

AFIGILITY

AGILE APIS WITH ZEND FRAMEWORK

/

WHY APIGILITY?

APIS R HARD!

- What response format should you use?
- How should you report errors?
- How much HTTP negotiation should you do?
- What about content negotiation?
- Hypermedia linking... WTF?
- How should you handle authentication? what about non-public APIs — or portions of your API?

**CREATE YOUR API
VISUALLY**

ZendCon

Current Version: 2

2 Create New Version

General Information

REST Services

RPC Services

Create New REST Service

REST ZendCon\V2\Rest\Session\SessionEntity [Remove](#)

REST ZendCon\V2\Rest\Speaker\SpeakerEntity [Remove](#)

View Edit Source code

General Settings

Route matches:
`/api/speaker[:speaker_id]`

Page Size
25

INSTALL APIGILITY!

ZF-APIGILITY-SKELETON

```
curl -s https://getcomposer.org/installer | php --  
php composer.phar create-project -sdev \  
    zfcampus/zf-apigility-skeleton path/to/install  
cd path/to/install  
php public/index.php development enable # put the skeleton in dev
```

FIRE IT UP!

With the PHP 5.4 built-in web server:

```
php -S 0:8080 -t public/ public/index.php
```

and browse to

OPINIONS

JSON

HYPERMEDIA APPLICATION LANGUAGE

application/hal+json

```
{
  "_links": {
    "self": { "href": "/session/1" }
  }
  "session_id": 1,
  "title": "Apigility: Agile APIs with ZF",
  "_embedded": {
    "speaker": {
      "_links": { "self": { "href": "/speaker/1" } }
      "speaker_id": 1,
      "name": "Matthew Weier O'Phinney"
    }
  }
}
```

API-PROBLEM

application/api-problem+json

```
{  
  "problemType": "/api/problems/forbidden",  
  "title": "Forbidden",  
  "detail": "Your API key is missing or invalid.",  
  "httpStatus": 403,  
  "authenticationUrl": "/api/oauth"  
}
```

VERSION ALL THE THINGS!

- URL-based versioning: `/v1/session`, `/v2/session`
- Mediatype versioning:
`Accept: application/vnd.zend-con.v2+json`
- Code is versioned by namespace.

AUTHENTICATION AND AUTHORIZATION

- HTTP Basic and Digest
- OAuth 2
- Public API by default
- Bail early if either authentication or authorization fails — with an API-Problem response!

MAKING APIS EASIER

HTTP METHOD NEGOTIATION

```
POST /session HTTP/1.1  
Content-Type: application/xml
```

```
<session><sessionname>Foo</sessionname></session>
```

```
405 Method Not Allowed  
Allow: GET
```

ACCEPT AND CONTENT-TYPE NEGOTIATION

```
GET /session HTTP/1.1
```

```
Accept: application/xml
```

```
406 Not acceptable
```

```
Content-Type: application/api-problem+json
```

```
{  
  "problemType": "/api/problems/content",  
  "title": "Not acceptable",  
  "detail": "This API can deliver application/vnd.zend-con.v1+js",  
  "httpStatus": 406,  
}
```

PAGINATION

- Invoked automatically by returning `Zend\Paginator\Paginator`.

```
{
    _links: {
        self: { href: "/api/session?page=1" },
        first: { href: "/api/session" },
        last: { href: "/api/session?page=14" },
        next: { href: "/api/session?page=2" }
    }
}
```

USE WHAT YOU WANT

NO FRAMEWORK TO LEARN

Write your own code, however you want ...

... but `is` is under the hood.

14 ZF2 MODULES!

- zf-configuration
- zf-api-problem
- zf-content-negotiation
- zf-versioning
- zf-hal
- zf-mvc-auth
- zf-oauth2
- zf-rest
- zf-rpc
- zf-apigility-welcome
- zf-apigility-admin
- zf-apigility
- zf-apigility-example
- zf-apigility-skeleton

EXTEND VIA...

- events
- services

RECOMMENDATIONS

API FIRST

GO MOBILE!

Apigility provides Bootstrap 3 + jQuery + AngularJS +
Hyperagent resources out of the box.

THE FUTURE

MOAR FEATUREZ!

