MONASH University Library



Link Checking in Voyager

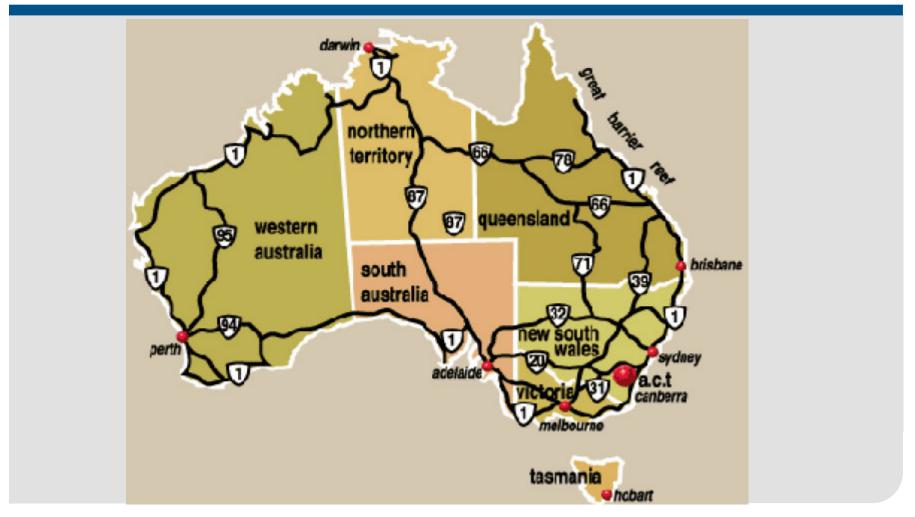
Simon Huggard, Systems Manager, Monash University Library IGeLU, Brno. 4 September 2007

Outline

- About myself and Monash University
- Why do link checking?
- Voyager programs
- My programs elinks and exams
- Future development
- Questions/discussion



About Monash University





About Monash University & the library

MONASH UNIVERSITY

- 6 campuses in Victoria, Australia, 1 in Malaysia and 1 in South Africa.
- 53,000 students
- 10 Faculties
- 5000 academic and general staff







Monash University Library

• LIBRARY

- 8 branch libraries
- 1.9 million books
- 60,000 journals
- 111,000 e-books & e-journals
- 600 electronic databases
- 265 library staff
- Systems Area 16 staff web, MULO, voyager/unix, help desk, it support.







Service Level Agreement

Service: No. 1 – Inform	ation Resources: Access a	nd Delivery			
Service description: Access	to materials and resources				
Key Performance Indicator	Result	Date reported/ to be reported	Period covered by statistics	Frequency to be reported	Measured by
The library catalogue available during core service hours Monday to Friday 8.30am to 5.30pm with the exception of scheduled downtimes	System available 98.2% of core service hours. There were 10 hours of outages during core hours which were unplanned.	April, July, October and January	January – March 2007	Quarterly	% of hours the library catalogue available during core service hours

Service: No. 2 – Inform	ation Resources: Collection	Management			
Service description: Develop	pment, selection, acquisition, catalog	uing, maintenance and	d overall mana	gement of library r	esources
Key Performance Indicator	Result	Date reported/ to be reported	Period covered by statistics	Frequency to be reported	Measured by
95% of web links in the library catalogue are accurate	98.5% of web links in the library catalogue were accurate.	April, July, October and January	January – March 2007	Quarterly	% of accurate links in the library catalogue identified by monthly link checking program



Link checking programs – Voyager – catjob 9 or 10

Table 2-4. Cataloging batch jobs

Cataloging Batch Job Number	Cataloging Batch Job Name	Report Name	Record Type Num- ber
Catjob 6	'See' References With Linked Bib Records Report	See Refs with linked bib records	Туре 06
Catjob 7	'See' References Authorized In Another Authority Record Report	See Refs autho- rized in another record	Туре 07
Catjob 8	'See Also' Refer- ence Without Corre- sponding Authority Record Report	See Also Refs with- out an Authority record	Туре 08
Catjob 9	HTTP Verification - Within Date Range	856 Link Failure report	Туре 09
Catjob 10	HTTP Verification - All New Links	856 Link Failure report	Туре 09

This is from the Reporter Users Guide



Voyager link checking program

- Catjob 10 only validates NEW links
- Catjob 9 will revalidate ALL links within a date range

NOTE:

Catjob 10 *does not* revalidate links that have previously been validated, whereas catjob 9 *does* revalidate links. As a result, you should run catjob 10 first to validate all new links then run catjob 9 to revalidate links that were last checked within the specified date range.

• These jobs can be run from command line on the server, or from WebAdmin.





http://voydb.lib.monash.edu.au/webadmin/cgi-bin/catjob.cgi

Cataloging Reports and Processes

Select the report you want to run and press the submit button. Certain reports require a starting and ending date, and some require a location code. When you select one of these reports, you will be prompted for the apropriate information.

When the job is completed, you will receive notification via email that the job is complete as well as any additional information which was provided by the job. You will be able to retrieve the data generated using the Voyager reporter program (follow instructions in Accessories manual).

Also, check for the log file under "Voyager's Report Files" and look for "catjob.log".

10. HTTP Verify - All	
Email Address: Simon.Huggard@lib.mc required	Ŕ
Job Scheduler	
Return to Main Page	
Email notification to: Simon.Huggard@lib.mona job: catjob -j 10	sh.edu.au



Catjob.log file

Fri Aug 17 10:19:11 2007 Job execution begun.

