

Authority control without tears

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Picking up the pieces - Authority SQL data

1. Questions for audience
 - a. How many know about database structure?
2. Sierra database structure (putting it all back together)
 - a. How does Sierra index or store marc records?
 - b. How does Sierra know if something is a heading used for the first time?
3. Headings used for the first time
 - a. What does this look like
4. Demo (recordings)

Pieces of authority data: putting it back together

Questions for audience

- a. How many know about database structure?

Pieces of authority data: putting it back together

But where is the MARC record?

Spoilers: no where in Sierra postgresQL

Pieces of authority data: putting it back together

Sierra database structure

- a. How does Sierra index or store marc records?
- b. Finding the right information (maximize use)

Pieces of authority data: putting it back together

Comprised of

1. Authority/subject headings stored in bibliographic records(1xx, 6xx,7xx)
 - a. Varfield tables,
2. Headings used for the first time
 - a. Catmaint table
3. Triggers for headings used for the first time (Covered by Mike)
 - a. occ_num

Pieces of authority data: putting it back together

The screenshot shows the pgAdmin III interface. On the left, the 'Object browser' pane displays a tree view of database objects. The 'authority_record' object is selected and highlighted in blue. The right pane is split into two sections: 'Properties' and 'SQL pane'. The 'Properties' section shows a table with columns 'Property' and 'Value', listing details for the selected view. The 'SQL pane' contains SQL code for dropping and recreating the view.

Property	Value
Name	authority_record
OID	47478
Owner	pdroot
ACL	{pdroot=arwdDxt/pdroot,sierra_partne

```
-- View: sierra_view.authority_record
-- DROP VIEW sierra_view.authority_record;

CREATE OR REPLACE VIEW sierra_view.authority_record AS
SELECT authority_record.id,
       authority_record.record_id,
       authority_record.marc_type AS marc_type_code,
       authority_record.code1,
       authority_record.code2,
       authority_record.suppress_code,
```

Retrieving details on view authority_record... Done.

iii on bomanca@10.3.9.185:1032

38 msec

pgAdmin III

File Edit Plugins View Tools Help

Object browser

- [-] bib_level_property_myuser
- [-] bib_level_property_name
- [-] bib_record
- [-] bib_record_call_number_prefix
- [-] bib_record_holding_record_link
- [-] bib_record_item_record_link
- [-] bib_record_location
- [-] bib_record_order_record_link
- [-] bib_record_property
- [-] bib_record_volume_record_link
- [-] bib_view
- [-] billing_location_property
- [-] billing_location_property_myuser
- [-] billing_location_property_name
- [-] booking
- [-] bool_info
- [-] bool_set
- [-] branch
- [-] branch_change
- [-] branch_myuser
- [-] branch_name
- [-] c
- [-] collection_myuser
- [-] contact_record
- [-] contact_record_address_type
- [-] contact_view
- [-] control_field
- [-] counter
- [-] country_property
- [-] country_property_myuser
- [-] country_property_name
- [-] course_record
- [-] course_record_bib_record_link
- [-] course_record_item_record_link
- [-] course_view
- [-] darc_service_view
- [-] diacritic_category
- [-] diacritic_mapping
- [-] ead_hierarchy
- [-] external_fund_property
- [-] external_fund_property_mvview

Properties

Property	Value
Name	catmaint
OID	46696
Owner	pdroot
ACL	{pdroot=arwdDxt/pdroot,sierra_partner=/pdroot,ii=/pdroot,iipriv=/pdroot,iiapp=arwd/pdroot}
Definition	SELECT catmaint.id, catmaint.is_locked, catmaint.is_viewed, catmaint.condition_code_num, catmaint.index_tag, catmaint.index_entry, catmaint.record_metadata_id, catmaint.statistics_group_code_num, catmaint.process_gmt,
System view?	No
Materialized view?	No
Check Option	
Comment	

View Data

- View Top 100 Rows
- View Last 100 Rows
- View All Rows
- View Filtered Rows...

SQL pane

```
-- View: sierra_view.catmaint
-- DROP VIEW sierra_view.catmaint;

CREATE OR REPLACE VIEW sierra_view.catmaint AS
SELECT catmaint.id,
       catmaint.is_locked,
       catmaint.is_viewed,
       catmaint.condition_code_num,
       catmaint.index_tag,
       catmaint.index_entry,
       catmaint.record_metadata_id,
       catmaint.statistics_group_code_num
```

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint	statistics_group_code_num integer	process_gmt timestamp with time zone	program_code character varying(255)	iii_user_name character varying(255)	one_xx_entry text	authority_record_metadata_id bigint	old_field text	new_240_field text	field
1	958677	FALSE	FALSE	1	a	owens delia xzo	420911452488	0	2018-10-08 09:06:47.339-04	sierra	pka					al
2	958678	FALSE	FALSE	1	a	brennan jobs lisa xzo	420911452489	0	2018-10-08 09:09:57.199-04	sierra	pka					al
3	958679	FALSE	FALSE	1	a	wager jeffrey d	420911450599	504	2018-10-08 09:18:46.85-04	sierra	bjz					b7
4	958680	FALSE	FALSE	1	a	morton kate xzo	420911452490	0	2018-10-08 09:22:10.868-04	sierra	pka					al
5	958681	FALSE	FALSE	1	a	albert susan wittig xzo	420911452491	0	2018-10-08 09:40:51.113-04	sierra	pka					al
6	958682	FALSE	FALSE	1	a	andrews donna xzo	420911452492	0	2018-10-08 09:43:39.257-04	sierra	pka					al
7	958683	FALSE	FALSE	1	d	african diaspora political aspects history	420911448378	504	2018-10-08 09:49:56.907-04	sierra	bjz					d6
8	958685	FALSE	FALSE	4	d	china lu jun	416613424982	504	2018-10-08 10:02:41.877-04	sierra	bjz					di
9	958687	FALSE	FALSE	4	d	china republic 1949 lu jun	416613424983	504	2018-10-08 10:04:00.379-04	sierra	bjz					d1

100 rows

	id bigint	record_id bigint	marc_type_code character(1)	code1 character(1)	code2 character(1)	suppress_code character(1)	is_suppressed boolean
1	416613374154	416613374154					FALSE
2	416613374155	416613374155					FALSE
3	416613374156	416613374156					FALSE
4	416613374157	416613374157					FALSE
5	416613374158	416613374158					FALSE
6	416613374159	416613374159					FALSE
7	416613374160	416613374160					FALSE
8	416613374161	416613374161					FALSE
9	416613374162	416613374162					FALSE
10	416613374163	416613374163					FALSE
11	416613374164	416613374164					FALSE
12	416613374165	416613374165					FALSE
13	416613374166	416613374166					FALSE
14	416613374167	416613374167					FALSE
15	416613374168	416613374168					FALSE
16	416613374169	416613374169					FALSE
17	416613374170	416613374170					FALSE
18	416613374171	416613374171					FALSE
19	416613374172	416613374172					FALSE
20	416613374173	416613374173					FALSE
21	416613374174	416613374174					FALSE
22	416613374175	416613374175					FALSE
23	416613374176	416613374176					FALSE
24	416613374177	416613374177					FALSE
25	416613374178	416613374178					FALSE
26	416613374179	416613374179					FALSE
27	416613374180	416613374180					FALSE
28	416613374181	416613374181					FALSE
29	416613374182	416613374182					FALSE
30	416613374183	416613374183					FALSE
31	416613374184	416613374184					FALSE
32	416613374185	416613374185					FALSE
33	416613374186	416613374186					FALSE
34	416613374187	416613374187					FALSE
35	416613374188	416613374188					FALSE
36	416613374189	416613374189					FALSE

Scratch pad

Pieces of authority data: putting it back together

Hazards of looking at authority data in Sierra PostgreSQL?

Pieces of authority data: putting it back together

Hazards of looking at authority data in Sierra?

1. Dirty data
 - a. Authority data is mixed up with all kinds of other data (Varfield)
 - i. Patron data is mixed with bibliographic, item, order, **virtual data**, and any other type of variable length data
 - b. Virtual data for consortia present in individual ILS's
 - i. Exclude virtual/consortial data when looking at authority record data

Varfield table

Hazards of looking at
authority data in Sierra

PostgreSQL?

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_ chara
1	6962	1126350885888622	c				0	DK32
2	6965	1126320821117550	t				0	Inter
3	6966	6474375438441945	b				0	12223
4	6967	6474375438441945	c				0	KLA40
5	6968	6474375438441945	5				0	50707
6	6969	6474375438441945	x				0	LAW S
7	6970	6474345373670873	t				0	Perfc
8	6971	6474345373670873	a				0	Wood,
9	6972	1407825862475734	b				0	80638
10	6973	1407825862475734	c				0	PN199
11	6974	1407825862475734	5				0	51174
12	6975	1407825862475734	x				0	OSU E
13	6976	1407795797704662	t				0	Portr
14	6977	1407795797704662	a				0	Zorka
15	6978	1407825862703253	b				0	80738
16	6979	1407825862703253	c				0	PN199
17	6980	1407825862703253	5				0	51174
18	47056	420911081829	t	240	1	0	0	laTre
19	48292305	450972695474	b				1	35054
20	6981	1407825862703253	x				0	OSU E
21	6984	1407825858685980	b				0	80628
22	6985	1407825858685980	c				0	PG302
23	6986	1407825858685980	5				0	51226
24	6987	1407825858685980	x				0	OSU E
25	6990	1407825858804081	b				0	80502
26	6991	1407825858804081	c				0	PG341
27	6992	1407825858804081	5				0	51226
28	6993	1407825858804081	x				0	OSU E
29	60868678	420911288374	d	651		0	1	lawes
30	60868679	420911288374	t	245	1	4	0	laThe
31	6997	563400926991756	c				0	DK35.
32	7002	1407825858864632	b				0	80802
33	7003	1407825858864632	c				0	PN199
34	7004	1407825858864632	5				0	51413
35	7005	1407825858864632	x				0	OSU E

Varfield table

Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?

