OCLC CONTENTdm and the WorldCat Digital Collection Gateway
Overview

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June 2015
Overview Audience

- This session is for users—library staff, curators, archivists, who are brand-new to CONTENTdm
- ...or returning users
- ...or administrators, section-, department-, heads, library directors and deans
Overview Agenda

• Software and Community
• How does it work in the context of my workflows?
• Visibility
  – SEO
  – Linked data
• Demonstration
Architecture of CONTENTdm

Who uses it?

Why should I use it?

- Software and community
What is CONTENTdm?

• A complete digital collection management software solution
• Stores, manages and provides access for all digital collections
• For organizations – and collaborations-- of all types and sizes academic libraries, public libraries, historical societies, museums, state libraries, cultural heritage organizations and others
CONTENTdm architecture and evolution

CONTENTdm Administration
- User management
- Collection management
  - Collection export
- OAI & Sync with WorldCat
- Website management

Website config tool
Global and Collection-level

Project Clients
- Metadata/Cataloging
- Batch Processing

OCR Extension

Server—Hosted or Local Unix (Linux) or Windows

Website
Today’s CONTENTdm—powerful and flexible

- Responsive website design
- High performance for audio/video
- SEO—Automatic visibility to search engines
Why should I use CONTENTdm?

• Promote access to your unique digital resources
• Efficiently maintain collections leveraging best practices and true standards:
  – Dublin Core, Unicode, JPEG2000, OAI Harvesting, PHP API and more
• High performance searching and browsing
• Responsive design and customizable UI
How does CONTENTdm help me?

Automatically creates your website
  – You: Organize, Catalog, Publish
  – End users: Find, Retrieve, Use
Who is using CONTENTdm?

• Academic libraries
• Research libraries and archives
• Public libraries
• State and other government libraries and archives
• Museums
• Consortia
All kinds of libraries, all types of digital materials
Over 22 million digital items are hosted at OCLC data centers globally.
Keeping up with CONTENTdm

- Office Hours twice monthly
- In the sandbox
  - http://sandbox.contentdm.oclc.org
- Customers and Collections
  - http://www.oclc.org/contentdm
- User Support Center
  - http://www.contentdm.org/login
- Downloads
  - CONTENTdm Knowledgebase
- Monthly newsletter
CONTENTdm user community

- 1,115 licenses worldwide of which 863 are using Hosting Services. 4 data centers (US, UK, CA and Australia)
  - 2,500+ users with consortia and collaborative arrangements (including over 40% of the ARL libraries)
  - 149 outside the US (CA, Australia, New Zealand, China, UK, Netherlands, Spain and more)
- Engaged and active
  - Users Group Meetings
  - Beta programs and extensions – running the latest “build”
    - http://sandbox.contentdm.oclc.org
Extensions running in the Sandbox

Blue Heron Press Collection
Artists' Books

Search

Home ➔ Blue Heron Press Collection of Artist Books ➔ Timeline

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beginning of collection

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end of collection

OCLC The world's libraries. Connected.
Download extensions at:

Add on features to my CONTENTdm Website using custom script examples provided by OCLC

OCLC has provided these examples and instructions to demonstrate how customizations can be created and used in CONTENTdm sites. You are welcome to use the extensions but they are not supported by OCLC support. You will need to supply some programming expertise to use these examples on your own site.

- Download the Collection Map Extension (compatible with CONTENTdm 6.1 and later) to replace the image carousel on a collection landing page with a map that plots each item in the collection. This can be used on collections that have geographic coordinates listed in their metadata or simply information about addresses, cities, states, or countries. A marker will be added to the map if the geographic data can be parsed. Each marker has an info bubble attached to it that will contain the associated item’s title, thumbnail and link to the item’s page. View example on the CONTENTdm Sandbox.

- Download the CoolIris Photo Wall Extension (compatible with CONTENTdm 6.1 and later) to allow users to see more images at a time and move from a close-up view of one image back to a thumbnail view of several images very quickly. (CoolIris is an application that displays images in a draggable photo wall.) View example on the CONTENTdm Sandbox (click View Image Wall link, next to Display Options).

- Download the Search Results Map Extension (compatible with CONTENTdm 6.1 and later) to plot search results in a Google Map that is available by clicking on a link at the top of the search results page, beside the Display Options link. When clicked, another window opens that contains a map with markers. View example on the CONTENTdm Sandbox (click View Map link, next to Display Options).

