Cask

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Contents

Cask is a project management tool for Emacs Lisp to automate the package development cycle; development, dependencies, testing, building, packaging and more.

Cask can also be used to manage dependencies for your local Emacs configuration.

It's based on a `Cask` file, which identifies an Emacs Lisp package, provides meta information about the package, and declares its contents and dependencies.
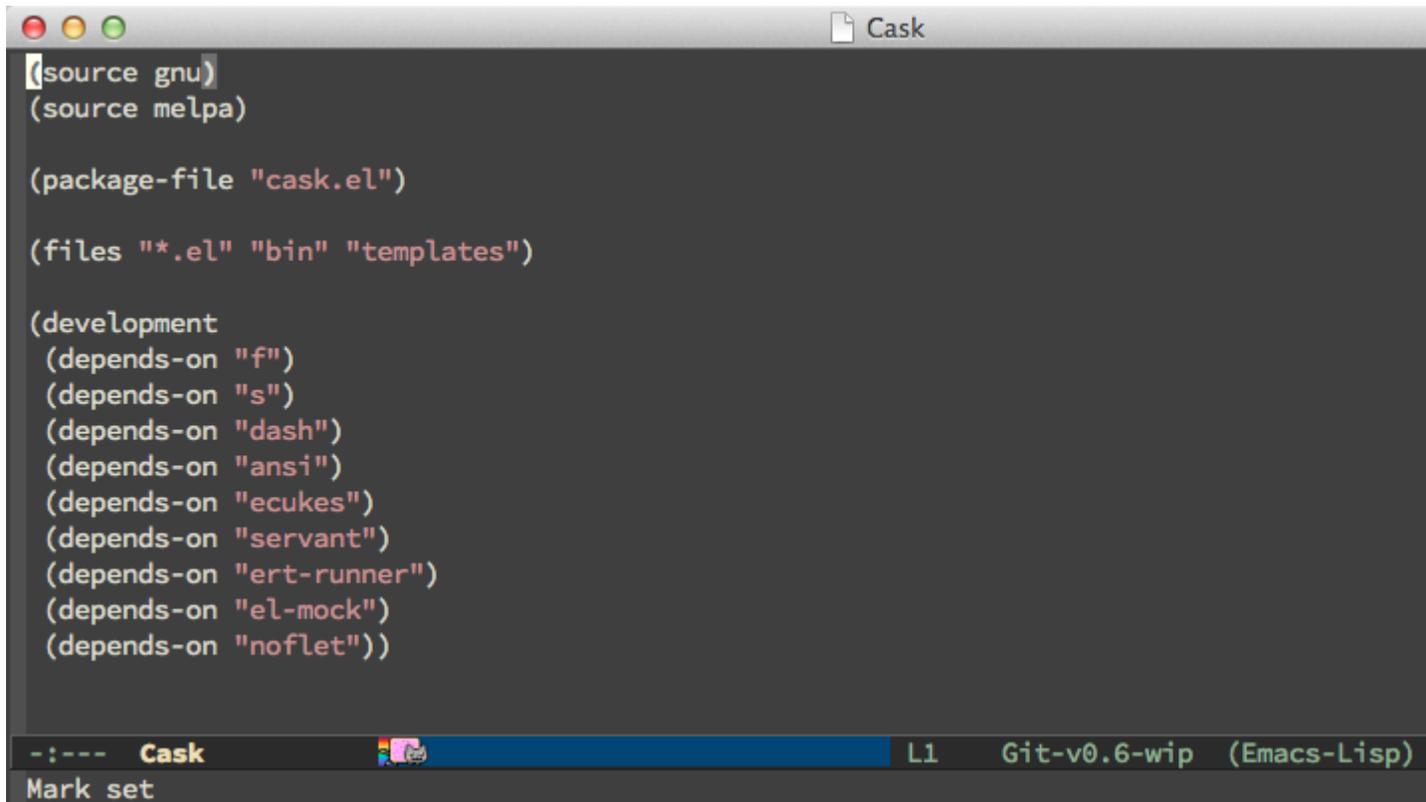
Fig. 1: Cask's own `Cask` file

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User guide

This part of the documentation explains how to use Cask. We start with a little introduction on Cask, which provides background information and motivation for Cask. Then we guide you through the installation and usage of Cask, and provide a reference on Cask's domain specific language. We conclude with some troubleshooting help.

1.1 Introduction — Why Cask?

Cask is an Emacs Lisp project management tool, similar to Maven or Leiningen. It aims to control and automate the entire life cycle of an Emacs Lisp package, including dependency management, packaging, distribution and testing.