File Edit View Tools Help

100 rows

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_ chara
1	6962	1126350885888622	c				0	DK32
2	6965	1126320821117550	t				0	Inter
3	6966	6474375438441945	b				0	12223
4	6967	6474375438441945	c				0	KLA40
5	6968	6474375438441945	5				0	50707
6	6969	6474375438441945	x				0	LAW S
7	6970	6474345373670873	t				0	Perfc
8	6971	6474345373670873	a				0	Wood,
9	6972	1407825862475734	b				0	80638
10	6973	1407825862475734	c				0	PN199
11	6974	1407825862475734	5				0	51174
12	6975	1407825862475734	x				0	OSU E
13	6976	1407795797704662	t				0	Portr
14	6977	1407795797704662	a				0	Zorka
15	6978	1407825862703253	b				0	80738
16	6979	1407825862703253	c				0	PN199
17	6980	1407825862703253	5				0	51174
18	47056	420911288374	t	240	1	0	0	laTre
19	48292305	420911288374	b				1	35054
20	6981	1407825862703253	x				0	OSU E
21	6984	1407825858685980	b				0	80628
22	6985	1407825858685980	c				0	PG302
23	6986	1407825858685980	5				0	51226
24	6987	1407825858685980	x				0	OSU E
25	6990	1407825858804081	b				0	80502
26	6991	1407825858804081	c				0	PG341
27	6992	1407825858804081	5				0	51226
28	6993	1407825858804081	x				0	OSU E
29	60868678	420911288374	d	651		0	1	lawes
30	60868679	420911288374	t	245	1	4	0	laThe
31	6997	563400926991756	c				0	DK35.
32	7002	1407825858864632	b				0	80802
33	7003	1407825858864632	c				0	PN199
34	7004	1407825858864632	5				0	51413
35	7005	1407825858864632	x				0	OSU E

Varfield table

Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	id. chara
1	6962	1126350885888622	c				0	DK32
2	6965	1126320821117550	t				0	Inter
3	6966	6474375438441945	b				0	12223
4	6967	6474375438441945	c				0	KLA40
5	6968	6474375438441945	5				0	50707
6	6969	6474375438441945	x				0	LAW S
7	6970	6474345373670873	t				0	Perfc
8	6971	6474345373670873	a				0	Wood,
9	6972	1407825862475734	b				0	80638
10	6973	1407825862475734	c				0	PN199
11	6974	1407825862475734	5				0	51174
12	6975	1407825862475734	x				0	OSU E
13	6976	1407795797704662	t				0	Portr
14	6977	1407795797704662	a				0	Zorka
15	6978	1407825862703253	b				0	80738
16	6979	1407825862703253	c				0	PN199
17	6980	1407825862703253	5				0	51174
18	47056	420911288374	t	240	1	0	0	laTre
19	48292305	420911288374	b				1	35054
20	6981	1407825862703253	x				0	OSU E
21	6984	1407825858685980	b				0	80628
22	6985	1407825858685980	c				0	PG302
23	6986	1407825858685980	5				0	51226
24	6987	1407825858685980	x				0	OSU E
25	6990	1407825858804081	b				0	80502
26	6991	1407825858804081	c				0	PG341
27	6992	1407825858804081	5				0	51226
28	6993	1407825858804081	x				0	OSU E
29	60868678	420911288374	d	651		0	1	lawes
30	60868679	420911288374	t	245	1	4	0	laThe
31	6997	563400926991756	c				0	DK35.
32	7002	1407825858864632	b				0	80802
33	7003	1407825858864632	c				0	PN199
34	7004	1407825858864632	5				0	51413
35	7005	1407825858864632	x				0	OSU E

Varfield table

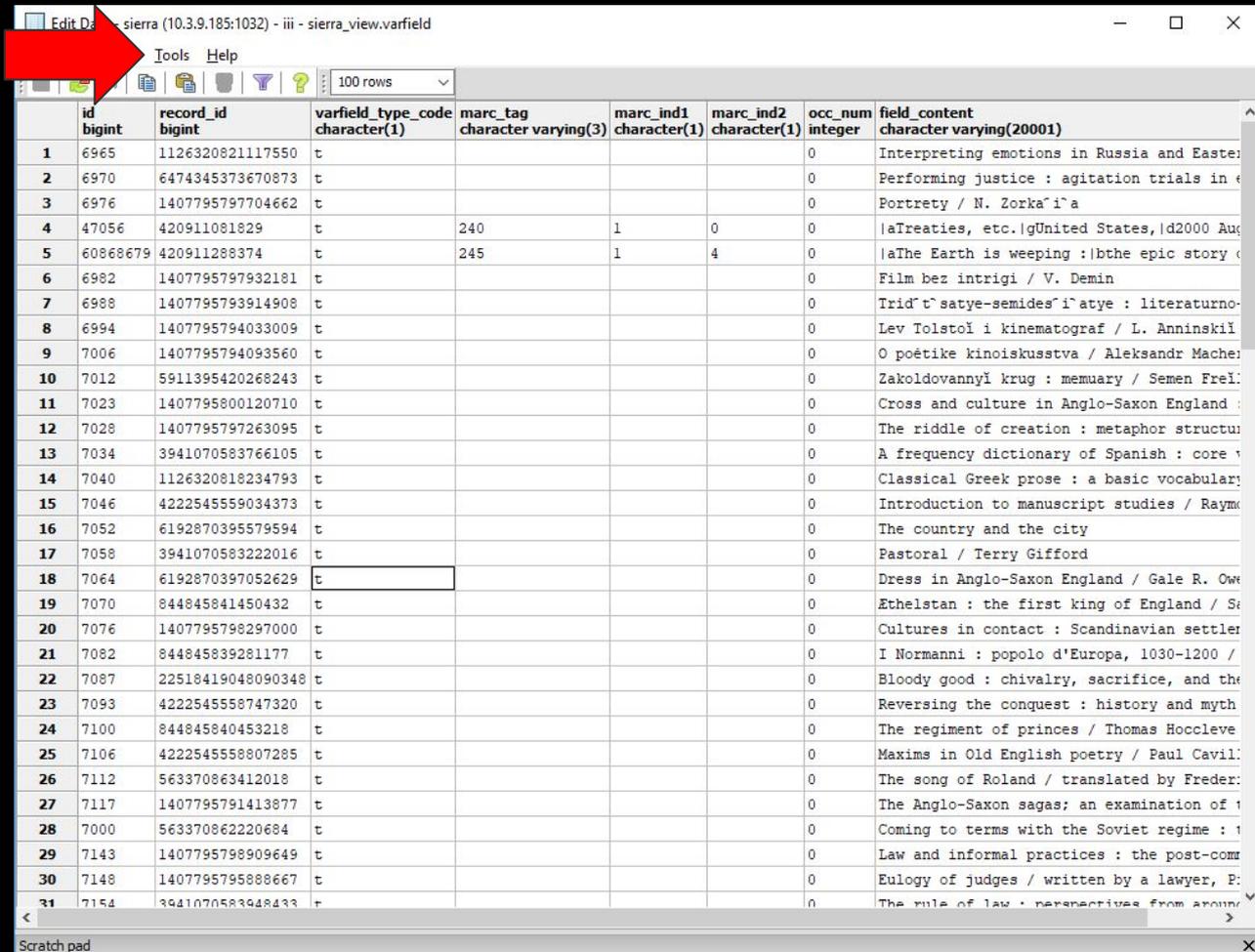
Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?

-filtering options

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_ chara
1	6962	1126350885888622	c				0	DK32
2	6965	1126320821117550	t				0	Inter
3	6966	6474375438441945	b				0	12223
4	6967	6474375438441945	c				0	KLA40
5	6968	6474375438441945	5				0	50707
6	6969	6474375438441945	x				0	LAW 9
7	6970	6474345373670873	t				0	Perfo
8	6971	6474345373670873	a				0	Wood,
9	6972	1407825862475734	b				0	80638
10	6973	1407825862475734	c				0	PN199
11	6974	1407825862475734	5				0	51174
12	6975	1407825862475734	x				0	OSU E
13	6976	1407795797704662	t				0	Portr
14	6977	1407795797704662	a				0	Zorke
15	6978	1407825862703253	b				0	80738
16	6979	1407825862703253	c				0	PN199
17	6980	1407825862703253	5				0	51174
18	47056	4509726954	t			0	0	laTre
19	48292305	4509726954	b				1	35054
20	6981	1407825862703253	x				0	OSU E
21	6984	1407825858685980	b				0	80628
22	6985	1407825858685980	c				0	PG302
23	6986	1407825858685980	5				0	51226
24	6987	1407825858685980	x				0	OSU E
25	6990	1407825858804081	b				0	80502
26	6991	1407825858804081	c				0	PG341
27	6992	1407825858804081	5				0	51226
28	6993	1407825858804081	x				0	OSU E
29	60868678	420911288374	d	651		0	1	laWee
30	60868679	420911288374	t	245	1	4	0	laThe
31	6997	563400926991756	c				0	nr35

Varfield table

Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?



