

# Headings - Useful Concepts and Innovations in 15.2

## Ex Libris

Prepared by Marina  
Spivakov, 2002; updated by  
Jerry Specht, June 2003

---

**NOTE: This Power Point shows what Headings features are new in 15.2.**

**It supplements the (preceding) NAAUG.Headings.ppt which covers Headings in 14.2 (and in general).**

---

***Where to get your own copy:***

**Both this Power Point presentation and the preceding may be found on the US documentation server ( <http://support.exlibris-usa.com/D> ) in the NAAUG\_Indexes\_2003 directory.**

# Scope of the Lecture

---

- Major tables changes
- Headings :
  - Normalization
  - Performance
  - Modifications in authority enrichment mechanism
  - Batch jobs for authority enrichment – 15.2 innovations
  - Untraced references
- z0102 – 15.2 innovations
- Sub-arranged index (z0101)

---

# Table Changes

# Major Table Changes

---

- **tab11** is split into four tables:
  - **tab11\_acc**
  - **tab11\_word**
  - **tab11\_ind**
  - **tab11\_aut**

NOTE: This is a structural change only. No functional changes are involved

# Major Tables Changes

---

- **Other tables which have been changed in relation to Headings:**
  - **Tab\_filing**
  - **Tab00.eng**

---

# Normalization of Headings



# Normalization of Headings

---

- Normalization - fields which contain identical texts must link to the same heading.
- Filing – sorting of headings list

---

## *In Versions Prior to 15.2...*

*Note: This section (next 10 slides) duplicates slides 6-16 in the 14.2 “Understanding Indexes” presentation.*

# Z01

Filing text (stripped sub-fields, stripped punctuation, add leading zeros to numeric fields, character conversion etc.) - determines sort order in the browse list

```
03 acc_code .....AUT
03 alpha .....L
03 filing_text ..... S H A K E   S P E A R E   W I L L I A M
03 filing_sequence .....44939
02 z01_acc_sequence .....000044939
02 z01_hash .....103928840151
02 z01_aut_tag .....4001
02 z01_rec_key_4 \
  03 aut_library .....USM10
  03 aut_doc_number .....000002042
02 z01_acc_sequence_see ....000044187
02 z01_number_of_doc .....00000
02 z01_cataloger \
  03 cataloger_name .....BATCH
  03 cataloger_level .....01
02 z01_open_date .....20020221
02 z01_update_date .....20020221
02 z01_cataloger_library ...
02 z01_non_filing_char .....00
02 z01_update_doc .....Y
02 z01_update_z0102 .....Y
02 z01_display_text ..... $$aShake-speare, William$$d1564-1616
```

Display text (data is taken directly from the record (slight modifications are possible)).

# Normalization of Headings

- If two records generate headings that have a common filing text but different display texts, the system will create two headings, not one.

## *Bibliographic document 1*

245 14 a The Journal of Higher Education.

### *z01*

```
acc_code .....TIT
alpha .....L
filing_text ..... JOURNAL OF HIGHER EDU
filing_sequence ..45000
.....
z01_display_text ...$$aThe Journal of Higher Education
```

## *Bibliographic document 2*

245 10 a Journal of Higher Education.

### *z01*

```
acc_code .....TIT
alpha .....L
filing_text ..... JOURNAL OF HIGHER EDU
filing_sequence ..45000
.....
z01_display_text ...$$aJournal of Higher Education
```

# Normalization of Headings

- Examples of possible problems:
  - Case differences:

## Browse List: Titles

No. of Recs	
1	<u>The History of Belgium</u>
1	<u>The history of Belgium</u>

- Differences in punctuation:

## Browse List: Titles

No. of Recs	Entry
1	<u>Four years at Yale.</u>
1	<u>Four years at Yale :</u>

# Normalization of Headings

- Examples of possible problems:
  - Display text originate from different sub-fields:

245 10 a Principles of internal medicine.

700 1 a Harrison, Tinsley Randolph,  
d 1900-  
t Principles of internal medicine.

**z01 display text ...\$\$aPrinciples of internal medicine**

**z01 display text ...\$\$tPrinciples of internal medicine**

1 Principles of internal medicine

1 Principles of internal medicine

# Normalization of Headings

- In the versions prior to 15.2 normalization possibilities of display text address the problems of punctuation only.

**tab00.lng, col.4:**

**0 - no suppression**

**1 or space - suppress punctuation at the end each sub-field when creating a Z01 heading.**

# Normalization of Headings

## Bibliographic document 1

245 10 a Four years at Yale :  
k diaries,  
f 1903 Sept. 16-1907 Oct. 5.

## Bibliographic document 2

245 10 a Four years at Yale.

### Tab00.Ing

H TIT ACC 0 11 00 0000 Titles

### z01

acc\_code .....TIT  
 alpha .....L  
 filing\_text ..... F O U R Y E A R S A T Y A L E  
 filing\_sequence .45015  
 .....  
 z01\_display\_text ..\$\$aFour years at Yale :

### z01

03 acc\_code .....TIT  
 03 alpha .....L  
 03 filing\_text ..... F O U R Y E A R S A T Y A L E  
 03 filing\_sequence .45015  
 .....  
 ! z01\_display\_text ..\$\$aFour years at Yale.

## Browse List: Titles

No. of Recs	Entry
1	<u>Four years at Yale.</u>
1	<u>Four years at Yale :</u>



# Normalization of Headings

## *Bibliographic document 1*

245 10 a Four years at Yale :  
k diaries,  
f 1903 Sept. 16-1907 Oct. 5.

## *Bibliographic document 2*

245 10 a Four years at Yale.

### *Tab00.Ing*

H TIT ACC 1 11 00 0000 Titles

### *z01*

```
acc_code .....TIT
alpha .....L
filing_text .....FOUR YEARS AT YALE
filing_sequence .45015
.....
z01_display_text ..$$aFour years at Yale
```

# Normalization of Headings - Cataloger's Assistant

## ? USM01 Detect Similar Headings

Output file

Report language

Check all headings

Check headings by code

Title of Report

Header/Footer

Columns in report

Run Time  at  o'clock

Print ID

- **Detect Similar Headings (p\_manage\_26)** reports headings which differ in display text only, i.e. headings which are the same except for punctuation and case differences.

