

Toward an Institutional Repository at the Data Service of NDAP

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Content

- The Concept of Institutional Repository
- The Challenges of the Data Service of National Digital Archives Program
- The Strategies
- The Implementation
- The Outcomes
- Conclusion Remarks

The Concept of Institutional Repository

- Institutional Repository (IR)
 - A strategy of **open access**, is to **capture, preserve and make available** as much of the **research output** of an **institution** as possible.
 - It might include material such as **research papers** and electronic versions of documents such as **theses**, but may also include many of the digital assets generated by normal campus life, such as **administrative documents, course notes, or learning objects**.

The Concept of Institutional Repository

- It is believed that IRs are a **practical, cost-effective, and strategic means** for institutions to build partnerships with their faculty **to advance scholarly communication.** (Johnson, 2002)

The Nature of Institutional Repositories

- 13 nations (most Europe and the Northman America) (Westrienen & Lynch, 2005; Lynch & Lippincott, 2005)
 - Number of IRs
 - about 344 IRs
 - Number of Objects
 - typically a few hundred per IR
 - Type of Objects
 - Articles
 - Books and theses
 - Primary data
 - Video, music and the like
 - Course material
 - Other types of material

The Nature of Institutional Repositories

- 13 nations (most Europe and the Northman America) (Westrienen & Lynch, 2005; Lynch & Lippincott, 2005)
 - **Disciplinary Coverage**
 - Humanities and Social Sciences
 - Life Sciences
 - Natural Sciences
 - Engineering
 - Performing Arts
 - **Software used**
 - GNU Eprints, DSpace, CDSWare, ARNO, Fedora, DIVA, iTOR, Others.

The Nature of Institutional Repositories

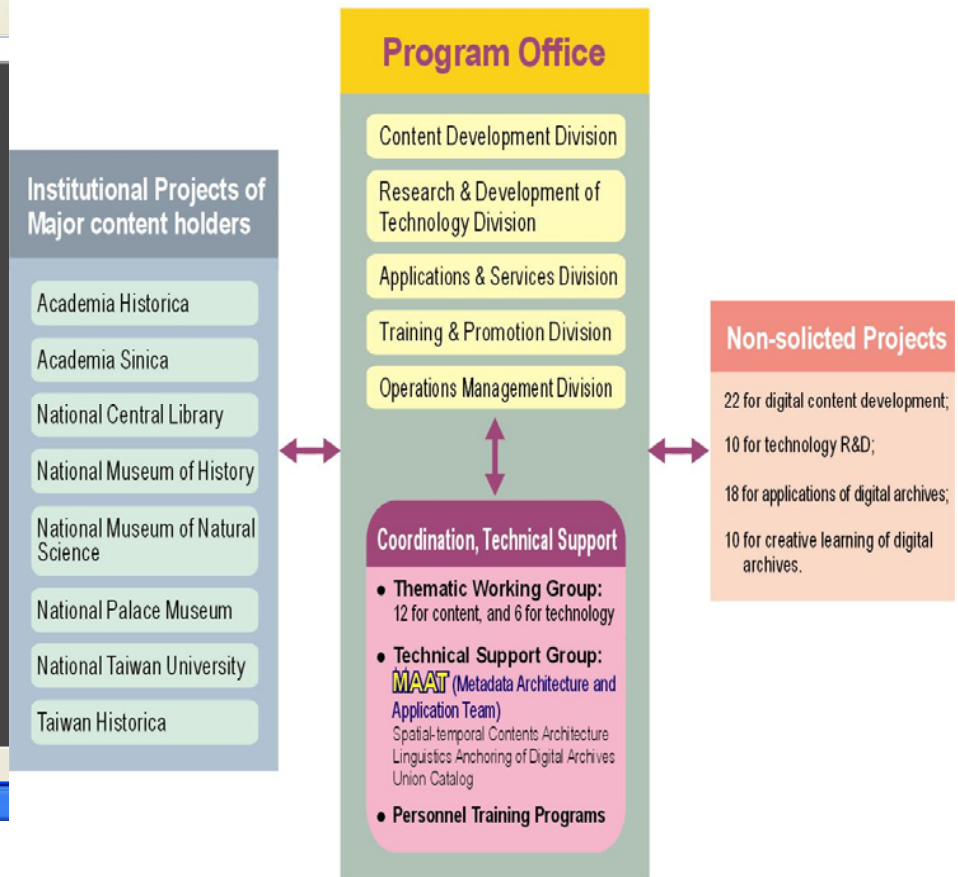
- 13 nations (most Europe and the Northman America) (Westrienen & Lynch, 2005; Lynch & Lippincott, 2005)
 - Administrative Responsibility and Policy-Setting (in the US)
 - in general, research libraries have the leadership role in operating institutional repositories, and also the leadership role in formulation of policy for such repositories.
 - close to 80% indicated that the library has the sole responsibility. A few institutions indicated that the responsibility was jointly held by the library and the information technology unit, library and instructional technology, library and academic administration, an archives unit, or some other multi-organizational arrangement.