sierra (10.3.9.185:1032) - iii - sierra_view.varfield

Tools Help

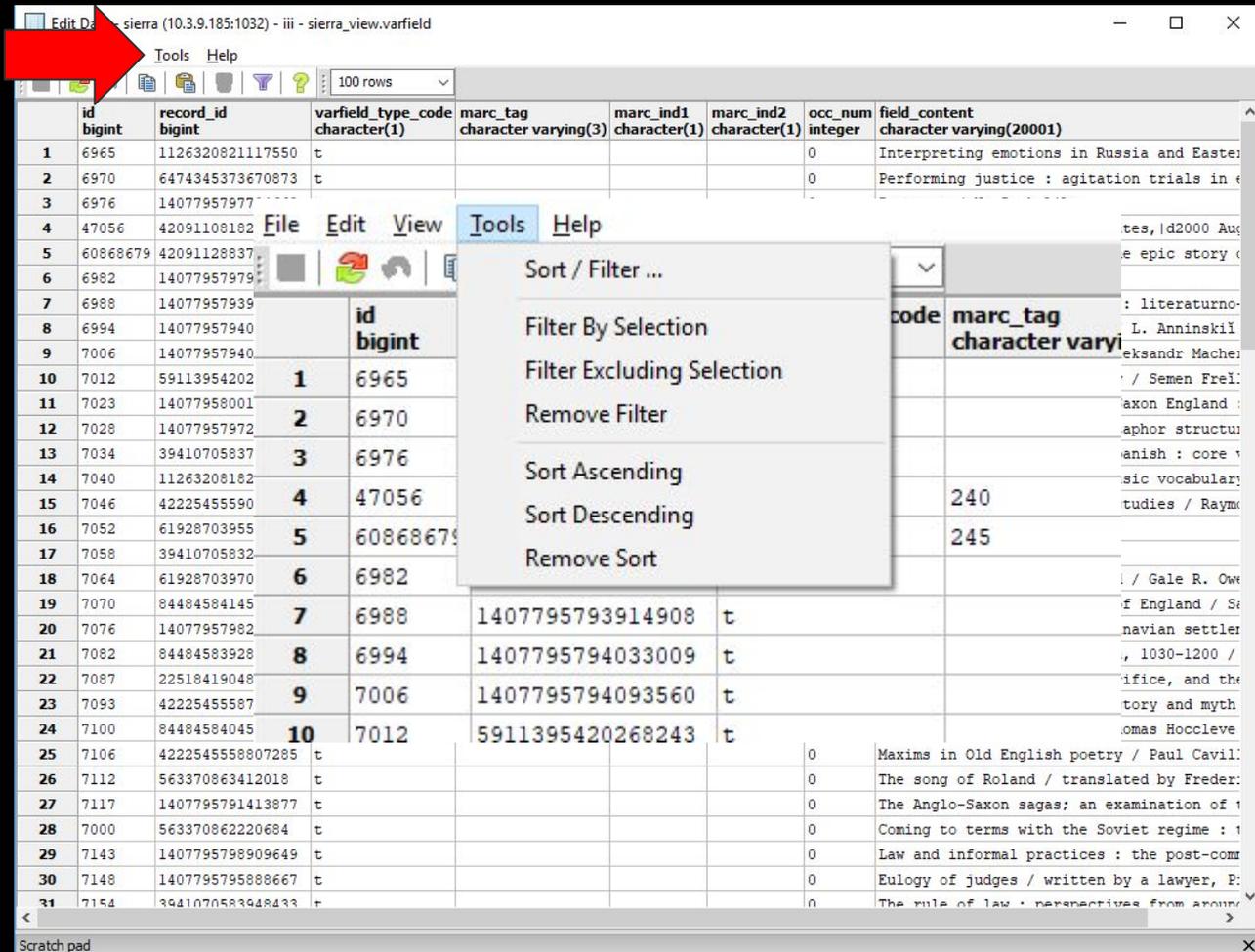
100 rows

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_content character varying(20001)
1	6965	1126320821117550	t				0	Interpreting emotions in Russia and Easter
2	6970	6474345373670873	t				0	Performing justice : agitation trials in e
3	6976	1407795797704662	t				0	Portrety / N. Zorka'i'a
4	47056	420911081829	t	240	1	0	0	aTreaties, etc. gUnited States, d2000 Auc
5	60868679	420911288374	t	245	1	4	0	aThe Earth is weeping : bthe epic story (
6	6982	1407795797932181	t				0	Film bez intrigi / V. Demin
7	6988	1407795793914908	t				0	Trid' t`satye-semides' i`atye : literaturno-
8	6994	1407795794033009	t				0	Lev Tolstoĭ i kinematograf / L. Anninskiĭ
9	7006	1407795794093560	t				0	O poĕtike kinoiskusstva / Aleksandr Mache
10	7012	5911395420268243	t				0	Zakoldovannyĭ krug : memuary / Semen Freĭl
11	7023	1407795800120710	t				0	Cross and culture in Anglo-Saxon England :
12	7028	1407795797263095	t				0	The riddle of creation : metaphor structur
13	7034	3941070583766105	t				0	A frequency dictionary of Spanish : core v
14	7040	1126320818234793	t				0	Classical Greek prose : a basic vocabulary
15	7046	4222545559034373	t				0	Introduction to manuscript studies / Raym
16	7052	6192870395579594	t				0	The country and the city
17	7058	3941070583222016	t				0	Pastoral / Terry Gifford
18	7064	6192870397052629	t				0	Dress in Anglo-Saxon England / Gale R. Ow
19	7070	844845841450432	t				0	Ethelstan : the first king of England / Se
20	7076	1407795798297000	t				0	Cultures in contact : Scandinavian settler
21	7082	844845839281177	t				0	I Normanni : popolo d'Europa, 1030-1200 /
22	7087	22518419048090348	t				0	Bloody good : chivalry, sacrifice, and the
23	7093	4222545558747320	t				0	Reversing the conquest : history and myth
24	7100	844845840453218	t				0	The regiment of princes / Thomas Hoccleve
25	7106	4222545558807285	t				0	Maxims in Old English poetry / Paul Cavi
26	7112	563370863412018	t				0	The song of Roland / translated by Freder
27	7117	1407795791413877	t				0	The Anglo-Saxon sagas; an examination of
28	7000	563370862220684	t				0	Coming to terms with the Soviet regime :
29	7143	1407795798909649	t				0	Law and informal practices : the post-comm
30	7148	1407795795888667	t				0	Eulogy of judges / written by a lawyer, P
31	7154	3941070583948433	t				0	The rule of law : perspectives from aroun

Scratch pad

Varfield table

Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?



The screenshot shows a PostgreSQL 'Edit Data' window for a table named 'sierra_view.varfield'. The table has columns: id (bigint), record_id (bigint), varfield_type_code (character(1)), marc_tag (character varying(3)), marc_ind1 (character(1)), marc_ind2 (character(1)), occ_num (integer), and field_content (character varying(20001)). A red arrow points to the 'Tools' menu, which is open, showing options like 'Sort / Filter ...', 'Filter By Selection', 'Filter Excluding Selection', 'Remove Filter', 'Sort Ascending', 'Sort Descending', and 'Remove Sort'. The table data is as follows:

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_content character varying(20001)
1	6965	1126320821117550	t				0	Interpreting emotions in Russia and Eastern Europe
2	6970	6474345373670873	t				0	Performing justice : agitation trials in England and Wales
3	6976	14077957977						
4	47056	42091108182						
5	60868679	42091128837						
6	6982	14077957979						
7	6988	14077957939						
8	6994	14077957940						
9	7006	14077957940						
10	7012	59113954202	1	6965				
11	7023	14077958001	2	6970				
12	7028	14077957972	3	6976				
13	7034	39410705837	4	47056				
14	7040	11263208182	5	60868679				
15	7046	42225455590	6	6982				
16	7052	61928703955	7	6988	14077957939	14908	t	
17	7058	39410705832	8	6994	14077957940	033009	t	
18	7064	61928703970	9	7006	14077957940	093560	t	
19	7070	84484584145	10	7012	59113954202	268243	t	
20	7076	14077957982						
21	7082	84484583928						
22	7087	22518419048						
23	7093	42225455587						
24	7100	84484584045						
25	7106	42225455588	07285	t			0	Maxims in Old English poetry / Paul Cavill...
26	7112	56337086341	2018	t			0	The song of Roland / translated by Freder...
27	7117	14077957914	13877	t			0	The Anglo-Saxon sagas; an examination of ...
28	7000	56337086222	0684	t			0	Coming to terms with the Soviet regime : ...
29	7143	14077957989	09649	t			0	Law and informal practices : the post-comm...
30	7148	14077957958	88667	t			0	Eulogy of judges / written by a lawyer, P...
31	7154	39410705834	8433	t			0	The rule of law : perspectives from aroun...

Varfield table

Hazards of looking at authority or **any data** in Sierra PostgreSQL?

The screenshot shows a PostgreSQL table named 'sierra_view.varfield' with the following columns: id bigint, record_id bigint, varfield_type_code character(1), marc_tag character varying(3), marc_ind1 character(1), marc_ind2 character(1), occ_num integer, and field_content character varying(20001). The table contains 31 rows of data. A 'Tools' menu is open, showing options like 'Sort / Filter ...', 'Filter By Selection', 'Filter Excluding Selection', 'Remove Filter', 'Sort Ascending', 'Sort Descending', and 'Remove Sort'. A 'View Data Options' dialog box is also open, showing a 'Filter' tab with a filter string: 'varfield_type_code = 't''. Red arrows highlight the 'Tools' menu, the 'id bigint' column header, and the 'Filter' tab in the dialog box.

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_content character varying(20001)
1	6965	1126320821117550	t				0	Interpreting emotions in Russia and Eastern Europe
2	6970	6474345373670873	t				0	Performing justice : agitation trials in the Soviet Union
3	6976	14077957977						
4	47056	42091108182						
5	60868679	42091128837						
6	6982	14077957979						
7	6988	14077957939						
8	6994	14077957940						
9	7006	14077957940						
10	7012	59113954202	1	6965				
11	7023	14077958001	2	6970				
12	7028	14077957972	3	6976				
13	7034	39410705837	4	47056				
14	7040	11263208182	5	60868679				
15	7046	42225455590	6	6982				
16	7052	61928703955	7	6988				1407795793914908
17	7058	39410705832	8	6994				1407795794033009
18	7064	61928703970	9	7006				1407795794093560
19	7070	84484584145	10	7012				5911395420268243
20	7076	14077957982						
21	7082	84484583928						
22	7087	22518419048						
23	7093	42225455587						
24	7100	84484584045						
25	7106	4222545558807285	t					
26	7112	563370863412018	t					
27	7117	1407795791413877	t					
28	7000	563370862220684	t					
29	7143	1407795798909649	t				0	Law and informal practices : the post-communist transition in Russia
30	7148	1407795795888667	t				0	Eulogy of judges / written by a lawyer, P. S. Novitskiy
31	7154	394107058348433	t				0	The rule of law : perspectives from around the world

Varfield table

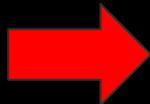
Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?

The screenshot shows a PostgreSQL database interface with a table containing 31 rows. The columns are: id (bigint), record_id (bigint), varfield_type_code (character(1)), marc_tag (character varying(3)), marc_ind1 (character(1)), marc_ind2 (character(1)), occ_num (integer), and field_content (character varying(20001)). A 'View Data Options' dialog box is open, showing a filter string: `varfield_type_code = 't' AND marc_tag = '245'`. A red arrow points from the dialog box to the table data.

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_content character varying(20001)
1	11273	420911080661	t	245	1	0	0	aBilbao & the Basque Lands / cDana Facaros & P
2	11399	420911080662	t	245	0	0	0	aMASH-UP HOW TO USE YOUR MULTIPLE SKILLS TO G
3	19195890	420909158388	t	245				logy; bmodels and in
4	11418	420911080663	t	245				ique talents into a
5	5765783	420907953757	t	24				
6	47603	420911081852	t	24				
7	5765791	420907953758	t	24				
8	5765786	420907953759	t	24				
9	60868765	420911288376	t	245				
10	47620	420911081853	t	245				
11	11261478	420908453053	t	245				
12	47743	420911081859	t	245				
13	5765829	420907953760	t	245				
14	5765849	420907953763	t	245				
15	47643	420911081854	t	245				
16	12519	420911080664	t	245				
17	12699	420911080665	t	245				
18	5765866	420907953765	t	245				
19	12821	420911080666	t	245				
20	47666	420911081855	t	245				
21	19195907	420909158391	t	245				
22	19195906	420909158389	t	245				
23	47684	420911081856	t	245				
24	5765907	420907953770	t	245				
25	11261521	420908453054	t	245				
26	47706	420911081857	t	245	1	0	0	aHonoring our past, securing our future h elec
27	13482	420911080667	t	245	0	0	0	aEssential knowledge h videorecording]
28	47724	420911081858	t	245	0	0	0	aAssessment of American Indian housing needs &
29	60868819	420911272272	t	245	1	0	1	aArmstrong : bthe adventurous journey of a mo
30	5765933	420907953774	t	245	1	4	0	aDer kleine Harlekin : bfür Klarinette, 1975,
31	60869011	420911288383	t	245	1	0	0	aDe nos frères blessés : broman / cJoseph B

Varfield table

Hazards of looking at
authority or **any data**
in Sierra PostgreSQL?



