

Using Open-Source Software@ Curtin Library: Instant Messaging, Podcasts, Subject Guides, Blogs and Wikis!

Sue Grey-Smith and Luke Padgett

Library and Information Service
Curtin University of Technology
Western Australia

Abstract

Curtin Library has a reputation for having an innovative approach to providing services. Its SMS service, for example, has been of interest to libraries both in Australia and overseas. This paper discusses a number of other new services, all supported by open-source software, that have been customised and implemented by Curtin.

*In 2006, Curtin chose to implement an instant messaging “AskOnline” service to replace Tutor.com virtual reference software. Open-source software was used: ejabberd for the backend, jwchat as the web client and **Miranda Instant Messenger** as the gui interface. Another new addition to the library’s resources in 2006 was a customisable subject guide database based on **Pirate Source** software created by the Joyner Library at East Carolina University.*

*Podcasts and blogs have also been offered by Curtin. We use **Audacity** – free, open-source, sound-editing software, and copyright-free music from ccMixer, to produce podcasts on a range of topics aimed at new students, and use the free open-source blog engine **b2evolution** for blogs for external and internal use. In 2006 we experimented with **MediaWiki** software to evaluate it as another useful open-source tool for library staff and clients.*

In each of these examples, the reasons for choosing open-source software rather than commercial products are discussed. There is a detailed description of the customisations we needed to make, together with advice for those who might be interested in following the same path.

What is open source software (OSS)?

The Open Source Initiative (<http://www.opensource.org/>) claims that open source software is “an idea whose time has finally come”. But what exactly is it? If you define the first term “open”, it is seen to represent the philosophical understanding of how a previously created “source” or code can be used or adapted to develop a piece of “software”.

However the concept of “openness” in software development is said to exist on a spectrum.¹ At one end of the spectrum is a piece of software developed by someone who never allows anyone else to look at it. This can be defined as “closed” source software. However, if the developer allows a friend to look at the inner workings of the software, then to a degree, that software becomes open. It is the other end of the openness spectrum that we will discuss in this paper. That is, where the source code

¹ CED, 2006, *Open standards, open source, and open innovation: harnessing the benefits of openness*, CED: Washington, p. 8

of software is available to everyone to modify and adapt to their own needs. There is often a license requirement that those who modify the software allow their changes to be available to other users and developers. These are the conditions which underlie the philosophy of the GNU public license.²

The historical origins of OSS can be traced to the academic environment where the sharing of software was part of a free exchange of information. Traditionally, sharing source code was driven by a pursuit of knowledge and furthering conceptual understanding in programming science and utility. Source code was analysed, modified and created to solve programming problems rather than being used for producing a sellable or vendible product. The use of code in this way has been referred to as “hacking”.³ Richard Stallman espoused that the very nature of software demands that it be available to anyone to ensure that innovation is not stifled.⁴ He goes further to provide that essential freedoms should include the ability to use and modify software for any purpose. You should also be able to “distribute or redistribute” the software freely such that the community can benefit from the improvements you or anybody else make.⁵

The phrase “open source” was coined by a number of individuals who have carried forward the free-software philosophy through the 1990s and beyond. Eric S Raymond co-founder of the Open Software Initiative (OSI) and others have maintained the underlying importance of having unrestricted access to modify and redistribute source code. However, there has been a tendency by those associated with OSI to acknowledge a proprietary element to the software.⁶

What constitutes OSS from a practical perspective is access to the source code (the software’s building blocks) rather than just the precompiled binary. Creators and supporters will quite often also include a binary version of their software. This is for the benefit of those who are less technically proficient with programming and who simply wish to use the software. Raymond in “Homesteading the Noosphere” describes some other common characteristics of OSS.⁷

- Established OSS quite often have a dedicated website created or administered by the author which acts as a single point of access to information about the software, as well as links to mirror sites to download source and binary files required to run, fix and update the software.
- Support for the use of the software usually comes in various forms suitable for varying users. Quite often the software website includes a combination of different discussion lists, forums and more recently blogs and wikis. There may be a blog designed for users who require less technical information on how to set up and operate the software. There

² The philosophy and condition can be found at <http://www.gnu.org/philosophy/free-sw.html>

³ For a concise review of performance of hacking see Garfinkel, S. 2005, ‘Hack license’, *Technology Review*, vol 108 no 3, p.75

⁴ Stallman, R. M. 1985, *The GNU manifesto*, retrieved September 28, 2006 from <http://www.gnu.org/gnu/manifesto.html>

⁵ Stallman, R. M., 1999 ‘The GNU Operating system and the free software movement’ in C DiBona et al. (eds.) *Open sources: voices from the open source revolution*, California, O’Reilly and Associates, p. 56

⁶ Raymond, E. S 1999, ‘A brief history of hackerdom’ in *The Cathedral and the bazaar: musings on linux and open source by an accidental revolutionary*, California, O’Reilly and Associates

⁷ Raymond, E. S 1999, ‘Homesteading the Noosphere’ in *The Cathedral and the bazaar: musings on linux and open source by an accidental revolutionary*, California, O’Reilly and Associates

may also be a programmer's forum where people contribute their bug fixes, patches or adaptations, and discuss directions and opportunities for further enhancement.