Fri Aug 17 10:19:12 2007 Connection to Voyager Database successful...

Fri Aug 17 10:19:12 2007 HTTP Verify - All

Fri Aug 17 10:19:12 2007 Opening report file...

Fri Aug 17 10:19:12 2007 Building HTTP Bad Link Report...



Output file – catrprts.SYS.inp

For Cataloging batch jobs, the file that is created is always named catrprts.xxxx.inp.

catrprts.SYS.inp

09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2200297|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2199943|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2200307|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2201512|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2201512|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2201749|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2201749|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2201749|08/17/2007 09|97.2||...|http://...|URL|0|Invalid Response Code|Bibliographic|2201749|08/17/2007 09|97.2||142.206.72.67|http://142.206.72.67/r000_e.htm|URL|302|Moved Temporarily|Bibliographic|5974|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=103|URL|0|Invalid Response Code|Bibliographic|1731442|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=103|URL|0|Invalid Response Code|Bibliographic|1724384|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=108|URL|0|Invalid Response Code|Bibliographic|1724384|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=108|URL|0|Invalid Response Code|Bibliographic|1724384|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=1108|URL|0|Invalid Response Code|Bibliographic|1724384|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=11|URL|0|Invalid Response Code|Bibliographic|1471800|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=11|URL|0|Invalid Response Code|Bibliographic|1471800|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=11|URL|0|Invalid Response Code|Bibliographic|1471800|08/17/2007 09|97.2||217.160.60.64|http://217.160.60.64/fb/link4.php?id=11|URL|0|Invalid Response Code|Bibliographic|1725481|08/17/2007 09|97.2||217.160.60.64|http:/



Entries in the log file

09|97.2||ezproxy.lib.monash.edu.au|http://ezproxy.lib. monash.edu.au/login?url=http://gateway.proquest.c om/openurl?ctx_ver=Z39.88-2003&res_id=xri:eebo&rft_val_fmt=&rft_id=xri:eebo :image:35198|URL| 0|Invalid Response Code |Holdings|2178856|08/17/2007

09|97.2||name.umdl.umich.edu|http://name.umdl.umic h.edu/AAN7780|URL| 404|Not Found |Bibliographic|2105711|08/17/2007



Big bit verw High year Hig	😻 Document Images - EEBO - Mozilla Firefox	
Getting Statute © Lattest Headines © Databay File ♥ University of Michigan Library Name R © Document Images - EEBO E E B O EARLY ENGLISH BOOKS ONLINE Do cu Im en L Im alg es Home MARKED LIST SEARCH HISTORY HELP ? SEARCH: Basis Advanced Periodicals BROWSE; Authors Thomason Tracts Periodicals View this document as: © © @ ?? Help on downloading Add this record to your Marked List Durable URL · (new fact Ourable URL · (new fact Ø ?? · (new	<u>File Edit View Higtory Bookmarks Tools H</u> elp	
Departer Images - EEBO Concernent Im	<	Q)
E E B O EARLY PROCLEME BOOKS ONLINE Do c u m ent im ages HOME MARKED LIST SEARCH HISTORY HELP? SARCH Basic Advanced Periodicals BROWSE? Authors Thomason Tracts Periodicals View this document as: Image Image Help on downloading Image Image Help on downloading Image Add this record to your Marked List Image Image Marked List Image Image Add this record to your Marked List Image Image Market List Voice to the City, Or, ALoud Car from Graphic Image Mext Image >> To Image Image Her S image Image Image Image Her S image Mext Image >> To Image Image Image Her S image To Image Image Image Image Her S image Image Image Image Image Image Image Image Image Her S image To Image Image Image Image Image Her Image	se Getting Started 🔂 Latest Headlines	
Document Images HOME MARKED LIST SEARCH HISTORY HELP? SEARCH: Basic I Advanced I Periodical: BROWSE: Authors I Thomason Tracts I Periodical: View this document as: Image Imag	🖏 Display File 🔣 University of Michigan Library Name R 🖂 🗋 Document Images - EEBO 🔯	-
SEARCH: Basis Advanced Periodicals BROWSE: Authors Internations View this document as: Image and the leg on downloading Add this record to your Marked List Durable URL « Previous illustration Next illustration >>	E E B O EARLY ENGLISH BOOKS ONLINE	-
View this document as: B B B B Help on downloading Add this record to your Marked List w Previous illustration Next illustration >> Woice to the City, Or, A Loud Car from HERAVEN T O LONDDON Setting before her \$ 11 x 5, Her S 1 x 5, Her R 1 x 1 x 0 1 1 5. Mich. 6.9. The Lords Fries crysthistic (b), here te Red, and web bat's appointed it. LONDON	Document Images Home MARKED LIST SEARCH HISTORY HELP?	
Add this record to your Marked List Add this record to your Marked List Durable URL • Previous illustration Next illustration >> • Previous illustration Next illustration >>	SEARCH: <u>Basic</u> <u>Advanced</u> <u>Periodicals</u> BROWSE: <u>Authors</u> <u>Thomason Tracts</u> <u>Periodicals</u>	
<pre>« Previous illustration Next illustration >></pre>	View this document as: 🗈 🛱 🖷 🖷 Help on downloading	
Voice to the City, or, ALoud Car from HEAVEN T O LONDON Her SINS, Setting before her Her SINS, Her R & M & D I & S. Mich. 6.9. The Lords Price crysthe the City, hear the R & M & D I & S. Mich. 6.9. The Lords Price crysthe the City, hear the R & M & D I & S.	Add this record to your Marked List	
Voice to the City, or, A Loud Car from HEAVEN T o LONDON Setting before her {Her S 1 N 5, Setting before her {Her S 1 N 5, Her R & M ED 1 & 5. Her R & M ED 1 & 5. Her R & M ED 1 & 5.	<< Previous illustration Next illustration >>	
Done	Voice to the City, or, A Loud Car from HEAVEN To LONDON Setting before her Her Sins, Her Raw zoitas: Mich. 6.9. The Lords Poice crysto to the City, hear che Rod, and who hat appointed it.	
	Done	

