

Loan Rule Cleanup

using SQL and Excel

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About PRPLD

- Located in Fort Collins, Colorado
- We have 5 buildings:
 - 3 branches
 - 1 storage/ Collection Development facility
 - 1 Answer Center (Front line customer service via phone and email)/Communications department/administration building
- Currently have 140,000 patron accounts on our system
- A Turn-key server
- On Sierra release 5.2
- Amid a server migration from on-prem servers to AWS (Non-III hosted)



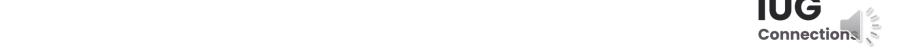


Background

Over the years we have customized several Loan Rules which are, in essence, a 98% duplicate of the previous Loan Rule.

As we started reviewing our own structure, we realized a lot of duplication. The unique parameters primarily dealt with item cost or fine charge amount. Since we went Fines Free in 2020, the need to maintain variations of the same rule with different Fine charge amount structure became obsolete.

It's easy to create a new rule and change a few parameters. However, down the road, it becomes more challenging to remove it from the system as you must deal with items currently checked out and potentially in Collections.





Initial Strategy

- Merge duplicate LR's to lowest number
- Rename LR convention to lending period instead of material type
 - This will address issue for materials funneled into a different itype
- Do not delete duplicate entries from the LRT. This will cause remaining entries to change their ID within the system, causing chaos and confusion
 - Instead, rename the entries with "OK to reuse"
- Deactivate duplicate LR's from the Loan Rule Determiner Table





BH	l35 ∨	f_x =CONCA	TENATE(C35, D35, E35,	F35, G35, H35, I35, J35, K3	5, L35, M35, N35, O35, P35, Q35, P35, R35, S35, T35, U35, V35, W35, X35, Y35, Z35, AA35, AB35, AC35, AD35, AE35,
		AF35, AG	35, AH35, AI35, AJ35, A	K35, AL35, AM35, AN35, A	O35, AP35, AQ35, AP35, AR35, AS35, AT35, AU35, AV35, AW35, AX35, AY35, AZ35, BA35, BB35, BC35, BD35, BE35,
		BF35, BG	35)		
	Msa Bill ▼ Msa Adiustm	nent ▼ Rental C	irctext Penalty Incr	If Recall ▼ Editable By ▼	Unique String
35	10	6	0	0 ALL	R0ynnn000000999999997211000010000010000010300010000n3010000110600ALL
36	10	6	0	0 ALL	R0nnnn0000000999999997211000010000010000010300010000n3010000110600ALL
37	10	6	0	2 ALL	R21ynnn020212160219999999997417770024110000241100057110300010100n15010000110600ALL
38	10	6	0	0 AL	R21ynnn020212160219999999997417770024110000241100057110300010500n1610000110600ALL
39	0	6	0	0 ALL	R7ynnn0677607999999997417770024110000241100057110300010500n251000000600ALL
40	34	6	0	0 ALL	R7ynnn000000799999999741777003833340003833340057110314004010220n8510000134600ALL
41	34	6	0	0 ALL	R21ynnn0142101021999999999741777003233340003233340057110314004010220n8510000134600ALL
42	0	0	0	0 ALL	R17ynnn0000001700001000000000000000000000
43	0	0	0	0 ALL	R55ynnn0700105500001000000000000000000000000
44	10	6	0	0 ALL	K2nnnn000000299999999995824120336168048495047004849504700080000040000n600150000110600ALL
45	10	6	0	0 ALL	R7nnnn0000007999999999417770024110000241100057110300010000n50010000110600ALL
46	10	6	0	0 ALL	R42ynnn040424230429999999997417770024110000241100057110300010500n1610000110600ALL
47	10	6	0	0 ALL	R14ynnn01314143014999999997417770024110000241100057110300010200n5010000110600ALL
48	10	6	0	0 ALL	R42ynnn04142423042999999997417770024110000241100057110300010200n5010000110600ALL
49	10	6	0	0 ALL	R84ynnn08384010849999999997417770024110000241100057110300010100n1610000110600ALL
50	10	6	0	0 ALL	R7ynnn0677607999999997417770024110000241100057110300010500n2510000110600ALL
51	10	6	0	0 ALL	R7ynnn0677607999999997417770024110000241100057110300010200n5010000110600ALL
52	10	6	0	0 ALL	R21ynnn020212160219999999997317700024110000241100057110300010500n1610000110600ALL





IC	Name	▼ Code ▼	Normal Loan Period	▼ Holdable ▼	Bookable	Home Pickup	▼ Shippable S	Ship Time Time Remaini	ng B4 Renew First Renewal	Period 🔻
4	15 Holiday bk/CD/cass	R		7 y	n	n	n	0	6	7
5	49 7-dayFFbk/CD-DVD-RON	M R		7 y	n	n	n	0	6	7
6	55 HolidayFF/bk/CD/cass	R		7 y	n	n	n	0	6	7
7										
8										
9	3 7-day video/DVD/BD	R		7 y	n	n	n	0	6	7
10	50 7-day FFvideo/DVD/BD	R		7 y	n	n	n	0	6	7
11										
12										
13	4 21-day bk/CD/cas/kit	R		21 y	n	n	n	0	20	21
14	5 21-day magazine	R		21 y	n	n	n	0	20	21
15	37 21-day Picture Book	R		21 y	n	n	n	0	20	21
16	52 21-day FF/magazine	R		21 y	n	n	n	0	20	21
17	53 21-dyFFbk/CD/cas/kit	R		21 y	n	n	n	0	20	21
18	64 21-day Picture Book	R		21 y	n	n	n	0	20	21
19										
20	11 21-day DVD/BD	R		21 y	n	n	n	0	20	21
21	54 21-day FF/DVD/BD	R		21 y	n	n	n	0	20	21





Procedure

- Using SQL, look at the desired items and determine how many renewals are left (in average)
- Export a copy (serves as a backup) of the current Loan Rule table
- Import file into Excel
- Create transitional itype (s) to help with the transfer of items from one LR to the new one (or existing one)
- Test by identifying and then generating a group of items (via Create List)
 - Export the results
 - Limit to:
 - Patron barcode
 - Item barcode
- Update the itype via Global update
- Perform a batch renewal using the Sierra Offline Client
 - This action forces the items to attach to the desired Loan Rule
- Double check your work





```
FROM circ_trans

WHERE loanrule_code_num = '51'

AND op_code != 'i'

-- LIMIT 15
```

