The New ADL Registry

ADL Registry Web Portal Changes

Eric Sakmar, *ADL Technical Team*

Jason Haag, *Joint ADL Co-Lab*

Larry Lannom, *CNRI*

August 18-19, 2009
The New ADL Registry. ADL Registry Web Portal Changes

Advanced Decision Learning (ADL), Joint ADL Co-Lab, 13501 Ingenuity Drive Suite 248, Orlando, FL, 32826

ImplementationFest2009, 18-20 Aug 2009
ADL Registry Web Portal Changes

Eric Sakmar
ADL Registry Informational Site

- http://www.adlnet.gov/Technologies/adlr/
  - News and Announcements
  - Frequently Asked Questions (FAQ)
  - Documentation
  - Events and Event Registration
ADL Registry Functional Site

- http://adlregistry.adlnet.gov
  - Search
  - Contribute
  - Register Repositories and Contributors
  - Practice Registry
  - Help and Contact Information
ADL Registry Changes
ADL Registry Changes

- Identifiers
- Registry Transaction Envelope
- LOM Overview
- Search Results
Registry Transaction Envelope

- Multiple, Typed URLs
- Types of URLs
  - object - Direct link to the object itself, no authentication required
  - advertisement - link to information about the object (preview, screenshot, etc.)
  - runtime - link to the object in a runtime environment
  - contact – link to information about a contact through which the object may be requested
  - extended metadata – link to additional metadata
  - repository – link to the object in a repository, authentication may be required
Search Results

Example Submission

This is an example submission that is used to demonstrate ADL Registry features.

Object: http://adlregistry.adlnet.gov/package.zip
Advertisement: http://adlregistry.adlnet.gov/ad.html
Runtime: http://adlregistry.adlnet.gov/lms/examole.html
Contact: http://adlregistry.adlnet.gov/contact.html
Extended Metadata: http://adlregistry.adlnet.gov/extensionsmetadata.xml
Repository: http://adlregistry.adlnet.gov/repository/example

1
ADL Registry 1.7
Metadata Changes
LOM Changes Overview

- ‘conformance’ was replaced with ‘compliance’
- ‘content object’ was replaced with ‘object’
- Additional support for Educational Objectives and Competencies
  - Represented in <classification> elements
- Additional values for ‘complies with’ classification
- Additional values for ‘object type’ classification
Metadata Changes

- ‘conformance’ to ‘compliance’
  - LOM Classifications
    - ‘conforms to’ >> ‘complies with’
    - ‘ADL/DOD Conformance Taxonomy’ >> ‘ADL/DOD Compliance Taxonomy’
Metadata Changes

‘content object’ to ‘object’

XML Elements
- `contentObjectDescriptor` >> `objectDescriptor`
- `cordraContentObject` >> `cordraObject`
- `contentObjectIdentifier` >> `objectIdentifier`
- `contentObjectLocation` >> `objectLocation`
- `communityContentObject` >> `communityObject`

LOM Classifications
- ‘content type’ >> ‘object type’
- ‘ADL/DOD Content Type Taxonomy’ >> ‘ADL/DOD Object Type Taxonomy’
- ‘ADL/DOD Content Category Taxonomy’ >>
- ‘ADL/DOD Object Category Taxonomy’
Metadata Changes

- Additional support for Educational Objectives and Competencies
  - Create a lom:classification element
  - Set value to lom:classification/lom:purpose/lom:value ‘educational objective’ or ‘competency’
  - Set values for
    - lom:classification/lom:taxonPath/source
    - lom:classification/lom:taxonPath/lom:taxon/lom:id
    - lom:classification/lom:taxonPath/lom:taxon/lom:entry
Metadata Changes

- Additional values for ‘complies with’ classification
  - SCORM 2004 3rd Edition
  - SCORM 2004 4th Edition
  - SCORM Version 1.2
  - S1000D V2.0
  - S1000D V2.1
  - S1000D V2.2
  - S1000D V2.3
  - S1000D V3.0
  - S1000D V4.0
  - IEEE 1484.20.1-2007 RCD
  - other
Metadata Changes

- Additional values for ‘object type’ classification
  - sco
  - aggregation
  - other
Introduction
Overview

- Success Stories (Navy & JKDDC)
- Similar Challenges
- Technical Approaches
<table>
<thead>
<tr>
<th>Contributor</th>
<th>Records</th>
<th>Entry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy eLearning (US Navy)</td>
<td>2,086</td>
<td>08/05/2008</td>
</tr>
<tr>
<td>Joint Knowledge Development and Distribution Capability (JKDDC)</td>
<td>127</td>
<td>04/01/2007</td>
</tr>
<tr>
<td>Defense Ammunition Center</td>
<td>76</td>
<td>09/08/2008</td>
</tr>
</tbody>
</table>
Use Case: U.S. Navy

- Currently deploys more than 4,000 custom catalog items (content packages) to multiple environments and platforms
U.S. Navy Organizational Challenges