- Well established OSS usually becomes the subject of further publications to allow people to become familiar with the language and construction of the source code. They further explain how different open source components can interact to form new software packages to suit individual needs. An example is the interoperation between PHP and MySQL which has been the subject of numerous publications.

OSS and libraries

It is clear that libraries can now choose from a variety of OSS programs for library functions. For example the **eIFL** website <http://www.eifl.net/opensoft/soft.html> provides a long list of open source software designed specifically for libraries. These include software for integrated library systems, content management systems, document delivery, collection management, Marc record readers and writers, bibliography writers and readers and Z39.50 clients and servers. Libraries in New Zealand are successfully using the open source integrated library system **Koha** <http://www.koha.org/> and the multilingual, open source content management software **Greenstone** <http://www.greenstone.org/cgi-bin/library> is being used in digital collections around the world.

However while large academic libraries are probably slightly anxious about adopting open source software for their library management systems, it *is* being used for other more peripheral functions. Curtin University Library has adopted a number of open source software products that have cemented its reputation for being technologically innovative, without a huge input of cash.

As Eric Lease Morgan wrote in 2002, "...since [open source] software is freely given away, it is very easy to download, install, give it a whirl, and evaluate whether or not more time should be spent on it".⁸

This is exactly what Curtin has done. Our whirl with **MyLibrary** a few years ago gave us an idea of the sort of time and technical expertise we'd need if we chose to use open source software. Even if our enthusiastic librarians found something they thought was terrific and "free!", our IT professionals had to be convinced that open source software was worth looking at. **MyLibrary** was a useful training ground for us all.

In the last couple of years Curtin has implemented a number of open source software products. These have been chosen for a variety of reasons – in the case of our virtual reference service we chose the **Miranda Instant Messaging** open source software <http://www.miranda-im.org/> to replace the expensive 'Ask a Librarian' proprietary service we had been using. The incentive to change to open source was not just the cost (though that helped persuade library managers), but the functionality of the new light-weight, flexible system.

When it came to looking for a subject guide on-the-fly system to replace many static web pages, we found an open source software **Pirate Source** from the Joyner

⁸ Morgan, Eric Lease 2002, "Possibilities for open source software in libraries" *Information technology and Libraries*, vol. 21, no. 1, pp12-16

Library at East Carolina University that we could adapt. By this time we were feeling very confident that open source software was the way to go, and our IT people were also feeling reassured that implementing these programs would not cause problems for them. So, when we decided to experiment with podcasts we first looked for open source software to create them and chose **Audacity** <http://audacity.sourceforge.net/> with the advice of our IT people.

By the time we told the IT people we wanted a blog and a wiki, they were ready – they had their recommendations for us – we used b2evolution <http://b2evolution.net/> for the blog and MediaWiki <http://www.mediawiki.org/wiki/MediaWiki> for our wiki.

Since our first experiments, IT staff have become enthusiastic about using open source software, our librarians are excited about learning to use new products and probably most importantly, library management see the advantages of trying out open source products and giving them a whirl.

Instant Messaging Virtual Reference Service



The initial reason to investigate changing from a licensed web based VR Software to instant messaging (IM) software was a perceived unsatisfactory service to our students and staff. The existing service was deemed unsatisfactory for a number of reasons. Here are a couple of the major ones:

- **The service was very slow and cumbersome.**
This was because the service was administered from the US. When a student contacted us through the web browser, their query had to pass through the vendor company's server in the US before it arrived back to us in Western Australia. We then replied to the student's query which again had to pass through the server in the US. This process could take upwards of 20 seconds which meant there was a lot of room for confusion and frustration between the query and the answer. We wanted a faster turnaround time.
- **Technical support was administered from the US**
Our in-house IT service could only fix non-server issues and even then the fixes often relied upon a reboot of the server which was based in the US. One consistent problem was that the server would go down at precisely the same time every day. After asking the vendor why this happened they replied that they reboot the server at midnight (US time) for maintenance purposes and the reboot would cause our service in Western Australia to go down for approximately 30 minutes during the middle of every day.

IM software was put forward as an alternative to the web based VR package. Here are some of the options we considered.

Option 1: Using a freely available IM client such as MSN messenger or Yahoo Messenger

Advantages:

- It's free
- Easy to setup (no need for an IT Professional)

Disadvantages:

- Licensing conditions mean no alteration to the interface
- Cannot easily restrict users to staff and students only (although Shibboleth software now offers some control)
- Students and staff must have an MSN messenger account if you use MSN Messenger as your IM client.
- There is no obligation for support from the vendor
- Network security issues

However freely available IM clients such as MSN messenger are a good choice when a budget is very small and there is no in-house IT support.

Option 2: Using open source and freely available IM applications such as Miranda

Advantages:

- It's free
- Subject to open source licensing which allows alteration to suit your need.
- A wide variety of setup options such as just using a binary .exe wizard style setup, or using open source tar.gz. This means you can set it up without IT professional help, or use IT professionals to modify as needed.
- You are not restricted to a particular IM Client server. This means you can receive queries from any client your staff or students wish to use, such as MSN messenger, Yahoo messenger or a personal client server.
- Can be made secure

Disadvantages:

- Sophisticated setups such as we have at Curtin with a password authentication setup, require IT professionals
- No legally obliged vendor support. However, the Miranda website does have an excellent support forum as do most open source developments.

