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Národní technická knihovna
National Technical Library

UNIVERSITY OF CALGARY
LIBRARIES AND CULTURAL RESOURCES

Audit DRAMBORA for Trustworthy Repositories: A Study Dealing with the Digital Repository of Grey Literature

Petra Pejšová, National Technical Library, Czech Republic
Marcus Vaska, University of Calgary, Canada

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Audit for Trustworthy Repositories

- In order for a repository to be deemed trustworthy, it must meet its objectives, and contain the information and material, which, according to its mandate, it is supposed to contain
- 4 competing factors:
  - Authenticity
  - Availability
  - Confidentiality
  - Integrity

Credibility of Grey Literature in Digital Repositories

- "One of the central challenges to long-term preservation in a digital repository is the ability to guarantee the authenticity and interpretability (understandability) of digital objects for users across time"
  - Susanne Dobratz and Astried Schoger, 2009
- Task Force on Archiving of Digital Information (1996)
- RLG/NARA Audit Checklist (2005)
- Nestor Catalogue of Criteria for Trusted Digital Repositories (2006)

Reasons Why an Audit is Done

- Maintain a sustainable, secure repository, with a user-friendly interface
- Establish and maintain a policy that will result in a long-term repository for data producers
- Solid management foundation (quality, object, data), ensuring high-quality information is continuously deposited
- Identify weaknesses and risks, overcome challenges

What an Audit Represents

- Matrix methodology: a tool to aid in the decision-making of certifying a repository as a trustworthy source of information
- Software package: to guarantee access to interpretable objects
- 3 key areas of digital preservation
  - Management
  - Resources
  - Technology

Existing Audit Methodologies and Tools

- Digital Repository Audit Method Based on Risk Assessment (DRAMBORA)

  http://www.repositoryaudit.eu

- Nestor Catalogue of Criteria for Trusted Digital Repositories

  http://files.d-nb.de/nestor/materialien/nestor_mat_08-eng.pdf

- Planning Tool for Trusted Electronic Repositories (PLATTER)

