

# Package ‘analogsea’

June 27, 2019

**Title** Interface to 'Digital Ocean'

**Description** Provides a set of functions for interacting with the 'Digital Ocean' API at <<https://developers.digitalocean.com/documentation/v2>>, including creating images, destroying them, rebooting, getting details on regions, and available images.

**Version** 0.7.2

**License** MIT + file LICENSE

**URL** <https://github.com/sckott/analogsea>

**BugReports** <https://github.com/sckott/analogsea/issues>

**LazyData** yes

**VignetteBuilder** knitr

**Encoding** UTF-8

**Imports** stats, utils, httr (>= 1.2.0), jsonlite (>= 1.1), magrittr, yaml, aws.s3

**Suggests** roxygen2 (>= 6.1.1), testthat, knitr, ssh (>= 0.6)

**RoxygenNote** 6.1.1

**NeedsCompilation** no

**Author** Scott Chamberlain [aut, cre],  
Hadley Wickham [aut],  
Winston Chang [aut],  
Bob Rudis [ctb],  
Bryce Mecum [ctb] (<<https://orcid.org/0000-0002-0381-3766>>),  
RStudio [cph]

**Maintainer** Scott Chamberlain <[myrmecocystus@gmail.com](mailto:myrmecocystus@gmail.com)>

**Repository** CRAN

**Date/Publication** 2019-06-27 20:50:31 UTC

**R topics documented:**

analogsea-package	3
account	4
action	5
actions	5
adjectives	6
analogsea-defunct	6
analogsea-deprecated	7
as.certificate	7
as.domain_record	8
as.firewall	10
as.image	11
as.project	12
as.snapshot	13
as.space	14
as.volume	14
certificate_delete	16
debian	17
docklets_create	18
docklet_create	20
domains	24
domain_create	24
do_oauth	25
do_options	26
droplet	27
droplets	28
droplets_cost	28
droplets_create	29
droplet_action	31
droplet_actions	32
droplet_create	33
droplet_delete	35
droplet_do_actions	36
droplet_execute	37
droplet_freeze	38
droplet_functions	39
droplet_kernels_list	41
droplet_modify	42
droplet_reuse	43
droplet_snapshot	44
droplet_ssh	45
droplet_upgrades_list	46
droplet_wait	47
firewall_add_droplets	48
firewall_add_tags	48
firewall_delete	49
image_actions	50

image_convert . . . . .	50
image_delete . . . . .	51
image_transfer . . . . .	52
key-crud . . . . .	52
keys . . . . .	53
neighbors . . . . .	54
nouns . . . . .	54
project_create . . . . .	55
project_delete . . . . .	56
project_patch . . . . .	57
project_update . . . . .	57
regions . . . . .	58
resize . . . . .	59
sizes . . . . .	60
spaces . . . . .	60
spaces_GET . . . . .	61
spaces_info . . . . .	62
space_create . . . . .	63
standardise_keys . . . . .	63
tags . . . . .	64
tag_create . . . . .	65
tag_delete . . . . .	66
tag_resource . . . . .	66
tag_resource_delete . . . . .	67
volume_attach . . . . .	68
words . . . . .	69
<b>Index</b>	<b>70</b>

---

analogsea-package      *R client for Digital Ocean*

---

## Description

This package is an R client for Digital Ocean's RESTful API, and a set of scripts that allow you to install R, RStudio server, RStudio Shiny server, or OpenCPU server, in addition to common packages used. The goal here is to spin up a cloud R environment without leaving R, and requiring no knowledge other than R. Of course if you are more experienced you can log in on the command line and modify anything you want, but for those that just want a quick cloud R environment, this should be one of the easiest options.

You need to authenticate to use this package. Get your auth token at <https://cloud.digitalocean.com/settings/api/tokens>  
 - See [do\\_oauth](#) for more on authentication.

## ssh keys

**analogsea** allows you to interact with your droplet(s) from R via SSH. To do this you need to setup SSH keys with Digital Ocean. Make sure you provide Digital Ocean your public key at [https://cloud.digitalocean.com/ssh\\_keys](https://cloud.digitalocean.com/ssh_keys). GitHub has some good advice on creating a new public key if you don't already have one: <https://help.github.com/articles/generating-ssh-keys>.

Note that when using ssh, you'll likely get warnings like "The authenticity of host can't be established ...". This is normal, don't be worried about this.

Note that if you want to connect over SSH to a droplet you have to create the droplet with an SSH key with the ssh\_keys parameter. If you don't you can still interact with the droplet via the Digital Ocean API, but you can't access the droplet over SSH.

## Author(s)

Scott Chamberlain <myrmecocystus@gmail.com>

Hadley Wickham <hadley@rstudio.com>

Winston Chang <winston@stdout.org>

Bob Rudis <bob@rudis.net>

Bryce Mecum <brycemecum@gmail.com>

---

account	<i>Get account information</i>
---------	--------------------------------

---

## Description

Get account information

## Usage

```
account(...)
```

## Arguments

... Options passed down to [GET](#)

## Examples

```
## Not run:  
account()  
  
## End(Not run)
```

---

action	<i>Retrieve an existing action by action id</i>
--------	---

---

**Description**

Retrieve an existing action by action id

**Usage**

```
action(actionid, ...)
```

**Arguments**

actionid	(integer) Optional. An action id.
...	Additional arguments passed down to low-level API function (do_*)

**Examples**

```
## Not run:
d <- droplet_create()
droplet_actions(d)[[1]]$id %>% action()

## End(Not run)
```

---

actions	<i>List actions across all droplets.</i>
---------	--

---

**Description**

"Actions are records of events that have occurred on the resources in your account. These can be things like rebooting a Droplet, or transferring an image to a new region."

**Usage**

```
actions(..., page = 1, per_page = 25)

action_wait(x)
```

**Arguments**

...	Additional arguments passed down to low-level API function (do_*)
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
x	Input object

**Details**

"An action object is created every time one of these actions is initiated. The action object contains information about the current status of the action, start and complete timestamps, and the associated resource type and ID."

"Every action that creates an action object is available through this endpoint. Completed actions are not removed from this list and are always available for querying."

**Examples**

```
## Not run:
actions()

## End(Not run)
```

---

adjectives	<i>Adjectives to use for seeding random word selection when name not given for a droplet</i>
------------	--

---

**Description**

Adjectives to use for seeding random word selection when name not given for a droplet

**Details**

A vector of 999 adjectives. From the GitHub repo <https://github.com/dariusk/corpora> - the data is licensed CC0.

---

analogsea-defunct	<i>Defunct functions in <b>analogsea</b></i>
-------------------	--

---

**Description**

These functions are gone, no longer available.

**Details**

- `tag_rename`: DigitalOcean removed this functionality from their API. See <https://developers.digitalocean.com/documentation/changelog/api-v2/deprecating-update-tag/> for details.

---

analogsea-deprecated    *Deprecated functions in analogsea*

---

### Description

None at the moment

---

as.certificate            *Get list of certificate and their metadata, or a single certificate*

---

### Description

Get list of certificate and their metadata, or a single certificate

### Usage

```
as.certificate(x)
```

```
certificates(page = 1, per_page = 25, ...)
```

```
certificate(id, ...)
```

```
certificate_create(name, type, private_key = NULL,
  leaf_certificate = NULL, certificate_chain = NULL,
  dns_names = NULL, ...)
```

### Arguments

x	Object to coerce to an certificate
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
...	Additional arguments passed down to low-level API function (do_*)
id	(numeric) certificate id
name	(character) a certificate name
type	(character) a string representing the type of certificate. The value should be "custom" for a user-uploaded certificate or "lets_encrypt" for one automatically generated with Let's Encrypt. If not provided, "custom" will be assumed by default.
private_key	(character) the contents of a PEM-formatted private-key corresponding to the SSL certificate
leaf_certificate	(character) the contents of a PEM-formatted public SSL certificate

certificate\_chain (character) the full PEM-formatted trust chain between the certificate authority's certificate and your domain's SSL certificate

dns\_names (character) a vector of fully qualified domain names (FQDNs) for which the certificate will be issued. The domains must be managed using DigitalOcean's DNS

### Examples

```
## Not run:
# list certificates
certificates()

# create a certificate (create a fake domain first)
d <- domain_create('tablesandchairsbunnies.stuff', '107.170.220.59')
certificate_create("mycert", "lets_encrypt",
  dns_names = list('tablesandchairsbunnies.stuff'))

## End(Not run)
```

---

as.domain\_record      *List, create, update, and delete domain records.*

---

### Description

List, create, update, and delete domain records.

### Usage

```
as.domain_record(x, domain)

## S3 method for class 'list'
as.domain_record(x, domain)

## S3 method for class 'domain_record'
as.domain_record(x, domain)

## S3 method for class 'domain_record'
as.url(x, ...)

domain_records(domain, ...)

domain_record(domain, domain_record_id, ...)

domain_record_create(domain, type, name = NULL, data = NULL,
  priority = NULL, port = NULL, ttl = NULL, weight = NULL,
  flags = NULL, tag = NULL, ...)
```



```
domain_record_update(domain_record, type = NULL, name = NULL,
  data = NULL, priority = NULL, port = NULL, ttl = NULL,
  weight = NULL, flags = NULL, tag = NULL, ...)
```

```
domain_record_delete(domain_record, ...)
```

## Arguments

x	Domain record.
domain	(domain) Required. Domain Name (e.g. domain.com), specifies the domain for which to create a record.
...	Further args passed on the curl call to the web.
domain_record_id	(numeric/integer) A domain record ID
type	(character) Required. The type of record you would like to create. 'A', 'CNAME', 'NS', 'TXT', 'MX' or 'SRV'
name	(character) The host name, alias, or service being defined by the record. Required for 'A', 'CNAME', 'TXT' and 'SRV' records
data	(character) Variable data depending on record type. Required for 'A', 'AAAA', 'CNAME', 'MX', 'TXT', 'SRV', and 'NS' records
priority	(integer) Required for 'SRV' and 'MX' records
port	(integer) Required for 'SRV' records
ttl	(numeric/integer) Time to live for the record, in seconds. This defines the time frame that clients can cache queried information before a refresh should be requested. If not set, default is 1800
weight	(integer) Required for 'SRV' records
flags	(integer) An unsigned integer between 0-255 used for CAA records
tag	(character) The parameter tag for CAA records. Valid values are "issue", "wild-issue", or "iodef"
domain_record	A domain record, or anything coercible to one

## Examples

```
## Not run:
# list domains, then get domain records
(d <- domains()[[1]])
(rec <- domain_records(d))

# create a domain
dom <- domain_create('tablesandchairsbunnies.info', '107.170.220.59')
## list domain records
domain_records(dom)

# create a domain record
dr <- domain_record_create(dom, "CNAME", name = "helloworld", data = "@")
domain_record(dom, dr$id)
```

```
# update a domain record
dru <- domain_record_update(domain_record = dr, name = "blog")

# delete a domain record
domain_record_delete(dr)

## End(Not run)
```

---

as.firewall

*Get list of firewalls and their metadata, or a single firewall*


---

### Description

Get list of firewalls and their metadata, or a single firewall

### Usage

```
as.firewall(x)

firewalls(page = 1, per_page = 25, ...)

firewall(id, ...)

firewall_create(name, inbound_rules, outbound_rules, droplet_ids = NULL,
  tags = NULL, ...)

firewall_update(name, inbound_rules, outbound_rules, droplet_ids = NULL,
  tags = NULL, ...)
```

### Arguments

x	Object to coerce to an firewall.
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
...	Additional arguments passed down to low-level API function (do_*)
id	(numeric) firewall id.
name	(character) a firewall name
inbound_rules	(list) inbound rules
outbound_rules	(list) outbound rules
droplet_ids	(numeric/integer) droplet ids
tags	(character) tag strings

**Examples**

```
## Not run:
# list firewalls
firewalls()

# create a firewall
inbound <- list(list(protocol = "tcp", ports = "80",
  sources = list(addresses = "18.0.0.0/8")))
outbound <- list(list(protocol = "tcp", ports = "80",
  destinations = list(addresses = "0.0.0.0/0")))
res <- firewall_create("myfirewall", inbound, outbound)
res

# get a firewall
firewall("d19b900b-b03e-4e5d-aa85-2ff8d2786f28")
as.firewall("d19b900b-b03e-4e5d-aa85-2ff8d2786f28")

## End(Not run)
```

as.image

*Get list of images and their metadata, or a single image***Description**

Get list of images and their metadata, or a single image

**Usage**

```
as.image(x)

images(private = FALSE, type = NULL, page = 1, per_page = 25,
  public = TRUE, ...)

image(id, ...)
```

**Arguments**

x	Object to coerce to an image.
private	Include public images? If FALSE, returns only the images that you've created (with snapshots).
type	(character) One of distribution or application. Default: NULL (no type parameter passed)
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
public	Include public images? If FALSE, returns only the images that you've created (with snapshots).
...	Additional arguments passed down to low-level API function (do_*)
id	(numeric) Image id.

