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I also open the door and order pizza for you ...



```
class EntityFieldQuery
```

```
-- drupal.org
```

So, it is just another way to get node  
and other entities ...



- db\_query, db\_select, db\_.....
- Views module
- and ...?
- EntityFieldQuery

- db\_query/db\_select
  - I don't know SQL ...
  - And I don't understand "leftJoin", "innerJoin", whatever join
- The great Views module
  - S                      Q

- Easier to explain when you see the code

```
<?php
$query = new EntityFieldQuery();

$query->entityCondition('entity_type', 'node')
  ->entityCondition('bundle', 'article')
  ->propertyCondition('status', 1)
  ->fieldCondition('field_news_types', 'value', 'spotlight', '=')
  ->fieldCondition('field_photo', 'fid', 'NULL', '!=')
  ->fieldCondition('field_faculty_tag', 'tid', $value)
  ->fieldCondition('field_news_publishdate', 'value', $year. '%', 'like')
  ->fieldOrderBy('field_photo', 'fid', 'DESC')
  ->range(0, 10)
  ->addMetaData('account', user_load(1)); // Run the query as user 1.

$result = $query->execute();

if (isset($result['node'])) {
  $news_items_nids = array_keys($result['node']);
  $news_items = entity_load('node', $news_items_nids);
}
?>
```

## Layer in front of db

- So we don't care what's the table name anymore
- no more multiple tables
- much more flexible (case study coming)

## Extendable

- As it is a class, we can define our own class based on EFQ i.e list all published nodes



```
class NodeEntityFieldQuery extends EntityFieldQuery {  
  // define some defaults for the class  
  public function __construct() {  
    // now we don't need to define these over and over anymore  
    $this  
      ->entityCondition('entity_type', 'node')  
      ->propertyCondition('status', 1)  
      ->propertyOrderBy('created', 'DESC');  
    // define a pager  
    $this->pager();  
  }  
  
  public function excludeNode($nid) {  
    // code snip; we'll come back to this.  
  }  
  
}
```

Example from <http://www.phase2technology.com/blog/entityfieldquery-let-drupal-do-the-heavy-lifting-pt-2/>

```
1  /**
2   * If we're on a node, and if the entity_type is node, exclude the local node from the query
3   */
4  public function excludeNode($nid) {
5      if (!$nid) {
6          $object = menu_get_object();
7          $nid = $object->nid;
8      }
9      if (!empty($nid) && $this->entityConditions['entity_type']['value'] === 'node') {
10         $this->propertyCondition('nid', $nid, '<');
11     }
12     return $this;
13 }
```

# Flippy module:

showing pagers for each content type, nice and easy, welcome to use.

You can guess, of course it was using db\_select.

Everyone was happy with it until one day ...



People wanted to sort the nodes by different fields.

And I don't which field and what field they have... And how many joins do I need to do with db\_select???



And something more serious...

I got contacted by the drupal security team...  
it was an honor ...

#### Problem/Motivation

The Flippy module generates previous/next links for nodes of selected content types. However these links do not take the node access rights of their targets into account: users may thus get a previous/next link that points to a node they do not have access to.

I like how they described it.

And you know the solution:

```
$query = new EntityFieldQuery();
$query->entityCondition('entity_type', 'node')
  ->entityCondition('bundle', $node->type)
  ->propertyCondition('status', 1)
  ->propertyCondition('nid', $node->nid, '!=')
  ->propertyCondition('language', array($language->language, LANGUAGE_NONE), 'IN')
  ->range(0, 1)
  ->addTag('node_access');
```

```
if ($field_value) {
  // set the conditions
  $first->fieldCondition($sort, 'value', $field_value, $before);
  $prev->fieldCondition($sort, 'value', $field_value, $before);
  $next->fieldCondition($sort, 'value', $field_value, $after);
  $last->fieldCondition($sort, 'value', $field_value, $after);
  // set the ordering
  $first->fieldOrderBy($sort, 'value', $before);
  $prev->fieldOrderBy($sort, 'value', $before);
  $next->fieldOrderBy($sort, 'value', $after);
  $last->fieldOrderBy($sort, 'value', $after);
}
```

## addTag and hook\_query\_TAG\_alter()

```
$random->addTag('random');  
$result = $random->execute();
```

```
/**  
 * Implement hook_query_TAG_alter()  
 */  
function flippy_query_random_alter($query){  
    $query->orderRandom();  
}
```

Doesn't support db\_or/db\_and. **Drupal 8**

Work around:

Coming soon... (???)

addTag, and '\$query->join', 'db\_or' in  
hook\_query\_TAG\_alter()





## andConditionGroup/orConditionGroup

For example, consider a map entity with an 'attributes' field containing 'building\_type' and

.keshed')

```
$query = Drupal::entityQuery('map');  
$group = $query->orConditionGroup()  
  ->condition('attributes.color', 'red')  
  ->condition('attributes.color', 'green');  
$entity_ids = $query  
  ->condition('attributes.building_type', 'bi  
  ->condition($group)  
  ->execute();
```

- <https://api.drupal.org/api/drupal/includes!entity.inc/class/EntityFieldQuery/7>
- <https://drupal.org/node/1343708>
- <http://www.phase2technology.com/blog/building-energy-gov-without-views/>
- <http://www.phase2technology.com/blog/or-queries-with-entityfieldquery/>