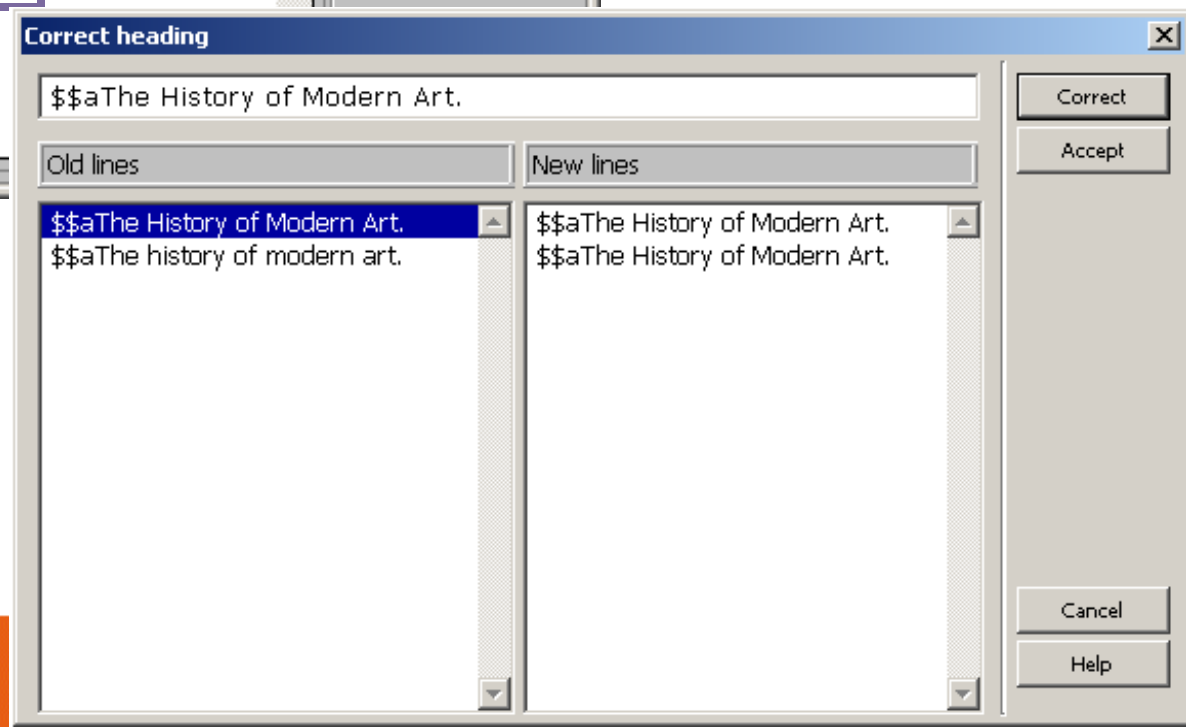
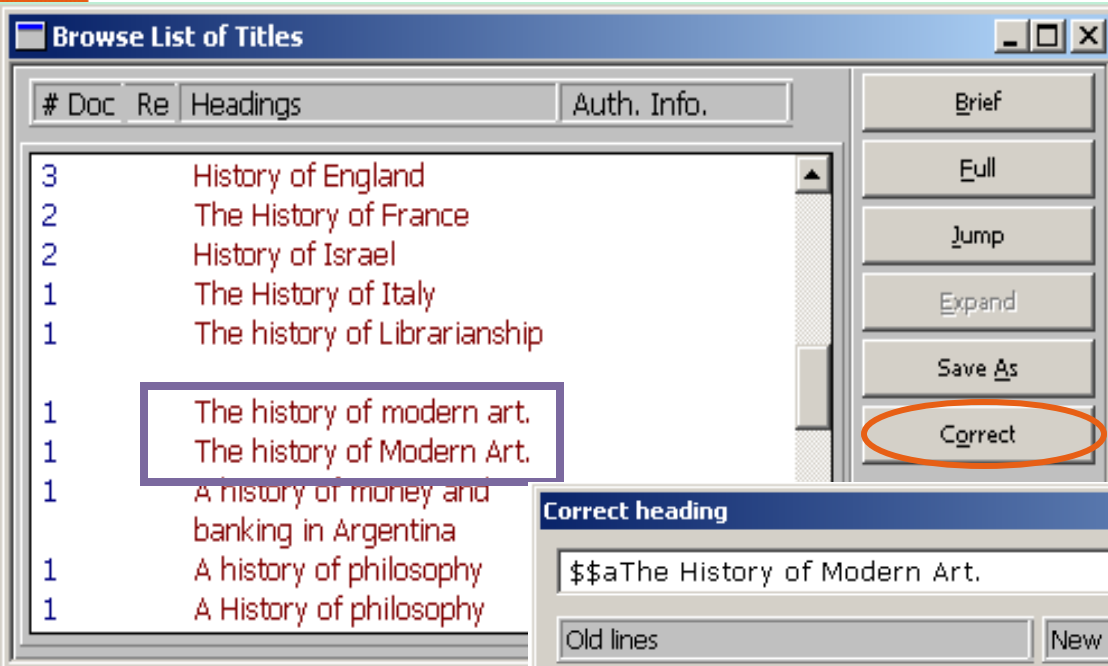
### Example of output file

Number of Matches	Sequence	Display Text
5 Matches	000008718	PLA \$\$a[New York, N.Y.
	000020845	PLA \$\$aNew York, N.Y
	000020848	PLA \$\$aNew York, NY
	000024455	PLA \$\$aNew York, N.Y.
	000026316	PLA \$\$a[New York, N.Y.]

