Service-Oriented Ingestion Workflow for Digital Preservation System

Approach and Practice of DP at NLC

Zhigeng, Wang

Digital Service Department

the National Library of China
Background

National Library of China

- needs to provide useful access functionality to its digital holdings including
  - both *digitized materials* and
  - *born digital* resources.
- needs to make these content readily available and usable for both *human* and *machine* users,
  - different types of *content* (text, images, videos, sound recordings, web)
  - different types of *user devices* (PC, PDA, mobile phones).
- Extended *legal deposit* to include electronic publications
DP requirement

- the technologies on which the information is stored, or in which form the information is encoded, will have to be migrated to a newer format, operating system or hardware.
- The migration is inevitable and unavoidable, and most national libraries manage this as a regular business requirement and replace their systems on a reasonably regular basis.
- The approach for digital preservation is not to build permanent systems, but rather to construct systems that will facilitate the management and preservation of the digital resources in the nature of change.
DPS

DPS must consider all aspects of a digital repository;

- Ingest,
- Access,
- Administration,
- Data Management,
- Preservation Planning
- Archival Storage,
  - storage media and
  - management software.
NLC’s Solution Statement

DPS must be a system that can

- ensure the integrity, authenticity and trustworthiness of digital material deposited into NLC, and
- integrate with other local library applications and systems to deliver digital library services.

DPS will be based on

- identity management
- workflow management

The system would be built on a commercial solution, which is standards-based, cost effective, and adaptable.
System Environment

Producers
- News agency
- Publisher
- Library

DiNeR
an OAIS archive
Digital Newspaper Repository

Management
NLC Governing Board

Consumers
- Designated Community
- General public
# System Overview

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- **warehouse**
  - 保存模块
  - Preservation Management 保存管理
  - Storage Management 存储管理

- Digital Rights Management 权利管理
  - Dissemination management 发布管理
  - Statistics and report 统计报告

- Workflow management 工作流管理
System Architecture
Content Relationships
SOIW
Service-Oriented Ingestion Workflow
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Metadata hierarchy construction
PID Generation
Administrator arrangement
Conclusion

- Ingestor consults the workflow engine in order to determine next steps.

- Invoking the preservation process as soon as they are received.

- It is possible to construct a service-oriented ingestion workflow to coordinate the ingestion process of an OAIS-compliant system.
Thank you for your attention!

Zhigeng Wang
wangzhg@nlc.gov.cn
National Library of China/
86-10-88545472