

# Package ‘boxr’

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**Description** An R interface for the remote file hosting service 'Box' (<<https://www.box.com/>>). In addition to uploading and downloading files, this package includes functions which mirror base R operations for local files, (e.g. `box_load()`, `box_save()`, `box_read()`, `box_setwd()`, etc.), as well as 'git' style functions for entire directories (e.g. `box_fetch()`, `box_push()`).

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boxr-package

*boxr: access the Box API*

---

### Description

A lightweight, *opinionated*, high-level R interface for the [box.com](https://box.com) API.

### Details

This package has a documentation-website (created using [pkgdown](#)), containing:

- [README](#).
- [Get-started article](#), also accessible from R: `vignette("boxr")`.
- [Function reference](#).

The boxr source-repository is at GitHub: <https://github.com/r-box/boxr>.

If you find anything you think might be a bug, please report it as a [GitHub issue](#)!

Happy hacking! :)

---

boxr_options	<i>Get boxr options</i>
--------------	-------------------------

---

### Description

This function gets the values of boxr's global options.

### Usage

```
boxr_options()
```

### Details

Options can be set in the usual way, using [options\(\)](#).

### Value

list, current values of boxr options, with elements:

`boxr.interactive` logical, indicates if boxr is running in interactive mode.

`boxr.progress` logical, indicates to use progress-bars, if available.

`boxr.verbose` logical, indicates if boxr will use [cat\(\)](#) to print to the console. Setting to TRUE may cause problems with knitr.

`boxr.wd` list, containing information on the Box working-directory: `id` (numeric), and `name` (character).

`boxr.wd.path` character, path to the Box working-directory.

`boxr.token` Object with S3 class `Token2.0` ([httr::Token2.0](#)).

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boxr_S3_classes	<i>boxr S3 Classes</i>
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### Description

boxr implements a series of S3 classes to manage the data returned by the Box API. These classes are built on `list`; if you wish to access the information directly, you can use `unclass(x)`.

### Details

`boxr_file_reference`

- describes a file created, modified, or deleted at Box.
- returned by [box\\_ul\(\)](#), [box\\_save\(\)](#), [box\\_delete\\_file\(\)](#), etc.
- available methods: [print\(\)](#).

**boxr\_folder\_reference**

- describes a folder created or deleted at Box.
- returned by `box_dir_create()`, `box_delete_folder()`.
- available methods: `print()`.

**boxr\_dir\_wide\_operation\_result**

- describes the result of a directory-wide operation.
- returned by `box_fetch()` and `box_push()`.
- available methods: `print()`, `summary()`.

**boxr\_object\_list**

- describes a collection of files at Box.
- returned by `box_ls()`, `box_search()`, and related functions.
- available methods: `print()`, `as.data.frame()`.

**boxr\_dir\_comparison**

- describes the difference between directories.
- returned by the internal function `box_dir_diff()`.
- available methods: `print()`, `summary()`.

---

`box_add_description`    *Add description to a Box file*

---

**Description**

This function will attach a description to a Box file; it will overwrite the Box file's existing description.

**Usage**

```
box_add_description(file_id, description)
```

**Arguments**

<code>file_id</code>	numeric or character, file ID at Box.
<code>description</code>	character, description caption for the file.

**Details**

Files hosted at Box can have small text-descriptions that you can be use to annotate files, or even to leave 'git commit' style messages.

**Value**

Object with S3 class `boxr_file_reference`.

---

box_auth	<i>Authenticate to Box (interactive-app)</i>
----------	--

---

## Description

There are two common use-cases for `box_auth()`:

1. Connecting to [box.com](#) accounts from **boxr** for the first time.
2. Connecting to previously-connected [box.com](#) accounts.

In the first case, you will need to provide `box_auth()` with `client_id` and `client_secret`.

In the second case, you can call `box_auth()` with no arguments; the function will look for these in your R environment.

To run this function the first time, you will need access to the `client_id` and `client_secret` of a Box interactive-app. If you are using a work account, this information might be provided to you by your Box-admin team. If you are using a personal account, you will have to set up a Box interactive-app.

For both cases, these procedures are detailed in this [boxr interactive-app article](#).

