

The Devil's in the Details: working towards global consensus for digital repository certification

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Where museums, libraries, and archives intersect

The Call for Certification

“A critical component of the digital archiving infrastructure is the existence of a sufficient number of trusted organizations capable of storing, migrating, and providing access to digital collections...”

A process for certification of digital archives is needed to create an overall climate of trust about the prospects of preserving digital information.”

Task Force on Archiving of Digital Information,
Preserving Digital Information, 1996.

Other Calls for Certification

- *Open Archival Information System Reference Model (ISO 14721:2002)*
 - Identified potential OAIS-related standards to be developed, including “standards for accreditation of archives”
- *Trusted Digital Repositories: Attributes and Responsibilities (2002)*
 - Defined “trusted digital repository” and affiliated attributes, recommended development of a process for certification

Task Force on Digital Repository Certification

- Bibliothèque nationale de France
- Cornell University
- Digital Preservation Coalition, UK
- Harvard University
- Internet Archive
- Koninklijke Bibliotheek
- Library of Congress
- National Aeronautics and Space Administration (NASA US)
- National Archives and Records Administration (NARA US)
- OCLC
- RLG
- Rutherford Appleton Laboratory, Council for the Central Laboratory of the Research Councils, UK
- Stanford University
- University of London Computing Centre

Task Force Remit

- Identify a list of certifiable elements (attributes, processes, functions, activities) of a digital repository or types of repositories
- Create a standard certification process or a framework that can be implemented across domains or types of digital repositories.
- Develop a certification plan
- Define the conditions for revocation of certification and suggest appropriate action plans for endangered digital information

Certification – Difficult Questions

- Levels of certification?
- Self certification?
- Bit preservation?
- Information preservation?
- Certifiable elements?
- Certifying body/organization?
- Duration of certification?
- Consequences of revocation?

Is a domain-neutral, global certification possible?

Emerging Certification Framework

- Dual purpose toolkit
 - Self evaluation
 - Independently administered certification
- Certification
 - Baseline requirements
 - Based on OAIS and Trusted Digital Repositories
 - Additional levels or “modules” likely
 - Domain-specific needs/mandates
 - National libraries, archives, data centers

Certifiable Elements (1 of 2)

- Minimum Attributes (Requirements)
 - *Trusted Digital Repositories*
 - Compliance with OAIS
 - Administrative responsibility
 - Organizational viability
 - Financial sustainability
 - Transparency, etc.
 - Technological and procedural suitability
 - Existing “computer center” practices of requirements
 - System security
 - Back-up, recovery, etc.
 - Procedural accountability
 - Policies, practices documented, etc.

Certifiable Elements (2 of 2)

- Minimum attributes (continued)
 - Minimum preservation level
 - Storing objects with metadata
 - Retrieval
 - Rendering?
- Curatorial aspects
- Audit aspects
- “Customer perspective”
 - Levels of service
- Other...

Overlap with other processes

- Metrics must take into account existing, related standards and best practices
 - ISO 9000 family of standards?
 - BS 7799/ISO 17799?
 - Country-specific legislation?
- May point to pieces/parts of relevant standards as metrics

Domain-Specific Issues?

- Legal mandates, remits
 - Legal deposit, authenticity, etc.
- The role of the collecting policy
 - Clearly relevant to research libraries
 - Relevancy for other sorts of repositories?
- Third-party service providers
 - Usually removed from pre-ingest functions that are critical to other repositories

Who Will Seek Certification?

- Cost of certification will influence this
- Relevancy to mission, goals, remit
- As envisioned:
 - National libraries, archives, data centers with legal remit/mandate
 - Large research libraries
 - Consortial/federated repositories
 - Third party service providers

Not all repositories will seek or need certification!

Important Questions Still Needing Answers

- Is peer review acceptable ? Achievable ?
- What will repositories pay for certification?
- What is their incentive to pay?
- Nature of certifying body?
- Who bankrolls the process at the outset?

Next steps

- Draft document(s) will be issued for public review
 - Draft framework – very soon
 - Report for comment – December 2004
- Modules or community-relevant components most likely to be developed as necessary
- Revision
- Certification plan to follow
- Design and implementation of an organizational structure and program for certification

For More Information...

Task Force on Digital Repository Certification

http://www.rlg.org/en/page.php?Page_ID=580