# Normalization of headings - Cataloger's Assistant

**Correct** allows you to:

- Discover inconsistencies
- Change bibliographic documents without going to Cataloguing module
- Reindex the documents (creates Z07)



---

# Normalization of Headings in 15.2...

# Z01

Filing text

```
03 acc_code .....AUT
03 alpha .....L
03 filing_text .....SHAKESPEARE WILLIAM 1564 1616
03 filing_sequence .....00209
02 z01_acc_sequence .....000011179
02 z01_hash .....855170250639
02 z01_aut_tag .....1001
02 z01_rec_key_4 \
  03 aut_library .....USM10
  03 aut_doc_number .....000002042
02 z01_acc_sequence_see ....000000000
02 z01_number_of_doc .....00000
02 z01_cataloger \
  03 cataloger_name .....BATC
  03 cataloger_level .....01
02 z01_open_date .....20020617
02 z01_update_date .....20020617
02 z01_cataloger_library ...
02 z01_non_filing_char .....00
02 z01_update_doc .....Y
02 z01_update_z0102 .....N
02 z01_ref_tupe .....
02 z01_normalized_text .....$$-shakespeare, william $$-1564-1616
02 z01_display_text .....$$aShakespeare, William,$$d1564-1616
```

Normalized text

Display text

# 15.2 - New Normalization Concept

---

- Z01\_normalized\_text - Two z01s can share the same single heading display even though they derive from different display texts.
- Normalization field enables us to:
  - Retain original display text
  - Match using normalized text
  - Define customer specific matching rules

# Normalization of Headings

Version 14.2 – Non Normalized

Scan for a Record

Library: USM01 - USMARC Bibliographic

Scan Code: TIT - Title Scan Text: norm

# Docs.	Ref.	Headings	Auth. Info.
1		Nonlinear analysis and its applications to differential equations	
2		Norma	
2		Norma Libretto French & Italian	
1		Normalization OF Headings	
1		normalization of headings	
1		North East England	
1		The north western region: development prospects and needs A report presented to the North	

Search Full Cancel Help

# Normalization of Headings

Version 15.2 - Normalized

The screenshot shows the 'Scan for a Record' window with the following settings:

- Library: USM01 - USMARC Bibliographic
- Scan Code: TIT - Title
- Scan Text: norm
- Include Expanded AUT Data:

The main results table is as follows:

# Docs	Ref.	Headings	Auth. info.
2		Norma. Libretto. French & Italian.	
2		normalization of headings.	
1			
1			
1			
1		The northern countries	

A 'Brief List' dialog box is open, showing a table with the following data:

Title	Author
normalization of headings.	Gibbons, William Joseph, 1912- ed.
Normalization OF Headings.	Gibbons, William Joseph, 1912- ed.



# Normalization of Headings

## •tab\_filing

```
11 D end_punctuation      :.,=;/
11 N to_lower
11 N compress             '[]
11 N to_blank             !"()-{}<>;:~.?./\@*%=&^_'\~
11 N pack_spaces
11 N del_subfield_code
11 N char_conv            FILING-KEY-10
11 F del_subfield
11 F suppress
11 F numbers
11 F expand_num
11 F non_filing
11 F compress            ,
11 F pack_spaces
11 F char_conv            FILING-KEY-01
```

•D - use when generating Z01-DISPLAY-TEXT

•N - use when generating Z01-NORMALIZED-TEXT

•F or SPACE - use when generating Z01-FILING-TEXT

# Normalization of Headings

---

- Creation of z01 text fields is a step-by-step process.
- Text that has been manipulated in "N" lines is the basis for the "F" lines, and the order must take this into account.

# Normalization of Headings - 15.2

```
z01_display_text .....$$aThe history of York :$$ban interesting st
```

11 D end_punctuation	.,=:/
11 N to_lower	
11 N compress	'[]
11 N to_blank	!"()-{}<>;:~?./\@*%#^_`~
11 N pack_spaces	
11 N del_subfield_code	
11 N char_conv	FILING-KEY-10
11 F del_subfield	
11 F suppress	
11 F numbers	
11 F expand_num	
11 F non_filing	
11 F compress	,
11 F pack_spaces	
11 F char_conv	FILING-KEY-01

```
z01_normalized_text .....$$-the history of york $$-an interesting sto
```

```
filing_text .....HISTORY OF YORK AN INTERESTING STORY
```

# Util-f-3 - Tool for Testing Filing Procedures

## F. View procedures and files

- 
- 0. Exit procedure
- 1. Display/check character conversion tables
- 2. Display/check word building routines
- 3. Display/check filing routines
- 4. Display records from data files

```
Enter Filing Procedure (Q to quit)
Enter values as defined in Col. 1 of tab_filing: 11
Enter values D/N/F or Space: N
Enter text (Q to quit) : $$aAmerican masters$$pPaul Simon--born at the
IN -$aAmerican masters$$pPaul Simon--born a-
Load: /exlibris/a57_5/usm01/tab/tab_filing
Load: /exlibris/a57_5/alephe/unicode/unicode_case
Load: /exlibris/a57_5/alephe/unicode/tab_character_conversion_line
Load: /exlibris/a57_5/alephe/unicode/naco_diacritics
OUT -$-american masters$$-paul simon born at the
```

```
Enter text (Q to quit) : █
```

# Problems Solved by New Normalization Mechanism

## • Case differences

245 14 a The history of Prague.

245 14 a The History of Prague.

01 N to lower

z01\_normalized\_text .....\$\$-the history of prague  
z01\_display\_text .....\$\$aThe History of Prague.

The screenshot shows a library catalog interface. At the top, there are two search results: 'A history of philosophy.' and 'The History of Prague.'. Below these is a 'Brief List' table with columns for Title, Author, Call No., Imprint, ISBN/ISSN, and Year. The table contains two entries: 'The history of Prague.' with Call No. 345.876 and Year 2001, and 'The History of Prague.' with Year 2000.

Title	Author	Call No.	Imprint	ISBN/ISSN	Year
The history of Prague.		345.876			2001
The History of Prague.					2000

# • Differences in Punctuation

245 10 a History of civilization - Frédéric Ozanam: translated by Ashley C. Glyn.

245 10 a History of civilization / [Frédéric Ozanam] ; translated by Ashley C. Glyn.

**01 N compress** '[]|  
**01 N to\_blank** !"()-{ } <> ; : . ? \ ^ \_ ` ~  
**01 N pack\_spaces**

**z01\_normalized\_text** .....\$\$-history of civilization frEdEric ozanam t  
**z01\_display\_text** .....\$\$aHistory of civilization / [FrÃ©dÃ©ric Oza

# Docs	Ref.	Headings	Brief List					
			Title	Author	Call No.	Imprint	ISBN/ISSN	Year
1		A history of Catholic life in the diocese of Albany, 1609-1864						
2		History of civilization / [Frédéric Ozanam] ; translated by Ashley C. Glyn.	History of civilization / [Frédéric Ozanam] ; translated by Ashley C. Glyn.	Ozanam, Frédéric, 1813-1853.		London : Allen, 1868.		1868
1		History of Cobol.						
1		A history of deeds done beyond the sea						
1		The history of drug production.						
3		History of England						
1		The History of England.						
1		The History of Fine Arts.						
1		The History of France.						
			History of civilization - Frédéric Ozanam: translated by Ashley C. Glyn.	Ozanam, Frederic, 1813-1853.		London : Allen, 1868.		1868

# • Normalization of Special Characters

100 10 a Ozanam, Frédéric,  
d 1813-1853.