## Usage

```
box_auth(client_id = NULL, client_secret = NULL, interactive = TRUE,  
         cache = "~/boxr-oauth", write.Renv, ...)
```

## Arguments

<code>client_id</code>	character, the client id for the account to use.
<code>client_secret</code>	character, the client secret for the account to use.
<code>interactive</code>	logical, indicates that the authorization process will be interactive (requiring user input to the R console, and/or a visit to <a href="#">box.com</a> ).
<code>cache</code>	A logical value or a string. TRUE means to cache using the default cache file <code>.httr-oauth</code> , FALSE means don't cache, and NA means to guess using some sensible heuristics. A string means use the specified path as the cache file.
<code>write.Renv</code>	<b>deprecated.</b>
<code>...</code>	Other arguments passed to <code>httr::oauth2.0_token()</code> .

## Value

`invisible(NULL)`, called for side-effects.

### Side-effects

This function has some side effects which make subsequent calls to `box_auth()` easier:

- a browser window may be opened at [box.com](https://box.com), for you to authorize to your Box app.
- a token file is written, according to the value of `cache`. The default behaviour is to write this file to `~/ .boxr-oauth`.
- some global `options()` are set for your session to manage the token.
- environment variables `BOX_USER_ID`, `BOX_CLIENT_ID`, and `BOX_CLIENT_SECRET` are set.
- if these environment variables have changed, and you have the `usethis` package installed, it will copy some text to your clipboard that you can paste into your `.Renviron` file.
- a message is printed to the console.

### See Also

`box_auth_service()` for authenticating to service-apps.

`httr::oauth2.0_token()` for details on how tokens are handled.

**Box Developers: Setup with OAuth 2.0** documentation for setting up Box (interactive) apps with OAuth 2.0.

---

box\_auth\_on\_attach      *Authenticate to Box (interactive) automatically*

---

### Description

**This function is deprecated, and will be removed at the next release.**

This function saves you the effort of typing `box_auth()` after the package loads. Executing `box_auth_on_attach(TRUE)` will mean that `boxr` will automatically attempt to authorize itself when 'attached' (e.g. `library(boxr)`), using the credentials from the current session.

### Usage

```
box_auth_on_attach(auth_on_attach = FALSE)
```

### Arguments

`auth_on_attach` `logical`, indicates if `boxr` should authenticate as soon as it's loaded.

### Value

`invisible(NULL)`, called for side-effects.

**Note**

This is provided for convenience, but it's a bad idea to use, if:

- You'd like your code to be reproducible. Even if your collaborators have access to the same files on box.com, as the default behaviour is to require using `box_auth()`, code is likely to become irreproducible.
- You use more than one box.com account. Things could get rather confusing.

**See Also**

[box\\_auth\(\)](#)

---

box_auth_service	<i>Authenticate to Box (service-app)</i>
------------------	--

---

**Description**

How you authenticate to Box depends the Box-app through which you connect. A Box service-app can be useful for unattended jobs that need access to only a limited part of Box, e.g. one folder.

Use this function to access Box using a service-app.

To access a service-app, you will need a JSON web-token (JWT), generated by your Box-admin team. If you have a personal Box account, *you* are your Box-admin team. You specify the JWT either as `token_file`, the path to the JWT file, or as `token_text`, the text of the JWT.

Using JWT-authentication is more convenient than using standard OAuth2 authentication, as you do not have to go through the "OAuth Dance". This convenience brings additional considerations because the JWT file gives its bearer uninhibited access to anything the Box service-app can access. Accordingly, you are recommended to:

- give the service-account access to as little information as you need it to have, e.g. a single folder.
- keep the JWT file secure.

**Usage**

```
box_auth_service(token_file = NULL, token_text = NULL)
```

**Arguments**

<code>token_file</code>	character, path to JSON token-file. If not provided, the function will look for an environment variable <code>BOX_TOKEN_FILE</code> . If that is not there, it will try <code>~/ .boxr-auth/token.json</code> .
<code>token_text</code>	character, JSON text. If this is provided, <code>token_file</code> is ignored.