**Examples**

```
## Not run:
images()

# list private images
images(private = TRUE)

# list by type
images(type = "distribution")
images(type = "application")

# paging
images(per_page = 3)
images(per_page = 3, page = 2)

## End(Not run)
```

---

as.project

*Get list of projects and their metadata, or a single project*


---

**Description**

Get list of projects and their metadata, or a single project

**Usage**

```
as.project(x)

projects(page = NULL, per_page = NULL, ...)

project(id = "default", ...)
```

**Arguments**

x	Object to coerce to a project.
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
...	Additional arguments passed down to low-level API function (do_*)
id	(character) project id, default: "default"

**Examples**

```
## Not run:
projects()
project("f9597f51-6fb0-492c-866d-bc67bff6d409")

## End(Not run)
```

---

as.snapshot	<i>Snapshot operations</i>
-------------	----------------------------

---

### Description

**snapshot** retrieve a snapshot

**snapshots** list snapshots, all, droplets, or volumes

**snapshot\_delete** delete a snapshot

### Usage

```
as.snapshot(x)
```

```
snapshots(type = NULL, ...)
```

```
snapshot(id, ...)
```

```
snapshot_delete(snapshot, ...)
```

### Arguments

x	Object to coerce to an snapshot
type	(character) NULL (all snapshots), or one of droplet (droplet snapshots) or volume (volume snapshots)
...	Additional options passed down to <a href="#">GET</a> , <a href="#">POST</a> , etc.
id	A snapshot id (varies depending on droplet or volume ID)
snapshot	A snapshot, or something that can be coerced to a snapshot by <a href="#">as.snapshot</a> .

### Examples

```
## Not run:  
# list all snapshots  
(res <- snapshots())  
  
# list droplet snapshots  
snapshots(type = "droplet")  
  
# list volume snapshots  
snapshots(type = "volume")  
  
# get a single snapshot  
snapshot(res[[1]]$id)  
  
# delete a snapshot  
## a whole snapshot class object  
snapshot_delete(res[[2]])  
## by id
```

```

snapshot_delete(res[[2]]$id)
## by name
snapshot_delete(res[[2]]$name)

# delete many snapshots
lapply(snapshots(), snapshot_delete)

## End(Not run)

```

---

as.space                      *Coerce an object to a space*

---

### Description

Coerce an object to a space

### Usage

```
as.space(x)
```

### Arguments

x                      Object to coerce to a space

---

as.volume                      *Block storage operations*

---

### Description

**volume** get a single volume  
**volumes** list volumes  
**volume\_create** create a volume  
**volume\_snapshot\_create** create a snapshot of a volume  
**volume\_snapshots** list snapshots for a volume  
**volume\_delete** delete a volume

**Usage**

```

as.volume(x)

volumes(...)

volume(volume, ...)

volume_create(name, size, description = NULL, region = "nyc1",
  snapshot_id = NULL, filesystem_type = NULL,
  filesystem_label = NULL, tags = NULL, ...)

volume_snapshot_create(volume, name, ...)

volume_snapshots(volume, ...)

volume_delete(volume, ...)

```

**Arguments**

x	Object to coerce to an volume
...	Additional options passed down to <a href="#">GET</a> , <a href="#">POST</a> , etc.
volume	A volume, or something that can be coerced to a volume by <a href="#">as.volume</a> .
name	(character) Name of the new volume. required.
size	(integer) The size of the Block Storage volume in GiB
description	(character) An optional free-form text field to describe a Block Storage volume.
region	(character) The region where the Block Storage volume will be created. When setting a region, the value should be the slug identifier for the region. When you query a Block Storage volume, the entire region object will be returned. Should not be specified with a snapshot_id. Default: nyc1
snapshot_id	(integer) The unique identifier for the volume snapshot from which to create the volume. Should not be specified with a region_id.
filesystem_type	(character) The name of the filesystem type to be used on the volume. When provided, the volume will automatically be formatted to the specified filesystem type. Currently, the available options are "ext4" and "xfs". Pre-formatted volumes are automatically mounted when attached to Ubuntu, Debian, Fedora, Fedora Atomic, and CentOS Droplets created on or after April 26, 2018. Attaching pre-formatted volumes to other Droplets is not recommended.
filesystem_label	(character) The label to be applied to the filesystem. Labels for ext4 type filesystems may contain 16 characters while lables for xfs type filesystems are limited to 12 characters. May only be used in conjunction with filesystem_type.
tags	(character) tag names to apply to the Volume after it is created. Tag names can either be existing or new tags.

## Details

note that if you delete a volume, and it has a snapshot, the snapshot still exists, so beware

## Examples

```
## Not run:
# list volumes
volumes()

# create a volume
vol1 <- volume_create('testing', 5)
vol2 <- volume_create('foobar', 6, tags = c('stuff', 'things'))

# create snapshot of a volume
xx <- volume_snapshot_create(vol2, "howdy")

# list snapshots for a volume
volume_snapshots(xx)

# list volumes again
res <- volumes()

# get a single volume
## a whole volume class object
volume(res$testing)
## by id
volume(res[[1]]$id)
## by name
volume(res[[1]]$name)

# delete a volume
## a whole volume class object
volume_delete(res$testing)
## by id
volume_delete(res[[1]]$id)
## by name
volume_delete(res[[1]]$name)

# delete many volumes
lapply(volumes(), volume_delete)

## End(Not run)
```

---

certificate\_delete      *Delete a certificate*

---

## Description

Delete a certificate



**Usage**

```
certificate_delete(id, ...)
```

**Arguments**

id	A certificate id (not the name) to delete
...	Options passed on to htrr::DELETE

---

debian	<i>Helpers for managing a debian droplets.</i>
--------	--

---

**Description**

Helpers for managing a debian droplets.

**Usage**

```
debian_add_swap(droplet)
debian_install_r(droplet)
debian_install_rstudio(droplet, user = "rstudio", password = "server",
  version = "0.99.484")
debian_install_shiny(droplet, version = "1.4.0.756")
debian_apt_get_update(droplet)
debian_apt_get_install(droplet, ...)
install_r_package(droplet, package, repo = "http://cran.rstudio.com")
```

**Arguments**

droplet	A droplet, or object that can be coerced to a droplet by <a href="#">as.droplet</a> .
user	Default username for Rstudio.
password	Default password for Rstudio.
version	Version of rstudio to install.
...	Arguments to apt-get install.
package	Name of R package to install.
repo	CRAN mirror to use.

**Examples**

```
## Not run:
d <- droplet_create()
d %>% debian_add_swap()
d %>% debian_apt_get_update()

d %>% debian_install_r()
d %>% debian_install_rstudio()

# Install libcurl, then build RCurl from source
d %>% debian_apt_get_install("libcurl4-openssl-dev")
d %>% install_r_package("RCurl")
droplet_delete(d)

## End(Not run)
```

---

docklets\_create

*Docklets: docker on droplets - create many docklets*


---

**Description**

Docklets: docker on droplets - create many docklets

**Usage**

```

docklets_create(names = NULL, size = getOption("do_size",
  "s-1vcpu-2gb"), region = getOption("do_region", "sfo2"),
  ssh_keys = getOption("do_ssh_keys", NULL),
  backups = getOption("do_backups", NULL), ipv6 = getOption("do_ipv6",
  NULL), private_networking = getOption("do_private_networking", NULL),
  tags = list(), wait = TRUE, image = "docker-18-04", ...)
```

**Arguments**

names	(character) Names of the droplets. The human-readable string you wish to use when displaying the Droplet name. The name, if set to a domain name managed in the DigitalOcean DNS management system, will configure a PTR record for the Droplet. The name set during creation will also determine the hostname for the Droplet in its internal configuration. Default: picks a random name from <a href="#">words</a> if none supplied.
size	(character) Size slug identifier. See <a href="#">sizes()</a> for a complete list. Default: s-1vcpu-1gb, the smallest
region	(character) The unique slug identifier for the region that you wish to deploy in. See <a href="#">regions()</a> for a complete list. Default: sfo2
ssh_keys	(character) A character vector of key names, an integer vector of key ids, or NULL, to use all keys in your account. Accounts with the corresponding private key will be able to log in to the droplet. See <a href="#">keys()</a> for a list of the keys that you've added. Default: NULL

backups	(logical) Enable backups. A boolean indicating whether automated backups should be enabled for the droplet. Automated backups can only be enabled when the droplet is created, and cost extra. Default: FALSE
ipv6	(logical) A boolean indicating whether IPv6 is enabled on the droplet.
private_networking	(logical) Use private networking. Private networking is currently only available in certain regions. Default: FALSE
tags	(character) A vector of tag names to apply to the Droplet after it is created. Tag names can either be existing or new tags. Default: list()
wait	If TRUE (default), wait until droplet has been initialised and is ready for use. If set to FALSE we return a droplet object right away after droplet creation request has been sent. Note that there won't be an IP address in the object yet. Note that waiting means we ping the DigitalOcean API to check on the status of your droplet, which uses up your API requests. The option <code>do.wait_time</code> can be set to any positive integer to determine how many seconds between pings. The default is 1 sec. Note that if you are creating droplets in a loop, parallel or otherwise, set <code>do.wait_time</code> within the loop instead of outside of it.
image	(character/numeric) The image ID of a public or private image, or the unique slug identifier for a public image. This image will be the base image for your droplet. See <a href="#">images()</a> for a complete list. Default: ubuntu-18-04-x64
...	Additional options passed down to <a href="#">POST</a>

## Value

Two or more droplet objects

## Missing droplet ID

If you get a droplet object back without an IP address, the IP address was not assigned when the payload was returned by DigitalOcean. Simply run `d <- droplet(d$id)` to update your droplet object and the IP address will populate.

## Examples

```
## Not run:
# if no names given, creates two droplets with random names
docklets_create()

# give names
docklets_create(names = c('drop1', 'drop2'))
docklets_create(names = c('drop3', 'drop4'))

## End(Not run)
```

---

docklet\_create      *Docklets: docker on droplets.*

---

## Description

Docklets: docker on droplets.

