The Archivists’ Toolkit
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Overview

• Project objectives
• Overview of features
• Functional modules
• Application architecture and technology
• Demonstration example
Project Objectives

To build digital tools that will:

- Support archival processing in a manner that promotes efficiency and standardization
- Integrate key functions in the archival lifecycle:
  - Accessioning
  - Description
  - Subjects and name management
  - Location management
- Produce outputs such as EAD, EAC, METS, MARCXML and various administrative outputs
- Be deployable in a range of archival settings

Application Features

- Output neutral data
- Modular
- Customizable
- Easy to use
- Secure
- Stand-alone or multi-user network
- Context-sensitive help
- Open source
Design Overview

- Administration/Project Management
- Ingest
- Accession
- Description
- Location
- Names
- Audit Tracking
- Subjects

Application/Project Management

- Establish repository record
- Manage users
- Customize default fields, required fields, input forms
- Create project definitions
Ingest Module

- EAD version 1.0 and 2002 (XML)
- MARC XML

Accession Module

- Preliminary descriptive information
- Some collection management fields
- Descriptive and administrative outputs:
  - Accession record
  - Accession receipt
  - ‘Acquisitions report
  - Processing reports
  - More…
Description Module

• Archival resources and surrogates
• Inputs based on DACS, ISAD(G)
• Outputs:
  • EAD
  • METS
  • Dublin Core
  • Collections guide
  • MARC XML
  • MODS
  • Printed finding aids
  • More…
Location Module

- For tracking “permanent” locations
- Accommodate a range of practice
- Outputs:
  - Location record
  - Shelf list
  - List of all locations for a resource

Names Module

- Authority control for names (personal, family, and corporate/conference)
- Includes fields for contact information, biographical/historical note
- Supports see also and see references
- Outputs:
  - Source record
  - Sources list
  - EAC record
Subject Module

- Basic authority control for subjects
- Can create records in advance or on an as-needed basis
- Outputs:
  - Repository subject guide

Audit Tracking

- Uniquely identifies each record
- Allows repository to track creation and editing of records
Search Module

• For moderated use in reference setting
• Features:
  – Search for resource by resource ID, title, creator, or subject
  – Search for resources, resource components, surrogates, and surrogate components by keywords in title
  – Search for locations by resource ID
Back End (database)

- Developed with mySQL
- Will work with many SQL databases both open source and commercial
  - Partial list: DB2, PostgreSQL, MySQL, Oracle, Sybase, Microsoft SQL Server, Informix, Ingres ...
- Why SQL and not other technologies like xml and object databases?
  - Maturity of SQL databases
  - Likelihood of local IT departments having SQL expertise
  - Many existing open source projects to integrate into the projects.

Front End (Client)

- Needs: Cross platform (Mac OSX, Windows 98+, Linux), open source, sophisticated user interface capabilities
- Solution: Java desktop client
  - Many more user interface options than a web based client
  - Will run on any computer with Java 5 (1.5) installed
- Client and database can be installed on the same computer or on different computers.
  - Single machine configuration
  - Local network configuration
  - Wide area network configuration
Open Source

- SourceForge
  - Project will be listed by the end of the year.
  - Source code will be available in an early alpha version early next year for viewing only.
  - When we enter beta testing we will be open to other developers joining the effort.
- Anyone will be able to download the source code and use it as they wish.
- We hope a developer community will grow out of the project.

The Great Divide

or in technical terms

The Paradigm Mismatch

Java
Object Oriented Programming Language

SQL
Relational Database
Hibernate
A persistence layer

• An open source project to bridge the differences between Java and relational databases
• Saves us from rolling our own
• Allows easy swapping of back end databases

A Live Demonstration

Archivists’ Toolkit - NEA Fall Meeting, October 15, 2005