	transaction_gmt	application_name	source_code	op_code	patron_record_id	item_record_id	volume_record_id	bib_record_id	stat_group_code_num	due_date_gmt
0,178,221	2021-06-24 15:01:31-06	milmyselfcheck	local	0	481,037,642,650	450,973,152,076	(NULL)	420,908,112,905	211	2021-07-15 04:00:00-0
0,178,222	2021-06-24 15:01:37-06	milmyselfcheck	local	0	481,037,642,650	450,973,227,794	(NULL)	420,908,112,906	211	2021-07-15 04:00:00-0
0,178,225	2021-06-24 15:01:40-06	milmyselfcheck	local	0	481,037,642,650	450,973,921,833	(NULL)	420,908,284,147	211	2021-07-15 04:00:00-0
0,178,226	2021-06-24 15:02:04-06	webpac	local	r	481,037,544,084	450,973,833,534	(NULL)	420,908,591,236	100	2021-07-15 04:00:00-0
0,178,227	2021-06-24 15:02:07-06	milmyselfcheck	local	0	481,037,688,332	450,973,896,323	(NULL)	420,908,647,618	411	2021-07-15 04:00:00-0
0,178,228	2021-06-24 15:02:07-06	milmyselfcheck	local	0	481,037,688,332	450,973,880,882	(NULL)	420,908,511,354	411	2021-07-15 04:00:00-0
0,178,229	2021-06-24 15:02:07-06	milmyselfcheck	local	0	481,037,688,332	450,973,951,668	(NULL)	420,908,298,260	411	2021-07-15 04:00:00-0
0,178,230	2021-06-24 15:02:09-06	milmyselfcheck	local	0	481,037,688,332	450,973,865,975	(NULL)	420,908,626,173	411	2021-07-15 04:00:00-0
0,178,232	2021-06-24 15:02:09-06	milmyselfcheck	local	0	481,037,688,332	450,973,800,591	(NULL)	420,908,564,753	411	2021-07-15 04:00:00-
0,178,236	2021-06-24 15:02:17-06	milmyselfcheck	local	0	481,037,688,332	450,973,484,956	(NULL)	420,908,270,317	411	2021-07-15 04:00:00-
0,178,238	2021-06-24 15:02:17-06	milmyselfcheck	local	0	481,037,688,332	450,973,684,605	(NULL)	420,908,426,318	411	2021-07-15 04:00:00-0
0,179,405	2021-06-24 16:23:33-06	milmyselfcheck	local	0	481,037,672,554	450,973,933,031	(NULL)	420,908,720,088	211	2021-07-15 04:00:00-
0,179,406	2021-06-24 16:23:33-06	milmyselfcheck	local	0	481,037,672,554	450,973,935,479	(NULL)	420,908,723,772	211	2021-07-15 04:00:00-
0,179,407	2021-06-24 16:23:33-06	milmyselfcheck	local	0	481,037,672,554	450,973,927,602	(NULL)	420,908,715,092	211	2021-07-15 04:00:00-0
0,179,409	2021-06-24 16:23:38-06	milmyselfcheck	local	0	481,037,672,554	450,973,954,146	(NULL)	420,908,190,014	211	2021-07-15 04:00:00-0
0,178,841	2021-06-24 15:40:36-06	milmyselfcheck	local	0	481,037,732,269	450,973,511,112	(NULL)	420,908,289,514	211	2021-07-15 04:00:00-0
0,178,842	2021-06-24 15:40:39-06	milmyselfcheck	local	0	481,037,732,269	450,973,658,157	(NULL)	420,908,344,660	211	2021-07-15 04:00:00-0
0,178,184	2021-06-24 15:00:04-06	milmyselfcheck	local	0	481,037,642,650	450,973,968,298	(NULL)	420,908,432,068	211	2021-07-15 04:00:00-
0,178,185	2021-06-24 15:00:08-06	milmyselfcheck	local	0	481,037,642,650	450,973,696,284	(NULL)	420,908,224,705	211	2021-07-15 04:00:00-0
0,178,188	2021-06-24 15:00:19-06	milmyselfcheck	local	0	481,037,642,650	450,973,669,978	(NULL)	420,908,408,790	211	2021-07-15 04:00:00-
0,178,189	2021-06-24 15:00:30-06	milmyselfcheck	local	0	481,037,688,332	450,973,964,155	(NULL)	420,908,760,869	411	2021-07-15 04:00:00-0





```
-- SELECT id, application_name, source_code, op_code, stat_group_code_num, item_location_code, patron_home_library_code, loanrule_code_num, COUNT (loanrule_code_num)

SELECT loanrule_code_num AS "Loan Rule", COUNT (loanrule_code_num) AS "Count"

FROM circ_trans

WHERE op_code = "0"

GROUP BY loanrule_code_num

ORDER by COUNT (loanrule_code_num) DESC
```

Result #1 (44r × 2c)

Result #1 (44	
	Count
53	368,016
4	346,685
51	
3	43,647
22	34,471
25	33,775
50	26,053
11	25,341
18	19,989
45	15,607
21	11,266
5	9,569
38	4,438
24	1,898
6	1,710
15	
40	803
46	718
52	
39	620
67	
42	530
14	320
65	
47	293



