

# Primo norm rules overview

## Definitions

Primo Back Office (BO): website where Primo is configured. You need a separate login for the back office. There are two back offices: one for the sandbox and one for production.

Sandbox BO url: [https://calstate-primosb.hosted.exlibrisgroup.com:1443/primo\\_publishing/admin/acegilogin.jsp](https://calstate-primosb.hosted.exlibrisgroup.com:1443/primo_publishing/admin/acegilogin.jsp)

(Access to the back office is restricted by IP range (I think.) So you can only access the Primo back office from work.

I haven't set up your user logins yet so you don't have access yet. I'll probably set you up as a NE (norm rules editor) first.

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/060Back\\_Office\\_Guide/030Configuring\\_Staff\\_Users\\_and\\_User\\_Groups/Staff\\_User\\_Configuration](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/060Back_Office_Guide/030Configuring_Staff_Users_and_User_Groups/Staff_User_Configuration)

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/060Back\\_Office\\_Guide/150Staff\\_User\\_Role\\_Privileges#wwconnect\\_header](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/060Back_Office_Guide/150Staff_User_Role_Privileges#wwconnect_header)

Primo normalization rules: configurations in the back office that take Marc data and transform it into Primo Normalized XML ([PNX](#))

Primo renorm: A renormalization of Alma data. All Alma data is re-indexed and digested into Primo. A renorm implements additions and/or modifications to Primo norm rules.

Primo sandbox: a place to test Primo configurations and normalization rules.

The Primo sandbox gets its Marc data from generic Exlibris records and some records contributed by CSU libraries during migration.

Generally, changes to Primo are tested in the sandbox first and then carried over to production.

Primo production: real-live Primo, the Primo that library users see and use

Links to CSU library production and sandbox instances of Primo

<https://calstate.atlassian.net/wiki/spaces/ULMSD/pages/78291823/CSU+Primo+Instances>

# Exlibris documentation

Training videos to become familiar with the back office and navigating it

## Getting Started

[https://knowledge.exlibrisgroup.com/Primo/Training/Primo\\_Training/Introduction\\_to\\_Primo/Getting\\_Started](https://knowledge.exlibrisgroup.com/Primo/Training/Primo_Training/Introduction_to_Primo/Getting_Started)

### Videos:

- 01 Introduction to Primo,
- 02 What is Discovery and Delivery and
- 04 Introduction to Primo PNX and Publishing.

Primo Certification (you don't need to be Primo certified (I'm not), this is just the name of the webpage)

[https://knowledge.exlibrisgroup.com/Primo/Training/Primo\\_Training/Primo\\_Certification](https://knowledge.exlibrisgroup.com/Primo/Training/Primo_Training/Primo_Certification)

### Videos:

- 01 Primo Back Office Overview,
- 05 Primo Normalized XML (PNX),
- 06 Normalization Rules Overview,
- 07 Normalization Rules Configuration

## Knowledge center articles

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/040Editing\\_Normalization\\_Rules\\_Sets](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/040Editing_Normalization_Rules_Sets)

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/070How\\_to\\_Edit\\_the\\_Normalization\\_Rules](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/070How_to_Edit_the_Normalization_Rules)

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/040Editing\\_Normalization\\_Rules\\_Sets#The\\_Top\\_of\\_the\\_Normalization\\_Set\\_Editor\\_Page](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/040Editing_Normalization_Rules_Sets#The_Top_of_the_Normalization_Set_Editor_Page)

# Systemwide vs local configurations

Some things in Primo can be configured locally by each campus, other configurations are systemwide and require consensus.

For example, norm rules for Alma Marc data (which is primarily what our task force deals with) are systemwide. The edition statement is taken from marc field 250 subfield a and b. This is systemwide.

Individual campus libraries have some customization options. They can choose to display or not display the edition statement in Primo's full record view. They can also choose to add the edition statement to Primo's brief results.