## Details

The default behavior of a service-app is to act on behalf of the service-account associated with the service-app. This is different from an interactive-app, which acts on behalf of the Box user who authenticates to it.

To use a service-app on a folder belonging to a Box user, either the Box user has to invite the service-account to collaborate on a folder belonging to the user, or the service-account has to invite the Box user to collaborate on a folder belonging to the service-account.

In either case, you can use `box_dir_invite()`.

For more details on Box service-apps, including how to create them, and service-app-based workflows, please read this [boxr service-app article](#).

## Value

Invisible NULL, called for side-effects.

## Side-effects

This function has some side effects:

- some global `options()` are set for your session to manage the token.
- a message is printed to the console.

## See Also

[box\\_auth\(\)](#) for authenticating to interactive-apps.

[box\\_dir\\_invite\(\)](#) for inviting a different account to collaborate on a Box folder.

**Box Developers: Setup with JWT** documentation for setting up Box (service) apps with JWT.

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box_delete_file	<i>Move files within Box, from/to trash directory</i>
-----------------	---

---

## Description

In the Box context, deleting a file moves it to a special folder within your Box account: 'Trash'. As of mid-2019, Box' default **policy** is to retain files in Trash for 30 days.

## Usage

```
box_delete_file(file_id)
```

```
box_restore_file(file_id)
```

```
box_delete_folder(dir_id)
```

```
box_restore_folder(dir_id)
```



**Arguments**

file\_id            numeric or character, file ID at Box.  
 dir\_id            numeric or character, folder ID at Box.

**Details**

box\_delete\_file() Move a file to Trash.  
 box\_restore\_file() Restore a file from Trash.  
 box\_delete\_folder() Move a folder, including contents, to Trash.  
 box\_restore\_folder() Restore a folder, including contents, from Trash.

**Value**

box\_delete\_file() Object with S3 class [boxr\\_file\\_reference](#).  
 box\_restore\_file() Object with S3 class [boxr\\_file\\_reference](#).  
 box\_delete\_folder() Object with S3 class [boxr\\_folder\\_reference](#).  
 box\_restore\_folder() Object with S3 class [boxr\\_folder\\_reference](#).

---

box_dir_create	<i>Create a Box directory</i>
----------------	-------------------------------

---

**Description**

This will create a new folder at Box, with name `dir_name`, in the Box folder with ID `parent_dir_id`.

**Usage**

```
box_dir_create(dir_name, parent_dir_id = box_getwd())
```

**Arguments**

dir\_name            character, name for new folder at Box.  
 parent\_dir\_id    character or numeric, ID for the parent folder at Box.

**Value**

Object with S3 class [boxr\\_folder\\_reference](#).

**See Also**

[box\\_delete\\_folder\(\)](#) to move Box folders to trash, [box\\_ls\(\)](#) to list files in a Box folder.

---

box_dir_invite	<i>Invite collaboration on a Box folder</i>
----------------	---

---

## Description

Although this function can be used in all sorts of situations, it can be particularly useful in setting up a workflow with a service-account:

- If you are authenticated as a user, using `box_auth()`, you can invite the service account to collaborate on a folder in your *user* filesystem. In this case, the shared folder will appear in the service-account file-space.
- If you are authenticated as the service-account using `box_auth_service()`, you can invite your *user-account* to collaborate. In this case, the shared folder will appear in your user file-space.

Once you issue an invitation to create a collaboration, you cannot change it, e.g. you cannot change the role from "viewer" to "co-owner". However, you can delete the collaboration, then issue a *new* invitation. To delete a collaboration, you can use the Box web-portal.

The default role, i.e. permission level, for an invitation is "viewer". Legal values for role are "editor", "viewer", "previewer", "uploader", "previewer uploader", "viewer uploader", "co-owner", "owner".

## Usage

```
box_dir_invite(dir_id, user_id, login = NULL, role = "viewer",
              can_view_path = FALSE)
```

## Arguments

dir_id	numeric or character, folder ID at Box.
user_id	character ID for Box account to invite, e-mail address (login) will also work.
login	character email address of account to invite, can be used instead of user_id.
role	character role of the collaborator; default is "viewer".
can_view_path	logical indicates to allow the collaborator to navigate parent-folders at Box.

