



INTERNATIONAL ASSOCIATION OF SCIENTIFIC, TECHNICAL & MEDICAL PUBLISHERS

Audit and Certification of Data Repositories

Summary overview of the current initiatives

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Why certification matters:

- The Trust issue:
 - Researchers need reliable repositories, for the long term preservation and curation of the data and tools they deposit,
 - Long term access, understandability and re-use must be guaranteed, for researchers who wish to consult the data
 - Funders wish to see that the output of their investments remain available
 - Publishers wish to make data related to publications permanently discoverable
- The Quality Issue
 - Researchers need guarantees on the integrity, quality and provenance and authenticity of the data
 - Funders wish to be able to make well informed investment decisions: which repository is worth investing in
 - The process of auditing and certification assists repositories in diagnosing where improvements are needed and how these can be achieved

And why certification matters most of all to the repository:

The process of auditing and certification assists repositories in *diagnosing* where *improvements* are needed and how these can be *achieved*

This is often a *step-by-step* process

Many Tools and Methods available:

- TRAC: Trusted Repository Audit and Certification
- DRAMBORA: Digital Repository Audit Method Based On Risk Assessment
- EUROPEAN FRAMEWORK for Audit and Certification of Digital Repositories
- NESTOR: Network of Expertise in Long-Term Storage of Digital Resources
- PLATTER: Planning Tool for Trusted Electronic Repositories
- ISO 16363: Audit and Certification of Trustworthy Digital Repositories

(for full list: see website of the Center for Research Libraries, CRL)

3 levels of certification* in the current initiatives:

Three levels, in increasing trustworthiness:

- **Basic Certification:** self audit through 3 stages
 - 16 quality guidelines developed by DANS
 - Can be done in a few days, longer if external review is included
 - Good for self diagnosis by smaller organisations
- **Extended Certification:** adds an external review and report is publicly available based on ISO 16363 or DIN 31644;
 - ISO and DIN have more thorough requirements on process and proven cross-organisational consistency
 - Requires a few months, mostly suitable for larger organisations
 - Stricter and even greater transparency
- **Formal Certification:** full external audit and certification based on ISO 16363 or equivalent DIN 31644
 - Can require several months
 - Ensures full compliance on all requirements

Active parties on a global scale: WDS, CRL, RDA

- WDS (World Data System – ICSU) has a certification process, mandatory for its (applicant) members, combining several standards in a pragmatic way: OAIS1, OCLC, NESTOR, WMO-IS, CRL, DSA
- CRL (Center of Research Libraries) performs audits following the TRAC criteria
- In the RDA (Research Data Alliance), an Interest group has been established to align all these standards into one, global approach and possible merge existing initiatives into one standard.

Relevant for Dryad ?

- Basic Certification will provide some idea how DRYAD scores on the general criteria
- It will also provide a roadmap of how to prepare for extended and more formal levels of certification

Relevant websites:

http://www.crl.edu/sites/default/files/attachments/pages/trac_0.pdf

<http://www.crl.edu/archiving-preservation/digital-archives/metrics-assessing-and-certifying/core-re>

www.iso16363.org

www.langzeitarchivierung.de

www.nabd.din.de

<http://datasealofapproval.org>

www.trusteddigitalrepository.eu

<http://public.ccsds.org/publications/archive/650x0b1.pdf>

<http://icsu-wds.org/our-members/membership-application/criteria-membership-certification>

<http://rd-alliance.org>