sites or digital repository systems
  - *use SafeArchive/DVN plugins to replicate content in the Dataverse Network*
  - *use SafeArchive/LOCKSS plugins to replicate content through OAI or HTTP*
  - *Automatically deploy and repair LOCKSS replication based on policy*
New Additions

- Preservation Enforcer
- New User Interface
- New Data Reports
- Track Historical Poll Agreement
- Ability to utilize agreement in less than 100% polls
- Improved Documentation
- New Amazon Instance
- New Batch Installation Scripts
SafeArchive in Action

An auditing tool for policy-driven distributed replication

safearchive.org

Auditing Distributed Digital Preservation Networks
Future Possibilities

- Support additional audit standards
  - Data Seal of Approval
  - ISO 16363
- Simplify SAFE audit standards interface
  - Single interview style questionnaire “Turbo Tax Like”
  - Automatic crosswalk to all supported audit standards
- Enhance qualitative audit compliance
  - Interactive audit agency tools
  - Multiple levels of audit compliance
- Support additional replication networks
  - iRODS
  - Data Conservancy
- Audit other policy sets
  - Data Management policies
  - IRB Policies
Questions

Website
- www.safearchive.org

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