



University of Exeter

Ranking Configuration and Harvested Collections in Primo VE

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Library
Search

Search anything

Library Search

Welcome to the new Library

Sign-in to your account to:

- Request and renew items
- Pin results to My Favourites
- Set up saved search alerts
- Export citations

Agenda



- Context
 - University of Exeter
 - University of Exeter Library
- Ranking Configuration
 - Checking the Knowledge Centre
 - Gathering evidence
 - Testing in the Sandbox
 - API article
 - Some lessons learned
 - Harvested Collections
 - Working with an API
 - Results so far
- Q&A



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Institutional Context

- 30,000 students from over 150 countries
- 7,400 staff from over 100 countries
- Russell Group member
- 155th in QS World University Rankings 2025
- Partnership with Falmouth University



Cornwall
Penryn
Penryn Campus
Truro
Knowledge Spa

Devon
Exeter
Streatham Campus
St Luke's Campus
RILD Building (Royal Devon and Exeter Hospital)
CSRC (Royal Devon and Exeter Hospital)



2023/24



The Library

We migrated from Millennium and Encore to Alma and Primo VE (and Rapido) in July 2023

- Deep Search with Cornwall campuses
- Integrated collections – Devon and Exeter Institute, Bill Douglas Cinema Museum, Archives and Special Collections
- Presented at IGELU 2023 on this change

Ranking Configuration work

- Error log – staff identified issues with owned books not surfacing
- Presented at IGELU 2024 on this work





Checking the Knowledge Center

- Ranking configuration is a delicate balancing act requiring a lot of careful testing in the Sandbox!
- Configuring aspects of the ranking algorithm
 - Fields Boosting
 - Date Boosting – maximum of 5 date/date range rows
 - Resource Type Boosting
- Non-Fields boosts have more impact and can significantly change results
- Positive boost
 - Value from 1.0 to 1000000
- Negative boost
 - Value from 0.0 to 1.0
- CDI results not effected by ranking configuration

Ranking Configuration

Fields Boosting

1 - 7 of 7

Field	Name	Boosting Factor
1. title	Title	3.5
2. creator	Creator	3.0
3. sub	Subject	2.5
4. toc	TOC	1.5
5. isbn	ISBN	1.0
6. lang	Language	1.0
7. addtitle	Additional title	0.01

Date Boosting

Resource Type Boosting



Gathering evidence

- Spreadsheet of examples from staff
 - Search terms used, date and format of target
 - Primo Analytics for popular searches
- It's not always the ranking!
 - Metadata – alternative titles
 - Staff training – 'multiple versions'
- Simple search – title and author surname
 - Target surfaces from title but is buried when surname is added
 - Source – Alma/SFX Local Collection vs. Library Catalog

Search terms	Surfaces?	Source
marketing: an introducti	No	Library Catalog
social psychology baror	No	Library Catalog
research methods and s	No	Library Catalog
International human res	No	Library Catalog
How to write better essa	Yes	Alma/SFX Local Collection
Developing skills for bu	Yes	Alma/SFX Local Collection
International Financial	Yes	Alma/SFX Local Collection
legal skills finch	Yes	Alma/SFX Local Collection
Developing skills for bu	Yes	Alma/SFX Local Collection

Search terms	Results are from not signed in, testing done on Firefox		Green means sandbox results are
	Date (of target)	Print/E-(target)	
Developing skills for business leadership	2023	E-	
Developing skills for business leadership watson	2023	E-	
How to write better essays	2023	E-	
How to write better essays Greetham of probability	2023	E-	
Foundations of the theory of probability Kolmogorov	1950	Print	
DSM-5/DSM-5/DSM5	2013	Print	
China's Belt and Road Initiative	2020	E-	
Central Asia, Southeast Asia and Central Eastern			



Testing in Sandbox

- Testing in the Sandbox
 - Trying out different boost factors to see the impact on results
 - E.g. Resource type – Books. Boosting by 10 had the unwanted results of burying relevant articles
- A more organised approach
 - Checking every example after every change
 - Making notes on how the results responded to each change
- Incremental date boosting over past 5 years
- Remember the Sandbox is not based on current Alma data
 - Time spent trying to surface a result which didn't exist in the Sandbox yet – woops!

