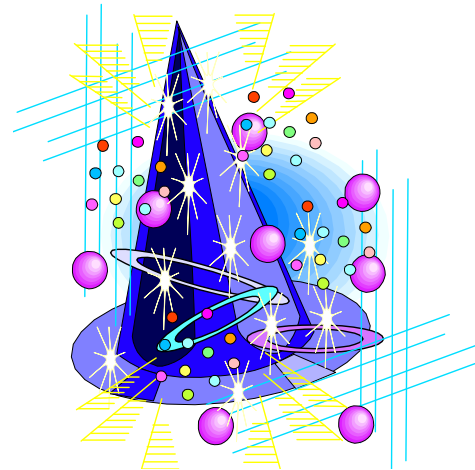


Database Conversion Using The Data Magician

Laura Guy

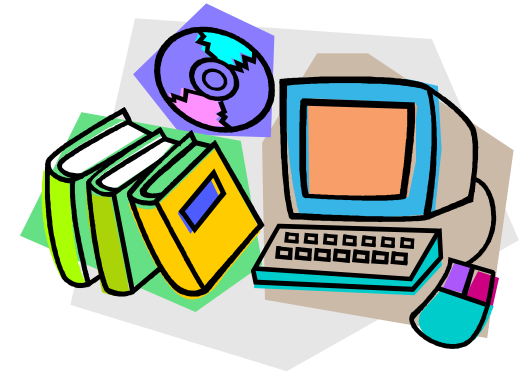
Colorado School of Mines

lguy@mines.edu



Locally-produced Databases

- Information Center for Ropeway Studies
- Tell Ertl Oil Shale Repository
- Society of Mining Engineers Preprints Bibliography
- CSM “Photographs” Database
- Faculty Publications



Database R.I.P.?

- “Personal Librarian” no longer supported by vendor
- Ability to add or update records lost
- Campus support of database and its server ending “sometime soon”



What Do We Do?

Q: are the data worth saving?

A: yes!

Options:

Find a different database system

Incorporate into our OPAC

Convert to Voyager citation database



Find a Different Database System

- No staff
- No time
- No money
- No good



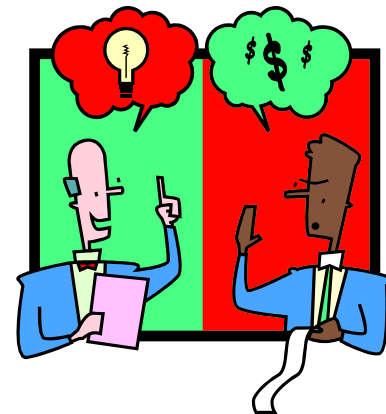
Incorporate Into OPAC

- Records not MARC
- Quality issues
- In the past databases were maintained by students and volunteers (not catalogers!)
- Concern that adding thousands of odd records would confuse patrons



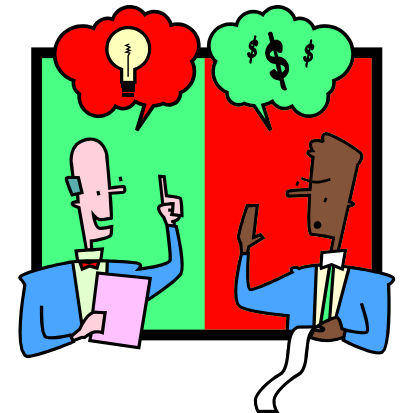
Voyager Citation DB (Pro's)

- Experience already in-house
- Price is right (already had Citation Server)
- No problem with simple bib. records
- Great user interface: WebVoyage
- Templated Input for non-professionals
- Continued....



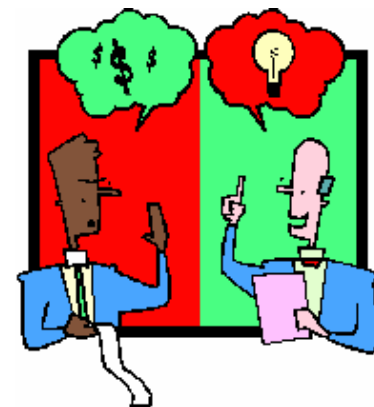
Voyager Citation DB (Pro's)

- LC Authorities can be used for controlled vocabulary
- Internet accessible
- OPAC search statistics
- 856 field



Voyager Citation DB (Con's)

- Conversion to MARC
- Monograph cataloger gone
- Project coordination: local staff, consortium staff, Endeavor staff
- No holdings records can be linked to our bibliographic records
- No Circ, Acquisitions modules
- No patron loads



