

# Automated Metadata Repurposing using eXtensible Catalog Software

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# The eXtensible Catalog (XC)

- Set of open-source software tools
- Facilitate resource discovery and metadata management
- Funding from Andrew W. Mellon Foundation and from XC partner institutions
- Software available for free download via [www.eXtensibleCatalog.org](http://www.eXtensibleCatalog.org)
- eXtensible Catalog Organization (Feb. 2010)



# XC Software

- User Interface:
  - Faceted, FRBRized, customizable search interface
  - Web application framework for libraries
- Metadata Management:
  - Automated metadata processing: Enable libraries to aggregate metadata and run services on it
- Connectivity:
  - Harvest and synchronize metadata with OAI-PMH
  - Circulation and authentication with NCIP



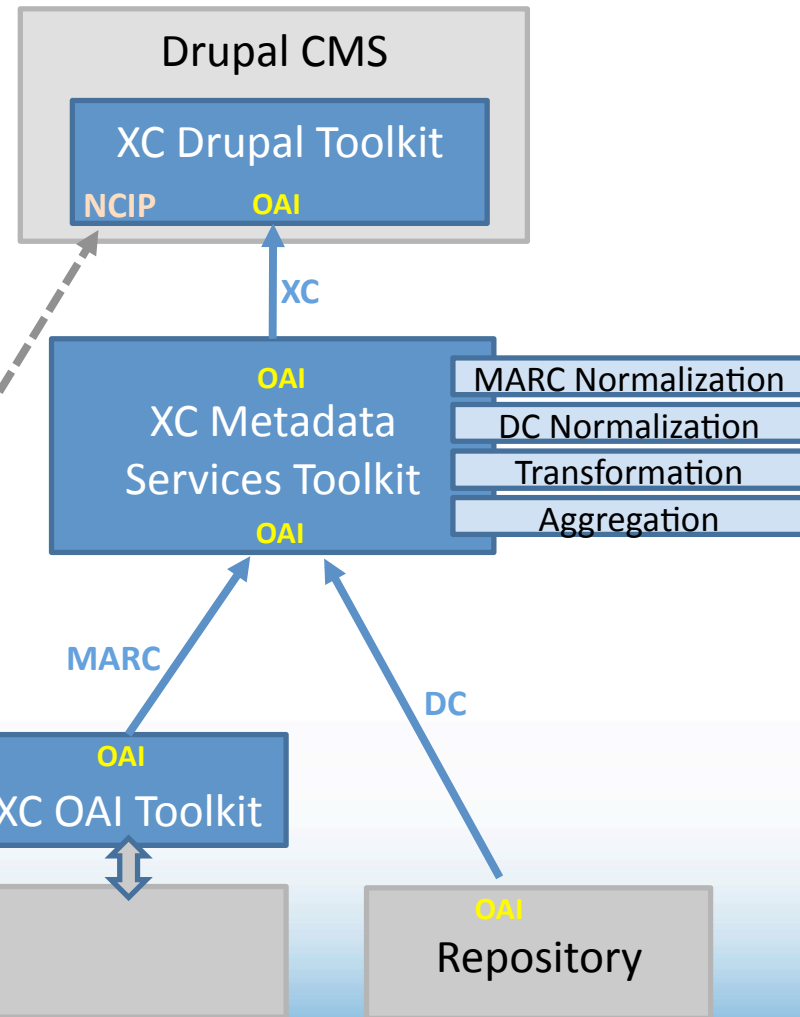
# XC Software Overview

User Interface  
Web Application Platform

Metadata Management  
Software

Connectivity  
Software

Sources



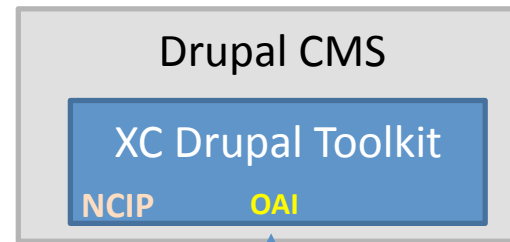
# Why OAI-PMH?