For details, see <https://calstate.atlassian.net/wiki/spaces/ULMSD/pages/586416144/Display+Fields+in+Primo+full+record+view>

<https://trello.com/c/wgvLhJ5s/121-95-move-the-edition-details-up-near-the-author-and-year-above-the-find-it-and-get-it-tabs-it-is-currently-buried-too-far-down-6>

## Challenges

balancing the requests from one campus vs the system as a whole

displaying informative Marc fields in Primo vs cluttering up the display

If we index too many Marc fields will this introduce undesired behavior in Primo search results?

## Work overview

The Primo norm rules groups mainly deals with the display (which Marc (sub)fields display in Primo and how they display) and indexing (which Marc (sub)fields are indexed for search in Primo), while considering the challenges mentioned above.

Occasionally, we'll deal with other areas of Primo. For example, recently we [re-aligned Primo facets and formats](#). Formats are the material types (DVDs, Audio CDs, Blu-Rays, Atlases, Web Sites...) described in the bibliographic record. We also re-configured that facets (search limiters that display on the left side in Primo) based on the new and revised formats.

When implementing or testing a norm rule, you'll always start in the Primo sandbox. You find an example record in the Primo sandbox search results. (This will be the record you'll test the effect of your norm rules on.) In the Primo sandbox back office you edit and/or add the norm rules.

For example, I want to display the Marc 310 field, current publication frequency. <https://www.oclc.org/bibformats/en/3xx/310.html>

First, I need to find a record in the sandbox that has the 310 field.

<https://calstate.atlassian.net/wiki/spaces/ULMSD/pages/78291823/CSU+Primo+Instances>

I know that serials use the 310 to indicate the journal's publication frequency (annual, quarterly, monthly...)

So basically, I just randomly search Primo for a journal with a 310 in its bib record.

(This can be a time-consuming task because basically you're searching Primo for bib records that have a specific field but you can't limit your search to that specific field.

This is a scenario where you can use your cataloging skills. For example, I need to find a bib record with a 505 contents note. I know that a monograph of short stories usually would have a 505 note listing the titles of each story so maybe I'll search Primo for "short story.")

I found a title, Journal of the State Bar of California (oclc 01696037, issn 0039-002X).

[https://csun-primosb.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01CAL\\$ALMA71385912010002901&context=L&vid=01CAL\\$UNO&search\\_scope=EVERYTHING&tab=everything&lang=en\\_US](https://csun-primosb.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01CAL$ALMA71385912010002901&context=L&vid=01CAL$UNO&search_scope=EVERYTHING&tab=everything&lang=en_US)

Marc record has 310 field

```
245 00$aJournal of the State Bar of California.
246 1#$iTitle varies slightly, May/June 1966-1971:$aJournal
260 ##$aSan Francisco, Calif. :$bState Bar of California,$c1942-1971.
300 ##$a30 v. ;$c23 cm.
310 ##$aBimonthly
362 0#$aVol. 17, no. 3 (Mar./Apr. 1942)-v. 46, no. 6 (Nov./Dec. 1971).
500 ##$aTitle from cover.
```

Primo full record view confirms that the 310 is not currently displayed.