Option 3: Using a specific Vendor product

Advantages:

- Legally obliged to offer support and fix problems.
- Usually well designed and secure (some obviously are no better than freely available applications)

Disadvantages:

- May be contractually locked to the product for an extended period
- The vendor may host the service overseas which can cause service issues as mentioned above
- You may not be able to alter the product yourself and the vendor may be slow to implement your suggestions
- It costs money!

As you can see, Option 1 and 3 offer choices that may suit libraries with no in-house IT support but they do have their disadvantages. We chose to give Option 2 a whirl.

The technical stuff

Miranda is an open source multi protocol instant messenger client suitable for the Windows operating system.⁹ “Multi protocol” means that it can receive messages from different types of instant messaging client servers. This was a key factor in our decision to use it. Miranda can receive messages from people using Yahoo Messenger, MSN Messenger, ICQ, AIM and practically any other form of IM. Clients can also login to the library’s IM client through a Curtin Password protected webpage, avoiding the need to have an external IM account or download anything to their computer. We use the Miranda software as a translator between the Curtin library IM client server which is setup on a **Jabber** protocol, and the IM client servers the students may be using.

Jabber is an open source instant messenger promoted as “an ad-free alternative to consumer IM services like AIM, ICQ, MSN, and Yahoo”.¹⁰ The architecture of the Jabber software allows you to run your own IM client server. This has a couple of major benefits. The first is that your instant messaging service can be in house and tucked neatly behind firewalls for security. For us a second crucial factor is that the server is controlled by Curtin and not a vendor in the US. This means that Curtin Library is in the driving seat when any problems with the server or any updates to the software arise. There is now no more rebooting in the middle of the day! The third important factor is that messages can be received and returned within a second or two, rather than the 20 second turn around we had with the previous system. Running our own IM client server also allowed us to securely connect to our student and staff records database. This meant we could create the password authentication web page for our students and staff to log in and use a web based IM service run from our Jabber IM client server.

A service perspective

From a service perspective our AskOnline service is marketed as a general point of contact for students, staff and the library. Queries range from reference questions to technical questions. An example of a technical question a student might ask is that they cannot print from one of the computers within the library. We reply saying we will send someone to help and then use a walkie talkie to call our floor staff.

⁹ Visit <http://www.miranda-im.org/about/> for further information about Miranda

¹⁰ *Jabber: An overview*, Retrieved 10 October, 2006 from <http://www.jabber.org/about/overview.shtml>

Askonline Login Page

Library & Information Service

Information & Services | Referencing Resources | Exam & Course Resources | Study Skills | Specialised Resources | Research Support

Catalogue Tools | Database Tools | Web Searching | Guides & Training | Borrower Information | Teaching Support

AskOnline
chat with a librarian

Welcome to the AskOnline Instant Messenger Service!

Login to chat to a librarian in real time inside or outside the library

Curtin ID

Password

Help with your Curtin ID and Password.

Students have the choice of logging into AskOnline via our web based login screen to a Jabber based IM hosted by Curtin Library.

OR

Via other client servers such as Yahoo Messenger and MSN Messenger

Can I use my own Instant Messaging client?

Your library has also set up contacts on MSN and Yahoo so you can contact us using your MSN Messenger or Yahoo Messenger client. All you need to do is add the library's IM address to the contacts in your IM client.

IM Client	IM Address (add to your contact list)	Availability	Online Help
MSN Messenger Download, Web Version	curtinlibrarian@hotmail.com	Mon-Fri: 9am-5pm	MSN Help
Yahoo! Messenger Download, Web Version	curtinlibrarian@yahoo.com.au	Mon-Fri: 9am-5pm	Yahoo! Help

If there are multiple simultaneous queries they open in new windows so librarians answer as many queries as they like at once, or they can set their status to "busy with a client". This is very efficient as we have found students are logged into chat as a matter of course, wherever they are.

One thing missing from the original software is a statistics collection function. This is something we'd like to see added to the Miranda software. Miranda does however allow all messages to be saved in a log so previous questions can be checked.

Results

Curtin went with Miranda as we have very good in-house IT support. However the OSS we chose could also be installed from an executable package by non-IT professionals. We chose Miranda as it allowed us to answer queries from different IM Clients. We also chose the Jabber IM as it allowed us to host the service on our own client server. This means you are not reliant on, for example, the MSN Messenger client server for your IM VR service. If you are reliant on an external server it can go down and you have no recourse.

By hosting the service on our own client server we can connect to our student and staff records databases for the authentication of our users without problems with security. It is internally networked.

The service itself runs through our server and thus there is little time delay between the student's query and the librarian's answer. It also can act as an internal staff messaging system as all staff and students have accounts generated simply by being present on the student and staff databases. In theory it could replace email completely! This is something that we haven't explored yet, however this is a growing trend in corporate US.¹¹

Subject guides on the fly



What are subject guides?

Subject guides have been defined as:

*A guide to the shelves of a library, showing where books on particular subjects may be found*¹²

However in the online age they have developed into web pages listing library resources on a given subject including links and directions to the resources. Subject Guides sometimes have additional information on what the resources are, their scope, and how to use them.

