Supporting The Library of the Future: The Endeavor Perspective

Eric Mulder
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Endeavor Information Systems

Three Main Product Lines

Employees
• Offices
  – Chicago, USA (headquarters)
  – London, UK
  – Amsterdam, Netherlands
  – Singapore
  – Sydney, Australia
• 160 staff members – 31% with advanced library science degrees

Customers
• 1150+ Voyager
• 150+ ENCompass
• 200+ LinkFinderPlus
• 10 National Libraries
• 5 continents
• 16 countries
The Digital Library Challenge

- Today’s information resources collections are hybrid
- Combinations of
  - paper and digital format
  - local and remote storage
- Libraries have increasing difficulty managing hybrid collections
- Patrons have increasing difficulty finding what they need
If Users Can’t Find It...

“The Google™ Effect”
The solution for managing, searching, and linking all of your collections
ENCompass Building Blocks

Library Operating Systems Modules

Remote Resources

Data Management Modules

*Databases which locally store a wide range of metadata and associated objects*

- MARC records (OPAC)
- Full-text articles and Journals
- A&I citations
- Thesis
- Digital audio and video
- Digitised maps
- etc.
ENCompass Building Blocks

Library Operating Systems Modules

Data Management Modules

Integration Modules

Remote Resources

Connections to all types of online content

- Commercial publishers
- Free web sites
- Web search engines
- etc.
ENCompass Building Blocks

Library Operating Systems Modules

Data Management Modules

Integration Modules

*Integration tools to provide access across all types of data*

Includes: Linking, Federated searching, E-learning integration, Electronic Resource Management, etc.
ENCompass Building Blocks

Library Operating System Modules

*Modules that provide the overriding structure and architecture to provide context for the library systems*

Includes: User Interface, Access & Entitlements, Personalisation, Collection Management

Integration Modules
ENCompass Solutions

• LinkFinderPlus
  – OpenURL Link Resolver

• ENCompass for Resource Access (ERA)
  – Library Portal / Federated Searching

• ENCompass for Digital Collections (EDC)
  – Digital Object Management

• ENCompass for E-Journals On Site (EJOS)
  – E-Journal Archiving

• Meridian
  – Electronic Resource Management

• Course Content Integrator
  – Integration modules for Blackboard and WebCT
LinkFinderPlus

• Context sensitive reference linking
• Generates links to related resources based on citation data
  – Full text articles
  – Print holdings (OPAC)
  – Other libraries catalogues
  – Internet search engines
  – Interlibrary loan
  – Etc.
• Links are offered from any OpenURL enabled source, including the OPAC and ENCompass
• Pre-populated Knowledge Base with >300,000 targets
• Batch import, activation & updating
• Local implementation or Hosted (subscription service)
<table>
<thead>
<tr>
<th>1 to 10 (of 61)</th>
<th>Pages: 1 2 3 4 5</th>
</tr>
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<tbody>
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<td>![HTML Full Text](HTML Full Text)</td>
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<td>2. Medicine, myths, and the movies. By: Raj, Y. Pitham. Postgraduate Medicine, Jun2003, Vol. 113 Issue 6, p9, 3p, 1c; (AN 10025756)</td>
<td>Add</td>
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<td>4. I'd like to thank the Hackaday. By: Dunleavy, Natalie. CMAJ: Canadian Medical Association Journal, 5/13/2003, Vol. 168 Issue 10, p1310, 1/3p, 1c; (AN 9068800)</td>
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</tbody>
</table>
Interpretations of smoking in film by older teenagers

Judith P. McCool, Linda D. Cameron and Keith J. Petrie

*Health Psychology and Practitioner Development Unit, Faculty of Medicine and Health Science, The University of Auckland, Private Bag 92019, Auckland, New Zealand
Department of Psychology, Faculty of Science, The University of Auckland, Auckland, New Zealand

Available online 4 April 2002.

Abstract
Target Configuration

To configure targets:

1. Select the provider's site from the drop-down list.
2. Change values for any of the targets, as needed.
3. Save your changes (or cancel).

