
cdrouter.py Documentation

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1	Introduction	1
1.1	Download & Install	1
1.2	Usage	1
2	Reference	3
2.1	cdrouter	3
2.2	cdrouter.CDRouter	3
2.3	cdrouter.filters	5
2.4	cdrouter.configs	7
2.5	cdrouter.devices	12
2.6	cdrouter.attachments	15
2.7	cdrouter.jobs	17
2.8	cdrouter.packages	19
2.9	cdrouter.results	22
2.10	cdrouter.testresults	31
2.11	cdrouter.annotations	34
2.12	cdrouter.captures	35
2.13	cdrouter.highlights	39
2.14	cdrouter.imports	41
2.15	cdrouter.exports	43
2.16	cdrouter.history	43
2.17	cdrouter.system	44
2.18	cdrouter.tags	48
2.19	cdrouter.testsuites	49
2.20	cdrouter.users	54
	Python Module Index	59

Introduction

cdrouter is a simple Python wrapper for the CDRouter Web API. <https://support.qacafe.com/cdrouter-web-api/>

For more information on CDRouter, please visit <http://www.qacafe.com/>.

1.1 Download & Install

cdrouter is available on PyPI.

```
$ pip install -U cdrouter
```

1.2 Usage

First create a *CDRouter* object, passing it the URL of your CDRouter system. The `token` parameter should be set to a valid API token on your CDRouter system. If `token` is not specified, it will default to the value of the `CDROUTER_API_TOKEN` environment variable. The `token` argument can be omitted for CDRouter systems where Automatic Login is enabled.

```
import time
from cdrouter import CDRouter
from cdrouter.cdrouter import CDRouterError
from cdrouter.filters import Field as field
from cdrouter.jobs import Job

c = CDRouter('http://localhost:8015', token='deadbeef')

for p in c.packages.list(filter=field('tags').contains('noretry'), limit='none').data:
    print('Launching package ' + p.name)

    try:
        j = c.jobs.launch(Job(package_id=p.id, extra_cli_args='-testvar myvar=example'))
    except CDRouterError as ce:
        print('Error launching job: {}'.format(ce))

    while j.result_id == None:
        time.sleep(1)
        j = c.jobs.get(j.id)

    print('    Result-ID: ' + j.result_id)
```

```
print('done.')
```

More examples of using cdrouter can be found [here](#). Please see the *Reference* page for more information on available fields and methods for each class.

2.1 cdrouter

Python client for the CDRouter Web API.

2.2 cdrouter.CDRouter

class `cdrouter.CDRouter` (*base*, *token=None*, *insecure=False*)
Service for accessing the CDRouter Web API.

Parameters

- **base** – Base HTTP or HTTPS URL for CDRouter system as a string, optionally including a port. For example *http://localhost*, *http://cdrouter.lan:8015* or *https://127.0.0.1*.
- **token** – (optional) CDRouter API token as a string. Not required if Automatic Login is enabled. If omitted, value will be taken from `CDROUTER_API_TOKEN` environment variable.
- **insecure** – (optional) If bool *True* and *base* is an HTTPS URL, skip certificate verification and allow insecure connections to the CDRouter system.

annotations = None

annotations.AnnotationsService object

attachments = None

attachments.AttachmentsService object

authenticate (*username=None*, *password=None*, *_getuser=None*, *_getpass=None*)

Set API token by authenticating via username/password.

Parameters

- **username** – Username as string.
- **password** – Password as string.
- **_getuser** – If *username* is *None*, function to call as `_getuser(base)` which returns a username as a string. If `_getuser` is *None*, `authenticate` will print a prompt to stdout and read the username from stdin.
- **_getpass** – If *password* is *None*, a function to call as `_getpass(base, username)` which returns user's password as a string. If `_getpass` is *None*,

`authenticate` will print a password prompt to stdout and read the password from stdin.

Returns `users.User` object

Return type `users.User`

captures = None

`captures.CapturesService` object

configs = None

`configs.ConfigsService` object

devices = None

`devices.DevicesService` object

exports = None

`exports.ExportsService` object

highlights = None

`highlights.HighlightsService` object

history = None

`history.HistoryService` object

imports = None

`imports.ImportsService` object

jobs = None

`jobs.JobsService` object

packages = None

`packages.PackagesService` object

results = None

`results.ResultsService` object

system = None

`system.SystemService` object

tags = None

`tags.TagsService` object

tests = None

`testresults.TestResultsService` object

testsuites = None

`testsuites.TestsuitesService` object

users = None

`users.UsersService` object

class `cdrouter.cdrouter.CDRouterError` (*args, **kwargs)

Class for representing CDRouter Web API errors.

class `cdrouter.cdrouter.Links` (**kwargs)

Class representing paging information returned by `list` calls to the CDRouter Web API.

Parameters

- **first** – (optional) First page number as an int.
- **last** – (optional) Last page number as an int.
- **current** – (optional) Current page number as an int.

- **total** – (optional) Total element count across all pages as an int.
- **limit** – (optional) Resources per page limit as an int.
- **next** – (optional) Next page number as an int.
- **prev** – (optional) Previous page number as an int.

class `cdrouter.cdrouter.Share` (***kwargs*)
Model for CDRouter Shares.

Parameters

- **user_id** – (optional) User ID as string.
- **read** – (optional) Bool *True* if reading is allowed.
- **write** – (optional) Bool *True* if writing is allowed.
- **execute** – (optional) Bool *True* if executing is allowed.

2.3 cdrouter.filters

class `cdrouter.filters.Field` (*field*)

Class for constructing CDRouter Web API filters. Field objects can be passed to `filter` parameters to make constructing filters easier.

The value parameter passed to Field methods is converted to a string using the builtin `str` function. Bool values are additionally lowercased such that bool `True` becomes string `'true'` and `False` becomes string `'false'`. The Field methods `contains`, `contained_by` and `overlaps` accept a variable number of values which are converted into a list in accordance with the API's syntax. For example, the int values `1, 2, 3` is converted to the string `'{1,2,3}'` and the string values `'one', 'two', 'three'` is converted to the string `'{one,two,three}'`.

Usage:

```
from cdrouter.filters import Field as field
# each pair of filters below are equivalent
c.packages.list(filter=[
    field('id').eq(123),
    'id=123',
    #
    field('use_as_testlist').ne(True),
    'use_as_testlist!=true',
    #
    field('name').not_().match('^(foo|bar)$', ignorecase=True),
    'name!~*^(foo|bar)$',
    #
    field('tags').contains('foo', 'bar', 'baz'),
    'tags@>{foo,bar,baz}',
])
```

See [this page](#) for more details on CDRouter Web API filters.

contained_by (**args*)

Construct an array contained by (<@) filter.

Parameters *args* – Filter values

Returns `filters.Field` object

Return type `filters.Field`

contains (*args)

Construct an array contains (@>) filter.

Parameters **args** – Filter values

Returns *filters.Field* object

Return type *filters.Field*

eq (value)

Construct an equal to (=) filter.

Parameters **value** – Filter value

Returns *filters.Field* object

Return type *filters.Field*

ge (value)

Construct a greater than or equal to (>=) filter.

Parameters **value** – Filter value

Returns *filters.Field* object

Return type *filters.Field*

gt (value)

Construct a greater than (>) filter.

Parameters **value** – Filter value

Returns *filters.Field* object

Return type *filters.Field*

le (value)

Construct a less than or equal to (<=) filter.

Parameters **value** – Filter value

Returns *filters.Field* object

Return type *filters.Field*

lt (value)

Construct a less than (<) filter.

Parameters **value** – Filter value

Returns *filters.Field* object

Return type *filters.Field*

match (value, ignorecase=False)

Construct a regexp match (~) filter. Combine with `not_` method to construct a negative regexp match (!~) filter.

Parameters

- **value** – Filter value
- **ignorecase** – If bool *True*, make match case insensitive (~*, !~*)

Returns *filters.Field* object

Return type *filters.Field*

ne (*value*)

Construct a not equal to (!=) filter.

Parameters **value** – Filter value

Returns *filters.Field* object

Return type *filters.Field*

not_ ()

Negate the filter. Not supported by `contains`, `contained_by` or `overlaps` methods.

Returns *filters.Field* object

Return type *filters.Field*

overlaps (**args*)

Construct an array overlaps (&&) filter.

Parameters **args** – Filter values

Returns *filters.Field* object

Return type *filters.Field*

2.4 cdrouter.configs

class `cdrouter.configs.ConfigsService` (*service*)

Service for accessing CDRouter Configs.

bulk_copy (*ids*)

Bulk copy a set of configs.

Parameters **ids** – String list of config IDs.

Returns *configs.Config* list

bulk_delete (*ids=None, filter=None, type=None, all=False*)

Bulk delete a set of configs.

Parameters

- **ids** – (optional) String list of config IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_edit (*_fields, ids=None, filter=None, type=None, all=False, testvars=None*)

Bulk edit a set of configs.

Parameters

- **_fields** – *configs.Config* object
- **ids** – (optional) String list of config IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.
- **testvars** – (optional) *configs.ConfigTestvars* list

bulk_edit_testvars (*id, testvars*)

Bulk edit a config's testvars.

Parameters

- **id** – Config ID as string.
- **testvars** – *configs.Testvar* list

Returns *configs.Testvar* list

bulk_export (*ids*)

Bulk export a set of configs.

Parameters **ids** – String list of config IDs.

Return type tuple (*io.BytesIO*, 'filename')

check_config (*contents*)

Process config contents with cdrouter-cli -check-config.

Parameters **contents** – Config contents as string.

Returns *configs.CheckConfig* object

Return type *configs.CheckConfig*

create (*resource*)

Create a new config.

Parameters **resource** – *configs.Config* object

Returns *configs.Config* object

Return type *configs.Config*

delete (*id*)

Delete a config.

Parameters **id** – Config ID as string.

delete_testvar (*id, name, group=None*)

Delete a testvar in a config. Deleting a testvar unsets any explicitly configured value for it in the config.

Parameters

- **id** – Config ID as string.
- **name** – Testvar name as string.
- **group** – (optional) Testvar group as string.

edit (*resource*)

Edit a config.

Parameters **resource** – *configs.Config* object

Returns *configs.Config* object

Return type *configs.Config*

edit_shares (*id, user_ids*)

Edit shares for a config.

Parameters

- **id** – Config ID as string.
- **user_ids** – User IDs as int list.

Returns *cdrouter.Share* list

edit_testvar (*id*, *resource*)

Edit a testvar in a config.

Parameters

- **id** – Config ID as string.
- **resource** – *configs.Testvar* object.

Returns *configs.Testvar* object

Return type *configs.Testvar*

export (*id*)

Export a config.

Parameters **id** – Config ID as string.

Return type tuple (*io.BytesIO*, 'filename')

get (*id*)

Get a config.

Parameters **id** – Config ID as string.

Returns *configs.Config* object

Return type *configs.Config*

get_by_name (*name*)

Get a config by name.

Parameters **name** – Config name as string.

Returns *configs.Config* object

Return type *configs.Config*

get_networks (*contents*)

Process config contents with `cdrouter-cli -print-networks-json`.

Parameters **contents** – Config contents as string.

Returns *configs.Networks* object

Return type *configs.Networks*

get_new ()

Get output of `cdrouter-cli -new-config`.

Return type string

get_plaintext (*id*)

Get a config as plaintext.

Parameters **id** – Config ID as string.

Return type string

get_shares (*id*)

Get shares for a config.

Parameters **id** – Config ID as string.

Returns *cdrouter.Share* list

get_testvar (*id*, *name*, *group=None*)

Get a testvar from a config.