  http://www.digitalpreservationeurope.eu/platter/

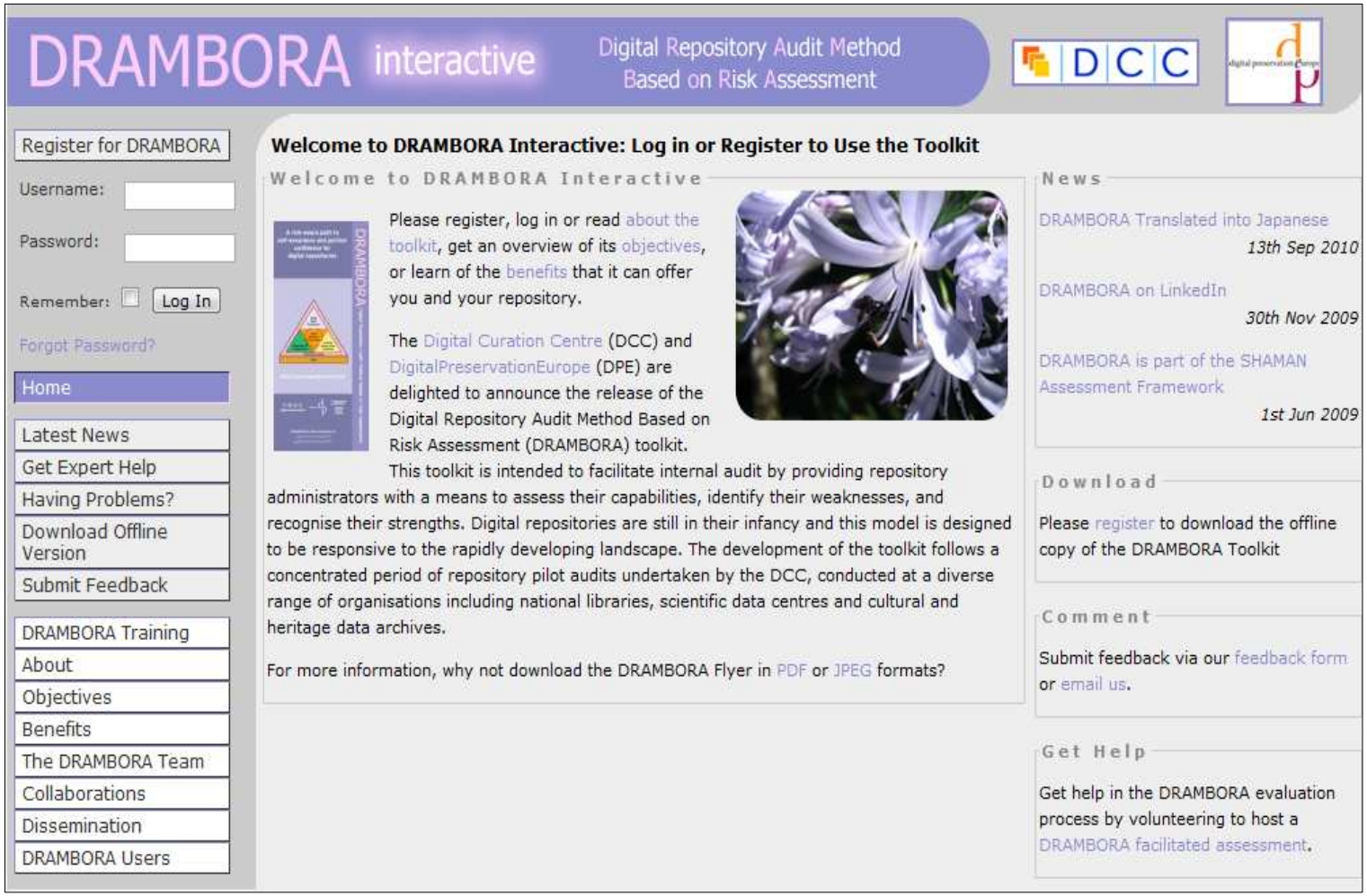
- Trustworthy Repositories Audit & Certification (TRAC)

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

DRAMBORA: Tool & Methodology

- DRAMBORA = *Digital Repository Audit Method Based on Risk Assessment*
- Of-line / On-line
  http://www.repositoryaudit.eu/
- Digital Curation Centre (DCC)
  DigitalPreservationEurope (DPE)

DRAMBORA: Tool & Methodology



How to use DRAMBORA

- On-line version
  - External links
  - Attached files
  - Coherence
  - Model examples
- English language
- Incremental method

DRAMBORA: Advantages vs. Disadvantages

Advantages	**Disadvantages**
Online version (interactive content, internal activity)	Implementation and methodology available only in English
Methodology and implementation of tools	Does not support Czech character set - iso-8859-2/windows-1250
Descriptors and examples (ease of use, intuitive, applicable)	Read-only access not permitted
Evaluation or risk	Exporting not possible

Audit of the National Repository of Grey Literature (NRGL)

- 2009 - first audit: filed test
- 2010 – second: routine operation – 2011…
- WHY?
  - Warranty for partners
  - Define objectives
  - Management repository
  - The need for the methodology
  - Materials for managements

NRGL Audit – Preparatory Phase

- Data Collection
  - documents, standards, descriptions, procedures, staffing, physical facilities, budget information, etc.

The following examples of individual audit parts are often shortened for presentation purposes.

NRGL Audit – Mandate and Equipmet

NTK status: To build national repository of grey literature and to make the information and findings contained in the repository accessible for NTK users using modern information technology.

http://www.techlib.cz/default/files/download/id/1747/dodatek-c-1-k-zl-ntkpdf.pdf

Repository Hardware

Hardware used to run the repository software and database - SUN SUNXFIRE 4500 server, OS SOLARIS 10

NRGL Audit – Functional Class

Supporting Functions:

Legal & Regulatory Legitimacy

Functions and characteristics corresponding to legislative, regulatory or common

law rights and responsibilities of the repository.