100 10 a Ozanam, Frederic,  
d 1813-1853.

**01 N char conv      FILING-KEY-10**

**z01\_normalized\_text .....\$\$-ozanam, frederic \$\$-1813-1853**  
**z01\_display\_text .....\$\$aOzanam, FrÃ©dÃ©ric,\$\$d1813-1853.**

Scan for a Record

Library: USM01 - USM...

Scan Code: AUT - Author    Scan Text:

Include Expanded AUT Data

# Docs	Ref.	Headings
3		Oz, Avraham.
2		Ozanam, Frédéric, 1813-1853.
	+	P. F. (Phineas Fletcher), 1582-16
	+	P[li-erh-p[lei-t[le, Ya-lan, 1925-
	+	P[ung, U-ran, 1895-

**Brief List**

Title	Author	Call No.	Imprint	ISBN/ISSN	Year
History of civilization / [Frédéric Ozanam] ; translated by Ashley C. Glyn.	Ozanam, Frédéric, 1813-1853.		London : Allen, 1868.		1868
History of civilization - Ozanam: translated by Ashley C. Glyn.	Ozanam, Frederic, 1813-1853.		London : Allen, 1868.		1868

# Normalization of Headings

- Display text originates from different subfields:

245 10 a Principles of internal medicine.

700 1 a Harrison, Tinsley Randolph,  
d 1900-  
t Principles of internal medicine.

**01 N del subfield code**

z01\_normalized\_text .....\$\$-principles of internal medicine  
z01\_display\_text .....\$\$aPrinciples of Internal Medicine.



# Normalization of Headings - 15.2

- Restrictions of the new normalization mechanism:
  - the actual display text is determined by “first in”.

The screenshot displays a software window titled "Scan for a Record". The interface includes a "Library:" dropdown menu set to "USM01 - USMARC Bibliographic", a "Scan Code:" dropdown menu set to "TIT - Title", and a "Scan Text:" input field containing "norm". There are "Search" and "Full" buttons on the right. A checkbox labeled "Include Expanded AUT Data" is checked. Below these controls is a table with columns "# Docs", "Ref.", "Headings", and "Auth. info.".

# Docs	Ref.	Headings	Auth. info.
2		Norma. Libretto. French & Italian.	
2		normalization of headings.	
1		The northern countries	

An inset window titled "Brief List" is open over the second row of the table. It shows a detailed view of the record with columns "Title" and "Author".

Title	Author
normalization of headings.	Gibbons, William Joseph, 1912- ed.
Normalization OF Headings.	Gibbons, William Joseph, 1912- ed.

The "Brief List" window also features "Select", "View Full", "Cancel", and "Help" buttons.

# Normalization of Headings - 15.2

Correct Heading's Display Text

	Old	New
Display Text	\$\$a[The ]History of Prag	\$\$a[The ]History of Prag
Normalized Text	\$\$-the history of prague	
Key	HISTORY OF PRAGUE	

Update  
Correct  
Cancel  
Help

---

# Performance Issues

*Note: This section (next 3 slides) duplicates the “Performance Issues” section in the 14.2 “Understanding Indexes” presentation.*

# Performance Issues

In order to display the browse list the system must count the documents which are connected to a heading (Z02 records attached to Z01).

## Browse List: LC Subjects

No. of Recs	Entry
2	<a href="#">Administrative courts -- United States.</a>
8	<a href="#">Administrative law -- United States.</a>
3	<a href="#">Administrative law -- United States -- Cases.</a>
12	<a href="#">Administrative procedure -- United States.</a>
1	<a href="#">Administrative remedies -- United States.</a>
1	<a href="#">Admirals -- Great Britain -- Biography.</a>
2	<a href="#">Adolescent psychology.</a>
2	<a href="#">Adolescent psychotherapy.</a>
1	<a href="#">Adopted children -- Biography.</a>
1	<a href="#">Adopted children -- Canada -- Longitudinal studies.</a>

# Performance Issues

---

- *Pre-14.2* ALEPH:

*p\_manage\_10* updates *Z01* (*z01\_number\_of\_doc*) with the number of documents available for each heading.

- **14.2 and higher:**

the system allows extensive use of base and denied records (per user profile) functionality. That is why **browse list** must be **pre-filtered**. The system **counts** the number of records **on the fly**.

# Performance issues

- *How to speedup z02 count when the headings are displayed?*

```
10. last-z34-sequence      0      y      S
11. library-lock-status   0      y      S
12. max-z02-count         60     y      S
```

## Count limit.

A heading with records greater than the number defined in this counter will display with + rather than the number itself

## Browse List: Authors

No. of Recs	Entry
60+	<a href="#">Shakespeare, William, 1564-1616.</a>
1	<a href="#">Shamba, Shaka.</a>

Records 1 - 9 of 111 Sorted by Title, then Year

#	Author	Title
1	<input type="checkbox"/> Shakespeare, William, 1564-1616	An age of kings;
2	<input type="checkbox"/> Rowley, William, 1585?-1642?	The birth of Merlin, or, The childe hath found his father

---

# Enrichment of Headings - New Features

---

# **How to Suppress Generation of Cross-References and Display of Fields from Authority Records**



# How to Suppress Generation of Cross-References and Display of Fields from Authority Records

According to MARC 21:

**4XX and 5XX \$\$w, 4th position (i.e. \$\$wxxx4)** - contains a code that enables the generation or suppression of a cross references

**If** \$\$wxxx4 = blank

or

\$\$wxxx4 = 'n'

or

\$\$w does not exist

**then** the cross reference is generated and the fields are shown in browse list, expanded authority record, under the heading in the new brief record, etc.

# How to Suppress Generation of Cross-references and Display of Fields from Authority Records

---

If \$\$wxxx4 is not 'n' or blank, then the cross-reference is suppressed.