Parameters

- **id** – Config ID as string.
- **name** – Testvar name as string.
- **group** – (optional) Testvar group as string.

Returns *configs.Testvar* object

Return type *configs.Testvar*

iter_list (**args*, ***kwargs*)

Get a list of configs. Whereas `list` fetches a single page of configs according to its `limit` and `page` arguments, `iter_list` returns all configs by internally making successive calls to `list`.

Parameters

- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns *configs.Config* list

list (*filter=None*, *type=None*, *sort=None*, *limit=None*, *page=None*)

Get a list of configs.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns *configs.Page* object

list_testvars (*id*)

Get a list of a config's testvars.

Parameters **id** – Config ID as string.

Returns *configs.Testvar* list

upgrade_config (*contents*)

Process config contents with `cdrouter-cli -upgrade-config`.

Parameters **contents** – Config contents as string.

Returns *configs.UpgradeConfig* object

Return type *configs.UpgradeConfig*

class `cdrouter.configs.Config` (***kwargs*)

Model for CDRouter Configs.

Parameters

- **id** – (optional) Config ID as string.
- **name** – (optional) Config name as string.

- **description** – (optional) Config description as string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **contents** – (optional) Config contents as string.
- **user_id** – (optional) User ID as string.
- **result_id** – (optional) Result ID as string (if a config snapshot).
- **tags** – (optional) Tags as string list.
- **note** – (optional) Note as string.

class `cdrouter.configs.Page`
Named tuple for a page of list response data.

Parameters

- **data** – `configs.Config` list
- **links** – `cdrouter.Links` object

class `cdrouter.configs.ConfigError` (**kwargs)
Model for CDRouter Check Config Error.

Parameters

- **lines** – (optional) Line numbers as string list.
- **error** – (optional) Error message as string.

class `cdrouter.configs.CheckConfig` (**kwargs)
Model for CDRouter Check Config.

Parameters **errors** – (optional) `configs.ConfigError` list

class `cdrouter.configs.UpgradeConfig` (**kwargs)
Model for CDRouter Config Upgrades.

Parameters

- **success** – (optional) Bool *True* if successful.
- **output** – (optional) Output as string.

class `cdrouter.configs.Networks` (**kwargs)
Model for CDRouter Config Networks.

Parameters

- **name** – (optional) Network name as string.
- **type** – (optional) Network type as string.
- **side** – (optional) Network side as string.
- **title** – (optional) Network title as string.
- **children** – (optional) `configs.Networks` list.

class `cdrouter.configs.Testvar` (**kwargs)
Model for CDRouter Config Testvars.

Parameters

- **group** – (optional) Testvar group name as string.

- **name** – (optional) Testvar name as string.
- **value** – (optional) Testvar value as string.
- **default** – (optional) Testvar default value as string.
- **isdefault** – (optional) Bool *True* if testvar is set to default value.
- **line** – (optional) Config file line number as int.

2.5 cdrouter.devices

class `cdrouter.devices.DevicesService` (*service*)

Service for accessing CDRouter Devices.

bulk_copy (*ids*)

Bulk copy a set of devices.

Parameters **ids** – String list of device IDs.

Returns `devices.Device` list

bulk_delete (*ids=None, filter=None, type=None, all=False*)

Bulk delete a set of devices.

Parameters

- **ids** – (optional) String list of device IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_edit (*_fields, ids=None, filter=None, type=None, all=False*)

Bulk edit a set of devices.

Parameters

- **_fields** – `devices.Device` object
- **ids** – (optional) String list of device IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_export (*ids*)

Bulk export a set of devices.

Parameters **ids** – String list of device IDs.

Return type tuple (*io.BytesIO, 'filename'*)

create (*resource*)

Create a new device.

Parameters **resource** – `devices.Device` object

Returns `devices.Device` object

Return type `devices.Device`

delete (*id*)

Delete a device.

Parameters **id** – Device ID as string.

edit (*resource*)

Edit a device.

Parameters **resource** – *devices.Device* object

Returns *devices.Device* object

Return type *devices.Device*

edit_shares (*id, user_ids*)

Edit shares for a device.

Parameters

- **id** – Device ID as string.
- **user_ids** – User IDs as int list.

Returns *cdrouter.Share* list

export (*id*)

Export a device.

Parameters **id** – Device ID as string.

Return type tuple (*io.BytesIO*, 'filename')

get (*id*)

Get a device.

Parameters **id** – Device ID as string.

Returns *devices.Device* object

Return type *devices.Device*

get_by_name (*name*)

Get a device by name.

Parameters **name** – Device name as string.

Returns *devices.Device* object

Return type *devices.Device*

get_shares (*id*)

Get shares for a device.

Parameters **id** – Device ID as string.

Returns *cdrouter.Share* list

iter_list (**args, **kwargs*)

Get a list of devices. Whereas *list* fetches a single page of devices according to its *limit* and *page* arguments, *iter_list* returns all devices by internally making successive calls to *list*.

Parameters

- **args** – Arguments that *list* takes.
- **kwargs** – Optional arguments that *list* takes.

Returns *devices.Device* list

list (*filter=None, type=None, sort=None, limit=None, page=None*)
Get a list of devices.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns *devices.Page* object

class `cdrouter.devices.Device` (***kwargs*)
Model for CDRouter Devices.

Parameters

- **id** – (optional) Device ID as a string.
- **name** – (optional) Name as string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **user_id** – (optional) User ID as string.
- **result_id** – (optional) Result ID as string (if a device snapshot).
- **attachments_dir** – (optional) Filepath for attachments as string.
- **picture_id** – (optional) Attachment ID for used for device picture as string.
- **tags** – (optional) Tags as string list.
- **default_ip** – Default IP as a string (optional)
- **default_login** – Default login as a string (optional)
- **default_password** – Default password as a string (optional)
- **location** – Location as a string (optional)
- **device_category** – Device category as a string (optional)
- **manufacturer** – Manufacturer as a string (optional)
- **manufacturer_oui** – Manufacturer OUI as a string (optional)
- **model_name** – Model name as a string (optional)
- **model_number** – Model number as a string (optional)
- **description** – Description as a string (optional)
- **product_class** – Product class as a string (optional)
- **serial_number** – Serial number as a string (optional)
- **hardware_version** – Hardware version as a string (optional)
- **software_version** – Software version as a string (optional)
- **provisioning_code** – Provisioning code as a string (optional)
- **note** – Note as a string (optional)

class `cdrouter.devices.Page`
 Named tuple for a page of list response data.

Parameters

- **data** – `devices.Device` list
- **links** – `cdrouter.Links` object

2.6 cdrouter.attachments

class `cdrouter.attachments.AttachmentsService` (*service*)

create (*id*, *fd*, *filename*='attachment-name')

Add an attachment to a device.

Parameters

- **id** – Device ID as string.
- **fd** – File-like object to upload.
- **filename** – (optional) Name to use for new attachment as a string.

Returns `attachments.Attachment` object

Return type `attachments.Attachment`

delete (*id*, *attid*)

Delete a device's attachment.

Parameters

- **id** – Device ID as string.
- **attid** – Attachment ID as string.

download (*id*, *attid*)

Download a device's attachment.

Parameters

- **id** – Device ID as string.
- **attid** – Attachment ID as string.

Return type tuple (`io.BytesIO`, 'filename')

edit (*resource*)

Edit a device's attachment.

Parameters **resource** – `attachments.Attachment` object

Returns `attachments.Attachment` object

Return type `attachments.Attachment`

get (*id*, *attid*)

Get a device's attachment.

Parameters

- **id** – Device ID as string.
- **attid** – Attachment ID as string.

Returns `attachments.Attachment` object

Return type `attachments.Attachment`

iter_list (*id*, *args, **kwargs)

Get a list of attachments. Whereas `list` fetches a single page of attachments according to its `limit` and `page` arguments, `iter_list` returns all attachments by internally making successive calls to `list`.

Parameters

- **id** – Device ID as string.
- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns `attachments.Attachment` list

list (*id*, filter=None, type=None, sort=None, limit=None, page=None)

Get a list of a device's attachments.

Parameters

- **id** – Device ID as string.
- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns `attachments.Page` object

thumbnail (*id*, attid, size=None)

Download thumbnail of a device's attachment. Attachment must be a GIF, JPEG or PNG image.

Parameters

- **id** – Device ID as string.
- **attid** – Attachment ID as string.
- **size** – (optional) Height in pixels of generated thumbnail.

Return type tuple (*io.BytesIO*, 'filename')

class `cdrouter.attachments.Attachment` (**kwargs)

Model for CDRouter Attachments.

Parameters

- **id** – (optional) Attachment ID as a string.
- **name** – (optional) Name as string.
- **description** – (optional) Description as string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **size** – (optional) Attachment size as an int.
- **path** – (optional) Filepath to attachment as string.
- **device_id** – (optional) Device ID as string.

class `cdrouter.attachments.Page`
 Named tuple for a page of list response data.

Parameters

- **data** – `attachments.Attachment` list
- **links** – `cdrouter.Links` object

2.7 cdrouter.jobs

class `cdrouter.jobs.JobsService` (*service*)
 Service for accessing CDRouter Jobs.

bulk_delete (*ids=None, filter=None, type=None, all=False*)
 Bulk delete a set of jobs.

Parameters

- **ids** – (optional) String list of job IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_launch (*jobs=None, filter=None, all=False*)
 Bulk launch a set of jobs.

Parameters

- **jobs** – `jobs.Job` list
- **filter** – (optional) Filters to apply as a string list.
- **all** – (optional) Apply to all if bool *True*.

delete (*id*)
 Delete a job.

Parameters **id** – Job ID as string.

edit (*resource*)
 Edit a job.

Parameters **resource** – `jobs.Job` object

Returns `jobs.Job` object

Return type `jobs.Job`

get (*id*)
 Get a job.

Parameters **id** – Job ID as string.

Returns `jobs.Job` object

Return type `jobs.Job`

iter_list (**args, **kwargs*)
 Get a list of jobs. Whereas `list` fetches a single page of jobs according to its `limit` and `page` arguments, `iter_list` returns all jobs by internally making successive calls to `list`.

Parameters

- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns `jobs.Job` list

launch (*resource*)

Launch a new job.

Parameters **resource** – `jobs.Job` object

Returns `jobs.Job` object

Return type `jobs.Job`

list (*filter=None, type=None, sort=None, limit=None, page=None*)

Get a list of jobs.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns `jobs.Page` object

class `cdrouter.jobs.Job` (**kwargs)

Model for CDRouter Jobs.

Parameters

- **id** – (optional) Job ID as string.
- **status** – (optional) Bool *True* if user is an administrator.
- **options** – (optional) `jobs.Options` object
- **package_id** – (optional) Package ID as string.
- **package_name** – (optional) Package name as string.
- **device_id** – (optional) Device ID as string.
- **device_name** – (optional) Device name as string.
- **result_id** – (optional) Result ID as string.
- **user_id** – (optional) User ID as string.
- **created** – (optional) Job creation time as *DateTime*.
- **updated** – (optional) Job last-updated time as *DateTime*.

class `cdrouter.jobs.Options` (**kwargs)

Model for CDRouter Job Options.

Parameters

- **tags** – (optional) Tags as string list.
- **skip_tests** – (optional) Tests to skip as string list.

- **begin_at** – (optional) Test name to begin testing at as string.
- **end_at** – (optional) Test name to end testing at as string.
- **extra_cli_args** – (optional) Extra *cdrouter-cli* arguments as string.

class `cdrouter.jobs.Page`
Named tuple for a page of list response data.

