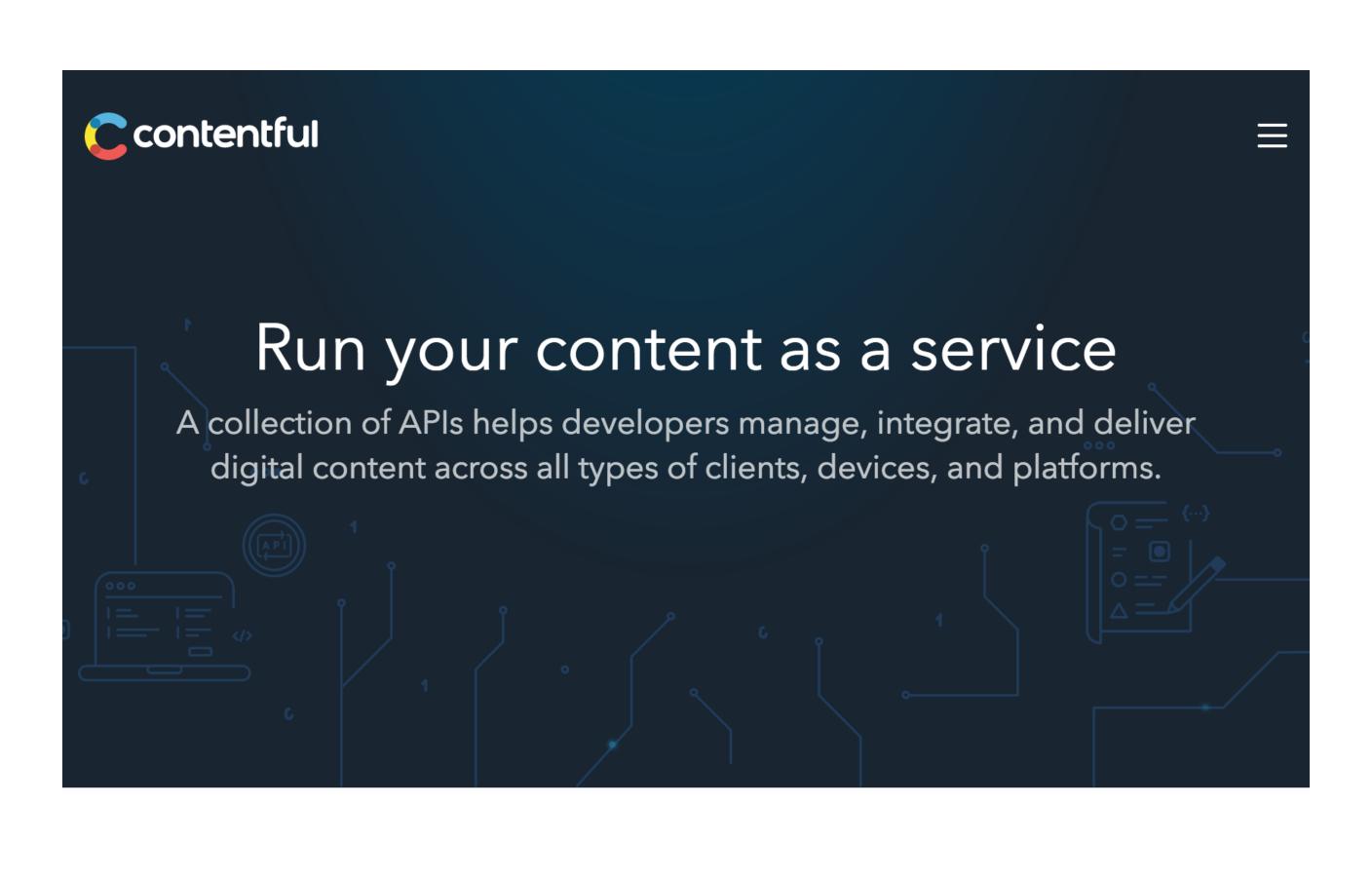




A content management developer platform with an API at its core.