Operational Functions:

Acquisition & Ingest

Functions and characteristics corresponding to the repository's negotiation, submission, receipt and ingestion of data from creators and suppliers.

NRGL Audit – Staff

Position: Manager
Unique Staff ID: 1
Telephone: +420232002485
Staff Email: petra.pejsova@techlib.cz
Address: NTK, Technicka 6/2710, 160 80 Praha 6
Status: Coordinator
Username: petrapej
Name: Miss Petra Pejsova
Alt. Email: petra.techlib@gmail.com
Roles: Management

NRGL Audit – Roles

Role Name: Management

Description: Establishes strategy and objectives of the repository, Establishes strategy of the repository content provider network...

Corresponding Staff Members: Manager

Activity Responsibilities: Budget Management, Cooperation Network, Team Management, NUSL Publicity

Risk Responsibilities: Loss of Staff Members, Pilot Project End, Disaster Recovery, Partner Network Voluntary, Backup Tapes...

NRGL Audit – Limitations

Name: Documents Publication Status

Description: The Repository is devoted to grey literature, so it accepts only non-published or semi-published documents

Type: Policy

Functional Class(es): Supporting Functional Classes - Acquisition & Ingest

Web Links:

http://nusl.techlib.cz/index.php/Typologie_dokument%C5%AF_NU%C5%A0L

NRGL Audit – Goals

Name: Best Practices

Description: Best practices for building similar cooperating institutional repositories are one of the planned outputs of the project

2010: Best practices for partners created in the technical and methodical areas, see section Constraints - Methodology of the cooperation with NUSL etc.

Functional Class(es)*: Supporting Functional Classes - Efficient & Effective Policies

NRGL Audit – Activities

Activity Name: Repository Backup

Activity Desc: To create the backup copy of the system to preserve the current setup and of the repository database to preserve it's content

Activity Role(s): Administrator

Related Assets: Repository Hardware, Repository Software

Related Objective(s): Main Function

Functional Class(es)*:Preservation of Digital Object Integrity, Authenticity & Usability

Related Risks: Backup Tapes Storage

NRGL Audit – Risk Identification

- Risk identification and mapping to the corresponding roles
- Determination the seriousness of risks
- Design risks mitigation or elimination
- Determination of the date of inspection
- Risk analysis - assessment of severity - Pareto 80/20 rule
- In 2009 were identified 16 risk
- In 2010 were identified 6 new risks
- Third audit is in process now

NRGL Audit – Risk Example

Risk Number 4: Partner Network Voluntary

Risk Description: The planned network of partner organizations, supplying content for the repository, is based on organizations voluntariness, there is no legal regulation in place.

Risk Owner(s): Management, Legal Support

Risk Impact: High

Treatment Strategy: Continue to promote NUSL among potential partners, create a partner success story

Strategy Owner: Management

Check Date: 2011-06-30

NRGL Audit – Outputs

- Identified risks threatening the operation of the repository, its quality, responsiveness, reputation and position
- Mapped repository - including the relevant area
- Action Plan - dates and steps to eliminate or mitigate risks

Recommendations & Conclusions

- While no organization can absolutely guarantee long-term preservation and access, one must "advance knowledge and learning at the highest level and…convey products of its efforts to the world."
  - Columbia Mission Statement

- We therefore recommend that an audit be undertaken on an annual basis, identifying any associated risks, and creating an action plan to make the audit an iterative process that contributes to the trustworthiness of the digital repository.

Questions

- Contact Information
  - Petra Pejšová: **petra.pejsova@techlib.cz**
  - Marcus Vaska: **mmvaska@ucalgary.ca**