File Edit Query Favourites Macros View Help

on bomanca@10.3.9.185:1032

SQL Editor Graphical Query Builder

Previous queries

```
SELECT
*
FROM
--put the table name here
sierra_view.varfield as V

WHERE
--paste in data filter options
varfield_type_code = 't'
AND marc_tag = '245'

--gets more complicated after table joins

LIMIT 100;
```

Output pane

Data Output Explain Messages History

	id bigint	record_id bigint	varfield_type_code character(1)	marc_tag character varying(3)	marc_ind1 character(1)	marc_ind2 character(1)	occ_num integer	field_content character varying(20001)
1	5766141	420907953790	t	245	1	0	0	aDear me b(or April changes) an optimist
2	47965	420911081869	t	245	0	0	0	aHawthorn h[electronic resource]
3	5766319	420907953804	t	245	1	4	0	aThe Mexican War diary of George B. McCl
4	19195954	420909158395	t	245	1	0	0	aWater resources of Spinks County, South
5	47988	420911081870	t	245	0	0	0	aSomalia sanctions h[electronic resource]
6	5766150	420907953789	t	245	1	2	0	aA collection of watercolors and drawings
7	16600	420911077163	t	245	0	0	0	aMulticultural Perspectives in Customer R
8	16679	420911080688	t	245	0	0	0	aInvesting in change : bthe reform of Eur
9	16749	420911080689	t	245	1	0	0	aMake your job a calling : bhow the psych
10	49017	420911081871	t	245	1	0	0	aReady seapower h[electronic resource] :
11	11261658	420908453062	t	245	1	4	0	aThe ANVIL decision : bcrossroads of str
12	5766264	420907953799	t	245	1	4	0	aThe lieutenant-governors of Upper Canad
13	16789	420911080690	t	245	1	0	0	aWhy shrink-wrap a cucumber? : bthe comp
14	48031	420911081872	t	245	1	0	0	aNational Institute of Nursing Research'
15	5766176	420907953791	t	245	1	0	0	aNapoléon et Alexandre Ier. bL'alliance
16	48054	420911081873	t	245	1	0	0	aMotor vehicle use map, Mendocino Nation
17	16842	420911070419	t	245	1	0	0	aNBER International Seminar on Macroecon

Building a query: Getting to know Sierra

Joining tables in Sierra (catmaint and record_metadata tables)

Why?

What don't we have in catmaint?

What don't we have in catmaint? (Spoilers: no bibliographic #s)

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint	statistics_group_code_num integer	process_gmt timestamp with time zone	program_code character varying(255)	ii c
1	959091	FALSE	FALSE	1	a	akunna joseph c joseph chukwuemeka	420911452602	504	2018-10-10 08:34:08.514-04	sierra	b
2	959092	FALSE	FALSE	1	a	bellantoni nicholas f	420911452669	504	2018-10-10 08:40:03.554-04	sierra	b
3	959093	FALSE	FALSE	1	d	calvino italo citta invisibili	420911452692	0	2018-10-10 08:45:21.598-04	marc2inn	a
4	959094	FALSE	FALSE	1	d	china foreign public opinion case studies	420911452693	0	2018-10-10 08:54:44.257-04	marc2inn	a
5	959095	FALSE	FALSE	1	d	chinese foreign countries social conditions case studies	420911452693	0	2018-10-10 08:54:44.264-04	marc2inn	a
6	959096	FALSE	FALSE	1	d	model minority stereotype case studies	420911452693	0	2018-10-10 08:54:44.27-04	marc2inn	a
7	959097	FALSE	FALSE	1	a	urbansky soren	420911452693	0	2018-10-10 08:54:44.283-04	marc2inn	a
8	959098	FALSE	FALSE	3	b	82053070214	450974707250	507	2018-10-10 09:04:45.497-04	sierra	a
9	959099	FALSE	FALSE	3	b	82053070215	450974709023	507	2018-10-10 09:05:16.228-04	sierra	a
10	959100	FALSE	FALSE	4	a	eaton matthew 1979	416613425016	0	2018-10-10 09:10:40.402-04	marc2inn	'
11	959101	FALSE	FALSE	1	a	harvie timothy	420911452678	504	2018-10-10 09:11:41.365-04	sierra	b
12	959102	FALSE	FALSE	1	d	minorities social conditions juvenile literature	420911452694	0	2018-10-10 09:12:07.222-04	marc2inn	a
13	959103	FALSE	FALSE	1	d	racism juvenile literature	420911452694	0	2018-10-10 09:12:07.234-04	marc2inn	a
14	959104	FALSE	FALSE	1	a	greeney harold f	420911452596	504	2018-10-10 09:32:29.704-04	sierra	b
15	959105	FALSE	FALSE	4	a	hackett william christian	416613425018	0	2018-10-10 09:36:59.512-04	marc2inn	'
16	959106	FALSE	FALSE	1	a	hixon thomas j 1940 2009	420911452673	504	2018-10-10 09:41:02.024-04	sierra	b
17	959107	FALSE	FALSE	1	a	muldoon james b	420911452695	0	2018-10-10 09:42:50.558-04	marc2inn	a
18	959108	FALSE	FALSE	1	a	herman lise esther	420911452695	0	2018-10-10 09:42:50.564-04	marc2inn	a
19	959109	FALSE	FALSE	1	d	international relations psychological aspects case studies	420911452697	0	2018-10-10 09:53:32.452-04	marc2inn	a
20	959110	FALSE	FALSE	1	d	reputation political aspects case studies	420911452697	0	2018-10-10 09:53:32.461-04	marc2inn	a
21	959111	FALSE	FALSE	1	d	self monitoring political aspects case studies	420911452697	0	2018-10-10 09:53:32.467-04	marc2inn	a
22	959112	FALSE	FALSE	1	d	presidents ohio history	420911452699	0	2018-10-10 11:29:10.702-04	marc2inn	a
23	959115	FALSE	FALSE	3	b	82053070218	450975398306	507	2018-10-10 11:35:58.291-04	sierra	a
24	959113	FALSE	FALSE	1	d	republicanism ohio history	420911452699	0	2018-10-10 11:29:10.723-04	marc2inn	a
25	959116	FALSE	FALSE	3	b	82053070219	450972869737	507	2018-10-10 11:37:46.91-04	sierra	a
26	959117	FALSE	FALSE	3	b	82053070220	450975408577	507	2018-10-10 11:39:50.17-04	sierra	a
27	959118	FALSE	FALSE	3	b	82053070217	450974709022	507	2018-10-10 11:47:33.801-04	sierra	a
28	959119	FALSE	FALSE	3	b	82053070404	450975409032	507	2018-10-10 11:56:21.168-04	sierra	a
29	959120	FALSE	FALSE	3	b	82053070405	450975409034	507	2018-10-10 11:57:10.082-04	sierra	a
30	959121	FALSE	FALSE	1	d	adult education study and teaching handbooks manuals etc	420911452703	0	2018-10-10 12:38:44.499-04	marc2inn	a
31	959122	FALSE	FALSE	1	a	cockrum william m 1937	420911452703	0	2018-10-10 12:38:44.511-04	marc2inn	a
32	959123	FALSE	FALSE	3	b	82053070406	450975409035	507	2018-10-10 13:10:22.666-04	sierra	a
33	959124	FALSE	FALSE	3	b	82053070407	450975410731	507	2018-10-10 13:17:31.728-04	sierra	a
34	959125	FALSE	FALSE	3	b	82053070408	450975410732	507	2018-10-10 13:17:55.481-04	sierra	a
35	959126	FALSE	FALSE	3	b	82053070409	450975410748	507	2018-10-10 13:19:36.618-04	sierra	a

Building a query: Getting to know Sierra

Edit Data - sierra (10.3.9.185:1032) - iii - sierra_view.record_metadata

File Edit View Tools Help

100 rows

	id bigint	record_type_code character(1)	record_num integer	creation_date_gmt timestamp with time zone	deletion_date_gmt date	campus_code character varying(5)	agency_code_num smallint	num_revisi integer
1	450974990361	i	3424281	1999-04-16 13:13:02-04		**	0	6
2	420908980098	b	2185090		2002-02-25	**	0	0
3	420909317322	b	2522314	1998-03-04 14:40:46-05		**	0	4
4	450974818141	i	3252061	1998-03-26 07:39:36-05	2016-11-29	**	0	8
5	416612920368	a	1092656	1990-06-21 04:00:00-04		**	0	2
6	450974531988	i	2965908	1997-04-10 14:46:01-04		**	0	8
7	450974818145	i	3252065	1998-03-26 07:39:46-05	2016-11-29	**	0	8
8	450974818147	i	3252067	1998-03-26 07:39:46-05	2016-11-29	**	0	8
9	450976492791	i	4926711	2015-08-03 13:10:09-04		**	0	1
10	420909929649	b	3134641	2004-09-22 09:40:21-04		**	0	1
11	450975845317	i	4279237	2005-09-14 18:35:26-04	2016-06-06	**	0	3
12	450974547940	i	2981860	1997-05-02 13:26:01-04	2016-09-01	**	0	10
13	450975845319	i	4279239	2005-09-14 18:35:52-04	2016-06-06	**	0	3
14	420909322939	b	2527931	1998-03-06 06:13:49-05	2016-12-05	**	0	5
15	416612920373	a	1092661	1990-06-21 04:00:00-04		**	0	2
16	450974990402	i	3424322	1999-04-16 13:27:52-04	2016-09-02	**	0	4
17	450974990380	i	3424300	1999-04-16 13:21:28-04		**	0	6
18	450972674376	i	1108296	1990-05-14 04:00:00-04		**	0	10
19	450974036140	i	2470060	1994-11-08 03:24:07-05	2016-12-06	**	0	8
20	450974990382	i	3424302	1999-04-16 13:22:02-04		**	0	6
21	450974261007	i	2694927	1995-06-26 16:06:49-04	2016-12-06	**	0	7
22	450972697787	i	1131707	1990-05-14 04:00:00-04	2016-07-01	**	0	15
23	450974275910	i	2709830	1995-07-12 15:42:44-04	2016-12-06	**	0	7
24	450974174926	i	2608846	1995-01-05 09:42:57-05		**	0	22
25	450974990406	i	3424326	1999-04-16 13:38:57-04		**	0	2
26	450972937964	i	1371884		2012-12-06	**	0	15
27	450972932099	i	1366019	1990-06-01 04:00:00-04	2016-07-01	**	0	55
28	420911051564	b	4266556	2012-06-22 14:02:00-04		**	0	4
29	450976416833	i	4850753	2013-04-15 05:22:16-04		**	0	1
30	450975941740	i	4375660	2006-03-29 09:24:50-05		**	0	7
31	450976416835	i	4850755	2013-04-15 05:22:17-04		**	0	1

Edit Data - sierra (10.3.9.185:1032) - iii - sierra_view.catmaint

File Edit View Tools Help

100 rows

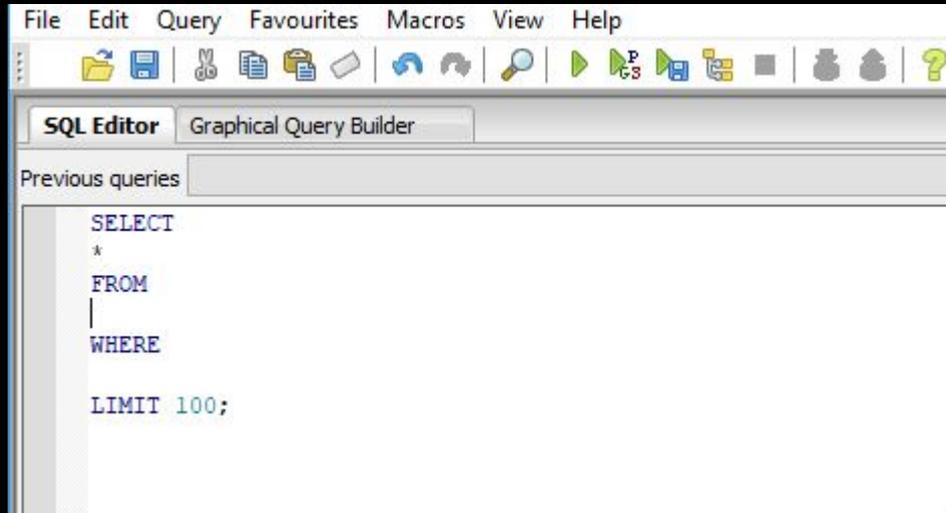
	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint	statistics_group_code_n integer
1	959091	FALSE	FALSE	1	a	akunna joseph c joseph chukuwemeka	420911452602	504
2	959092	FALSE	FALSE	1	a	bellantoni nicholas f	420911452669	504

Scratch pad

Scratch pad

Building a query: Getting to know Sierra

Joining tables in Sierra



SQL Editor Graphical Query Builder

Previous queries

Delete

Delete All

```

SELECT
*
FROM
sierra_view.catmaint
--WHERE

LIMIT 100;

```

Scratch pad

Output pane

Data Output

Explain

Messages

History

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint
1	959091	f	f	1	a	akunna joseph c joseph chukwuemeka	420911452602
2	959092	f	f	1	a	bellantoni nicholas f	420911452669
3	959093	f	f	1	d	calvino italo citta invisibili	420911452692
4	959094	f	f	1	d	china foreign public opinion case studies	420911452693
5	959095	f	f	1	d	chinese foreign countries social conditions case studies	420911452693
6	959096	f	f	1	d	model minority stereotype case studies	420911452693

Building a query: Common numbers?