## Details

---

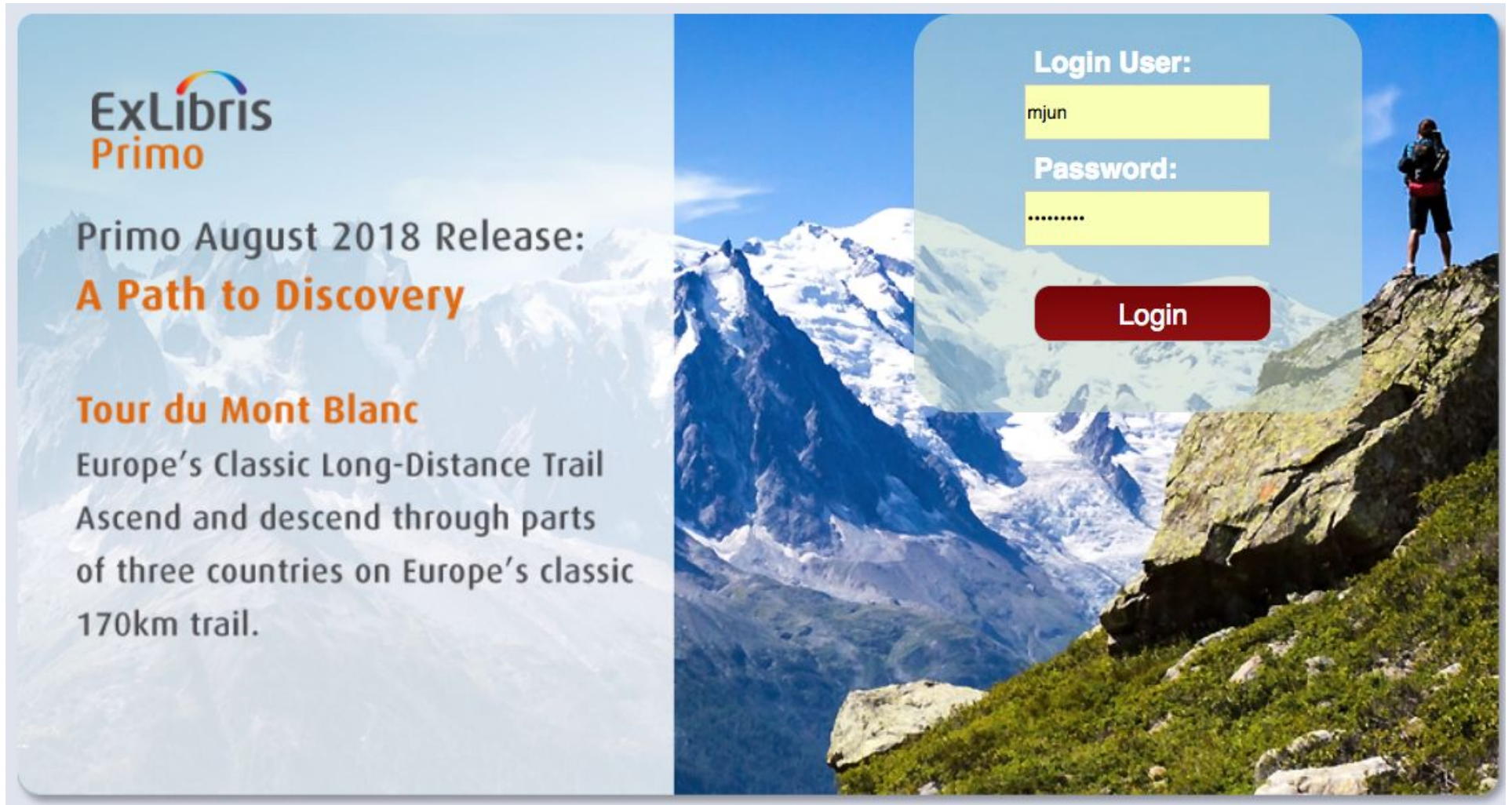
Title	Journal of the State Bar of California.
Other Titles	Journal
Subjects	<a href="#">State Bar of California -- Periodicals</a> > <a href="#">Bar associations -- California -- Periodicals</a> >
Notes	Title from cover.
Related Titles	Earlier Title: State bar journal of the State Bar of California Later Title: California State bar journal Online version: Journal of the State Bar of California
Publisher	San Francisco, Calif. : State Bar of California
Creation Date	1942-1971
Format	30 v. ; 23 cm..
Contributors	<a href="#">State Bar of California.</a> >
Identifier	ISSN : 0039-002X LC : KF200 .C33 LC : K23 .T37 LC (local) : K3 .A4
Language	English
OCLC Number	01696037
Institution Zone ID	991002235319702914
Network Zone ID	991059858159702901
Earlier Title	<a href="#">State bar journal of the State Bar of California</a>
Later Title	<a href="#">California State bar journal</a>
Source	California State University

I've found my test record and took a screenshot of what the Primo record looks like before I made any changes to the norm rules.

