
restae Documentation

Release 1.1

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1	Terms of content	3
1.1	Installation	3
1.2	Examples	3
1.3	Handlers	4
1.3.1	BaseHandler	5
1.3.2	APIHandler	5
1.3.3	APIModelListHandler	5
1.3.4	APIModelCreateHandler	5
1.3.5	APIModelRetrieveHandler	5
1.3.6	APIModelUpdateHandler	5
1.3.7	APIModelPatchHandler	5
1.3.8	APIModelDestroyHandler	5
1.3.9	APIModelMixinHandler	5
1.3.10	APIModelHandler	5
1.4	Router	5
1.4.1	Route	5
1.4.2	Url	5
1.4.3	Router	5
1.5	Middleware	6
1.5.1	Middleware	6
1.6	Pagination	6
1.6.1	BasePagination	6
1.6.2	CursorPagination	6
1.7	Response	6
1.7.1	CorsResponse	6
1.7.2	JsonResponse	6
1.8	Serializers	7
1.8.1	Field	7
1.8.2	BooleanField	7
1.8.3	IntegerField	7
1.8.4	StringField	7
1.8.5	FloatField	7
1.8.6	KeyField	7
1.8.7	DatetimeField	8
1.8.8	Serializer	8
1.8.9	ModelSerializer	8

1.9	Decorators	8
1.9.1	action	8
2	Indices and tables	9
	Python Module Index	11

restae is a light framework build on the top of webapp2 and is meant tu be used on Google App Engine.

1.1 Installation

Install with Pip.

```
$ pip install restae
```

If you want, you can always download the latest bleeding edge from GitHub:

```
$ git clone git://github.com/tolsac/restae.git
$ cd restae
$ ./setup.py install
```

Restae supports Python 2.6, 2.7.

1.2 Examples

Let's take a look at a quick example of using restae to build a simple model-backed API. We'll create a read-write API for accessing information on the users of our project. Any global settings for the API are kept in a single configuration dictionary named `RESTAE_SETTINGS`.

```
import webapp2

from google.appengine.ext import ndb

from restae.handlers import APIModelHandler
from restae.router import Router
from restae.serializers import ModelSerializer

class User(ndb.Model):
    email = ndb.StringProperty()
```

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```

first_name = ndb.StringProperty()
last_name = ndb.StringProperty()

class UserModelSerializer(ModelSerializer):
    class Meta:
        model = User
        fields = '__all__'

class Handler(APIModelHandler):
    queryset = User.query()
    serializer_class = UserModelSerializer

router = Router()
router.register('user', Handler)

app = webapp2.WSGIApplication(router.urls)

```

This will generate the following routes

GET	/user/	\ list action
GET	/user	\ list action (idem without trailing_
	↪slash)	
GET	/user/<user key urlsafe>/	\ retrieve action
GET	/user/<user key urlsafe>	\ retrieve action (idem without_
	↪trailing slash)	
POST	/user/	\ create action
POST	/user	\ create action (idem without_
	↪trailing slash)	
PUT	/user/<user key urlsafe>/	\ update action
PUT	/user/<user key urlsafe>	\ update action (idem without_
	↪trailing slash)	
PATCH	/user/<user key urlsafe>/	\ partial_update action
PATCH	/user/<user key urlsafe>	\ partial_update action (idem without_
	↪trailing slash)	
DELETE	/user/<user key urlsafe>/	\ destroy action
DELETE	/user/<user key urlsafe>	\ destroy action (idem without_
	↪trailing slash)	

1.3 Handlers

Basically you do not need this API but if you are curious feel free to check it out.

1.3.1 BaseHandler

1.3.2 APIHandler

1.3.3 APIModelListHandler

1.3.4 APIModelCreateHandler

1.3.5 APIModelRetrieveHandler

1.3.6 APIModelUpdateHandler

1.3.7 APIModelPatchHandler

1.3.8 APIModelDestroyHandler

1.3.9 APIModelMixinHandler

1.3.10 APIModelHandler

1.4 Router

Router class definitions

1.4.1 Route

class `restae.router.Route` (***kwargs*)

A route mapping representation contains the URL, METHOD and route type

1.4.2 Url

class `restae.router.Url` (***kwargs*)

An URL representation contains the Route and the destination Handler

1.4.3 Router

class `restae.router.Router`

The default router

get_lookup_regex (*handler*)

Given a handler, return the portion of URL regex that is used to match against a single instance.

get_method_map (*handler, method_map*)

Given an handler, and a mapping of http methods to actions, return a new mapping which only includes any mappings that are actually implemented by the viewset.

get_routes (*handler*)

Augment *self.routes* with any dynamically generated routes. Returns a list of the Route class.

get_urls ()

Use the registered handlers to generate a list of URL patterns.

1.5 Middleware

Middleware class definitions

1.5.1 Middleware

