Certification Efforts at Nestor Working Group and cooperation with Certification Efforts at RLG/OCLC to become an international ISO standard

Paper presented at the ipres 2007 in Beijing
by Christian Keitel, Regional State Archive of Baden-Württemberg
Members are working in...

- Libraries
- Archives
- Museums
- Data Centers
- Universities
- Research Institutions
Some Questions

- When is a digital repository trustworthy?
- What should be the criteria for a formal process of certification?
- Who verifies the trustworthiness of a digital repository: A group of experts, the archive by itself or each user on his own?
Trustworthiness of

- Formats?
  - For example Tiff
- Carriers?
  - For example CD
- Processes?
  - For example Ingest
Principles

- **Adequacy**
  (appropriateness)

- **Documentation**

- **Transparency**

- **Measurability**

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Trustworthiness is the capacity of a system to operate in accordance with its objectives and specifications.
Recent Research


Audit and Certification Criteria:
- TRAC (2005/2007)

Core Requirements, common principles (2007)


ISO standardisation effort
Criteria Catalogue

3 Parts
- Organisational framework
- Object management
- Infrastructure and Security

Should encourage organisations to start with digital preservation activities.
4.4 The digital repository engages in long-term planning.

8 The digital repository has a strategic plan for its technical preservation measures.

10.4 The digital repository implements strategies for the long-term preservation of the AIPs.
Organisational Framework

1. The digital repository has defined its goals.

2. The digital repository grants its designated community adequate usage of the information represented by the digital objects.

3. Legal and contractual rules are observed.

4. The organisational form is adequate for the DR.

5. Adequate quality management is conducted.
Object Management
- Integrity and authenticity.
- OAIS stages ingest, storage and use.
- Data management.

Infrastructure and security
- The IT infrastructure is adequate.
- The infrastructure protects the digital repository and its digital objects.
Verification of Trustworthiness

- External experts (Certification)
  - Lacking of standards.
  - Comparability of certification results?
  - Lacking of transparency?

- Users
  - Interest versus effort.

- Repository
  - Self-Evaluation.
## Checklist

<table>
<thead>
<tr>
<th>A</th>
<th>Organisational framework</th>
<th>conceptual groundwork</th>
<th>planned /specified</th>
<th>implemented</th>
<th>evaluated</th>
<th>published</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The DR has defined its goals.</td>
<td></td>
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<tr>
<td>1.1</td>
<td>The DR has developed criteria for the selection of its digital objects.</td>
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<td>1.2</td>
<td>The DR assumes responsibility for long-term preservation of the information represented by the digital objects.</td>
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<tr>
<td>1.3</td>
<td>The DR has defined its designated community/-ies.</td>
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<tr>
<td>2</td>
<td>The DR grants its designated community adequate usage of the information represented by</td>
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</table>
Core requirements for digital repositories

1. The repository commits to continuing maintenance of digital objects for identified community/communities.
2. Demonstrates organizational fitness (including financial, staffing structure, and processes) to fulfill its commitment.
3. Acquires and maintains requisite contractual and legal rights and fulfills responsibilities.
4. Has an effective and efficient policy framework.
5. Acquires and ingests digital objects based upon stated criteria that correspond to its commitments and capabilities.
Core requirements for digital repositories

6. Maintains/ensures the integrity, authenticity and usability of digital objects it holds over time.

7. Creates and maintains requisite metadata about actions taken on digital objects during preservation as well as about the relevant production, access support, and usage process contexts before preservation.

8. Fulfills requisite dissemination requirements.

9. Has a strategic program for preservation planning and action.

10. Has technical infrastructure adequate to continuing maintenance and security of its digital objects.
Thank You for Your Attention!

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- nestor WG Trusted Repositories – Certification
  http://nestor.cms.hu-berlin.de/moinwiki/WG_Trusted_Repositories_-_Certification