Interactivity and Subject Guides

¹¹ Denison, D.C. 2003, 'In the blink of an eye, IM spreads across systems' *Boston Globe*, March 2, Retrieved 13 October, 2006 from ProQuest; Pritchard, S. 2005, 'Messaging spells a revolution, collaboration technologies: Real-time communications are changing the way we work', *Financial Times*, Retrieved 13 October 2006 from ProQuest.; Strom, D. 2006, 'I.M. Generation Is Changing the Way Business Talks'. *New York Times*, April 5, Retrieved 13 October, 2006)

¹² Prytherch, Ray 2005 *Harrod's Librarian's Glossary* (10th ed.)

Online Subject guides act more like portals providing hyperlinks to resources and information on different relevant resources from a single access point on the web. Brian Detlor and Vivian Lewis¹³ have discussed the growing ability for web users to customize information to suit individual needs. That is, to make the information more meaningful to the individual end user. As librarians we should not underestimate the sophistication of current users to adapt to new formats of web information. Quite often newer web formats of information such as Wikis, RSS feeds and blogs and growing forms of PHP based web content have been given a thorough road test by students before we have heard of them!

The idea of customizing information access to suit the needs of the user is now prevalent in many well known websites and is part of a broader transformation to a "Web 2" environment.

What Curtin Library hoped to achieve

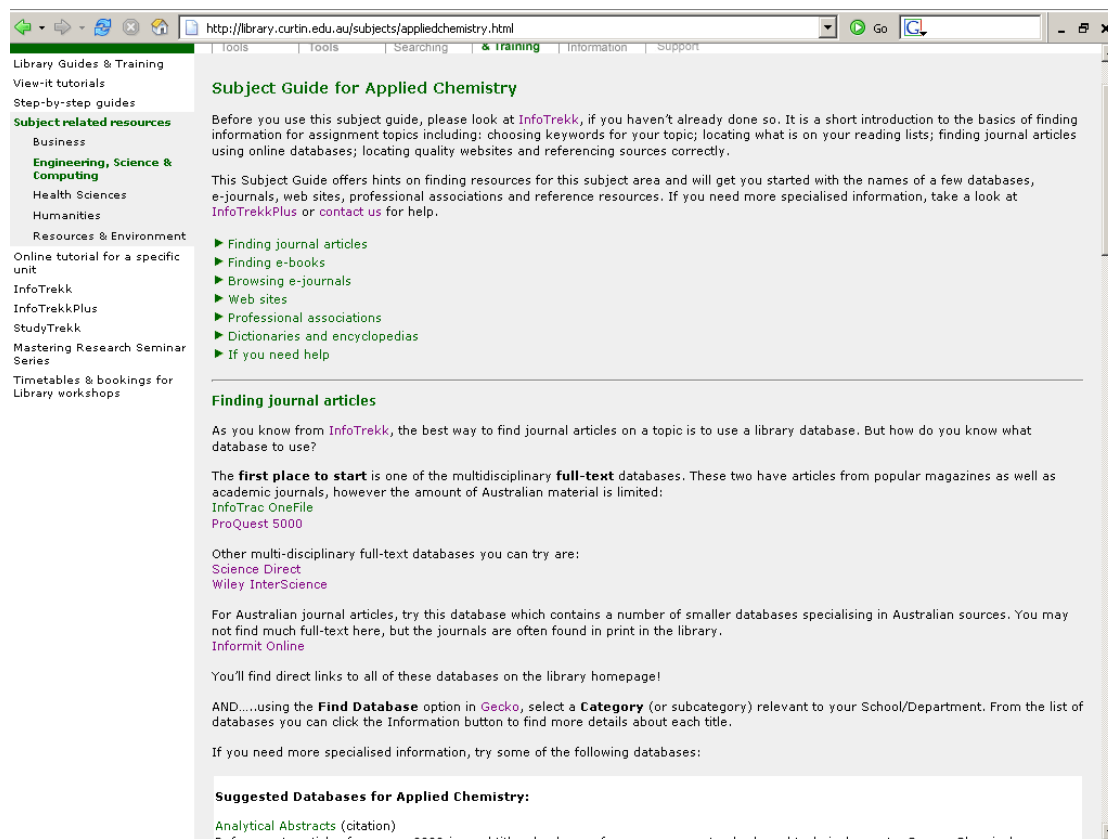
Curtin library through the Learning Services Unit provides 46 subject guides which were available as html web pages. This meant that if there were a change to a database subscription or a new resource was acquired, each subject guide on which the resource appears or is to appear, must be changed. This was not considered the most efficient way to manage the guides. For example, Proquest 5000 is a multi disciplinary database and is listed on many of our subject guides. If there was a change to the Proquest subscription such as a new link or a name change, it would have to be edited on each subject guide. This means changing each of the 46 subject guide web pages on which it appears.

Another aspect of the static nature of the guides is that they offered little avenue of interaction to a user. It was felt that there was room for improvement to make the subject guides more attractive by allowing the user to customise the subject information they wanted. We wanted less static information and quicker access (less clicking) to core information.