Parameters

- **data** – *jobs.Job* list
- **links** – *cdrouter.Links* object

2.8 cdrouter.packages

class `cdrouter.packages.PackagesService` (*service*)
Service for accessing CDRouter Packages.

analyze (*id*)

Get a list of tests that will be skipped for a package.

Parameters **id** – Package ID as string.

Returns *packages.Analysis* object

Return type *packages.Analysis*

bulk_copy (*ids*)

Bulk copy a set of packages.

Parameters **ids** – String list of package IDs.

Returns *packages.Package* list

bulk_delete (*ids=None, filter=None, type=None, all=False*)

Bulk delete a set of packages.

Parameters

- **ids** – (optional) String list of package IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_edit (*_fields, ids=None, filter=None, type=None, all=False*)

Bulk edit a set of packages.

Parameters

- **_fields** – *packages.Package* object
- **ids** – (optional) String list of package IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_export (*ids*)

Bulk export a set of packages.

Parameters `ids` – String list of package IDs.

Return type tuple (*io.BytesIO*, 'filename')

create (*resource*)

Create a new package.

Parameters `resource` – *packages.Package* object

Returns *packages.Package* object

Return type *packages.Package*

delete (*id*)

Delete a package.

Parameters `id` – Package ID as string.

edit (*resource*)

Edit a package.

Parameters `resource` – *packages.Package* object

Returns *packages.Package* object

Return type *packages.Package*

edit_shares (*id*, *user_ids*)

Edit shares for a package.

Parameters

- `id` – Package ID as string.
- `user_ids` – User IDs as int list.

Returns *cdrouter.Share* list

export (*id*)

Export a package.

Parameters `id` – Package ID as string.

Return type tuple (*io.BytesIO*, 'filename')

get (*id*)

Get a package.

Parameters `id` – Package ID as string.

Returns *packages.Package* object

Return type *packages.Package*

get_by_name (*name*)

Get a package by name.

Parameters `name` – Package name as string.

Returns *packages.Package* object

Return type *packages.Package*

get_shares (*id*)

Get shares for a package.

Parameters `id` – Package ID as string.

Returns *cdrouter.Share* list

iter_list (*args, **kwargs)

Get a list of packages. Whereas `list` fetches a single page of packages according to its `limit` and `page` arguments, `iter_list` returns all packages by internally making successive calls to `list`.

Parameters

- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns `packages.Package` list

list (filter=None, type=None, sort=None, limit=None, page=None)

Get a list of packages.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns `packages.Page` object

class `cdrouter.packages.Package` (**kwargs)

Model for CDRouter Packages.

Parameters

- **id** – (optional) Package ID as a string.
- **name** – (optional) Name as a string.
- **description** – (optional) Description as a string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **test_count** – (optional) Test count as a string.
- **testlist** – (optional) Testlist as a string list.
- **extra_cli_args** – (optional) Extra CLI args as a string.
- **user_id** – (optional) User ID as a string.
- **agent_id** – (optional) Agent ID as a string.
- **config_id** – (optional) Config ID as a string.
- **result_id** – (optional) Result ID as a string (if a package snapshot).
- **device_id** – (optional) Device ID as a string.
- **options** – (optional) `packages.Options` object
- **tags** – (optional) Tags as a string list.
- **use_as_testlist** – (optional) Bool *True* if package is used as a testlist.
- **note** – (optional) Note as a string.

class `cdrouter.packages.Options` (**kwargs)

Model for CDRouter Package Options.

Parameters

- **forever** – (optional) Bool *True* if package looped forever.
- **loop** – (optional) Loop count as a string.
- **repeat** – (optional) Repeat count as a string.
- **maxfail** – (optional) Max fail count as a string.
- **duration** – (optional) Max testing time duration as a string.
- **wait** – (optional) Wait between tests duration as a string.
- **pause** – (optional) Bool *True* is pausing between tests.
- **shuffle** – (optional) Bool *True* if testlist is shuffled.
- **seed** – (optional) Shuffle seed as a string.
- **retry** – (optional) Retry count as a string.
- **rdelay** – (optional) Retry delay as a string.

class `cdrouter.packages.Page`
 Named tuple for a page of list response data.

Parameters

- **data** – `packages.Package` list
- **links** – `cdrouter.Links` object

class `cdrouter.packages.Analysis` (**kwargs)
 Model for CDRouter Package Analysis.

Parameters

- **total_count** – (optional) Total count as an int.
- **run_count** – (optional) Run count as an int.
- **skipped_count** – (optional) Skipped test count as an int.
- **skipped_tests** – (optional) Skipped tests as a string list.

2.9 cdrouter.results

class `cdrouter.results.ResultsService` (*service*)
 Service for accessing CDRouter Results.

all_stats ()
 Compute stats for all results.

Returns `results.AllStats` object

Return type `results.AllStats`

bulk_copy (*ids*)
 Bulk copy a set of results.

Parameters *ids* – String list of result IDs.

Returns `results.Result` list

bulk_delete (*ids=None, filter=None, type=None, all=False*)

Bulk delete a set of results.

Parameters

- **ids** – (optional) String list of result IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_edit (*_fields, ids=None, filter=None, type=None, all=False*)

Bulk edit a set of results.

Parameters

- **_fields** – *results.Result* object
- **ids** – (optional) String list of result IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_export (*ids, exclude_captures=False*)

Bulk export a set of results.

Parameters **ids** – String list of result IDs.

Return type tuple (*io.BytesIO*, 'filename')

delete (*id*)

Delete a result.

Parameters **id** – Result ID as string.

download_logdir_archive (*id, format='zip', exclude_captures=False*)

Download logdir archive in tgz or zip format.

Parameters

- **id** – Result ID as string.
- **format** – (optional) Format to download, must be string *zip* or *tgz*.
- **exclude_captures** – If bool *True*, don't include capture files

Return type tuple (*io.BytesIO*, 'filename')

edit (*resource*)

Edit a result.

Parameters **resource** – *results.Result* object

Returns *results.Result* object

Return type *results.Result*

edit_shares (*id, user_ids*)

Edit shares for a result.

Parameters

- **id** – Result ID as string.

- **user_ids** – User IDs as int list.

Returns `cdrouter.Share` list

export (*id*, *exclude_captures=False*)

Export a result.

Parameters

- **id** – Result ID as string.
- **exclude_captures** – If bool *True*, don't export capture files

Return type tuple (*io.BytesIO*, 'filename')

get (*id*)

Get a result.

Parameters **id** – Result ID as string.

Returns `results.Result` object

Return type `results.Result`

get_logdir_file (*id*, *filename*)

Download a logdir file.

Parameters

- **id** – Result ID as string.
- **filename** – Logdir filename as string.

Return type tuple (*io.BytesIO*, 'filename')

get_shares (*id*)

Get shares for a result.

Parameters **id** – Result ID as string.

Returns `cdrouter.Share` list

get_test_metric (*id*, *name*, *metric*)

Get a test metric.

Parameters

- **id** – Result ID as string.
- **name** – Test name as string.
- **metric** – Metric name as string.

Returns `results.Metric` object

Return type `results.Metric`

get_test_metric_csv (*id*, *name*, *metric*)

Get a test metric as CSV.

Parameters

- **id** – Result ID as string.
- **name** – Test name as string.
- **id** – Metric name as string.

Return type string

iter_list (*args, **kwargs)

Get a list of results. Whereas `list` fetches a single page of results according to its `limit` and `page` arguments, `iter_list` returns all results by internally making successive calls to `list`.

Parameters

- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns `results.Result` list

list (*filter=None, type=None, sort=None, limit=None, page=None*)

Get a list of results.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns `results.Page` object

list_csv (*filter=None, type=None, sort=None, limit=None, page=None*)

Get a list of results as CSV.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Return type string

list_logdir (*id, filter=None, sort=None*)

Get a list of logdir files.

Parameters

- **id** – Result ID as string.
- **filter** – Filter to apply as string.
- **sort** – Sort field to apply as string.

Returns `results.LogDirFile` list

pause (*id, when=None*)

Pause a running result.

Parameters

- **id** – Result ID as string.
- **when** – Must be string *end-of-test* or *end-of-loop*.

pause_end_of_loop (*id*)

Pause a running result at the end of the current loop.

Parameters **id** – Result ID as string.

pause_end_of_test (*id*)

Pause a running result at the end of the current test.

Parameters **id** – Result ID as string.

set_stats (*ids*)

Compute stats for a set of results.

Parameters **id** – Result IDs as string list.

Returns *results.SetStats* object

Return type *results.SetStats*

single_stats (*id*)

Compute stats for a result.

Parameters **id** – Result ID as string.

Returns *results.SingleStats* object

Return type *results.SingleStats*

stop (*id, when=None*)

Stop a running result.

Parameters

- **id** – Result ID as string.
- **when** – Must be string *end-of-test* or *end-of-loop*.

stop_end_of_loop (*id*)

Stop a running result at the end of the current loop.

Parameters **id** – Result ID as string.

stop_end_of_test (*id*)

Stop a running result at the end of the current test.

Parameters **id** – Result ID as string.

unpause (*id*)

Unpause a running result.

Parameters **id** – Result ID as string.

class `cdrouter.results.Result` (***kwargs*)

Model for CDRouter Results.

Parameters

- **id** – (optional) Result ID as a string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **result** – (optional) Result as a string.
- **status** – (optional) Status as a string.
- **loops** – (optional) Loop count as an int.

- **tests** – (optional) Test count as an int.
- **passed** – (optional) Passed count as an int.
- **fail** – (optional) Failed count as an int.
- **duration** – (optional) Duration in seconds as an int.
- **size_on_disk** – (optional) Size on disk in bytes as an int.
- **starred** – (optional) Bool *True* if result is starred.
- **archived** – (optional) Bool *True* if result is archived.
- **result_dir** – (optional) Filepath to result directory as a string.
- **agent_name** – (optional) Agent name as a string.
- **package_name** – (optional) Package name as a string.
- **device_name** – (optional) Device name as a string.
- **config_name** – (optional) Config name as a string.
- **package_id** – (optional) Package ID as a string.
- **device_id** – (optional) Device ID as a string.
- **config_id** – (optional) Config ID as a string.
- **user_id** – (optional) User ID as a string.
- **note** – (optional) Note as a string.
- **pause_message** – (optional) Pause message as a string (if currently paused).
- **build_info** – (optional) Build info as a string.
- **tags** – (optional) Tags as a string list.
- **testcases** – (optional) Testcases as a string list.
- **options** – (optional) *results.Options* object

class `cdrouter.results.Page`
Named tuple for a page of list response data.

Parameters

- **data** – *results.Result* list
- **links** – *cdrouter.Links* object

class `cdrouter.results.TestCount` (**kwargs)
Model for CDRouter Test Counts.

Parameters

- **name** – (optional) Name as a string.
- **count** – (optional) Count as a string.

class `cdrouter.results.TestDuration` (**kwargs)
Model for CDRouter Test Durations.

Parameters

- **name** – (optional) Name as a string.
- **duration** – (optional) Duration as a string.

class `cdrouter.results.ResultBreakdown` (**kwargs)
Model for CDRouter Result Breakdowns.

Parameters

- **passed** – (optional) Pass count as a string.
- **failed** – (optional) Fail count as a string.
- **skipped** – (optional) Skipped count as a string.

class `cdrouter.results.TimeBreakdown` (**kwargs)
Model for CDRouter Time Breakdowns.

Parameters

- **passed** – (optional) Pass duration as a string.
- **failed** – (optional) Fail duration as a string.

class `cdrouter.results.SetStats` (**kwargs)
Model for CDRouter Result Set Stats.