# How to Suppress Generation of Cross-references and Display of Fields from Authority Records

```
FMT L AU
LDR L ^^^^^^nz^^^^^^^^^^n^^^^^^
008 L 010717^alacInlaabllllllllllllla^Inlllllll
100 L $$aProust, Marcel,$$d1871-1922
400 L $$aPrust, Marsel,$$d1871-1922
400 L $$aProust, Valentin Louis Georges Eug "ne Marcel,$$d1871-1922$$waaa a
400 L $$aP'urusut'u, Marusel,$$d1871-1922$$waaan
400 L $$aP'u-lu-ssu-t'e,$$d1871-1922$$wxxxxa
```

Generation of cross-references and display are suppressed

## Cross-references - Authors - Proust, Marcel, 1871-1922

Click on an underlined tag to see a Browse List.

<b>Sys. no.</b>	000002662
<b><u>Heading</u></b>	<u>Proust, Marcel,1871-1922</u>
<b>Seen from</b>	P'urusut'u, Marusel, 1871-1922
<b>Seen from</b>	Proust, Valentin Louis Georges Eugène Marcel, 1871-1922
<b>Seen from</b>	Prust, Marsel, 1871-1922

Close

# How to Suppress Generation of Cross-references and Display of Fields from Authority Records

Activate / deactivate suppression using the following tables:

## tab20

1	AUT	AUT	100##		-wi	0
2			400##	w !!!n	-wi5	0 SEEF
2			400##	w !!! *	-wi5	0 SEEF
2			400##	w -	-wi5	0 SEEF
1	AUT	AUT	110##		-wi	0
2			410##	w !!!n	-wi5	0 SEEF
2			410##	w !!! *	-wi5	0 SEEF
2			410##	w -	-wi5	0 SEEF

## edit\_doc\_999\_aut\_libXX.lng

##	4####	w !!!n	D LSeen from	Y	E
##	4####	w !!! *	D LSeen from	Y	E
##	4####	w -	D LSeen from	Y	E
##	5####	w g	D LBroaden term	Y X	E
##	5####	w h	D LNarrower term	Y X	E
##	5####	w g!!n	D LBroaden term	Y X	E
##	5####	w g!! *	D LBroaden term	Y X	E
##	5####	w h!!n	D LNarrower term	Y X	E
##	5####	w h!! *	D LNarrower term	Y X	E
##	5####	w -	D LSee also	Y	E

# Browse List Display - Public Notes Can be Included

It is possible to define that fields 260, 664, 666 and 680 from the AUT record will be expanded into or excluded from the browse list

No. of Recs	Brief Recs	Entry
26	<input type="checkbox"/> Brief Recs	<u>Proust, Marcel, 1871-1922 - [LC Authority Record]</u> Public Note: Use under topical headings for works containing lists of abbreviations pertaining to the topic.

## User preferences

Include AUT data in Browse List ?

No  Yes

---

# Untraced References

# Untraced References

- Untraced references are Authority entries that do not relate to a specific bibliographic record but should be displayed as references in the headings list.

## Example

```
LDR      ^^^^^nz^^^^^^^^^^^^^^^^n^^^^^^
001      _  _  000002733
005      _  _  20020312145408.0
008      _  _  020312^a|bc|n|aab|a^|n|
100      _  a  De la
666      _  a  Names beginning with this prefix are also entered under La (e.g., La
           _  a  Bretèque, Pierre de) or under the name following the prefix (e.g.,
           _  a  Torre, Marie de la)
```





# How to Use Untraced References?

No. of Recs	Brief Recs	Entry
		De la - <a href="#">[LC Authority Record]</a> ^^ Names beginning with this prefix are also entered under La (e.g., La Bretèque, Pierre de) or under the name following the prefix (e.g., Torre, de la)
		De le - <a href="#">[LC Authority Record]</a> ^^ Names beginning with this prefix are also entered under Le (e.g., Le Bretèque, Pierre de) or under the name following the prefix (e.g., Torre, de le)
1		<a href="#">De Lima, Agnes</a>
1		<a href="#">De Sanctis, Francesco, 1817-1883 Criticism and interpretation</a>
2		<a href="#">Death</a>
1		<a href="#">Death Causes</a>

# Untraced References

---

- Untraced references can not be expanded through ue\_08 since they have no matching bibliographic documents.
- In 14.2 the only way to work them out is to create a dummy BIB record to initiate the Authority link.

# Untraced References

---

- This does not solve the problem of displaying the untraced reference in different bases.
- In 15.2, `p_manage_105` (**Update Untraced References**) - imports all untraced references to `z01` and `z0102`.

# Untraced References

- Setup :
  - **tab11\_word** in the **authority library** must have the following line:

<b>008</b>	<b>F09-01</b>	<b>01</b>
------------	---------------	-----------

- words must exist on the authority library before this service can be run.

NOTE : p\_manage\_105 identifies untraced references by searching “*UTR=b*” in the authority library.

# Untraced References

- Z01 has a new field (Z01-REF-TYPE). This field is set to “U” for untraced references.

```
03 acc_code .....SUL
03 alpha .....L
03 filing_text .....DE LA
03 filing_sequence .....50556
02 z01_acc_sequence .....000050556
02 z01_hash .....685157981273
02 z01_aut_tag .....100
02 z01_rec_key_4 \
  03 aut_library .....USM10
  03 aut_doc_number .....000002733
02 z01_acc_sequence_see ....0000000000
02 z01_number_of_doc .....00000
02 z01_cataloger \
  03 cataloger_name .....BATCH
  03 cataloger_level .....01
02 z01_open_date .....20020623
02 z01_update_date .....20020623
02 z01_cataloger_library ...
02 z01_non_filing_char .....00
02 z01_update_doc .....Y
02 z01_update_z0102 .....Y
02 z01_ref_type .....U
02 z01_normalized_text .....$$-de la
02 z01_display_text .....$$aDe la
```

# Untraced References

---

- Headings of type “U” are displayed in any browse list regardless of base or denied base.
- p\_manage\_105 will delete all headings of type “U” before importing the untraced references again.

# When to run p\_manage\_105?

---

- This service must be run each time an untraced reference is added or updated in the authority database.

---

# Batch Jobs for AUT Enrichment



# Batch Jobs for AUT Enrichment

---

**p\_manage\_102:** pre-enriches the BIB Z01 index from the entire AUT library. Creates Z01 records linked to the authority documents.

In 15.2 p\_manage\_102 allows to filter out specific authority records from building bibliographic headings, based on data in the authority record.

# Batch Jobs for AUT Enrichment


Pre-Enrich Bibliographic Headings Based on the Authority Database (manage-...)