## Usage

```
docklet_create(name = random_name(), size = getOption("do_size",
  "s-1vcpu-2gb"), region = getOption("do_region", "sfo2"),
  ssh_keys = getOption("do_ssh_keys", NULL),
  backups = getOption("do_backups", NULL), ipv6 = getOption("do_ipv6",
  NULL), private_networking = getOption("do_private_networking", NULL),
  tags = list(), wait = TRUE, image = "docker-18-04", ...)

docklet_ps(droplet, all = TRUE, ssh_user = "root")

docklet_images(droplet, all = TRUE, ssh_user = "root")

docklet_pull(droplet, repo, ssh_user = "root", keyfile = NULL,
  ssh_passwd = NULL, verbose = FALSE)

docklet_run(droplet, ..., rm = FALSE, name = NULL, ssh_user = "root",
  keyfile = NULL, ssh_passwd = NULL, verbose = FALSE)

docklet_stop(droplet, container, ssh_user = "root")

docklet_rm(droplet, container, ssh_user = "root")

docklet_docker(droplet, cmd, args = NULL, docker_args = NULL,
  ssh_user = "root", keyfile = NULL, ssh_passwd = NULL,
  verbose = FALSE)

docklet_rstudio(droplet, user, password, email = "rstudio@example.com",
  img = "rocker/rstudio", port = "8787", volume = "", dir = "",
  browse = TRUE, add_users = FALSE, ssh_user = "root",
  keyfile = NULL, ssh_passwd = NULL, verbose = FALSE)

docklet_rstudio_addusers(droplet, user, password, img = "rocker/rstudio",
  port = "8787", ssh_user = "root", keyfile = NULL,
  ssh_passwd = NULL, verbose = FALSE)

docklet_shinyserver(droplet, img = "rocker/shiny", port = "3838",
  volume = "", dir = "", browse = TRUE, ssh_user = "root")

docklet_shinyapp(droplet, path, img = "rocker/shiny", port = "80",
```

```
dir = "", browse = TRUE, ssh_user = "root")
```

## Arguments

name	(character) Name of the droplet. The human-readable string you wish to use when displaying the Droplet name. The name, if set to a domain name managed in the DigitalOcean DNS management system, will configure a PTR record for the Droplet. The name set during creation will also determine the hostname for the Droplet in its internal configuration. Default: picks a random name from <a href="#">words</a> if none supplied.
size	(character) Size slug identifier. See <a href="#">sizes()</a> for a complete list. Default: s-1vcpu-2gb
region	(character) The unique slug identifier for the region that you wish to deploy in. See <a href="#">regions()</a> for a complete list. Default: sfo2
ssh_keys	(character) A character vector of key names, an integer vector of key ids, or NULL, to use all keys in your account. Accounts with the corresponding private key will be able to log in to the droplet. See <a href="#">keys()</a> for a list of the keys that you've added. Default: NULL
backups	(logical) Enable backups. A boolean indicating whether automated backups should be enabled for the droplet. Automated backups can only be enabled when the droplet is created, and cost extra. Default: FALSE
ipv6	(logical) A boolean indicating whether IPv6 is enabled on the droplet.
private_networking	(logical) Use private networking. Private networking is currently only available in certain regions. Default: FALSE
tags	(character) A vector of tag names to apply to the Droplet after it is created. Tag names can either be existing or new tags. Default: list()
wait	If TRUE (default), wait until droplet has been initialised and is ready for use. If set to FALSE we return a droplet object right away after droplet creation request has been sent. Note that there won't be an IP address in the object yet. Note that waiting means we ping the DigitalOcean API to check on the status of your droplet, which uses up your API requests. The option <code>do.wait_time</code> can be set to any positive integer to determine how many seconds between pings. The default is 1 sec. Note that if you are creating droplets in a loop, parallel or otherwise, set <code>do.wait_time</code> within the loop instead of outside of it.
image	(character/numeric) The image ID of a public or private image, or the unique slug identifier for a public image. This image will be the base image for your droplet. See <a href="#">images()</a> for a complete list. Default: ubuntu-18-04-x64
...	For <code>docketlet_create</code> , additional options passed down to <code>POST</code> . For <code>docketlet_run</code> , additional arguments combined and applied to docker statement.
droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .
all	(logical) List all containers or images. Default: TRUE
ssh_user	(character) User account for ssh commands against droplet. Default: root
repo	(character) Docker name, can be local to the Droplet or remote, e.g., rocker/rstudio

keyfile	Optional private key file.
ssh_passwd	Optional passphrase or callback function for authentication. Refer to the <code>ssh::ssh_connect</code> documentation for more details.
verbose	If TRUE, will print command before executing it.
rm	(logical) Automatically remove the container when it exits. Default: FALSE
container	(character) Container name, can be partial (though has to be unique)
cmd	(character) A docker command (e.g., "run")
args	(character) Docker args
docker_args	(character) Docker args
user	(character) User name. required.
password	(character) Password. required. can not be 'rstudio'
email	(character) E-mail address. Default: "rstudio@example.com"
img	(character) Docker image (not a DigitalOcean image). Default: 'rocker/rstudio'
port	(character) Port. Default: 8787
volume	(character) Volume. Can use to bind a volume.
dir	(character) Working directory inside the container.
browse	(logical) If TRUE, open RStudio instance in your default browser.
add_users	(logical) Add users or not when installing RStudio server. Default: FALSE
path	(character) Path to a directory with Shiny app files

**Value**

all functions return a droplet

**URLs**

If you need to figure out the URL for your RStudio or Shiny server instance, you can construct like `http://<ip address>:<port>` where IP address can most likely be found like `d$networks$v4[[1]]$ip_address` and the port is the port you set in the function call.

**Missing droplet ID**

If you get a droplet object back without an IP address, the IP address was not assigned when the payload was returned by DigitalOcean. Simply run `d <- droplet(d$id)` to update your droplet object and the IP address will populate.

**See Also**

[droplets\\_create](#)

**Examples**

```

## Not run:
d <- docketlet_create()
d <- droplet(d$id)
d %>% docketlet_pull("dockerpinata/sqlite")
d %>% docketlet_images()

# sqlite
d %>% docketlet_run("dockerpinata/sqlite", "sqlite3 --version", rm = TRUE)
d %>% docketlet_ps()

# cowsay
d %>% docketlet_pull("chuanwen/cowsay")
d %>% docketlet_run("chuanwen/cowsay", rm = TRUE)

# docker images
d %>% docketlet_images()

# install various R versions via Rocker
d %>% docketlet_pull("rocker/r-base")
d %>% docketlet_pull("rocker/r-devel")
d %>% docketlet_pull("rocker/r-ver:3.2")
d %>% docketlet_run("rocker/r-ver:3.2", "R --version", rm = TRUE)
d %>% docketlet_run("rocker/r-ver:3.2", "Rscript -e '2 + 3'", rm = TRUE)

# Run a docketlet containing rstudio
d %>% docketlet_rstudio(user = "foo", password = "bar")

# Delete a droplet
d %>% droplet_delete()

# Add users to an Rstudio instance
## This adds 100 users to the instance, with username/passwords
## following pattern user1/user1 ... through 100
d <- docketlet_create()
d <- droplet(d$id)
d %>% docketlet_rstudio(user = "foo", password = "bar") %>%
  docketlet_rstudio_addusers(user = "foo", password = "bar")

# Spin up a Shiny server (opens in default browser)
(d <- docketlet_create())
d %>% docketlet_shinyserver()
docketlet_create() %>% docketlet_shinyserver()

# Spin up a Shiny server with an app (opens in default browser)
d <- docketlet_create(); d <- droplet(d$id)
path <- system.file("examples", "widgets", package = "analogsea")
d %>% docketlet_shinyapp(path)
## uploading more apps - use droplet_upload, then navigate in browser
### if you try to use docketlet_shinyapp again on the same droplet, it will error
path2 <- system.file("examples", "mpg", package = "analogsea")
d %>% droplet_upload(path2, "/srv/shinyapps") # then go to browser

```

```
## End(Not run)
```

---

domains	<i>Get information on a single domain or all your domains.</i>
---------	--

---

### Description

Get information on a single domain or all your domains.

### Usage

```
domains(...)  
as.domain(x)  
domain(x, ...)
```

### Arguments

...	Further args passed on the curl call to the web.
x	(character) Required. Domain name

### Examples

```
## Not run:  
domains()  
  
## End(Not run)
```

---

domain_create	<i>Create/delete domains.</i>
---------------	-------------------------------

---

### Description

Create/delete domains.

### Usage

```
domain_create(name, ip_address, ...)  
domain_delete(domain, ...)
```



**Arguments**

name	(character) Required. The domain name to add to the DigitalOcean DNS management interface. The name must be unique in DigitalOcean's DNS system. The request will fail if the name has already been taken.
ip_address	(character) Required. An IP address for the domain's initial A record.
...	Further args passed on the curl call to the web.
domain	A domain to modify

**Examples**

```
## Not run:
d <- domain_create('tablesandchairsbunnies.info', '107.170.220.59')
domain_delete(d)

## End(Not run)
```

---

do\_oauth                      *Authorize with Digital Ocean.*

---

**Description**

This function is run automatically to allow analogsea to access your digital ocean account.

**Usage**

```
do_oauth(app = do_app, reauth = FALSE)
```

**Arguments**

app	An <a href="#">oauth_app</a> for DO. The default uses the standard ROpenSci application.
reauth	(logical) Force re-authorization?

**Details**

There are two ways to authorise analogsea to work with your digital ocean account:

- Generate a personal access token at <https://cloud.digitalocean.com/settings/api/tokens> and record in the DO\_PAT envvar.
- Interactively login into your DO account and authorise with OAuth.

Using DO\_PAT is recommended.

---

`do_options`*Set Digital Ocean options including ssh keys, etc.*

---

## Description

This function sets options and prints them so you know what options are set.

## Usage

```
do_options(size = NULL, image = NULL, region = NULL,  
           ssh_keys = NULL, private_networking = NULL, backups = NULL,  
           ipv6 = NULL, unset = FALSE)
```

## Arguments

<code>size</code>	(optional) A Digital Ocean size slug name, e.g. '1gb'. Saved in options as 'do_size'
<code>image</code>	(optional) A Digital Ocean image name, e.g., 'ubuntu-14-04-x64'. Saved in options as 'do_image'
<code>region</code>	(optional) A Digital Ocean region name, e.g., 'nyc1'. Saved in options as 'do_region'
<code>ssh_keys</code>	(optional) One or more ssh key id numbers or fingerprints. Put many in a list or vector. Saved in options as 'do_ssh_keys'
<code>private_networking</code>	(optional) A logical, whether to use private networking or not. Saved in options as 'do_private_networking'
<code>backups</code>	(optional) A logical, whether to enable backups. Automated backups can only be enabled when the Droplet is created. Saved in options as 'do_backups'
<code>ipv6</code>	(optional) A boolean indicating whether IPv6 is enabled on the Droplet. Saved in options as 'do_ipv6'
<code>unset</code>	(optional) A boolean. If TRUE, unsets options so as to use defaults in <a href="#">droplet_create</a> . If FALSE (default) your options are used in <a href="#">droplet_create</a> .

## Details

These options are read and used by [droplet\\_create](#).

You can only set one value for each of size, image, and region, but multiple values for ssh\_keys as you can use multiple ssh keys on one DO droplet.

Keep in mind that there are defaults set for size, image, and region in [droplet\\_create](#).

