Result Grouping with Match Keys

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0. Agenda

1. Starting Point
2. Solr Grouping
3. How to get it running - technical prerequisites
4. Live Installation demo
1. Starting point

- ~170 million records in index of German union catalogues (GVI)
- Six library networks
- Many duplicates
- Filtering is not always applicable (interlibrary-loan context)

→ Users are confused

→ We need deduplication
2. Solr grouping

- Light weight “deduplication”
- Based on a simple match key
  - format : isbn : year
  - format : firstauthor : maintitle : year : publisher
- Easy to compute while indexing
- No complex comparison required
- Performs better than expected
- Much clearer for end users
3. How to get it running - technical prerequisites

- Solr indexing
  - index field “match_str” for all Records

- Module Integration VuFind
  - Module integration the easy way
    - VuFind 8.0
    - package finc/vufind-results-grouping
    - templates integrate seamlessly
  - What you need to do...
    - install module via composer
    - adapt templates
    - configure solr requests
4. Live Installation Demo

- install - add to composer.json
- install - activate module
- Add templates in result-list.phtml
- Don't forget the config

All steps are covered in more detail in the module's Readme.md.
install - add to composer.json
install - activate module

$modules = [
    'Laminas\Cache', 'Laminas\Form', 'Laminas\Router', 'LmcRbacMvc', 'Laminas\I18n',
    'Laminas\Mvc\I18n', 'SlmLocale', 'VuFindTheme', 'VuFindSearch', 'VuFind',
    'VuFindAdmin', 'VuFindApi', 'VuFindResultsGrouping',
];

if (!extension_loaded('intl')) {
    // Disable SlmLocale module if intl extension is missing:
    $modules = array_diff($modules, ['SlmLocale']);
}

if (PHP_SAPI == 'cli' && APPLICATION_ENV !== 'testing') {
    $modules[] = 'VuFindConsole';
}

if (APPLICATION_ENV == 'development') {
    $modules[] = 'WhoopsErrorHandler';
}
Add templates in result-list.phtml

```php
<?php endforeach; ?>
<?php endif; ?>

<?=$this->driver->supportsCoinsOpenUrl() ? '<span class="Z3988" title="'. $this->escape($this->driver->supportsCoinsOpenUrl()) .'">';
<?=$this->render('RecordDriver/DefaultRecord/result-list-grouping-button') ?>
</div>

<?=$this->render('RecordDriver/DefaultRecord/result-list-grouped-subrecords') ?>
</div>

<?php if ($thumbnail && $thumbnailAlignment == 'right'): ?>
<?=$thumbnail ?
<?php endif ?>
</div>
```
Don't forget the config

[Index]

group = true
group.field = "match_str"
group.limit = 10

[Parent_Config]
relative_path=../../../../../config/vufind/config.ini
Ready to work
Get the module....

...as composer package:

https://packagist.org/packages/finc/vufind-results-grouping

...as source code:

https://git.sc.uni-leipzig.de/ubl/finc/packages/vufind-results-grouping
Thank you!

Credits:

OUTERMEDIA GmbH, Berlin, created first version

BSZ, Konstanz, took their code and put them into more standalone classes and added a nice Bootstrap frontend.

finc, Leipzig, further standardized the code as a module and added a composer mechanism for simple installation.

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