

7-12-2012

ISO 16363: Trustworthy Digital Repository Certification in Practice

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Recommended Citation

Witt, Michael; Kroll, Matthew; Minor, David; and Reilly, Bernie, "ISO 16363: Trustworthy Digital Repository Certification in Practice" (2012). *Libraries Faculty and Staff Presentations*. Paper 4.
http://docs.lib.purdue.edu/lib_fspres/4

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ISO 16363: Trustworthy Digital Repository Certification in Practice

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Abstract

The proposed panel will present three perspectives from the United States on the new ISO 16363 certification process from a repository that is currently preparing to undergo an audit (Purdue University), a repository that has recently been certified as a trustworthy digital repository (Chronopolis Digital Preservation Network, University of California, San Diego), and an auditor (Center for Research Libraries). After a concise overview of the certification process, each panelist will offer insights and practical tips based on their experience and participate in a moderated discussion that includes questions and comments from the audience.

Background

The 1996 report, *Preserving Digital Information*, concluded that “a process of certification for digital archives is needed to create an overall climate of trust about the prospects of preserving digital information” [1]. In 2003, the Research Libraries Group and National Archives and Records Administration (NARA) convened a task force to address the issue of digital repository certification. Further collaboration with the Center for Research Libraries (CRL), nestor, the Digital Curation Center, and others led to development of *Trustworthy Repositories Audit & Certification: Criteria and Checklist*, otherwise known as the TRAC Checklist, which was published in 2007 [2]. Other, important work taking place around this same time in Europe included, but was not limited to, the development of the *Catalogue of Criteria for Trusted Digital Repositories* by nestor, *DRAMBORA* (Digital Repository Audit Method Based On Risk Assessment) from the DCC and DigitalPreservationEurope, and the *Data Seal of Approval* by the

Dutch Data Archiving and Networked Services.

The TRAC Checklist has since been updated by a group of collaborators, leading up to the creation of a birds-of-a-feather group led by David Giaretta [3] that became the MOIMS-RAC (Mission Operations Information Management Services Repository Audit and Certification) Working Group [4] of the Consultative Committee for Space Data Systems. The working group and collaborators worked with the International Organization of Standardization (ISO) to formalize TRAC as *ISO 16363:2012 Audit and Certification of Trustworthy Digital Repositories* [5]. On February 14, 2012, this work reached stage 60:60, “International Standard published” [6]. Requirements for auditors are currently going through a similar standardization process for its complement, *ISO 16919: Requirements for Bodies Providing Audit and Certification* [7].

ISO 16363 uses language and concepts from the Open Archival Information Systems (OAIS) reference model, and it enables the assessment and certification of a repository as being a trustworthy digital repository (TDR). The standard begins with an introduction that explains the scope, purpose, and applicability of ISO 16363 as well as the structure and terminology employed in the document. The second section defines a TDR and evaluation metrics and gives an overview of other, relevant ISO standards. The last three sections of ISO 16363 comprise the metrics themselves, which are the bulk of the document. Each metric includes a concise statement of the criterion, a supporting sentence that explains the importance and relevance of the criterion, a paragraph that gives examples of evidence that could be used to demonstrate that the repository meets the criterion, and a lengthier discussion that provides more information about and context for the criterion, including relationships to or dependencies on other criteria. Section 3, *Organizational Infrastructure*, addresses issues such as governance and organizational structure, staffing, procedural accountability, the policy framework, financial sustainability, and contracts, licenses, and liabilities. Section 4, *Digital Object Management*, assesses the acquisition of content, creation of the Archival Information Package (AIP), preservation planning, the actual preservation of the AIPs, and the management of information (i.e., metadata) and access. Lastly, Section 5 explains metrics related to technical infrastructure and security risk management. Two brief appendices address security considerations inherent in the audit and certification process itself as well as a list of references.

Summary

A handful of early-adopters have gone through the certification process, first using TRAC, and now using the new ISO 16363 standard. Attendees will learn from the practical experience of the panelists what to expect from the certification process and tips for preparing for an audit. This panel may complement other proposed sessions on repository assessment that may be

using other approaches, or it may be narrowed in scope to focus on current practice in the United States.

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