# What do you do?





#### INTRODUCTION

Authentication

Resource IDs

Updating resources

Updating and version locking

API rate limits

Common Resource Attributes

Collection resources and pagination

Errors

#### **Entry**

#### **Create/update an entry**

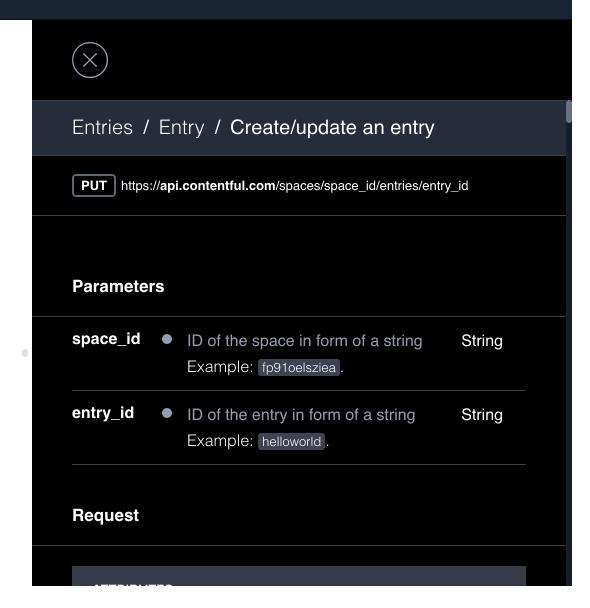
This endpoint can be used to create a new entry with an ID specified by the user, or to update a specific entry via its ID.

Note that when updating an existing entry, you always need to specify the last version you got of the entry you are updating with

X-Contentful-Version.

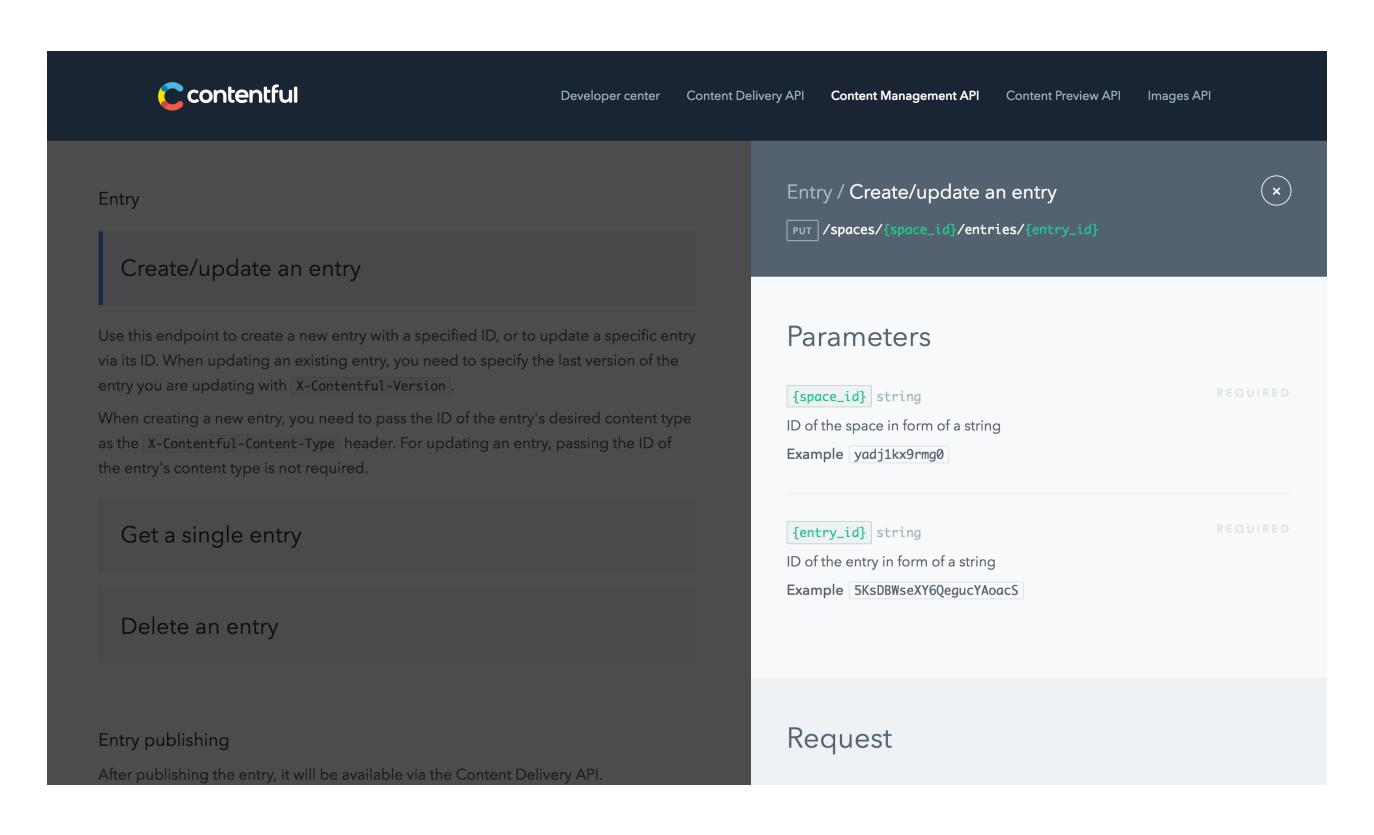
Before you can create an entry you need to create and activate a content type.