The guides were also not easy to find from the library home page. They were hidden in a directory system based on the division in which a course belonged.

¹³ Detlor, Brian and Lewis, Vivian 2006, 'Academic Library Web Sites: Current Practice and Future Directions', *Journal of Academic Librarianship*, vol. 32 no. 3, p. 251

Example of the old HTML Subject Guides:



We started to look for software that would fulfil these objectives:

- easier Maintenance of subject guides
- more up-to-date resources for clients
- customisation opportunities for clients

The Pirate Source software

After some searching, a freely available open source PHP based package was found at the Joyner Library of the East Carolina University. **Pirate Source** offered a very basic PHP client and backend interface to an underlying set of MySQL tables where the subject guide information was stored.¹⁴

A few problems

We found that the backend (administration) interface was too basic and didn't offer the functionality that we required. For example it didn't offer any way to delete a record. If a subscription to a database was cancelled, there was no way to remove the record from Pirate Source. There also was no way to remove an attached resource from a specific subject guide. This functionality was provided by our IT staff.

¹⁴ Further information about Pirate Source is available in Nall, Clark and Lewis, Janice Steed, 'Integrating print and electronic resources: Joyner Library's Pirate Source', *The Acquisition Librarian*, vol. 17 no.33/34, pp.107-20

The new Pirate Source Administration Interface

The screenshot displays the administration interface for a record. At the top, there are 'Previous Record' and 'Next Record' buttons. The record details include a 'Title' field with the text 'A dictionary of chemistry', a 'Post' field with '(full text)', and a 'Checked by Editor?' checkbox. Below this is a 'Description' field containing HTML code: `<i>A dictionary of chemistry</i>, 5th edn. 2004, Oxford University Press, Oxford. Available from: Oxford Reference Online.`

The 'Subjects' section contains two rows of 'Rank' (both set to 100) and 'Subject' dropdown menus. The first row has 'Applied Chemistry' selected, and the second row is set to '--select one--'. To the right, there are 'Source' dropdown menus, with the first set to 'Electronic books and texts' and the second to '--select one--'.

The 'Locations' section has a 'Format' dropdown set to 'Online' and a 'Location' text field containing the URL 'http://link.lis.curtin.edu.au/cgi-bin/gw?url=+'. Below this is another 'Format' dropdown and an empty 'Location' text field.

At the bottom of the editing section, there are two buttons: 'Make changes now' and 'Delete this record'. A yellow callout box with an arrow pointing to the 'Delete this record' button contains the text: 'The delete functionality was added by Curtin Library IT staff'.

Below the editing section is a 'Find a Record' section with a search input field and radio buttons for 'At the beginning of the title' (selected) and 'Anywhere in the title'. A 'Submit Search Now' button is located below the search options.

At the very bottom is an 'Add a Record' section with an 'Add a Record' button and a label 'with 1 subject(s) and 1 location(s)'.

The client interface, on the other hand, was considered too complex and required alteration to suit Curtin's needs. We felt there were too many options in the initial screen but found editing them required high level scripting skills by our IT staff.

The new subject guide user interface

The screenshot shows the 'subject GUIDES' user interface. The word 'subject' is in a red script font, and 'GUIDES' is in a large, bold, orange font. Below the title is a 'Step 1: Choose a subject:' section with a dropdown menu. The menu is open, showing a list of subjects: Accounting, Agribusiness, Applied Biosciences, Applied Chemistry (highlighted in blue), Applied Geology, Applied Physics, and Architecture & Interior Architecture.

To the right of the dropdown is a text block: 'Before you use this subject guide, please look at InfoTrek. It is a short introduction to the assignment topics including: choosing keywords for your topic; locating what is on your reading lists; finding journal articles using online databases; locating quality websites; and referencing sources correctly.'

Below the dropdown is a 'Step 2: Source Types:' section with several checkboxes: 'All' (checked), 'Databases', 'Dictionaries & Encyclopedias', 'Electronic books and texts', 'Professional Associations', and 'Web Sites'. A 'View Sources' button is located at the bottom of this section.

A yellow callout box with an arrow pointing to the 'View Sources' button contains the text: 'A third step was removed from the source script. It required you to choose online or walk-in retrieval'.

Finally, we discovered that our original html guides could not be easily migrated or converted into the new Pirate Source database. A substantial amount of data entry was required to get the subject guide information into the new format.

Results

Initial comments have been positive. From an administrative perspective, time has been reduced in maintaining the subject guides as library staff of varying IT skills can enter new resources once, without the need for html knowledge. Each resource now has its own record within Pirate Source allowing the guides to be changed from one record rather than being entered on every guide. If there is a change to a resource subscription then the resource record is only changed once and this change filters through to every subject guide on which it appears.

From a client perspective the new interface allows customisation of results in less clicks than the previous guide.

The subject guides provide quick access to a brief description of the resources and how to access the resource. There is a link where the resource is online and location information if the resource is in hardcopy.

Pirate Source is an example of the use of OSS built upon PHP language. Curtin library was able to access the source and change the functionality of the software to meet its needs. The new subject guides would not have been possible without our in house IT unit as some sophisticated changes were required to meet Curtin Library needs. However, once the changes were made the subject guides became much easier to manage saving a substantial amount of staff time as well as offering students customisable access to subject information.