Parameters

- **frequent_failures** – (optional) `results.TestCount` list
- **longest_tests** – (optional) `results.TestDuration` list
- **result_breakdown** – (optional) `results.ResultBreakdown` object
- **time_breakdown** – (optional) `results.TimeBreakdown` object

class `cdrouter.results.TestResultBreakdown` (**kwargs)
Model for CDRouter TestResult Breakdowns.

Parameters

- **failed_at_least_once** – (optional) `results.TestCount` list
- **passed_every_time** – (optional) `results.TestCount` list

class `cdrouter.results.Progress` (**kwargs)
Model for CDRouter Result Progress.

Parameters

- **finished** – (optional) Finished count as an int.
- **total** – (optional) Total count as an int.
- **progress** – (optional) Progress as an int.
- **unit** – (optional) Unit as a string.

class `cdrouter.results.SingleStats` (**kwargs)
Model for CDRouter Single Results Stats.

Parameters

- **result_breakdown** – (optional) `results.ResultBreakdown` object
- **progress** – (optional) `results.Progress` object

class `cdrouter.results.PackageCount` (**kwargs)
Model for CDRouter Package Counts.

Parameters

- **package_name** – (optional) Package name as a string.
- **count** – (optional) Count as a string.

class `cdrouter.results.DeviceCount` (**kwargs)
Model for CDRouter Device Counts.

Parameters

- **device_name** – (optional) Device name as a string.
- **count** – (optional) Count as a string.

class `cdrouter.results.AllStats` (**kwargs)
Model for CDRouter All Results Stats.

Parameters

- **frequent_packages** – (optional) `results.PackageCount` list
- **package_names** – (optional) `results.PackageCount` list
- **frequent_devices** – (optional) `results.DeviceCount` list
- **device_names** – (optional) `results.DeviceCount` list

class `cdrouter.results.Metric` (**kwargs)
Model for CDRouter Metrics.

Parameters

- **log_file** – (optional) Filepath to logfile as a string.
- **timestamp** – (optional) Timestamp for metric as a *DateTime*.
- **metric** – (optional) Metric name as a string.
- **value** – (optional) Metric value as a string.
- **units** – (optional) Metric units as a string.
- **result** – (optional) Metric result as a string.
- **interface_1** – (optional) First interface as a string.
- **interface_2** – (optional) Second interface as a string.
- **streams** – (optional) Stream count as a string.

class `cdrouter.results.LogDirFile` (**kwargs)
Model for CDRouter Logdir Files.

Parameters

- **name** – (optional) Name as a string.
- **size** – (optional) Filesize as an int.
- **modified** – (optional) Last-updated time as a *DateTime*.

class `cdrouter.results.Options` (**kwargs)
Model for CDRouter Result Options.

Parameters

- **tags** – (optional) Tags as string list.
- **skip_tests** – (optional) Tests to skip as string list.
- **begin_at** – (optional) Test name to begin testing at as string.

- **end_at** – (optional) Test name to end testing at as string.
- **extra_cli_args** – (optional) Extra *cdrouter-cli* arguments as string.

class `cdrouter.results.Result` (***kwargs*)
Model for CDRouter Results.

Parameters

- **id** – (optional) Result ID as a string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **result** – (optional) Result as a string.
- **status** – (optional) Status as a string.
- **loops** – (optional) Loop count as an int.
- **tests** – (optional) Test count as an int.
- **passed** – (optional) Passed count as an int.
- **fail** – (optional) Failed count as an int.
- **duration** – (optional) Duration in seconds as an int.
- **size_on_disk** – (optional) Size on disk in bytes as an int.
- **starred** – (optional) Bool *True* if result is starred.
- **archived** – (optional) Bool *True* if result is archived.
- **result_dir** – (optional) Filepath to result directory as a string.
- **agent_name** – (optional) Agent name as a string.
- **package_name** – (optional) Package name as a string.
- **device_name** – (optional) Device name as a string.
- **config_name** – (optional) Config name as a string.
- **package_id** – (optional) Package ID as a string.
- **device_id** – (optional) Device ID as a string.
- **config_id** – (optional) Config ID as a string.
- **user_id** – (optional) User ID as a string.
- **note** – (optional) Note as a string.
- **pause_message** – (optional) Pause message as a string (if currently paused).
- **build_info** – (optional) Build info as a string.
- **tags** – (optional) Tags as a string list.
- **testcases** – (optional) Testcases as a string list.
- **options** – (optional) *results.Options* object

2.10 cdrouter.testresults

class `cdrouter.testresults.TestResultsService` (*service*)

Service for accessing CDRouter TestResults.

edit (*id, resource*)

Edit a test result.

Parameters

- **id** – Result ID as string.
- **resource** – `testresults.TestResult` object

Returns `testresults.TestResult` object

Return type `testresults.TestResult`

get (*id, seq*)

Get a test result.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.

Returns `testresults.TestResult` object

Return type `testresults.TestResult`

get_log (*id, seq, offset=None, limit=None, filter=None, packets=None, timestamp_format=None*)

Get a test result's log.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **offset** – (optional) Offset within logfile to get.
- **limit** – (optional) Limit returned list length.
- **filter** – (optional) Filters to apply as a string list.
- **packets** – (optional) Set to bool *False* to omit packet logs.
- **timestamp_format** – (optional) Timestamp format to use, must be string *long* or *short*.

Returns `testresults.Log` object

Return type `testresults.Log`

get_log_plaintext (*id, seq*)

Get a test result's log as plaintext.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.

Return type string

iter_list (*id*, **args*, ***kwargs*)

Get a list of test results. Whereas `list` fetches a single page of test results according to its `limit` and `page` arguments, `iter_list` returns all test results by internally making successive calls to `list`.

Parameters

- **id** – Result ID as string.
- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns `testresults.TestResult` list

list (*id*, *filter=None*, *type=None*, *sort=None*, *limit=None*, *page=None*)

Get a list of test results.

Parameters

- **id** – Result ID as string.
- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns `testresults.Page` object

list_csv (*id*, *filter=None*, *type=None*, *sort=None*, *limit=None*, *page=None*)

Get a list of test results as CSV.

Parameters

- **id** – Result ID as string.
- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Return type string

class `cdrouter.testresults.TestResult` (***kwargs*)

Model for CDRouter TestResults.

Parameters

- **id** – (optional) Result ID as string.
- **seq** – (optional) TestResult sequence ID as string.
- **loop** – (optional) Loop number as string.
- **result** – (optional) Test result as string.
- **retries** – (optional) Retry count as int.
- **started** – (optional) Test start time as *DateTime*.
- **duration** – (optional) Test duration as int.

- **flagged** – (optional) *True* if test is flagged.
- **name** – (optional) Test name as string.
- **description** – (optional) Test description as string.
- **skip_name** – (optional) Skip name for *TestResult* as string.
- **skip_reason** – (optional) Skip reason for *TestResult* as string.
- **log** – (optional) Logfile path for *TestResult* as string.
- **note** – (optional) Note for *TestResult* as string.

class `cdrouter.testresults.Page`
Named tuple for a page of list response data.

Parameters

- **data** – `testresults.TestResult` list
- **links** – `cdrouter.Links` object

class `cdrouter.testresults.Summary` (**kwargs)
Model for CDRouter Log Section Summaries.

Parameters

- **errors** – (optional) Error log count as int.
- **fails** – (optional) Fail log count as int.
- **passes** – (optional) Pass log count as int.
- **warning** – (optional) Warning log count as int.

class `cdrouter.testresults.Line` (**kwargs)
Model for CDRouter Log Lines.

Parameters

- **raw** – (optional) Raw log text as string.
- **line** – (optional) Line number as int.
- **header** – (optional) *True* if line is a header.
- **section** – (optional) *True* if line is a section.
- **prefix** – (optional) Log prefix as string.
- **name** – (optional) Log stack name as string.
- **timestamp** – (optional) Log timestamp as string.
- **message** – (optional) Log message as string.
- **interface** – (optional) Log interface as string (if packet log).
- **packet** – (optional) Log frame number as string (if packet log).
- **src** – (optional) Log source address as string (if packet log).
- **dst** – (optional) Log destination address as string (if packet log).
- **proto** – (optional) Log protocol name as string (if packet log).
- **info** – (optional) Log protocol summary as string (if packet log).
- **summary** – (optional) `testresults.Summary` object (if section log)

class `cdrouter.testresults.Log` (***kwargs*)
Model for CDRouter Log.

Parameters

- **offset** – (optional) Zero-based offset in logfile as int.
- **limit** – (optional) Limit as int.
- **lines** – (optional) `testresults.Line` list
- **total** – (optional) Total line count as int.

2.11 cdrouter.annotations

class `cdrouter.annotations.AnnotationsService` (*service*)
Service for accessing CDRouter Annotations.

create (*id, seq, resource*)
Create an annotation.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **resource** – `annotations.Annotation` object

Returns `annotations.Annotation` object

Return type `annotations.Annotation`

create_or_edit (*id, seq, resource*)
Create or edit an annotation.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **resource** – `annotations.Annotation` object

Returns `annotations.Annotation` object

Return type `annotations.Annotation`

delete (*id, seq, line*)
Delete an annotation.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **line** – Line number in TestResult's logfile as string.

edit (*id, seq, resource*)
Edit an annotation.

Parameters

- **id** – Result ID as string.

- **seq** – TestResult sequence ID as string.
- **resource** – `annotations.Annotation` object

Returns `annotations.Annotation` object

Return type `annotations.Annotation`

get (*id, seq, line*)

Get an annotation.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **line** – Line number in TestResult’s logfile as string.

Returns `annotations.Annotation` object

Return type `annotations.Annotation`

list (*id, seq*)

Get a list of annotations.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.

Returns `annotations.Annotation` list

class `cdrouter.annotations.Annotation` (***kwargs*)
Model for CDRouter Annotations.

Parameters

- **id** – (optional) Result ID as string.
- **seq** – (optional) TestResult sequence ID as string.
- **line** – (optional) Line number in TestResult’s logfile as string.
- **comment** – (optional) Comment text as string.

2.12 cdrouter.captures

class `cdrouter.captures.CapturesService` (*service*)
Service for accessing CDRouter Captures.

ascii (*id, seq, intf, filter=None, frame=None, inline=False*)
Get a capture’s ASCII (hex dump).

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **intf** – Interface name as string.
- **filter** – (optional) PCAP filter to apply as string.
- **frame** – (optional) Frame number to decode.

- **inline** – (optional) Use inline version of capture file.

Returns `captures.ASCII` object

Return type `captures.ASCII`

decode (*id, seq, intf, filter=None, frame=None, inline=False*)

Get a capture's decode.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **intf** – Interface name as string.
- **filter** – (optional) PCAP filter to apply as string.
- **frame** – (optional) Frame number to decode.
- **inline** – (optional) Use inline version of capture file.

Returns `captures.Decode` object

Return type `captures.Decode`

download (*id, seq, intf, inline=False*)

Download a capture as a PCAP file.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **intf** – Interface name as string.
- **inline** – (optional) Use inline version of capture file.

Return type tuple (`io.BytesIO`, `'filename'`)

get (*id, seq, intf*)

Get a capture.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **intf** – Interface name as string.

Returns `captures.Capture` object

Return type `captures.Capture`

list (*id, seq*)

Get a list of captures.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.

Returns `captures.Capture` list

send_to_cloudshark (*id, seq, intf, inline=False*)

Send a capture to a CloudShark Appliance. Both `cloudshark_appliance_url` and `cloudshark_appliance_token` must be properly configured via system preferences.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **intf** – Interface name as string.
- **inline** – (optional) Use inline version of capture file.

