

ZAVIER - Wider than Libraries Deeper than the Web

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Abstract:

“ZAVIER” STANDS FOR Z39.50 ARTS VICTORIA INTEROPERABILITY PROJECT. IT WAS DESIGNED TO DEMONSTRATE THE FEASIBILITY OF USING Z39.50 TO SEARCH THE DATABASES OF THE MAJOR VICTORIAN CULTURAL ORGANISATIONS – THE NATIONAL GALLERY OF VICTORIA, THE MUSEUM OF VICTORIA, THE STATE LIBRARY OF VICTORIA, THE PERFORMING ARTS MUSEUM, CINEMEDIA AND PUBLIC RECORDS OF VICTORIA. THIS PROVED TECHNICALLY FEASIBLE, BUT IF SUCCESS IS MEASURED BY CONTINUING LIFE – THIS PROJECT WOULD HAVE TO BE CONSIDERED A FAILURE. THIS PAPER BRIEFLY OUTLINES THE PROJECT AND SUGGESTS SOME REASONS FOR ITS NON-CONTINUANCE.

ZAVIER, WIDER THAN LIBRARIES, DEEPER THAN THE WEB.

A Chronology

In 1997 IT staff from the major Victorian cultural institutions started to meet to discuss ways of sharing their experiences. The group was named COMDIG (Cultural Organisations Metadata and Interoperability Group), and the membership was –

Helen Page	• COMDIG Convenor, National Gallery of Victoria
Anne Beaumont	• State Library of Victoria, liaison with National Library of Australia Metadata project
Tim Bosher	• Museum of Victoria and AMOL representative
Russell Browne	• Arts Victoria, HCC New Technologies Committee
Kevin Cassidy	• Public Records Office
Claudia Funder	• Performing Arts Museum
Indra Kurzeme	• State Library of Victoria (Multimedia Source Project), liaison with VICNET and Public Libraries on-line
Robin Wright	• Cinemedia (Digital Media Library, Performing Arts Media Library)

and the objectives were to –

- “Provide an expert group forum to explore issues on relevant metadata and database interoperability issues.
- Encourage interagency collaboration on project development and project outcomes.
- Plan cross agency implementation models for online access to cultural content.
- Implement common core standards across COMDIG member databases where possible.
- Act as a steering committee for developing cultural sector projects which will deliver increased online access to cultural resources.
- Provide timely and expert advice on pertinent issues to industry and other government steering committees and working parties.
- Disseminate information.
- Liaise with relevant national and international organisations.”¹

Meetings were held, with discussions covering a number of related issues. At around this time DSTC (Distributed Systems Technology Centre) was working with the Museum of Victoria on implementing its new database, and there was a suggestion that they work out a proposal to demonstrate the feasibility of interoperability between the databases of the COMDIG organisations. This was done and a proposal presented.

The next task was to get the money for a pilot project. After a considerable amount of negotiation and re-negotiation, money was provided by Arts Victoria, Multimedia Victoria and the Commonwealth New Technologies Working Party. Eventually the contracts were signed and work got underway.

The objective of the project was “to determine, via the implementation of a pilot system, the full potential of Z39.50 and the CIMI (Consortium for the Interchange of Museum Information) profile to deliver cross-cultural searching and retrieval across a diverse range of distributed Victorian cultural databases”.²

Meetings were held in Melbourne between COMDIG as a group and the DSTC staff members Sonya Finnegan and Linda Bird to discuss broad concepts for the user interface, including the 'Icon Search' topics, and also between DSTC staff and individual organisations to discuss database issues relevant to each site. There was also a steady stream of emails between all those involved. For the Icon searches, staff members from the various institutions identified appropriate images and wrote accompanying text.