**Examples**

```
## Not run:
do_options()
do_options(ssh_keys=89103)
getOption('do_ssh_keys')
do_options(size="8gb")
do_options(size="1gb", image='ubuntu-14-04-x64', region='nyc1')
getOption('do_size')
getOption('do_image')
getOption('do_region')

## End(Not run)
```

---

droplet	<i>Retrieve a single droplet.</i>
---------	-----------------------------------

---

**Description**

Retrieve a single droplet.

**Usage**

```
droplet(id, ...)

as.droplet(x)

## S3 method for class 'droplet'
summary(object, ...)
```

**Arguments**

id	(integer) Droplet id.
...	Additional arguments passed down to low-level API function (do_*)
x	Object to coerce. Can be an integer (droplet id), string (droplet name), a droplet (duh), or an action (which waits until complete then returns the droplet)
object	Droplet object to pass to summary

**Examples**

```
## Not run:
droplet(1234)

as.droplet("my-favourite-droplet")
as.droplet(10)
as.droplet(droplets()[[1]])

droplet(1234) %>% summary

## End(Not run)
```

---

droplets	<i>List all available droplets.</i>
----------	-------------------------------------

---

**Description**

List all available droplets.

**Usage**

```
droplets(..., page = 1, per_page = 25, tag = NULL)
```

**Arguments**

...	Additional arguments passed down to low-level API function (do_*)
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
tag	(character) Name of a tag. optional

**Examples**

```
## Not run:
droplets()
droplets(per_page = 2)
droplets(per_page = 2, page = 2)

# list droplets by tag
tag_create(name = "stuffthings")
d <- droplet_create()
tag_resource(name = "stuffthings", resource_id = d$id,
  resource_type = "droplet")
droplets(tag = "stuffthings")

## End(Not run)
```

---

droplets_cost	<i>Calculate cost across droplets</i>
---------------	---------------------------------------

---

**Description**

Calculate cost across droplets

**Usage**

```
droplets_cost(x)
```

**Arguments**

x                    Object to coerce. Can be an integer (droplet id), string (droplet name), a droplet (duh)

**Examples**

```
## Not run:
droplets() %>% droplets_cost()
droplets()[[2]] %>% droplets_cost()
droplets()[2:4] %>% droplets_cost()
droplets_cost("FatedSpaghetti")
droplets_cost(11877599)

## End(Not run)
```

---

droplets\_create                    *Create many new droplets.*

---

**Description**

There are defaults for each of size, image, and region so that a quick one-liner with one parameter is possible: simply specify the name of the droplet and you're up and running.

**Usage**

```
droplets_create(names = NULL, size = getOption("do_size",
  "s-1vcpu-1gb"), image = getOption("do_image", "ubuntu-18-04-x64"),
  region = getOption("do_region", "sfo2"),
  ssh_keys = getOption("do_ssh_keys", NULL),
  backups = getOption("do_backups", NULL), ipv6 = getOption("do_ipv6",
  NULL), private_networking = getOption("do_private_networking", NULL),
  tags = list(), user_data = NULL, cloud_config = NULL,
  wait = TRUE, ...)
```

**Arguments**

names                    (character) Names of the droplets. The human-readable string you wish to use when displaying the Droplet name. The name, if set to a domain name managed in the DigitalOcean DNS management system, will configure a PTR record for the Droplet. The name set during creation will also determine the hostname for the Droplet in its internal configuration. Default: picks a random name from [words](#) if none supplied.

size                    (character) Size slug identifier. See [sizes\(\)](#) for a complete list. Default: s-1vcpu-1gb, the smallest

image                    (character/numeric) The image ID of a public or private image, or the unique slug identifier for a public image. This image will be the base image for your droplet. See [images\(\)](#) for a complete list. Default: ubuntu-18-04-x64

region	(character) The unique slug identifier for the region that you wish to deploy in. See <a href="#">regions()</a> for a complete list. Default: sfo2
ssh_keys	(character) A character vector of key names, an integer vector of key ids, or NULL, to use all keys in your account. Accounts with the corresponding private key will be able to log in to the droplet. See <a href="#">keys()</a> for a list of the keys that you've added. Default: NULL
backups	(logical) Enable backups. A boolean indicating whether automated backups should be enabled for the droplet. Automated backups can only be enabled when the droplet is created, and cost extra. Default: FALSE
ipv6	(logical) A boolean indicating whether IPv6 is enabled on the droplet.
private_networking	(logical) Use private networking. Private networking is currently only available in certain regions. Default: FALSE
tags	(character) A vector of tag names to apply to the Droplet after it is created. Tag names can either be existing or new tags. Default: list()
user_data	(character) Gets passed to the droplet at boot time. Not all regions have this enabled, and is not used by all images.
cloud_config	(character) Specify the name of a cloud config template to automatically generate <a href="#">cloud_config</a> and submit in user metadata. Setting this is best practice: the built-in templates use security best practices (disabling root log-in, security autoupdates) to make it harder to hack your droplet.
wait	If TRUE (default), wait until droplet has been initialised and is ready for use. If set to FALSE we return a droplet object right away after droplet creation request has been sent. Note that there won't be an IP address in the object yet. Note that waiting means we ping the DigitalOcean API to check on the status of your droplet, which uses up your API requests. The option <code>do.wait_time</code> can be set to any positive integer to determine how many seconds between pings. The default is 1 sec. Note that if you are creating droplets in a loop, parallel or otherwise, set <code>do.wait_time</code> within the loop instead of outside of it.
...	Additional options passed down to <a href="#">POST</a>

### Details

Note that if you exit the R session or kill the function call after it's in waiting process (the string of ...), the droplet creation will continue.

### Value

Two or more droplet objects

### Missing droplet ID

If you get a droplet object back without an IP address, the IP address was not assigned when the payload was returned by DigitalOcean. Simply run `d <- droplet(d$id)` to update your droplet object and the IP address will populate.

## Examples

```
## Not run:
# if no names given, creates two droplets with random names
droplets_create()

# give names
droplets_create(names = c('drop1', 'drop2'))
droplets_create(names = c('drop3', 'drop4'))

# add tags
(d <- droplets_create(tags = 'mystuff'))
invisible(lapply(d, summary))

## End(Not run)
```

---

droplet_action	<i>Perform various actions on a droplet.</i>
----------------	--

---

## Description

These droplet actions have no further arguments.

## Usage

```
droplet_reboot(droplet, ...)
```

```
droplet_power_cycle(droplet, ...)
```

```
droplet_shutdown(droplet, ...)
```

```
droplet_power_off(droplet, ...)
```

```
droplet_power_on(droplet, ...)
```

```
droplet_reset_password(droplet, ...)
```

```
droplet_enable_ipv6(droplet, ...)
```

```
droplet_enable_private_networking(droplet, ...)
```

```
droplet_enable_backups(droplet, ...)
```

```
droplet_disable_backups(droplet, ...)
```

```
droplet_upgrade(droplet, ...)
```

**Arguments**

droplet            A droplet, or something that can be coerced to a droplet by [as.droplet](#).  
 ...                Additional options passed down to low-level API method.

**Details**

**reboot** This method allows you to reboot a droplet. This is the preferred method to use if a server is not responding

**powercycle** This method allows you to power cycle a droplet. This will turn off the droplet and then turn it back on.

**shutdown** Shutdown a running droplet. The droplet will remain in your account and you will continue to be charged for it.

**power\_off** Shutdown a running droplet. The droplet will remain in your account and you will continue to be charged for it.

**reset\_password** This method will reset the root password for a droplet. Please be aware that this will reboot the droplet to allow resetting the password.

**enable\_ipv6** Enable IPv6 networking on an existing droplet (within a region that has IPv6 available).

**enable\_private\_networking** Enable private networking on an existing droplet (within a region that has private networking available)

**disable\_backups** Disables backups for a droplet.

**enable\_backups** Enables backups for a droplet.

**power\_on** Turn on a droplet that's turned off.

**Examples**

```
## Not run:
d <- droplets()
d[[1]] %>% droplet_reboot()
d[[2]] %>% droplet_power_cycle()

d <- droplet_create()
d %>% summary
d %>% droplet_enable_backups()
d %>% summary

## End(Not run)
```

---

droplet\_actions

*Retrieve a droplet action or list all actions associatd with a droplet.*


---

**Description**

Retrieve a droplet action or list all actions associatd with a droplet.



**Usage**

```
droplet_actions(droplet, actionid = NULL, ...)
```

**Arguments**

`droplet` A droplet, or something that can be coerced to a droplet by [as.droplet](#).

`actionid` (integer) Optional. An action id.

`...` Additional options passed down to low-level API method.

**Examples**

```
## Not run:
droplet_actions(2428384)
droplet_actions(2428384, actionid=31223385)

## End(Not run)
```

---

droplet_create	<i>Create a new droplet.</i>
----------------	------------------------------

---

**Description**

There are defaults for each of size, image, and region so that a quick one-liner with one parameter is possible: simply specify the name of the droplet and your'e up and running.

**Usage**

```
droplet_create(name = random_name(), size = getOption("do_size",
  "s-1vcpu-1gb"), image = getOption("do_image", "ubuntu-18-04-x64"),
  region = getOption("do_region", "sfo2"),
  ssh_keys = getOption("do_ssh_keys", NULL),
  backups = getOption("do_backups", NULL), ipv6 = getOption("do_ipv6",
  NULL), private_networking = getOption("do_private_networking", NULL),
  tags = list(), user_data = NULL, cloud_config = NULL,
  wait = TRUE, ...)
```

**Arguments**

`name` (character) Name of the droplet. The human-readable string you wish to use when displaying the Droplet name. The name, if set to a domain name managed in the DigitalOcean DNS management system, will configure a PTR record for the Droplet. The name set during creation will also determine the hostname for the Droplet in its internal configuration. Default: picks a random name from [words](#) if none supplied.

`size` (character) Size slug identifier. See [sizes\(\)](#) for a complete list. Default: `s-1vcpu-1gb`, the smallest

image	(character/numeric) The image ID of a public or private image, or the unique slug identifier for a public image. This image will be the base image for your droplet. See <a href="#">images()</a> for a complete list. Default: ubuntu-18-04-x64
region	(character) The unique slug identifier for the region that you wish to deploy in. See <a href="#">regions()</a> for a complete list. Default: sfo2
ssh_keys	(character) A character vector of key names, an integer vector of key ids, or NULL, to use all keys in your account. Accounts with the corresponding private key will be able to log in to the droplet. See <a href="#">keys()</a> for a list of the keys that you've added. Default: NULL
backups	(logical) Enable backups. A boolean indicating whether automated backups should be enabled for the droplet. Automated backups can only be enabled when the droplet is created, and cost extra. Default: FALSE
ipv6	(logical) A boolean indicating whether IPv6 is enabled on the droplet.
private_networking	(logical) Use private networking. Private networking is currently only available in certain regions. Default: FALSE
tags	(character) A vector of tag names to apply to the Droplet after it is created. Tag names can either be existing or new tags. Default: list()
user_data	(character) Gets passed to the droplet at boot time. Not all regions have this enabled, and is not used by all images.
cloud_config	(character) Specify the name of a cloud config template to automatically generate <a href="#">cloud_config</a> and submit in user metadata. Setting this is best practice: the built-in templates use security best practices (disabling root log-in, security autoupdates) to make it harder to hack your droplet.
wait	If TRUE (default), wait until droplet has been initialised and is ready for use. If set to FALSE we return a droplet object right away after droplet creation request has been sent. Note that there won't be an IP address in the object yet. Note that waiting means we ping the DigitalOcean API to check on the status of your droplet, which uses up your API requests. The option <code>do.wait_time</code> can be set to any positive integer to determine how many seconds between pings. The default is 1 sec. Note that if you are creating droplets in a loop, parallel or otherwise, set <code>do.wait_time</code> within the loop instead of outside of it.
...	Additional options passed down to <a href="#">POST</a>

### Details

Note that if you exit the R session or kill the function call after it's in waiting process (the string of ...), the droplet creation will continue.