When creating a new entry you need to pass the ID of the entry's desired content type as the X-Contentful-Content-Type header.



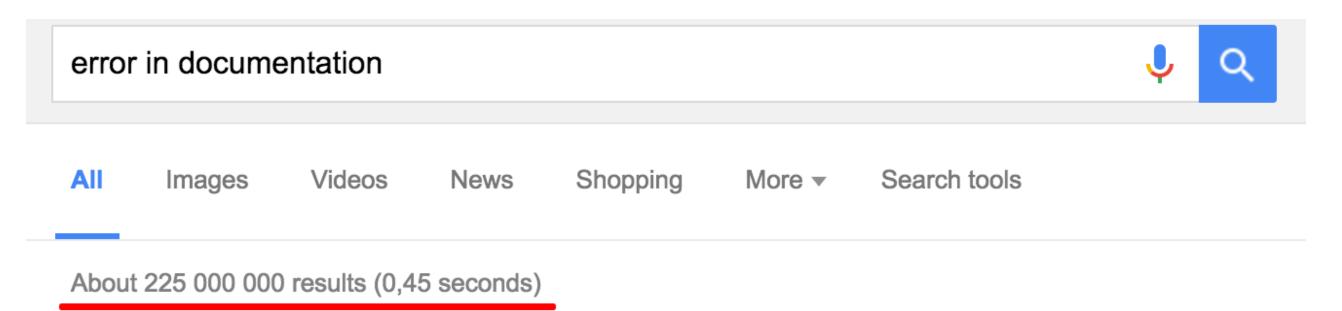
#### Powered by





A new look.

### Documentation will be wrong



#### Users hate that



#### Johnno Nolan @JohnnoNolan

16 Feb 15

incomplete or wrong documentation is the bane of my existence.



#### Lee Behrens

@leebehrens

.@JohnnoNolan I'd much rather have incomplete than wrong. Nothing breaks trust in another team's work like their incorrect API docs.

11:53 AM - 16 Feb 2015









I'm working with an incredibly well presented and documented API who's documentation is deeply wrong.

I'd rather have no docs.

7:54 PM - 15 Sep 2016 · SoMa, San Francisco, United States







### It's all in the spec



A powerful high-level API description language for web APIs.

```
## Questions Collection [/questions]
### Create a New Question [POST]
You may create your own question using this action. It takes a JSON
object containing a question and a collection of answers in the
form of choices.
+ Request (application/json)
            "question": "Favourite programming language?",
            "choices": [
                "Swift",
                "Python",
                "Objective-C",
                "Ruby"
+ Response 201 (application/json)
    + Headers
            Location: /questions/2
    + Body
                "question": "Favourite programming language?",
                "published at": "2015-08-05T08:40:51.620Z",
                "choices": [
```

## Let's get testing



### **DREDD**

No more outdated API documentation.