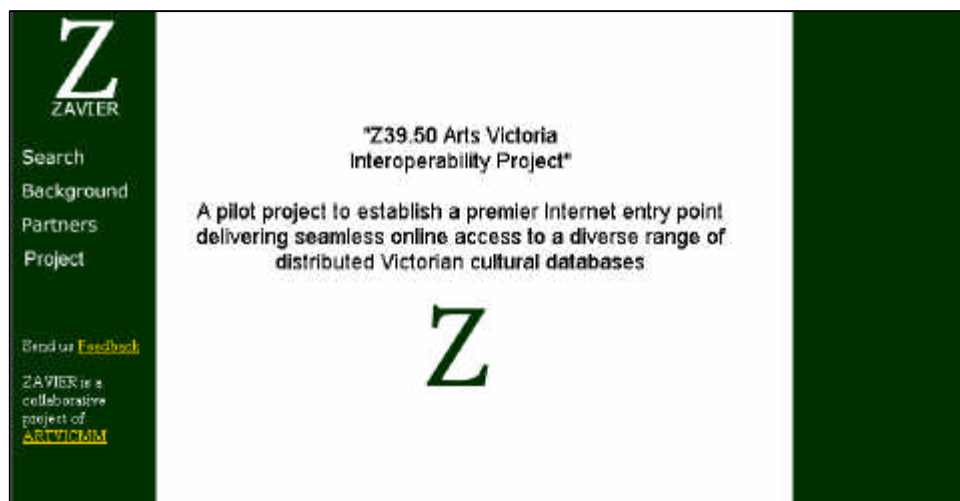
The State Library of Victoria was the only organisation whose database was already Z39.50 compliant, so there was need for relatively little interaction beyond explaining the basic setup. For all the other institutions it was decided that to make testing easier, all the databases would be replicated at DSTC and the specifically designed Z-servers would also be hosted there. To simulate the remote deployment of the Z-servers each agency database and server (where appropriate) was placed on a separate machine using different hardware and software platforms. For each of the individual databases (apart from the State Library of Victoria) a mapping to the CIMI profile from the native database structure was done to enable the searching. Mapping to Dublin Core was also carried out. Details of the servers and the database mappings are available in the official DSTC reports of the project.³

Then Zavier went live. During the time it was live I gave presentations on Zavier within my own organisation & to VALA, but there was little *concerted* effort by the original group to publicise the project. At the end of the pilot phase DSTC wrote a report, including an executive summary⁴ which was discussed by the COMDIG group. It was agreed to seek the additional funding necessary to keep the servers operational in Queensland, however this was not available, so at the moment we have an excellent report of what I believe was a very valuable project – and I have some screen grabs to show you what was achieved.

Sample screens

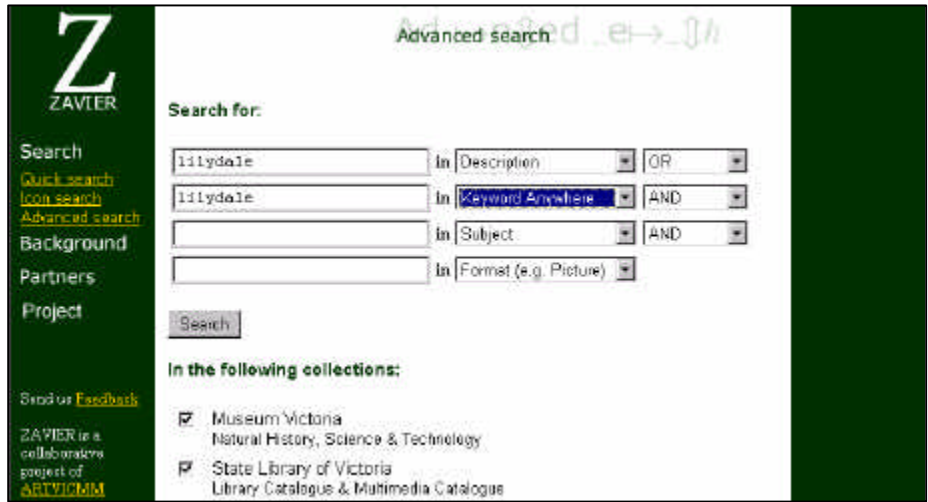
Front screen.