The Challenges of the Data Service of National Digital Archives Program (NDAP)



<http://www.sinica.edu.tw/~ndaplib/>

Organization Chart of NDAP



The Strategies

- Institutional Repository Strategy
- Open Source
- Contents

- **External resources**
(2700 records)

- International Standards
 - Technical reports
 - Proceedings
 - Electronic journals
 - Electronic books

- **Internal resources**

- Publications of the NDAP (160 records)

- Series, conference proceedings, conference presentations, tech reports, e-books, newsletter, guidelines...etc.

- Publications of the NDAP researchers (550 records)

- Conference papers, journal papers, e-print, post-print, conference presentation

The Implementation

- Evaluation of the software
 - **Dspace**: with complete functions, but less flexible to customize
 - Fedora
- Fix cost of operation a repository
 - Facilities
 - Hardware (Storage, less than 100G about US\$1,000~2000)
 - Software (Free--DSpace)
 - Human resources
 - A Technical staff
 - A Data Entry staff

The Implementation

- Technical skills
 - UNIX-like OS (Linux, HP/UX etc)
 - Java 1.4 or later (standard SDK is fine, you don't need J2EE)
 - Apache Ant 1.5 or later (Java make-like tool)
 - PostgreSQL 7.3 or later, an open source relational database, or Oracle 9 or higher
- Metadata skills
 - Metadata Application Profiles, Dublin Core, Cataloging guidelines

The Implementation (cont.)

- Content structure

| COMMUNITY | SUB-COMMUNITY | COLLECTION | ITEM |
|--------------------------|------------------------------|--|----------------------------------|
| | Intl. Natl. Standards | <ul style="list-style-type: none">● ISO● IEC | |
| | Tech. Reports | <ul style="list-style-type: none">● FLAAR Report | |
| Library Resources | Conf. Proceedings | <ul style="list-style-type: none">● Dublin Core Metadata Initiative Conference● Museums and the Web | Single item (eg. A paper) |
| | E-Journals | <ul style="list-style-type: none">● D-Lib Magazine● CCQ | |

The Implementation (cont.)

- Content structure

| COMMUNITY | SUB-COMMUNITY | SUB-COMMUNITY | COLLECTION | ITEM |
|---------------------|---|---|---|---------------------------|
| NDAP Publication | the Program Office | <ul style="list-style-type: none"> Project Pub. Faculty Pub | <ul style="list-style-type: none"> Books Journals Faculty A Faculty B | |
| | Research & Development of Technology Division | <ul style="list-style-type: none"> Project Pub. Faculty Pub | <ul style="list-style-type: none"> Tech. Report Conf. Proceedings Faculty C Faculty D | Single item (eg. A paper) |
| | Academia Sinica | <ul style="list-style-type: none"> Project Pub. Faculty Pub | <ul style="list-style-type: none"> Books Best Practices Faculty E Faculty F | |
| | National Central Library | <ul style="list-style-type: none"> Project Pub. Faculty Pub | <ul style="list-style-type: none"> Books Journals Faculty G Faculty H | |
| | National Palace Museum | <ul style="list-style-type: none"> Project Pub. Faculty Pub | <ul style="list-style-type: none"> Books Journals Faculty A Faculty B | |

The Outcomes

DSpace at MAAT(Metadata Architecture and Application Team), ASCC: test_數位典藏國家型科技計畫 計畫出版品 - Microsoft Internet Explorer

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Sub-communities within this community