Returns `captures.CloudShark` object

Return type `captures.CloudShark`

summary (*id, seq, intf, filter=None, inline=False*)

Get a capture's summary.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **intf** – Interface name as string.
- **filter** – (optional) PCAP filter to apply as string.
- **inline** – (optional) Use inline version of capture file.

Returns `captures.Summary` object

Return type `captures.Summary`

class `cdrouter.captures.Capture` (**kwargs)

Model for CDRouter Captures.

Parameters

- **id** – (optional) Result ID as string.
- **seq** – (optional) TestResult sequence ID as string.
- **interface** – (optional) Interface name as string.
- **filename** – (optional) Path to capture file as string.

class `cdrouter.captures.Section` (**kwargs)

Model for CDRouter Capture Sections.

Parameters **value** – (optional) Section value as a string.

class `cdrouter.captures.Structure` (**kwargs)

Model for CDRouter Capture Structures.

Parameters **sections** – (optional) `captures.Section` list

class `cdrouter.captures.SummaryPacket` (**kwargs)

Model for CDRouter Capture Summary Packets.

Parameters **sections** – (optional) `captures.Section` list

class `cdrouter.captures.Summary` (**kwargs)

Model for CDRouter Capture Summaries.

Parameters

- **structure** – (optional) *captures.Structure* object
- **summaries** – (optional) *captures.SummaryPacket* list

class `cdrouter.captures.Field` (**kwargs)
Model for CDRouter Capture Fields.

Parameters

- **name** – (optional) Field name as string.
- **show_name** – (optional) Either *true* or *false* as string.
- **hide** – (optional) Either *true* or *false* as string.
- **size** – (optional) Field size as string.
- **pos** – (optional) Field position as string.
- **show** – (optional) Either *true* or *false* as string.
- **fields** – (optional) *captures.Field* list
- **protos** – (optional) *captures.Proto* list

class `cdrouter.captures.Proto` (**kwargs)
Model for CDRouter Capture Proto.

Parameters

- **name** – (optional) Field name as string.
- **pos** – (optional) Field position as string.
- **show** – (optional) Either *true* or *false* as string.
- **show_name** – (optional) Either *true* or *false* as string.
- **value** – (optional) Field value as string.
- **size** – (optional) Field size as string.
- **fields** – (optional) *captures.Field* list
- **protos** – (optional) *captures.Proto* list

class `cdrouter.captures.Packet` (**kwargs)
Model for CDRouter Capture Packet.

Parameters **protos** – (optional) *captures.Proto* list

class `cdrouter.captures.Decode` (**kwargs)
Model for CDRouter Capture Decode.

Parameters **packets** – (optional) *captures.Packet* list

class `cdrouter.captures.ASCIIByte` (**kwargs)
Model for CDRouter Capture ASCII bytes.

Parameters

- **byte** – (optional) Byte value as string.
- **pos** – (optional) Byte position as int.

class `cdrouter.captures.ASCIILine` (**kwargs)
Model for CDRouter Capture ASCII lines.

Parameters

- **raw** – (optional) Raw line as string.
- **offset** – (optional) Line offset as string.
- **ascii** – (optional) *captures.ASCIIByte* list
- **hex** – (optional) *captures.ASCIIByte* list

class `cdrouter.captures.ASCIIFrame` (**kwargs)
Model for CDRouter Capture ASCII frame.

Parameters

- **name** – (optional) Frame name as string.
- **lines** – (optional) *captures.ASCIILine* list

class `cdrouter.captures.ASCII` (**kwargs)
Model for CDRouter Capture ASCII.

Parameters

- **frame** – (optional) *captures.ASCIIFrame* object
- **reassembled** – (optional) *captures.ASCIIFrame* object

class `cdrouter.captures.CloudShark` (**kwargs)
Model for CDRouter CloudShark uploads.

Parameters **url** – (optional) CloudShark URL as a string.

2.13 cdrouter.highlights

class `cdrouter.highlights.HighlightsService` (*service*)
Service for accessing CDRouter Highlights.

create (*id, seq, resource*)
Create a highlight.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **resource** – *highlights.Highlight* object

Returns *highlights.Highlight* object

Return type *highlights.Highlight*

create_or_edit (*id, seq, resource*)
Create or edit a highlight.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **resource** – *highlights.Highlight* object

Returns *highlights.Highlight* object

Return type *highlights.Highlight*

delete (*id, seq, line*)
Delete a highlight.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **line** – Line number in TestResult’s logfile as string.

edit (*id, seq, resource*)
Edit a highlight.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **resource** – *highlights.Highlight* object

Returns *highlights.Highlight* object

Return type *highlights.Highlight*

get (*id, seq, line*)
Get a highlight.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.
- **line** – Line number in TestResult’s logfile as string.

Returns *highlights.Highlight* object

list (*id, seq*)
Get a list of highlights.

Parameters

- **id** – Result ID as string.
- **seq** – TestResult sequence ID as string.

Returns *highlights.Highlight* list

class `cdrouter.highlights.Highlight` (**kwargs)
Model for CDRouter Highlights.

Parameters

- **id** – (optional) Result ID as string.
- **seq** – (optional) TestResult sequence ID as string.
- **line** – (optional) Line number in TestResult’s logfile as string.
- **color** – (optional) Highlight color as string.

2.14 cdrouter.imports

class `cdrouter.imports.ImportsService` (*service*)

Service for accessing CDRouter Imports.

commit (*id, impreq*)

Commit a staged import.

Parameters

- **id** – Staged import ID as string.
- **impreq** – `imports.Request` object

Returns `imports.Request` object

Return type `imports.Request`

delete (*id*)

Delete a staged import.

Parameters **id** – Staged import ID as string.

get (*id*)

Get a staged import.

Parameters **id** – Staged import ID as string.

Returns `imports.Import` object

Return type `imports.Import`

get_commit_request (*id*)

Get a commit request for a staged import.

Parameters **id** – Staged import ID as string.

Returns `imports.Request` object

Return type `imports.Request`

list ()

Get a list of staged (in-progress) imports.

Returns `imports.Import` list

stage_import_from_file (*fd, filename='upload.gz'*)

Stage an import from a file upload.

Parameters

- **fd** – File-like object to upload.
- **filename** – (optional) Filename to use for import as string.

Returns `imports.Import` object

stage_import_from_filesystem (*filepath*)

Stage an import from a filesystem path.

Parameters **filepath** – Local filesystem path as string.

Returns `imports.Import` object

stage_import_from_url (*url, token=None, insecure=False*)

Stage an import from a URL to another CDRouter system.

Parameters

- **url** – URL to import as string.
- **token** – (optional) API token to use as string (may be required if importing from a CDRouter 10+ system).
- **insecure** – (optional) Allow insecure HTTPS connections if bool *True*.

Returns `imports.Import` object

class `cdrouter.imports.Import` (**kwargs)
Model for CDRouter Staged Imports.

Parameters

- **id** – (optional) Staged import ID as string.
- **user_id** – (optional) User ID as string.
- **created** – (optional) Creation time as *DateTime*.
- **updated** – (optional) Last-updated time as *DateTime*.
- **archive** – (optional) Path to archive as string.
- **path** – (optional) Local filepath as string.
- **url** – (optional) URL to fetch as string.
- **insecure** – (optional) Allow insecure HTTPS connections if bool *True*.
- **size** – (optional) Size of import as int.

class `cdrouter.imports.Response` (**kwargs)
Model for CDRouter Import Responses.

Parameters

- **imported** – (optional) Bool *True* if resource imported successfully.
- **id** – (optional) Resource ID as string.
- **name** – (optional) Resource name as string.
- **message** – (optional) Response message as string.

class `cdrouter.imports.Resource` (**kwargs)
Model for CDRouter Import Resources.

Parameters

- **name** – (optional) Set to string to rename resource, leave empty to keep original
- **should_import** – (optional) Bool *True* if resource should be imported.
- **existing_id** – (optional) Contains ID of existing resource which will be overwritten if *should_import* is *True*.
- **response** – (optional) `imports.Response` object

class `cdrouter.imports.Request` (**kwargs)
Model for CDRouter Import Requests.

Parameters

- **replace_existing** – (optional) Bool *True* if existing resources should be overwritten.
- **configs** – (optional) Dict of strings to `imports.Resource` objects.

- **devices** – (optional) Dict of strings to *imports.Resource* objects.
- **packages** – (optional) Dict of strings to *imports.Resource* objects.
- **results** – (optional) Dict of strings to *imports.Resource* objects.

2.15 cdrouter.exports

class `cdrouter.exports.ExportsService` (*service*)
Service for accessing CDRouter Exports.

bulk_export (*config_ids=None, device_ids=None, package_ids=None, result_ids=None, exclude_captures=False*)

Bulk export a set of configs, devices, packages and results.

Parameters

- **config_ids** – (optional) Int list of config IDs.
- **device_ids** – (optional) Int list of device IDs.
- **package_ids** – (optional) Int list of package IDs.
- **result_ids** – (optional) Int list of result IDs.
- **exclude_captures** – (optional) Exclude capture files if bool *True*.

Return type tuple (*io.BytesIO, 'filename'*)

2.16 cdrouter.history

class `cdrouter.history.HistoryService` (*service*)
Service for accessing CDRouter History.

iter_list (**args, **kwargs*)

Get a list of history entries. Whereas `list` fetches a single page of history entries according to its `limit` and `page` arguments, `iter_list` returns all history entries by internally making successive calls to `list`.

Parameters

- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns `historys.History` list

list (*filter=None, type=None, sort=None, limit=None, page=None*)

Get a list of history entries.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns *history.Page* object

class `cdrouter.history.History` (**kwargs)
Model for CDRouter History entries.

Parameters

- **user_id** – (optional) User ID as string.
- **created** – (optional) Entry creation time as *DateTime*.
- **resource** – (optional) Resource type as string.
- **id** – (optional) Resource ID as string.
- **name** – (optional) Resource name as string.
- **action** – (optional) Action name as string.
- **description** – (optional) Resource description as string.

class `cdrouter.history.Page`
Named tuple for a page of list response data.

Parameters

- **data** – *history.History* list
- **links** – *cdrouter.Links* object

2.17 cdrouter.system

class `cdrouter.system.SystemService` (*service*)
Service for accessing CDRouter System.

check_for_lounge_upgrade (*email, password*)

Check the CDRouter Support Lounge for eligible upgrades using your Support Lounge email & password.

Parameters

- **email** – CDRouter Support Lounge email as a string.
- **password** – CDRouter Support Lounge password as a string.

Returns *system.Release* object

Return type *system.Release*

diagnostics ()

Get system diagnostics from cdrouter-diag output.

Return type string

edit_preferences (*resource*)

Edit preferences in `/usr/cdrouter-data/etc/config.yml`.

Parameters **resource** – *system.Preferences* object

Returns *system.Preferences* object

Return type *system.Preferences*

get_preferences ()

Get preferences from `/usr/cdrouter-data/etc/config.yml`.

Returns *system.Preferences* object

Return type *system.Preferences*

hostname ()

Get system hostname.

Return type string

info ()

Get system info from cdrouter-cli -info output.

Return type string

interfaces (addresses=False)

Get system interfaces.

Parameters **addresses** – (optional) If bool *True*, include interface addresses.

Returns *system.Interface* list

latest_lounge_release ()

Get the latest release of CDRouter from the CDRouter Support Lounge.

Returns *system.ReleaseLatest* object

Return type *system.ReleaseLatest*

live ()

Get CDRouter Live info from cdrouter-cli -live output.

Return type string

lounge_update_license ()

Download & install a license for your CDRouter system from the CDRouter Support Lounge.

