No, Really, This Is What We Want

Stephen Downes National Research Council Canada <u>IMS Open Technical Forum</u> Vancouver, Canada February 20, 2003

We Want Learning Objects

In a very real sense, learning objects are to online learning what books and articles are to traditional learning...

How could anyone object to using books in learning?

No, the objections are more like a complaint against using *only* books in learning

RSS

What Is It?

- An XML metadata language
- The major way news articles are syndicated online
- A cult, a community, a way of life

RSS Feeds

Microsoft news headlines

Microsoft amends .Net Server licensing CNET Dec 2 2002 7:41PM GMT email this

Rivals want Europe to hurt Microsoft Infomatics Dec 2 2002 7:32PM GMT email this

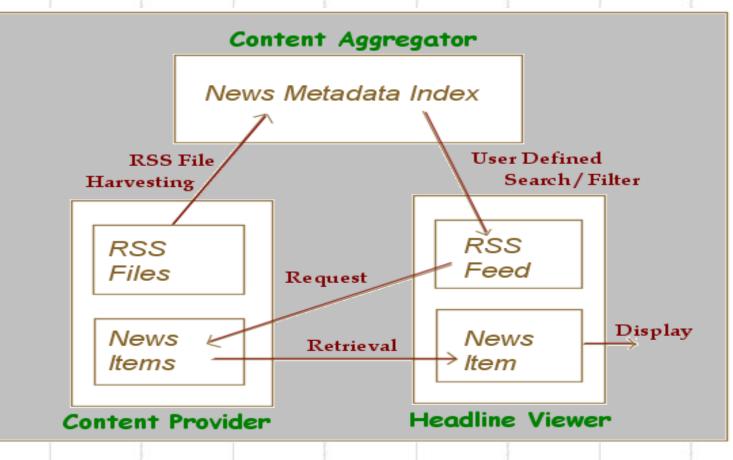
Microsoft Remains Bullish At Downsized Comdex Los Angeles Times reg Dec 2 2002 6:55PM GMT email this

Adobe Jumps Gun on Microsoft's Xdocs Internet News Dec 2 2002 6:37PM GMT email this

Thought for the day:Open source versus Microsoft CW360.com Dec 2 2002 6:31PM GMT email this

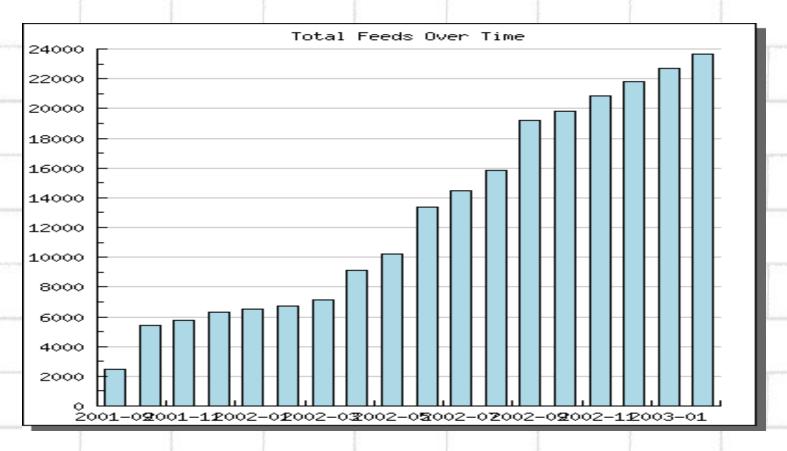
http://www.downes.ca/files/RSS_Educ.doc

The RSS Network



http://www.downes.ca/files/RSS_Educ.doc

Is RSS Working?



http://www.syndic8.com/stats.php?Section=overview

Why RSS Works

- Virtually no entry barrier all you need is a website, a text editor, and maybe a sample
 RSS file to use as a template
- Virtually no use barrier programmers can easily harvest, parse and display feeds, readers can install a simple RSS viewer or go to RSS-based web pages like <u>http://www.downes.ca/cgi-bin/xml/edu_rss.cgi</u>

OAI

What Is It?

