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# **python-tuskarclient Documentation**

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<b>1</b>	<b>Python API</b>	<b>3</b>
1.1	Reference . . . . .	3
<b>2</b>	<b>Command-line Tool</b>	<b>7</b>
2.1	CLI Usage with version 2 API . . . . .	7
<b>3</b>	<b>Man Pages</b>	<b>11</b>
3.1	Tuskar . . . . .	11
<b>4</b>	<b>Contributing</b>	<b>13</b>



This is a client for OpenStack Tuskar API. There's a Python API (the `tuskarclient` module), and a command-line script (installed as **tuskar**).



You can use the API like so:

```
>>> from tuskarclient.client import Client
>>> tuskar = Client('1', endpoint=tuskar_url)
```

## 1.1 Reference

### 1.1.1 Client Reference

#### Client

`tuskarclient.client.Client` (*version*, \**args*, \*\**kwargs*)

`tuskarclient.client.get_client` (*api\_version*, \*\**kwargs*)

Get an authenticated client, based on the **credentials** in the keyword args.

#### Parameters

- **api\_version** – the API version to use ('1' or '2')
- **kwargs** – keyword args containing credentials, either: \* `os_auth_token`: pre-existing token to re-use \* `tuskar_url`: tuskar API endpoint or: \* `os_username`: name of user \* `os_password`: user's password \* `os_auth_url`: endpoint to authenticate against \* `insecure`: allow insecure SSL (no cert verification) \* `os_tenant_{name|id}`: name or ID of tenant

#### Exc

**exception** `tuskarclient.exc.BaseException` (*message=None*)

Bases: `exceptions.Exception`

An error occurred.

**exception** `tuskarclient.exc.CommunicationError` (*message=None*)

Bases: `tuskarclient.exc.BaseException`

Unable to communicate with server.

**exception** `tuskarclient.exc.HTTPMultipleChoices` (*message=None, details=None, response=None, request\_id=None, url=None, method=None, http\_status=None*)

Bases: `tuskarclient.openstack.common.apiclient.exceptions.HttpError`

**code** = 300

**exception** `tuskarclient.exc.InvalidEndpoint` (*message=None*)

Bases: `tuskarclient.exc.BaseException`

The provided endpoint is invalid.

`tuskarclient.exc.from_response` (*response*)

Return an instance of an `exc.HttpError` based on `httplib` response.

`tuskarclient.exc.obj`

alias of `HTTPMultipleChoices`

## 1.1.2 Version 1 API Reference

### Client

**class** `tuskarclient.v1.client.Client` (*\*args, \*\*kwargs*)

Bases: `object`

Client for the Tuskar v1 HTTP API.

#### Parameters

- **endpoint** (*string*) – Endpoint URL for the tuskar service.
- **token** (*string*) – Keystone authentication token.
- **timeout** (*integer*) – Timeout for client http requests. (optional)

### Overcloud\_roles

**class** `tuskarclient.v1.overcloud_roles.OvercloudRole` (*manager, info, loaded=False*)

Bases: `tuskarclient.openstack.common.apiclient.base.Resource`

Represents an instance of an Overcloud Role in the Tuskar API.

#### Parameters

- **manager** – Manager object
- **info** – dictionary representing the resource attributes
- **loaded** – prevent lazy-loading if set to True

**class** `tuskarclient.v1.overcloud_roles.OvercloudRoleManager` (*api*)

Bases: `tuskarclient.common.base.Manager`

`OvercloudRoleManager` interacts with the Tuskar API and provides CRUD operations for the overcloud role type.

**create** (*\*\*fields*)

Create a new Overcloud Role.

**Parameters** **fields** (*string*) – A set of key/value pairs representing a `OvercloudRole`

**Returns** A `Overcloud Role` instance or `None` if its not found.



**Return type** tuskarclient.v1.overcloud\_roles.OvercloudRole

**delete** (*overcloud\_role\_id*)

Delete a Overcloud Role.

**Parameters** **id** (*string*) – id of the Overcloud Role.

**Returns** None

**Return type** None

**get** (*overcloud\_role\_id*)

Get the Overcloud Role by its ID.