- Standard protocol for harvesting metadata
- Already widely used by applications that use library metadata
- Lightweight, easy to learn and understand
- Enables synchronization of metadata between repositories
- Easy to replicate data if there is a problem – just harvest it a second time

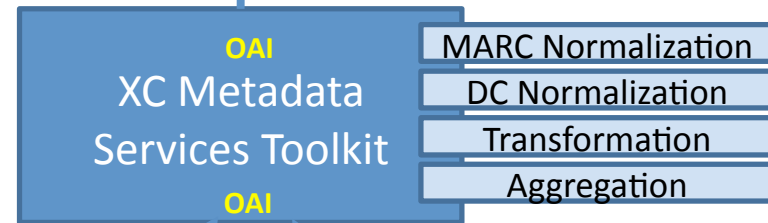


# XC Software Overview

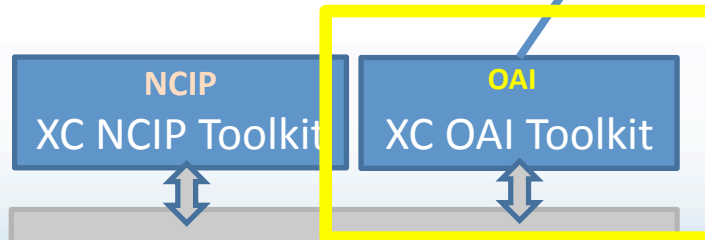
User Interface  
Web Application Platform



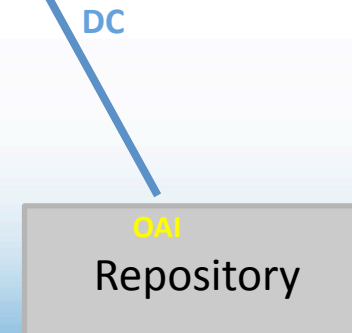
Metadata Management  
Software



Connectivity  
Software



Sources



# XC OAI Toolkit

XC OAI Toolkit

- Moves metadata using OAI-PMH
- Makes metadata available from a repository or ILS that does not already have a standard OAI-PMH interface
- Once added, XC software can maintain a synchronized copy of data in that repository



# XC OAI Toolkit

XC OAI Toolkit

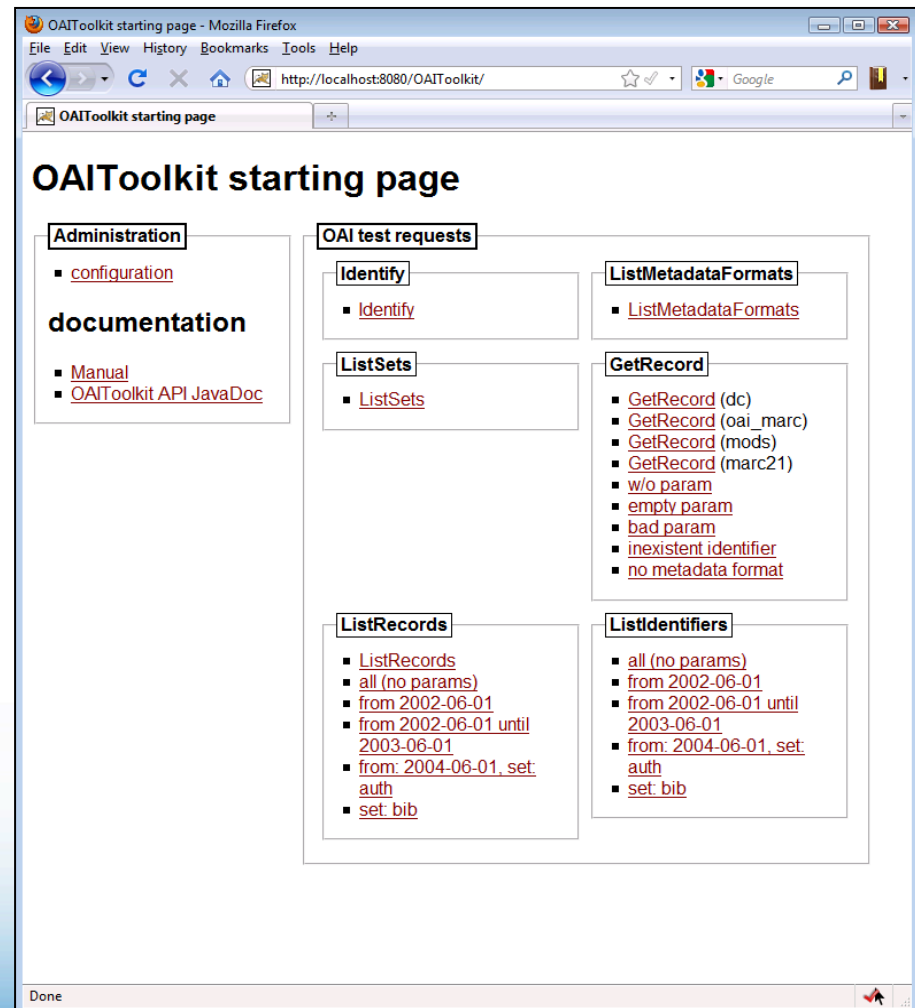
- Works with virtually any ILS that includes MARC export capabilities
- Includes tools to address data issues
  - XSLT processor
- Converts batches of metadata into other formats (e.g. MARC21 to MARCXML)