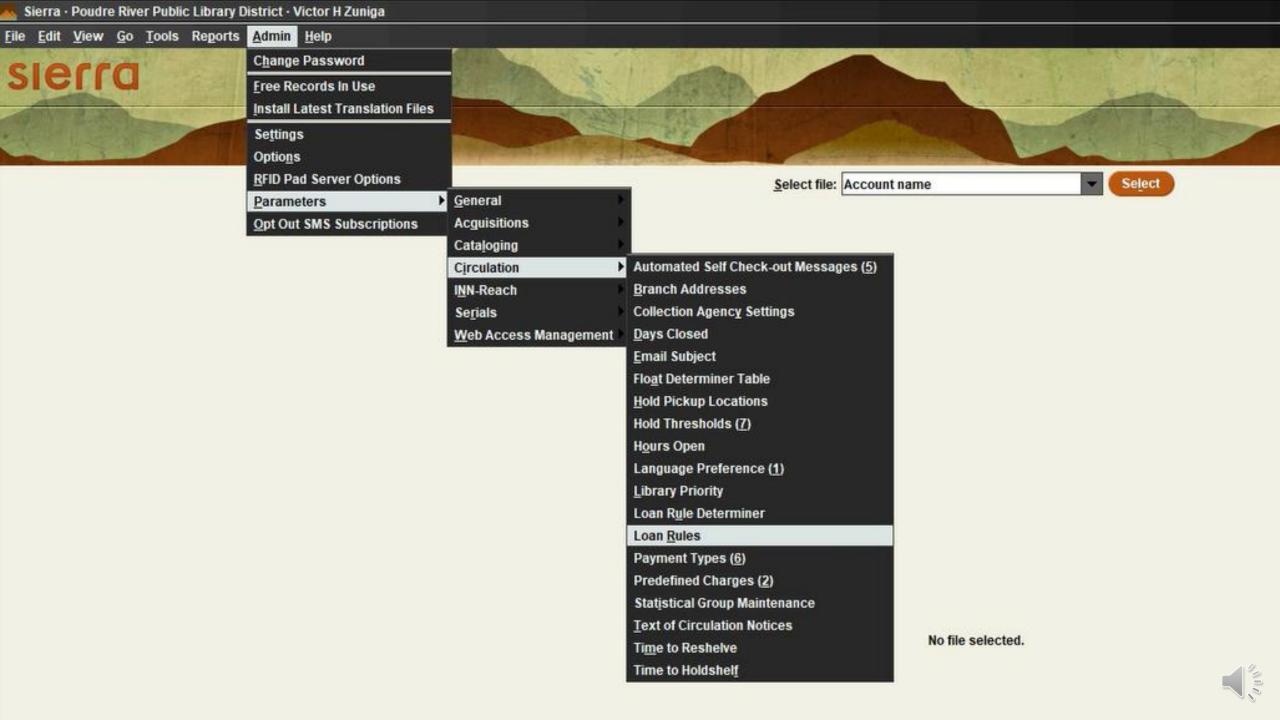


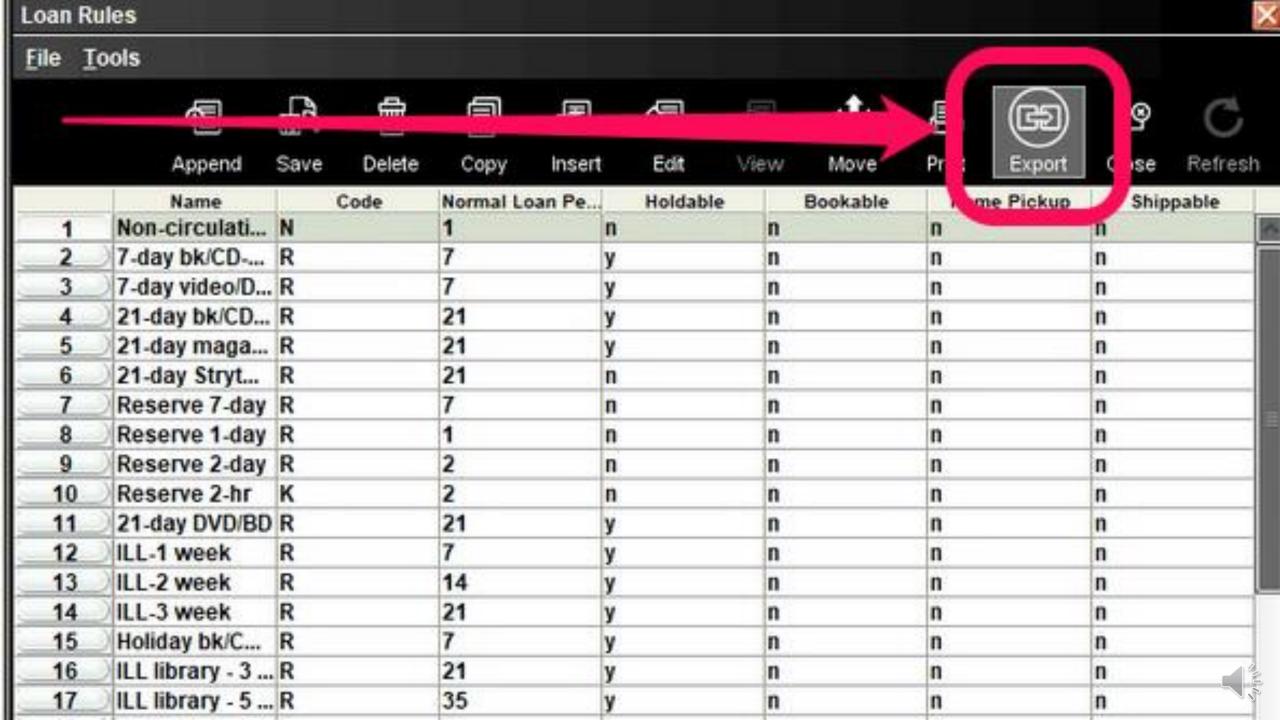
```
1 SELECT
2 patron_record_id,
3 --id2reckey(patron_record_id) AS "Patron Record",
4 checkout_gmt,
5 due_gmt,
6 loanrule_code_num,
7 renewal_count,
8 ptype,
9 overdue_count,
10 overdue_gmt,
11 NOW() - due_gmt AS "Number of days overdue"
12 from sierra_view.checkout
13 WHERE checkout_gmt BETWEEN '2021-01-01' AND '2021-05-01'
14 AND due_gmt <= NOW()
15 --AND Loanrule_code_num = '18'</pre>
```

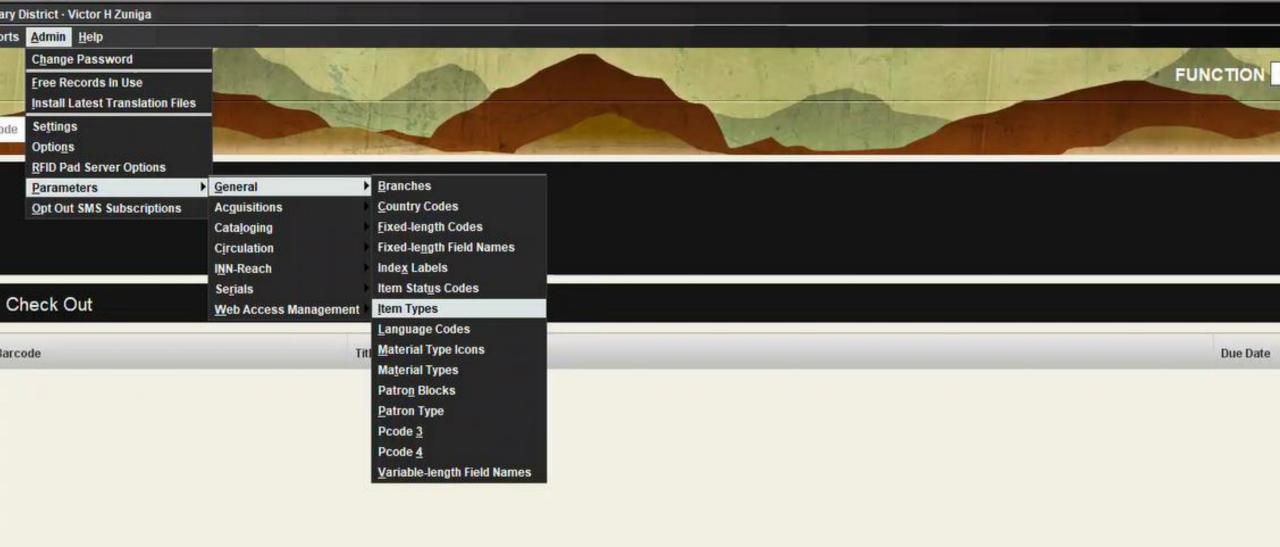
Result #1 (322r × 9c)