Library

0
Q
•
1 of 1
ally. Please
1 of 1

Printed Link Failure Report

856 Link Failure Report

08/17/2007					Date Range:
Link Host					
name.umdl.um	ich.edu				
Link Type:	URL	Link Text:	http://name.umdl.umich.edu/AAN7780		
Error Code:	404	Error Text:	Not Found		
Record Type:	Holdings		Record ID: 2178856	Date Updated:	08/17/2007
ezproxy.lib.mor	nash.edu.au				
Link Type:	URL	Link Text:	http://ezproxy.lib.monash.edu.au/login?u	rl=http://gateway.proques	st.com/openurl?ctx_ver=Z39.88-2003&res_id=xri
Error Code:	0	Error Text:	Invalid Response Code		
Record Type:	Bibliographic		Record ID: 2105711	Date Updated:	08/17/2007

End of 856 Link Failure Report



Link checking around the world

- Most libraries export all the links from voyager
- Create an HTML file of links
- Link checking programs : many out there - Xenu - most popular



Other libraries

```
----- Original Message -----
Subject: [VOYAGER-L]: Link Checker Program
Date: Tue, 15 May 2007 11:00:02 -0400
From: Jason Zou <qzou@lakeheadu.ca>
To: voyager-1 <voyager-1@voyager.ship.edu>
```

Hi everyone,

```
At the EndUser 2007, I had a poster session about a link checker
program I developed.
I have updated the program based on some comments and suggestions
gathered at the conference.
```

```
You can download the program from the following URL:
http://erl.lakeheadu.ca/staff/doku.php?id=public:elink checker
```

Hope you may find this helpful.

Jason

_

```
Jason (Qing) Zou
Systems Librarian
Lakehead University Library http://library.lakeheadu.ca
(807)343-8251, qzou@lakeheadu.ca
```

Link Checking at Monash

- Elinks program to extract all links and massage them into meaningful smaller files
- Exams link checker extracts all links and does checking online



Elink_index table

- Has just over 500,000 links in it
- Includes duplicates from MFHD and BIB records
- We don't want to check all links
- Some databases don't like you checking all links at once (and block your access)
- We don't want to count link checking via our ezproxy server



- Copies and sorts links from the elink_index table
- Deduplication of links
- Checking of 4 links per database domain

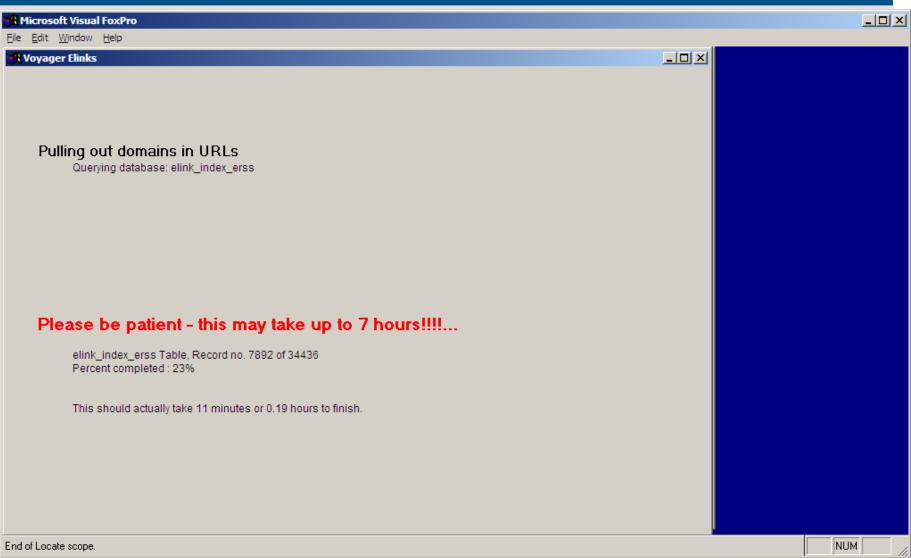


- Pulls out TOC and book review URLs
- Pulls out IMDB (movie info) links
- Sorts into separate HTML files of 1000 links each
- Removes ezproxy from the URL



Microsoft Visual FoxPro File Edit Window Help	
Voyager Elinks	
Voyager elinks program - Version for Michelle Rusiniak	
Retrieving data from the E-links table.	
Please wait	
The program excludes ERES, ERES-W and ERES-D locations as well as MLO records. It gets all records, including those without MFHDs. Our e-links table has over 490,000 records in it at present, Program written in Microsoft Visual FoxPro 7 by Simon Huge 21 August, 2001. Updated 21 August 2007 6:20pm March - May 2007 - new code for SS records, TOC & other links and to fix some bugs	
30 May 2005 - added code to remove MLO records	
11-21 March 2005 - made changes to speed up the program. 24 March 2005 - added code to remove ERES locations	
10 March 2005 - no longer gets suppressed records.	
4 March 2004 - only gets 5 links from same database	
Record: 1/112127 Exclusive	NUM //

Elinks program in detail



Microsoft Visual FoxPro	_
<u>E</u> dit <u>W</u> indow <u>H</u> elp	
Voyager Elinks	
Pulling out domains in URLs	
Querying database: elink_index_rest	
Please be patient - this may take up to 7 hours!!!!	
elink_index_rest Table, Record no. 67811 of 570107	
Percent completed : 12%	
This should actually take 190 minutes or 3.17 hours to finish.	