Returns *system.Upgrade* object

Return type *system.Upgrade*

lounge_upgrade (email, password, release_id)

Download & install an upgrade from the CDRouter Support Lounge using your Support Lounge email & password. Please note that any running tests will be stopped.

Parameters

- **email** – CDRouter Support Lounge email as a string.
- **password** – CDRouter Support Lounge password as a string.
- **release_id** – Release ID as an int.

Returns *system.Upgrade* object

Return type *system.Upgrade*

manual_update_license (fd, filename='cdrouter.lic')

Update the license on your CDRouter system manually by uploading a .lic license from the CDRouter Support Lounge.

Parameters

- **fd** – File-like object to upload.
- **filename** – (optional) Filename to use for license as string.

Returns *system.Upgrade* object

Return type *system.Upgrade*

manual_upgrade (*fd*, *filename*='cdrouter.bin')

Upgrade CDRouter manually by uploading a .bin installer from the CDRouter Support Lounge. Please note that any running tests will be stopped.

Parameters

- **fd** – File-like object to upload.
- **filename** – (optional) Filename to use for installer as string.

Returns *system.Upgrade* object

Return type *system.Upgrade*

restart ()

Restart CDRouter web interface. Please note that any running tests will be stopped.

time ()

Get system time.

Return type string

class *cdrouter.system.Version* (**kwargs)

Model for CDRouter Release Versions.

Parameters

- **raw** – (optional) Raw version as string.
- **major** – (optional) Major version as int.
- **minor** – (optional) Minor version as int.
- **build** – (optional) Build version as int.

class *cdrouter.system.ReleaseLatest* (**kwargs)

Model for CDRouter Latest Releases.

Parameters

- **latest** – (optional) *system.Version* object.
- **current** – (optional) *system.Version* object.
- **newer** – (optional) Bool *True* if newer release available.

class *cdrouter.system.Testsuite* (**kwargs)

Model for CDRouter Testsuite names.

Parameters

- **shortname** – (optional) Brief testsuite name as string.
- **name** – (optional) Full testsuite name as string.

class *cdrouter.system.Release* (**kwargs)

Model for CDRouter Releases.

Parameters

- **build_date** – (optional) Build date as string.
- **filename** – (optional) Installer filename as string.
- **version** – (optional) *system.Version* object
- **id** – (optional) Release ID as int.
- **article_id** – (optional) Release article ID as int.

- **testsuite** – (optional) *system.Testsuite* object

class `cdrouter.system.Upgrade` (**kwargs)
Model for CDRouter Upgrades.

Parameters

- **success** – (optional) Bool *True* if successful.
- **installer** – (optional) Installer filename as string.
- **output** – (optional) Output as string.
- **error** – (optional) Error output as string.

class `cdrouter.system.InterfaceFlags` (**kwargs)
Model for CDRouter Interface Flags.

Parameters

- **up** – (optional) Bool *True* if interface is up.
- **broadcast** – (optional) Bool *True* if interface is broadcasting.
- **loopback** – (optional) Bool *True* if interface is a loopback interface.
- **point_to_point** – (optional) Bool *True* if interface is a point-to-point interface.
- **multicast** – (optional) Bool *True* if interface is multicast.

class `cdrouter.system.InterfaceAddr` (**kwargs)
Model for CDRouter Interface Addresses.

Parameters

- **network** – (optional) Interface network as a string.
- **address** – (optional) Interface address as a string.

class `cdrouter.system.Interface` (**kwargs)
Model for CDRouter Interfaces.

Parameters

- **index** – (optional) Interface index as a string.
- **mtu** – (optional) Interface MTU as a string.
- **name** – (optional) Interface name as a string.
- **hardware_addr** – (optional) Interface hardware address as a string.
- **flags** – (optional) *system.InterfaceFlags* object
- **addresses** – (optional) *system.InterfaceAddr* list
- **multicast_addresses** – (optional) *system.InterfaceAddr* list

class `cdrouter.system.Preferences` (**kwargs)
Model for CDRouter Preferences.

Parameters

- **automatic_logic** – (optional) Bool *True* if Automatic Login is enabled.
- **cloudshark_appliance_autotags** – (optional) CloudShark Appliance autotags as a string.

- **cloudshark_appliance_insecure** – (optional) String *yes* if insecure CloudShark Appliance URLs are allowed.
- **cloudshark_appliance_password** – (optional) CloudShark Appliance password as a string.
- **cloudshark_appliance_tags** – (optional) CloudShark Appliance tags as a string.
- **cloudshark_appliance_token** – (optional) CloudShark Appliance API token as a string.
- **cloudshark_appliance_url** – (optional) CloudShark Appliance URL as a string.
- **cloudshark_appliance_username** – (optional) CloudShark Appliance username as a string.
- **hostname** – (optional) CDRouter system’s hostname as a string.
- **migrated** – (optional) Migrated resources as a string list.
- **port** – (optional) CDRouter’s HTTP port as an int.
- **https** – (optional) CDRouter’s HTTPS port as an int.
- **force_https** – (optional) If string *yes*, redirect HTTP connections to CDRouter to HTTPS.
- **use_cloudshark** – (optional) If string *yes*, use CloudShark Appliance for capture viewing.
- **log_timestamp_format** – (optional) Log timestamp format, must be string *short* or *long*.
- **editor_keymap** – (optional) Config editor keymap, must be string *default*, *emacs* or *vim*.
- **lounge_url** – (optional) CDRouter Support Lounge URL as a string.
- **lounge_insecure** – (optional) If bool *True*, allow insecure HTTPS connections to the CDRouter Support Lounge.

2.18 cdrouter.tags

class `cdrouter.tags.TagsService` (*service*)

Service for accessing CDRouter Tags.

delete (*name*)

Delete a tag.

Parameters **name** – Tag name as string.

edit (*resource*)

Edit a tag.

Parameters **resource** – `tags.Tag` object

Returns `tags.Tag` object

Return type `tags.Tag`

get (*name*)

Get a tag.

Parameters **name** – Tag name as string.

Returns *tags.Tag* object

Return type *tags.Tag*

list (*resource=None, sort=None*)

Get a list of tags.

Parameters

- **resource** – (optional) Restrict to given resource type as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns *tags.Tag* list

class `cdrouter.tags.Tag` (***kwargs*)

Model for CDRouter Tags.

Parameters

- **resource** – (optional) Resource type as string.
- **id** – (optional) Resource ID as string.
- **name** – (optional) Resource name as string.
- **count** – (optional) Resource tag count as an int.
- **tags** – (optional) Resource tags as a string list.
- **configs** – (optional) *tags.ResourceTags* list
- **devices** – (optional) *tags.ResourceTags* list
- **packages** – (optional) *tags.ResourceTags* list
- **results** – (optional) *tags.ResourceTags* list

class `cdrouter.tags.ResourceTags` (***kwargs*)

Model for CDRouter Resource Tags.

Parameters

- **id** – (optional) Resource ID as string.
- **name** – (optional) Resource name as string.
- **tags** – (optional) Resource tags as a string list.

2.19 cdrouter.testsuites

class `cdrouter.testsuites.TestsuitesService` (*service*)

Service for accessing CDRouter Testsuites.

get_error (*name*)

Get an error.

Parameters **name** – Error name as string.

Returns *testsuites.Error* object

Return type *testsuites.Error*

get_group (*name*)

Get a group.

Parameters **name** – Group name as string.

Returns *testsuites.Group* object

Return type *testsuites.Group*

get_label (*name*)

Get a label.

Parameters **name** – Label name as string.

Returns *testsuites.Label* object

Return type *testsuites.Label*

get_module (*name*)

Get a module.

Parameters **name** – Module name as string.

Returns *testsuites.Module* object

Return type *testsuites.Module*

get_test (*name*)

Get a test.

Parameters **name** – Test name as string.

Returns *testsuites.Test* object

Return type *testsuites.Test*

get_testvar (*name*)

Get a testvar.

Parameters **name** – Testvar name as string.

Returns *testsuites.Testvar* object

Return type *testsuites.Testvar*

info ()

Get testsuite info.

Returns *testsuites.Info* object

Return type *testsuites.Info*

list_errors (*filter=None, type=None, sort=None*)

Get a list of errors.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns *testsuites.Error* list

list_groups (*filter=None, type=None, sort=None*)

Get a list of groups.

Parameters

- **filter** – (optional) Filters to apply as a string list.

- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns `testsuites.Group` list

list_labels (*filter=None, type=None, sort=None*)

Get a list of labels.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns `testsuites.Label` list

list_modules (*filter=None, type=None, sort=None*)

Get a list of modules.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns `testsuites.Module` list

list_tests (*filter=None, type=None, sort=None*)

Get a list of tests.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns `testsuites.Test` list

list_testvars (*filter=None, type=None, sort=None*)

Get a list of testvars.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.

Returns `testsuites.Testvar` list

search (*query*)

Perform full text search of testsuite.

Parameters **query** – Search query as a string.

Returns `testsuites.Search` object

Return type `testsuites.Search`

class `cdrouter.testsuites.Info` (**kwargs)

Model for CDRouter Testsuite Info.

Parameters

- **build_info** – (optional) CDRouter build info as string.
- **copyright** – (optional) CDRouter copyright info as string.
- **customer** – (optional) Customer name from license as string.
- **lifetime** – (optional) License lifetime as string.
- **os** – (optional) OS name as string.
- **serial_number** – (optional) NTA serial number as string.
- **system_id** – (optional) CDRouter system ID as string.
- **testsuite** – (optional) CDRouter testsuite name as string.
- **release** – (optional) CDRouter release as string.
- **addons** – (optional) Enabled CDRouter addons as string list.
- **all_addons** – (optional) All CDRouter addons as string list.

class `cdrouter.testsuites.Group` (***kwargs*)
Model for CDRouter Groups.

Parameters

- **id** – (optional) Testsuite ID as an int.
- **name** – (optional) Name as string.
- **index** – (optional) Index as int.
- **test_count** – (optional) Test count as int.
- **modules** – (optional) Modules as string list.

class `cdrouter.testsuites.Module` (***kwargs*)
Model for CDRouter Modules.

Parameters

- **id** – (optional) Testsuite ID as an int.
- **name** – (optional) Name as string.
- **index** – (optional) Index as int.
- **group** – (optional) Group name as string.
- **description** – (optional) Module description as string.
- **test_count** – (optional) Test count as int.
- **tests** – (optional) Tests as string list.
- **labels** – (optional) Labels as string list.
- **aliases** – (optional) Aliases as string list.

class `cdrouter.testsuites.Test` (***kwargs*)
Model for CDRouter Tests.

Parameters

- **id** – (optional) Testsuite ID as an int.
- **name** – (optional) Name as string.

- **index** – (optional) Index as int.
- **group** – (optional) Group name as string.
- **module** – (optional) Module name as string.
- **synopsis** – (optional) Test synopsis as string.
- **description** – (optional) Test description as string.
- **labels** – (optional) Labels as string list.
- **aliases** – (optional) Aliases as string list.
- **testvars** – (optional) Testvars as string list.
- **skip_name** – (optional) Skip name as string.
- **skip_reason** – (optional) Skip reason as string.

class `cdrouter.testsuites.Label` (***kwargs*)
Model for CDRouter Skip Labels.

Parameters

- **id** – (optional) Testsuite ID as an int.
- **name** – (optional) Name as string.
- **index** – (optional) Index as int.
- **reason** – (optional) Skip reason as string.
- **description** – (optional) Description as string.
- **modules** – (optional) Modules as string list.
- **tests** – (optional) Tests as string list.

class `cdrouter.testsuites.Error` (***kwargs*)
Model for CDRouter Start Errors.