**Parameters** **id** (*string*) – id of the Overcloud Role.

**Returns** A Overcloud Role instance or None if its not found.

**Return type** tuskarclient.v1.overcloud\_roles.OvercloudRole or None

**list** ()

Get a list of the existing Overcloud Roles

**Returns** A list of Overcloud Roles or an empty list if none exist.

**Return type** [tuskarclient.v1.overcloud\_roles.OvercloudRole] or []

**resource\_class**

The class used to represent an overcloud role instance

alias of OvercloudRole

**update** (*overcloud\_role\_id*, *\*\*fields*)

Update an existing Overcloud Role.

**Parameters**

- **overcloud\_role\_id** (*string*) – id of the Overcloud Role.
- **fields** (*string*) – A set of key/value pairs representing a OvercloudRole

**Returns** An OvercloudRole instance or None if its not found.

**Return type** tuskarclient.v1.overcloud\_roles.OvercloudRole or None

## Overclouds

**class** tuskarclient.v1.overclouds.**Overcloud** (*manager*, *info*, *loaded=False*)

Bases: tuskarclient.openstack.common.apiclient.base.Resource

Represents an instance of a Overcloud in the Tuskar API.

**Parameters**

- **manager** – Manager object
- **info** – dictionary representing resource attributes
- **loaded** – prevent lazy-loading if set to True

**class** tuskarclient.v1.overclouds.**OvercloudManager** (*api*)

Bases: tuskarclient.common.base.Manager

OvercloudManager interacts with the Tuskar API and provides CRUD operations for the Overcloud type.

**create** (*\*\*fields*)

Create a new Overcloud.

**Parameters** **fields** (*string*) – A set of key/value pairs representing a Overcloud.

**Returns** A Overcloud instance or None if its not found.

**Return type** tuskarclient.v1.overclouds.Overcloud

**delete** (*overcloud\_id*)

Delete an Overcloud.

**Parameters** **overcloud\_id** (*string*) – id of the Overcloud.

**Returns** None

**Return type** None

**get** (*overcloud\_id*)

Get the Overcloud by its ID.

**Parameters** **overcloud\_id** (*string*) – id of the Overcloud.

**Returns** A Overcloud instance or None if its not found.

**Return type** tuskarclient.v1.overclouds.Overcloud or None

**list** ()

Get a list of the existing Overclouds

**Returns** A list of overclouds or an empty list if none are found.

**Return type** [tuskarclient.v1.overclouds.Overcloud] or []

**resource\_class**

The class used to represent an Overcloud instance

alias of Overcloud

**template\_parameters** ()

Get the template parameters from the Tuskar API.

**Returns** Dictionary containing template parameters

**Return type** dict

**update** (*overcloud\_id*, *\*\*fields*)

Update an existing Overcloud.

**Parameters**

- **overcloud\_id** (*string*) – id of the Overcloud.
- **fields** (*string*) – A set of key/value pairs representing the Overcloud.

**Returns** A Overcloud instance or None if its not found.

**Return type** tuskarclient.v1.overclouds.Overcloud or None

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## Command-line Tool

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### 2.1 CLI Usage with version 2 API

#### 2.1.1 Plans commands with version 2 API

##### List All Plans

*tuskar plan-list [-h]*

Usage example:

```
tuskar plan-list
```

This will show table of all Plans.

Example:

uuid	name	description	roles
53268a27-afc8-4b21-839f-90227dd7a001	dev-cloud-3	Development testing cloud	controller, comput
a117fa66-1445-44c7-8ad1-7663d2607aca	test1	None	
c367b394-7179-4c44-85ed-bf84baaf9fee	dev-cloud-2	Development testing cloud	

Field 'roles' contains list of names of Roles assigned to the Plan.

##### Retrieve a Single Plan

*tuskar plan-show [-h] <PLAN>*

Usage example:

```
tuskar plan-show c367b394-7179-4c44-85ed-bf84baaf9fee
```

This command will show table with properties of the Plan and their values.

Example:

Property	Value
created_at	2014-09-26T13:36:28.804272
description	Development testing cloud
name	dev-cloud-2
parameters	...
roles	description=OpenStack hypervisor node. Can be wrapped in a ResourceGroup for scaling name=compute uuid=b7b1583c-5c80-481f-a25b-708ed4a39734 version=1
	description=OpenStack control plane node. Can be wrapped in a ResourceGroup for scaling name=controller uuid=df9edfac-e009-4df1-ac7f-8931d37f4be6 version=1
updated_at	None
uuid	c367b394-7179-4c44-85ed-bf84baaf9fee

Note: Parameters are displayed similarly as Roles, ie. set of properties with values. Each Parameter/Role separated by empty line from previous.