Personal Library Software

SME_Preprints;

Describe what you are looking for. [Click here for searching tips.](#)

mining florida

Select max. number of results

Score Document Title

- 360 [83-515](#) New Techniques in Beneficiation of Florida Phosphates of the Future Part II - Mining and Matrix Transportation G.F. McKeregahan, D. Lynch Atlanta 1983
- 360 [83-104](#) Borehole Mining of Deep Phosphate Ore In St. Johns County, Florida G.A. Savanick Atlanta 1983
- 360 [83-13](#) Progress Report of a Reclaimed Wetland on Phosphate Mined Land in Central Florida J.D. Carson Atlanta 1983
- 360 [81-372](#) Future Trends in Florida Phosphate Mining, Benefication and Tailings Disposal J.C. McHardy Denver 1981
- 360 [80-67](#) New Reclamation and Restoration Trends in Florida Phosphate Mines A.M. Hale Las Vegas 1980

-Number- 83-515

-Title- New Techniques in Beneficiation of *Florida* Phosphates of the Future Part II - *Mining* and Matrix Transportation

-Author- G.F. McKeregahan, D. Lynch

-Place- Atlanta

-Date- 1983

-Abstract-

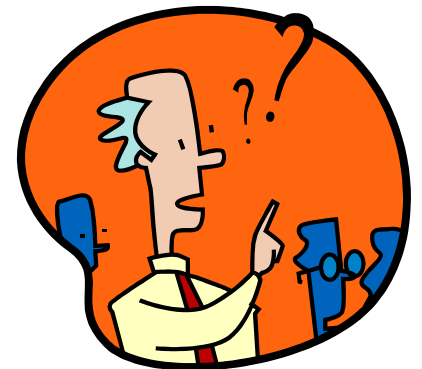
Introducing The Data Magician!

- Available from Folland Software
- Converts information from one database system into a format usable by another database system
- Import/Export: dBase, INMAGIC, delimited or tagged ASCII, MARC and more!
- Allows for import into an ILS DB



Decisions, Decisions

- Convert most important database first
- Convert now, clean later using Voyager catalog client
- First priority: Access
- Map fields as accurately as possible, and hope a cataloger will be hired soon



The Magician

- This is DOS software
- Runs well on Windows 98 and 2000
- A programming language with a rudimentary interface used to write conversion specifications
- Challenging, but help is available



Conversion in Four Parts

- Define input file specifications
- Define input field names and process codes
- Define output file specifications
- Specify output field names and process codes



Input File Definition

INPUT FILE SPECIFICATIONS

Input File Type: 2

1) ASCII Delimited file	2) Tagged file
3) dBase II, III, or IV file	4) INMAGIC or DB/TextWorks dump file
5) MARC communications file	6) STAR loadable file
7) Micro CDS/ISIS file	8) Library Master Tagged File
9) Fixed Length Fields	

Input file name: UMASTER2.TXT

Format of Repeated Fields: 0

0) None, 1) Numbered, 2) Repeat Tag
3) Special Symbol eg: ;

Continuation Line Character(s):

Beginning of Record Starts With: ~Number~	or Contains:
End of Record Starts With: ~end	or Contains:
Field Names Prefixed With: ~	or End With: ~

Global Field processing:

xr !This gets rid of trailing spaces ...

[F1] Help|[Shift-F1] Editor Help|[Alt-M] Menu|[Alt-X] Exit

Input Field Definition

```
INPUT FIELDS          - Record # 0
No.  Field Label      Field Name/Description
 1) Number             (Number) >
tb' $a'

 2) Photographer      (Photographer) >
tb'0 $a' TE"." ! Names are in direct order

 3) Title             (Title) >
TE"." c"||The " o"||Die " o"||Der" tb'14$a' c"||An " o"||If " o"||Of " o"||Or " o"||To
" tb"13$a" c"||A " tb"12$a" c"$a" c"$a" c~ tb"10$a" ! Create appropriate filing i
ndicator codes

 4) Year              (Year) >
tb' $c' TE"."

 5) Medium            (Medium) >
tb' $a' TE" :

 6) Color             (Color) >
tb'$b' TE" ;
```

```
[F1] Help|[Shift-F1] Editor Help|[Alt-M] Menu|[Alt-X] Exit
```


Output File Definition

OUTPUT FILE SPECIFICATIONS

Output File Type: 5
1) ASCII Delimited file 2) Tagged file 4) INMAGIC or DB/TextWorks
5) MARC Communications 6) STAR loadable format 7) Micro CDS/ISIS Import
8) Library Master Tagged File