Examples of Pirate Source software

Here are some examples of the use of pirate source:

Curtin Library Subject Guide: <http://library.curtin.edu.au/subjectguides/>

Joyner Library Subject Guide: <http://www.ecu.edu/lib/reference/piratesource/>

The Salmon Library of the University of Alabama in Huntsville provides a slightly different version designed to find a database resource only on a given subject: http://lib.uah.edu/online_databases.htm.

Podcasts



In late 2005 we became interested in producing podcasts for the library. We knew that podcasts had become incredibly popular as a medium since iPodder software was first released in 2004 and thought it would be a good medium to use for information literacy. Our podcasting project is described in detail in a paper by Curtin library staff presented at ALIA's Click06 conference¹⁵ but the aspect we would like to discuss here is the open-source software we used to create the podcasts.

¹⁵ Atkinson, J. et al. 2006 'Innovation in a podshell: Bringing information literacy into the world of podcasting', ALIA Click06 Available: http://conferences.alia.org.au/alia2006/Papers/Jody_Atkinson_et_al.pdf

The website Podcasting News (http://www.podcastingnews.com/topics/Podcasting_Software.html) lists a large range of podcasting publishing software options. We chose **Audacity** (<http://audacity.sourceforge.net/>) – described as “free, open source software for recording and editing sounds. [It is] available for Mac OS X, Microsoft Windows, GNU/Linux, and other operating systems.” We found Audacity easy to download and use as there were plenty of instructions available on the web.

To record the podcasts all we needed was a laptop with Audacity software loaded and a microphone. We found that the standard computer microphone was adequate once we managed the sound levels and that it was compatible with the soundcard in the laptop, unlike the more expensive microphones we had thought we should use. In fact we found that once the sound files are converted to MP3 files and downloaded to an MP3 player, the difference in quality between a good microphone and a cheap one is minimal.

Once recorded, we edited the podcasts with Audacity and added music from **CCMixter** (<http://ccmixter.org/>) which we used under a Creative Commons licence. Under a CC licence we could use and edit the music as long as we included an attribution to the composer and CCMixer. There was a huge range of musical styles to choose from and we had a great deal of fun making a choice.

The next stage was to create RSS feeds for the podcasts so that subscribers could automatically download new podcasts to their MP3 players. We edited RSS feed coding we had already used for the library blog adding “enclosure” tags for the MP3 files. However there are many RSS generators available freely on the web which can do the job.

The final task was to create a webpage to host the MP3 files and RSS feeds and to publicise them. We’ve used the podcasts for a range of information literacy topics and book reviews and they have proved to be amazingly popular with 9379 downloads from February to November 2006! Our decision to give the open source software a whirl was definitely worth it.

blog@Curtin library



For some years we have created static library news pages that were time-consuming to manage and archive. We soon realised that using a blog for library news would have many advantages: blogs are easy to post news to as they avoid the restrictions of webpage authoring and uploading, blogs automatically archive items, blog entries are searchable and blogs facilitate comments and feedback.¹⁶

While individuals can happily set up a blog on a blog hosting service such as Bloglines or Blogger (and as early as 2004 as a quick-fix we used a blog on Blogger

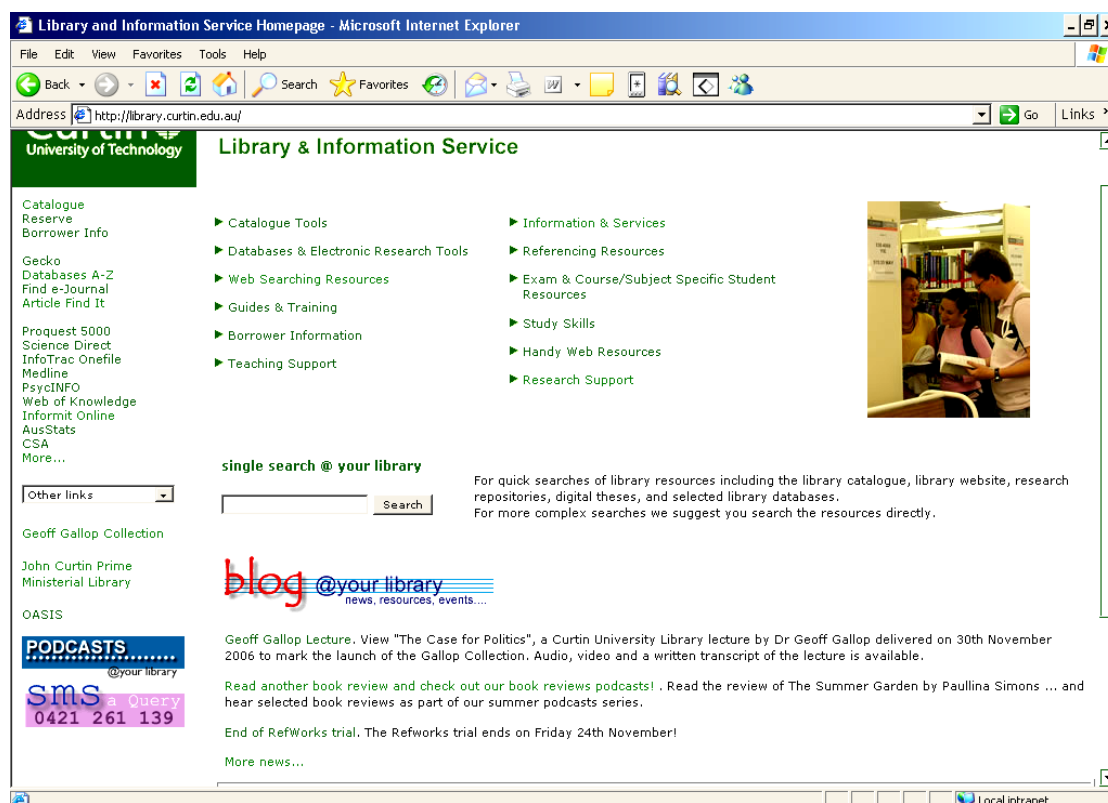
¹⁶ See also Constance Wiebrands' ALIA Click06 paper 'Creating community: the blog as a networking device', Available at: http://conferences.alia.org.au/alia2006/Papers/Constance_Wiebrands.pdf