The European Mathematical Information Service

The European Mathematical Information Service : 47 journals

Enter the first letters of a journal title and click "Go":

Display **10** targets

For definitions of fields, click the field headings.

<table>
<thead>
<tr>
<th>Title</th>
<th>Rank</th>
<th>Select All</th>
<th>Clear All</th>
<th>Select All</th>
<th>Clear All</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acta Mathematica Academiae</td>
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<td>✔️</td>
<td></td>
<td>✔️</td>
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<td></td>
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</tr>
<tr>
<td>Paedagogicae Nyiregyhaziensis</td>
<td></td>
<td></td>
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<tr>
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<td>✔️</td>
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<tr>
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<td>Applied Mathematics E-Notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>
Basic Features

LinkFinderPlus Consortium Server

Consortium Configuration

Member Configuration 1

Member Configuration 2

Member Configuration n

Consortium Member 1

Consortium Member 2

Consortium Member n
ENCompass for Resource Access

- Single point of access to remote (online) resources:
  - E-journals
  - A&I databases
  - Websites
  - etc.

- Basic and advanced searching
- Multi-protocol: Z39.50, HTTP, XML Gateway
- Sophisticated processing of result sets
- Resource discovery
- Virtual collections
- Completely configurable user interface (XSLT)
- Personalisation
ENCompass gives users easy access to all the library resources. The complete interface can be customised by the library.
The Library Collections are organised by the library in such a way that it is easy for the user to find the resources.
Personalisation options include creating a personal collection, saving searches, email alerts, exporting records, etc.
Search results are presented either by resource or as one de-duplicated list (“Show All”)

You did a basic search for "pediatric surgery"

<table>
<thead>
<tr>
<th>Collection</th>
<th>Search Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Catalog</strong></td>
<td>2 Hits</td>
</tr>
<tr>
<td>Local Library Catalog</td>
<td></td>
</tr>
<tr>
<td><strong>General Interest and Popular Collections</strong></td>
<td></td>
</tr>
<tr>
<td>Matter of Fact</td>
<td>No Hits</td>
</tr>
<tr>
<td>H.W. Wilson Databases</td>
<td>No Hits</td>
</tr>
<tr>
<td>Local Digital Repository</td>
<td>No Hits</td>
</tr>
<tr>
<td>Google Search Engine</td>
<td>20 Hits</td>
</tr>
<tr>
<td>Amazon Books</td>
<td>23 Hits</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td></td>
</tr>
<tr>
<td>PsycINFO</td>
<td>24 Hits</td>
</tr>
<tr>
<td>The Lancet</td>
<td>15 Hits</td>
</tr>
<tr>
<td>PubMed XML Gateway</td>
<td>20 Hits</td>
</tr>
<tr>
<td><strong>Other Library Catalogs</strong></td>
<td></td>
</tr>
<tr>
<td>Tulane University Library (Voyager)</td>
<td>23 Hits</td>
</tr>
<tr>
<td>Michigan State University Library (MI)</td>
<td>26 Hits</td>
</tr>
<tr>
<td>Boston College Library (Athens)</td>
<td>23 Hits</td>
</tr>
<tr>
<td>Evans Library of Texas A&amp;M University</td>
<td>1 Hits</td>
</tr>
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</table>

[View XML]
You did a Free Text search for "wormwood"

<table>
<thead>
<tr>
<th>Title</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergenic airborne pollen and spores in Anchorage, Alaska. ANN. ALLERGY; Volume 54, Issue 5; 1985; Pages 380-399</td>
<td>EMBASE</td>
</tr>
<tr>
<td>An affordable antimalarial. David J Tenenbaum; Environ Health Perspect; Vol: 112 Issue: 1; Jan 2004; A25</td>
<td>PubMed XML Gateway</td>
</tr>
<tr>
<td>Analysis of artemisinin by a packed-column supercritical fluid chromatography-atmospheric pressure chemical ionisation mass spectrometry technique. Kenan Cóst; Analyst; Vol: 128 Issue: 8, Aug 2003; 1037-42</td>
<td>PubMed XML Gateway</td>
</tr>
</tbody>
</table>
From the result user click directly through to the article or the native interface of the resource.