File Edit Query Favourites Macros View Help

SQL Editor Graphical Query Builder

```

SELECT
*
FROM
sierra_view.catmaint
--WHERE

--include table merge

LIMIT 100;
    
```

Scratch pad

Output pane

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint
1	959091	f	f	1	a	akunna joseph c joseph chukwuemeka	420911452602
2	959092	f	f	1	a	bellantoni nicholas f	420911452669
3	959093	f	f	1	d	calvino italo citta invisibili	420911452692
4	959094	f	f	1	d	china foreign public opinion case studies	420911452693
5	959095	f	f	1	d	chinese foreign countries social conditions case studies	420911452693
6	959096	f	f	1	d	model minority stereotype case studies	420911452693
7	959097	f	f	1	a	urbansky soren	420911452693
8	959098	f	f	3	b	82053070214	450974707250
9	959099	f	f	3	b	82053070215	450974709023
10	959100	f	f	4	a	eaton matthew 1979	416613425016
11	959101	f	f	1	a	harvie timothy	420911452678
12	959102	f	f	1	d	minorities social conditions juvenile literature	420911452694
13	959103	f	f	1	d	racism juvenile literature	420911452694

File Edit View Tools Help

100 rows

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint	statistics_group integer
1	959091	FALSE	FALSE	1	a	akunna joseph c joseph chukwuemeka	420911452602	504
2	959092	FALSE	FALSE	1	a	bellantoni nicholas f	420911452669	504
3	959093	FALSE	FALSE	1	d	calvino italo citta invisibili	420911452692	0
4	959094	FALSE	FALSE	1	d	china foreign public opinion case studies	420911452693	0
5	959095	FALSE	FALSE	1	d	chinese foreign countries social conditions case studies	420911452693	0
6	959096	FALSE	FALSE	1	d	model minority stereotype case studies	420911452693	0
7	959097	FALSE	FALSE	1	a	urbansky soren	420911452693	0
8	959098	FALSE	FALSE	3	b	82053070214	450974707250	507
9	959099	FALSE	FALSE	3	b	82053070215	450974709023	507
10	959100	FALSE	FALSE	4	a	eaton matthew 1979	416613425016	0
11	959101	FALSE	FALSE	1	a	harvie timothy	420911452678	504
12	959102	FALSE	FALSE	1	d	minorities social conditions juvenile literature	420911452694	0
13	959103	FALSE	FALSE	1	d	racism juvenile literature	420911452694	0
14	959104	FALSE	FALSE	1	a	greeney harold f	420911452596	504
15	959105	FALSE	FALSE	4	a	hackett william christian	416613425018	0

Edit Data - sierra (10.3.9.185:1032) - iii - sierra_view.record_metadata

File Edit View Tools Help

100 rows

	id bigint	record_type_code character(1)	record_num integer	creation_date_gmt timestamp with time zone	deletion_date_gmt date	campus_code character varying(5)	agency_code_num smallint	num_revisi integer
1	450974990361	i	3424281	1999-04-16 13:13:02-04		''	0	6
2	420908990098	b	2185090		2002-02-25	''	0	0
3	420909317322	b	2522314	1998-03-04 14:40:46-05		''	0	4
4	450974818141	i	3252061	1998-03-26 07:39:36-05	2016-11-29	''	0	8
5	416612920368	a	1092656	1990-06-21 04:00:00-04		''	0	2
6	450974531988	i	2965908	1997-04-10 14:46:01-04		''	0	8
7	450974818145	i	3252065	1998-03-26 07:39:46-05	2016-11-29	''	0	8
8	450974818147	i	3252067	1998-03-26 07:39:46-05	2016-11-29	''	0	8
9	450976492791	i	4926711	2015-08-03 13:10:09-04		''	0	1
10	4209099929649	b	3134641	2004-09-22 09:40:21-04		''	0	1

Scratch pad

Building a query: Common numbers (hint: ID #)

File Edit Query Favourites Macros View Help

SQL Editor Graphical Query Builder

```
SELECT * FROM sierra_view.catmaint --WHERE --include table merge LIMIT 100;
```

Scratch pad

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint	statistics_group integer
1	959091	FALSE	FALSE	1	a	akunna joseph c joseph	420911452602	504
2	959092	FALSE	FALSE	1	a	bellantoni nicholas f	420911452669	504
3	959093	FALSE	FALSE	1	d	calvino italo citta invisibili	420911452692	0
4	959094	FALSE	FALSE	1	d	china foreign public opinion case studies	420911452693	0
5	959095	FALSE	FALSE	1	d	chinese foreign countries social conditions case studies	420911452693	0
6	959096	FALSE	FALSE	1	d	model minority stereotype case studies	420911452693	0
7	959097	FALSE	FALSE	1	a	urbansky soren	420911452693	0
8	959098	FALSE	FALSE	3	b	82053070214	450974707250	507
9	959099	FALSE	FALSE	3	b	82053070215	450974709023	507
10	959100	FALSE	FALSE	4	a	eaton matthew 1979	416613425016	0
11	959101	FALSE	FALSE	1	a	harvie timothy	420911452678	504
12	959102	FALSE	FALSE	1	d	minorities social conditions juvenile lit	420911452694	0
13	959103	FALSE	FALSE	1	d	racism juvenile literature	420911452694	0
14	959104	FALSE	FALSE	1	a	greeney harold f	420911452596	504
15	959105	FALSE	FALSE	4	a	hackett william christian	416613425018	0

Edit Data - sierra (10.3.9.185:1032) - iii - sierra_view.record_metadata

File Edit View Tools Help

	id bigint	record_type_code character(1)	record_num integer	creation_date_gmt timestamp with time zone	deletion_date_gmt date	campus_code character varying(5)	agency_code_num smallint	num_revis integer
1	450974990361	i	3424281	1999-04-16 13:13:02-04		''	0	6
2	420908990098	b	2185090		2002-02-25	''	0	0
3	420909317322	b	2522314	1998-03-04 14:40:46-05		''	0	4
4	450974818141	i	3252061	1998-03-26 07:39:36-05	2016-11-29	''	0	8
5	416612920368	a	1092656	1990-06-21 04:00:00-04		''	0	2
6	450974531988	i	2965908	1997-04-10 14:46:01-04		''	0	8
7	450974818145	i	3252065	1998-03-26 07:39:46-05	2016-11-29	''	0	8
8	450974818147	i	3252067	1998-03-26 07:39:46-05	2016-11-29	''	0	8
9	450976492791	i	4926711	2015-08-03 13:10:09-04		''	0	1
10	4209099929649	b	3134641	2004-09-22 09:40:21-04		''	0	1

Scratch pad

Data Output Explain Messages History

	id bigint	is_locked boolean	is_viewed boolean	condition_code_num integer	index_tag character(1)	index_entry text	record_metadata_id bigint
1	959091	f	f		1 a	akunna joseph c joseph chukwuemeka	420911452602
2	959092	f	f		1 a	bellantoni nicholas f	420911452669
3	959093	f	f		1 d	calvino italo citta invisibili	420911452692
4	959094	f	f		1 d	china foreign public opinion case studies	420911452693
5	959095	f	f		1 d	chinese foreign countries social conditions case studies	420911452693
6	959096	f	f		1 d	model minority stereotype case studies	420911452693
7	959097	f	f		1 a	urbansky soren	420911452693
8	959098	f	f		3 b	82053070214	450974707250
9	959099	f	f		3 b	82053070215	450974709023
10	959100	f	f		4 a	eaton matthew 1979	416613425016
11	959101	f	f		1 a	harvie timothy	420911452678
12	959102	f	f		1 d	minorities social conditions juvenile literature	420911452694
13	959103	f	f		1 d	racism juvenile literature	420911452694

Building a query

Joining tables in Sierra

{picture joining catmaint}

Getting results; need more info->

The screenshot shows an SQL Editor window with the following content:

```
SELECT *
FROM
sierra_view.catmaint AS c
-- JOIN
-- sierra_view.record_metadata AS m
--WHERE

LIMIT 100;
```

The Output pane shows the following table:

	id	is_locked	is_viewed	condition_code_num	index_tag	index_entry
	bigint	boolean	boolean	integer	character(1)	text
1	959091	f	f		1a	akunna joseph c joseph chukwuemeka
2	959092	f	f		1a	bellantoni nicholas f
3	959093	f	f		1d	calvino italo citta invisibili
4	959094	f	f		1d	china foreign public opinion case studies
5	959095	f	f		1d	chinese foreign countries social conditions case studi
6	959096	f	f		1d	model minority stereotype case studies
7	959097	f	f		1a	urbansky soren
8	959098	f	f		3b	82053070214
9	959099	f	f		3b	82053070215
10	959100	f	f		4a	eaton matthew 1979
11	959101	f	f		1a	harvie timothy
12	959102	f	f		1d	minorities social conditions juvenile literature
13	959103	f	f		1d	racism juvenile literature

The status bar at the bottom indicates: OK, Unix Ln 7, Col 36, Ch 86, 43 chars, 100 rows, 63 msec.