## **Testing read-only**

```
info: Beginning Dredd testing...
info: Found Hookfiles: ./test-hooks-cma.js
skip: POST /spaces
pass: GET /spaces duration: 1377ms
skip: PUT /spaces/fp91oelsziea
pass: GET /spaces/fp91oelsziea duration: 972ms
skip: DELETE /spaces/fp91oelsziea
pass: GET /spaces/fp91oelsziea/content_types duration: 1649ms
skip: POST /spaces/fp91oelsziea/content types
skip: PUT /spaces/fp91oelsziea/content_types/30RKIA0aJqQWWg86MWky0s
skip: PUT /spaces/fp91oelsziea/content_types/30RKIA0aJqQWWg86MWky0s
skip: PUT /spaces/fp91oelsziea/content_types/30RKIA0aJqQWWg86MWky0s
skip: PUT /spaces/fp91oelsziea/content_types/30RKIA0aJqQWWg86MWky0s
pass: GET /spaces/fp91oelsziea/content_types/30RKIAOaJqQWWg86MWkyOs duration: 812ms
skip: DELETE /spaces/fp91oelsziea/content_types/30RKIA0aJqQWWg86MWky0s
skip: PUT /spaces/fp91oelsziea/content_types/30RKIAOaJqQWWg86MWkyOs/published
skip: DELETE /spaces/fp91oelsziea/content_types/30RKIA0aJqQWWg86MWky0s/published
pass: GET /spaces/fp91oelsziea/public/content types duration: 805ms
pass: GET /spaces/fp91oelsziea/content_types/hfM9RCJIk0wIm06WkE0QY/editor_interface duration: 835ms
fail: GET /spaces/fp91oelsziea/content types/hfM9RCJIk0wIm06WkE0QY/editor interface duration: 1392ms
skip: PUT /spaces/fp91oelsziea/content_types/hfM9RCJIk0wIm06WkE0QY/editor_interface
pass: GET /spaces/fp91oelsziea/entries duration: 2122ms
skip: POST /spaces/fp91oelsziea/entries
skip: PUT /spaces/fp91oelsziea/entries/helloworld
skip: PUT /spaces/fp91oelsziea/entries/helloworld
pass: GET /spaces/fp91oelsziea/entries/helloworld duration: 818ms
skip: DELETE /spaces/fp91oelsziea/entries/helloworld
skip: PUT /spaces/fp91oelsziea/entries/helloworld/published
skip: DELETE /spaces/fp91oelsziea/entries/helloworld/published
skip: PUT /spaces/fp91oelsziea/entries/helloworld/archived
skip: DELETE /spaces/fp91oelsziea/entries/helloworld/archived
pass: GET /spaces/fp91oelsziea/assets duration: 831ms
skip: POST /spaces/fp91oelsziea/assets
pass: GET /spaces/fp91oelsziea/public/assets duration: 781ms
```



### Hooks

- beforeAll called at the beginning of the whole test run
- beforeEach called before each HTTP transaction
- before called before some specific HTTP transaction
- beforeEachValidation called before each HTTP transaction is validated
- beforeValidation called before some specific HTTP transaction is validated
- after called after some specific HTTP transaction regardless its result
- afterEach called after each HTTP transaction
- afterAll called after whole test run

### Hooks

```
node_modules/.bin/dredd cma.apib https://api.contentful.com \
--hookfiles=./test-hooks.js \
-m GET
```

## **Skipping Tests**

```
var hooks = require('hooks');
hooks.before(
   "Webhook calls > Webhook call details > Get the webhook call details",
   function (transaction) {
     transaction.skip = true;
   });
```

## Mutating data

```
var hooks = require('hooks');
hooks.before(
   "Entries > Delete an Entry",
   function (transaction) {
     client.createEntry(entry, "1234")
   });
```

## Rate limiting

```
var hooks = require('hooks');
const DELAY = 1000/6.0;
hooks.afterEach(function(transaction, done) {
   setTimeout(done, DELAY);
});
```

## Changing request data

```
var hooks = require('hooks');
hooks.beforeEach(function (transaction, done) {
  transaction.fullPath = transaction.fullPath.replace('fp91oelsziea', 'gbkxklvmolc1');
  done();
});
```

### Chai assertions

```
var hooks = require('hooks');
var assert = require('chai').assert;
hooks.afterEach(function(transaction, done) {
   if (!transaction.skip) {
      assert.match(transaction.real.headers['x-contentful-request-id'], /^content-api:[a-zA-Z }
    }
   done();
});
```