Elinks program – detailed description

Name 🔺	Size	Туре	Date Modified
<pre>elink_index_erss2007082116-02-43.html</pre>	117 KB	Firefox Document	2007-08-21 4:02 PM
link_index_erss2007082116-02-45.html	144 KB	Firefox Document	2007-08-21 4:02 PM
link_index_erss2007082116-02-48.html	159 KB	Firefox Document	2007-08-21 4:02 PM
link_index_erss2007082116-02-51.html	153 KB	Firefox Document	2007-08-21 4:02 PM
link_index_erss2007082116-02-54.html	34 KB	Firefox Document	2007-08-21 4:02 PM
link_index_erss-ezproxy2007082116-02-40.html	118 KB	Firefox Document	2007-08-21 4:02 PM



Elinks HTML files

😢 Mozilla Firefox	
<u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp	\bigcirc
< - 🔶 - 🧭 - 🚱 🏠 👟 🗋 /marc/generic/elinks-distrib/michelle/new/: - 🕨 💽 - Google	Q
🦚 Getting Started 🔊 Latest Headlines	
http://ezproxy.lib.monash.edu.au/login?url=http://www.molbiolcell.org (2137230 - B)	<u> </u>
http://ezproxy.lib.monash.edu.au/login?url=http://www.plantcell.org (2138853 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://www.plantphysiol.org (2138867 - B)	
http://ezproxy.lib.monash_edu.au/login?url=http://www.pnas.org (2139498 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://ajpcell.physiology.org (2165516 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://ajpendo.physiology.org (2165517 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://ajpgi.physiology.org (2165518 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://edrv.endojournals.org (2165768 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://endo.endojournals.org (2165770 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://www.fasebj.org (2165806 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://jap.physiology.org (2165925 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://www.jbc.org (2165927 - B)	
http://ezproxy.lib.monash.edu.au/login?url=http://www.jcb.org (2165934 - B)	
	ŀ
http://www.pnas.org/	/

LINI UI Y

Link checking with Xenu

Xenu is freely available from:

http://home.snafu.de/tilman/xenulink.html

Xenu File <u>V</u> iew Options <u>H</u> elp	
Ready	

	🕅 Xenu
	File View Options Help
Xenu	Check URL Ctrl+N Open Ctrl+O Check URL List (Test) Recent File
	Exit Ctrl+Q
	Xenu's starting point
	What address do you want to check? (Enter your "root URL", e.g. http://www.host.com/~user/ and all local pages linked from it will also be checked) Or click "Browse" to check your local files the same way! y Documents\marc\generic\elinks-distrib\michelle\new\elink_index_erss-ezproxy2007082118-44-20.htm(
	Check external links
	Expand / Restrict
	Consider URLs beginning with this as 'internal': Add Delete
	Do not check any URLs beginning with this: Add Delete
	More <u>options</u> e- <u>m</u> ail OK Cancel