Output file name: UMASTER2.BIB

Global Output field processing:
Global Output *POST* processing:



[F1] Help|[Shift-F1] Editor Help|[Alt-M] Menu|[Alt-X] Exit

Output Field Definition

```
OUTPUT FIELDS          - Record # 0
No.  Field Label      Field Name/Description
 7) 007              (create fixed field          )
"kh bo"

 8) 008              (fixed fields              )
DT "s" "19uu" C~ "s  " C+ BL 14 "   xx          i eng d" BR 2

 9) 099              (                          )
f"Number"

10) 100              (                          )
f"Photographer" s"..".

11) 245              (                          )
f"Title" s"..".

12) 260              (                          )
f"Year"

13) 300              (                          )
f"Medium" f"Color" f"Size" s"...". s"..".
```

[F1] Help|[Shift-F1] Editor Help|[Alt-M] Menu|[Alt-X] Exit|[F2] Save

Begin Conversion

CONVERSION SUMMARY

Settings: **PHOTFIN.SET**

Begin Conversion? (Y/N) N

Input File Name: UMASTER2.TXT

Output File Name: UMASTER2.BIB

Processing Log File: LOG

Numbering Starts at:

Starting Record Number:

Ending Record Number:

Estimated Number of Records:

Comments/Description:

[F1] Help || **[Shift-F1] Editor Help** || **[Alt-M] Menu** || **[Alt-X] Exit**

End Conversion

Conversion in Progress ... (Press 'Esc' to stop, 'U' to View output)

Input File: UMASTER2.TXT	Start Time: 13:19:35	Current: 13:20:49
Output File: UMASTER2.BIB	Average time/record (secs):	0.07
Est. number of records: 1011	Estimated completion at:	13:20:49
Percent Complete: 100%	Estimated time remaining:	0:00:00

Record Number: 1011
Processing completed at 13:20:49.

Do you wish to quit? (Y/N): N

Example Input Record

~Number~ U800a
~Photographer~ Petersen, Max S.
~Title~ [Vinegar Hill Zinc Company]
~Year~ March 1946
~Medium~ Photograph
~Color~ b&w
~Size~ 4 x 6 in.
~Notes~ USBM #63004; Tailing pile of iron concentrate from acid plant. Tower supports overhead tram buckets. Vinegar Hill Zinc Company, Cuba City, Wis. - M. S. Petersen - March 1946.
~Donor~ United States Bureau of Mines
~LocalNote~ Corresponding digital image available from the Colorado School of Mines; online access via <http://www.mines.edu/library/digital/photodb/U800a.gif>
~533a~ Computer file.
~533b~ Golden, Colo. :
~533c~ Arthur Lakes Library, Colorado School of Mines,
~533d~ 2002.
~533e~ 1 file : 377,994 bytes ; 600 dpi.
~DateScanned~ Date scanned: 2002-6-18
~CorporateName~ United States Bureau of Mines
~URL~ <http://www.mines.edu/library/digital/photodb/U800a.gif>
~End~

Voyager Cataloging Import File

Select work records

Seq #	ID	Title/Heading
1	U800a	[Vinegar Hill Zinc Company].
2	U800b	[Vinegar Hill Zinc Company].
3	U801a	[Concentrating plant at Vinegar-Hill Zinc Company].
4	U801b	[Concentrating plant at Vinegar-Hill Zinc Company].
5	U802a	[Copeland (James) Mine].
6	U802b	[Copeland (James) Mine].
7	U803a	[Martin Mine].
8	U803b	[Martin Mine].
9	U804a	[Martin Mine].
10	U804b	[Martin Mine].