(Optional: You may want to find additional records, especially if your norm rule is complex (display multiple subfields, or transform subfields) or if the Marc field itself is complex.)

# Back Office walkthrough

sandbox back office: [https://calstate-primosb.hosted.exlibrisgroup.com:1443/primo\\_publishing/admin/acegilogin.jsp](https://calstate-primosb.hosted.exlibrisgroup.com:1443/primo_publishing/admin/acegilogin.jsp)



**ExLibris  
Primo**

Primo August 2018 Release:  
**A Path to Discovery**

**Tour du Mont Blanc**  
Europe's Classic Long-Distance Trail  
Ascend and descend through parts  
of three countries on Europe's classic  
170km trail.

**Login User:**  
mjun

**Password:**  
\*\*\*\*\*

**Login**

Most of your work will be in Local Data, Normalization Sets.

# CalState Sandbox Primo Back Office

Welcome to Primo Back Office - monitor and configure your settings



- Home
- Deploy & Utilities
- General
- Local Data**
- Publishing
- FE & Delivery
- Search Engine

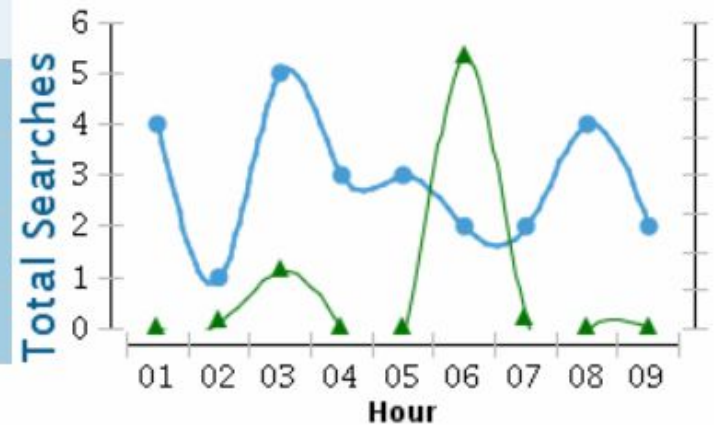
Hello mjun

## Monitoring & Maintenance

- > **Monitor Primo Status**  
Stay in control with one glance of all
- > **Primo Utilities**  
Cleanup procedures and More
- > **Primo Reports**  
View available reports or catalog a n
- > **Schedule Tasks**  
Schedule Primo tasks such as harvesting, reloading indexes and more
- > **PNX Viewer**  
Browse PNX files

- Data Sources
- Scope Values
- Normalization Sets**
- Enrichment Sets
- Publishing Mapping Tables
- Restricted Search Scopes
- Restricted Delivery Scopes

[Pipes: OK](#)   [Processes: OK](#)   [Search: OK](#)   [DB/FS/](#)



> [Deploy All](#)

Deploy all

## Configuration & Management wizards

- > **Ongoing Configuration Wizards**  
Configure and manage the Staff, Institutions, Views, Data sources and Pipes settings to maintain the proper function of Primo
- > **Advanced Configuration**  
Manage the advanced features of Primo, like Search Engine, Installation, UI and PNX



In the list of normalization rules sets, look for Owner: Installation, Normalization Rules Set Name: 01CALS\_ALMA, Normalization format: marc

## > Normalization Rules Sets

### Normalization Rules Sets

Owner:   Display Template NR

Owner	Normalization Rules Set Name	Version	Description	Normalization Rules Format				
California State University, Northridge	01CALS_UNO_SCHOLARWORKS2	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State University, East Bay	01CALS_UHL_Dspace	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State Polytechnic University, Pomona	Test953	24		marc	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State Polytechnic University, Pomona	01CALS_PUP_BS	10		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State Polytechnic University, Pomona	01CALS_PUP_BST	10		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State University, San Bernardino	01CALS_USB_IR	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
Installation	01CALS_DSPACE	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State University San Marcos	01CALS_USM_DSPACE	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State University, Northridge	01CALS_UNO_ASPACE2	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California State University, San Bernardino	01CALS_USB_WRCA	18		marc	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
California Polytechnic State University, San Luis Obispo	01CALS_PSU_SP	9		dublin_core	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>
Installation	01CALS_ALMA	24		marc	<a href="#">Edit</a>	<a href="#">Deploy</a>	<a href="#">Test</a>	<a href="#">Delete</a>

There are various norm rule sets but our group will focus on the Primo norm rules for marc data from Alma.