## Details

Regardless of the scenario, to use this function, you need the `dir_id` of folder you want to share and the `user_id` of the account with which you want to share it.

While authenticated from the host account, the one that will issue the invitation, you can use `box_ls()` and `box_setwd()` to get the `dir_id` for the folder you want to share. If the host-account is the user-account, you can also use the web-portal to find the `dir_id`. If the host account is the service-account, you can use the Box [content-portal](#) to find the `dir_id`.

A user can find their `user_id` using the Box web-portal. As well, when you authenticate using `boxr`, the `user_id` is included in the login message. Thus, you can use `box_auth_service()` to find out the `user_id` for a given service-account.

**Value**

Invisible list() containing collaboration-information.

**See Also**

[box\\_auth\(\)](#), [box\\_auth\\_service\(\)](#)

---

box_dl	<i>Download/upload files from/to Box</i>
--------	--

---

**Description**

box\_dl() download a file from Box to a local directory

box\_ul() upload a local file to a Box folder

**Usage**

```
box_dl(file_id, local_dir = getwd(), overwrite = FALSE,
       file_name = NULL, version_id = NULL, version_no = NULL,
       pb = options()$boxr.progress, filename)
```

```
box_ul(dir_id = box_getwd(), file, pb = options()$boxr.progress,
       description = NULL)
```

**Arguments**

file_id	numeric or character, file ID at Box.
local_dir	character, path to local directory.
overwrite	logical, indicates that newer files at origin will overwrite older files at destination.
file_name	character, if supplied, an alternate filename for the local version of the Box file.
version_id	character or numeric, the version_id of the file.
version_no	numeric, version of the file you'd like to download (starting at 1).
pb	logical, indicates to show progress bar (via <a href="#">setTxtProgressBar()</a> ).
filename	character, <b>deprecated</b> : use file_name instead.
dir_id	numeric or character, folder ID at Box.
file	character, local path to the file.
description	character, description caption for the file.

**Value**

box\_dl() character, local path to the downloaded file.

box\_ul() Object with S3 class [boxr\\_file\\_reference](#).

## Versions

`box_dl()` can accept one of two parameters to specify file versions: `version_id` or `version_no`.

The `box.com` API refers to file versions using 11 digit ids (which can be accessed via `box_previous_versions()`) - you can specify these using the `version_id` parameter.

However, this isn't terribly intuitive. As a result, `box_dl()` provides the `version_no` parameter, which accepts a whole number, and corresponds to the versions that you'll see via the web UI. For example to download the version marked 'V2' on `box.com`, specify `version_no = 2`. This works by making an internal call to `box_previous_versions()` to retrieve the `version_id`, which makes it slightly slower.

## See Also

- `box_fetch()` and `box_push()` for directory-wide equivalents.
- `box_delete_file()` for removing uploaded files.
- `box_source()` for R code.
- `box_save()/box_load()` for remote R objects.

---

box\_fetch

*Download/upload directories from/to Box*

---

## Description

`box_fetch()` download the contents of a Box folder to a local directory

`box_push()` upload the contents of a local directory to a Box folder

Files present in the origin but not the destination will be copied over.

Behaviour when a file exists in both depends on the arguments supplied.

## Usage

```
box_fetch(dir_id = box_getwd(), local_dir = getwd(),
          recursive = TRUE, overwrite = FALSE, delete = FALSE)
```

```
box_push(dir_id = box_getwd(), local_dir = getwd(),
          ignore_dots = TRUE, overwrite = FALSE, delete = FALSE)
```

## Arguments

<code>dir_id</code>	numeric or character, folder ID at Box.
<code>local_dir</code>	character, path to local directory.
<code>recursive</code>	logical, indicates to include subdirectories.
<code>overwrite</code>	logical, indicates that newer files at origin will overwrite older files at destination.
<code>delete</code>	logical, indicates to delete files that exist at destination, but not at origin.
<code>ignore_dots</code>	logical, indicates to ignore directories with names that begin with dots, e.g. <code>.git</code> and <code>.Rproj.user</code> .