patron_record_id	checkout_gmt	due_gmt 2021-03-30 04:00:00-00	loanrule_code_num	renewal_count	ptype	overdue_count	overdue_gmt	Number of days overdue
481,037,726,800	2021-04-21 11:22:06-06	2021-05-08 04:00:00-06	3	1	1	r .	2021-06-06 06:04:36-06	325 days 11:06:15.868606
481,037,345,411	2021-02-27 15:29:07-07	2021-05-26 04:00:00-06	5	3			2021-06-24 06:05:20-06	307 days 11:06:15.868606
481,037,731,217	2021-02-18 10:30:12-07	2021-04-05 04:00:00-06	3	6	1	1	2021-05-04 06:05:34-06	358 days 11:06:15.868606
481,037,732,758	2021-04-11 12:43:13-06	2021-05-02 04:00:00-06	4	0		r .	2021-05-31 06:03:59-06	331 days 11:06:15.868606
481,037,636,339	2021-04-22 13:10:22-06	2021-06-04 04:00:00-06	51	1		i i	3 2021-06-19 08:48:47-06	298 days 11:06:15.868606
481,037,622,497	2021-03-23 17:04:24-06	2021-05-04 04:00:00-06	4	1	1	p s	2021-06-02 06:08:58-06	329 days 11:06:15.868606
481,037,661,083	2021-02-13 14:24:00-07	2021-04-17 04:00:00-06	5	1			2021-05-16 06:04:30-06	346 days 11:06:15.868606
1,407,855,921,579,706	2021-04-25 09:27:55-06	2021-06-19 04:00:00-06	25	0	213	3	(NULL)	283 days 11:06:15.868606
844,905,968,332,896	2021-04-29 08:07:57-06	2021-11-18 04:00:00-07	25	0	207	7	(NULL)	131 days 10:06:15.868606
481,037,731,989	2021-03-17 13:09:07-06	2021-04-07 04:00:00-06	4	0		1	2021-05-06 06:05:28-06	356 days 11:06:15.868606
481,037,731,989	2021-03-17 13:09:07-06	2021-04-07 04:00:00-06	4	0		9	4 2021-05-06 06:05:28-06	356 days 11:06:15.868606
481,037,724,528	2021-04-25 12:42:59-06	2021-05-30 04:00:00-06	22	1	(NULL).	2021-06-28 06:04:11-06	303 days 11:06:15.868606
481,037,724,528	2021-04-25 12:42:55-06	2021-05-30 04:00:00-06	22	1	(NULL		2021-06-28 06:04:12-06	303 days 11:06:15.868606
481,037,724,528	2021-04-25 12:42:50-06	2021-05-30 04:00:00-06	22	1	(NULL)	2021-06-28 06:04:12-06	303 days 11:06:15.868606
481,037,724,528	2021-04-25 12:42:42-06	2021-05-30 04:00:00-06	22	1	(NULL)	2021-06-28 06:04:12-06	303 days 11:06:15.868606
481,037,724,528	2021-04-25 12:43:11-06	2021-05-30 04:00:00-06	22	1	(NULL		2021-06-28 06:04:12-06	303 days 11:06:15.868606
481,037,724,528	2021-04-25 12:42:47-06	2021-05-30 04:00:00-06	22	1	(NULL)	4 2021-06-28 06:04:11-06	303 days 11:06:15.868606
481,037,724,528	2021-04-25 12:42:31-06	2021-05-30 04:00:00-06	4	1			2021-06-21 06:04:06-06	303 days 11:06:15.868606



