

Django: REST in Peace

A RESTful approach to Django Web

Shreyank Gupta/sgupta@redhat.com

September 18, 2011

REST Architecture

REST - Representational State Transfer

- Using resource identifiers (URLs) to represent resources
- Transferring representations of the state of that resource between system components.

REST - Representational State Transfer

- Using resource identifiers (URLs) to represent resources
- Transferring representations of the state of that resource between system components.

REST - Representational State Transfer

- Using resource identifiers (URLs) to represent resources
- Transferring representations of the state of that resource between system components.

HTTP verbs

5.1.1 Method

The Method token indicates the method to be performed on the resource identified by the Request-URI. The method is case-sensitive.

```
Method      = "OPTIONS"           ; Section 9.2
             | "GET"              ; Section 9.3
             | "HEAD"             ; Section 9.4
             | "POST"             ; Section 9.5
             | "PUT"              ; Section 9.6
             | "DELETE"          ; Section 9.7
             | "TRACE"           ; Section 9.8
             | "CONNECT"        ; Section 9.9
             | extension-method
extension-method = token
```

The list of methods allowed by a resource can be specified in an Allow header field (section 14.7). The return code of the response always notifies the client whether a method is currently allowed on a resource, since the set of allowed methods can change dynamically. An origin server SHOULD return the status code 405 (Method Not Allowed) if the method is known by the origin server but not allowed for the requested resource, and 501 (Not Implemented) if the method is unrecognized or not implemented by the origin server. The methods GET and HEAD MUST be supported by all general-purpose servers. All other methods are OPTIONAL; however, if the above methods are implemented, they MUST be implemented with the same semantics as those specified in section 9.

??!

HTTP verbs

HTTP verbs

- GET
- POST
- PUT?
- DELETE?

HTTP verbs

- GET
- POST
- PUT?
- DELETE?

HTTP verbs

- GET
- POST
- PUT?
- DELETE?

Dirty URLs

Resource centric architecture

Conforming to the REST constraints is referred to as being "RESTful"

Advantages of RESTful

- Clean, self documenting URLs
- Allows you make web-services out of your views more easily

RESTful URLs

GET

- GET /examples/ - List examples
- GET /examples/new/ - New example
- GET /example/1/ - Show example #1
- GET /example/1/edit/ - Edit example #1

POST

- `POST /examples/` - Create new example

PUT

- PUT /example/1/ - Update example #1

DELETE

- DELETE /example/1/ - Destroy example #1

Does Django REST?

GET and POST

PUT and DELETE

```
class HttpMethodsMiddleware
```


Unobstusive JavaScript



!?!
!?!