When you're editing the 01CALIS\_ALMA norm rules, you'll see a dropdown for PNX section. You'll probably spend most of your time in the Display and Search sections.

## CalState Sandbox Primo Back Office

[Primo Home](#) > [Ongoing Configuration Wizards](#) > [Pipe Configuration Wizard](#) > **Normalization Rules configuration**

[Home](#) | [Deploy & Utilities](#) | [General](#) | [Local Data](#) | [Publishing](#) | [FE & Delivery](#) | [Search Engine](#)

### > Manage Normalization Rules

Normalization Rules Set:

PNX Section:

- Control
- ✓ Display
- Links
- Search
- Sort
- Facets
- Dedup
- FRBR
- Delivery And Scoping
- Enrichment
- Ranking
- Additional Data
- Browse

### Normalization Rules Set Attributes

Set Name:

Version: 24

Set Description:

Enable:

### Normalization Rules for PNX Section display in Normalization Rule 01CALIS\_ALMA

To see a PNX record and its various sections, please see the following sample record.

[https://csun-primosb.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01CALIS\\_ALMA71385912010002901&context=L&vid=01CALIS\\_UNO&lang=en\\_US&tab=everything&showPnx=true](https://csun-primosb.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01CALIS_ALMA71385912010002901&context=L&vid=01CALIS_UNO&lang=en_US&tab=everything&showPnx=true)

For more info on PNX records and how to view them, see

<https://docs.google.com/document/d/1FSV394wHtn2MGP2hlxjWA6RSwiEY1VNB8TICvTiYD-g/edit#heading=h.lesu0hzd14lt>

## Practice

In the PNX section, Display which of the following Marc fields display and if so, which subfields are displayed?  
(Hint: Use Ctrl + F in your browser to search for the specific Marc field tags.)

<u>Marc</u>	<u>Display?</u>	<u>Subfields</u>
020	Yes	a
242	No	
263		
340		
348		
351		
362		
380		
541		

## Adding a norm rule

When you're adding a new norm rule, first you have to find the PNX field (ex: display:title, display:publisher...) that it best fits under.

For example, I want to add the 310 field (current publication frequency) along with the other 3xx fields.

In the list of norm rules, I search for the 300 marc field and find that it and other 3xx fields are included in the display:format PNX field.

The screenshot shows a configuration interface for norm rules. On the left, a search box contains 'display:format' and the number '1'. The main area displays a list of norm rules with columns for Type, Field, Ind1, Ind2, Subfield, and the rule description. The '300' field is highlighted in orange. At the bottom right, there is a date and time stamp '2018-07-23 15:32:54.0' and an 'Edit' button.

Type	Field	Ind1	Ind2	Subfield	Rule
MARC	300			*	MERGE- Merge to single PNX field
MARC	343			a,b	MERGE- Merge to single PNX field
MARC	345			a	MERGE- Merge to single PNX field
MARC	351			*	Add single PNX field
MARC	347			a,b	MERGE- Merge to single PNX field
MARC	346			a	MERGE- Merge to single PNX field
MARC	344			a,b	MERGE- Merge to single PNX field
MARC	342			a	MERGE- Merge to single PNX field
MARC	340			*	MERGE- Merge to single PNX field mjun

Comments

2018-07-23 15:32:54.0

Edit

## Order of fields, subfields

You'll notice that in the listing of the 3xx fields, the fields are in random order. I think that the Marc fields display in Primo based on the order in the Marc bibliographic record. And I think the same applies to the display of subfields too.

For example, the Primo norm rule for the 505 field includes the subfields in alphabetical order: a,g,r,t.