```
class restae.middleware.Middleware
    Base middleware class

    process_request (request)
        Will be called before handler

    process_response (request, response)
        Will be called after handler
```

1.6 Pagination

Pagination class definitions

1.6.1 BasePagination

```
class restae.pagination.BasePagination
```

1.6.2 CursorPagination

```
class restae.pagination.CursorPagination
    A simple cursor based style that supports cursors urlsafe as query parameters. For example: http://api.example.org/accounts/?page\_token=<URLSAFE STRING>

    paginate_queryset (queryset, request, view=None)
        Paginate a queryset if required, either returning a page object, or None if pagination is not configured for this view.
```

1.7 Response

Response class definitions

1.7.1 CorsResponse

```
class restae.response.CorsResponse (*args, **kwargs)
```

1.7.2 JsonResponse

```
class restae.response.JsonResponse (*args, **kwargs)
```

1.8 Serializers

Serializers class definitions

1.8.1 Field

```
class restae.serializers.Field(*args, **kwargs)
```

```
    serialize()
```

—> si y’a un data={} on veut verifier que les fields sont bien types, pas de manquant etc.. —> si pas de data, on a un objet et on veut le mettre en dict

1.8.2 BooleanField

```
class restae.serializers.BooleanField(*args, **kwargs)
```

```
    base_type
```

alias of `__builtin__.bool`

1.8.3 IntegerField

```
class restae.serializers.IntegerField(*args, **kwargs)
```

```
    base_type
```

alias of `__builtin__.int`

1.8.4 StringField

```
class restae.serializers.StringField(*args, **kwargs)
```

```
    base_type
```

alias of `__builtin__.str`

1.8.5 FloatField

```
class restae.serializers.FloatField(*args, **kwargs)
```

```
    base_type
```

alias of `__builtin__.float`

1.8.6 KeyField

```
class restae.serializers.KeyField(*args, **kwargs)
```

1.8.7 DatetimeField

```
class restae.serializers.DatetimeField(*args, **kwargs)
```

```
    base_type
        alias of datetime.datetime
```

1.8.8 Serializer

```
class restae.serializers.Serializer(*args, **kwargs)
```

1.8.9 ModelSerializer

```
class restae.serializers.ModelSerializer(*args, **kwargs)
```

1.9 Decorators

Decorators class definitions

1.9.1 action

Decorators

```
restae.decorators.action(methods=None, detail=None, url_path=None, param_name=None)
```

Mark a Handler method as a routable action. Set the *detail* boolean to determine if this action should apply to instance/detail requests or collection/list requests.

CHAPTER 2

Indices and tables

- `genindex`
- `modindex`
- `search`

r

`restae.decorators`, [8](#)

A

action() (in module restae.decorators), 8

B

base_type (restae.serializers.BooleanField attribute), 7
base_type (restae.serializers.DateTimeField attribute), 8
base_type (restae.serializers.FloatField attribute), 7
base_type (restae.serializers.IntegerField attribute), 7
base_type (restae.serializers.StringField attribute), 7
BasePagination (class in restae.pagination), 6
BooleanField (class in restae.serializers), 7

C

CorsResponse (class in restae.response), 6
CursorPagination (class in restae.pagination), 6

D

DateTimeField (class in restae.serializers), 8

F

Field (class in restae.serializers), 7
FloatField (class in restae.serializers), 7

G

get_lookup_regex() (restae.router.Router method), 5
get_method_map() (restae.router.Router method), 5
get_routes() (restae.router.Router method), 5
get_urls() (restae.router.Router method), 5

I

IntegerField (class in restae.serializers), 7

J

JsonResponse (class in restae.response), 6

K

KeyField (class in restae.serializers), 7

M

Middleware (class in restae.middleware), 6
ModelSerializer (class in restae.serializers), 8

P

paginate_queryset() (restae.pagination.CursorPagination method), 6
process_request() (restae.middleware.Middleware method), 6
process_response() (restae.middleware.Middleware method), 6

R

restae.decorators (module), 8
Route (class in restae.router), 5
Router (class in restae.router), 5

S

serialize() (restae.serializers.Field method), 7
Serializer (class in restae.serializers), 8
StringField (class in restae.serializers), 7

U

Url (class in restae.router), 5