Authorities Library


Delete Flag  Delete Existing Headings  
 Keep Existing Headings

From Document Number (up to 9 digits)

To Document Number (up to 9 digits)

Filtering Program  

Processes to Create

Run Time  

At  O'clock

Add to History

# Batch Jobs for AUT Enrichment

Two filtering programs are currently available in running p\_manage\_102 :

- **1xxt** - Ignores the authority record if the 1XX field has subfield \$\$t.
- **4xx** - Ignores the authority record if the record does not have at least one 4XX field.

(Currently, in 15.2, only one of these can be specified. A request to allow both to be specified has been sent to Programming.)

# Batch Jobs for AUT Enrichment

## p\_manage\_02:

**14.2** - aleph\_start\_505 - parameter sw\_force\_chk.

When sw\_force\_chk='Y', all Z01 records are created with z01-aut-library= "-CHK-".

**15.2** - p\_manage\_02 has a parameter 'Insert -CHK- in New Headings':

**Update Headings Index (manage-02)**

Procedure to Run	Update headings index	Submit
From Document Number (up to 9 digits)	000000000	View History
To Document Number (up to 9 digits)	999999999	Cancel
Processes to Create	1	Help
Insert -CHK- in New Headings	Yes	<input checked="" type="checkbox"/> Add to History
Run Time	Today	
At	<input type="text"/> O'clock	

---

# Browsing Logical Bases

---

# Base Filtered Headings (Z0102)

# Z0102 Setup - 14.2

---

- **tab\_base\_z0102** - defines the bases that work with Z0102

```
!           1
!!!!!!!!!!!!!!!!!!!!!!!!!!!!
BOOKS
SERIALS
FARITAIL
HISTORY
```

# Z0102 Setup - 15.2

- **tab\_base.eng, col.8** - defines the bases that work with Z0102

LINC	Lincoln Library	USM01	USM01	Y	wsl=ulinc
EDUC	Education Library	USM01	USM01	N	wsl=ueduc
LAW	Law Library	USM01	USM01	N	wsl=ulaw
SCI	* Science Library	USM01	USM01	N	wsl=usci
HEAL	Health Library	USM01	USM01	N	wsl=uhlth
LIEDU or ueduc)	Lincoln or Education	USM01	USM01	N	wsl=(ulinc
HESCI or usci)	Health or Science	USM01	USM01	N	wsl=(uhlth
SERIALS	Serials	USM01	USM01	Y	wfm=SE
BOOKS	Books	USM01	USM01	Y	wfm=BK
MUSIC	Music	USM01	USM01	Y	wfm=MU
HISTORY y not wrd=israel	History	USM01	USM01	Y	wrd=histor
ART	Art	USM01	USM01	N	wti=art
ART_HIS y or wti=art	* History of Art	USM01	USM01	Y	wti=histor



# Z0102 Update - 15.2

-p\_manage\_34 is obsolete

**-ue\_08** performs background indexing of z0102

Start update BIB Headings and Doc records using AUTHORITY Database

- Continuous check of new headings (C)
- Re-check previously unmatched headings (R)
- Re-check all headings (as if they were new) (N)

Enter choice [C]:       c

Write Z07s for related bib records:

- Yes (Y)
- No (N)

Enter choice [Y]:

Update Z01 Counters (Z0102):

Please Note that counters should not be updated if table Z0102 was not already created by p\_manage\_32.

- Yes (Y)
- No (N)

Enter choice [Y]:       █

# Z01-UPDATE-Z0102 - 15.2

## How does ue\_08 work?

Like p\_manage\_34, ue\_08 looks for Z01 records that have been "touched" since the last time p\_manage\_32 was run.



*But, in 15.2 ...*

- p\_manage\_102 and p\_manage\_02 create records with **Z01-UPDATE-Z0102** = 'N'. This is due to the fact that p\_manage\_32 must necessarily run and having it update this flag is just extra work. So after p\_manage\_32 runs everything is correctly set to "N".
- Then new headings (Z01) are created or new titles (Z02) are added to existing headings (by ue\_01 which calls the update\_acc program which calls io\_z01 which sets **Z01-UPDATE-Z0102** to 'Y').
- Then when ue\_08 processes the Z01 it sets **Z01-UPDATE-Z0102** to 'N.'

# Z0102 - Implementation of count\_style

- In 14.2 the count\_style variable was not implemented for for z0102
- It was impossible to reach the following display in the bases working with z0102

www\_server\_defaults:  
setenv count\_style REF



## Browse List: Authors

No. of Recs	Entry
2	<a href="#">Plato. - [LC Authority Record]</a>
2	<a href="#">Platon. - [LC Authority Record]</a>
2	<a href="#">Platonas. - [LC Authority Record]</a>
2	<a href="#">Platone. - [LC Authority Record]</a>

www\_server\_defaults:  
setenv count\_style SEE



## Browse List: Authors

No. of Recs	Entry
5	<a href="#">Plato. - [LC Authority Record]</a>
-	<a href="#">Platon. - [LC Authority Record]</a> See: <a href="#">Plato.</a>
-	<a href="#">Platonas. - [LC Authority Record]</a> See: <a href="#">Plato.</a>
-	<a href="#">Platone. - [LC Authority Record]</a>

# Z0102 - Implementation of count\_style

---

- In 15.2 z0102 works with count\_style

NOTE: definition of count\_style is moved from www\_server\_defaults to tab10:

TAB10-ACC-COUNT-STYLE

---

# **Inclusion of Several Logical Bases into Browse List Display**

# Browse List Display - Documents Counter

ALEPH offers another setup, in which you can set up a logical base that will include one or two “sub-bases”. The system will display the two (or three) counters for each heading – the counter of the logical base, and the counters of each of the sub-bases as well.