MUST HAVES:

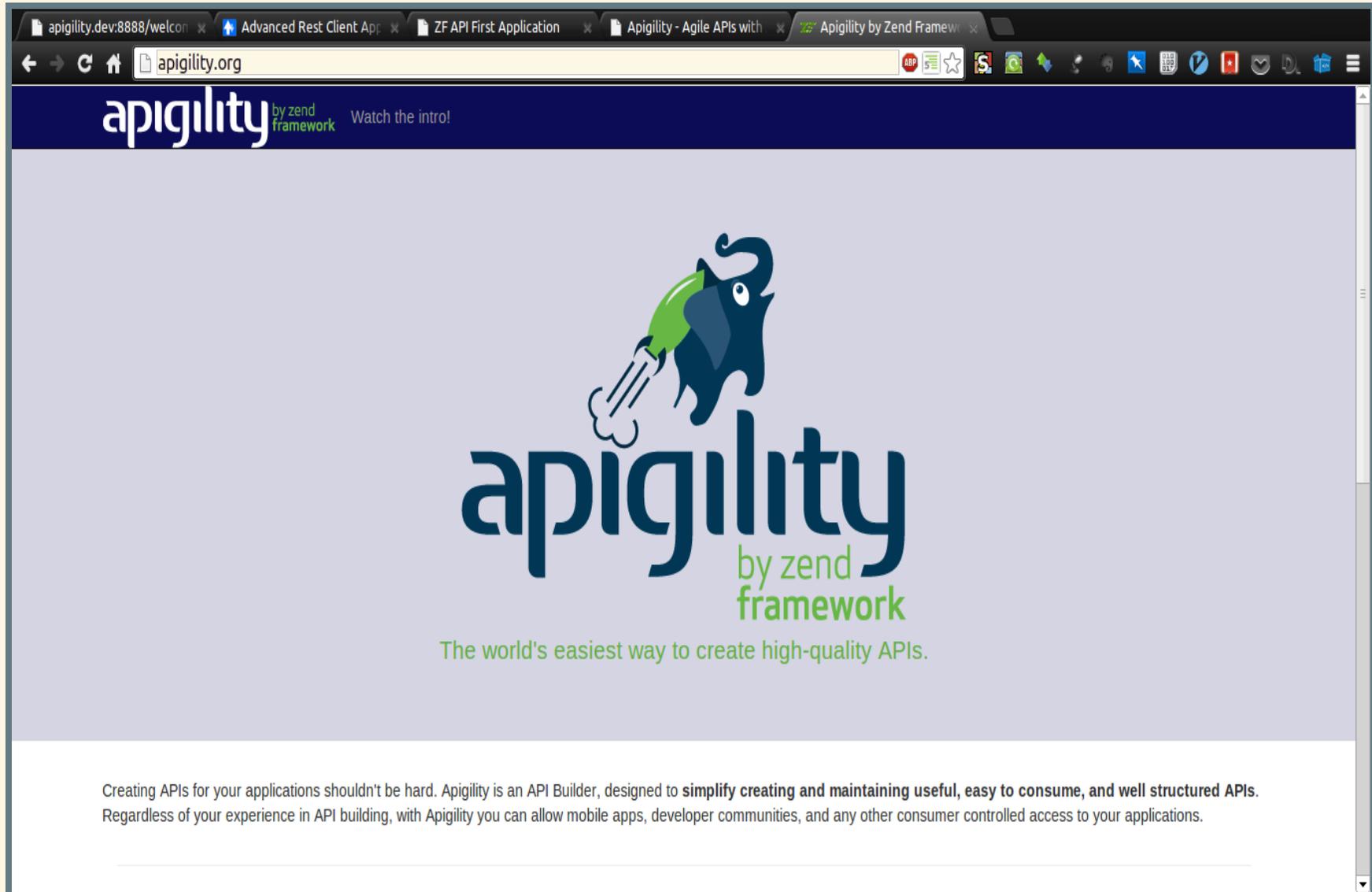
- Input validation builder
- API Documentation

HOPE TO HAVE:

