

Preparing a Trustworthy Domain Repository for ISO 16363 Certification

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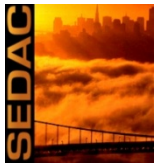
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Center for International Earth Science Information Network
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Joint Session: IG Domain Repositories, IG RDA/WDS Certification of
Digital Repositories
Wednesday 11 March 2015, 1:30 p.m.



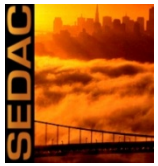
History & Current Status of ISO 16363 Certification



- Recommended practices developed
 - Consultative Committee for Space Data Systems (CCSDS) developed recommended practices based on:
 - Trustworthy Repositories Audit & Certification: Criteria and Checklist (TRAC).
- International standards published
 - Space data and information transfer systems -- Audit and certification of trustworthy digital repositories. Published as ISO 16363:2012
 - Space data and information transfer systems -- Requirements for bodies providing audit and certification of candidate trustworthy digital repositories. Published as ISO 16919:2014
- Adoption
 - Currently, various organizations provide consulting, training, and audit services based on ISO 16363
 - No organizations have been accredited to provide ISO 16363 certification.



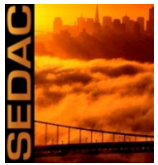
Conduct a Self-Assessment of ISO 16363 Compliance



- Familiarize staff with ISO 16363 Self-Assessment Template
 - Review each section: Organizational Infrastructure, Digital Object Management, Infrastructure and Security Risk Management
- Assign top-level metrics to staff with relevant responsibilities
 - Review each low-level metric to identify current practices and evidence
 - Revise policies and procedures to reflect current practices
 - Populate Evidence column with titles of documents and records
 - Provide explanation for how evidence addresses each metric
- Identify improvements needed to meet each metric
 - Review Evidence and Explanation columns and identify weaknesses
- Implement improvements to address each weakness
 - Develop, and adopt needed policies, procedures, tools, and techniques
 - Strengthen staff capabilities via professional development and hiring
- Revise each section for consistency with adopted improvements
 - Revise Evidence and Explanation to reflect documents and practices



References



- **Audit and Certification of Trustworthy Digital Repositories. Recommended Practice.** 2011 CCSDS <http://public.ccsds.org/publications/archive/652x0m1.pdf>
- **Audit Preparation and Self-Assessment Template for ISO 16363.** 2013 PTAB <http://www.iso16363.org/preparing-for-an-audit/>
- Downs RR, Chen RS 2013 **Independent Evaluation of a Scientific Data Center for Compliance with the ISO 16363 Requirements for Audit and Certification of Trustworthy Digital Repositories.** RDA 2nd Plenary, <http://hdl.handle.net/10022/AC:P:21793>
- Downs RR, Giaretta D, Hughes JS 2014 **Policy Recommendations for Institutions to Serve as Trustworthy Stewards of Research Data.** RDAP 2014, <http://dx.doi.org/10.7916/D8SB43SP>
- **Reference Model for an Open Archival Information System (OAIS).** 2012 CCSDS <http://public.ccsds.org/publications/archive/650x0m2.pdf>
- **Requirements for Bodies Providing Audit and Certification of Candidate Trustworthy Digital Repositories.** 2014 CCSDS <http://public.ccsds.org/publications/archive/652x1m2.pdf>
- **Trustworthy Repositories Audit & Certification: Criteria and Checklist.** 2007 CRL http://www.crl.edu/sites/default/files/d6/attachments/pages/trac_0.pdf