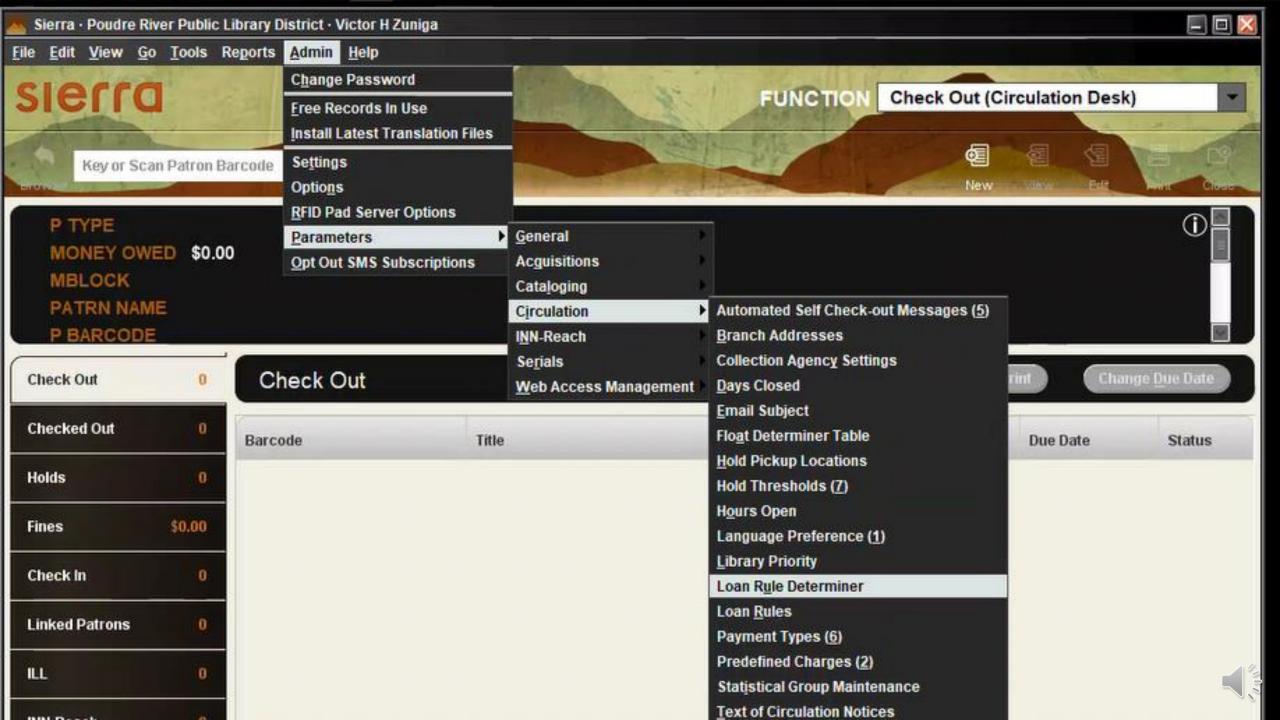


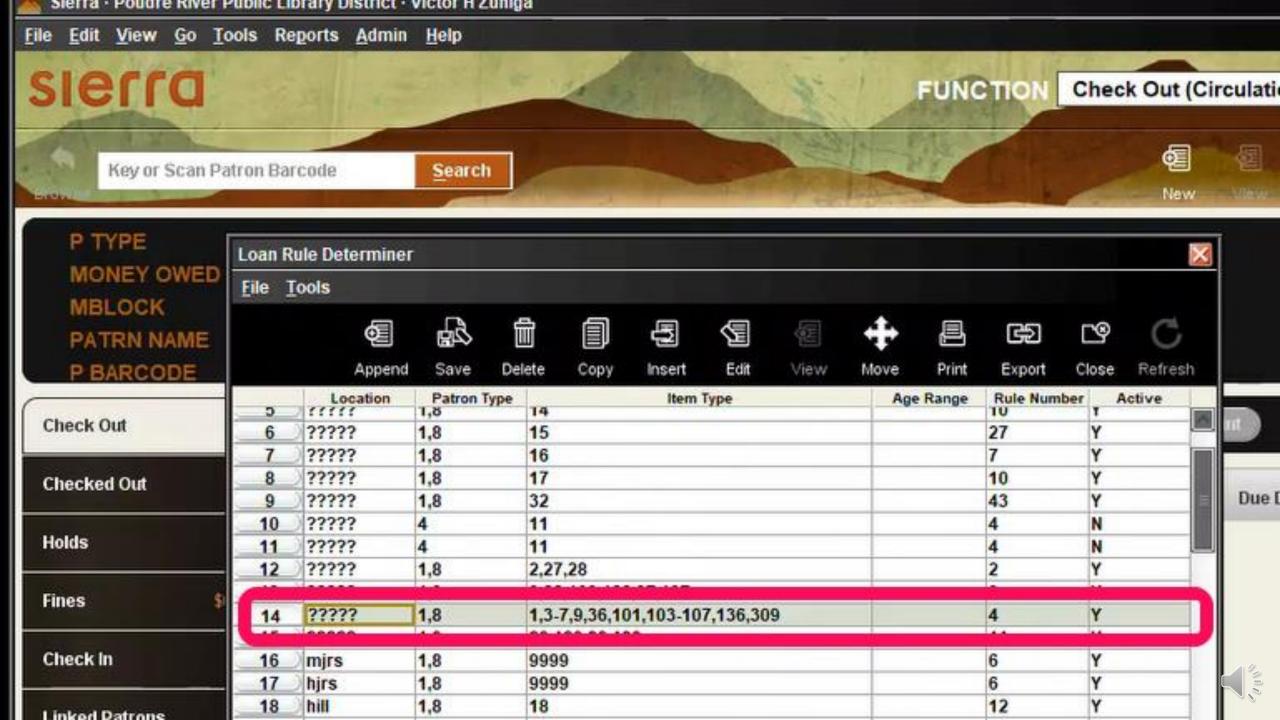


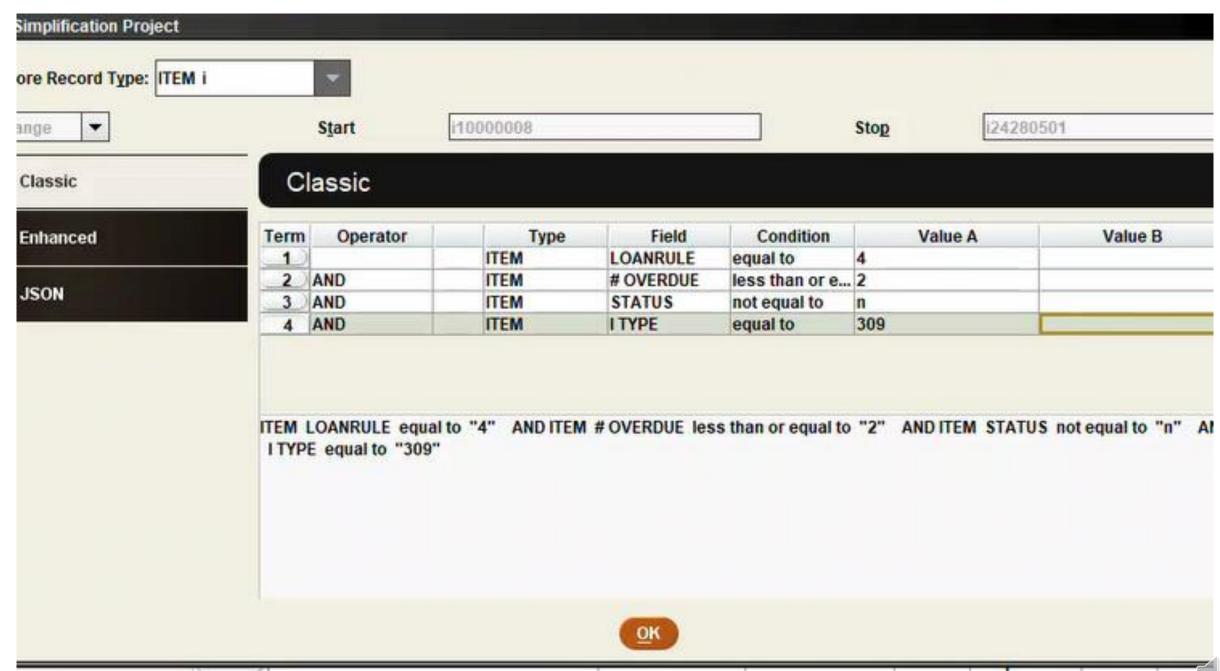


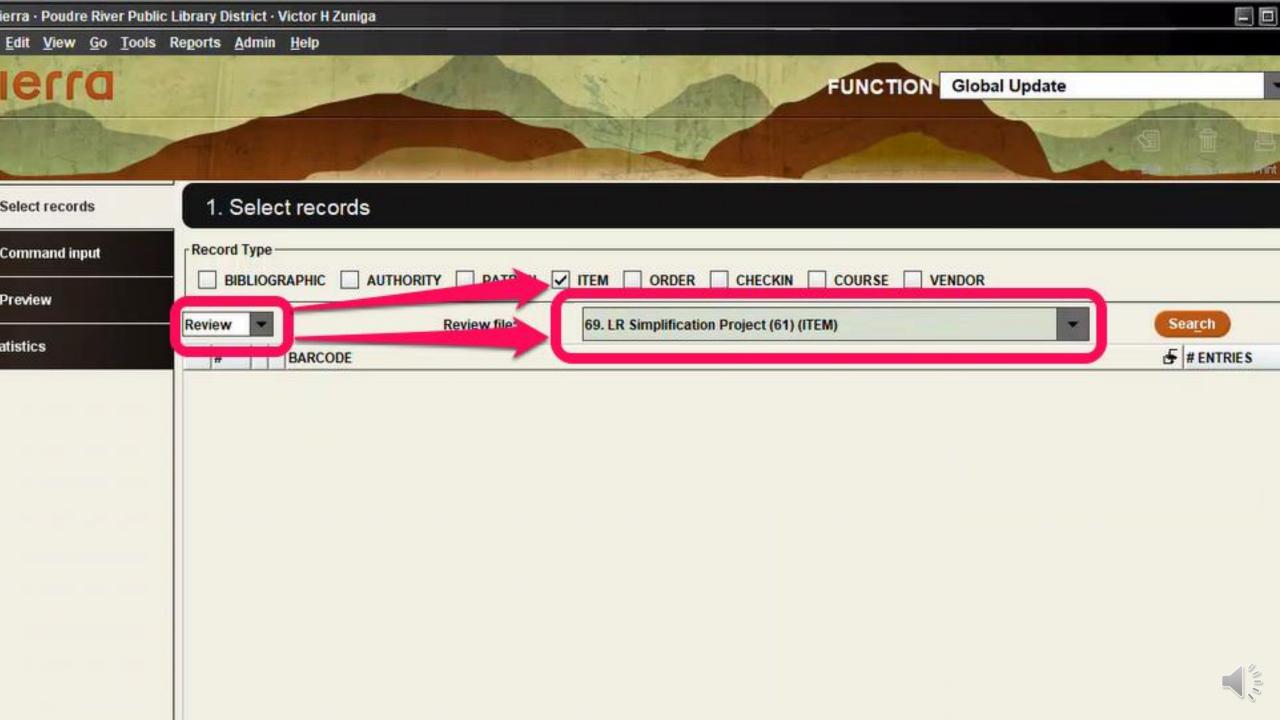