The article is titled "Absence of the inferior labial and lingual frenula in Ehlers-Danlos syndrome." The authors are Claudio De Felice, Paolo Toti, Giovanni Di Maggio, Stefano Parrini, and Franco Bagnoli.

The article is accessible via ScienceDirect and can be cited using the provided DOI: 10.1016/S0140-6736(00)04661-4.
You did a Free Text search for "wormwood"

<table>
<thead>
<tr>
<th>Database Source</th>
<th>PubMed XML Gateway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Active components from Artemisia iwayomogi displaying ONOO(-) scavenging activity.</td>
</tr>
<tr>
<td>Pub Type</td>
<td>Journal Article</td>
</tr>
<tr>
<td>Source</td>
<td>Phytother Res ISSN: 0951-416X Volume: 18 Number/Issue: 1 Date: 2004 Jan Pages: 1-7</td>
</tr>
<tr>
<td>Authors</td>
<td>Kim, Ae Ra Zou, Ya Ni Park, Tae Hyun Shim, Kyung Hee Kim, Min Sun Kim, Nam Deuk Kim, Jong Deog Bae, Sang Ja Choi, Jae Sue Chung, Hae Young</td>
</tr>
<tr>
<td>Affiliation</td>
<td>College of Pharmacy, Pusan National University, Pusan, Korea</td>
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<tr>
<td>Language</td>
<td>eng</td>
</tr>
<tr>
<td>Article ID(s)</td>
<td>PMID: 14760102</td>
</tr>
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</table>
ENCompass for Digital Collections

- Create and maintain local digital collections
- Very flexible metadata structures
  - *Dublin Core, EAD, TEI, full text, custom*
- Online creation or batch loading of descriptive metadata
- All metadata stored in XML (within Oracle tables)
- Multiple databases (“repositories”) in a single system
- Hierarchical organization possibilities
- FAST search engine ensures scalability and performance
- Access and entitlements
- OAI compliant
You did a basic search for "interstellar gas".

<table>
<thead>
<tr>
<th>Database</th>
<th>Title: Columns of Cool Interstellar Hydrogen Gas and Dust in M18, the Eagle Nebula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creator</td>
<td>Jeff Hester and Paul Scowen (Arizona State University)</td>
</tr>
<tr>
<td>Subject</td>
<td>Nebula</td>
</tr>
<tr>
<td>Subject</td>
<td>Hydrogen</td>
</tr>
<tr>
<td>Subject</td>
<td>Eagle Nebula</td>
</tr>
<tr>
<td>Subject</td>
<td>Serpens</td>
</tr>
<tr>
<td>Subject</td>
<td>Stars</td>
</tr>
<tr>
<td>Description</td>
<td>PILLARS OF CREATION IN (Nebula) Undersea coral? Earth-like structures are actually also incubators for new stars: a molecular cloud like stalagmites. &quot;Nebula&quot; (also called M18 -- &quot;fuzzy&quot; objects that aren't) in the constellation Serpens, where basalt and other dense surrounding landscape has especially dense clouds of (molecule) and dust that have a flood of ultraviolet light from. This process is called &quot;photophore&quot; illuminating the convoluted: boiling away from their sura three-dimension nature of from base to tip. As the pillar light, small globules of even globules have been dubbed Globules,&quot; but it is also a w...</td>
</tr>
</tbody>
</table>
Visual Arts

In this section you can view eight topics featuring works by New Zealand artists, photographers, designers and architects. Each topic includes an essay, a list of further resources and a selection of some of the following: photographs, drawings, prints, paintings, and posters. These topics have been designed to support the Arts/Nga Toi curriculum in New Zealand schools.