- PHP HAL client
- Optimized ZF2 runtime

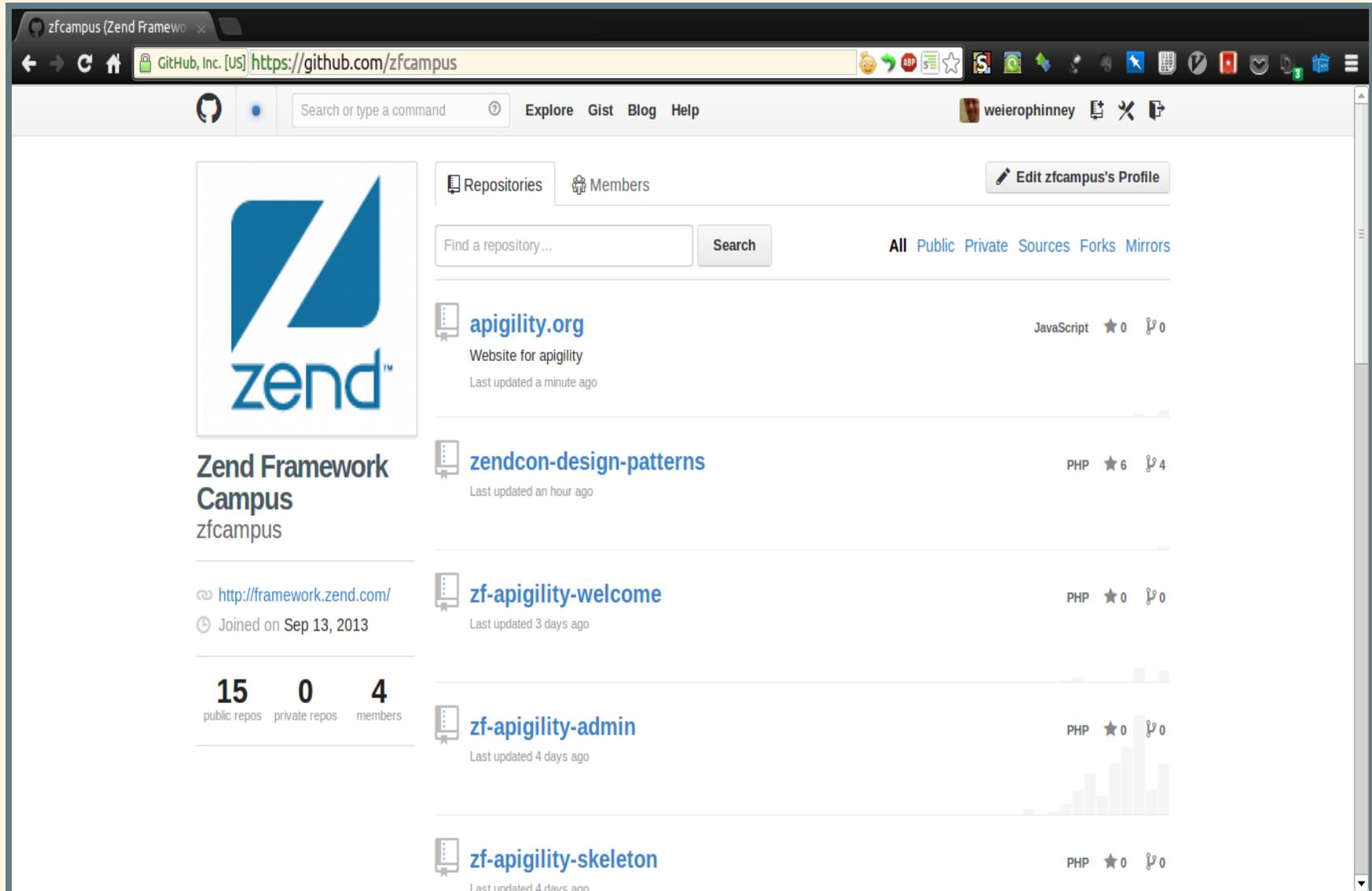
GET INVOLVED!

APIGILITY.ORG



The image shows a browser window displaying the Apigility website. The browser's address bar shows 'apigility.org'. The website has a dark blue header with the Apigility logo and the text 'by zend framework' and 'Watch the intro!'. The main content area features a large illustration of a blue elephant with a green rocket engine on its back, flying upwards. Below the illustration, the word 'apigility' is written in a large, dark blue font, with 'by zend framework' in a smaller, green font underneath. Below this, the tagline 'The world's easiest way to create high-quality APIs.' is displayed in green. At the bottom of the page, there is a white section with a horizontal line, containing the text: 'Creating APIs for your applications shouldn't be hard. Apigility is an API Builder, designed to **simplify creating and maintaining useful, easy to consume, and well structured APIs.** Regardless of your experience in API building, with Apigility you can allow mobile apps, developer communities, and any other consumer controlled access to your applications.'

ZFCAMPUS ON GITHUB



The screenshot shows the GitHub profile page for 'zfcampus'. The browser address bar displays 'https://github.com/zfcampus'. The profile header includes the Zend Framework logo, the name 'Zend Framework Campus', and the username 'zfcampus'. It also shows the website 'http://framework.zend.com/' and the date 'Joined on Sep 13, 2013'. The repository statistics are: 15 public repos, 0 private repos, and 4 members. The main content area lists several repositories:

- apigility.org**: Website for apigility, JavaScript, 0 stars, 0 forks, updated a minute ago.
- zendcon-design-patterns**: PHP, 6 stars, 4 forks, updated an hour ago.
- zf-apigility-welcome**: PHP, 0 stars, 0 forks, updated 3 days ago.
- zf-apigility-admin**: PHP, 0 stars, 0 forks, updated 4 days ago.
- zf-apigility-skeleton**: PHP, 0 stars, 0 forks, updated 4 days ago.

A commit activity graph is visible at the bottom right of the repository list.

LISTS AND GROUPS

- google group for support
- google group to discuss development

IRC

On Freenode:

- *#apigility* for support
- *#apigility-dev* for development discussions

THANK YOU!