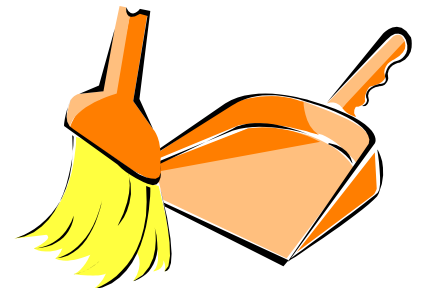
OK Cancel

MARC Record

Tag	I1	I2	Subfield Data
035			‡a U819
099			‡a U819
100	1		‡a Petersen, Max S.
245	1	0	‡a [Bull-setting stones].
260			‡c April 1946.
300			‡a Photograph : ‡b b&w ; ‡c 8 x 4 in.
500			‡a Item title supplied by cataloger.
500			‡a USBM #63165; Bull-setting stones (trimming rough edges by hand). Stones have previously been polished on 2 sides and the base. Cold Spring Granite Company, Cold Spring, Minnesota. - M. S. Petersen - April 1946. Donor: United States Bureau of Mines.
535	1		‡a Held in the Russell L. and Lyn Wood Mining History Archive, Arthur Lakes Library, Colorado School of Mines. ‡b 1400 Illinois St., Golden, CO 80401
540			‡a Restricted access.
590			‡a Corresponding digital image available from the Colorado School of Mines; online access via http://www.mines.edu/library/digital/photodb/U819.gif .
500			‡a The following information applies to the digital image:
533			‡a Computer file. ‡b Golden, Colo. : ‡c Arthur Lakes Library, Colorado School of Mines, ‡d 2002. ‡e 1 file : 640,186 bytes ; 600 dpi.
500			‡a Date scanned: 2002-6-18.
516			‡a GIF (Image file)
650		0	‡a Mines and mineral resources.
710	2		‡a United States Bureau of Mines.
710	2		‡a Arthur Lakes Library.
710	2		‡a Russell L. and Lyn Wood Mining History Archive.
856	4	1	‡u http://www.mines.edu/library/digital/photodb/U819.gif
856	4		‡3 Digital Rights Statement ‡u http://www.mines.edu/library/digital/rights.html

Cleanup

- Focus on major problems
- Good MARC = improved access
- Standardize names and “subject keywords”
- 008 field for for date, language limits
- Extensive work on 650 field
- Each database presented different problems



Look and Feel

Information Center for Ropeway Studies

Search - Help Exit

Database Name: Information Center for Ropeway Studies

Basic Search **Custom Search**

Search for:

Quick Limit by Date:
None ▾

Search by:
Keyword (Relevance)
Keyword (Boolean)
Author Browse
Title Browse
Subject Heading Browse

10 records per page ▾ Search Reset **Set Limits**

Basic Search Hints:

- Quick Limit by Date and the Set Limits button work with Keyword and Title Browse searches **only**.
- Keyword (Relevance) searches every part of every field for terms entered; treats multiple words as individual search terms. Results are ranked with most relevant items appearing first. Enter words in any order as you would with an Internet search engine. Use ? to auto-truncate (for example, **comput?** finds computing, computer, etc.).
- Keyword (Boolean) searches every part of every field for terms entered. Combine search terms using: **and, or, not**.
- Enter only as much of the title as you know for sure, beginning with the first word of the title; omit beginning articles (a, and, the, der, die, das, etc.).
- Enter author's last name first. Enter corporate authors in normal order.
- Enter subject term (for example, **doppelmayr, grips, halladie**).
- For more information, click the Help Button at the top of this page.

The torsional behavior of triangular strand ropes for drum winders / G. Rebel.

Database: Information Center for Ropeway Studies

Call Number: TA492.W8 B84

Author(s): [Rebel, Gerhard.](#)

Title: The torsional behavior of triangular strand ropes for drum winders / G. Rebel.

Publisher: Reading, U. K. : O.I.P.E.E.C., 1997.

General Note: O.I.P.E.E.C. (International Organisation for the Study of the Endurance of Ropes) Bulletin, 74, December 1997, (ODN 0659).

Abstract: The torsional behavior of Lang's lay triangular strand ropes will probably limit their application in very deep (2500m - 4000m) single lift shafts which the South African gold mining industry is planning for the future. These ropes have been used extensively on drum winding systems and it would be of technological and financial benefit if their application could be extended as far as possible. An improved understanding of the mechanisms which may lead to rope instability is however required. A research project was initiated in 1994 to investigate the torsional behavior of wire ropes for drum winders, the results of which are summarized in the paper.

Description: P. 29-55.

Location: Held at: Colorado School of Mines, Arthur Lakes Library

Language: Language of text: English

Descriptors: [Ropeways.](#)

[Materials handling.](#)

[Components.](#)

[Wire rope.](#)

[Design.](#)

[Testing.](#)

[Mining.](#)

[South Africa.](#)

[Africa.](#)

Paged by staff -- see Circulation Desk for assistance.

Database Conversion using the Data Magician

Data Magician:
<http://www.folland.com>

Citation Database URLs:
<http://ropeway.coalliance.org>
<http://csmphotos.coalliance.org>
<http://tellertl.coalliance.org>
<http://sme.coalliance.org> (under construction)

Example SET File:

The Data Magician, version 1.5
Settings Filename: PHOTOFIN.SET

Description: Conversion of tagged ASCII records to MARC format.