### Value

A droplet object

### Missing droplet ID

If you get a droplet object back without an IP address, the IP address was not assigned when the payload was returned by DigitalOcean. Simply run `d <- droplet(d$id)` to update your droplet object and the IP address will populate.

### Examples

```
## Not run:
# by default we give your droplet a name
droplet_create()

# you can set your own droplet name
droplet_create('droppinit')

# set name, size, image, and region
droplet_create(name="newdrop", size = '512mb', image = 'ubuntu-14-04-x64',
  region = 'sfo2')

# use an ssh key
droplet_create(ssh_keys=89103)

# add tags
(d <- droplet_create(tags = c('venus', 'mars'))))
summary(d)

## End(Not run)
```

---

droplet_delete	<i>Delete a droplet.</i>
----------------	--------------------------

---

### Description

This method deletes one of your droplets - this is irreversible.

### Usage

```
droplet_delete(droplet = NULL, tag = NULL, ...)
```

### Arguments

droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .
tag	(character) Name of a tag. optional
...	Additional options passed down to low-level API method.

**Examples**

```
## Not run:
drops <- droplets()
drops[[1]] %>% droplet_delete()
drops[[2]] %>% droplet_delete()
droplet_create() %>% droplet_delete()

droplet_delete("lombard")
droplet_delete(12345)

# Delete all droplets
lapply(droplets(), droplet_delete)

# delete droplets by tag
## first, create a tag, then a droplet, then tag it
tag_create(name = "foobar")
e <- droplet_create()
tag_resource(name = "foobar", resource_id = e$id)
droplets(tag = "foobar")
## then delete the droplet by tag name
droplet_delete(tag = "foobar")

## End(Not run)
```

---

droplet\_do\_actions      *Perform actions on one or more droplets associated with a tag*

---

**Description**

Perform actions on one or more droplets associated with a tag

**Usage**

```
droplet_do_actions(name, type, ...)
```

**Arguments**

name	(character) Name of the tag. Required.
type	(character) action type, one of 'power_cycle', 'power_on', 'power_off', 'shut-down', 'enable_private_networking', 'enable_ipv6', 'enable_backups', 'disable_backups', or 'snapshot'. Required.
...	Additional options passed down to <a href="#">POST</a>

**Examples**

```
## Not run:
tag_create(name = "pluto")
d <- droplet_create()
tag_resource(name = "pluto", resource_id = d$id)
(x <- droplet_do_actions(name = "pluto", type = "power_off"))
# wait until completed, check with action(xx$actions[[1]]$id)
droplet_do_actions(name = "pluto", type = "power_on")

## End(Not run)
```

---

droplet_execute	<i>Execute R code on a droplet.</i>
-----------------	-------------------------------------

---

**Description**

Execute R code on a droplet.

**Usage**

```
droplet_execute(droplet, code, verbose = TRUE)
```

**Arguments**

droplet	A droplet, or object that can be coerced to a droplet by <a href="#">as.droplet</a> .
code	Code to execute on a droplet.
verbose	(logical) Print messages. Default: TRUE

**Details**

Assumes that the droplet has R installed.

**Examples**

```
## Not run:
d <- droplet_create() %>%
  debian_add_swap() %>%
  droplet_ssh("apt-get update") %>%
  debian_install_r()

results <- d %>% droplet_execute({
  x <- letters
  numbers <- runif(1000)
})
results$x
results$numbers

droplet_delete(d)

## End(Not run)
```

---

droplet_freeze	<i>Freeze/thaw droplets.</i>
----------------	------------------------------

---

### Description

Freeze powers off the droplet, snapshots to create an image, and deletes the droplet. Thaw performs the inverse: it takes an image and turns it into a running droplet.

### Usage

```
droplet_freeze(droplet, name = droplet$name, ...)
```

```
droplet_thaw(image, ...)
```

### Arguments

droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .
name	Name for the image to be created, or to be used to create a new droplet. Defaults to name of the droplet.
...	For freeze, further args passed on to <a href="#">droplet_snapshot</a> ; thaw, args passed on to <a href="#">droplet_create</a> .
image	Image to thaw into a droplet.

### Value

`droplet_freeze` accepts a droplet as first argument, and returns an image; `droplet_thaw` does the opposite: it accepts an image as first argument, and returns a droplet.

### Examples

```
## Not run:
# freeze
droplet_create(region = 'nyc3') %>% droplet_freeze()

# thaw
droplet_thaw(image='chiromantical-1412718795', region='nyc3')

## End(Not run)
```

## Description

There's a lot of functions for working with droplets. Here's a breakdown of what they all do.

## Documentation

- DigitalOcean docs overview: <https://developers.digitalocean.com/documentation/>
- DigitalOcean API docs: <https://developers.digitalocean.com/documentation/v2/>

## Functions

The main functions for creating/deleting droplets:

- `droplet()`: get a droplet object from a droplet ID
- `droplet_create()`: create a droplet
- `droplets_create()`: create two or more droplets
- `droplet_delete()`: delete a droplet
- `droplets()`: get your droplets
- `as.droplet()`: coerce various things to droplet objects

Modify a droplet:

- `droplet_resize()`: resize a droplet to a different size
- `droplet_rebuild()`: reinstall a droplet with a different image
- `droplet_rename()`: rename a droplet
- `droplet_change_kernel()`: change droplet to a new kernel

Take and restore snapshots:

- `droplet_snapshot()`: make a snapshot of a droplet
- `droplet_snapshots_list()`: list snapshots on a droplet
- `droplet_backups_list()`: list droplet backups
- `droplet_restore()`: Restore a droplet with a previous image or snapshot

ssh interactions with droplets:

- `droplet_ssh()`: Remotely execute code on your droplet via ssh
- `droplet_upload()`: Upload files to your droplet via ssh
- `droplet_download()`: Download files from your droplet via ssh

Perform various actions on droplets:

- `droplet_actions()`: retrieve a droplet action or list all actions associated with a droplet

- `droplet_disable_backups()`: Disables backups for a droplet
- `droplet_do_actions()`: Perform actions on one or more droplets associated with a tag
- `droplet_enable_backups()`: Enables backups for a droplet
- `droplet_enable_ipv6()`: Enable IPv6 networking on an existing droplet (within a region that has IPv6 available)
- `droplet_enable_private_networking()`: Enable private networking on an existing droplet (within a region that has private networking available)
- `droplet_execute()`: Execute R code on a droplet
- `droplet_kernels_list()`: List all available kernels for a droplet
- `droplet_neighbors()`: List a droplet's neighbors on the same physical server
- `droplet_power_cycle()`: power cycle a droplet. will turn off the droplet and then turn it back on
- `droplet_power_off()`: Shutdown a running droplet. The droplet will remain in your account and you will continue to be charged for it
- `droplet_power_on()`: Turn on a droplet that's turned off
- `droplet_reboot()`: reboot a droplet. This is the preferred method to use if a server is not responding
- `droplet_reset_password()`: reset the root password for a droplet
- `droplet_reuse()`: Reuse a droplet or image by name, creating a new droplet
- `droplet_shutdown()`: Shutdown a running droplet. The droplet will remain in your account and you will continue to be charged for it.
- `droplet_upgrade()`: Migrate a droplet - NOT SURE IF THIS STILL WORKS OR NOT
- `droplet_upgrades_list()`: List all droplets that are scheduled to be upgraded
- `droplet_wait()`: Wait for a droplet to be ready. mostly used internally
- `droplets_cost()`: Calculate cost across droplets

Freeze/thaw droplets:

- `droplet_freeze()`: power off a droplet, snapshots to create an image, and deletes the droplet
- `droplet_thaw()`: takes an image and turns it into a running droplet

### Working with Docker

We named a DO droplet with the Docker application installed a "docklet" for convenience

The main two functions for creating docklets:

- `docklet_create()`: create a docklet (a droplet using the docker image)
- `docklets_create()`: create many docklets

Running docker commands on your docklet:

- `docklet_images()`: list docker images on your docklet
- `docklet_ps()`: list running docker containers



- `docklet_pull()`: pull a docker image to your docket
- `docklet_rm()`: remove a docker image from your docket
- `docklet_run()`: run a docker command on your docket
- `docklet_stop()`: stop a running docker container
- `docklet_docker()`: low level fxn for running docker commands on your, not really intended for public use

Install RStudio things:

- `docklet_rstudio()`: install RStudio on your docket using Rocker images (<https://hub.docker.com/u/rocker>)
- `docklet_rstudio_addusers()`: add users to an RStudio docker image
- `docklet_shinyserver()`: install Shiny server on your docket using Rocker images (<https://hub.docker.com/u/rocker>)
- `docklet_shinyapp()`: install a Shiny app on your Shiny server docker container

---

`droplet_kernels_list` *List all available kernels for a droplet.*

---

## Description

List all available kernels for a droplet.

## Usage

```
droplet_kernels_list(droplet, ...)
```

## Arguments

<code>droplet</code>	A droplet, or something that can be coerced to a droplet by <code>as.droplet</code> .
<code>...</code>	Additional options passed down to low-level API method.

## Examples

```
## Not run:  
droplets()[[1]] %>% droplet_kernels_list  
  
## End(Not run)
```

---

droplet\_modify      *Modify a droplet.*

---

## Description

These methods allow you to modify existing droplets.

## Usage

```
droplet_resize(droplet, size, ...)
droplet_rebuild(droplet, image, ...)
droplet_rename(droplet, name, ...)
droplet_change_kernel(droplet, kernel, ...)
```

## Arguments

droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .
size	(character) Size slug (name) of the image size. See <a href="#">sizes</a>
...	Additional options passed down to low-level API method.
image	(optional) The image ID of the backup image that you would like to restore.
name	(character) The new name for the droplet
kernel	(numeric) The ID of the new kernel.

## Details

**resize** Resize a specific droplet to a different size. This will affect the number of processors and memory allocated to the droplet.

**rebuild** Reinstall a droplet with a default image. This is useful if you want to start again but retain the same IP address for your droplet.

**rename** Change the droplet name

**change\_kernel** Change kernel ID.

Beware: `droplet_resize()` does not seem to work, see `resize()`

## Examples

```
## Not run:
droplets()[[1]] %>% droplet_rename(name='newname')

## End(Not run)
```

---

droplet_reuse	<i>Reuse a droplet or image by name</i>
---------------	---

---

## Description

Reuse a droplet or image by name

## Usage

```
droplet_reuse(name, ...)
```

## Arguments

name	A name that could be a droplet or image name
...	Named options passed on to <a href="#">droplet_create</a> .

## Details

Internally, we call the [droplets](#) and [images](#) (with `private = TRUE`) to get list of your droplets and images - and we check against those.

## Value

A droplet

## Examples

```
## Not run:  
# matches droplet that exists  
droplet_reuse(name = 'BeguiledAmmonia')  
  
# matching image that exists  
droplet_reuse(name = 'hadleyverse1', size = "1gb")  
  
# no matching droplet or image  
droplet_reuse(name = 'tablesandchairs')  
  
## End(Not run)
```

---

droplet\_snapshot      *Take and restore snapshots.*

---

### Description

**snapshot** Take a snapshot of the droplet once it has been powered off, which can later be restored or used to create a new droplet from the same image. Please be aware this may cause a reboot.