## Create a New Plan

*tuskar plan-create [-h] [-d <DESCRIPTION>] name*

Usage example:

```
tuskar plan-create -d 'Description of new plan' new-plan-name
```

Output will be the same as for showing detail of a Plan. Note that parameters and roles are not set for newly created Plan.

Property	Value
created_at	2014-09-27T00:10:33.958239
description	Description of new plan
name	new-plan-name
parameters	
roles	
updated_at	None
uuid	839fcbbf-7aa0-4801-8ccb-d020da654dd6

## Delete an Existing Plan

*tuskar plan-delete [-h] <PLAN>*

Usage example:

```
tuskar plan-delete 839fcbbf-7aa0-4801-8ccb-d020da654dd6
```

When successfully deleted, you will get message like this:

```
Deleted Plan "new-plan-name".
```

## Adding a Role to a Plan

*tuskar plan-add-role [-h] -r <ROLE UUID> plan\_uuid*

Usage example:

```
tuskar plan-add-role -r df9edfac-e009-4df1-ac7f-8931d37f4be6 c367b394-7179-4c44-85ed-bf84baaf9fee
```

This will assign Role specified by UUID to Plan. Output of this command is the same as for plan-show.

## Removing a Role from a Plan

*tuskar plan-remove-role [-h] -r <ROLE UUID> plan\_uuid*

Usage example:

```
tuskar plan-remove-role -r df9edfac-e009-4df1-ac7f-8931d37f4be6 c367b394-7179-4c44-85ed-bf84baaf9fee
```

This will unassign Role from a Plan. This will not delete the Role from Tuskar. Output of this command is the same as for plan-show.

## Changing a Plan's Configuration Values

*tuskar plan-patch [-h] [-A <KEY1=VALUE1>] plan\_uuid*

Usage example:

```
tuskar plan-patch -A compute-1::CeilometerPassword=secret-password -A compute-1::CeilometerMeteringSecret=secret-secret
```

This command accepts multiple name=value pairs for parameters to be updated. Above example will look for parameter named 'compute-1::CeilometerPassword' and update its value to 'secret-password' and will do similar update for 'compute-1::CeilometerMeteringSecret' parameter.

This command can be used only for updating existing parameters. It is not possible to create new parameter this way.

## Retrieve a Plan's Template Files

*tuskar plan-templates [-h] -O <OUTPUT DIR> plan\_uuid*

Usage example:

```
tuskar plan-templates -O templates 53268a27-afc8-4b21-839f-90227dd7a001
```

This command will retrieve contents of templates of the Plan and save them as files into specified directory. -O/-output-dir is mandatory and application will create it if it does not exist. Output is list of files with templates.

Following templates has been written:

```
templates/plan.yaml
templates/environment.yaml
templates/provider-controller-1.yaml
templates/provider-compute-1.yaml
```

## 2.1.2 Roles commands with version 2 API

### Retrieving Possible Roles

*tuskar role-list [-h]*

Usage example:

```
tuskar role-list
```

This will show table of all Roles:

Example:

uuid	name	version	description
b7b1583c-5c80-481f-a25b-708ed4a39734	compute	1	OpenStack hypervisor node. Can be wr
df9edfac-e009-4df1-ac7f-8931d37f4be6	controller	1	OpenStack control plane node. Can be

## 3.1 Tuskar

### 3.1.1 SYNOPSIS

*tuskar* [options] <command> [command-options]

*tuskar help*

*tuskar help* <command>

### 3.1.2 DESCRIPTION

*tuskar* is a command line client for controlling OpenStack Tuskar.

### 3.1.3 OPTIONS

To get a list of available commands and options run:

```
tuskar help
```

To get usage and options of a command run:

```
tuskar help <command>
```

### 3.1.4 EXAMPLES

Get information about overcloud-create command:

```
tuskar help overcloud-create
```

List available overcloud-list:

```
tuskar overcloud-list
```

List available Overcloud Roles:

```
tuskar overcloud-roles-list
```

### 3.1.5 BUGS

Tuskar client is hosted in Launchpad so you can view current bugs at <https://bugs.launchpad.net/python-tuskarclient/>.



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### Contributing

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Code is hosted on [OpenStack git](#). Submit bugs to the Tuskar project on [Launchpad](#). Submit code to the [openstack/python-tuskarclient](#) project using [Gerrit](#).