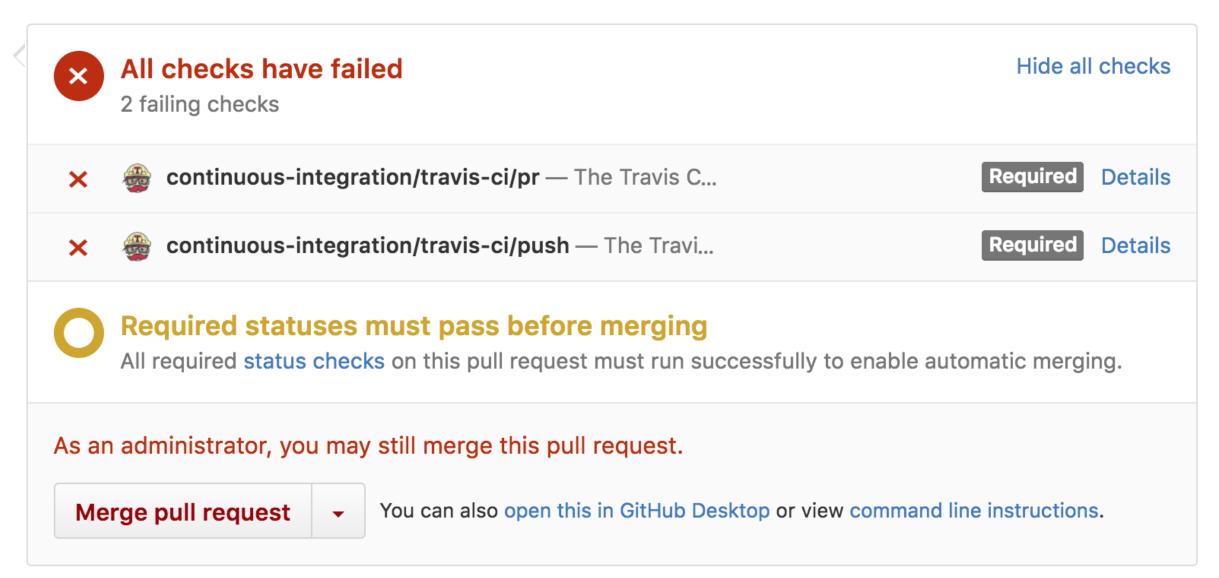
## Security

### Censor private data

```
var hooks = require('hooks');
const SECRET_HEADERS = ['Authorization'].map(header => header.toLowerCase());
hooks.afterEachValidation(function(transaction, done) {
   Object.keys(transaction.request.headers).forEach(function(key) {
    if (SECRET_HEADERS.indexOf(key.toLowerCase()) > -1) {
        transaction.request.headers[key] = "***HIDDEN SECRET DATA***";
    }
   });
   done();
});
```

### CI the beast







#### Content Management API

Documentation Inspector Editor Tests





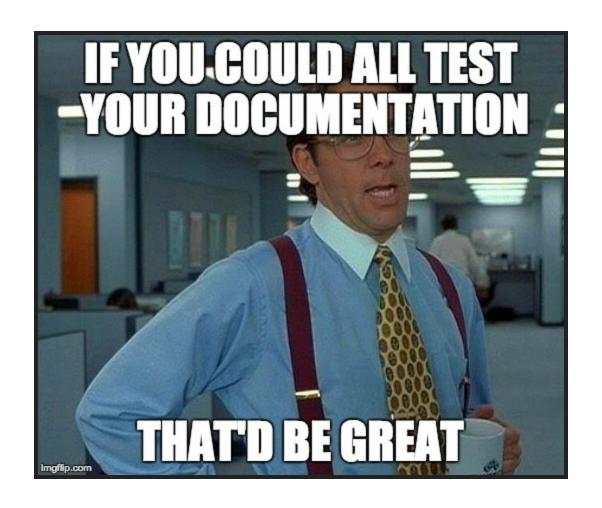




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(!)	@Travis CI contentful/slash-developers	(!	Update a space name	

### Conclusion

- Base your documentation on an API spec
- Test that spec
- Make it part of your CI
- Don't substitute your integration tests



Slides available on Slideshare: http://www.slideshare.net/rwessling/

Follow me on Twitter: @RouvenWessling



Thursday, March 2, 2017 7:00 pm

Pivotal Labs, Level 11, 155 Clarence Street, Sydney

https://www.meetup.com/Contentful-User-Meetup-Sydney/events/237520492/