# XC OAI Toolkit

## Web Interface

- Configure XC OAI Toolkit with a web admin interface
  - OAI-PMH Identify response
  - Performance settings
  - Default MARCXML schema
  - Select storage: mySQL or Lucene
- View user manual
- Send test OAI-PMH requests with a single click



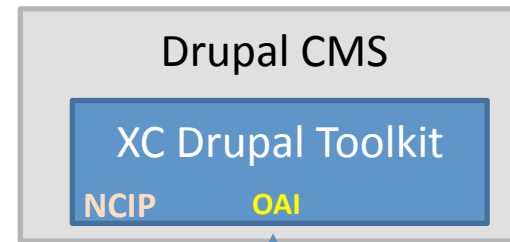
The screenshot shows the OAIToolkit starting page in a Mozilla Firefox browser window. The browser's address bar shows the URL <http://localhost:8080/OAIToolkit/>. The page title is "OAIToolkit starting page". The content is organized into several sections:

- Administration**
  - [configuration](#)
- documentation**
  - [Manual](#)
  - [OAIToolkit API JavaDoc](#)
- OAI test requests**
  - Identify**
    - [Identify](#)
  - ListSets**
    - [ListSets](#)
  - ListRecords**
    - [ListRecords](#)
    - [all \(no params\)](#)
    - [from 2002-06-01](#)
    - [from 2002-06-01 until 2003-06-01](#)
    - [from: 2004-06-01, set: auth](#)
    - [set: bib](#)
  - ListMetadataFormats**
    - [ListMetadataFormats](#)
  - GetRecord**
    - [GetRecord \(dc\)](#)
    - [GetRecord \(oai\\_marc\)](#)
    - [GetRecord \(mods\)](#)
    - [GetRecord \(marc21\)](#)
    - [w/o param](#)
    - [empty param](#)
    - [bad param](#)
    - [inexistent identifier](#)
    - [no metadata format](#)
  - ListIdentifiers**
    - [all \(no params\)](#)
    - [from 2002-06-01](#)
    - [from 2002-06-01 until 2003-06-01](#)
    - [from: 2004-06-01, set: auth](#)
    - [set: bib](#)