**Value**

Object with S3 class `boxr_dir_wide_operation_result`.

**Overwrite/Update**

In the interests of preventing mishaps, `overwrite` is by default set to `FALSE`, which means that files which exist in the destination, but which are out of date, are not modified.

Setting `overwrite` to `TRUE` is likely to produce expected behavior for most users.

This is a conservative precaution to prevent users unexpectedly overwriting their files, and may change as a default in later releases.

However, files at Box are versioned, and most operating systems have file recovery features (e.g. 'Trash' (Ubuntu/Debian/OSX), or 'Recycle Bin' (Windows)), so unintended modification of files will be revertible for most users.

**Implementation**

At the time of writing, the Box API allows for only one file at a time to be uploaded/downloaded. As a result, `boxr` recursively scans the directory tree, uploading/downloading files in loops. Because the Box API can send, but not accept, gzipped files, downloading tends to be faster than uploading.

`box_fetch()/box_push()` rely on the internal function `box_dir_diff()` to determine how to process individual files (i.e. which to update, which to leave as is, etc.). See its help page for details.

**See Also**

`box_dl()/box_ul()` for single file operations, `box_dir_diff()` determines how files should be processed

---

<code>box_fresh_auth</code>	<i>Re-authenticate to Box (interactive-app)</i>
-----------------------------	---

---

**Description**

Deletes the cached token-file before trying to re-authenticate. This is often the solution to authentication problems.

**Usage**

```
box_fresh_auth(cache = "~/ .boxr-oauth", ...)
```

**Arguments**

<code>cache</code>	A logical value or a string. <code>TRUE</code> means to cache using the default cache file <code>.httr-oauth</code> , <code>FALSE</code> means don't cache, and <code>NA</code> means to guess using some sensible heuristics. A string means use the specified path as the cache file.
<code>...</code>	Other arguments passed to <code>box_auth()</code> .

**See Also**

[box\\_auth\(\)](#) for the usual method of authentication.

---

box_ls	<i>List files in a Box directory</i>
--------	--------------------------------------

---

**Description**

Non-recursive

**Usage**

```
box_ls(dir_id = box_getwd(), limit = 100, max = Inf, fields = NULL)
```

**Arguments**

dir_id	numeric or character, folder ID at Box.
limit	integer, maximum number of entries to retrieve per query-page.
max	integer, maximum number of entries to retrieve in total.
fields	character, fields to return; the default value, NULL, will return all possible columns: modified_at, content_modified_at, name, id, type, sha1 ,size, owned_by, path_collection, description.

**Value**

Object with S3 class [boxr\\_object\\_list](#).

**See Also**

[box\\_fetch\(\)](#) and [box\\_push\(\)](#) for synchronizing the contents of local and remote directories.

---

box_previous_versions	<i>Get details of previous versions of a Box file</i>
-----------------------	---

---

**Description**

Box explicitly versions files; this function returns a data.frame containing information on a file's previous versions on Box. No information about the current version of the file is returned.

**Usage**

```
box_previous_versions(file_id)
```

**Arguments**

file\_id            numeric or character, file ID at Box.

**Details**

The returned data.frame contains a variable, file\_version\_id, which you can use with [box\\_dl\(\)](#).

**Value**

data.frame containing information about previous versions of the file (if available).

**References**

This function is a light wrapper of the [box.com](#) API versions method.

<https://developers.box.com/docs/#files-view-versions-of-a-file>

**See Also**

[box\\_dl\(\)](#)

---

box_read	<i>Read an R object from a Box file</i>
----------	---

---

**Description**

These functions are used to download a Box file, specified by file\_id, then attempt to parse its contents into memory as an R object. For example, you may wish to read a Box CSV file as a data.frame.

**Usage**

```
box_read(file_id, type = NULL, version_id = NULL, version_no = NULL,  
         read_fun = rio::import, ...)
```

```
box_read_csv(file_id, ...)
```

```
box_read_tsv(file_id, ...)
```

```
box_read_json(file_id, ...)
```

```
box_read_excel(file_id, ...)
```

**Arguments**

file_id	numeric or character, file ID at Box.
type	character, <b>MIME type</b> used to override the content type returned by the server.
version_id	character or numeric, the version_id of the file.
version_no	numeric, version of the file you'd like to download (starting at 1).
read_fun	function, used to read (parse) the content into R; for box_read() the default function is <code>rio::import()</code> ; the specific helpers each use a different function directly.
...	Other arguments passed to read_fun.

