

# DLORN

**Distributed Learning Object Repository Network**

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[open-education.org](http://open-education.org)

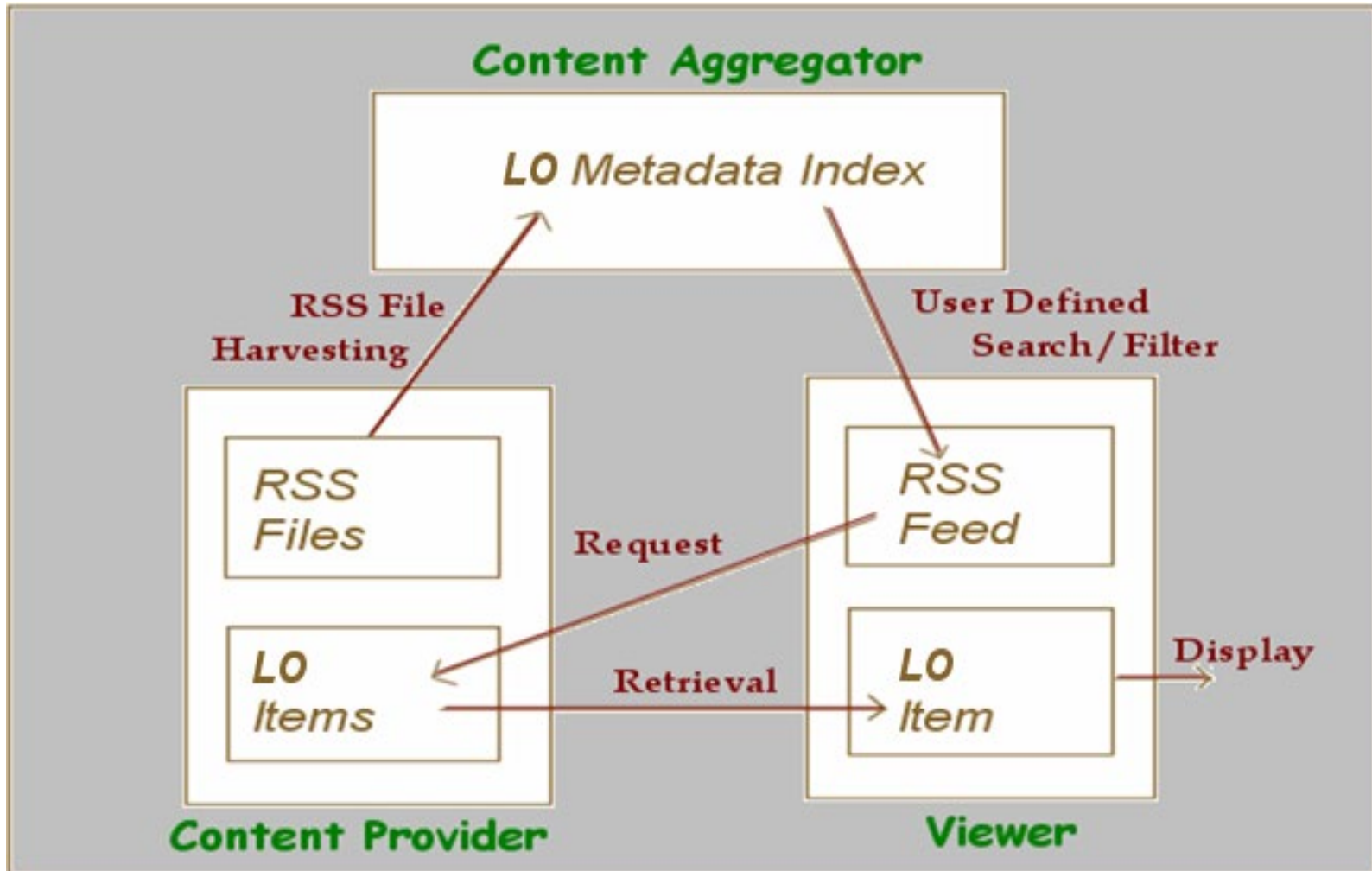
# What is DLORN?