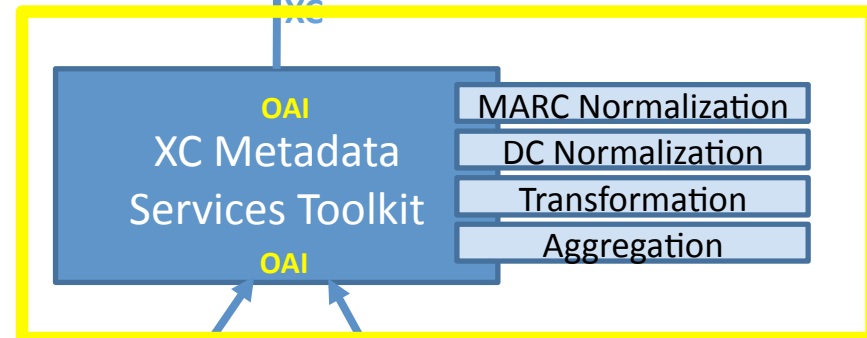


# XC Software Overview

User Interface  
Web Application Platform



Metadata Management  
Software



Connectivity  
Software



Sources



MARC

DC

XC



# XC Metadata Services Toolkit

XC Metadata  
Services Toolkit

MARC Normalization

DC Normalization

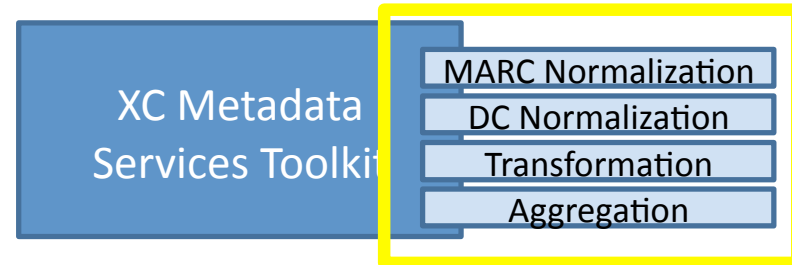
Transformation

Aggregation

- Enables libraries to automatically process batches of metadata through a set of services
- Aggregate metadata from various repositories
- Make metadata available for harvest by other applications
- Propagates changes in source metadata through services and on to other applications



# XC MST Metadata Services



- Normalization - Prepare metadata for use in other applications
- Transformation – From one schema to another
- Aggregation – manage metadata from multiple repositories
- Planned: Authority Control

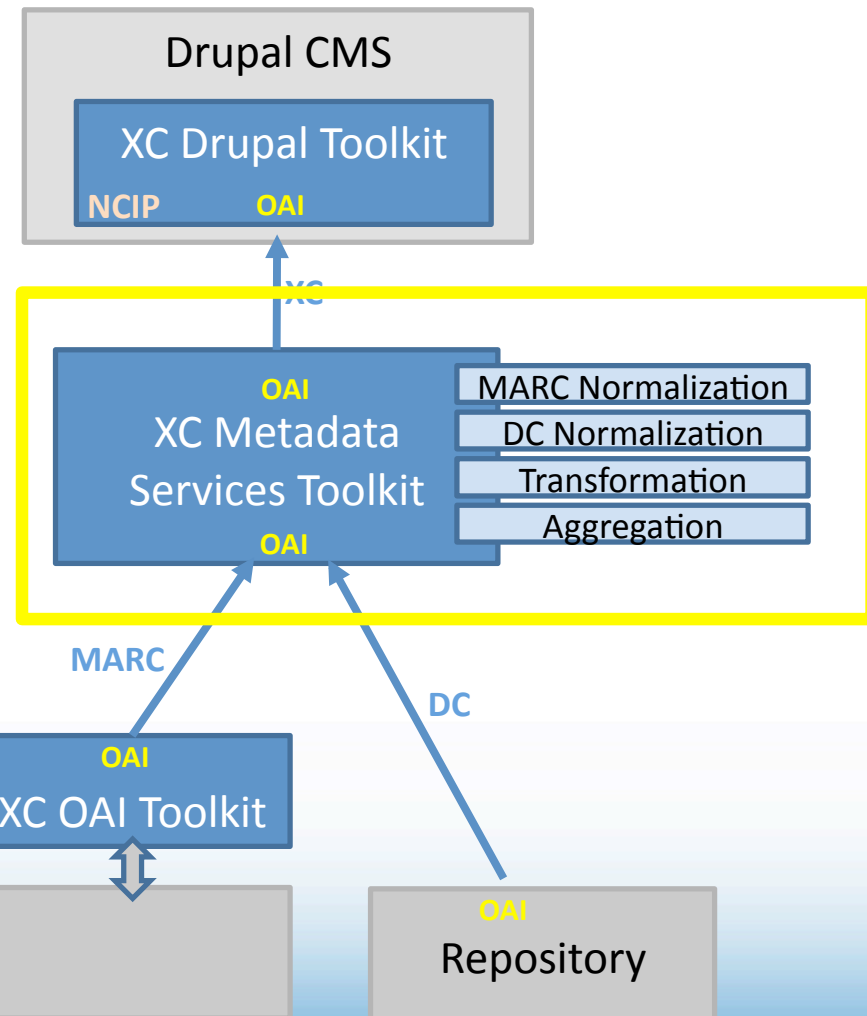


# Metadata Services Toolkit Functions

- Add repositories
- Schedule harvests
- Orchestrate services
- Browse records



# Metadata Services Toolkit Demonstration



# Where are we now?

- XC software available for free download via [www.extensiblecatalog.org](http://www.extensiblecatalog.org)
- Initial MST services prepare MARC data for reuse in FRBRized XC user interface
- Ongoing XC development includes testing with a range of data, performance work, code refinement, and documentation





Take Control.

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