Parameters

- **id** – (optional) Testsuite ID as an int.
- **name** – (optional) Name as string.
- **index** – (optional) Index as int.
- **description** – (optional) Description as string.

class `cdrouter.testsuites.Testvar` (***kwargs*)
Model for CDRouter Start Errors.

Parameters

- **id** – (optional) Testsuite ID as an int.
- **name** – (optional) Name as a string.
- **index** – (optional) Index as an int.
- **humanname** – (optional) Human-readable name as a string.
- **display** – (optional) Display name as a string.
- **dataclass** – (optional) Data-type as a string.
- **addedin** – (optional) Added-in info as a string.

- **deprecatedin** – (optional) Deprecated-in info as a string.
- **obsoletedin** – (optional) Obsoleted-in info as a string.
- **min** – (optional) Minimum value as a string.
- **max** – (optional) Maximum value as a string.
- **length** – (optional) Required length as a string.
- **description** – (optional) Description as a string.
- **default** – (optional) Default value as a string.
- **defaultdisabled** – (optional) Bool *True* if testvar has no default value.
- **dyndefault** – (optional) Bool *True* if testvar’s default value is dynamically calculated.
- **keywords** – (optional) Accepted values as a string list.
- **alsoaccept** – (optional) Also-accepted values as a string list.
- **wildcard** – (optional) Bool *True* if testvar is a wildcard testvar.
- **instances** – (optional) Number of allowed wildcard instances as an int.
- **parent** – (optional) Parent wildcard testvar name as a string.
- **children** – (optional) Child testvars as a string list.
- **tests** – (optional) Test names as a string list.

class `cdrouter.testsuites.Search` (***kwargs*)
Model for CDRouter Testsuite Searches.

Parameters

- **addons** – (optional) *testsuites.Group* list
- **modules** – (optional) *testsuites.Module* list
- **tests** – (optional) *testsuites.Test* list
- **reasons** – (optional) *testsuites.Label* list
- **errors** – (optional) *testsuites.Error* list
- **testvars** – (optional) *testsuites.Testvar* list

2.20 cdrouter.users

class `cdrouter.users.UsersService` (*service*)
Service for accessing CDRouter Users.

bulk_copy (*ids*)
Bulk copy a set of users.

Parameters *ids* – String list of user IDs.

Returns *users.User* list

bulk_delete (*ids=None, filter=None, type=None, all=False*)
Bulk delete a set of users.

Parameters

- **ids** – (optional) String list of user IDs.

- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

bulk_edit (*_fields*, *ids=None*, *filter=None*, *type=None*, *all=False*)

Bulk edit a set of users.

Parameters

- **_fields** – *users.User* object
- **ids** – (optional) String list of user IDs.
- **filter** – (optional) String list of filters.
- **type** – (optional) *union* or *inter* as string.
- **all** – (optional) Apply to all if bool *True*.

change_password (*id*, *new*, *old=None*, *change_token=True*)

Change a user's password.

Parameters

- **id** – User ID as string.
- **new** – New password as string.
- **old** – (optional) Old password as string (required if performing action as non-admin).
- **change_token** – (optional) If bool *True*, also generate a new API token for user.

Returns *users.User* object

Return type *users.User*

change_token (*id*)

Change a user's token.

Parameters **id** – User ID as string.

Returns *users.User* object

Return type *users.User*

create (*resource*)

Create a new user.

Parameters **resource** – *users.User* object

Returns *users.User* object

Return type *users.User*

delete (*id*)

Delete a user.

Parameters **id** – User ID as string.

edit (*resource*)

Edit a user.

Parameters **resource** – *users.User* object

Returns *users.User* object

Return type *users.User*

get (*id*)

Get a user.

Parameters **id** – User ID as string.

Returns *users.User* object

Return type *users.User*

get_by_name (*name*)

Get a user by name.

Parameters **name** – User name as string.

Returns *users.User* object

Return type *users.User*

iter_list (**args, **kwargs*)

Get a list of users. Whereas `list` fetches a single page of users according to its `limit` and `page` arguments, `iter_list` returns all users by internally making successive calls to `list`.

Parameters

- **args** – Arguments that `list` takes.
- **kwargs** – Optional arguments that `list` takes.

Returns *users.User* list

list (*filter=None, type=None, sort=None, limit=None, page=None*)

Get a list of users.

Parameters

- **filter** – (optional) Filters to apply as a string list.
- **type** – (optional) *union* or *inter* as string.
- **sort** – (optional) Sort fields to apply as string list.
- **limit** – (optional) Limit returned list length.
- **page** – (optional) Page to return.

Returns *users.Page* object

class `cdrouter.users.User` (***kwargs*)

Model for CDRouter Users.

Parameters

- **id** – (optional) User ID as string.
- **admin** – (optional) Bool *True* if user is an administrator.
- **disabled** – (optional) Bool *True* if user is disabled.
- **name** – (optional) User name as string.
- **description** – (optional) User description as string.
- **created** – (optional) User creation time as *DateTime*.
- **updated** – (optional) User last-updated time as *DateTime*.
- **token** – (optional) User's API token as string.

class `cdrouter.users.Page`

Named tuple for a page of list response data.

Parameters

- **data** – `users.User` list
- **links** – `cdrouter.Links` object

C

cdrouter, 3

A

all_stats() (cdrouter.results.ResultsService method), 22
 AllStats (class in cdrouter.results), 29
 Analysis (class in cdrouter.packages), 22
 analyze() (cdrouter.packages.PackagesService method), 19
 Annotation (class in cdrouter.annotations), 35
 annotations (cdrouter.CDRouter attribute), 3
 AnnotationsService (class in cdrouter.annotations), 34
 ASCII (class in cdrouter.captures), 39
 ascii() (cdrouter.captures.CapturesService method), 35
 ASCIIByte (class in cdrouter.captures), 38
 ASCIIFrame (class in cdrouter.captures), 39
 ASCIILine (class in cdrouter.captures), 38
 Attachment (class in cdrouter.attachments), 16
 attachments (cdrouter.CDRouter attribute), 3
 AttachmentsService (class in cdrouter.attachments), 15
 authenticate() (cdrouter.CDRouter method), 3

B

bulk_copy() (cdrouter.configs.ConfigsService method), 7
 bulk_copy() (cdrouter.devices.DevicesService method), 12
 bulk_copy() (cdrouter.packages.PackagesService method), 19
 bulk_copy() (cdrouter.results.ResultsService method), 22
 bulk_copy() (cdrouter.users.UsersService method), 54
 bulk_delete() (cdrouter.configs.ConfigsService method), 7
 bulk_delete() (cdrouter.devices.DevicesService method), 12
 bulk_delete() (cdrouter.jobs.JobsService method), 17
 bulk_delete() (cdrouter.packages.PackagesService method), 19
 bulk_delete() (cdrouter.results.ResultsService method), 22
 bulk_delete() (cdrouter.users.UsersService method), 54
 bulk_edit() (cdrouter.configs.ConfigsService method), 7
 bulk_edit() (cdrouter.devices.DevicesService method), 12

bulk_edit() (cdrouter.packages.PackagesService method), 19
 bulk_edit() (cdrouter.results.ResultsService method), 23
 bulk_edit() (cdrouter.users.UsersService method), 55
 bulk_edit_testvars() (cdrouter.configs.ConfigsService method), 7
 bulk_export() (cdrouter.configs.ConfigsService method), 8
 bulk_export() (cdrouter.devices.DevicesService method), 12
 bulk_export() (cdrouter.exports.ExportsService method), 43
 bulk_export() (cdrouter.packages.PackagesService method), 19
 bulk_export() (cdrouter.results.ResultsService method), 23
 bulk_launch() (cdrouter.jobs.JobsService method), 17

C

Capture (class in cdrouter.captures), 37
 captures (cdrouter.CDRouter attribute), 4
 CapturesService (class in cdrouter.captures), 35
 CDRouter (class in cdrouter), 3
 cdrouter (module), 3
 CDRouterError (class in cdrouter.cdrouter), 4
 change_password() (cdrouter.users.UsersService method), 55
 change_token() (cdrouter.users.UsersService method), 55
 check_config() (cdrouter.configs.ConfigsService method), 8
 check_for_lounge_upgrade() (cdrouter.system.SystemService method), 44
 CheckConfig (class in cdrouter.configs), 11
 CloudShark (class in cdrouter.captures), 39
 commit() (cdrouter.imports.ImportsService method), 41
 Config (class in cdrouter.configs), 10
 ConfigError (class in cdrouter.configs), 11
 configs (cdrouter.CDRouter attribute), 4
 ConfigsService (class in cdrouter.configs), 7
 contained_by() (cdrouter.filters.Field method), 5

contains() (cdrouter.filters.Field method), 6
create() (cdrouter.annotations.AnnotationsService method), 34
create() (cdrouter.attachments.AttachmentsService method), 15
create() (cdrouter.configs.ConfigsService method), 8
create() (cdrouter.devices.DevicesService method), 12
create() (cdrouter.highlights.HighlightsService method), 39
create() (cdrouter.packages.PackagesService method), 20
create() (cdrouter.users.UsersService method), 55
create_or_edit() (cdrouter.annotations.AnnotationsService method), 34
create_or_edit() (cdrouter.highlights.HighlightsService method), 39

D

Decode (class in cdrouter.captures), 38
decode() (cdrouter.captures.CapturesService method), 36
delete() (cdrouter.annotations.AnnotationsService method), 34
delete() (cdrouter.attachments.AttachmentsService method), 15
delete() (cdrouter.configs.ConfigsService method), 8
delete() (cdrouter.devices.DevicesService method), 12
delete() (cdrouter.highlights.HighlightsService method), 39
delete() (cdrouter.imports.ImportsService method), 41
delete() (cdrouter.jobs.JobsService method), 17
delete() (cdrouter.packages.PackagesService method), 20
delete() (cdrouter.results.ResultsService method), 23
delete() (cdrouter.tags.TagsService method), 48
delete() (cdrouter.users.UsersService method), 55
delete_testvar() (cdrouter.configs.ConfigsService method), 8
Device (class in cdrouter.devices), 14
DeviceCount (class in cdrouter.results), 29
devices (cdrouter.CDRouter attribute), 4
DevicesService (class in cdrouter.devices), 12
diagnostics() (cdrouter.system.SystemService method), 44
download() (cdrouter.attachments.AttachmentsService method), 15
download() (cdrouter.captures.CapturesService method), 36
download_logdir_archive() (cdrouter.results.ResultsService method), 23

E

edit() (cdrouter.annotations.AnnotationsService method), 34
edit() (cdrouter.attachments.AttachmentsService method), 15

edit() (cdrouter.configs.ConfigsService method), 8
edit() (cdrouter.devices.DevicesService method), 13
edit() (cdrouter.highlights.HighlightsService method), 40
edit() (cdrouter.jobs.JobsService method), 17
edit() (cdrouter.packages.PackagesService method), 20
edit() (cdrouter.results.ResultsService method), 23
edit() (cdrouter.tags.TagsService method), 48
edit() (cdrouter.testresults.TestResultsService method), 31
edit() (cdrouter.users.UsersService method), 55
edit_preferences() (cdrouter.system.SystemService method), 44
edit_shares() (cdrouter.configs.ConfigsService method), 8
edit_shares() (cdrouter.devices.DevicesService method), 13
edit_shares() (cdrouter.packages.PackagesService method), 20
edit_shares() (cdrouter.results.ResultsService method), 23
edit_testvar() (cdrouter.configs.ConfigsService method), 9
eq() (cdrouter.filters.Field method), 6
Error (class in cdrouter.testsuites), 53
export() (cdrouter.configs.ConfigsService method), 9
export() (cdrouter.devices.DevicesService method), 13
export() (cdrouter.packages.PackagesService method), 20
export() (cdrouter.results.ResultsService method), 24
exports (cdrouter.CDRouter attribute), 4
ExportsService (class in cdrouter.exports), 43