18th Century and 19th Century New Zealand Art

20th Century New Zealand Art and the Practice of Drawing

Architecture

Photography
Search the May Anti-Slavery Collection

It is recommended that you use browsers no older than Internet Explorer 5.0 or Netscape 6.2 when searching this collection.

Find: [ ] as: [Keyword Anywhere] [Search]

- Choose Phrase to search two or more words together in the order entered (e.g., west indies)
- Choose Keyword(s) to search single words, or two or more words in any order or in any proximity to each other
- Do not use Boolean operators: and, or, not
- Use ? with partial words to find variant endings: abolition? Finds abolition, abolitionist, abolitionists, etc.
- Unless limited to Title Keyword, Subject Keyword or Author Keyword, search results will include listings for specific pages within pamphlets.
ENCompass for E-journals On Site

• Store Fulltext Journals locally
• Custom data loaders
• Full text searching
• XML based
• Rights management
• Personalization, alerts, saved searches
• Easy administration
• SCALABLE + predictable cost of ownership
1. Numerical modeling on pultrusion of composite I beam
   In Press, Corrected Proof, Available online: 26 December 2003
   Liu, X.-L.
   
   Abstract | Full Text | PDF (586 K) | Open URL
   
   Pultrusion is one of the most efficient methods for making fiber reinforced polymer composite parts. However, more work needs to be done to develop efficient means for the pultrusion tooling design and process control. This paper describes numerical simulation on the pultrusion of fiberglass-epoxy composite I beam using a numerical procedure based on general-purpose FE packages. The theory and numerical implementation of the procedure is briefly introduced. The procedure is verified by good agreement between the predicted temperature profiles and the experimental ones. The effect of...
Course Content Integrator

• Vision: unite course management with library systems
• Alliances with Blackboard and WebCT
• Tools
  – Search library content and create links or searches through the course management system
  – Create pre-defined searches created by an instructor
  – Present learning objects including e-reserves, multimedia, full-text articles, etc.
  – Dynamic search boxes
  – One-click insertion of e-reserves
• Single sign-on
• Persistent URLs
Example in Blackboard: User can search within library resources that have been pre-selected by the instructor.

Enter your keyword terms to search databases recommended by your instructor for "Introduction to Psychology".

Search For: seasonal affective disorder

Search Psychology Resources

Childhood readings
You'll be able to put in a larger description for display here.
Search results are presented within the course management system.
Meridian

• Complete solution for Electronic Resource Management

• Single source of information for managing a range of activities related to electronic resources
  – License data
  – Linking information
  – Search definitions
  – Statistics

• Elimination of duplicate data through integration across products

• Improve staff productivity in managing these vital resources
Meridian

Voyager
- Bib Description & Holdings
- Acquisitions
- OPAC

Electronic Resource Repository
- License Information
- Linking KnowledgeBase
- Search Definitions
- Statistics

Reporting

ENCompass
- Entitlements
- Collection Manager

LinkFinderPlus
- OpenURL Resolver

Endeavor’s Electronic Resource Management Solutions
ENCompass - Unique Benefits

• Complete digital library framework

• Technology: XML, XSL, Oracle 9i

• Powerful Searching
  – Z39.50, HTTP, XML Gateway
  – FAST Search Engine

• Integration/Interoperability (XML):
  – ScienceDirect
  – SCOPUS
  – E-Learning: Blackboard, WebCT

• Long-term, Sustainable Partner for Libraries
  – Endeavor/Elsevier
Libraries using ENCompass

• >150 libraries worldwide
  – Cornell University
  – University of Edinburgh
  – National University of Singapore
  – National Library of Medicine (US)
  – London School of Economics
  – University of Auckland
  – National Library of New Zealand
  – CNRS/INIST (France)
  – University of Helsinki
  – University of Western Sydney
  – Open University (UK)
  – University of Toronto
  – Los Alamos
  – British Library
Thank you and please visit

- Developing an all science navigation tool together with the scientific community.

Sharon Mombru (Product Sales Manager) 16.00 at the Commercial & Manufacturing Chamber of Corfu (2 Aristotelous Str. and Kapodistriou).
Thank you!