Type	Field	Ind1	Ind2	Subfield
MARC	505			a,g,r,t

But in Primo, the subfields display based on their order in the bib record.

Primo example:

[https://csun-primosb.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01CAL\\$ALMA71431773290002901&context=L&vid=01CAL\\$UNO&search\\_scope=EVERYTHING&tab=everything&lang=en\\_US](https://csun-primosb.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=01CAL$ALMA71431773290002901&context=L&vid=01CAL$UNO&search_scope=EVERYTHING&tab=everything&lang=en_US)

Marc record

505 00 \$t Cordials /\$r David Kranes --\$t The pension grillparzer /\$r John Irving...

Primo display

**Contents**

Cordials / David Kranes -- The pension grillparzer / John Irving -- Going after Cacciato / Tim O'Brien -- Rough strife / Lynne Sharon Schwartz -- The fat girl / Andrew Dubus -- Home / Jayne Anne Phillips -- Levitation / Cynthia Ozick -- Pretend dinners / W.P. Kinsella -- Lost

If I'm mistaken or you find evidence to the contrary, please let me know so I can update this google doc.

For the 310 field, I will edit the rules in display:format.

## CalState Sandbox Primo Back Office

09/16/18

[Primo Home](#) > [Ongoing Configuration Wizards](#) > [Pipe Configuration Wizard](#) > **Normalization Rules configuration**

[Home](#) | [Deploy & Utilities](#) | [General](#) | [Local Data](#) | [Publishing](#) | [FE & Delivery](#) | [Search Engine](#)

### > Advanced Normalization Set Editor

Normalization Rules Set:

Section:

Field:

### Normalization Rules for field format in PNX Section display in Normalization rules set 01CAL5\_ALMA

Description:

Basic

[Enable all rules](#) | [Disable all rules](#)

Last Updated By: mjun

At: 2018-07-23 15:32:54.0

Comments:

Version: 1 (modified)

(Usually I add new norm rules below existing rules. You don't have to do this. When I'm testing I just find it easier to locate my rule if it's at the bottom.)

The last rule in display:format is rule 9. To add a new rule, I click on the plus (+) icon which duplicates the current rule, instead of creating a blank rule. (It's weird but it's just one of the quirks of working in the back office.)

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**Rule group** display\_format

**Type**

Source	Field	Ind1	Ind2	Subfield	Enabled
MARC	351			Include *	<input checked="" type="checkbox"/>

**Conditions** + No conditions Specified


**Transformations** +

Transformation	Parameter
Copy As Is	

**Behavior**

**Action** ADD

+ -  
Test



## Rules in detail

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**Rule group** display\_format

**Source** Type: MARC

Field	Ind1	Ind2	Subfield	
310			Include	a <input checked="" type="checkbox"/> Enabled

**Conditions** + No conditions Specified

**Transformations** +

Transformation	Parameter
Add to beginning of string	Publication frequency:
Copy As Is	

**Behavior**

**Action** ADD

Exlibris documentation:

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/040Editing\\_Normalization\\_Rules\\_Sets](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/040Editing_Normalization_Rules_Sets)

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/070How\\_to\\_Edit\\_the\\_Normalization\\_Rules](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/070How_to_Edit_the_Normalization_Rules)



Rule group: no need to edit. the rule group is the PNX field you're working in. (in the example above, display:format)

Source: MARC. Our group only works with Marc data from Alma.

Field: the specific Marc tag. (Unfortunately you can use wildcards like (5\*\* or 5xx). You have to specify each Marc tag by its numbers. It's frustrating but it's just how the back office works.)

Ind1, Ind2: where you can specify indicators. If blank, you're selecting any and all indicators.

Subfield: Include or Exclude. "Specify the subfields that you want to exclude or include". Use a comma to separate multiple subfields. Asterisk (\*) is used to specify all subfields.

Enabled: You can enable or disable a norm rule with this checkbox. It's good to use when you want to preserve an existing norm rule but disable it. Then you can add a new norm rule to test. If the new norm rule fails or behaves unexpectedly, you can delete the new norm rule and enable the existing one.