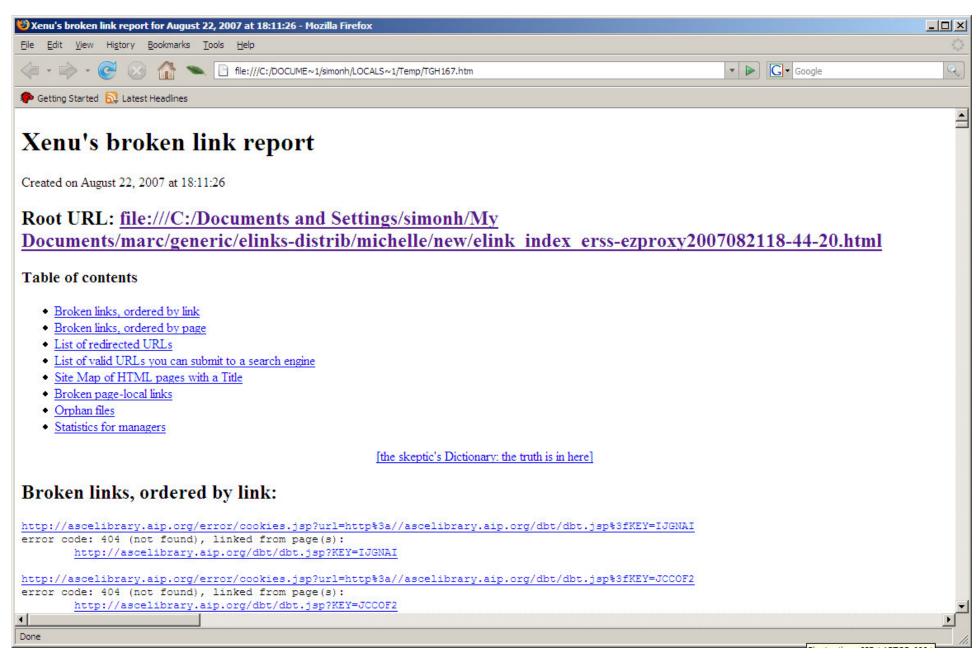


Xenu - [Xenu1]					
Eile Edit View Options Window Help					_ 8
ddress	Status	Туре	Size	Title	
e:///C:/Documents and Settings/simonh/My Documents/marc/gen	ok	text/html	120022		21.08.
tp://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res	ok	text/plain		http://ezproxy.lib.monash.edu.au	
tp://circ.ahajournals.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://circres.ahajournals.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
tp://www.genetics.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://archinte.ama-assn.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://archneur.ama-assn.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://archpedi.ama-assn.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://stroke.ahajournals.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.amjbot.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
tp://ajp.amjpathol.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.annals.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://aac.asm.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://aem.asm.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.biolreprod.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.biophysj.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
tp://www.bmj.com/	pending			http://ezproxy.lib.monash.edu.au	
tp://cvi.asm.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.clinchem.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://cmr.asm.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.cmaj.ca/	pending			http://ezproxy.lib.monash.edu.au	
tp://ec.asm.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.genesdev.org/	pending			http://ezproxy.lib.monash.edu.au	
tp://www.genome.org/	busy			http://ezproxy.lib.monash.edu.au	
tp://www.geochemicaltransactions.com/	pending			http://ezproxy.lib.monash.edu.au	
10. 140 C C C C C C C C C C C C C C C C C C C					Þ
ady Thr	eads: 29			292 of 789 URLs (37	%) done

Library

🔀 Xenu - [Xenu1]					_ 🗆 ×
Eile Edit View Options Window Help					_ 8 ×
Address	Status	Туре	Size	Title	
http://lea.sagepub.com/	ok	text/html	1	http://ezproxy.lib.monash.edu.au	
http://mend.endojournals.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://pharmrev.aspetjournals.org/	pending			http://ezproxy.lib.monash.edu.au	
http://physiolgenomics.physiology.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://www.physiologyonline.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://www.proteinscience.org/	pending			http://ezproxy.lib.monash.edu.au	
http://stemcells.alphamedpress.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://ajpcon.physiology.org/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://www.theannals.com/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://adc.bmj.com/contents-by-date.0.shtml	pending			http://ezproxy.lib.monash.edu.au	
http://afraf.oxfordjournals.org/archive/index.dtl	pending			http://ezproxy.lib.monash.edu.au	
http://ageing.oxfordjournals.org/archive/index.dtl	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://aje.oxfordjournals.org/archive	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://ajrccm.atsjournals.org/contents-by-date.0.shtml	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://aler.oxfordjournals.org/archive	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://alh.oxfordjournals.org/archive	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://als.dukejournals.org/archive/	pending			http://ezproxy.lib.monash.edu.au	
http://americanliterature.dukejournals.org/archive/	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://americanspeech.dukejournals.org/archive/	pending			http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-archive&issn=	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-archive&issn=	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-archive&issn=	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-archive&issn=	pending			http://ezproxy.lib.monash.edu.au	
http://aob.oxfordjournals.org/archive/index.dtl	pending			http://ezproxy.lib.monash.edu.au	
http://applij.oxfordjournals.org/archive	ok	text/html		http://ezproxy.lib.monash.edu.au	
http://ard.bmj.com/contents-by-date.0.shtml	pending			http://ezproxy.lib.monash.edu.au	
http://arjournals.annualreviews.org/loi/fluid	ok		95	http://ezproxy.lib.monash.edu.au	
A distant di				· · · · ·	Þ
teady Thr	eads: 27			574 of 884 URLs (6	4 %) doni

Xenu - [Xenu1]				- 🗆 🗵
File Edit View Options Window Help				_ 8 ×
Address	Status	Type Siz	e Title	
http://adc.bmj.com/contents-by-date.0.shtml	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://afraf.oxfordjournals.org/archive/index.dtl	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://ageing.oxfordjournals.org/archive/index.dtl	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://aje.oxfordjournals.org/archive	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://ajrccm.atsjournals.org/contents-by-date.0.shtml	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://aler.oxfordjournals.org/archive	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://alh.oxfordjournals.org/archive	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://als.dukejournals.org/archive/	ok	textAtml	http://ezproxy.lib.monash.edu.au	
http://americanliterature.dukejournals.org/archive/ Xenu		×	http://ezproxy.lib.monash.edu.au	
http://americanspeech.dukejournals.org/archive/			http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-ar			http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-ar	Link sleuth finis	hed. Do you want a report?	http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-ar			http://ezproxy.lib.monash.edu.au	
http://ams.allenpress.com/amsonline/?request=get-ar	20 2000/00	1	http://ezproxy.lib.monash.edu.au	
http://aob.oxfordjournals.org/archive/index.dtl	Yes	No	http://ezproxy.lib.monash.edu.au	
http://applij.oxfordjournals.org/archive			http://ezproxy.lib.monash.edu.au	
http://ard.bmj.com/contents-by-date.0.shtml	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://arjournals.annualreviews.org/loi/fluid	ok	9	5 http://ezproxy.lib.monash.edu.au	
http://arjournals.annualreviews.org/loi/anthro	ok	9		
http://arjournals.annualreviews.org/loi/astro	ok	9	5 http://ezproxy.lib.monash.edu.au	
http://arjournals.annualreviews.org/loi/biochem	ok	9	7 http://ezproxy.lib.monash.edu.au	
http://ascelibrary.aip.org/dbt/dbt.jsp?KEY=IJGNAI	ok		http://ezproxy.lib.monash.edu.au	
http://ascelibrary.aip.org/dbt/dbt.jsp?KEY=JCCOF2	ok	N	http://ezproxy.lib.monash.edu.au	
http://ascelibrary.aip.org/dbt/dbt.jsp?KEY=JCEMD4	ok	\searrow	http://ezproxy.lib.monash.edu.au	
http://ascelibrary.aip.org/dbt/dbt.jsp?KEY=JOEEDU	ok		http://ezproxy.lib.monash.edu.au	
http://beheco.oxfordjournals.org/archive	ok	text/html	http://ezproxy.lib.monash.edu.au	
http://bioinformatics.oxfordjournals.org/archive/index.dtl	ok	text/html	http://ezproxy.lib.monash.edu.au	-
▲	100			- F
Ready	Threads: 0		976 of 976 URLs (1	00 %) dor 4
			1970 01 970 01 02 (2	