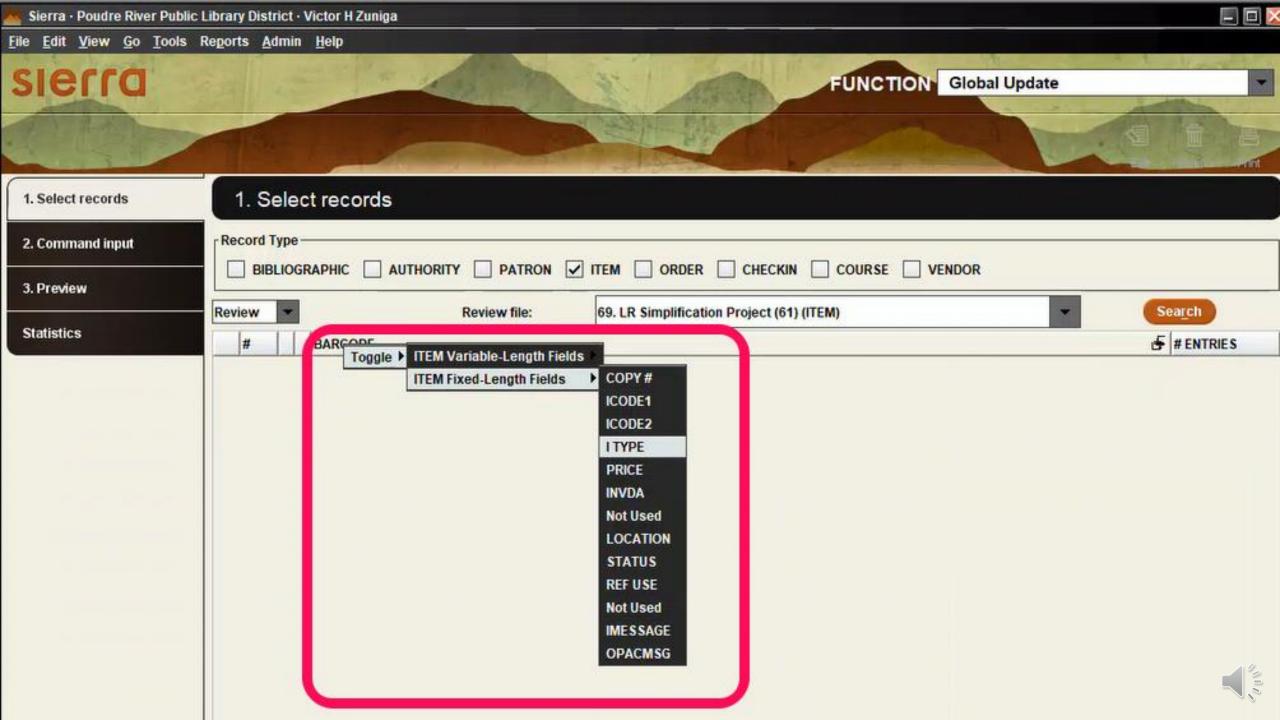
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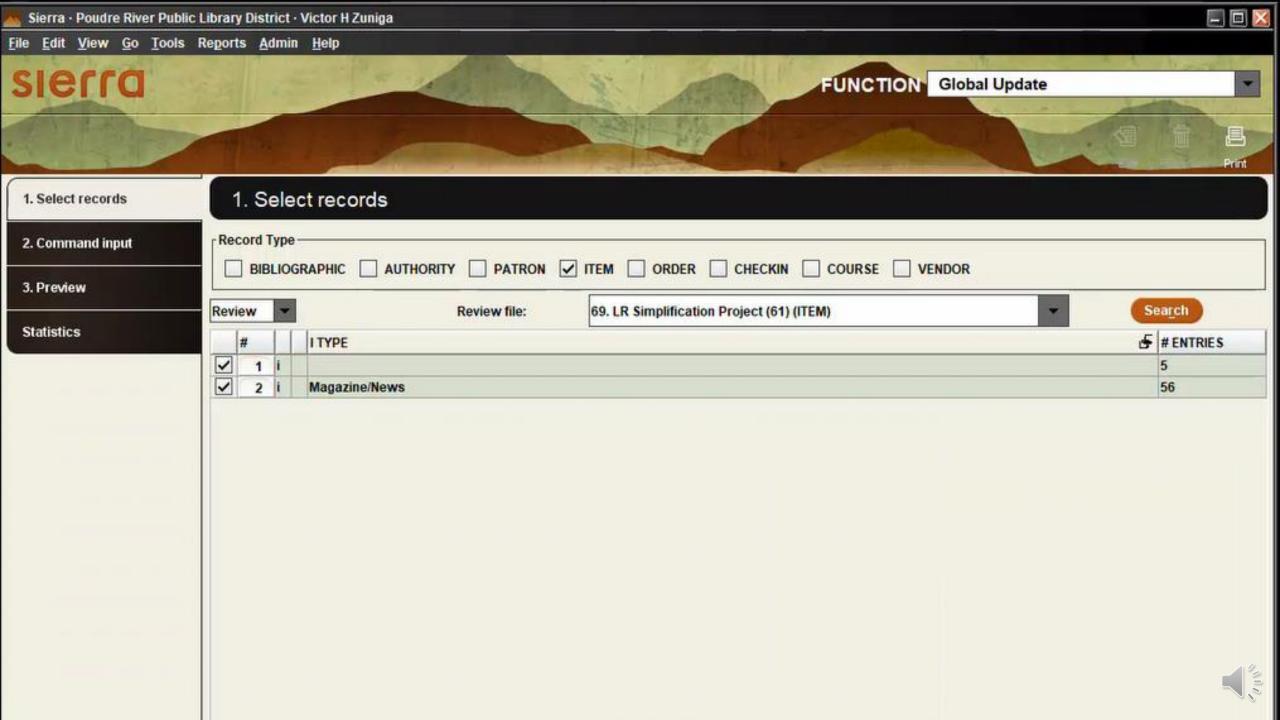