Conditions: You can set up conditions that determine if a field displays or not.

The condition below looks for 655\_7 where \$2 is lcgft.

<b>Condition 1 - Logic</b>	True						
<b>Condition 1 - Source</b>	Type	Field	Ind1	Ind2	Subfield		Success If
	MARC	655		7	Include	2	Match Current
<b>Condition1 - Routines</b>	<b>General Parameter</b>						
	[Empty text box]						
	<b>Routine</b>	<b>Parameter</b>					
	Check string equals string	lcgft					

Transformation: You can take the Marc data as-is or make changes to it.

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/050Transformation\\_Routines](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/050Transformation_Routines)

(Most of the time you'll be using "Copy as is". I don't think we'll be doing much complicated transformations of Marc data.)

Action Behavior:

Add: adds a new "line" in Primo display for this norm rule

Or: only a single PNX field should be created. Once that field has been created, the system stops checking the remaining rules. (I've never use this.)

Merge: "merge all occurrences of the source fields to a single PNX field"

[https://knowledge.exlibrisgroup.com/Primo/Product\\_Documentation/Technical\\_Guide/020Working\\_with\\_Normalization\\_Rules/040Editing\\_Normalization\\_Rules\\_Sets#The\\_Top\\_of\\_the\\_Normalization\\_Set\\_Editor\\_Page](https://knowledge.exlibrisgroup.com/Primo/Product_Documentation/Technical_Guide/020Working_with_Normalization_Rules/040Editing_Normalization_Rules_Sets#The_Top_of_the_Normalization_Set_Editor_Page)

In general use Add but this is something you can play around with and test in the Sandbox.

Test: There is an option to test your norm rule but it uses generic data. (And I also forgot how it works.) I prefer to test on records I found in the Primo Sandbox.

## Testing

Owner:

- MARC xml records
- MARC exchange records

Select a record

Edit Record

Test

[select all/deselect all](#) rules for testing.

After you finalized your norm rule, you save.

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**Rule group**

Type	Field	Ind1	Ind2	Subfield	
<b>Source</b> <input type="text" value="MARC"/>	<input type="text" value="310"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Include"/>	<input type="text" value="a"/> <input checked="" type="checkbox"/> Enabled

**Conditions**  No conditions Specified

**Transformations**

Transformation	Parameter
<input type="text" value="Add to beginning of string"/>	<input type="text" value="Publication frequency:"/> <input type="button" value="+"/> <input type="button" value="-"/>
<input type="text" value="Copy As Is"/>	<input type="text"/> <input type="button" value="+"/> <input type="button" value="-"/>

**Behavior**

**Action**

[Go to top of page](#)

Create new source mapping

(The Back Office doesn't give you a confirmation message. You click Save and then it just reloads the webpage.)

## Sandbox renorm

To see the changes my new norm rule made, I will have to do a renorm.

For the procedure, follow steps #3 (Deploy norm rules) and #8 (Run renorm) here:

[https://docs.google.com/document/d/1NG0Kv4zOXN1QsreHArl\\_EG7q7Jf4Lgtb0lIp-0Xxcc/edit#heading=h.nqbda731e29y](https://docs.google.com/document/d/1NG0Kv4zOXN1QsreHArl_EG7q7Jf4Lgtb0lIp-0Xxcc/edit#heading=h.nqbda731e29y)

(I don't expect new members of the task force to do a renorm. Most of your work will be adding and editing norm rules and I will do the renorms. But I'm including the renorm procedure so you have an idea of the entire process.)

Production renorms take about 3 days (72 hours) while a sandbox renorm takes about 2 hours. This is another reason we test in the sandbox. It's much quicker to see the changes we made.)

## Tips

Much of my experience in the Primo back office has been through trial and error and examining existing norm rules to create new ones.

Most of your work will be in the sandbox. At first I was afraid of ruining or seriously messing up Primo but that's why we have the sandbox.

You can always back up existing norm rules by printing to PDF the webpage of existing rules before you make any changes.

I also use screenshots to document before and after.