- Lack of consistent metadata for learning content
  - Most content was created prior to the establishment of Navy content development policy, guidelines, and DoD Instruction 1322.26

- Many learning programs in “legacy state” of maintenance
  - Lack of funding and/or resources to move to a more mature state of life-cycle management
U.S. Navy Technical Challenges

- Metadata was available for all of the learning content, but it was not always included in the SCORM content package
  - Hosting process required manual input into the LMS but only course-level (aggregate)
- CMAD Repository was no longer operational
  - R&D project unable to transition to enterprise data center
  - Provided capability to populate ADL-R using RIM-LITE
- Lack of tools for new content development efforts
  - All new metadata would have to be updated/modified by the technical implementer to support the ADL-R
U.S. Navy Situation

- All metadata wasn’t always included in the content package
- The Navy’s LMS contained this metadata for each catalog item (course aggregation)
  - Title
  - Description
  - Keywords
  - Instructional Hours (Duration)
  - SCORM Version
U.S. Navy Approach

- Populate the ADL Registry with a single insert transaction file generated by the custom utility

- Develop utility to extract metadata from the LMS
The NROWS Orders Administration course is designed primarily for Unit Reviewers and Unit Approvers but contains an overview of the order submission and approval process from which all Members will benefit. This course provides an introduction to AT/ADT/IDTT Orders Policy; NROWS Roles and Responsibilities; Maintaining NROWS; Unit Reviewer and Unit Approver Menus and Procedures; Order Writing Authority (OWA) and Orders Specialist (OS) Menus; Orders Verification Submission and Approval; Email Notifications; and NROWS Reports.
Populate the ADL Registry with a single insert transaction file generated by the custom utility.
Use Case: JKDDDC
JKDDC Technical Challenges

- Lack of metadata for learning content
  - Majority of the content was created prior to the establishment of DoD Instruction 1322.26

- Metadata was not always included in the SCORM content package
  - Would have to manually create metadata using source materials
JKDDC Approach

- Reviewed each piece of content
  - Used instructional lesson plans, storyboards, etc. to locate relevant metadata
  - Manually created new metadata and entered it into a database that supported
    - Title
    - Description
    - Keywords
    - Duration

- Created wrapper utility to generate XML for the ADL Registry
  - Each insert file contained 20 content aggregation records
U.S. Navy & JKDDC
Current Status
Current Status – U.S. Navy

- NeL in-house content deployment tracking application doesn’t currently support ADL Registry
  - Navy lacks funding and additional resources to update this application
  - Manual ADL Registry population could be automated if an interface for RIM-LITE were added
  - NeL TestTrack Metadata Editor supports new content development efforts to include all LOM elements and ADL Registry-specific metadata
U.S. Navy Metadata Editor
Support for ADL Registry

## Classification

All information below is in reference to the `<classification>` element for the course_metadata.xml file.

### Purpose:

- **Source:** LOMv1.0
- **Value:** security level

### TaxonPath:

**Taxon:**
- Unclassified

### Purpose:

- **Source:** ADL-RV1.0
- **Value:** content type

### TaxonPath:

**Source:** ADL/DCD Content Type Taxonomy
**Taxon:** aggregation

### Purpose:

- **Source:** ADL-RV1.0
- **Value:** distribution restrictions

### TaxonPath:

**Source:** ADL/DCD Distribution Taxonomy
**Taxon:** Cleared for public exhibition but not distribution

### Purpose:

- **Source:** ADL-RV1.0
- **Value:** conforms to

### TaxonPath:

**Source:** ADL/DCD Conformance Taxonomy
**Taxon:** SCORM 2004 3rd Ed.
Current Status - JKDDC

- Uses a Rapid Online Content Creation Engine (ROCCE) to create metadata as part of the Atlas Pro Engine
  - Atlas Pro LMS supports RIM-LITE
  - ADL Registry is currently a public registry
    - JKDDC will resume ADL Registry updates when a military domain (.mil) network is available.
**JKO Joint Content Management Architecture**

All components are DoDI 1322.26 compliant

All GOTS / FASTCOURSE tools provided at no cost to JKO Stakeholders

ATRRS -- Army Training Requirements and Resources System

SCO -- Shareable Content Objects
Summary

- Don’t let technical challenges stand in your way
  - Locate metadata outside of the content package
    - Instructional Plans
    - LMS DB
    - LCMS
    - etc.
  - Contact ADL for support
Resources

- ADL Initiative
  - http://www.adlnet.gov/
- ADL Registry
  - http://adlregistry.adlnet.gov/
- Navy eLearning Content Team
  - https://www.netc.navy.mil/ile
- Joint Knowledge Online
References

- The ADL Registry and CORDRA, Volume 2: ADL Registry Overview and User Guide
  - http://adlregistry.adlnet.gov/
- DoD Instruction 1322.26, Development, Management, and Delivery of Distributed Learning, June 2006
Questions or Comments?

Jason Haag
Learning Technology Analyst
jason.haag.ctr@adlnet.gov
+1.850.471.1300