**snapshots\_list** List available snapshots

**backups\_list** List available snapshots

**restore** Restore a droplet with a previous image or snapshot. This will be a mirror copy of the image or snapshot to your droplet. Be sure you have backed up any necessary information prior to restore.

### Usage

```
droplet_snapshot(droplet, name = NULL, ...)
```

```
droplet_snapshots_list(droplet, ...)
```

```
droplet_restore(droplet, image, ...)
```

```
droplet_backups_list(droplet, ...)
```

### Arguments

droplet	A droplet number or the result from a call to droplets()
name	(character) Optional. Name of the new snapshot you want to create. If not set, the snapshot name will default to the current date/time
...	Additional options passed down to <a href="#">POST</a>
image	(optional) The image ID of the backup image that you would like to restore.

### Examples

```
## Not run:
d <- droplet_create()
d %>% droplet_snapshots_list()
d %>% droplet_backups_list()

d %>%
  droplet_power_off() %>%
  droplet_snapshot() %>%
  droplet_power_on() %>%
  droplet_snapshots_list()

# To delete safely
d %>%
```

```

droplet_power_off() %>%
droplet_snapshot() %>%
droplet_delete() %>%
action_wait()

## End(Not run)

```

---

droplet_ssh	<i>Remotely execute ssh code, upload &amp; download files.</i>
-------------	--

---

## Description

Assumes that you have ssh & scp installed, and password-less login set up on the droplet.

## Usage

```
droplet_ssh(droplet, ..., user = "root", keyfile = NULL,
            ssh_passwd = NULL, verbose = FALSE)
```

```
droplet_upload(droplet, local, remote, user = "root", keyfile = NULL,
               ssh_passwd = NULL, verbose = FALSE)
```

```
droplet_download(droplet, remote, local, user = "root", keyfile = NULL,
                  ssh_passwd = NULL, verbose = FALSE, overwrite = FALSE)
```

## Arguments

droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .
...	Shell commands to run. Multiple commands are combined with && so that execution will halt after the first failure.
user	User name. Defaults to "root".
keyfile	Optional private key file.
ssh_passwd	Optional passphrase or callback function for authentication. Refer to the <code>ssh::ssh_connect</code> documentation for more details.
verbose	If TRUE, will print command before executing it.
local, remote	Local and remote paths.
overwrite	If TRUE, then overwrite destination files if they already exist.

## Details

Uploads and downloads are recursive, so if you specify a directory, everything inside the directory will also be downloaded.

With the change to package `ssh`, we create ssh session objects (C pointers) internally, and cache them, then look them up in the cache based on combination of user and IP address. That is, there's separate sessions for each user for the same IP address.

ssh sessions are cleaned up at the end of your R session.

**Value**

On success, the droplet (invisibly). On failure, throws an error.

**Examples**

```
## Not run:
d <- droplet_create() %>% droplet_wait()

# Upgrade system packages
d %>%
  droplet_ssh("apt-get update") %>%
  droplet_ssh("sudo apt-get upgrade -y --force-yes") %>%
  droplet_ssh("apt-get autoremove -y")

# Install R
d %>%
  droplet_ssh("apt-get install r-base-core r-base-dev --yes --force-yes")

# Upload and download files -----

tmp <- tempfile()
saveRDS(mtcars, tmp)
d %>% droplet_upload(tmp, ".")
d %>% droplet_ssh("ls")

tmp2 <- tempdir()
d %>% droplet_download(basename(tmp), tmp2)
mtcars2 <- readRDS(file.path(tmp2, basename(tmp)))

stopifnot(all.equal(mtcars, mtcars2))

## another upload/download example
tmp <- tempfile(fileext = ".txt")
writeLines("foo bar", tmp)
readLines(tmp)
d %>% droplet_upload(tmp, ".")
d %>% droplet_ssh("ls")

tmp2 <- tempdir()
unlink(tmp)
d %>% droplet_download(basename(tmp), tmp2)
readLines(file.path(tmp2, basename(tmp)))

## End(Not run)
```

---

droplet\_upgrades\_list *List all droplets that are scheduled to be upgraded.*

---

**Description**

List all droplets that are scheduled to be upgraded.

**Usage**

```
droplet_upgrades_list(...)
```

**Arguments**

... Additional options passed down to low-level API method.

**Examples**

```
## Not run:  
droplet_upgrades_list()  
  
## End(Not run)
```

---

droplet_wait	<i>Wait for a droplet to be ready.</i>
--------------	--

---

**Description**

Wait for a droplet to be ready.

**Usage**

```
droplet_wait(droplet)
```

**Arguments**

droplet A droplet, or something that can be coerced to a droplet by [as.droplet](#).

**Examples**

```
## Not run:  
droplet_create() %>% droplet_wait()  
  
## End(Not run)
```

---

```
firewall_add_droplets Add/remove droplets to a firewall
```

---

### Description

Add/remove droplets to a firewall

### Usage

```
firewall_add_droplets(id, droplet_ids, ...)
```

```
firewall_remove_droplets(id, droplet_ids, ...)
```

### Arguments

`id` (character) A firewall id (not the name) to delete  
`droplet_ids` (integer/numeric) a vector of droplet ids  
`...` Options passed on to `httr::POST` or `httr::DELETE`

### Examples

```
## Not run:
drops <- droplets_create()
drop_ids <- vapply(drops, "[[", numeric(1), "id")
inbound <- list(list(protocol = "tcp", ports = "80",
  sources = list(addresses = "18.0.0.0/8")))
outbound <- list(list(protocol = "tcp", ports = "80",
  destinations = list(addresses = "0.0.0.0/0")))
res <- firewall_create("myfirewall", inbound, outbound)
firewall_add_droplets(id = res$id, droplet_ids = drop_ids)
firewalls()[[1]]$droplet_ids
firewall_remove_droplets(id = res$id, droplet_ids = drop_ids)

## End(Not run)
```

---

```
firewall_add_tags Add/remove tags to a firewall
```

---

### Description

Add/remove tags to a firewall

### Usage

```
firewall_add_tags(id, tags, ...)
```

```
firewall_remove_tags(id, tags, ...)
```



**Arguments**

id (character) A firewall id (not the name) to delete  
tags (character) tag strings  
... Options passed on to httr::POST or httr::DELETE

**Examples**

```
## Not run:
drops <- droplets_create()
drop_ids <- vapply(drops, "[[", numeric(1), "id")
inbound <- list(list(protocol = "tcp", ports = "80",
  sources = list(addresses = "18.0.0.0/8")))
outbound <- list(list(protocol = "tcp", ports = "80",
  destinations = list(addresses = "0.0.0.0/0")))
res <- firewall_create("myfirewall", inbound, outbound)

tag_create(name = "foobar")
tags()
firewall_add_tags(id = res$id, tags = "foobar")
firewalls()[[1]]$tags
firewall_remove_tags(id = res$id, tags = "foobar")

## End(Not run)
```

---

firewall_delete	<i>Delete a firewall</i>
-----------------	--------------------------

---

**Description**

Delete a firewall

**Usage**

```
firewall_delete(id, ...)
```

**Arguments**

id A firewall id (not the name) to delete  
... Options passed on to httr::DELETE

**Examples**

```
## Not run:
firewall_delete(id="d19b900b-b03e-4e5d-aa85-2ff8d2786f28")

## End(Not run)
```

---

image_actions	<i>Retrieve an action associated with a particular image id.</i>
---------------	--

---

**Description**

Retrieve an action associated with a particular image id.

**Usage**

```
image_actions(image, action_id, ...)
```

**Arguments**

image	An image to modify.
action_id	An action id associated with an image.
...	Options passed on to htrr::GET. Must be named, see examples.

**Examples**

```
## Not run:  
image_actions(5710271, 31221438)  
  
## End(Not run)
```

---

image_convert	<i>Convert an backup image to a snapshot.</i>
---------------	---

---

**Description**

Convert an backup image to a snapshot.

**Usage**

```
image_convert(image, ...)
```

**Arguments**

image	An image to modify.
...	Options passed on to htrr::GET. Must be named, see examples.

**Examples**

```
## Not run:  
# get a backup image  
img <- images(TRUE)[[1]]  
# then convert to a snapshot  
# image_convert(img)  
  
## End(Not run)
```

---

image_delete	<i>Rename/delete an image</i>
--------------	-------------------------------

---

**Description**

There is no way to restore a deleted image so be careful and ensure your data is properly backed up before deleting it.

**Usage**

```
image_delete(image, ...)  
  
image_rename(image, name, ...)
```

**Arguments**

image	An image to modify.
...	Options passed on to httr::GET. Must be named, see examples.
name	(character) New name for image.

**Examples**

```
## Not run:  
image_delete(5620385)  
  
# Delete all of your snapshots  
## BE CAREFUL WITH THIS ONE  
# lapply(images(TRUE), image_delete)  
  
## End(Not run)
```

---

image_transfer	<i>Transfer an image to a specified region.</i>
----------------	---

---

**Description**

Transfer an image to a specified region.

**Usage**

```
image_transfer(image, region, ...)
```

**Arguments**

image	An image to modify.
region	(numeric) Required. The region slug that represents the region target.
...	Options passed on to http::GET. Must be named, see examples.

**Examples**

```
## Not run:
image_transfer(image=images(TRUE)[[1]], region='nyc2')
image_transfer(image=images(TRUE)[[1]], region='ams2')

## End(Not run)
```

---

key-crud	<i>Create, update, and delete ssh keys.</i>
----------	---

---

**Description**

Create, update, and delete ssh keys.

**Usage**

```
key_create(name, public_key, ...)
```

```
key_rename(key, name, ...)
```

```
key_delete(key, ...)
```

**Arguments**

name	(character) The name to give the new SSH key in your account.
public_key	(character) A string containing the entire public key.
...	Other options passed on to low-level API methods.
key	(key) Key to modify.

**Examples**

```
## Not run:
k <- key_create("key", readLines("~/ssh/id_rsa.pub"))
k <- key_rename(k, "new_name")
key_delete(k)

## End(Not run)
```

---

keys	<i>List your ssh keys, or get a single key</i>
------	--

---

**Description**

List your ssh keys, or get a single key

**Usage**

```
keys(..., page = 1, per_page = 25)

key(x, ...)

as.sshkey(x)
```

**Arguments**

...	Additional arguments passed down to low-level API function (do_*)
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
x	For key the numeric id. For as.sshkey, a number (the id), a string (the name), or a key.

**Examples**

```
## Not run:
keys()
as.sshkey(328037)
as.sshkey("hadley")

## End(Not run)
```

---

neighbors	<i>List neighbors</i>
-----------	-----------------------

---

**Description**

List neighbors

**Usage**

```
neighbors(...)
```

```
droplet_neighbors(droplet, ...)
```

**Arguments**

...	Additional options passed down to low-level API method.
droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .

**Examples**

```
## Not run:
# List a droplet's neighbors on the same physical server
droplets()[[3]] %>% droplet_neighbors()
# List all neighbors on the same physical server
neighbors()

## End(Not run)
```

---

nouns	<i>Nouns to use for seeding random word selection when name not given for a droplet</i>
-------	---

---

**Description**

Nouns to use for seeding random word selection when name not given for a droplet

**Details**

A vector of 1000 nouns From the GitHub repo <https://github.com/dariusk/corpora> - the data is licensed CC0.