This document provides a motivation for using Cask in your Emacs Lisp packages, or in your personal Emacs configuration.

1.1.1 Package development

So, why should your Emacs Lisp project use Cask? Do you know why:

- Ruby projects have a `gemspec` file?
- Node.js projects have a `package.json` file?
- Clojure projects have a `project.clj` file?
- Emacs Lisp projects have a `Cask` file?

Actually, let us rephrase the last statement.

- Some Emacs Lisp projects have a `Cask` file?

No, let's try that again.

- Some Emacs Lisp projects do not have a `Cask` file?

We will argue that some Emacs Lisp projects may not benefit directly from using Cask. Those are the projects that:

- Do not have any dependencies

- Do not have any tests

- Do not care about consistency

- Do not care about compiler warnings

- Do not want to make it easy for contributors

So all in all, projects that are not worth using.

Emacs package development has improved drastically during the last couple of years. From single Emacs Lisp files uploaded to the Emacs Wiki, to high quality packages, using VCS, that are tested, installable via a package manager and more.

But there's one thing still missing and that is consistency. Note that *every* Ruby project has a `gemspec` file, *every* Node.js project has a `package.json` file and *every* Clojure project has a `project.clj` file.

In those environments, projects are structured, tested, packaged, compiled, released in the same way. If you find a new project and want to find out what dependencies it has, you will know exactly where to look. If you want to find the test for a specific feature, you know exactly where to look.

For Emacs Lisp projects using Cask, this is true as well.

So, even if you feel that your Emacs Lisp project does not have direct benefit of using Cask, please do so any way. If not for you, do it for other Emacs Lisp developers.

1.1.2 Emacs configuration

If you look at the majority of Emacs configurations out there, you will see a few different types setups. These are the major ones:

Using package.el directly

It usually looks something like this:

```
(require 'package)
(package-initialize)
(mapc
 (lambda (package)
   (unless (package-installed-p package)
     (package-install package)))
 '(s f dash flycheck prodigy ...))
```

I did something like this in my configuration once as well, but I no longer have to, because Cask exists.

Submodules

I have over 60 packages in my Emacs configuration. Can you imagine how much work it would require to keep all of those up to date?

Bundled packages

This has the same "keeping up to date" issue as the submodules approach. But it's even worse. Storing dependencies as part of the repository is madness. I shouldn't have to explain why.

Cask

This is obviously what we want. All it is, is a single file that declares a list of dependencies. You know where to look if you want to find out what dependencies a configuration has and it's easy to keep packages up to date.

1.2 Installation

This document guides you through the installation of Cask.

1.2.1 Prerequisites

Cask requires GNU Emacs 24 and Python 2.6 or later on a Unix system. It will not work with Emacs 23 and below, or with other flavours of Emacs, e.g. XEmacs.

> **Warning:** Windows support for Cask requires additional work (see *Windows Installation and Setup*).

1.2.2 Manual installation

To install Cask, run the following command:

```
$ curl -fsSL https://raw.githubusercontent.com/cask/cask/master/go | python
```

You can also clone the repository explicitly:

```
$ git clone https://github.com/cask/cask.git
```

To upgrade a manual installation, use:

```
$ cask upgrade-cask
```

1.2.3 Package managers

Cask is available in Homebrew, so OS X users can just use:

```
$ brew install cask
```

1.2.4 Setup

Add Cask to your `$PATH`:

```
export PATH="$HOME/.cask/bin:$PATH"
```

1.2.5 Windows Installation and Setup

Cask requires the following additional steps to run under Windows.

Both **emacs** and **python** need to be added to your %PATH%.

Assuming that python is installed to the default location (c:Python27) and emacs is under c:binemacs.

By Command Line

```
> setx PATH "%PATH%;c:\Python27\"
> setx PATH "%PATH%;c:\bin\emacs\bin"
> setx PATH "%PATH%;%userprofile%\.cask\bin"
```

By GUI

1. Use Win+Pause to open System Properties.

2. Under Windows 7 or newer, click on *Advanced system settings*.

   Under Windows XP, click on the *Advanced* tab.

3. Click on *Environment Variables. . . .*

4. Under System Variables find Path then choose to *Edit. . . .*

   At the end of the listed path, append (include the first ; only if not already present):

   ```
   ;C:\Python27\;C:\bin\emacs\bin
   ```

   If you do not have administrative rights to the machine, add the above to the User Variables Path.