😻 Xenu's broken link report for August 22, 2007 at 18:11:26 - Mozilla Firefox		<u>_ ×</u>
<u>File E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp		\bigcirc
The second seco	G Google	Q)
🌮 Getting Started 🔂 Latest Headlines		
Broken links, ordered by link:		<u> </u>
<pre>http://ascelibrary.aip.org/error/cookies.jsp?url=http%3a//ascelibrary.aip.org/dbt/dbt.jsp%3fKEY=IJGNAI error code: 404 (not found), linked from page(s):</pre>		
<pre>http://ascelibrary.aip.org/error/cookies.jsp?url=http%3a//ascelibrary.aip.org/dbt/dbt.jsp%3fKEY=JCCOF2 error code: 404 (not found), linked from page(s):</pre>		
<pre>http://ascelibrary.aip.org/error/cookies.jsp?url=http%3a//ascelibrary.aip.org/dbt/dbt.jsp%3fKEY=JCEMD4 error code: 404 (not found), linked from page(s):</pre>		
<pre>http://ascelibrary.aip.org/error/cookies.jsp?url=http%3a//ascelibrary.aip.org/dbt/dbt.jsp%3fKEY=JOEEDU error code: 404 (not found), linked from page(s):</pre>		
<pre>http://eurpub.oxfordjournals.org/archive/ error code: 12017 (cancelled / timeout), linked from page(s):</pre>		
<pre>http://proquest.umi.com/pqdweb?RQT=318&pmid=36036 error code: 403 (forbidden request), linked from page(s):</pre>	link index erss-ezproxy20	007082118-44-2
<pre>http://proquest.umi.com/pqdweb?RQT=318&pmid=38591 error code: 403 (forbidden request), linked from page(s):</pre>	link index erss-ezproxy20	007082118-44-2
<pre>http://proquest.umi.com/pqdweb?RQT=318&pmid=46160 error code: 403 (forbidden request), linked from page(s): file:///C:/Documents and Settings/simonh/My Documents/marc/generic/elinks-distrib/michelle/new/e</pre>	link index erss-ezproxy20	007082118-44-2
<pre>http://proquest.umi.com/pqdweb?RQT=318&pmid=55291 error code: 403 (forbidden request), linked from page(s): file(////////////////////////////////////</pre>	14-1-4-4	······································
Done		1.



http://www.sciencedirect.com/science/journal/02604779
error code: 400 (no object data), linked from page(s):
 file:///C:/Documents and Settings/simonh/My Documents/marc/ger

http://ezproxy.lib.monash.edu.au/login?url=http://www.sciencedirect.com/science/journal/00220728 (2124874 - B) http://ezproxy.lib.monash.edu.au/login?url=http://www.sciencedirect.com/science/journal/02604779 (2124914 - B) http://ezproxy.lib.monash.edu.au/login?url=http://www.sciencedirect.com/science/journal/00275107 (2124918 - B) http://ezproxy.lib.monash.edu.au/login?url=http://www.sciencedirect.com/science/journal/09692126 (2124971 - B) http://ezproxy.lib.monash.edu.au/login?url=http://www.sciencedirect.com/science/journal/09692126 (2124971 - B)

😰 Find: 🛛 ::ience/journal/02604779 😺 Next 🏠 Previous 📄 Highlight all 🔲 Match case