## Browse List: Authors/Names

Total	LINC	EDUC	Entry
1	<u>1</u>	<u>1</u>	<u>Service Center for Teachers of History</u>
10	<u>3</u>	<u>7</u>	<u>Shakespeare, William, 1564-1616</u>
1	<u>1</u>	<u>1</u>	<u>Shaw, William Arthur, 1865-1943</u>

# Browse List Display - Documents Counter

**/alephe/tab/tab\_base\_count** - defines the setup of principal base and sub-bases.

Up to three columns can be set, for three logical bases. Each column displays the number of relevant records.

```
!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!-!!!!!!!!!!!!!!!!!!!!!!!!!!!!
LIEDUC                                LINC                                EDUC
```

## Browse List: Authors/Names

Total	LINC	EDUC	Entry
1	<u>1</u>	<u>1</u>	<u>Service Center for Teachers of History</u>
10	<u>3</u>	<u>7</u>	<u>Shakespeare, William, 1564-1616</u>
1	<u>1</u>	<u>1</u>	<u>Shaw, William Arthur, 1865-1943</u>

---

**Z0101 -**

**Sub-arranged Display of  
Records Related to  
Headings (Z01)**



# Problems of Traditional ALEPH Display and Sort Order

```

LDR      _____  ^^^^njm^a22^^^^^^^a^4500
001      ___  -  000005827
005      ___  -  20020309140610.0
008      ___  -  020309s1986^^^^^^^|^^^eng^d
100      1  a  Bach, Johann Sebastian,
          d  1685-1750.
240      0  a  Harpsichord music.
          k  Selections,
          o  arr.
245      00 a  Partita no.1, BWV 825; Nun Komm', Der Heiden Heiland.
260      ___ a  Hayes Middlesex, England :
          b  EMI Records Ltd.,
          c  1986.
700      12 a  Bach, Johann Sebastian,
          d  1685-1750.
          t  Partitas
700      12 a  Scarlatti, Domenico,
          d  1685-1757.
          t  Sonatas.
    
```

# Problems of Traditional ALEPH Display and Sort Order

<u>100</u>	<u>1</u>	<u>a</u> Bach, Johann Sebastian, <u>d</u> 1685-1750.
<u>240</u>	<u>0</u>	<u>a</u> Harpsichord music. <u>k</u> Selections, <u>o</u> arr.
<u>245</u>	<u>00</u>	<u>a</u> Partita no.1, BWV 825; Nun Komm', Der Heiden Heiland.
<u>260</u>		<u>a</u> Hayes Middlesex, England : <u>b</u> EMI Records Ltd., <u>c</u> 1986.
<u>700</u>	<u>12</u>	<u>a</u> Bach, Johann Sebastian, <u>d</u> 1685-1750. <u>t</u> Partitas
<u>700</u>	<u>12</u>	<u>a</u> Scarlatti, Domenico, <u>d</u> 1685-1757. <u>t</u> Sonatas.

## tab11\_acc

100##	9 -	AUT	-e468
700##	9 -	AUT	-efhklmnoqrst4568

# Problems of Traditional ALEPH Display and Sort Order

In the standard brief view in ALEPH, the brief display uses 100 and 245 fields for display (as defined in `pc_tab_short` and `www_f_tab_short`). Therefore, under author heading Scarlatti, Domenico the brief display shows:

Author = Bach, Johann Sebastian  
Title = Harpsichord music.

With no mention of either “Scarlatti” or “Sonatas”. Also, there is no way to have this record display twice under Bach, once for “Harpsichord”, and again for

# Problems of Traditional ALEPH Display and Sort Order

One way to solve the problem of added author-title indexing in ALEPH is to create analytic cataloging for author-title added entries.

Another way to solve the problem is to create an author-title BROWSE list. This is done by indexing all 7XX + \$ \$t fields as they are, and indexing virtual author-title fields, created by concatenating 1XX + 240 or 1XX + 245, using ALEPH's "expand" features.

-76-

A third solution is to use the Z0101

brief records... Understanding Indexes



# Z0101

---

- Used to sub-arrange records related to a particular heading (Z01)
- The new format is especially useful for sub-arranging records that are attached to prolific authors.

# Z0101

- Brief records are sub-arranged under the particular heading to which they relate.
- Multiple z0101, representing one bibliographic record, can be attached to one z01
- Z0101 display text presents relevant information from the bibliographic record.
- These records are built according to the record's format, the headings index and the field of origin.

# Z0101 Creation

---

- Creation uses the following tables :
  - tab\_z0101
  - tab\_z0101\_text

# Z0101 Creation

- tab\_z0101 - defines brief record structure based on format, index and field of origin

```
!1  2    3      4          5          6          7          8          9
      10      11
!!-!!!!!!-!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!-!!!!!!!!!!!!
-!!!!!!!!!!!!-!!!!!!!!!!!!
## AUT  100## TITLE-MAIN DATE                                AUTHOR-REF
      TIT-M-REF
## AUT  110## TITLE-MAIN DATE
## AUT  111## TITLE-MAIN
## AUT  7#### TITLE-ADD  DATE
## AUT  800## SERIES-ADD VOL800      DATE
```



# Z0101 Creation

- tab\_z0101\_text – codes definitions for brief record

```
TITLE-MAIN 100## t t t
TITLE-MAIN 240## adfhlmopr t
TITLE-MAIN 243## adfhlmopr
TITLE-MAIN 245## ahnp
TITLE-ADD 700## t t
TITLE-ADD 240##
TITLE-ADD 243##
TITLE-ADD 245##
AUTHOR-REF 100## t -
AUTHOR-REF 100##
TIT-M-REF 100## t
TIT-M-REF 240## adfhlmopr
TIT-M-REF 243## adfhlmopr
TIT-M-REF 245## ahnp
TIT-A-REF 700## t
TIT-A-REF 240## adfhlmopr
```

# Z0101 Creation

tab\_z0101

```
## AUT 100## TITLE-MAIN DATE AUTHOR-REF  
TIT-M-REF  
## AUT 110## TITLE-MAIN DATE  
## AUT 111## TITLE-MAIN  
## AUT 7#### TITLE-ADD DATE  
## AUT 800## SERIES-ADD VOL800 DATE
```

tab\_z0101\_text

```
TITLE-MAIN 100## t t t  
TITLE-MAIN 240## adfhlmnopr t  
TITLE-MAIN 243## adfhlmnopr  
TITLE-MAIN 245## ahnp  
TITLE-ADD 700## t t  
TITLE-ADD 240##  
TITLE-ADD 243##  
TITLE-ADD 245##  
AUTHOR-REF 100## t -  
AUTHOR-REF 100##  
TIT-M-REF 100## t  
TIT-M-REF 240## adfhlmnopr
```

# Z0101 Record Structure

## z01

```
02 z01_rec_key \  
  03 acc_code .....AUT  
  03 alpha .....L  
  03 filing_text .....BACH JOHANN SEBASTIAN 1685 1750  
  03 filing_sequence .....05035  
02 z01_acc_sequence .....000005035  
02 z01_hash .....531397991500
```

