

EXAMPLE 6-12. Batching method calls

```
$facebook->api_client->begin_batch();  
$friends = &$facebook->api_client->friends_get();  
$notifications = &$facebook->api_client->notifications_get();  
$facebook->api_client->end_batch();
```

In Facebook Platform's PHP5 client library, `end_batch` effectively initiates the request to the platform server, obtains all results, and updates the reference variables used for each result. Here we are *getting* data for the user in a batch from a single user session. Commonly, the batch query mechanism is used to group together many *setting* operations, such as mass Facebook profile updates or large user notification bursts.

The fact that these *set* operations are most effective here reveals the main problem with this batching style. Problematically, each call must be independent of the results of the other. Set operations for many different users usually enjoy this property, but a common case remains unaddressed: using the results of one call as inputs to the next. Example 6-13 features a common scenario that would *not* work with the batch system.

EXAMPLE 6-13. Improper use of batching

```
$fields = array('uid', 'name', 'books', 'pic', 'current_location');  
$facebook->api_client->begin_batch();  
$friends = &$facebook->api_client->friends_get();  
$user_info = &$facebook->api_client->users_getInfo($friends, $fields); // NO!  
$facebook->api_client->end_batch();
```

The content of `$friends` clearly does not exist at the time the client sends the `users_getInfo` request. The FQL model solves this and other problems elegantly.

FQL

FQL is a simple query language wrapper around Facebook's internal data. The output generally shares the same format as the Facebook Platform API, but the input graduates from a simple RPC library model to a query model reminiscent of SQL: *named tables and fields with a known relationship*. Like SQL, this technology adds the abilities to select on instances or ranges, select a subset of fields from a data row, and nest queries to push a greater amount of work to the data server, eliminating the need for multiple calls over the RPC stack.

As an example, if the desired output were the fields named `'uid'`, `'name'`, `'books'`, `'pic'`, and `'current_location'` for all users who are my friends, in our pure-API model, we would run a procedure like that in Example 6-14.