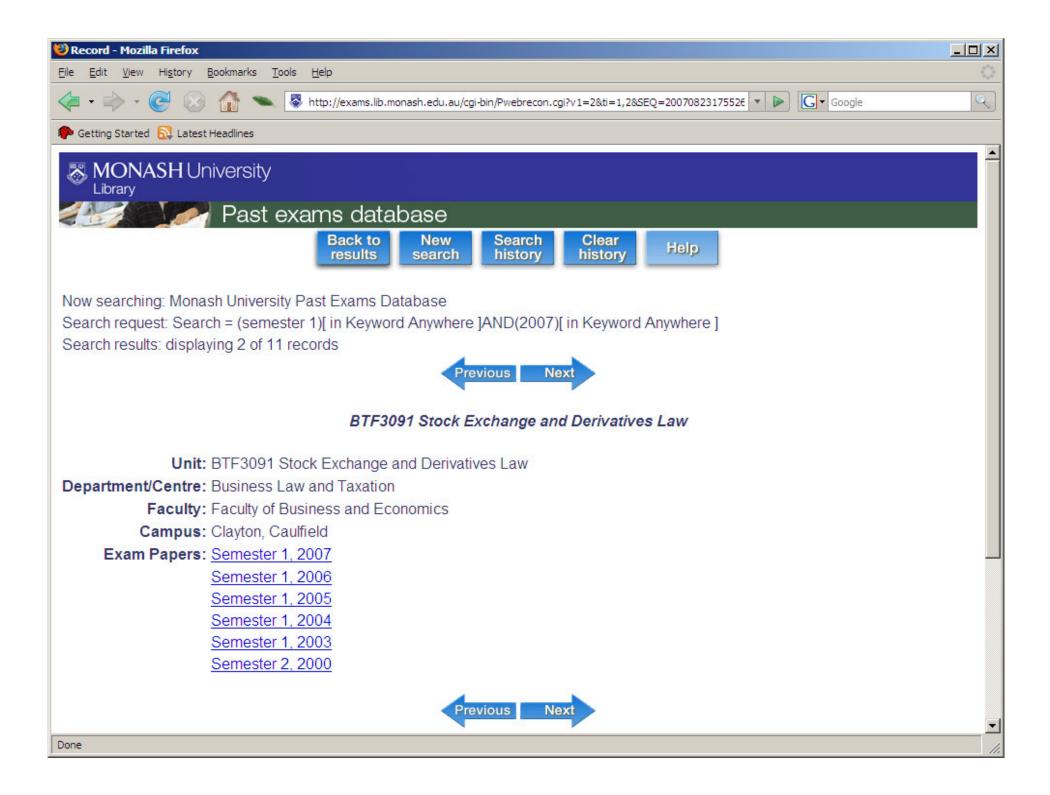


Exams database

- Uses voyager
- Records are in MARC format
- All BIB records, with no MFHDs
- Only 5,700 records in the database
- There are over 17,500 links



🥹 Past exams database, Monash University - Mozilla Firefox	
<u>E</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp	() ()
< r 🔶 r 💽 🛞 🏠 👟 🗟 http://exams.lib.monash.edu.au/	V Scogle
P Getting Started 🔂 Latest Headlines	
S MONASH University Library Past exams database	
Quick search	News
Unit code: Search use ? to truncate eg acc1? separate unit codes with spaces eg acc2351 afx2351 more search options more help Read more <u>about the Past exams database</u>	Database problems The exams database is experiencing problems. We are working on fixing these. Apologies for any inconvenience. Latest additions: Semester 1, 2007 exams are now available. Downtime: Routine backup occurs every day between 2:30am-3:00am. During this time the past exams database may be unavailable.
Need help? Library frequently asked questions and online inquiries: <u>current students/staff</u> <u>public users</u> , <u>online chat</u> , o Something to say? Use our online inquiry service to send us your feedback and suggestions: <u>current students/staff</u> <u>p</u> Library home	
😰 Find: http://www.sciencedirec 🐺 Next 🏠 Previous 📄 Highlight all 🔲 Match case	
Done	
Library	



Exams database link checker

- Shell and perl programs
- Runs on the server on 1st day of each month
- Emails broken links (only) directly to cataloguers
- No maintenance or running of the program manually
- Takes about 2 hours to run (so if I used it for our 500,000 links in our main catalogue – it would take 200 hours or about 10 days to run!)



Exams link checker

00 11 1 * * /m1/voyager/examtestdb/local/examscheck.sh

#!/bin/ksh
Using this to do link checking of PDF files from the examtestdb database
Simon Huggard 29 May 2007

cd /m1/voyager/examtestdb/local exams-link-checker.pl do-exams-checks.pl cp header.txt results.txt

grep examspdf exams-broken.txt >>results.txt cat results.txt | mailx -s 'Exam link checker results' Simon.Huggard@lib.monash. edu.au,michelle.rusiniak@lib.monash.edu.au,nghi.duong@lib.monash.edu.au



exams-link-checker.pl

- SQL query for all links in elink_index
- Creates "exampdfs.txt" (list of all 17,506 of them)

http://examspdf.lib.monash.edu.au/pdf/cl1996/04084163.pdf http://examspdf.lib.monash.edu.au/pdf/cl1995/04083421.pdf http://examspdf.lib.monash.edu.au/pdf/cl1994/04078156.pdf http://examspdf.lib.monash.edu.au/pdf/cl1993/04074633.pdf http://examspdf.lib.monash.edu.au/pdf/cl1997/04087949.pdf http://examspdf.lib.monash.edu.au/pdf/cl1996/04084163.pdf http://examspdf.lib.monash.edu.au/pdf/cl1995/04083421.pdf http://examspdf.lib.monash.edu.au/pdf/cl1995/04083421.pdf



do-exams-checks.pl

It creates one file: examscheck.txt

This file will list all of the status codes that the program finds when checking each URL.

The program first reads in exampdfs.txt and puts each line in to an array.