Sandbox	Notes
2nd	use 776 field to relate editions
2nd	as above
1st	
1st	The 2018 book chapters are Keen to be surfaced
1st	
Buried	I had the print showing 1st on the sandbox but lost it now
	Resource recommender comes up now with direct link to text
	5th for good reason, there are other more recent e-books with this phrase in the title
5th	



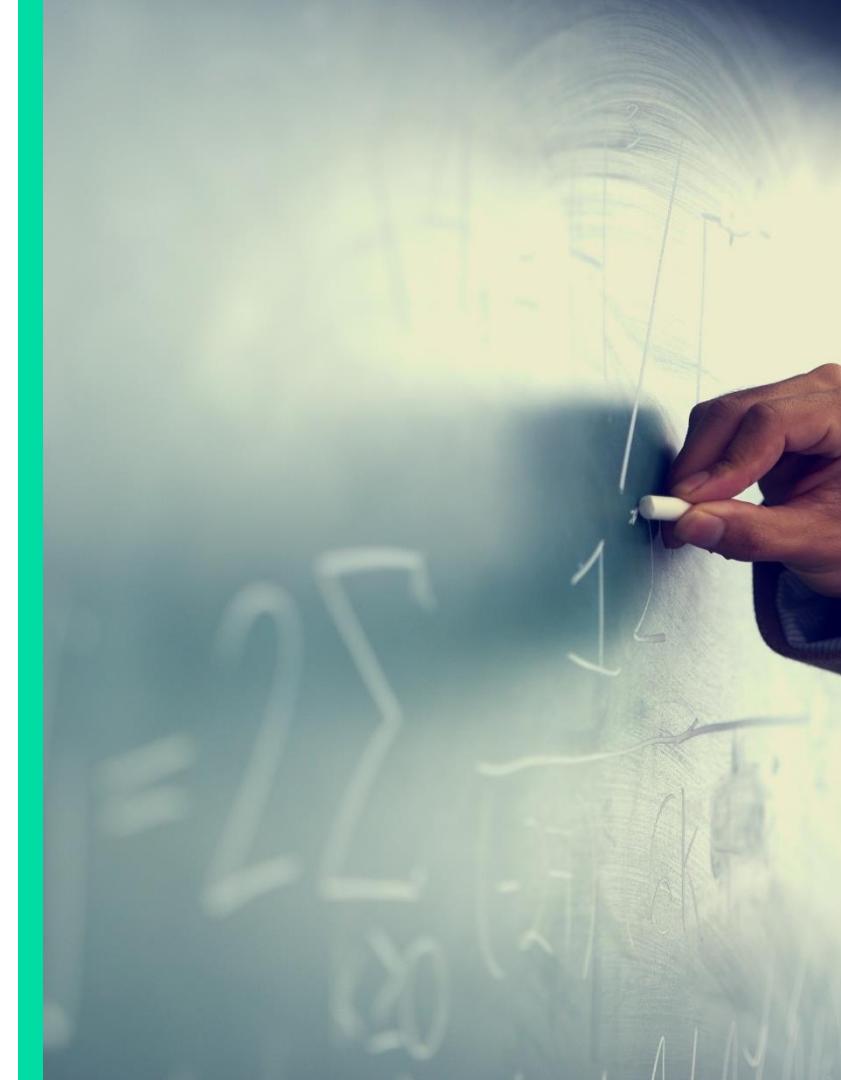
API article

- Configure Primo VE Search Result Ranking with Clarity: A Workable Method Using API
 - Can Li, Internet Reference Services Quarterly, 28(4), 2024
 - “the first page of a search result is prime real estate that libraries do not want to waste on resources unlikely to be the top choices for users”
 - “achieving a satisfactory ranking can be elusive”
 - Using a Primo Search API makes testing clearer
 - Saves time scrolling to check changes in results
 - Gives a ‘score’ for results in the data – monitoring changes to this score shows the impact configuration changes are having



Lessons learned

- It is very easy to get lost in this process
- Document EVERYTHING
 - When testing a change, document specifically what change you are testing (seems obvious doesn't it?)
- It isn't always the ranking
- Check the default settings every now and again
 - (in the Sandbox!)
- Let go of the idea that you will ever get it 'right'





Harvested Collections

- Three Harvested Collections: Bill Douglas Cinema Museum (Bespoke Catalogue), Special Collections (CALM) and Institutional Repository (DSpace/Figshare)
- Imported using discovery import profiles
- We match resource types where possible to make the items discoverable when filtering.
- Found some weird results for some searches such as “Climate Change” so investigated further.





API Setup

- We setup an API key for both our Sandbox and our Live site for testing.
- We used the Developer Network API console to build the searches.
- We then ran the searches in browser using the URL provided by the console.