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- 內容發展分項計畫

國家圖書館國家典藏數位化計畫

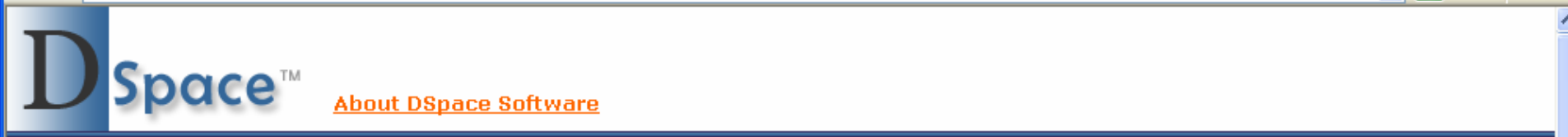
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- 數位博物館大觀園
- 數位典藏技術研討會, 第一屆
- 數位典藏技術研討會, 第四屆

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Other Titles: The first workshop on digital archi
Authors: 數位典藏國家型科技計畫技術研發分項計
 Research & Development of Techn
Keywords: 會議論文集(proceedings)
Issue Date: Jul-2002
Publisher: 數位典藏國家型科技計畫技術研發分項計
Abstract: TOC: Session A : 多媒體內涵查詢技
 Based Retrieval for MP3 Database
 鏡頭對數位電影資料進行自動化摘要合成
 進行MPEG-4 鏡頭變化偵測之技術/劉志
 基礎的文件自動分類技術/郭奕宏、林琮
 系統/鄭心怡、林宣華、何建明 --Conte
 Indexing/吳宗德、許文豪--個人化美術
 Implementation and Evaluation of

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基礎的文件自動分類技術/郭奕宏、林琮烈、洪西進、許福龍--GKS - 群組文件與知識典藏系統/鄭心怡、林宣華、何建明 --Content-based Video Summarization and Indexing/吳宗德、許文豪--個人化美術影像風格查詢系統/劉勁男、沈錕坤 -- Implementation and Evaluation of a Content-Based Image Retrieval System/賴鼎陞 </P>。Session B : 時空資訊整合技術&智慧型問答技術: WME : 建置在XML基礎相關技術之多媒體網路教學系統/林朝興、洪駿命--數位典藏時空資訊基礎架構研發/翁維瓏、陸天塔--Design and Implementation of an RDF Triple Store/Ching-Long Yeh、Ruei-Feng Lin--Design and Implementation of an Ontology-Based Web Portal/Ching-Long Yeh、Chang-Gang Chen。Session C : 語言技術&數位化技術: The Formosan language archive: a linguistic perspective/Elizabeth Zeitoun(齊莉莎) --Scenario-Based Learning - an application for the National Digital Library/Hwai-Jan Wu、Kuan-Tase Huang、Horward Chen、Hwai-Ping Wu--語言典藏開放式語言典藏社群之雙語元素集及控制詞彙中文版/張如瑩、黃居仁--珍藏文物數位化與重現: 大型影像圖像的數位化與展現/李音儀、黃志中、范紀文、周照欽、何建明--國家圖書館期刊報紙...

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| ndap-dats2002_G-3.pdf | 數位典藏國家型科技計畫OAI-based聯合目錄建置規劃 | 309Kb | Adobe PDF View/Open |
| ndap-dats2002_F-4.pdf | 後設資料系統的需求評選與發展設計 | 332Kb | Adobe PDF View/Open |

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Conclusion Remarks

- Greatly Enhance the information access and service
- Ongoing works and issues
 - Collection development
 - Systems integration
 - With the knowledge management systems
 - With the content management systems

References

- Johnson, R.K. (2002). Institutional repositories: partnering with faculty to enhance scholarly communication. D-Lib Magazine, 8(11).
<http://www.dlib.org/dlib/november02/johnson/11johnson.html>
- Westrienen & Lynch. (2005). Academic institutional repositories: deployment status in 13 nations as of mid 2005. D-Lib Magazine, 11(9).
<http://www.dlib.org/dlib/september05/westrienen/09westrienen.html>
- Lynch & Lippincott. (2005). Institutional repository deployment in the United States as of early 2005. D-Lib Magazine, 11(9).
<http://www.dlib.org/dlib/september05/lynch/09lynch.html>

Welcome Any Comments!

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The Concept of Institutional Repository (cont.)

- Why Institutional Repositories?
 - Support a broad, pan-institutional effort
 - *New scholarly publishing paradigm*
 - Offer direct and immediate benefits to each institution that implements a repository
 - *Institutional visibility and prestige*
- Essential Elements of an Institutional Repository
 - Institutionally defined
 - Scholarly
 - Cumulative and perpetual
 - Open and interoperable (Johnson, 2002)