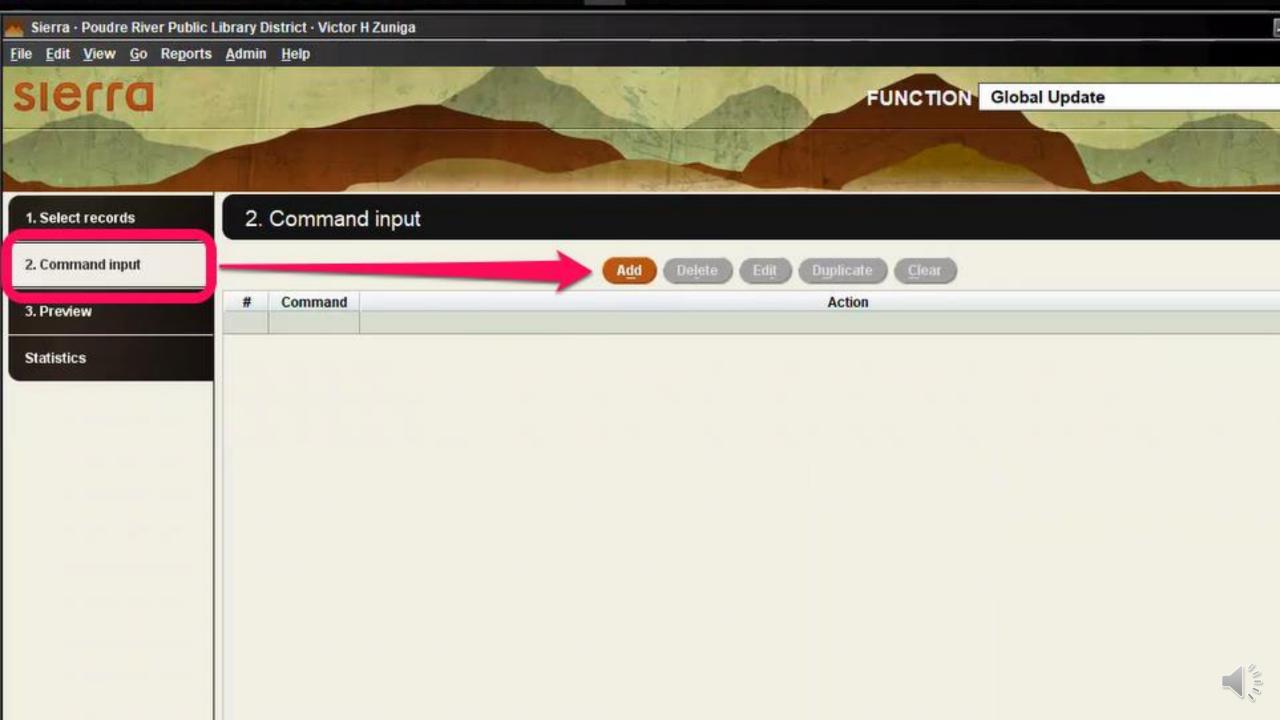


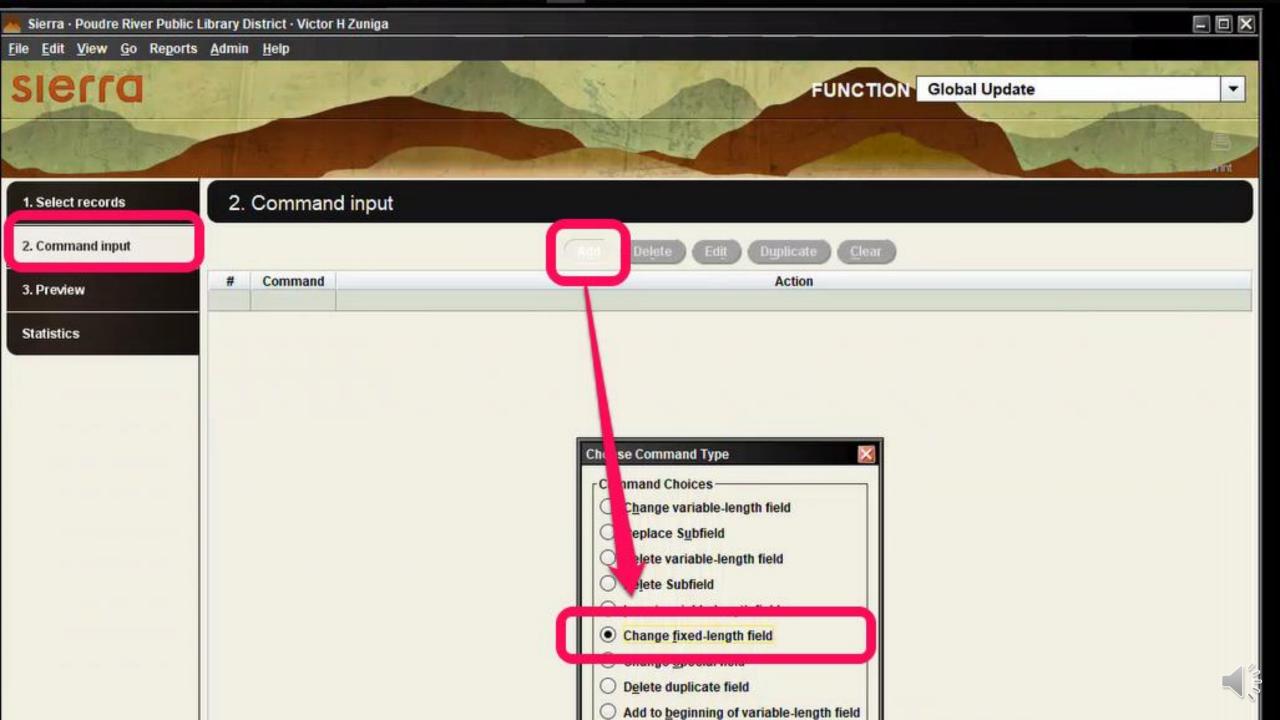


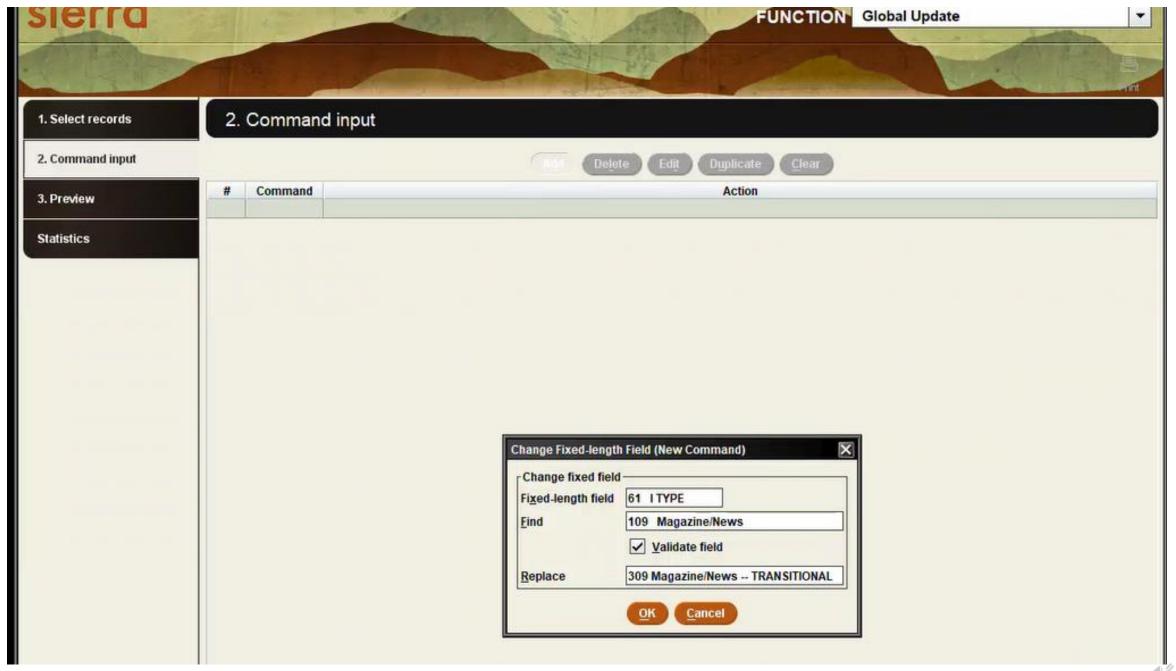




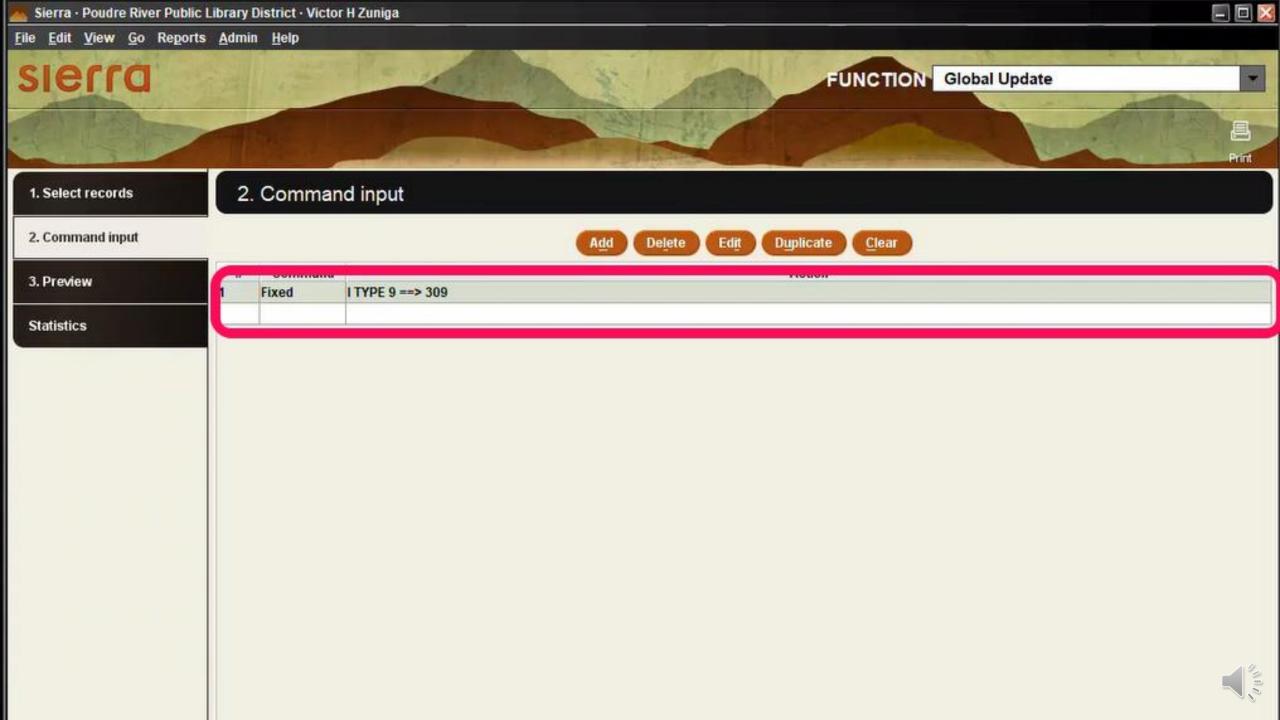


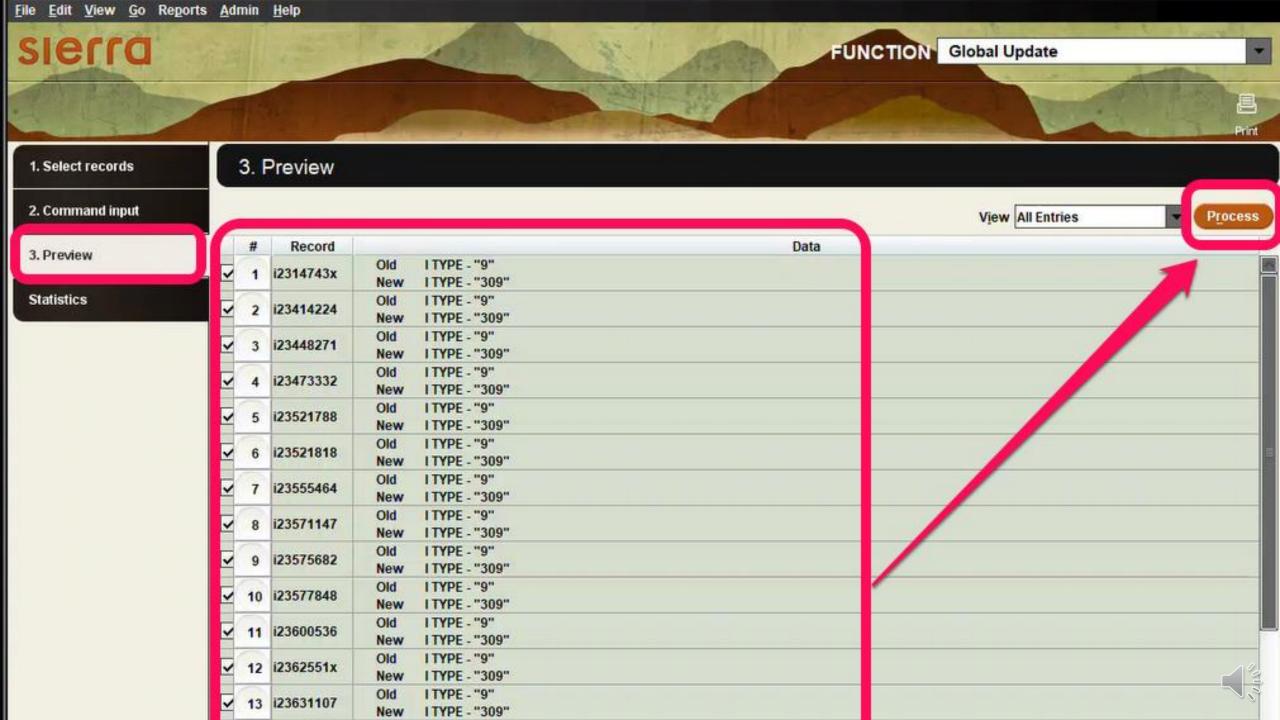








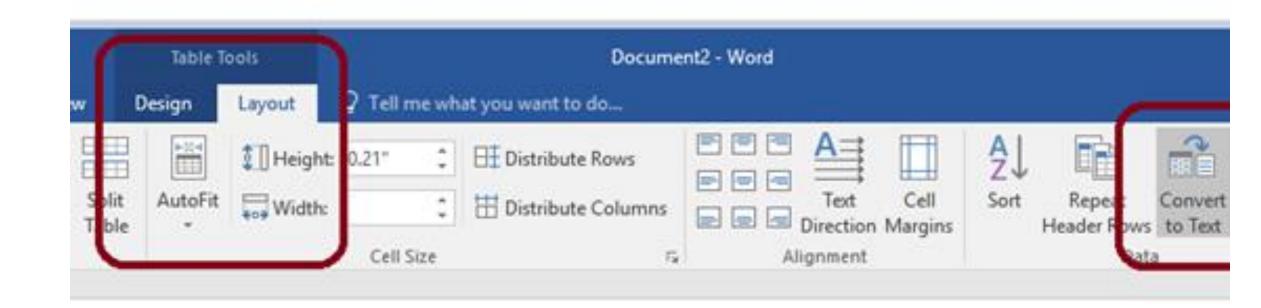




3	3 34	199
4	874	542
5	994	424
6	422	829
7	993	172
8	922	671
9	995	939
10	613	596
11	852	655
12	731	441







1000329465	2000173026
1000175031	2000158916
1000020163	2000163449
1000571129	2000173025
1000051294	2000095521
1000054385	2000158916
1000175503	2000150016





Find and Replace

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o:2003230400:1000054385:2000158916:2004130400:111
o:2003230400:1000176503:2000158916:2004130400:111
o:2003230400:1000076460:2000158916:2004130400:111
o:2003230400:1000177427:2000158916:2004130400:111
o:2003230400:1000171936:2000095521:2004130400:111
o:2003230400:1000134357:2000067200:2004130400:111
o:2003230400:1000173124:2000129656:2004130400:111
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Insights...

- Avoid items already in Collections
 - Renewing an item already in collections status wipes the fines from the patron account
 - We decided to process items up to the second overdue notice
- Start small
 - Your first test should be 1-2 items
 - Do a few more tests
 - Once you are confident with the process, proceed to process all the items within one of the duplicates
- Use the LR Duplicate spreadsheet as a visual reference
 - Share with Senior Circulation staff
 - It is always good to have an extra set of eyes







THANK YOU

Questions?

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