- Download the Timeline Extension (compatible with CONTENTdm 6.1 and later) to plot items of a particular collection on a timeline that displays on a custom page. A marker and the item's title is added to the timeline for each item that has a date associated with it. If a user clicks an item, an info balloon displays the title (which also links to the item view), a description, thumbnail and date. View example on the CONTENTdm Sandbox (click on the Timeline tab, next to the Home and Browse All on the Landing Page).

- Download the WorldCat Search Extension (compatible with CONTENTdm 6.1 and later) to show the availability of additional search results in WorldCat. View example on the CONTENTdm Sandbox (see View More Items link in the left column).
Download extensions at:
CONTENTdm User Conferences

• May 27-28. Spring CONTENTdm User Conference
  Hosted by Digital Maryland and Goucher College in Baltimore.

• CONTENTdm User Group Meeting and OCLC Reception
  ALA Annual Saturday, June 27, 2015 3:30 pm SF, CA.
  oc.fc/ALA15Events

• August 6-7. Summer CONTENTdm User Group Meeting.
  Hosted by Nashville Public Library & Tennessee State Archives.
Defining terms: Collection

• A group of objects (items) that
  – Share the same metadata schema
  – Live on the same CONTENTdm server

• How many Collections can I have?
  – Up to 400 collections per server

• How many items can I have?
  • Depends upon your license level
  • Subscriptions at 10,000, 50,000 or UNLIMITED levels
A word about “items”

- CONTENTdm indexes/searches item metadata.
- CONTENTdm displays file formats that are able to be:
  - Viewed with a Web browser natively
  - Or viewed via a plug-in, e.g., PDF
- Each file represents an example of one CONTENTdm simple item
Items combine to make *Compound Objects*

- Assemble two or more items together and you have a
  - *Compound Object*
  - Four classes: document, postcard, monograph, cube
  - XML file “wrapper” uses an additional “item”
- You control growth
- Easy upgrade path
Project Client: powerful for adding items and objects to a collection

- What’s a CONTENTdm Project?
- A workspace
  - Into which you may add thousands of items at a time
  - That live on the workstation until uploading to the server
- A group of settings
  - Decisions about image rights
  - Automatic metadata generation
- How many Projects can I have at one time?
- Limited only by your disk space on the workstation
Three basic steps to building a CONTENTdm collection

1. Configure a Collection
2. Add items to a Collection
3. Go live!
   1. out of the box
   2. or configure your website.
Three basic steps:
1. Configure a Collection

- Define the metadata schema
  - Dublin Core element (dcterms—55) set offered
  - CONTENTdm only requires one field: DC.Title
    - Collection admin may require more fields
  - 125 fields per collection
  - 128,000 characters per field
Three basic steps:

2. ➤ Add items to the Collection

Three workflows are common:

A. Add items from the Web browser
B. Attach digital items to WorldCat records (available to OCLC Hosting Services users)
C. Build Project on the Project Client
2. Add items to collection—
   A. Add from the web browser
2. Add items to collection—
B. Connexion digital import
2. Add items to Collection—
C. Build a Project on the *Project client*
Three basic steps: Go live!
3. Take the out-of-the-box defaults or configure your website
Now with Automated sitemaps...

After creating a good Public URL for your CONTENTdm site, you may simply enter it here to activate automated sitemap generation.
• After setting up Google Analytics, enable it with your ID
And Responsive design – phone, tablet, desktop
More visibility for your unique digital resources
Improving discovery of your collections:
Share your metadata and drive traffic to your site
How do you drive users to your site?

- Be more discoverable--
  - By Google and other search engines through syndication
  - SEO and automatic sitemapping

- CONTENTdm has a built-in sync to the OCLC Worldcat Digital Collection Gateway
  - Improve access & presence for digital collections
  - Synchronize non-MARC metadata with WorldCat
  - Provide self-service tools to drive harvest
WorldCat Digital Collection Gateway

- Why put metadata in WorldCat?
- How do you use the Gateway?
What does WorldCat look like today?

• World’s largest bibliographic database, freely available
• Over 1 billion referrals to WorldCat from search engines since 2005
• 42 million records pointing to digital items harvested through the Gateway from 2,219 repositories
  • Over 2.5 million items from 140 CONTENTdm servers
CONTENTdm sync with Worldcat.org

Harvesting
Configure WorldCat sync and OAI harvesting settings, and view and edit.