- A system that allows content producers to distribute their learning resources
- A mechanism that enables the subject specific aggregation of learning resources from many sources
- A means to allow course authors to locate and use resources from many sources

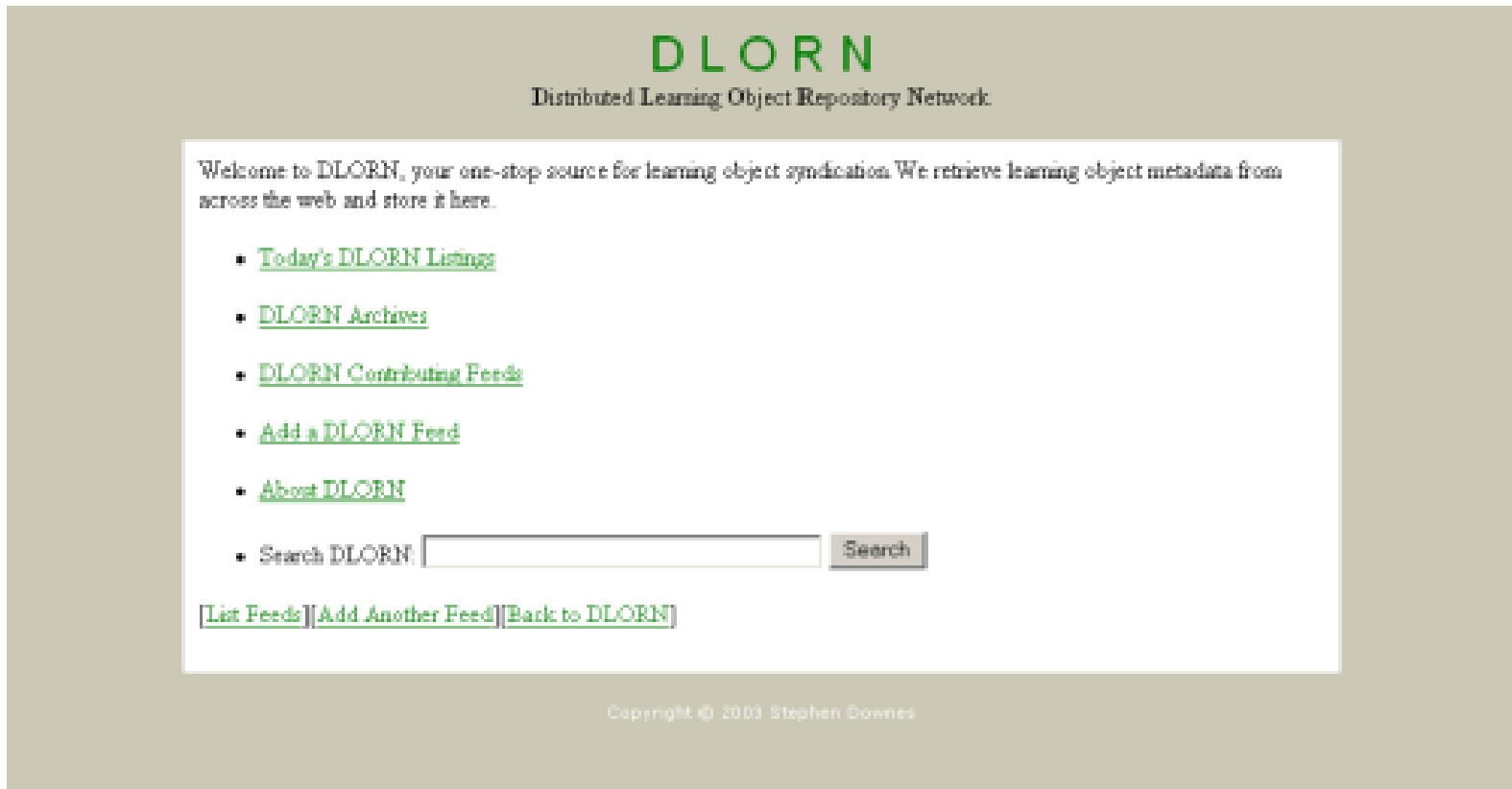
# DLORN, the Concept

- DLORN should be thought of as a concept, not a product
- The central idea is that learning resources are distributed through a network
- DLORN isn't about content management, it is about content distribution
- The principles behind DLORN are those of the web: distributed, decentralized, open

# DLORN: Basic Structure



# Current Implementation



The screenshot shows the DLORN website interface. At the top, the text "DLORN" is displayed in a large, green, spaced-out font. Below it, the subtitle "Distributed Learning Object Repository Network" is centered. A white rectangular box contains the main content: a welcome message, a bulleted list of links, a search bar, and footer links. The background of the entire page is a solid olive green color.

**DLORN**  
Distributed Learning Object Repository Network

Welcome to DLORN, your one-stop source for learning object syndication. We retrieve learning object metadata from across the web and store it here.

- [Today's DLORN Listings](#)
- [DLORN Archives](#)
- [DLORN Contributing Feeds](#)
- [Add a DLORN Feed](#)
- [About DLORN](#)
- Search DLORN:

[List Feeds](#) | [Add Another Feed](#) | [Back to DLORN](#)

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<http://www.downes.ca/cgi-bin/dlorn/dlorn.cgi>

# Syndication Formats

- DLORN currently supports all versions of RSS with Syndication, Admin, DC and CC modules
- DLORN also supports all LOM fields as RSS modules (needs documentation)
- Planned: support for OAI repository harvesting

# LOM Metadata in RSS

- Treat LOM as just another RSS Mod
- Prefix with LOM
- Example:

```
<item rdf:about="http://careo.ucalgary.ca">