to get rapid feedback for a library survey), we needed to find a server-installed script to use. We chose to use the free, open source **b2evolution** (<http://b2evolution.net/>) software which offers the functions we wanted.

The library has created multiple blogs on the b2evolution platform which is loaded on a local server. One of these is the library news blog and others include an internal blog containing information for those working on the Enquiries Desk, and test and development blogs.

While b2evolution offers a large range of different “skins” or appearances to choose from, we customised our “skin” to remove some of the features we did not need, such as the calendar.

Initially we installed an early version of b2evolution that did not have good anti-spamming capacity. This meant we were spending time deleting inane computer-generated comments each morning – so in the end we turned the Comments feature off. However, version 1.8.1 of b2evolution has allowed us to install free anti-spamming **Captcha** software which has proved very efficient.



b2evolution generates RSS feeds so our library news blog feeds appear automatically in the student portal as well as in the library homepage (and to anyone who chooses to subscribe to the feed). b2evolution allows categorisation of items, creates archives and is searchable. We have found it to be flexible and resilient.

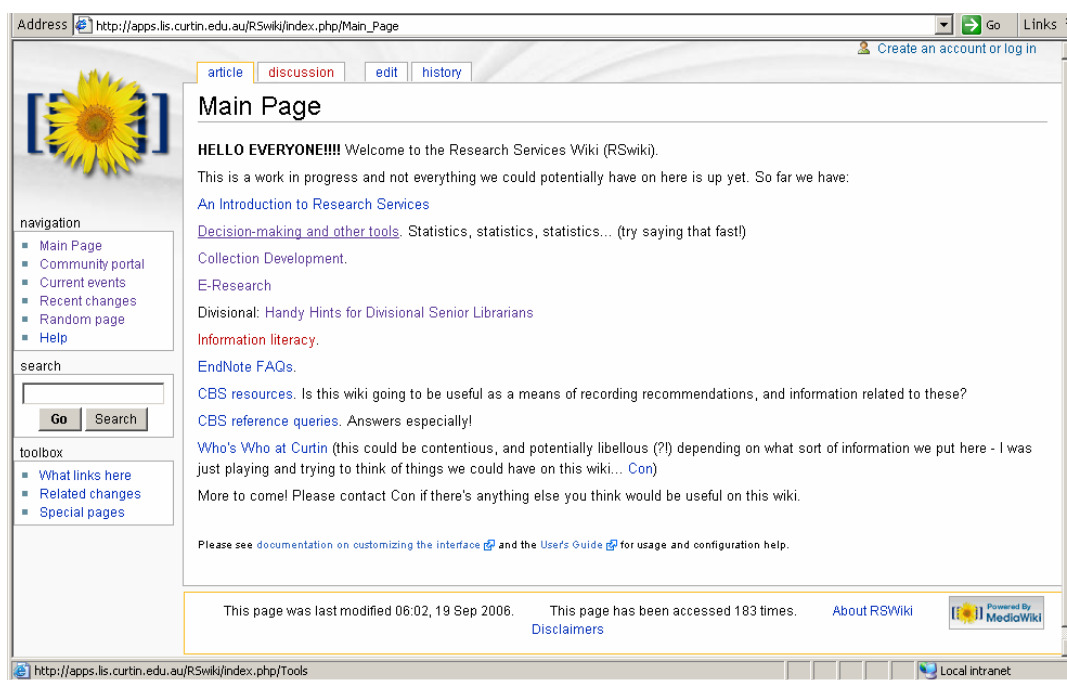
Again, using free open source software has allowed us to experiment at little cost to see if a public library blog is a viable way of providing a good service – concerns that we may have been inundated with inappropriate comments have been allayed - and we are very pleased with the results.

And finally ... Wikis

Most people are very familiar with Wikipedia - “the Internet's hottest information source”.¹⁷ and know that a wiki is a type of collaborative website where users can make changes: “the complete opposite of traditional content management systems”¹⁸. New content can be added to wiki pages by using web forms and simple markup language, and all changes are recorded on the server so that there is a record of edits and changes. Wikis also include a number of “dynamic Web site features like full text search; automatic navigation links or ‘breadcrumbs’; design templates or ‘skins’; PDF or RSS support; per-page discussion functionality; ...”¹⁹ and more. We could see the advantages in using a wiki internally as a tool for collaborative writing and as a knowledge base.