**Details**

This is a two-step process. The first is to download the contents of the file, the second is to parse those contents into an R object. The default parsing-function is `rio::import()`.

In addition to `box_read()`, some specific helpers are provided:

`box_read_csv()` parse a remote CSV file into a `data.frame`. Default read-function is `rio::import()` with `format = "csv"`, which uses `data.table::fread()` if available, and `utils::read.csv()` if not. Pass the argument `fread = FALSE` to ... to always use `utils::read.csv()`.

`box_read_tsv()` parse a remote TSV file into a `data.frame`. Default read-function is `rio::import()` with `format = "tsv"`, which uses `data.table::fread()` if available, and `utils::read.delim()` if not. Pass the argument `fread = FALSE` to ... to always use `utils::read.delim()`.

`box_read_json()` parse a remote JSON file into a R object. Default read-function is `jsonlite::fromJSON()`.

`box_read_excel()` parse a remote Microsoft Excel file into a `data.frame`. Default read-function is `rio::import()` with `format = "excel"`, which uses `readxl::read_excel()` by default. Pass the argument `readxl = FALSE` to ... to use `openxlsx::read.xlsx()` instead.

**Value**

Object returned by function `read_fun`.

**rio's import() and JSON files**

In `rio` (0.5.18) there was a change in how JSON files are processed by `rio::import()`, a non-`data.frame` object stored in JSON is no longer coerced into a `data.frame`. The old behavior would produce unexpected results or fatal errors if the stored object was not a `data.frame`. The new behavior is closer to that of the underlying function `jsonlite::fromJSON()` and similar to the behavior for RDS files.

In keeping with the spirit of `jsonlite`, `box_read_json()` has been modified to call `jsonlite::fromJSON()` directly, which by-passes the old "undesirable" behavior of `rio` (< 0.5.18). If you are using the current CRAN release of `rio` (0.5.16) you should use `box_read_json()` to avoid these issues.

**See Also**

`box_dl()`, `box_save()`, `box_source()`



---

`box_save`*Download/upload an R workspace from/to a Box file*

---

### Description

Similar to `save()`, `save.image()`, and `load()`; these functions operate on files at Box instead of on local files.

### Usage

```
box_save(..., dir_id = box_getwd(), file_name = ".RData",
         description = NULL)
```

```
box_save_image(dir_id = box_getwd(), file_name = ".RData",
              description = NULL, filename)
```

```
box_load(file_id)
```

### Arguments

<code>...</code>	Objects to be saved, quoted or unquoted; passed to <code>save()</code> .
<code>dir_id</code>	numeric or character, folder ID at Box.
<code>file_name</code>	character, if supplied, an alternate filename for the local version of the Box file.
<code>description</code>	character, description caption for the file.
<code>filename</code>	character, <b>deprecated</b> : use <code>file_name</code> instead.
<code>file_id</code>	numeric or character, file ID at Box.

### Details

`box_save()` Save object(s) using `save()`, write to Box file.

`box_save_image()` Save image using `save.image()`, write to Box file.

`box_load()` Read from Box file, load using `load()`.

### Value

`box_save()` Object with S3 class `boxr_file_reference`.

`box_save_image()` Object with S3 class `boxr_file_reference`.

`box_load()` From `load()`, a character vector of the names of objects created, invisibly.