This is a simple design created largely by one of the Museum of Victoria staff



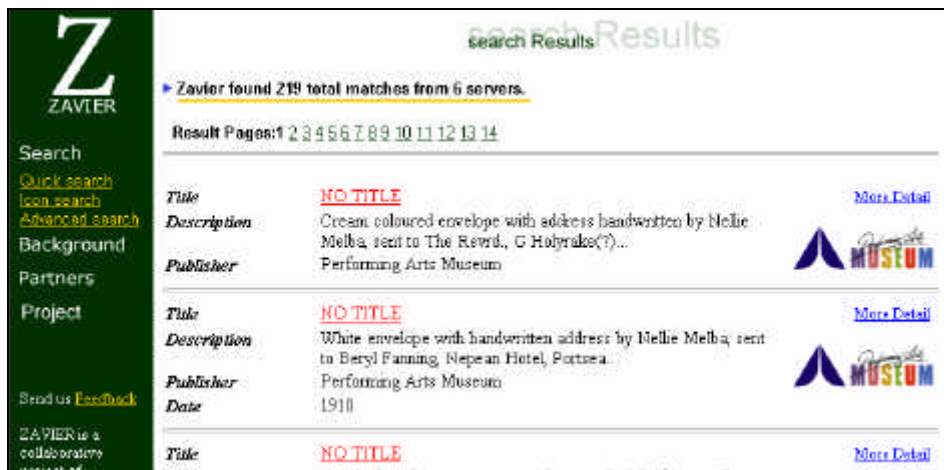
Advanced Search Screen

Gives the ability to search on different fields and to use Boolean operators



Results pages

First results page shows total number of items retrieved and number of different servers.



Another page shows results from different organisations, including live links to images.



Final results page summarises information

ZAVIER

Title [The Boroondara standard and Bulleen, Nunawading and Lilydale advertiser.](#) [More Details](#)

Publisher Hawthorn, Vic. : E. Kidgill

Date Began in 1871 Cf. Newspapers in Australian libraries. -v. 8, no. 11 (Mar. 14, 1884)

Information On Selected Servers

Performing Arts Museum (6 retrieved, no more)	Catalog (1 retrieved, no more)
dynix-naxx (10 retrieved, 134 more)	Cinema (No result in search)
Museum (10 retrieved, 2 more)	Public Records Office (No result in search)
National Gallery of Victoria (5 retrieved, no more)	dynix (10 retrieved, 51 more)

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View of individual record(s)

Gives data mapped to Dublin Core

ZAVIER

search Results

Detailed Results

Title 1982.006.0017359

Identifier 1982.006.0017359

Type Letter

Contributors Nellie, MELBA, Singer, opera

Description Handwritten letter to Mr Rust, vicar at Lilydale, from Nellie Melba on letterhead from Coochie Cottage, Coldstream. Melba writing to apologise for being unable to attend church. No date, c1920s?

Subject Singer, opera; Singer, Australian; Music, performer; Melba, Nellie (Dame)

Publisher Performing Arts Museum

This record has been returned from the Performing Arts Museum. [Click here](#) to view more information on the Performing Arts Museum collection.

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Where there was a live link in the record, it was possible to go the the attached image

ZAVIER

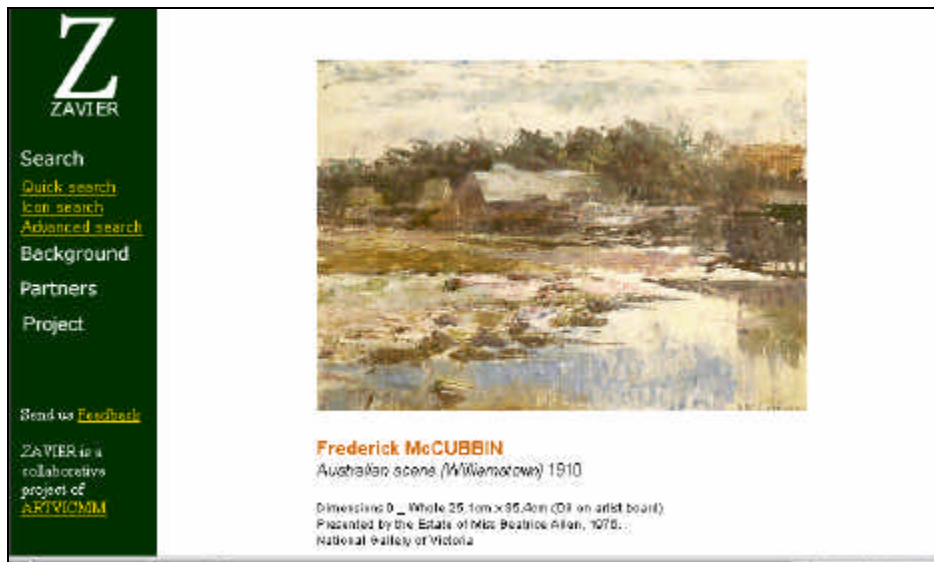
Multimedia Catalogue

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We also have some statistics -

“Since 9 Dec 1998, there have been a total of 2,916 queries made to the Zavier web site (ie. about 325 queries per month). This figure excludes those queries which were made from DSTC hosts, as most of these were probably made for debugging and support purposes. The breakdown of figures for each query interface is:

- 1,993 Cultural Icon seaches
- 754 simple keyword seaches
- 169 advanced searches

We are unsure as to how many of the cultural icon queries were performed by web crawlers ... but suspect that the trend between search types is still probably fairly indicative of the search patterns.