The Research Services unit at Curtin is responsible for developing and maintaining the library’s Collection Management Policy. This has been a lengthy process as additional elements of the policy are discussed, edited and added to the document. We had found that changes were sometimes lost or misfiled and it was hard to be confident that we were all working on the same version of the document. It seemed that using a wiki would resolve many of these issues.

Our ever tolerant IT staff were asked to investigate wiki software and suggested WikiMedia, the open-source software that underpins Wikipedia. We now have a wiki for the Research Services unit of the library which is used as an administrative and information resource. It includes our policy documents, FAQs for EndNote problems and Handy Hints for librarians.



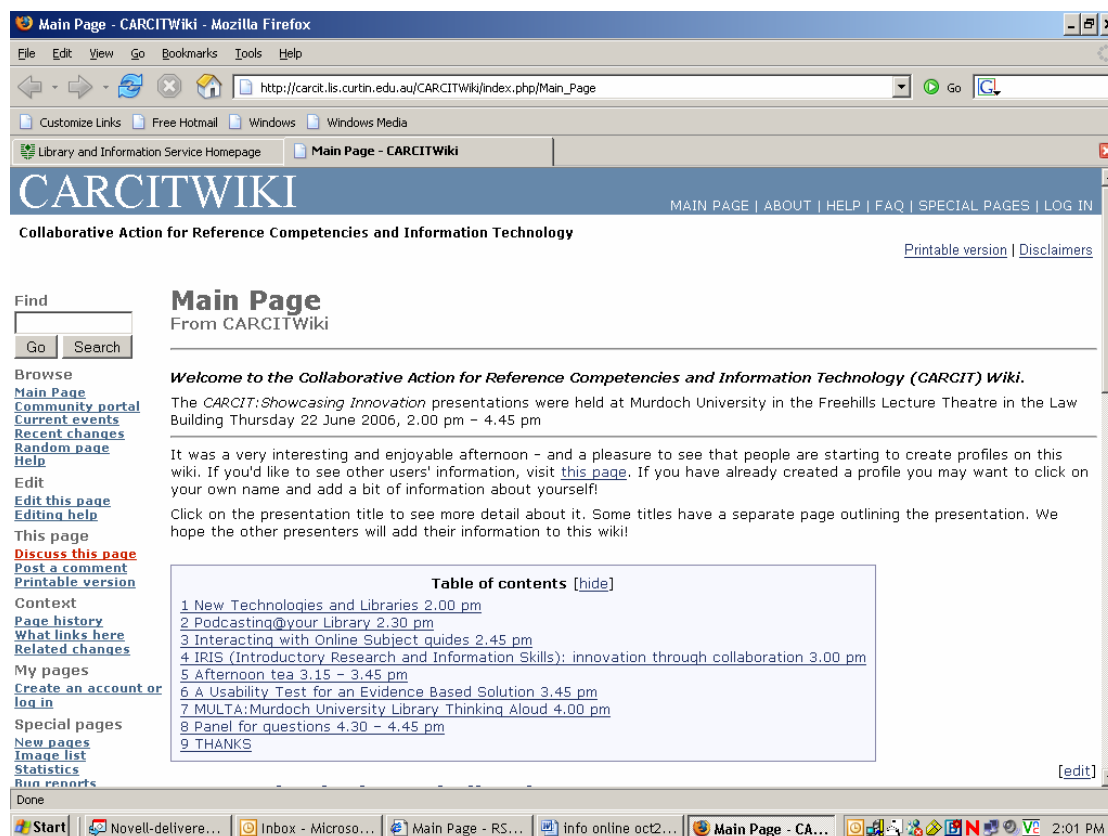
¹⁷ Read, Brock 2006, ‘Can Wikipedia Ever Make the Grade?’ *The Chronicle of Higher Education*, vol. 53 no. 10 pA31, Retrieved 13 October 2006 from <http://chronicle.com>

¹⁸ Drakos, N, et al. 2004, ‘Wikis can improve collaborative work and knowledge sharing’. Retrieved: 30 January 2006, from Gartner.

¹⁹ Ibid

As this is a wiki for internal use only we have not made any changes to the default 'skin' but a wiki we host for a librarians' professional development group in Western Australian - CARCIT (Collaborative Action for Reference Competencies and Information Technology) is an example of a different choice of skin.

The CARCIT wiki: <http://carcit.lis.curtin.edu.au>



We are starting to see the advantages of using wikis in areas where we would like to have more feedback and interaction with our users. Users of the future are likely to want much more than static web pages from libraries and we are thinking of how we could use a wiki for much of the content currently on the library webpage.

Conclusion

Open-source software has allowed us to experiment with a variety of new technologies. We've implemented projects we would have been very unlikely to try if we'd had to pay a heavy licence fee for the software. We have been able to adapt and change the software where we needed, but also used some with scarcely a change. Open source software has given us the opportunity to give new technologies a whirl and see what works for us and our users. We hope our experiences will inspire other libraries to try some of these things too.