Building a query

Joining tables in Sierra

{picture joining catmaint}

Getting results; need join info->

The screenshot shows a SQL Editor window with the following SQL query:

```
SELECT *
FROM sierra_view.catmaint AS c
-- JOIN
-- sierra_view.record_metadata AS m
--WHERE
LIMIT 100;
```

The Output pane displays the following table:

	id	is_locked	is_viewed	condition_code_num	index_tag	index_entry
	bigint	boolean	boolean	integer	character(1)	text
1	959091	f	f		1a	akunna joseph c joseph chukwuemeka
2	959092	f	f		1a	bellantoni nicholas f
3	959093	f	f		1d	calvino italo citta invisibili
4	959094	f	f		1d	china foreign public opinion case studies
5	959095	f	f		1d	chinese foreign countries social conditions case studi
6	959096	f	f		1d	model minority stereotype case studies
7	959097	f	f		1a	urbansky soren
8	959098	f	f		3b	82053070214
9	959099	f	f		3b	82053070215
10	959100	f	f		4a	eaton matthew 1979
11	959101	f	f		1a	harvie timothy
12	959102	f	f		1d	minorities social conditions juvenile literature
13	959103	f	f		1d	racism juvenile literature

The status bar at the bottom indicates: OK, Unix, Ln 7, Col 36, Ch 86, 43 chars, 100 rows, 63 msec.

Building a query: Joined tables in Sierra

Query - iii on bomanca@10.3.9.185:1032 *

File Edit Query Favourites Macros View Help

SQL Editor Graphical Query Builder

Previous queries

Scratch pad

SQL Editor

```

SELECT
*
FROM
sierra_view.catmaint AS c

JOIN
sierra_view.record_metadata AS m
ON
m.id = c.record_metadata_id
--WHERE

LIMIT 100;
    
```

Output pane

Data Output Explain Messages History

id bigint record_type_code character(1) record_num integer creation_date_gmt timestamp with time zone

420911452602 b 4657594 2018-10-09 17:13:03-04

420911452669 b 4657661 2018-10-09 17:13:05-04

420911452692 b 4657684 2018-10-10 08:45:20-04

420911452693 b 4657685 2018-10-10 08:54:43-04

450974707250 i 3141170 1998-02-24 16:03:14-05

450974709023 i 3142943 1998-02-25 09:03:13-05

416613425016 a 1597304 2018-10-10 09:10:40-04

420911452678 b 4657670 2018-10-09 17:13:05-04

420911452694 b 4657686 2018-10-10 09:12:06-04

420911452694 b 4657686 2018-10-10 09:12:06-04

420911452596 b 4657588 2018-10-09 17:13:03-04

7:13:03-04 deletion_date_gmt date campus_code character varying(1)

7:13:05-04

8:45:20-04

8:54:43-04

8:54:43-04

8:54:43-04

8:54:43-04

6:03:14-05

9:03:13-05

9:10:40-04

7:13:05-04

9:12:06-04

9:12:06-04

7:13:03-04

9:36:59-04

7:13:05-04

9:42:49-04

9:42:49-04

19 Yarhi-Milo, Keren, 1978- author who fights for reputation : the psychology of leaders i 58349019 420911452697 b 4657689 2018-10-10 09:53:31-04

20 Yarhi-Milo, Keren, 1978- author who fights for reputation : the psychology of leaders i 58349026 420911452697 b 4657689 2018-10-10 09:53:31-04

21 Yarhi-Milo, Keren, 1978- author who fights for reputation : the psychology of leaders i 58349027 420911452697 b 4657689 2018-10-10 09:53:31-04

22 Skrabec, Quentin R., author The Ohio Presidents : eight men and a binding political 58349210 420911452699 b 4657691 2018-10-10 11:29:09-04

23 Employment, hours, and earnings in Ohio / Bureau of Emp 58349220 450975398306 i 3832226 2002-02-25 10:51:31-05

24 Skrabec, Quentin R., author The Ohio Presidents : eight men and a binding political 58349213 420911452699 b 4657691 2018-10-10 11:29:09-04

25 Bertacchi, Zein Tannous Immunochemical studies of Streptococcus mitis polysacch 58349222 450972869737 i 1303657 1998-05-29 04:00:00-04

OK. Unix Ln 12, Col 1, Ch 121 100 rows. 83 msec

Building a query

Building bibliographic

Number in SQL

(AKA merging columns)

The screenshot shows a SQL Editor window with a menu bar (File, Edit, Query, Favourites, Macros, View, Help) and a toolbar. The main text area contains the following SQL query:

```
SELECT
*
FROM
sierra_view.catmaint AS c
-- JOIN
-- sierra_view.record_metadata AS m
--WHERE
LIMIT 100;
```

The output pane at the bottom displays a table with the following data:

	id	is_locked	is_viewed	condition_code_num	index_tag	index_entry
	bigint	boolean	boolean	integer	character(1)	text
1	959091	f	f		1a	akunna joseph c joseph chukwuemeka
2	959092	f	f		1a	bellantoni nicholas f
3	959093	f	f		1d	calvino italo citta invisibili
4	959094	f	f		1d	china foreign public opinion case studies
5	959095	f	f		1d	chinese foreign countries social conditions case studi
6	959096	f	f		1d	model minority stereotype case studies
7	959097	f	f		1a	urbansky soren
8	959098	f	f		3b	82053070214
9	959099	f	f		3b	82053070215
10	959100	f	f		4a	eaton matthew 1979
11	959101	f	f		1a	harvie timothy
12	959102	f	f		1d	minorities social conditions juvenile literature
13	959103	f	f		1d	racism juvenile literature

The status bar at the bottom indicates: OK, Unix, Ln 7, Col 36, Ch 86, 43 chars, 100 rows, 63 msec.

Building a query

Building bibliographic

Number in SQL

(AKA concatenate columns

Using || or pipe)

The screenshot shows a SQL Editor window with the following SQL query:

```
SELECT
  m.record_type_code || m.record_num
  --*
  --count(*)
FROM
  sierra_view.catmaint AS c
JOIN
  sierra_view.record_metadata AS m
ON
  m.id = c.record_metadata_id
--WHERE

LIMIT 100;
```

The Output pane displays the following table:

	entry_id	id	record_type_code	record_num	creation_date_gmt	deletion_date_gmt	campus_code	
	bigint	character(1)	integer	timestamp with time zone	date	character varying(5)	s	
1	3348793	420911452602	b	4657594	2018-10-09 17:13:03-04			
2	3348798	420911452669	b	4657661	2018-10-09 17:13:05-04			
3	3348815	420911452692	b	4657684	2018-10-10 08:45:20-04			
4	3348858	420911452693	b	4657685	2018-10-10 08:54:43-04			
5	3348859	420911452693	b	4657685	2018-10-10 08:54:43-04			
6	3348862	420911452693	b	4657685	2018-10-10 08:54:43-04			
7	3348869	420911452693	b	4657685	2018-10-10 08:54:43-04			
8	3348882	450974707250	i	3141170	1998-02-24 16:03:14-05			
9	3348884	450974709023	i	3142943	1998-02-25 09:03:13-05			
10	3348895	416613425016	a	1597304	2018-10-10 09:10:40-04			
11	3348899	420911452678	b	4657670	2018-10-09 17:13:05-04			
12	3348906	420911452694	b	4657686	2018-10-10 09:12:06-04			
13	3348910	420911452694	b	4657686	2018-10-10 09:12:06-04			
14	3348936	420911452596	b	4657588	2018-10-09 17:13:03-04			
15	3348947	416613425018	a	1597306	2018-10-10 09:36:59-04			
16	3348953	420911452673	b	4657665	2018-10-09 17:13:05-04			
17	3348960	420911452695	b	4657687	2018-10-10 09:42:49-04			
18	3348961	420911452695	b	4657687	2018-10-10 09:42:49-04			
19	3349019	420911452697	b	4657689	2018-10-10 09:53:31-04			
20	3349026	420911452697	b	4657689	2018-10-10 09:53:31-04			

The status bar at the bottom indicates: OK, Unix Ln 4, Col 3, Ch 47, 100 rows, 84 msec.

Building a query

Building bibliographic

Number in SQL

(AKA concatenate columns

Using || or pipe)



Query - iii on bomanca@10.3.9.185:1032 *

File Edit Query Favourites Macros View Help

SQL Editor Graphical Query Builder

Previous queries Delete Delete All

```
SELECT
m.record_type_code || m.record_num
--don't forget 'a' at end of barcode|

--*
--count(*)

FROM
sierra_view.catmaint AS c

JOIN
sierra_view.record_metadata AS m
ON
m.id = c.record_metadata_id
--WHERE

LIMIT 100;
```

Output pane

Data Output Explain Messages History

	?column? text
1	b4657594
2	b4657661
3	b4657684
4	b4657685
5	b4657685
6	b4657685
7	b4657685
8	i3141170
9	i3142943
10	a1597304
11	b4657670
12	b4657686

Building a query

Building bibliographic

Number

Result: working bibliographic

Record # for each row in catmaint

The screenshot shows a SQL Editor window with the following SQL query:

```
SELECT
m.record_type_code || m.record_num || 'a'|
--don't forget 'a' at end of barcode

--*
--count(*)

FROM
sierra_view.catmaint AS c

JOIN
sierra_view.record_metadata AS m
ON
m.id = c.record_metadata_id
--WHERE

LIMIT 100;
```

The Output pane shows the following results:

	?column? text
1	b4657594a
2	b4657661a
3	b4657684a
4	b4657685a
5	b4657685a
6	b4657685a
7	b4657685a
8	i3141170a
9	i3142943a
10	a1597304a
11	b4657670a
12	b4657686a

Building a query: Getting to know Sierra

Recap

1. SQL structures
2. Hazards
3. Joining tables
4. Building bibliographic number in catmaint after join
5. **Don't forget formatting SQL queries for readability and LIMIT 100;**

Mike's slides start here

The University of Akron Libraries

University Libraries

Bierce Library



Science & Technology Library



Archival Services



(Separate Units)

Wayne College Library



Akron Law Library



Center for the History of Psychology



What this is NOT about

Automated authority control
within the ILS

Working with an authority
control vendor

Automatic Authority Control Processing

- Automatically updates headings in bibliographic records.
- Based on the valid form of the heading (MARC 1XX) in an authority record.
- Triggered whenever an authority record passes through the system transaction file.
- Manual = Page # 101467



Wouldn't it be nice if...

The “Headings used for the first time” report could export a list of the headings, and we could batch search OCLC for records?