  <title>Writer's Online Outline</title>
  <link>http://www.2learn.ca/.../senoutline.html</link>
  <lom:educational>
    <lom:learningresourcetype>x</lom:learningresourcetype>
    <lom:typicalagerange>xxx</lom:typicalagerange>
  </lom:educational>
  <dc:creator>kdh</dc:creator>
  <dc:date>2003-04-16T15:52:24-07:00</dc:date>
</item>
```

# LOM Metadata: Issues

- As usual, what does the 'link' tag point to?
  - Preferred: to the LO directly
  - Optional: to the LO metadata
  - Really not desired: to an HTML summary page describing the LO
- Excess 'junk' in LOM
  - The endless 'languagestring' tags
  - The reference to VCard data



# Metadata Repositories

- Intent is to conform to IMS DRI as much as possible – analogous to IMS ‘search intermediary’
- Expectation that there will be many metadata repositories
- MDs harvest metadata and provide search services to e-learning applications

# MD Issues

- Some repositories do not make all metadata available – eg CAREO, most recent 10 items
- Some repositories don't make any metadata available – eg. Corbis, Merlot
- MDs will have to output in a variety of (as yet unspecified) formats, eg., SOAP, XML-RPC, RSS, etc.

# E-Learning Applications

- Right now, only the web browser, but of course MD output should be fed directly into applications, including:
  - Content aggregation tools
  - Learning Object browsers (akin to headline viewers)
  - LCMSs and LMSs

# Third Party Metadata

- Not yet supported
- Third party reviews of learning objects
- Aggregated by MDs and made available as part of search process
- Includes:
  - Categorization
  - Reviews
  - Certifications

# Digital Rights

- DLORN will support the eduSource DRM component
- The reason is to place free and priced learning resources *side by side* in search results (if desired by searcher). Why?
  - Creates market for free materials
  - Undermines existing publisher monopoly
  - Results in realistic content pricing

# DLORN: Complete Structure