---

project_create	<i>Create a project</i>
----------------	-------------------------

---

**Description**

Create a project

**Usage**

```
project_create(name, purpose, description = NULL, environment = NULL,  
...)
```

**Arguments**

name	(character) Name of the project. required
purpose	(character) The purpose of the project. The maximum length is 255 characters. For examples of valid purposes, see the "Purposes" section. required
description	(character) The description of the project. The maximum length is 255 characters. optional
environment	(character) The environment of the project's resources. optional
...	Additional options passed down to <a href="#">POST</a>

**Value**

A project object

**Purposes**

The purpose attribute can have one of the following values:

- Just trying out DigitalOcean
- Class project / Educational purposes
- Website or blog
- Web Application
- Service or API
- Mobile Application
- Machine learning / AI / Data processing
- IoT
- Operational / Developer tooling

If specify another value for purpose, for example "your custom purpose", your purpose will be stored as Other: your custom purpose

## Environments

The environment attribute must have one of the following values:

- Development
- Staging
- Production

If another value is specified, a 400 Bad Request is returned.

## Examples

```
## Not run:
project_create(name = "venus", purpose = "Web Application")

## End(Not run)
```

---

project_delete	<i>Delete a project</i>
----------------	-------------------------

---

## Description

Delete a project

## Usage

```
project_delete(project, ...)
```

## Arguments

project	A project to modify.
...	Options passed on to httr::GET. Must be named, see examples.

## Examples

```
## Not run:
project_delete(5620385)

## End(Not run)
```



---

project_patch	<i>Update certain aspects of a project</i>
---------------	--

---

**Description**

Update certain aspects of a project

**Usage**

```
project_patch(id, name = NULL, purpose = NULL, description = NULL,
             is_default = FALSE, environment = NULL, ...)
```

**Arguments**

id	project id. to update the default project use "default". required
name	(character) Name of the project. required
purpose	(character) The purpose of the project. The maximum length is 255 characters. For examples of valid purposes, see the "Purposes" section. required
description	(character) The description of the project. The maximum length is 255 characters. optional
is_default	(logical) If TRUE, all resources will be added to this project if no project is specified. default: FALSE
environment	(character) The environment of the project's resources. optional
...	Additional options passed down to <a href="#">POST</a>

---

project_update	<i>Update all aspects of a project</i>
----------------	--

---

**Description**

Update all aspects of a project

**Usage**

```
project_update(id, name, purpose, description, is_default = FALSE,
              environment = NULL, ...)
```

**Arguments**

id	project id. to update the default project use "default". required
name	(character) Name of the project. required
purpose	(character) The purpose of the project. The maximum length is 255 characters. For examples of valid purposes, see the "Purposes" section. required
description	(character) The description of the project. The maximum length is 255 characters. optional
is_default	(logical) If TRUE, all resources will be added to this project if no project is specified. default: FALSE
environment	(character) The environment of the project's resources. optional
...	Additional options passed down to <a href="#">POST</a>

---

regions	<i>Get list of regions and their metadata</i>
---------	---

---

**Description**

Get list of regions and their metadata

**Usage**

```
regions(page = 1, per_page = 25, ...)
```

**Arguments**

page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.
...	Named options passed on to <a href="#">GET</a> .

**Examples**

```
## Not run:
regions()

## End(Not run)
```

---

resize	<i>Resize a droplet by power off, snapshot, and create new droplet</i>
--------	--

---

## Description

Resize a droplet by power off, snapshot, and create new droplet

## Usage

```
resize(droplet, delete_original = TRUE, ...)
```

## Arguments

`droplet` A droplet, or something that can be coerced to a droplet by [as.droplet](#).

`delete_original` (logical) Delete original droplet. Default: TRUE

`...` Named options passed on to [droplet\\_create](#).

## Details

Note that you can not resize a droplet while it is powered on. Thus, this function powers off your droplet, makes a snapshot, then creates a new droplet from that snapshot. We use [droplet\\_wait](#) in between these steps to wait for each to finish. You can optionally delete the original droplet.

## Value

A droplet

## Examples

```
## Not run:  
d <- droplet_create()  
d # current size is 512mb  
d %>% resize(size = "2gb")  
  
## End(Not run)
```

---

`sizes`*Get all the available sizes that can be used to create a droplet.*

---

**Description**

Get all the available sizes that can be used to create a droplet.

**Usage**

```
sizes(page = 1, per_page = 25, ...)
```

**Arguments**

<code>page</code>	Page to return. Default: 1.
<code>per_page</code>	Number of results per page. Default: 25.
<code>...</code>	Named options passed on to <a href="#">GET</a> .

**Value**

A data.frame with available sizes (RAM, disk, no. CPU's) and their costs

**Examples**

```
## Not run:  
sizes()  
  
## End(Not run)
```

---

`spaces`*List all Spaces.*

---

**Description**

List all Spaces.

**Usage**

```
spaces(spaces_region = NULL, spaces_key = NULL, spaces_secret = NULL,  
...)
```

**Arguments**

spaces_region	(character) String containing a spaces region. If missing, defaults to value stored in an environment variable DO_SPACES_REGION.
spaces_key	(character) String containing a spaces access key. If missing, defaults to value stored in an environment variable DO_SPACES_ACCESS_KEY.
spaces_secret	(character) String containing the secret associated with the spaces key. If missing, defaults to value stored in an environment variable DO_SPACES_SECRET_KEY.
...	Additional arguments to <a href="#">spaces_GET</a>

**Value**

(list) A list of Spaces. Can be empty.

**References**

<https://developers.digitalocean.com/documentation/spaces/#get-object>

**Examples**

```
## Not run:
# List all of your Spaces
spaces()

## End(Not run)
```

---

spaces\_GET

*Internal helper method to get information about a Space*


---

**Description**

Internal helper method to get information about a Space

**Usage**

```
spaces_GET(spaces_region = NULL, spaces_key = NULL,
           spaces_secret = NULL, ...)
```

**Arguments**

spaces_region	(character) String containing a spaces region. If missing, defaults to value stored in an environment variable DO_SPACES_REGION.
spaces_key	(character) String containing a spaces access key. If missing, defaults to value stored in an environment variable DO_SPACES_ACCESS_KEY.
spaces_secret	(character) String containing the secret associated with the spaces key. If missing, defaults to value stored in an environment variable DO_SPACES_SECRET_KEY.
...	Additional arguments to <a href="#">s3HTTP</a>

**Value**

The raw S3 response, or throws an error

---

spaces\_info                      *DigitalOcean Spaces*

---

**Description**

DigitalOcean provides support for storing files (Objects) in Spaces. This is useful for storing related files for fast access, sharing, etc. See <https://developers.digitalocean.com/documentation/spaces/> for more information.

**Arguments**

space                      A Space, or the name of the Space as a string.  
 object                      (character) The name of the Object

**Details**

In order to get started using the Spaces API, you'll need to generate a new "Spaces access key" in the API section of your DigitalOcean control panel and set the key and its secret as environmental variables via [Sys.setenv](#). Set the access key to DO\_SPACES\_ACCESS\_KEY and its secret to DO\_SPACES\_SECRET\_KEY. After that, set your region to DO\_SPACES\_REGION (e.g., nyc3). Alternatively, you can pass this information as arguments to whichever Spaces API functions you're using.

**Examples**

```
## Not run:
# List Spaces
spaces()

# Obtain Spaces as a list of Space objects
res <- spaces()

# Print Space summary using a Space object
summary(res[["my_space_name"]])

# Create a new space
space_create("new_space_name")

## End(Not run)
```

---

space_create	<i>Create a new Space</i>
--------------	---------------------------

---

**Description**

Create a new Space

**Usage**

```
space_create(name, spaces_region = NULL, spaces_key = NULL,
             spaces_secret = NULL, ...)
```

**Arguments**

name	(character) The name of the new Space
spaces_region	(character) String containing a spaces region. If missing, defaults to value stored in an environment variable DO_SPACES_REGION.
spaces_key	(character) String containing a spaces access key. If missing, defaults to value stored in an environment variable DO_SPACES_ACCESS_KEY.
spaces_secret	(character) String containing the secret associated with the spaces key. If missing, defaults to value stored in an environment variable DO_SPACES_SECRET_KEY.
...	Additional arguments to <a href="#">put_bucket</a>

**Value**

(character) The name of the created Space.

**Examples**

```
## Not run:
# Create a new Space
# (Names must be unique within region)
space_create("new_space_name")

## End(Not run)
```

---

standardise_keys	<i>Standardise specification of ssh keys.</i>
------------------	---

---

**Description**

Standardise specification of ssh keys.

**Usage**

```
standardise_keys(ssh_keys = NULL)
```

**Arguments**

ssh\_keys      An integer vector of given key ids, a character vector of key ids, or NULL, to use all ssh keys in account.

**Value**

A integer vector of key ids.

**Examples**

```
## Not run:
standardise_keys(123)
standardise_keys(123L)
standardise_keys()
standardise_keys("hadley")

## End(Not run)
```

---

tags

*List tags*


---

**Description**

List tags

**Usage**

```
tags(...)
```

```
tag(name, ...)
```

```
as.tag(x)
```

**Arguments**

...      Additional options passed down to [GET](#)

name      (character) Name of the tag

x      Object to coerce to a tag.

**Details**

tags gets all your tag, tag gets a tag by name

**Value**

Many tag objects in a list



**Examples**

```
## Not run:
# get all your tags
tags()

# get a tag by name
tag("stuffthings")
tag("helloworld")

## End(Not run)
## Not run:
tag_create("pluto")
as.tag('pluto')
as.tag(tag_create("howdyhoneighbor"))

## End(Not run)
```

---

tag\_create

*Create a tag*

---

**Description**

Create a tag

**Usage**

```
tag_create(name, ...)
```

**Arguments**

name	(character) Name of the tag
...	Additional options passed down to <a href="#">POST</a>

**Value**

A tag object

**Examples**

```
## Not run:
tag_create(name = "venus")

## End(Not run)
```

---

tag_delete	<i>Delete a tag</i>
------------	---------------------

---

**Description**

Delete a tag

**Usage**

```
tag_delete(name, ...)
```

**Arguments**

name	(character) Name of the tag
...	Additional options passed down to <a href="#">DELETE</a>

**Value**

nothing, if successful

**Examples**

```
## Not run:
tag_delete(name = "helloworld")

## End(Not run)
```

---

tag_resource	<i>Tag a resource</i>
--------------	-----------------------

---

**Description**

Tag a resource

**Usage**

```
tag_resource(name, resource_id = NULL, resource_type = "droplet",
             resources = NULL, ...)
```

**Arguments**

name	(character) Name of the tag
resource_id	(integer) a droplet id
resource_type	(character) only "droplet" for now. Default: "droplet"
resources	(list) instead of resource_id and resource_type you can pass in a list to this parameter. see examples
...	Additional options passed down to <a href="#">POST</a>

**Value**

logical, TRUE if successful

**Examples**

```
## Not run:
d <- droplet_create()
tag_resource(name = "stuffthings", resource_id = d$id,
  resource_type = "droplet")
tag_resource("stuffthings", resources = list(list(resource_id = d$id,
  resource_type = "droplet")))

## End(Not run)
```

---

tag\_resource\_delete     *Untag a resource*

---

**Description**

Untag a resource

**Usage**

```
tag_resource_delete(name, resource_id = NULL,
  resource_type = "droplet", resources = NULL, ...)
```

**Arguments**

name	(character) Name of the tag
resource_id	(integer) a droplet id
resource_type	(character) only "droplet" for now. Default: "droplet"
resources	(list) instead of resource_id and resource_type you can pass in a list to this parameter. see examples
...	Additional options passed down to <a href="#">DELETE</a>

**Value**

logical, TRUE if successful

**Examples**

```
## Not run:
d <- droplet_create()
tag_resource(name = "stuffthings", resource_id = d$id,
  resource_type = "droplet")
## same as this because only allowed resource type right now is "droplet"
# tag_resource(name = "stuffthings", resource_id = d$id)
```

```

tag_resource_delete(name = "stuffthings", resource_id = d$id,
  resource_type = "droplet")

## End(Not run)

```

---

volume_attach	<i>Attach a volume to a droplet</i>
---------------	-------------------------------------

---

### Description

Attach a volume to a droplet

### Usage

```

volume_attach(volume, droplet, region = "nyc1", ...)
volume_detach(volume, droplet, region = "nyc1", ...)
volume_resize(volume, size, region = "nyc1", ...)
volume_action(volume, actionid, ...)
volume_actions(volume, page = 1, per_page = 25, ...)