INPUT FILE SPECIFICATIONS

Input File Type: 2
1) ASCII Delimited file 2) Tagged file
3) dBase II, III, or IV file 4) INMAGIC or DB/TextWorks dump file
5) MARC communications file 6) STAR loadable file
7) Micro CDS/ISIS file 8) Library Master Tagged File
9) Fixed Length Fields

Input file name: UMASTER2.TXT

Format of Repeated Fields: 0
0) None, 1) Numbered, 2) Repeat Tag
3) Special Symbol eg: ;

Continuation Line Character(s):
Beginning of Record Starts With: ~Number~ or Contains:
End of Record Starts With: ~end or Contains:
Field Names Prefixed With: ~ or End With: ~

Global Field processing:
xr !This gets rid of trailing spaces ...

Input line PRE-process codes:

INPUT FIELDS

No.	Field Label	Field Name/Description
1)	Number	(Number)
tb'	\$a'	
2)	Photographer	(Photographer)
tb'0	\$a' TE".	! Names are in direct order
3)	Title	(Title)
TE ".	c" The " o" Die " o" Der" tb'14\$a' c" An " o" If " o" Of " o" Or " o" To	" tb"13\$a" c" A " tb"12\$a" c"\$a" c"\$a" c~ tb"10\$a" ! Create appropriate filing indicator codes
4)	Year	(Year)
tb'	\$c' TE".	
5)	Medium	(Medium)
tb'	\$a' TE" :	
6)	Color	(Color)
tb'\$b'	TE" ;"	
7)	Size	(Size)
tb'\$c'	TE".	
8)	Notes	(Notes)
tb'	\$a' te".	

9) Donor tb' Donor: ' TE"."	(Donor)	9) 099 f"Number"	(Original Item No.)
10) LocalNote tb' \$a' te"."	(590a)	10) 100 f"Photographer" s".."."	(Photographer's Name)
11) 533a tb' \$a'	(533a)	11) 245 f"Title" s".."."	(Title)
12) 533b tb'\$b'	(533b)	12) 260 f"Year"	(Date)
13) 533c tb'\$c'	(533)	13) 300 f"Medium" f"Color" f"Size" s"...". s".."."	(Physical Description)
14) 533d tb'\$d'	(533d)	14) 500 " \$aItem title supplied by cataloger."	(Static note field)
15) 533e tb'\$e'	(533e)	15) 500 f"Notes" f"Donor" s".."."	(Note field)
16) DateScanned tb' \$a' TE"."	(500a)	16) 535 "1 \$aHeld in the Russell L. and Lyn Wood Mining History Archive, Arthur Lakes Li brary, Colorado School of Mines.\$b1400 Illinois St., Golden, CO 80401"	(Repository Info)
17) CorporateName tb'2 \$a' TE"."	(710)	17) 540 " \$aRestricted access."	(Use note)
18) URL tb'41\$u'	(Image-856)	18) 590 f"LocalNote" s"..". s"..."."	(Local note)
19) End !End of Record	(EOR)	19) 500 " \$aThe following information applies to the digital image:"	(Digital image info field)
OUTPUT FILE SPECIFICATIONS		20) 533 f"533a" f"533b" f"533c" f"533d" f"533e"	(533)
Output File Type: 5		21) 500 f"DateScanned" s"..". s"..."."	(Date scanned note)
5) MARC Communications		22) 516 " \$aGIF (Image file)	(Image type)
Output file name: UMASTER2.BIB		23) 650 " 0\$aMines and mineral resources."	(650 standard subject)
Global Output field processing:		24) 710 f"CorporateName" s"..". s"..."."	(Corporate Name)
Global Output *POST* processing:		25) 710 "2 \$aArthur Lakes Library."	(Corporate Name)
OUTPUT FIELDS		26) 710 "2 \$aRussell L. and Lyn Wood Mining History Archive."	(Corporate Name)
No. Field Label Field Name/Description		27) 856 f"URL"	(Image URL)
1) STATUS (leader code - always n)	"n"	28) 856 "4 \$3Digital Rights Statement\$uhttp://www.mines.edu/library/digital/righ ts.html"	(Digital Rights URL)
2) RECTYPE (record type - always k)	"k"		
3) BIBLEVEL (bib level - always m)	"m"		
4) ENCODE (encode/1 - always 3)	"3"		
5) DCF (cataloging form - always a)	"a"		
6) 001 (original record ID number)	f"Number" BR4		
7) 007 (fixed field - 007)	"kh bo"		
8) 008 (fixed field - 008)	DT "s" "19uu" C~ "s " C+ BL 14 " xx i eng d" BR 2		