Type	Entry
<input type="checkbox"/> Headings used for the first time	Field: b7102 a7 North Productions (Firm), 4dst Indexed as AUTHOR: 7 north productions firm Preceded by "a": 7 mile isle musical group Followed by "a": 7 television station france From: b5264439x The Cheshire Transaction: A Town for Sale
<input type="checkbox"/> Headings used for the first time	Field: b7102 a108 Media Corp. (Firm), 4dst Indexed as AUTHOR: 108 media corp firm Preceded by "a": 108 media Followed by "a": 110 2 national institute of justice u s From: b55542190 The Boy From Geita
<input type="checkbox"/> Headings used for the first time	Field: b7102 a125 Productions (Firm), 4dst Indexed as AUTHOR: 125 productions firm Preceded by "a": 122nd army band Followed by "a": 127 gregg camfield From: b52643207 Rezoning Harlem - A Community Fights Against Gentrification
<input type="checkbox"/> Headings used for the first time	Field: b7102 aAban Productions (Firm), 4dst Indexed as AUTHOR: aban productions firm Preceded by "a": abam engineers inc Followed by "a": abane albert From: b5263954x Garifuna in Peril
<input type="checkbox"/> Headings used for the first time	Field: b7102 aAccess Training Media (Firm), 4dst Indexed as AUTHOR: access training media firm Preceded by "a": access to higher education conference of ministers of education of european member states on Followed by "a": accessible archives inc From: b55550459 Customer Service - Make it Easy
<input type="checkbox"/> Headings used for the first time	Field: b7102 aAcort International (Firm), 4dst Indexed as AUTHOR: acort international firm Preceded by "a": acorn william r Followed by "a": acos98 1998 university of lisbon From: b55545774 Kings of Kallstadt
<input type="checkbox"/> Headings used for the first time	Field: b7001 aAcosta, Luis M., eauthor Indexed as AUTHOR: acosta luis m Preceded by "a": acosta lu Followed by "a": acosta luz marina From: b55552560 Adoption law : Turkey, United States
<input type="checkbox"/> Headings used for the first time	Field: b7102 aAdam Tow (Firm), 4dst Indexed as AUTHOR: adam tow firm Preceded by "a": adam tim 1979 Followed by "a": adam uwe dietrich



A work in progress!

[Automating Authority Work at OVGTSL 2018](#)

- Single SQL query
- Processing of output in multiple programs, THEN batch search
- RegEx-capable text editor required

But now:

- Three SQL queries
- Ready for batch search without further processing

The tool box

pgAdmin (or similar)

OCLC Connexion Client



The process

1. Extract headings from report (with SQL query)
 - a. Names-as-names
 - b. Names-as-subjects
 - c. Topicals (as-subjects)
2. Batch search each set in Connexion
3. Mark* and load the authority records
4. Delete blind references

SQL queries of *Headings used for the first time* report

<https://mmonaco-uakron.tinytake.com/sf/MjkzMDY2NI84NzkzMTc0>

(2.5 minute video)

sierra

FUNCTION Headings Report



Clear

Print

#	Type	Entry	Cat Date	Function	Group	Login	Entry Date
1	Headings used for the first time	Field: b7102 a4x4 Frauenchor der PH Heidelberg. esinger Indexed as AUTHOR: <i>4x4 frauenchor der ph heidelberg</i> Preceded by "a": <i>4saxess musical group</i> Followed by "a": <i>4x4 musical group</i> From: b59541301 Himmlisch / 4x4	Sep 5, 2018	marc2inn	120	dap	Sep 5, 2018
2	Headings used for the first time	Field: b7102 a25 To Life LLC (Firm), 4dst Indexed as AUTHOR: <i>25 to life llc firm</i> Preceded by "a": <i>25 hill akron filmworks</i> Followed by "a": <i>25th anniversary conference on asean and the pacific basin east west centers</i> From: b59530698 25 To Life	Sep 5, 2018	marc2inn	120	monaco	Sep 5, 2018
3	Headings used for the first time	Field: b7102 a125 Productions (Firm), 4dst Indexed as AUTHOR: <i>125 productions firm</i> Preceded by "a": <i>122nd army band</i> Followed by "a": <i>127 gregg camfield</i> From: b59463715 Rezoning Harlem - A Community Fights Against Gentrification	Sep 5, 2018	marc2inn	120	monaco	Sep 5, 2018
4	Headings used for the first time	Field: a100 a880-01 Dong xi Mei Zhongguo liu xue sheng hui. Indexed as AUTHOR: <i>880 01 dong xi mei zhongguo liu xue sheng hui</i> Preceded by "a": <i>850 1921</i> Followed by "a": <i>892</i> From: b59572322 880-01 Dong xi Mei Zhongguo liu xue sheng hui. Meizhou liu xue bao gao /		sierra	117	bill	Sep 18, 2018
5	Headings used for the first time	Field: b7001 d1973- aFreeman, Cathy, Indexed as AUTHOR: <i>1973 freeman cathy</i> Preceded by "a": <i>1973</i> Followed by "a": <i>1973{7F05BE}1891</i> From: b5934717x Finding my magic : a human rights initiative	Sep 5, 2018	marc2inn	120	monaco	Sep 5, 2018
	Headings used for the first time	Field: b7000 aA barrister of the Inner-Temple. ecourt reporter Indexed as AUTHOR: <i>a barrister of the inner temple</i>	Sep 11, 2018	marc2inn	215	tnn	Sep 11, 2018

Welcome



pgAdmin

Version 4
Management Tools for PostgreSQL

Feature rich | Maximises PostgreSQL | Open Source

pgAdmin is an open source administration and management tool for the PostgreSQL database. The tools include a graphical administration interface, query editor, and much more. The tool is designed to answer the needs of developers, DBAs and system administrators alike.

Quick Links



[Add New Server](#)

Getting Started



[PostgreSQL Documentation](#)



[pgAdmin Website](#)



[Planet PostgreSQL](#)

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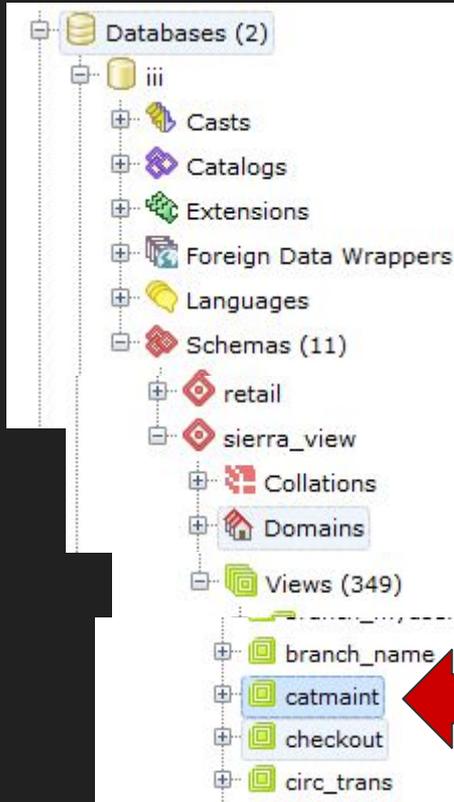
[Dashboard](#) [Properties](#) [SQL](#) [Statistics](#) [Dependencies](#) [Dependents](#) [Query-1](#)

iii on monaco@Sierra

1

[Data Output](#) [Explain](#) [Messages](#) [History](#)

SQL query*



```
iii on monaco@Sierra
1 SELECT index_entry
2 FROM sierra_view.catmaint
3 WHERE condition_code_num=1 and field ~'^a|^b'
4 ;
5 |
```

The three queries

All start the same:

1. SELECT index_entry
2. FROM sierra_view.catmaint

1. “index_entry” is the normalized text
2. “Sierra_view.catmaint” is where they keep the headings reports

Headings used for the first time	Field: b7102 a125 Productions (Firm), 4dst Indexed as AUTHOR : 125 productions firm Preceded by "a": 122nd army band Followed by "a": 127 gregg camfield From: b59463715 Rezoning Harlem - A Community Fights Against Gentrification
----------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



Names-as-names

WHERE condition_code_num=1 and field ~'^a|^b'

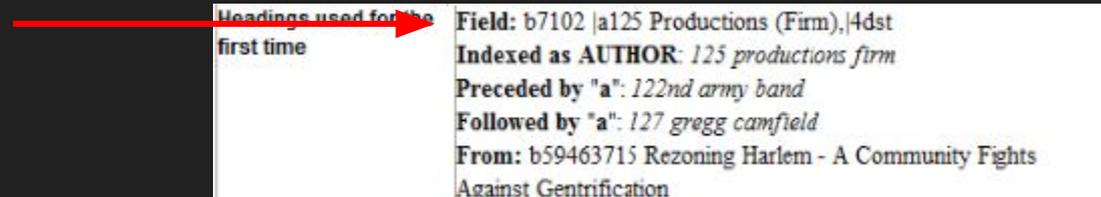
“condition_code_num=1” means **Headings used for the first time**

“field” is the Field Tag + MARC

“~'^a|^b'” is a RegEx for

“Starts with a or b”

That is, any Author (a) or Other Author (b)



Headings used for the first time	Field: b7102 a125 Productions (Firm), 4dst Indexed as AUTHOR : 125 <i>productions firm</i> Preceded by "a": 122nd army band Followed by "a": 127 gregg camfield From: b59463715 Rezoning Harlem - A Community Fights Against Gentrification
----------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

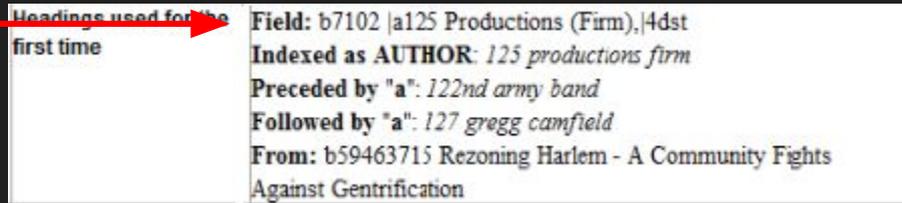
Names-as-subjects

WHERE condition_code_num=1 and field ~'^d6[0-3]'

“field” is the Field Tag + MARC

“~'^d6[0-3]” means

“Starts with d60 through d63”



Headings used for the first time	Field: b7102 a125 Productions (Firm), 4dst Indexed as AUTHOR: 125 productions firm Preceded by "a": 122nd army band Followed by "a": 127 gregg camfield From: b59463715 Rezoning Harlem - A Community Fights Against Gentrification
----------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

That is, Subjects (d) that are names or titles (MARC 600, 610, 611, 630)

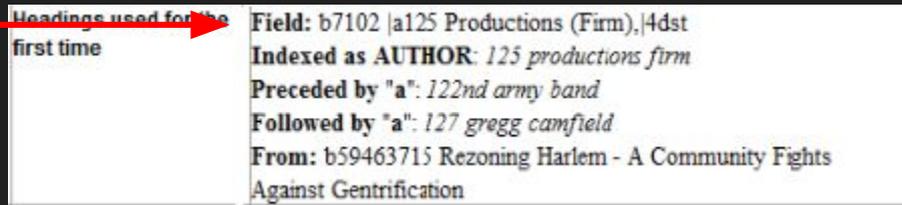
Topical subject headings

WHERE condition_code_num=1 and field ~'^d65'

“field” is the Field Tag + MARC

“~'^d65'” is a RegEx for

“Starts with d65”



Headings used for the first time	Field: b7102 a125 Productions (Firm), 4dst Indexed as AUTHOR: 125 productions firm Preceded by "a": 122nd army band Followed by "a": 127 gregg camfield From: b59463715 Rezoning Harlem - A Community Fights Against Gentrification
----------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

That is, subjects (d) that are topical headings (650) or geographical names (651)

NOTA BENE!

This is assuming you are using the standard a/b/d Field Group Tags

If you are also flagging other indexes, you may want to adjust the queries

You can see your options in Admin Corner under:

System OPTIONS and information>Set System OPTIONS>Database
maintenance>Heading Report: First time use fields

(my options were: **a, b, d, j, t, s**)

Searching in batches

Searching a batch of terms in Connexion Client

<https://mmonaco-uakron.tinytake.com/sf/MjU4OTAyMF83Nzg3NjE2>

(ca. 1 min.)