```

### Arguments

volume	A volume, or something that can be coerced to a volume by <a href="#">as.volume</a> .
droplet	A droplet, or something that can be coerced to a droplet by <a href="#">as.droplet</a> .
region	(character) The region where the Block Storage volume will be created. When setting a region, the value should be the slug identifier for the region. When you query a Block Storage volume, the entire region object will be returned. Should not be specified with a snapshot_id. Default: nyc1
...	Additional options passed down to <a href="#">GET</a> , <a href="#">POST</a> , etc.
size	(integer) The size of the Block Storage volume in GiB
actionid	(integer) Optional. An action id.
page	Page to return. Default: 1.
per_page	Number of results per page. Default: 25.

### Details

Note that there is a way to attach a volume to or remove from a droplet by name, but we only support doing this by ID. However, as the user, all you need to do is make a volume class object via [as.volume](#) and pass it to `volume_attach` or `volume_detach`, which is pretty darn easy.

**Examples**

```
## Not run:
# resize a volume
## create a volume
(vol1 <- volume_create('foobar', 5))
## resize it
volume_resize(vol1, 6)
volume(vol1)

# attach a volume to a droplet
## create a droplet
(d <- droplet_create(region = "nyc1"))
## attach volume to droplet
volume_attach(vol1, d)
## refresh droplet info, see volumes slot
droplet(d$id)

# detach a volume from a droplet
(act <- volume_detach(vol1, d))
## refresh droplet info, see volumes slot
droplet(d$id)

# list an action
volume_action(vol1, 154689758)

# list all volume actions
volume_actions(volumes()[[1]])

## End(Not run)
```

---

words	<i>1000 words to use for seeding random word selection when name not given for a droplet</i>
-------	--

---

**Description**

1000 words to use for seeding random word selection when name not given for a droplet

# Index

## \*Topic **data**

- adjectives, 6
- nouns, 54
- words, 69

## \*Topic **package**

- analogsea-package, 3

account, 4  
action, 5  
action\_wait (actions), 5  
actions, 5  
adjectives, 6  
analogsea (analogsea-package), 3  
analogsea-defunct, 6  
analogsea-deprecated, 7  
analogsea-package, 3  
as.certificate, 7  
as.domain (domains), 24  
as.domain\_record, 8  
as.droplet, 17, 21, 32, 33, 35, 37, 38, 41, 42, 45, 47, 54, 59, 68  
as.droplet (droplet), 27  
as.droplet(), 39  
as.firewall, 10  
as.image, 11  
as.project, 12  
as.snapshot, 13, 13  
as.space, 14  
as.sshkey (keys), 53  
as.tag (tags), 64  
as.url.domain\_record (as.domain\_record), 8  
as.volume, 14, 15, 68  
  
certificate (as.certificate), 7  
certificate\_create (as.certificate), 7  
certificate\_delete, 16  
certificates (as.certificate), 7  
cloud\_config, 30, 34

debian, 17  
debian\_add\_swap (debian), 17  
debian\_apt\_get\_install (debian), 17  
debian\_apt\_get\_update (debian), 17  
debian\_install\_r (debian), 17  
debian\_install\_rstudio (debian), 17  
debian\_install\_shiny (debian), 17  
DELETE, 66, 67  
do\_oauth, 3, 25  
do\_options, 26  
docklet\_create, 20  
docklet\_create(), 40  
docklet\_docker (docklet\_create), 20  
docklet\_docker(), 41  
docklet\_images (docklet\_create), 20  
docklet\_images(), 40  
docklet\_ps (docklet\_create), 20  
docklet\_ps(), 40  
docklet\_pull (docklet\_create), 20  
docklet\_pull(), 41  
docklet\_rm (docklet\_create), 20  
docklet\_rm(), 41  
docklet\_rstudio (docklet\_create), 20  
docklet\_rstudio(), 41  
docklet\_rstudio\_addusers (docklet\_create), 20  
docklet\_rstudio\_addusers(), 41  
docklet\_run (docklet\_create), 20  
docklet\_run(), 41  
docklet\_shinyapp (docklet\_create), 20  
docklet\_shinyapp(), 41  
docklet\_shinyserver (docklet\_create), 20  
docklet\_shinyserver(), 41  
docklet\_stop (docklet\_create), 20  
docklet\_stop(), 41  
docklets\_create, 18, 22  
docklets\_create(), 40  
domain (domains), 24  
domain\_create, 24

domain\_delete (domain\_create), 24  
domain\_record (as.domain\_record), 8  
domain\_record\_create  
    (as.domain\_record), 8  
domain\_record\_delete  
    (as.domain\_record), 8  
domain\_record\_update  
    (as.domain\_record), 8  
domain\_records (as.domain\_record), 8  
domains, 24  
droplet, 27  
droplet(), 39  
droplet\_action, 31  
droplet\_actions, 32  
droplet\_actions(), 39  
droplet\_backups\_list  
    (droplet\_snapshot), 44  
droplet\_backups\_list(), 39  
droplet\_change\_kernel (droplet\_modify),  
    42  
droplet\_change\_kernel(), 39  
droplet\_create, 26, 33, 38, 43, 59  
droplet\_create(), 39  
droplet\_delete, 35  
droplet\_delete(), 39  
droplet\_disable\_backups  
    (droplet\_action), 31  
droplet\_disable\_backups(), 40  
droplet\_do\_actions, 36  
droplet\_do\_actions(), 40  
droplet\_download (droplet\_ssh), 45  
droplet\_download(), 39  
droplet\_enable\_backups  
    (droplet\_action), 31  
droplet\_enable\_backups(), 40  
droplet\_enable\_ipv6 (droplet\_action), 31  
droplet\_enable\_ipv6(), 40  
droplet\_enable\_private\_networking  
    (droplet\_action), 31  
droplet\_enable\_private\_networking(),  
    40  
droplet\_execute, 37  
droplet\_execute(), 40  
droplet\_freeze, 38  
droplet\_freeze(), 40  
droplet\_functions, 39  
droplet\_kernels\_list, 41  
droplet\_kernels\_list(), 40  
droplet\_modify, 42  
droplet\_neighbors (neighbors), 54  
droplet\_neighbors(), 40  
droplet\_power\_cycle (droplet\_action), 31  
droplet\_power\_cycle(), 40  
droplet\_power\_off (droplet\_action), 31  
droplet\_power\_off(), 40  
droplet\_power\_on (droplet\_action), 31  
droplet\_power\_on(), 40  
droplet\_reboot (droplet\_action), 31  
droplet\_reboot(), 40  
droplet\_rebuild (droplet\_modify), 42  
droplet\_rebuild(), 39  
droplet\_rename (droplet\_modify), 42  
droplet\_rename(), 39  
droplet\_reset\_password  
    (droplet\_action), 31  
droplet\_reset\_password(), 40  
droplet\_resize (droplet\_modify), 42  
droplet\_resize(), 39  
droplet\_restore (droplet\_snapshot), 44  
droplet\_restore(), 39  
droplet\_reuse, 43  
droplet\_reuse(), 40  
droplet\_shutdown (droplet\_action), 31  
droplet\_shutdown(), 40  
droplet\_snapshot, 38, 44  
droplet\_snapshot(), 39  
droplet\_snapshots\_list  
    (droplet\_snapshot), 44  
droplet\_snapshots\_list(), 39  
droplet\_ssh, 45  
droplet\_ssh(), 39  
droplet\_thaw (droplet\_freeze), 38  
droplet\_thaw(), 40  
droplet\_upgrade (droplet\_action), 31  
droplet\_upgrade(), 40  
droplet\_upgrades\_list, 46  
droplet\_upgrades\_list(), 40  
droplet\_upload (droplet\_ssh), 45  
droplet\_upload(), 39  
droplet\_wait, 47, 59  
droplet\_wait(), 40  
droplets, 28, 43  
droplets(), 39  
droplets\_cost, 28  
droplets\_cost(), 40  
droplets\_create, 29

- droplets\_create(), 39
- firewall (as.firewall), 10
- firewall\_add\_droplets, 48
- firewall\_add\_tags, 48
- firewall\_create (as.firewall), 10
- firewall\_delete, 49
- firewall\_remove\_droplets  
    (firewall\_add\_droplets), 48
- firewall\_remove\_tags  
    (firewall\_add\_tags), 48
- firewall\_update (as.firewall), 10
- firewalls (as.firewall), 10
  
- GET, 4, 13, 15, 58, 60, 64, 68
  
- image (as.image), 11
- image\_actions, 50
- image\_convert, 50
- image\_delete, 51
- image\_rename (image\_delete), 51
- image\_transfer, 52
- images, 19, 21, 29, 34, 43
- images (as.image), 11
- install\_r\_package (debian), 17
  
- key (keys), 53
- key-crud, 52
- key\_create (key-crud), 52
- key\_delete (key-crud), 52
- key\_rename (key-crud), 52
- keys, 18, 21, 30, 34, 53
  
- neighbors, 54
- nouns, 54
  
- oauth\_app, 25
  
- POST, 13, 15, 19, 21, 30, 34, 36, 44, 55, 57, 58,  
    65, 66, 68
- project (as.project), 12
- project\_create, 55
- project\_delete, 56
- project\_patch, 57
- project\_update, 57
- projects (as.project), 12
- put\_bucket, 63
  
- regions, 18, 21, 30, 34, 58
- resize, 59
  
- s3HTTP, 61
- sizes, 18, 21, 29, 33, 60
- snapshot (as.snapshot), 13
- snapshot\_delete (as.snapshot), 13
- snapshots (as.snapshot), 13
- space\_create, 63
- spaces, 60
- spaces\_GET, 61, 61
- spaces\_info, 62
- standardise\_keys, 63
- summary.droplet (droplet), 27
- Sys.setenv, 62
  
- tag (tags), 64
- tag\_create, 65
- tag\_delete, 66
- tag\_rename, 6
- tag\_resource, 66
- tag\_resource\_delete, 67
- tags, 64
  
- volume (as.volume), 14
- volume\_action (volume\_attach), 68
- volume\_actions (volume\_attach), 68
- volume\_attach, 68
- volume\_create (as.volume), 14
- volume\_delete (as.volume), 14
- volume\_detach (volume\_attach), 68
- volume\_resize (volume\_attach), 68
- volume\_snapshot\_create (as.volume), 14
- volume\_snapshots (as.volume), 14
- volumes (as.volume), 14
  
- words, 18, 21, 29, 33, 69