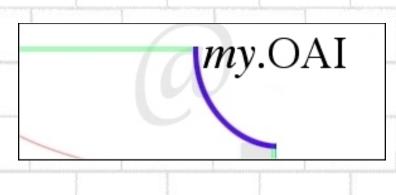
- Uses an XML metadata language (Dublin Core)
- The major way academic journal articles are syndicated online
- A cult, a community, a way of life

OAI Feeds

• OAIster 1,089,937 records from 142 institutions http://www.oaister.org/o/oaister/



...find the pearls

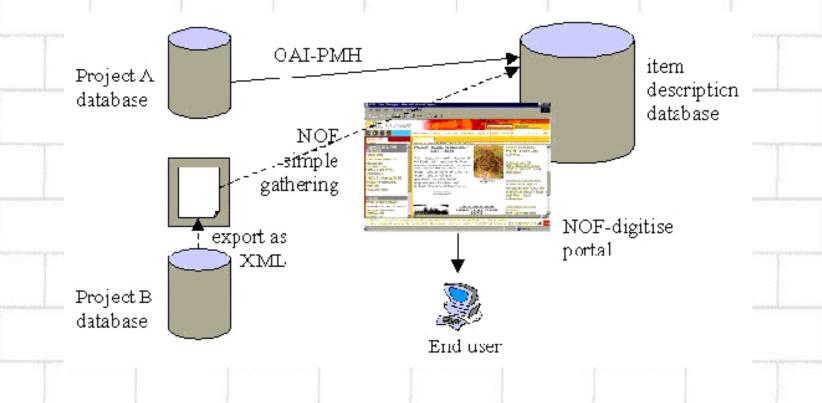


• MyOAI

Search engine to a selected list of metadata databases

http://www.myoai.org/

The OAI Network



http://www.ukoln.ac.uk/nof/support/help/papers/oai-pmh/

Why OAI Works

- A low entry barrier, with many tools available
- Virtually no use barrier programmers can easily harvest, parse and display feeds, readers can go to OAI-based service providers like the ones listed on
 <u>http://www.openarchives.org/service/listproviders.html</u>

RSS, OAI and IMS

How is IMS (Currently) Different from RSS, OAI?

- It's not simple
- There aren't really many tools available
- There's no place to put learning objects into the system
- There's no way to find or use learning objects (outside of searching individual collections, outside of using an LMS)
- There's a community of developers, but not really a community of users

What We Want

- Something simple IMS Lite
- Useful and easy to use tools
- A way to publish learning objects / metadata on our own sites
- A way to find learning objects, to search from the entire world of learning objects
- Involvement of the community

The eduSource Vision

eduSourceCanada

CANADIAN NETWORK OF LEARNING OBJECT REPOSITORIES RÉSEAU CANADIEN DE BANQUES D'OBJECT D'APPRENTISSAGE

A *network* of learning object repositories, with simple tools available for users, a single-source search, and a lively and active user community

1. Standards

- eduSource commits itself to using international standards
- But we will use only *royalty free* standards so there is no up-front cost to participants
- The standards we use must be able to *change* and *evolve*; they must be extensible
- Standards consensus is desired but not a requirement for entry

2. Infrastructure vs. Services

- *Infrastructure* the free and open network that is used by all participants (no fees, no proprietary technology, no overhead)
- Services opportunities for public and private enterprises to add value (sometimes in return for money) over and above the network (like roads and gas stations)

3. Distributed Architecture

- eduSource isn't a single application or a centralized portal it is not a *system*, rather, it is a *network* with distinct parts performing distinct functions
- Any eduSource service may be replicated and offered as an independent service – there is no central control, there are no bottlenecks

4. An Open Marketplace

- Any provider of learning materials may make their content available through the system without tariff or restrictions
- There is no vendor lock-in; material from different suppliers (free, shared, priced) available through the same interface
- eduSource is an implementation of and extension of the Semantic Web

5. Open Rights Management

- Make it easier to buy than to steal
- Make multiple DRM models available
- No single rights agency governing all transactions
- Individual rights and preferences are as important as distributor rights and preferences

The Guiding Principle

Enable, don't require

- Make things possible, not necessary
- Create choices
- Make room for innovation