WorldCat sync
WorldCat is the world's largest network of library content and services. Enable WorldCat sync to make your collections available for harvesting by WorldCat.

Enable WorldCat sync: Yes
Collections: None

You must register with the Digital Collection Gateway.

OAI
The Open Archives Initiative (OAI) develops and promotes interoperability standards so that content can be disseminated. Enabling OAI makes all published or specified collections available for harvesting.

Enable OAI: Yes
Base URL for OAI repository: http://server15710.contentdm.oclc.org/oai/oai.php
Repository name: CONTENTdm 5
Server administration e-mail: CONTENTdm5SampleUser@oclc.org
Enable compound object pages: No
Collections: CONTENTdm 5 e-Demonstration Gateway
How does the Gateway work?
Self-service profiling and harvest scheduling
The default map gives good WorldCat.org keyword recall...
But as users expect precision with recall, you can customize your maps
After remapping, more precision—the Author search
Plus the power of linking to find other works by author
Example: user clicks right into your CONTENTdm item
Ready for Linked data?
We can help!
WorldCat, schema.org—helping libraries join the “web of things”
Library Linked Data in the Cloud

OCLC’s Experiments with New Models of Resource Description
Why we wrote this book
At OCLC: Many interlocking projects

• Goals
  – Develop linked data models of resources managed by libraries using published vocabularies
  – Discover evidence for the models in legacy library data
  – Address two primary use cases
    • Visibility of library resources on the Web
    • Data aggregation

• Scope
  – Models of key entities: Person, Organization, Concept, Work, Object
  – Initial draft: key entities represented in library authority files and monographs
  – Explore issues primarily in the publication (rather than the consumption) of linked data
“…[P]eople are not the only users of the data we produce in the name of bibliographic control, but so too are machine applications that interact with those data…”


“Linked data is about sharing data. [It] provides a strong and well-defined means to communicate library data, one of the main functions requiring attention in the community’s migration from MARC.”

Kevin Ford, 2012
Some big tasks

• Transform the description of library resources
  – Filling the ‘library-shaped’ hole in the Web of Data
  – Defining more clearly what is meant by ‘machine-readable’ semantics in bibliographic metadata

• ...using standards, protocols, and best practices developed for the Semantic Web
Some outcomes

- WorldCat Works: 5 billion RDF triples
- WorldCat Catalog: 15 billion triples
- DDC: 300 million triples
- FAST: 23 Million
- VIAF: 2 billion triples
Next steps

• **Build on our results**
  – Improve the models of ‘Person,’ ‘Organization,’ and ‘Concept, and ‘Work’
  – Continue with internationalization effort

• **Advance long-term goals**
  – Interoperate with other community efforts
  – Carry out formal studies of linked data’s impact
  – Access the new datasets from a new generation of services that improve the discovery and delivery of library resources.
The incremental value of the linked data program

- Web syndication
- Active or actionable data
- Data consumed outside the original domain or creation context
- Complex data queries without pre-built indexes
- Machine-understandable semantics
- Cleaner, more normalized data
“If we believe there’s value to making our materials discoverable and usable to a wider audience of people, then we must begin a concerted effort to make our metadata interoperable with Web standards and to publish to platforms that more people use.”

Kenning Arlitsch, 2014
Where you find Linked Data in WorldCat today

Related Subjects:
- Space flight
- Space photographs
- Space programs
- Space vehicles

Linked Data:

More info about Linked Data

library.oclc:
- "871010833"

library_placeOfPublication:
- dc:identifier: "XX"
  - rdf:type: schema:Country

owl:sameAs:
- info:oclcnum/871010833
  - rdf:type: schema:MediaObject

rdfs:type:
- schema:CreativeWork

schema:exampleOfWork:
- http://worldcat.org/entity/work/id/1820168141

schema:name:
- "Moscow from Space"

schema:publisher:
- rdf:type: schema:Organization
  - schema:name: "NASA"

schema:url:
- http://worldcat.org/oclc/871010833/viewonline

schema:url:
- http://oclc.org/oclc/871010833

Content-negotiable representations
- Turtle (text/turtle)
- JSON-LD (application/ld+json)
- RDF/XML (application/rdf+xml)
Using WorldCat to create linked data for your digital item records

**Title**: Moscow from Space

**Subject**: Space flight, Space photographs, Space programs, Space vehicles

**Description**: ISS030-E-185321 (28 March 2012) --- Moscow, Russia appears in Expedition 30 crew members aboard the International Space Station. The space station is on the left side of the frame. The view is of latitude and 42.1 degrees east longitude, about 100 miles west of a small sample of Aurora Borealis, airglow and daybreak.