API Fun

- Looking at the score for the results to see how they were affected by ranking configuration
- Testing a sample of searches to compare boosting scores
- Changing the boosting in increments and checking the impact of those changes
- Tested using Resource Type Boosting Date Boosting and Fields Boosting

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Date Boosting

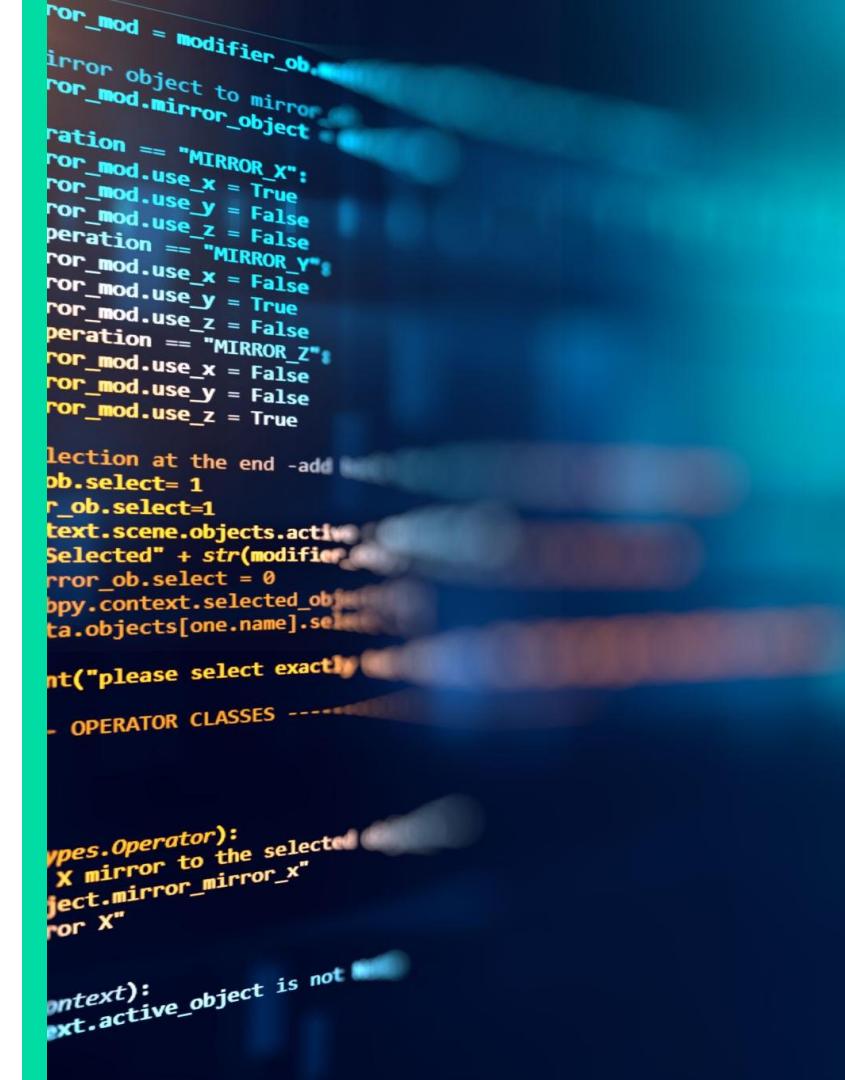
1 - 4 of 4

Field	Boosting Factor
1.. 2026-2028	2
2.. 2024-2025	1.9
3.. 2021-2023	1.8
4.. 2015-2020	1.7



Open Refine

- Imported the data from the API searches
- Created Project
- Looked at Score

A blurred background image of a computer screen showing a terminal window with Python code. The code is related to Open Refine, specifically dealing with modifier objects and their use in 3D space (X, Y, Z).

```
rror_mod = modifier_obj
irror object to mirror
rror_mod.mirror_object
ration == "MIRROR_X":
rror_mod.use_x = True
rror_mod.use_y = False
rror_mod.use_z = False
peration == "MIRROR_Y":
rror_mod.use_x = False
rror_mod.use_y = True
rror_mod.use_z = False
peration == "MIRROR_Z":
rror_mod.use_x = False
rror_mod.use_y = False
rror_mod.use_z = True

lection at the end -add
ob.select= 1
r_ob.select=1
text.scene.objects.active
Selected" + str(modifier
rror_obj.select = 0
rpy.context.selected_obj
ta.objects[one.name].sel
nt("please select exact
- OPERATOR CLASSES ----

ypes.Operator):
X mirror to the select
ject.mirror_mirror_x"
rror X"
rcontext):
ext.active_object is not
```



Conclusions

- Learning Opportunity to use OpenRefine and the Primo VE API
- Provide a better results for patrons





Next steps

- Andrew leaves for the Natural History Museum
- Elle takes charge!





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Thank you for listening.

Any questions?

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