F

Field (class in cdrouter.captures), 38
Field (class in cdrouter.filters), 5

G

ge() (cdrouter.filters.Field method), 6
get() (cdrouter.annotations.AnnotationsService method), 35
get() (cdrouter.attachments.AttachmentsService method), 15
get() (cdrouter.captures.CapturesService method), 36
get() (cdrouter.configs.ConfigsService method), 9
get() (cdrouter.devices.DevicesService method), 13
get() (cdrouter.highlights.HighlightsService method), 40
get() (cdrouter.imports.ImportsService method), 41
get() (cdrouter.jobs.JobsService method), 17
get() (cdrouter.packages.PackagesService method), 20
get() (cdrouter.results.ResultsService method), 24
get() (cdrouter.tags.TagsService method), 48
get() (cdrouter.testresults.TestResultsService method), 31
get() (cdrouter.users.UsersService method), 55
get_by_name() (cdrouter.configs.ConfigsService method), 9

- get_by_name() (cdrouter.devices.DevicesService method), 13
 get_by_name() (cdrouter.packages.PackagesService method), 20
 get_by_name() (cdrouter.users.UsersService method), 56
 get_commit_request() (cdrouter.imports.ImportsService method), 41
 get_error() (cdrouter.testsuites.TestsuitesService method), 49
 get_group() (cdrouter.testsuites.TestsuitesService method), 49
 get_label() (cdrouter.testsuites.TestsuitesService method), 50
 get_log() (cdrouter.testresults.TestResultsService method), 31
 get_log_plaintext() (cdrouter.testresults.TestResultsService method), 31
 get_logdir_file() (cdrouter.results.ResultsService method), 24
 get_module() (cdrouter.testsuites.TestsuitesService method), 50
 get_networks() (cdrouter.configs.ConfigsService method), 9
 get_new() (cdrouter.configs.ConfigsService method), 9
 get_plaintext() (cdrouter.configs.ConfigsService method), 9
 get_preferences() (cdrouter.system.SystemService method), 44
 get_shares() (cdrouter.configs.ConfigsService method), 9
 get_shares() (cdrouter.devices.DevicesService method), 13
 get_shares() (cdrouter.packages.PackagesService method), 20
 get_shares() (cdrouter.results.ResultsService method), 24
 get_test() (cdrouter.testsuites.TestsuitesService method), 50
 get_test_metric() (cdrouter.results.ResultsService method), 24
 get_test_metric_csv() (cdrouter.results.ResultsService method), 24
 get_testvar() (cdrouter.configs.ConfigsService method), 9
 get_testvar() (cdrouter.testsuites.TestsuitesService method), 50
 Group (class in cdrouter.testsuites), 52
 gt() (cdrouter.filters.Field method), 6
- ## H
- Highlight (class in cdrouter.highlights), 40
 highlights (cdrouter.CDRouter attribute), 4
 HighlightsService (class in cdrouter.highlights), 39
 history (cdrouter.CDRouter attribute), 4
 History (class in cdrouter.history), 44
 HistoryService (class in cdrouter.history), 43
 hostname() (cdrouter.system.SystemService method), 45
- ## I
- Import (class in cdrouter.imports), 42
 imports (cdrouter.CDRouter attribute), 4
 ImportsService (class in cdrouter.imports), 41
 Info (class in cdrouter.testsuites), 51
 info() (cdrouter.system.SystemService method), 45
 info() (cdrouter.testsuites.TestsuitesService method), 50
 Interface (class in cdrouter.system), 47
 InterfaceAddr (class in cdrouter.system), 47
 InterfaceFlags (class in cdrouter.system), 47
 interfaces() (cdrouter.system.SystemService method), 45
 iter_list() (cdrouter.attachments.AttachmentsService method), 16
 iter_list() (cdrouter.configs.ConfigsService method), 10
 iter_list() (cdrouter.devices.DevicesService method), 13
 iter_list() (cdrouter.history.HistoryService method), 43
 iter_list() (cdrouter.jobs.JobsService method), 17
 iter_list() (cdrouter.packages.PackagesService method), 20
 iter_list() (cdrouter.results.ResultsService method), 24
 iter_list() (cdrouter.testresults.TestResultsService method), 31
 iter_list() (cdrouter.users.UsersService method), 56
- ## J
- Job (class in cdrouter.jobs), 18
 jobs (cdrouter.CDRouter attribute), 4
 JobsService (class in cdrouter.jobs), 17
- ## L
- Label (class in cdrouter.testsuites), 53
 latest_lounge_release() (cdrouter.system.SystemService method), 45
 launch() (cdrouter.jobs.JobsService method), 18
 le() (cdrouter.filters.Field method), 6
 Line (class in cdrouter.testresults), 33
 Links (class in cdrouter.cdrouter), 4
 list() (cdrouter.annotations.AnnotationsService method), 35
 list() (cdrouter.attachments.AttachmentsService method), 16
 list() (cdrouter.captures.CapturesService method), 36
 list() (cdrouter.configs.ConfigsService method), 10
 list() (cdrouter.devices.DevicesService method), 13
 list() (cdrouter.highlights.HighlightsService method), 40
 list() (cdrouter.history.HistoryService method), 43
 list() (cdrouter.imports.ImportsService method), 41
 list() (cdrouter.jobs.JobsService method), 18
 list() (cdrouter.packages.PackagesService method), 21
 list() (cdrouter.results.ResultsService method), 25
 list() (cdrouter.tags.TagsService method), 49
 list() (cdrouter.testresults.TestResultsService method), 32
 list() (cdrouter.users.UsersService method), 56

list_csv() (cdrouter.results.ResultsService method), 25
list_csv() (cdrouter.testresults.TestResultsService method), 32
list_errors() (cdrouter.testsuites.TestsuitesService method), 50
list_groups() (cdrouter.testsuites.TestsuitesService method), 50
list_labels() (cdrouter.testsuites.TestsuitesService method), 51
list_logdir() (cdrouter.results.ResultsService method), 25
list_modules() (cdrouter.testsuites.TestsuitesService method), 51
list_tests() (cdrouter.testsuites.TestsuitesService method), 51
list_testvars() (cdrouter.configs.ConfigsService method), 10
list_testvars() (cdrouter.testsuites.TestsuitesService method), 51
live() (cdrouter.system.SystemService method), 45
Log (class in cdrouter.testresults), 33
LogDirFile (class in cdrouter.results), 29
lounge_update_license() (cdrouter.system.SystemService method), 45
lounge_upgrade() (cdrouter.system.SystemService method), 45
lt() (cdrouter.filters.Field method), 6

M

manual_update_license() (cdrouter.system.SystemService method), 45
manual_upgrade() (cdrouter.system.SystemService method), 45
match() (cdrouter.filters.Field method), 6
Metric (class in cdrouter.results), 29
Module (class in cdrouter.testsuites), 52

N

ne() (cdrouter.filters.Field method), 6
Networks (class in cdrouter.configs), 11
not_() (cdrouter.filters.Field method), 7

O

Options (class in cdrouter.jobs), 18
Options (class in cdrouter.packages), 21
Options (class in cdrouter.results), 29
overlaps() (cdrouter.filters.Field method), 7

P

Package (class in cdrouter.packages), 21
PackageCount (class in cdrouter.results), 28
packages (cdrouter.CDRouter attribute), 4
PackagesService (class in cdrouter.packages), 19

Packet (class in cdrouter.captures), 38
Page (class in cdrouter.attachments), 16
Page (class in cdrouter.configs), 11
Page (class in cdrouter.devices), 14
Page (class in cdrouter.history), 44
Page (class in cdrouter.jobs), 19
Page (class in cdrouter.packages), 22
Page (class in cdrouter.results), 27
Page (class in cdrouter.testresults), 33
Page (class in cdrouter.users), 56
pause() (cdrouter.results.ResultsService method), 25
pause_end_of_loop() (cdrouter.results.ResultsService method), 25
pause_end_of_test() (cdrouter.results.ResultsService method), 26
Preferences (class in cdrouter.system), 47
Progress (class in cdrouter.results), 28
Proto (class in cdrouter.captures), 38

R

Release (class in cdrouter.system), 46
ReleaseLatest (class in cdrouter.system), 46
Request (class in cdrouter.imports), 42
Resource (class in cdrouter.imports), 42
ResourceTags (class in cdrouter.tags), 49
Response (class in cdrouter.imports), 42
restart() (cdrouter.system.SystemService method), 46
Result (class in cdrouter.results), 26, 30
ResultBreakdown (class in cdrouter.results), 27
results (cdrouter.CDRouter attribute), 4
ResultsService (class in cdrouter.results), 22

S

Search (class in cdrouter.testsuites), 54
search() (cdrouter.testsuites.TestsuitesService method), 51
Section (class in cdrouter.captures), 37
send_to_cloudshark() (cdrouter.captures.CapturesService method), 36
set_stats() (cdrouter.results.ResultsService method), 26
SetStats (class in cdrouter.results), 28
Share (class in cdrouter.cdrouter), 5
single_stats() (cdrouter.results.ResultsService method), 26
SingleStats (class in cdrouter.results), 28
stage_import_from_file() (cdrouter.imports.ImportsService method), 41
stage_import_from_filesystem() (cdrouter.imports.ImportsService method), 41
stage_import_from_url() (cdrouter.imports.ImportsService method), 41
stop() (cdrouter.results.ResultsService method), 26

stop_end_of_loop() (cdrouter.results.ResultsService method), 26
 stop_end_of_test() (cdrouter.results.ResultsService method), 26
 Structure (class in cdrouter.captures), 37
 Summary (class in cdrouter.captures), 37
 Summary (class in cdrouter.testresults), 33
 summary() (cdrouter.captures.CapturesService method), 37
 SummaryPacket (class in cdrouter.captures), 37
 system (cdrouter.CDRouter attribute), 4
 SystemService (class in cdrouter.system), 44

T

Tag (class in cdrouter.tags), 49
 tags (cdrouter.CDRouter attribute), 4
 TagsService (class in cdrouter.tags), 48
 Test (class in cdrouter.testsuites), 52
 TestCount (class in cdrouter.results), 27
 TestDuration (class in cdrouter.results), 27
 TestResult (class in cdrouter.testresults), 32
 TestResultBreakdown (class in cdrouter.results), 28
 TestResultsService (class in cdrouter.testresults), 31
 tests (cdrouter.CDRouter attribute), 4
 Testsuite (class in cdrouter.system), 46
 testsuites (cdrouter.CDRouter attribute), 4
 TestsuitesService (class in cdrouter.testsuites), 49
 Testvar (class in cdrouter.configs), 11
 Testvar (class in cdrouter.testsuites), 53
 thumbnail() (cdrouter.attachments.AttachmentsService method), 16
 time() (cdrouter.system.SystemService method), 46
 TimeBreakdown (class in cdrouter.results), 28

U

unpause() (cdrouter.results.ResultsService method), 26
 Upgrade (class in cdrouter.system), 47
 upgrade_config() (cdrouter.configs.ConfigsService method), 10
 UpgradeConfig (class in cdrouter.configs), 11
 User (class in cdrouter.users), 56
 users (cdrouter.CDRouter attribute), 4
 UsersService (class in cdrouter.users), 54

V

Version (class in cdrouter.system), 46