## z0101

```
02 z0101_rec_key \  
  03 sequence .....000412772  
02 z0101_rec_key_1 \  
  03 acc_sequence .....000005035  
  03 filing_text .....harpsichord music 0001987  
  03 key_doc_number .....000002309  
02 z0101_doc_number .....000002309  
02 z0101_single_display ...N  
02 z0101_aut_library .....  
02 z0101_aut_doc_number ...000000000  
02 z0101_aut_tag .....  
02 z0101_display_text .....$$tHarpsichord music. $$d1987.
```

## z0101

```
02 z0101_rec_key \  
  03 sequence .....000412776  
02 z0101_rec_key_1 \  
  03 acc_sequence .....000005035  
  03 filing_text .....partitas 0001986  
  03 key_doc_number .....000005827  
02 z0101_doc_number .....000005827  
02 z0101_single_display ...N  
02 z0101_aut_library .....  
02 z0101_aut_doc_number ...000000000  
02 z0101_aut_tag .....  
02 z0101_display_text .....$$tPartitas. $$d1986.
```

# Z0101 Creation

- Filing rules for z0101 are defined in **filing routine 98** (hard-coded)

```
98 F del_subfield      ~ -
98 F year_uu
98 F numbers
98 F expand_num
98 F suppress
98 F compress          '[|]
98 F to_blank          !"()-{}<>;:~.?,/\\@*%=_-'~
98 F char_conv         FILING-KEY-10
98 F char_conv         FILING-KEY-11
98 F to_lower
98 F nack_spaces
```

# Z0101 Creation

- In routine 98 filing \_routine 'suppress' is required, because when Z0101 is built, non-filing indicators are handled by placing non-filing text within <<...>>

```
01 z0101 \  
  02 z0101_rec_key \  
    03 sequence .....000410984  
  02 z0101_rec_key_1 \  
    03 acc_sequence .....000000022  
    03 filing_text .....court and reign of francis the first 0001887  
    03 key_doc_number .....000000358  
  02 z0101_doc_number .....000000358  
  02 z0101_single_display ...N  
  02 z0101_aut_library .....  
  02 z0101_aut_doc_number ...000000000  
  02 z0101_aut_tag .....  
  02 z0101_display_text .....$$a<<The >>court and reign of Francis the Fir
```

# Z0101 Creation

---

- Use p\_manage\_35 to build Z0101 records.
- Online updates carried out by ue\_01

# Z0101 & Authority Data

---

- Brief records can have references from the authority database.
- This possibility generates display of references within the sub-arranged index.

# Z0101 & Authority Data

- tab\_z0101 , col. 9,10,11 - define Z0101 text to be used as a match against the Authority database

```

!1  2    3    4          5          6          7          8          9
    10    11
!!-!!!!-!!!!-!!!!!!!!-!!!!!!!!-!!!!!!!!-!!!!!!!!-!!!!!!!!-!!!!!!
-!!!!!!!!-!!!!!!
## AUT  100## TITLE-MAIN DATE                                AUTHOR-REF
TIT-M-REF
## AUT  110## TITLE-MAIN DATE
## AUT  111## TITLE-MAIN
## AUT  7#### TITLE-ADD  DATE
## AUT  800## SERIES-ADD UOL800    DATE
## TIT  245## ME-ONLY    IMP-ONLY  DATE        TYPE        AUTHOR-REF
TTL-M-REF
## TIT  246## ME-OR-TI   DATE        TYPE        AUTHOR-REF
TTL-M-REF
## TIT  247## ME-OR-TI   DATE        TYPE        AUTHOR-REF
TTL-M-REF

```



# Z0101 & Authority Data

```

11  2      3      4      5      6      7      8      9
   10     11
!!-!!!!-!!!!-!!!!!!!!-!!!!!!!!-!!!!!!!!-!!!!!!!!-!!!!!!!!-!!!!!!
-!!!!!!!!-!!!!!!
## AUT   100## TITLE-MAIN DATE                AUTHOR-REF
TIT-M-REF
## AUT   110## TITLE-MAIN DATE
## AUT   111## TITLE-MAIN
## AUT   7### TITLE-ADD  DATE
## AUT   800## SERIES-ADD UOL800    DATE
## TIT   245## ME-ONLY    IMP-ONLY  DATE        TYPE        AUTHOR-REF
TTL-M-REF
## TIT   246## ME-OR-TI   DATE        TYPE        AUTHOR-REF
TTL-M-REF
## TIT   247## ME-OR-TI   DATE        TYPE        AUTHOR-REF
TTL-M-REF

```

tab\_z0101

tab\_z0101\_text

```

AUTHOR-REF 100## t -
AUTHOR-REF 100##
TIT-M-REF 100## t
TIT-M-REF 240## adfhlmopr
TIT-M-REF 243## adfhlmopr
TIT-M-REF 245## ahnp
TIT-A-REF 700## t
TIT-A-REF 240## adfhlmopr
TIT-A-REF 243## adfhlmopr
TIT-A-REF 245## ahnp

```



# Z0101 & Authority Data

---

- The text is matched against a special heading index code, “Z0101”, in the Authority database.
- This means that the library must send the 1XX and 4XX fields of the authority record in tab11\_acc to a headings list called Z0101.
- The normalization routine used should strip all sub-fields, in order to enable a match with the Z0101 match text).

# Z0101 & Authority Data

- An additional Z0101 record is built from the Authority record.

```
01 z0101 \  
  02 z0101_rec_key \  
    03 sequence .....000421417  
  02 z0101_rec_key_1 \  
    03 acc_sequence .....000027260  
    03 filing_text .....in search of lost time  
    03 key_doc_number .....000003511  
  02 z0101_doc_number .....000003511  
  02 z0101_single_display ...Y  
  02 z0101_aut_library .....USM10  
  02 z0101_aut_doc_number ...000002660  
  02 z0101_aut_tag .....4001  
  02 z0101_display_text .....$$tIn search of lost time.
```

---

***For more information on the Z0101, go to:***

***Doc portal (***  
***<http://www.exlibrisgroup.com/documentation> )***

**. ALEPH500 Documentation**

**. . How To**

**. . . Indexing and OPAC**

**. . . . [Brief Records Functionality.pdf](#)**

**{I have also copied this to the US documentation server ( <http://support.exlibris-usa.com/D> ) in the NAAUG\_Indexes\_2002 directory }**

# The End