**Publisher**: NASA

**Series Title**: Astronomy Picture of the Day

**Rights**: 1. You may use NASA imagery, video and audio material if it is for textbooks, public exhibits and Internet Web pages.

**OCLC number**: 871010833

**OCLC refurl**: http://www.worldcat.org/oclc/871010833

**OCLC rdf**: http://www.worldcat.org/oclc/871010833.rdf

**OCLC jsonld**: http://www.worldcat.org/oclc/871010833.jsonld
To drive traffic to your site, and to leverage OCLC’s Linked Data work:

- First you want to sync CONTENTdm with WorldCat.org
- You interact with WorldCat via the Gateway
  - Customize the WorldCat.org display to best meet end user needs
  - Schedule your harvests as appropriate for your collection’s growth
From any OAI-PMH compliant system, use the Gateway to WorldCat.org

• BUILT IN registration for CONTENTdm
  • Connect through CONTENTdm Server/Harvesting/WorldCat Sync

• For other repository systems
  • Register at https://worldcat.org/DigitalCollectionGateway/register.jsp
  • Best Practices for CONTENTdm and other OAI-PMH compliant repositories ; creating shareable metadata
  • Ver 3.1 available on the CONTENTdm User Support Center and
    – http://www.oclc.org/content/dam/support/wcdigitalcollectiongateway/MetadataBestPractices.pdf
Demonstration
Configure Collection
Add Items
Configure, test Website
How do I get the Project Client?

• Download from the USC at www.contentdm.org
Workstation requirements to run the client

- The CONTENTdm Project Client requires the following:
  - Windows Vista or Windows 7. For sites processing a large volume of files, the 64-bit versions are recommended.
  - 2 GB RAM is recommended. For sites processing a large volume of files, 4 GB RAM is recommended.
  - 2 GB of available hard-disk space for installation. A portion of this disk space will be freed after installation if the original download package is removed from the hard drive.
  - Minimum display resolution of 1024 × 768.
  - A broadband Internet connection to the CONTENTdm Server.
  - Adobe® Reader.
Register first, then log into the User Support Center: www.contentdm.com/USC
Choose Downloads tab

User Support Center

Downloads & Guides

Downloads Home

Plugins, Tools & Extensions

Previous Versions

Web Templates

Downloads

Search within Entire Site Enter a search term

Search Advanced search

Project Client

Download Project Client Version 6.1.2
Save the zip file below to your computer and run the executable to install.

Right-click to save: InstallProjectClient512.zip

Project Client 6.1.2 is a minor bug fix release. It fixes two bugs that, while significant in their effects, affect only a tiny proportion of Project Client users.

- Records are deleted from project when thumbnail is replaced and application is closed prior to uploading (CDM-4605)
- Records cannot be approved when field nicknames are reserved terms "parent" or "item" (CDM-4418, CDM-5059)

Project Client will auto-update to 6.1.2 if you have Project Client 5.2 or later installed. If you are unable to use auto-update, you can install Project Client 6.1.2 from the zip file above.

Compatibility of Server and Project Client

Project Client 6.1.2 should work with all CONTENTdm Server versions 5.4 or later.

OCLC strongly recommends updating to the latest Project Client and Server.
CONTENTdm Live Training—
Face to Face, Hands-on experience

• At your organization
  – At your schedule
  – Two days on-site
  – Online sessions before and after
Live online CONTENTdm training available at no cost, by OCLC

- Free training series
- 3 modules
- Monthly
- Register on the Portal

http://training.oclc.org/
Monthly CONTENTdm Office Hours

Quick starters:
Second Tues. Noon PDT

Tech talk:
Third Thurs. 11 am PDT

See: User Support Center
www.contentdm.org/login

For further help with CONTENTdm and WorldCat Digital Collection Gateway

- CONTENTdm User Support Center
  http://www.oclc.org/contentdm (Logon)
- CONTENTdm technical support
  contentdmsupport@oclc.org
  (Toll free  877-797-0887)
- General CONTENTdm info email:
  contentdm@oclc.org
- Free, live online CONTENTdm training
  http://training.oclc.org
- Digital Collection Gateway support
  support@oclc.org