It then checks each URL as it goes through each one sequentially – and writes the output to examscheck.txt



do-exams-checks.pl

```
open (FHANDLEIN, "$filename") || die "Couldnt open file for reading: $!";
```

```
# while can read another line from file
while (<FHANDLEIN>) {
    $pdffile = $_;
    `/usr/local/bin/wget -nv --append-output
    =/m1/voyager/examtestdb/local/examscheck.txt --
    user=libstats --password=xxxxxx --spider $pdffile`;
```

} # end while read file

close(FHANDLEIN);



Examscheck.txt

200 OK 200 OK 200 OK 200 OK http://examspdf.lib.monash.edu.au/pdf/cl1997/04088255.pdf: 12:00:34 ERROR 404: Not Found. http://examspdf.lib.monash.edu.au/pdf/cl1997/04088256.pdf: 12:00:34 ERROR 404: Not Found. 200 OK 200 OK



Examscheck.txt

- We use the following options with wget:
- -nv, --no-verbose (turn off verboseness, without being quiet - So we only get the URL if there's an error.)
- -- spider (this means just crawl the site but don't download the actual file)



Back to examscheck.sh

Examscheck.sh now just does a couple of things more:

cp header.txt results.txt

grep examspdf exams-broken.txt >>results.txt



Results.txt

This is an output from the exams link checker program called examscheck.sh which is running on the Voyager database server. This program is automatically setup to run on the first day of each month.

Once the output is finished, it emails the results to Michelle Rusiniak, Nghi Duong and Simon Huggard.

The output below is a list of all the BROKEN links in the exams database.

http://examspdf.lib.monash.edu.au/pdf/cl1997/04088255.pdf http://examspdf.lib.monash.edu.au/pdf/cl1997/04088256.pdf http://examspdf.lib.monash.edu.au/pdf/cl1997/04088258.pdf http://examspdf.lib.monash.edu.au/pdf/cl1997/04088259.pdf



examscheck.sh – emailing of results

cat results.txt | mailx -s 'Exam link checker results' Simon.Huggard@lib.monash. edu.au,michelle.rusiniak@lib.monash.ed u.au,nghi.duong@lib.monash.edu.au



🖥 Exam lin	k check	er resu	ts - Th	underb	oird															_	
<u>F</u> ile <u>E</u> dit	<u>V</u> iew	<u>G</u> o <u>M</u> e	essage	Tools	Help	b															1
🥌 🗸	Write	Addres) is Book	Rep	P oly	Reply All	Forwar		Ĵ∕ - Tag	X Delete	Junk	l c	S Print	-	G Back	For	e rward	-			
2000 C	t: Exa																				
Fror	n: <u>Voya</u>	ger Own	er <voy< td=""><td>ager@a</td><td>lexand</td><td>der.lib.mo</td><td>nash.edu</td><td><u>au></u></td><td></td><td></td><td></td><td></td><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></voy<>	ager@a	lexand	der.lib.mo	nash.edu	<u>au></u>													
Dat	e: 2007	-08-01 1	2:21 PM	Ľ.																	
Т	o: <u>Simo</u>	h.Huggar	d@lib.m	nonash.e	edu.au	, <u>michelle</u>	rusiniak(Dib.mo	hash.ed	u.au , <u>nghi</u>	.duong@	lib.mo	onash.eo	<u>du, au</u>	8						
This is	an 01	tout	from	the d	avam	e link	check	er n	rogra	m call	ad av:	amer	heck	ah	whie	-h is		ninc	. on 1	the	
Voyager		the state of the s			LAGIN	J 1111	oncor	Let P	10910	in ourr	cu cat	anno c	MICOA.		WILLY						
This pro					lv s	etup t	o run	on t	he fi	rst da	v of e	each	mont	ch.							
Once the					-						-				hi I	Duono	and	i Sir	non Hu	aggard	1.
CALL OF THE OWNER OF					0.000		CONTRACTOR OF STREET			644.0733734.08					1000						C
The outp	out be	low i	s a l	list (of a	ll the	BROKE	EN li	nks i	n the	exams	dat	abase	÷.							
				A REAL PROPERTY.		NUMBER OF STREET					NOA WARRANT		1000	1000							
http://e	examsp	df.li	b.mor	ash.	edu.	au/pdf	/cl199	97/04	08825	5.pdf											
http://e																					
http://e	examsp	df.li	b.mor	hash.	edu.	au/pdf	/c1199	97/04	08825	8.pdf											
http://e	examsp	df.li	b.mor	hash.	edu.	au/pdf	/cl199	97/04	08825	9.pdf											
nttp://e	examsp	df.li	b.mor	ash.	edu.	au/pdf	/cl199	99/04	09195	5.pdf											
http://e	examsp	df.li	b.mor	hash.	edu.	au/pdf	/gl199	98/04	08007	3.pdf											
http://e	examsp	df.li	b.mor	hash.	edu.	au/pdf	/cf199	99/04	09130	9.pdf											
http://e	examsp	df.li	b.mor	hash.	edu.	au/pdf	/cl199	97/04	08830	4.pdf											
http://e	examsp	df.li	b.mor	hash.	edu.	au/pdf	/cf199	98/04	09064	0.pdf											
http://e																					
http://e																					
http://e																					
http://e																					
http://e																					
http://e																					
http://e																					
ittp://e																					
http://e																					
http://e																					
<pre>http://e</pre>																					
http://e																					
ittp://e																					
ittp://e							/cl199														

Summary

- Link checking is boring
- Automated programs help a lot (the less intervention the better)
- Future plan is to copy the examscheck scripts and perl programs to do what the elinks program does



Thank you – any questions?

- All programs and documentation are at:
- <u>http://users.monash.edu.au/~simonh/IGeLU/</u>
- Email: <u>Simon.Huggard@lib.monash.edu.au</u>

