## Laravel 事件及 序列功能應用

by fripig



就是個看技術文章當興趣的肥宅 在癮科技當工程師 www.cool3c.com

github.com/fripig/article log www.plurk.com/fripig twitter.com/fripig

## 先講序列(QUEUE)

### 序列(QUEUE)

Queues allow you to defer the processing of a time consuming task, such as sending an email, until a later time. Deferring these time consuming tasks drastically speeds up web requests to your application.

### 序列(QUEUE) 的優點

# 延時處理

#### 寄出認證信的運作順序

進入程式 (10ms)

sendEmail (100ms)

顯示等待收信頁面 (10ms)

120ms

#### 使用序列的運作順序

進入程式 (10ms)

dispatch (10ms)

顯示等待收信頁面 (10ms)

sendEmail (100ms)

30ms

# 運算分離

#### 主機運算乘載量

NGINX	
PHP-FPM	
PHP-CLI	

沒有運算分離的系統設計

#### 主機運算乘載量

NGINX		
PHP-FPM		

PHP-CLI

可以運算分離的系統設計

dispatch((new Job)->onConnection('highCPU'));

dispatch((new Job)->onQueue('high'));

php artisan queue:work highCPU --queue=high

```
class PostCacheUpdate implements ShouldQueue
{
    public $queue = 'high';
}

php artisan queue:work --queue=high,default,low
```

```
php artisan queue:lis --queue=high,default,low
Processing: App\Listeners\PostCacheUpdate
PostCacheUpdate
Processed: App\Listeners\PostCacheUpdate
Processing: App\Listeners\PostCDNUpdate
PostCDNUpdate
Processed: App\Listeners\PostCDNUpdate
dispatch((new Job)->onQueue('high'))
```

#### 主機運算乘載量

NGINX
PHP-FPM
PHP-CLI low

PHP-CLI high (more CPU or MEMORY)

將序列工作分配到不同乘載量的電腦執行

# 降低耦合

# php artisan make:job PublicPost

```
namespace App\Jobs;
class PublicPost ProcessPodcast implements ShouldQueue
  use Dispatchable, InteractsWithQueue, Queueable, SerializesModels;
  protected $post;
  public function __construct(Post $post)
     $this->post = $post;
  public function handle()
```

### SerializesModels

dispatch(new PublicPost(\$post));

要注意的是序列裡面

其實是用Model的ID去撈當時狀態的資料

而不是新增工作到序列時的資料

```
"displayName": "App\\Jobs\\PublicPost",
   "job": "Illuminate\\Queue\\CallQueuedHandler@call",
   "maxTries": null,
   "timeout": null,
   "data": {
      "commandName": "App\\Jobs\\PublicPost",
      "command":
"O:19:\"App\\Jobs\\PublicPost\":5:{s:7:\"\u0000*\u0000post\";0:45:\"Illum
inate\\Contracts\\Database\\ModelIdentifier\":2:{s:5:\"class\";s:8:\"App\
\Post\";s:2:\"id\";i:1;}s:6:\"\u0000*\u0000job\";N;s:10:\"connection\";N;
s:5:\"queue\";N;s:5:\"delay\";N;}"
```

# 可靠性

php artisan queue:work --timeout=30 --tries=3

```
<?php
namespace App\Jobs;
class ProcessPodcast implements ShouldQueue
  public $tries = 5;
  public $timeout = 120;
  public function failed(Exception $exception)
    // Send user notification of failure, etc...
```

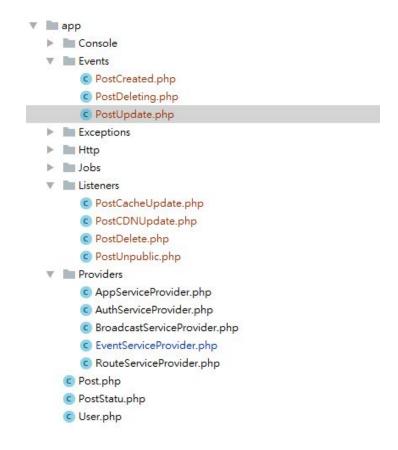
php artisan queue:failed-table php artisan queue:failed php artisan queue:retry 5 php artisan queue:retry all php artisan queue:forget 5 php artisan queue:flush

- database,
- Beanstalkd
- Amazon SQS
- Redis
- sync
- null

### 事件(EVENT)

Laravel's events provides a simple observer implementation, allowing you to subscribe and listen for various events that occur in your application.

```
namespace App\Providers;
class EventServiceProvider extends ServiceProvider
 protected $listen = [
   'App\Events\PostCreated' => [
      'App\Listeners\PostCDNUpdate',
   'App\Events\PostUpdate' => [
      'App\Listeners\PostCacheUpdate',
      'App\Listeners\PostCDNUpdate',
   'App\Events\PostDeleting' => [
      'App\Listeners\PostUnpublic',
      'App\Listeners\PostCacheUpdate',
      'App\Listeners\PostCDNUpdate',
      'App\Listeners\PostDelete',
```



### php artisan event:generate

```
<?php
namespace App\Listeners;
use App\Events\PostCreated;
class PostUnpublic
 public function __construct()
 public function handle(PostCreated $event)
```

```
<?php
namespace App\Listeners;
use App\Events\PostEvent;
class PostUnpublic
 public function __construct()
 public function handle(PostEvent $event)
```

```
event(new PostUpdate($post));
```

```
<?php
namespace App;
use Illuminate\Database\Eloquent\Model;
class Post extends Model
 protected $events = [
    'created' => \App\Events\PostCreated::class,
    'updated' => \App\Events\PostUpdate::class,
    'deleting' =>\App\Events\PostDeleting::class,
 ];
```

### ShouldQueue

# 络游

https://divinglaravel.com/queue-system

### DRY

Don't Repeat Yourself Principle

# Q&A