Based on our analysis, it seems that 581 unique hosts (+ 50 hosts that could not be resolved) have requested pages from the site since 2 October 1998. Based on these figures, we estimate that the site is probably attracting about 60 users a month (about half of these sites have come from within Australia)#⁵

So what was learnt?

I can only give my own opinions, others might have different views.

I learnt what wonderful resources the other cultural institutions have. Like the Library, both the National Gallery and the Museum of Victoria have very significant proportions of their collections in ‘closed access’ and the only way to find out about them is from their databases. Searching their web pages is little help. For example I found that the National Gallery has a very large collection of Edna Walling photographs (I had always thought of her as a garden designer rather than a photographer – shows my ignorance). The State Library of Victoria also has a very large collection of her material. Any scholar would want to find both sets of records, not just one.

I also learnt how advanced libraries are in terms of resource sharing over the other types of cultural organisations. There are good reasons for this. Libraries usually acquire identical

copies of the **same** 'logical' item (title), so it makes sense to only catalogue once and share the workload. This necessitated the development of a common format for that record, and also led to the development of union catalogues. Museums (including Art Museums/Galleries) are interested in acquiring **unique** items, so there is little opportunity to share the workload, and little incentive to develop any common record format(s). This has continued on with the Z39.50 BIB-1 profile being developed significantly in advance of the CIMI (Computer Interchange of Museum Information) one.

This has had an effect on the developers/vendors of automated systems for the different markets. Almost all Library system vendors have had some form of Z39.50 capability for some years now. Vendors of systems for museums and galleries are not even aware apparently of what Z39.50 is. This makes it very difficult for organisations who are trying to purchase systems to find ones that can work 'out of the box', and the development of specialised servers is a costly exercise.

I learnt that the Web is sexy, databases are not sexy, and that technical people probably need assistance with publicity. As a group we should have started to promote the project much earlier than we did. We really waited until the end of the project when the report was written before making major bids for continued funding. We should probably have started demonstrating it to the funding authorities and our individual CEOs about 6 months earlier. We should have arranged publicity in the computer pages of the daily papers. We should probably have tried to identify some of our known researchers who were likely to find the resources useful, and contacted them individually. It is easy to be wise after the event, but unfortunately we – the Victorian cultural institutions - seem to have lost a very valuable resource. However I think DSTC probably also learnt something, and maybe they will be able to build on that with other projects – as we are not the only ones trying to do this sort of thing. Sonya Finnegan alerted me to several similar projects, which can be seen at the following sites –

**Texas Association of Museums
Aquarelle**

<http://www.io.com/~tam/search.html>
http://www.ercim.org/publication/Ercim_News/enw33/michard1.html

I personally learnt an enormous amount about Z39.50 and its implications for configuration of internal library systems. It is not 'plug and play' but it is worth working to develop some understanding of it, the better to make your institutions' resources widely available – and isn't that the name of the game today?

1. Victorian C.O.M.D.I.G. (Cultural Organisations Metadata and Database Interoperability Group). *"Terms of reference."* 1997
2. DSTC Pty Ltd. *"Proposal to the Victorian Cultural Organisations Multimedia and Database Interoperability Group (COMDIG) for The Distributed Database Interoperability Project (DDIP)."* Queensland: DSTC, 1998.
3. Distributed Systems Technology Centre. *"Technical Architecture and Issues. ZAVIER – Z39.50 Arts Victoria Interoperability Project."* Queensland: DSTC, 1999.
Distributed Systems Technology Centre. *"Z39.50 configuration Details. ZAVIER – Z39.50 Arts Victoria Interoperability Project."* Queensland: DSTC, 1999.
4. Distributed Systems Technology Centre. *"ZAVIER Executive Report Summary. ZAVIER – Z39.50 Arts Victoria Interoperability Project."* Queensland: DSTC, 1999.
5. Bird, Linda (lbird@dstc.edu.au). "Zavier statistics" E-mail to Anne Beaumont (anneb@slv.vic.gov.au) 27 August 1999.