Batch searching

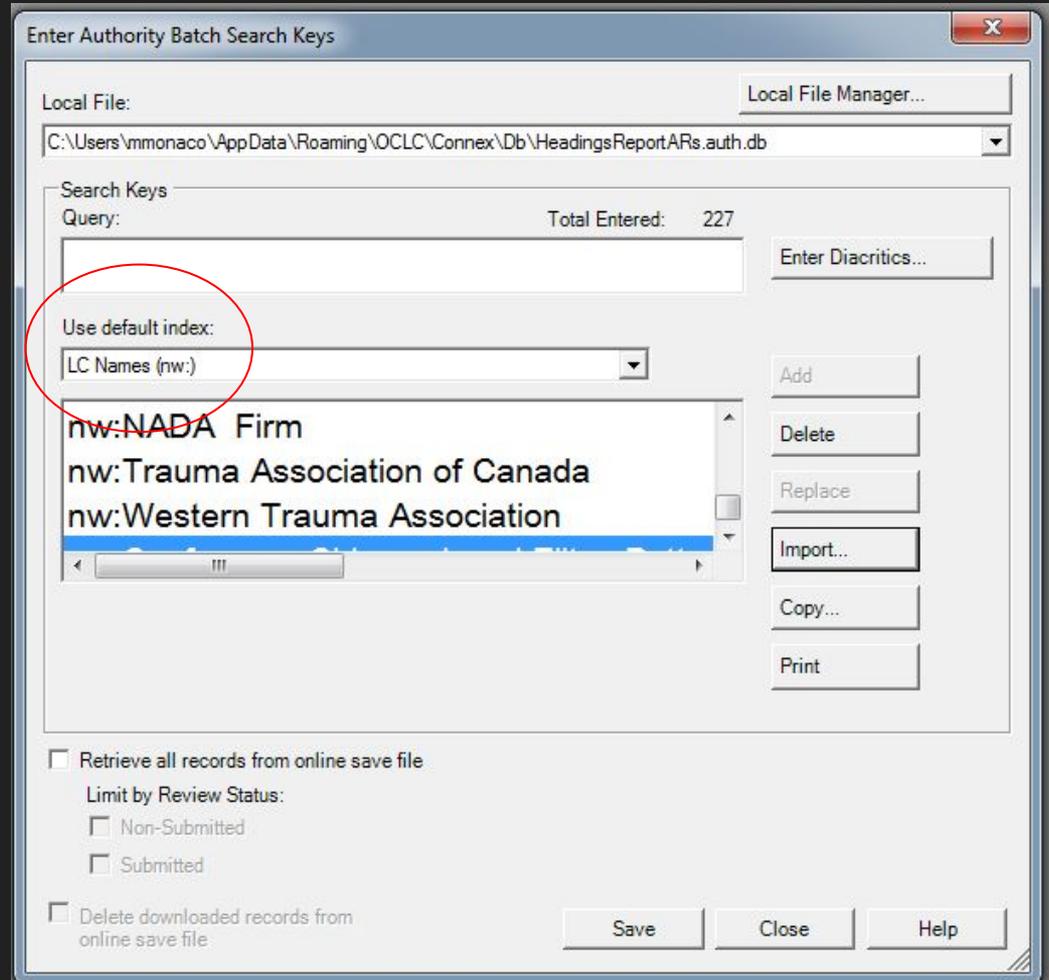
“Use default index” settings

nw: for names/titles

su: for topics/geographic terms

Maximum number of matches
to download: 1

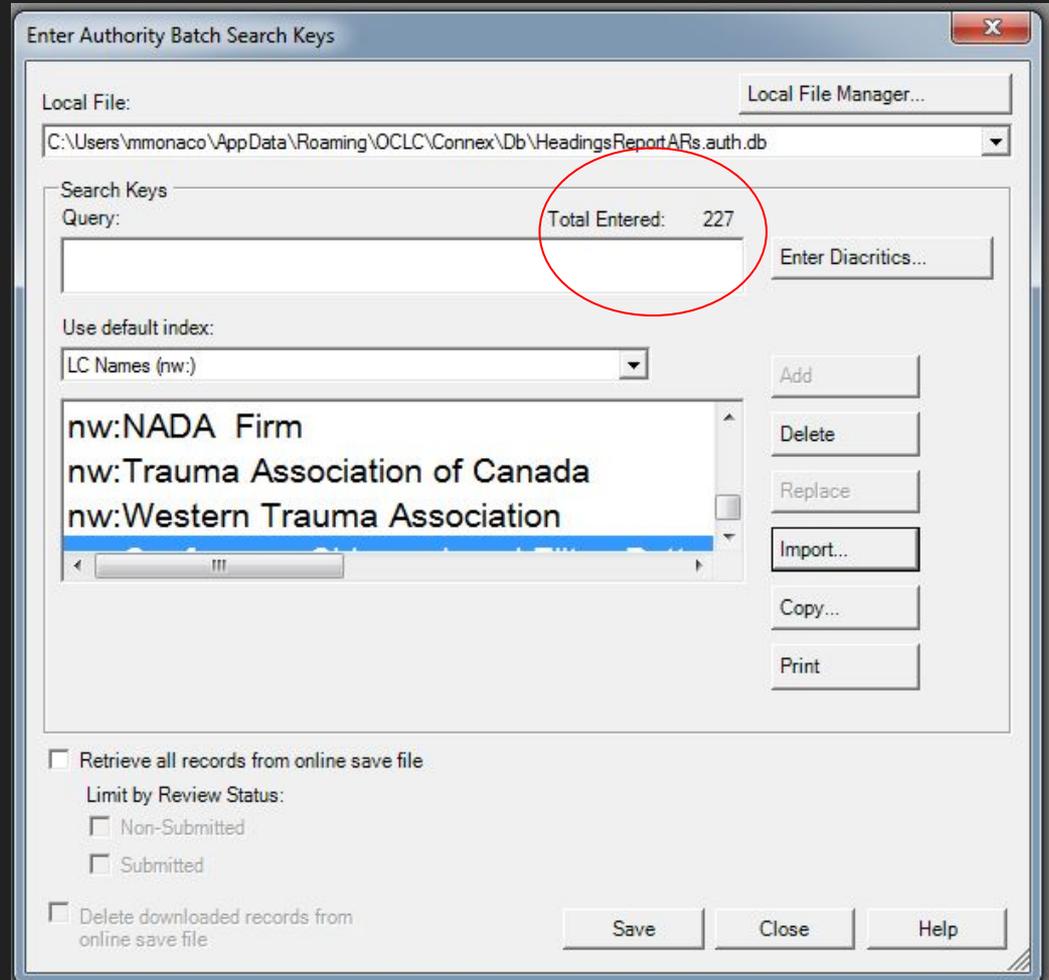
(Tools>Options>Batch)



Batch searching

NOTE:

Your local save file has a maximum capacity of 10,000 records, so don't search more than that many strings!



Enter Authority Batch Search Keys

Local File:

C:\Users\mmonaco\AppData\Roaming\OCLC\Connex\Db\HeadingsReportARs.auth.db

Search Keys

Query: Total Entered: 227

Use default index:

LC Names (nw:)

Retrieve all records from online save file

Limit by Review Status:

Non-Submitted

Submitted

Delete downloaded records from online save file

Successful name searches (of 1941 entries)

Successful Searches (1238)

Search Key	# Records	Save #	Control #	Title
nw:colbert brandy	1	1	9500853	Colbert, Brandy
nw:abel kenneth b. 1966-	1	2	4549190	Abel, Kenneth B., #d 1966-
nw:abikoff kevin	1	3	3801861	Abikoff, Kevin T., #d 1963-
nw:acero salazar martin	1	4	9892385	Acero Salazar, Martín
nw:agnew eadaoin	1	5	8898649	Agnew, Eadaoin
nw:aldana reyes xavier	1	6	10013462	Aldana Reyes, Xavier
nw:alfano veronica 1983-	1	7	10039113	Alfano, Veronica, #d 1983-
nw:allman peter j	1	8	2421337	Allman, Peter J.
nw:al-rawi ahmed	1	9	9298621	Al-Rawi, Ahmed K.
nw:anderson john 1795 -1864	1	10	4800519	Anderson, John, #d 1795?-1864
nw:anderson wesley j. l.	1	11	7944918	Anderson, Wesley J. L.
nw:angkatavanich n. todd 1967-	1	12	10691535	Angkatavanich, N. Todd, #d 1967-
nw:angkatavanich n. todd	1	13	10691535	Angkatavanich, N. Todd, #d 1967-
nw:arny henry vinecome 1868-	1	14	11204870	Arny, Henry V., #d 1868-1943
nw:ashby lowell d. lowell de witt	1	15	3548426	Ashby, Lowell D. #q (Lowell De Witt)
nw:åström berit	1	16	6123735	Åström, Berit
nw:aud ernest f	1	17	2343232	Aud, Ernest F.
nw:avakian nancy	1	18	3983477	Avakian, A. Nancy #q (Anita Nancy), #d 1935-
nw:balachandran g. gopalan 1959-	1	19	4827267	Balachandran, G. #q (Gopalan), #d 1959-
nw:bancroft janet	1	20	4112589	Bancroft, Janet
nw:barlow theodore -1749	1	21	2925788	Barlow, Theodore, #d -1749
nw:barr lewis t	1	22	1677153	Barr, Lewis T.
nw:basçi pelin	1	23	4858713	Başçı, Pelin
nw:battershill claire	1	24	10854196	Battershill, Claire

A four month test

	Total headings extracted	Hits in batch search	Success rate (ARs found for heading)
Names	36,244	21,760	60 %
Names as Subjects	3,795	896	23.6 %
Subjects	29,147	1,516	5.2 %

I'm very pleased with hit rate on names!

A four month test

	Total headings extracted	Hits in batch search	Success rate (ARs found for heading)
Names	36,244	21,760	60 %
Names as Subjects	3,795	896	23.6 %
Subjects	29,147	1,516	5.2 %

Main issues:

- Name/Title headings often not established
- Names with subdivisions

A four month test

	Total headings extracted	Unique hits in batch search	Success rate (ARs found for heading)
Names	36,244	21,760	60 %
Names as Subjects	3,795	896	23.6 %
Subjects	29,147	1,516	5.2 %

Main issues:

- Sierra 3.2 treats subdivided subject headings as single headings, inflating report (3.4+ should correct this issue!)
- Music headings (X, Arranged) often valid but not established in an AR

Is it worth it?

Typically this process takes **less than an hour** and resolved 36% of unauthorized headings -- averaging over a thousand ARs a week. Several “known issues” in Sierra 3.2 made me place this project on hold until we upgrade however.

So consider

1. the number of new headings you normally see in a report,
2. the quality of your incoming bib records (can the headings be authorized?)

Questions?

If you decide to test this process at your institution or discover any refinements, please let me know!

mmonaco@uakron.edu

