

Conference of Directors of National Libraries in Asia and Oceania

Hanoi, 20 April 2009

Use of Open Source Software at the National Library of Australia

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Open Source Software is

Any program whose source code is made available for use or modification as users see fit.

Open Source Software Gives Users The Freedom To:

- use the software as they wish, on as many computers as they wish
- fit the software to their needs. This includes improving it, fixing bugs, extending its functionality
- redistribute the software to others

Advantages of use of Open Source Software identified by the National Library of Australia are:

- innovation and integration of services based on open source is easier (with propriety, software vendors have to agree and do the work)
- collaborative development across institutions and countries is possible and useful
- ownership costs are less than with propriety software

Examples of the use of Open Source Software at the National Library of Australia

Case studies:

- search engine
- replacing the Library's online catalogue
- web curator tools
- Open Journal System
- digital preservation

Search Engine

NLA needed a search system to support metadata collections and collections of full-text

Selected Lucene an open source search engine

Search Engine

Lucene:

- met functional requirements
- performed better than commercial systems
- was the only economically feasible solution for NLA
- Lacked Z39.50, but we added it

Online Catalogue

- NLA wanted to improve its catalogue. We needed the functionality of traditional catalogues and the features of modern web systems like Google
- staff evaluated VuFind, an open source online catalogue

Online Catalogue

VuFind catalogue (used since early 2008) is superior in all respects. It provides:

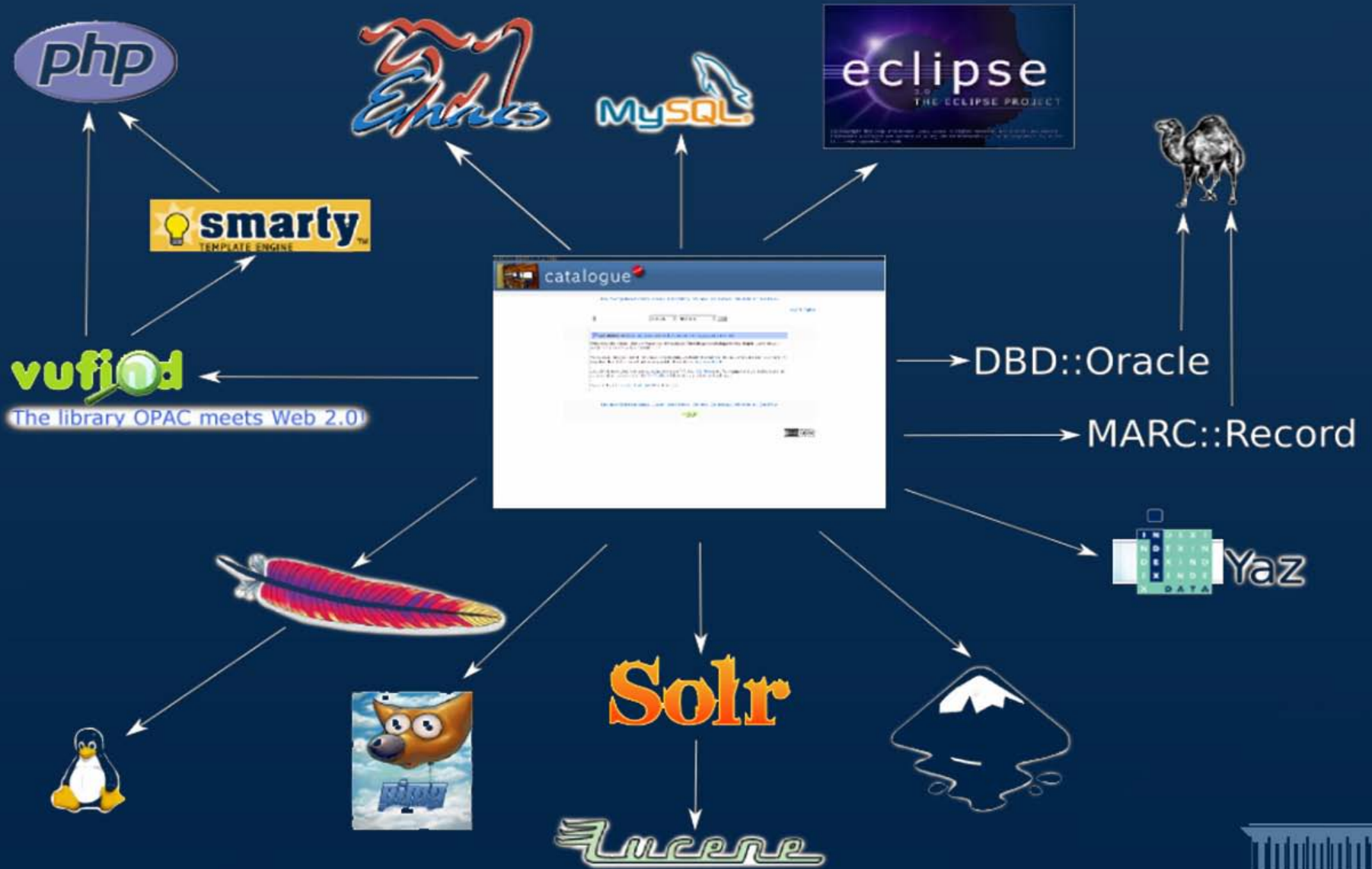
- a better interface
- relevance ranking
- “clustering”
- simplified requesting
- integrates digital collecting
- integrated with Wikipedia, Google Books and Library Thing to give additional information
- users can comment and annotate

Online Catalogue

The use of open source software allowed us to modify the system easily and quickly.

We could let users try it and suggest improvements.
We could update it quickly.

The NLA is contributing its software developments back to the VuFind Project



Web Curator Tool

The NLA developed software to support Pandora: Australia's Web Archive, which began in 1996 because there was no option.

Now, partners in the International Internet Consortium have collaborated to build an open source set of tools: Web Curator Tools.

The NLA will replace its current system with a system based on Web Curator Tools.

Open Journal System

The NLA created an “Open Publish” web space using Open Journal Systems.

This open source software is used to manage, host and deliver an online open access journal service.

It requires no intervention by the Library.

Digital Preservation

Preservation of digital material requires immediate, active and on-going management.

The volume of material means that automated preservation tools are needed.

NLA collaborated with the Australian universities to develop open source tools to automatically provide information on obsolescence.

Conclusions

Open source software can be more cost-effective than commercial software.

Open source allows rapid prototyping and customisation.

HOWEVER

Open source: Is not “easy”
Is not “free”

- The institution using open source software is responsible for installing, configuring and supporting use of the software
- Must have the resources and skills to manage e.g. planning, project management, design, training

It needs more than IT skills

- Open source software works best to support innovation
- If the application is mainstream and commercial solutions are available, this can be the best option



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