righteous Documentation

Release 0.5.0

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Release v0.5.0

righteous is a Python client implementation of the RightScale API for EC2 instance management.

righteous provides an API and CLI to create, start/stop, delete, remove and introspect RightScale EC2 Servers. This library implements RightScale API 1.0 and has only been tested with EC2 instances using ServerTemplates and managed in a Deployment.

CHAPTER

ONE

CONFIGURATION

Create a file called *~/.righteous* with the following customised contents:

```
[auth]
username: username@domain.com
password: password
account_id: 123

[server-defaults]
default_deployment_id: 45623
ec2_security_groups_href: https://my.rightscale.com/api/acct/123/ec2_security_groups/789
ec2_availability_zone: us-east-1a
ec2_ssh_key_href: https://my.rightscale.com/api/acct/123/ec2_ssh_keys/998
cloud_id: 1
server_template_href: https://my.rightscale.com/api/acct/123/ec2_server_templates/74732
instance_type: m1.small
m1.small: https://my.rightscale.com/api/acct/123/ec2_server_templates/74732
m1.large: https://my.rightscale.com/api/acct/123/ec2_server_templates/117240
```

CHAPTER

TWO

CLI

```
righteous
Interact with the RightScale Server API.

Usage:
  righteous [options] list
  righteous [options] create <environment> <instance-type> (<server-template-key>=<server-template-va
  righteous [options] stop <environment>...
  righteous [options] status <environment>...
  righteous [options] delete <environment>...
  righteous --version

Options:
  -c FILE --config=FILE        Specify the configuration file location, default is ~/.righteous
  -v --verbose                 Show debug output
  -h --help                    Show this screen.
```

CHAPTER

THREE

SERVER API

`righteous.initialise`(*username*, *password*, *account_id*, ***kwargs*)

Initialises righteous configuration

Parameters

- **username** – String of a Rightscale username
- **password** – String of the user's password
- **account_id** – String of the Rightscale account_id

Params kwargs Key word arguments for additional configuration

`righteous.login`(*username=None*, *password=None*, *account_id=None*)

Logins to RightScale and stores the auth cookie for future requests

Parameters

- **username** – (optional) String representing the username to login with
- **password** – (optional) String representing the password to login with
- **account_id** – (optional) String of the Rightscale account_id

Returns Boolean indicating successful login

`righteous.list_servers`(*deployment_id=None*)

Lists servers in a deployment

Parameters **deployment_id** – (optional) String representing Deployment to list servers from

Returns dict of server deployment information: http://reference.rightscale.com/api1.0/ApiR1V0/Docs/ApiDeployments.htm

`righteous.find_server`(*nickname*)

Finds a server based on nickname

Parameters **nickname** – (optional) String representing the nickname of the server to lookup

Returns dict of server information with the following keys:

```
[u'deployment_href', u'tags', u'created_at', u'server_type',
 u'updated_at', u'server_template_href', u'current_instance_href',
 u'state', u'href', u'nickname']
```

`righteous.server_info`(*server_href*, *nickname=None*)

Detailed server information

Parameters

- **server_href** – URL representing the server to query

- **nickname** – (optional) String representing the nickname of the server

Returns dict of server information with the following keys:

```
[u'deployment_href', u'parameters', u'tags', u'created_at',
 u'server_type', u'updated_at', u'server_template_href',
 u'current_instance_href', u'state', u'href', u'nickname']
```

`righteous.server_settings`(*server_href*, *nickname=None*)

Current server settings

Parameters

- **server_href** – URL representing the server to query settings from
- **nickname** – (optional) String representing the nickname of the server

Returns dict of server settings with the following keys:

```
[u'ec2-security-groups-href', u'private-ip-address',
 u'ec2-ssh-key-href', u'private-dns-name', u'locked', u'dns-name',
 u'pricing', u'cloud_id', u'ec2-availability-zone', u'aws-platform',
 u'ip-address', u'aws-product-codes', u'aws-id', u'ec2-instance-type',
 u'launched-by']
```

`righteous.create_and_start_server`(*nickname*, *instance_type*, *create_server_parameters=None*, *server_template_parameters=None*)

Creates and starts a server. Returns a tuple of operation status, href of the created, started server

Parameters

- **nickname** – String representing the nickname of the server
- **instance_type** – String of the EC2 instance type
- **create_server_parameters** – (optional) Dictionary of server creation parameters
- **server_template_parameters** – (optional) Dictionary of ServerTemplate parameters

Returns tuple of operation success and server href of the new instance

`righteous.stop_server`(*server_href*, *nickname=None*)

Stops a server.