### See Also

`save()`, `save.image()`, `load()`

---

box_search	<i>Search Box files</i>
------------	-------------------------

---

## Description

Search Box files

## Usage

```
box_search(query = "", content_types = c("name", "description",
  "file_content", "comments", "tags"), type = NULL,
  file_extensions = NULL, ancestor_folder_ids = NULL,
  created_at_range = NULL, updated_at_range = NULL,
  size_range = NULL, trash = FALSE, owner_user_ids = NULL,
  max = 200)
```

```
box_search_files(query, ...)
```

```
box_search_folders(query, ...)
```

```
box_search_trash(query, ...)
```

## Arguments

query	character, search term.
content_types	character, content to search; more than one can be supplied with a vector.
type	character, type of object to return; the default, NULL, returns all possible types ("file", "folder", or "weblink").
file_extensions	character, vector of strings containing the file extensions (without dots) by which to narrow your search.
ancestor_folder_ids	numeric or character, if supplied, results are limited to one or more parent (ancestor) folders.
created_at_range	POSIXct (vector, length 2), range of created-at times.
updated_at_range	POSIXct (vector, length 2), range of updated-at times.
size_range	numeric (vector, length 2), range of file sizes (bytes).
trash	logical, indicates to search only the trash folder.
owner_user_ids	numeric or character, limits search to files owned by users with these IDs.
max	numeric, upper limit on the number of search results.
...	Other arguments passed to box_search().

**Details**

The Box API supports a maximum of 200 results per request. If `max > 200`, then multiple requests will be sent to retrieve and combine 'paginated' results for you, behind the scenes.

See the [box.com search description](#) for details of the features of the service. Some notable details:

- Full-text searching
  - is available for many source code file types, though not including R at the time of writing.
- Boolean operators are supported
  - such as and, or, and not (upper or lower case).
- Phrases can be searched
  - by putting them in "quotation marks".
- Search availability
  - it takes around 10 minutes for a newly uploaded file to enter the search index.

**Value**

Object with S3 class `boxr_object_list`.

---

box\_setwd

*Get/set Box default working-directory*

---

**Description**

Similar to `getwd()` and `setwd()`, these functions get and set the folder ID of the working directory at [box.com](#).

This folder ID is also stored in `boxr_options()`.

**Usage**

```
box_setwd(dir_id)
```

```
box_getwd()
```

**Arguments**

`dir_id` numeric or character, folder ID at Box.

**Value**

`box_getwd()` numeric, ID for working folder at Box.

`box_setwd()` invisible(NULL), called for side-effects.

**See Also**

[box\\_ls\(\)](#) to list files in a Box directory, [box\\_fetch\(\)/box\\_push\(\)](#) to download/upload directories from/to Box

---

box_source	<i>Source R code from a Box file</i>
------------	--------------------------------------

---

**Description**

This function downloads a file from Box, then runs its contents, as R code, using `source()`.

**Usage**

```
box_source(file_id, local = globalenv(), ...)
```

**Arguments**

file_id	numeric or character, file ID at Box.
local	TRUE, FALSE or an environment, determining where the parsed expressions are evaluated. FALSE (the default) corresponds to the user's workspace (the global environment) and TRUE to the environment from which source is called.
...	Other arguments passed to <code>source()</code> .

**Value**

Object returned by `source()`, called for side-effect of modifying an environment.

**See Also**

`box_dl()`, `box_save()`, `box_read()`

---

box_write	<i>Write an R object to a Box file</i>
-----------	--

---

**Description**

This function is used to serialize an R object and write it to a Box file. For example, you may wish to write a `data.frame` to Box as a CSV file.

**Usage**

```
box_write(x, file_name, dir_id = box_getwd(), description = NULL,  
write_fun = rio::export, filename, ...)
```

**Arguments**

x	Object to be written.
file_name	character, name of the new Box file.
dir_id	numeric or character, folder ID at Box.
description	character, description caption for the file.
write_fun	function, used to write (serialize) the content from R; default function is <a href="#">rio::export()</a> .
filename	character, <b>deprecated</b> : use file_name instead.
...	Other arguments passed to write_fun.

**Details**

This is a two-step process. The first is to serialize the contents of the R object, the second is to upload that serialization to a Box file. The default serialization-function is [rio::export\(\)](#).

The [rio::export\(\)](#) function currently only supports `data.frame`; to serialize lists, you may wish to use [jsonlite::toJSON\(\)](#).

Please note that `box_write()` is used to write R objects to Box files using standard formats. To write R objects as `.RData` files, you can use [box\\_save\(\)](#).

**Value**

Object with S3 class [boxr\\_file\\_reference](#).

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