Parameters

- **server_href** – URL representing the server to stop
- **nickname** – (optional) String representing the nickname of the server

Returns *requests.Response*

`righteous.delete_server`(*server_href*, *nickname=None*)

Deletes a server from RightScale

Parameters

- **server_href** – URL representing the server to delete
- **nickname** – (optional) String representing the nickname of the server

Returns Boolean of operation success/failure

CHAPTER

FOUR

SERVERTEMPLATE API

`righteous.`**`list_server_templates`**`()`

Lists ServerTemplates

Returns list of dicts of server information with the following keys:

```
[u'description', u'is_head_version', u'created_at', u'updated_at',
 u'href', u'version', u'nickname']
```

`righteous.`**`server_template_info`**`(`*template_href*`)`

Details ServerTemplate information

Parameters **template_href** – String representing the server template href

Returns dict of server template information, with the following keys:

```
[u'description', u'is_head_version', u'created_at', u'updated_at',
 u'href', u'version', u'nickname']
```

`righteous.`**`create_server_template`**`(`*nickname*, *description*, *multi_cloud_image_href*`)`

Create a new ServerTemplate

Returns a tuple of operation status, href of the created, started server

Parameters

- **nickname** – String of the template nickname
- **description** – String describing the ServerTemplate
- **multi_cloud_image_href** – String of the template image href

Returns tuple of operation success and new server template href

`righteous.`**`delete_server_template`**`(`*server_template_href*`)`

Deletes a ServerTemplate

Parameters **server_template_href** – String of the ServerTemplate to delete

Returns Boolean of operation success/failure

CHAPTER

FIVE

DEPLOYMENT API

`righteous.list_deployments()`

Lists server deployment in an account

Returns dict of server deployment information with the following keys:

```
[u'href', u'description', u'tags', u'default_ec2_availability_zone',
 u'default_vpc_subnet_href', u'created_at', u'nickname', u'updated_at',
 u'servers']
```

`righteous.find_deployment(nickname)`

Finds a server deployment based on nickname

Parameters **nickname** – (optional) String representing the nickname of the deployment to lookup

Returns dict of deployment information with the following keys:

```
[u'href', u'description', u'tags', u'default_ec2_availability_zone',
 u'default_vpc_subnet_href', u'created_at', u'nickname', u'updated_at',
 u'servers']
```

`righteous.deployment_info(deployment_href, nickname=None)`

Detailed server deployment information

Parameters

- **deployment_href** – URL representing the deployment to retrieve information about
- **nickname** – (optional) String representing the nickname of the deployment

Returns dict of deployment information with the following keys

```
[u'href', u'description', u'tags', u'default_ec2_availability_zone',
 u'default_vpc_subnet_href', u'created_at', u'nickname', u'updated_at',
 u'servers']
```

`righteous.create_deployment(nickname, description)`

Creates a server deployment

Parameters

- **nickname** – Nickname of the new deployment
- **description** – Description of the new deployment

`righteous.delete_deployment(deployment_href, nickname=None)`

Deletes a server deployment

Parameters

- **deployment_href** – URL representing the deployment to delete
- **nickname** – (optional) String representing the nickname of the deployment

Returns Boolean of operation success/failure

`righteous.duplicate_deployment`(*deployment_href*, *nickname=None*)

Duplicates a server deployment

Parameters

- **deployment_href** – URL representing the deployment to duplicate
- **nickname** – (optional) String repesenting the nickname of the deployment to duplicate

Returns tuple of operation success Boolean and deployment href of the duplicated instance

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