5. Under User Variables find Path, and edit. If not present select *New. . .* and name it Path.

   Append or insert (add a ; at the beginning if Path exists):

   ```
   %userprofile%\.cask\bin
   ```

1.3 Usage

This document explains how to use Cask, and provides a reference of its commands and options.

1.3.1 Quickstart

Start by creating a file named Cask in the project root. Use **cask init** command to create a Cask-file automatically, containing boilerplate code:

```
$ cask init [--dev]
```

Use *cask init --dev*, if the project is for package development!

If you are using Cask for your Emacs configuration, add this to your ~/.emacs.d/init.el file:

```
(require 'cask "~/.cask/cask.el")
(cask-initialize)
```

Or if you installed Cask via Homebrew:

```
(require 'cask "/usr/local/share/emacs/site-lisp/cask/cask.el")
(cask-initialize)
```

To install all dependencies, run:

```
$ cask install
```

This will create a directory called `.cask` and install all dependencies into it.

Finding Emacs

By default, packages are installed for the default Emacs, i.e., the one behind the `emacs` command. To pick a different Emacs, set the environment variable *EMACS* to the command name or executable path of the Emacs to use:

```
$ EMACS="emacs24.1" cask command
```

Note that installed dependencies are scoped on the version of Emacs. So when switching between versions you will have to install the dependencies for each:

```
$ EMACS="emacs24.5" cask install
```

There are, unfortunately, circumstances under which Emacs itself resets the *EMACS* variable in a way which conflicts with **cask**, in which case you can use the environment variable *CASK_EMACS* instead. Specifically, this problem effects: Emacs-24, for `M-x compile`, `M-x shell` or `M-x term`, for Emacs-25 and Emacs-26 only for `M-x term`.

1.3.2 Commands and options

The general syntax of the **cask** program is as follows:

```
cask [GLOBAL-OPTIONS] [COMMAND] [COMMAND-OPTIONS] [COMMAND-ARGUMENTS]
```

cask exec

```
cask [GLOBAL-OPTIONS] exec [COMMAND] [ARGUMENTS ...]
```

Execute the system *command* with the given *arguments*, with a proper `$PATH` (see *cask path*) and `$EMACSLOADPATH` (see *cask load-path*).

cask emacs

```
cask [GLOBAL-OPTIONS] emacs [ARGUMENTS ...]
```

Execute `emacs` with the given *arguments*, with the appropriate environment (see *cask exec*). The Emacs executable is that which cask would normally run in (see *Finding Emacs*).

cask eval

```
cask [GLOBAL-OPTIONS] eval [FORM]
```

Evaluate FORM as a lisp form with a proper $PATH (see *cask path*) and $EMACSLOADPATH (see *cask load-path*). The return value of the form is not printed directly: FORM must print to the standard out or error stream.

cask help

```
cask [GLOBAL-OPTIONS] help [COMMAND]
```

Show help about Cask, or a given COMMAND.

cask info

```
cask [GLOBAL-OPTIONS] info
```

Show information about the project, such as name, description and version.

cask init

```
cask [GLOBAL-OPTIONS] init [--dev]
```

Create new Cask-file in the current directory.

If the project is for package development, use the *--dev* option:

--dev
> Add additional code to the Cask file, which is specific to Emacs Lisp packages.

cask install

```
cask [GLOBAL-OPTIONS] [install]
```

Install all dependencies of the project. This is the default command.

cask list

```
cask [GLOBAL-OPTIONS] list
```

List all run-time and development dependencies.

cask load-path

```
cask [GLOBAL-OPTIONS] load-path
```

Print the load path containing the dependencies of the current project, in proper format for the *EMACSLOADPATH* environment variable.

cask exec automatically runs its commands with the proper load-path.

cask outdated

```
cask [GLOBAL-OPTIONS] outdated
```

Show all outdated dependencies.

cask pkg-file

```
cask [GLOBAL-OPTIONS] pkg-file
```

Write a package descriptor file to `project`-pkg.el in the project root. `project` is the project name, as declared in the `Cask` file. See *Multi-file Packages(elisp)* for details.

cask package-directory

```
cask [GLOBAL-OPTIONS] package-directory
```

Print path to package directory, where all dependencies are installed. Currently, this is .cask/`emacs-version`/elpa), where `emacs-version` is the value of the `emacs-version` variable in Emacs.

cask path

```
cask [GLOBAL-OPTIONS] path
```

Print the `PATH` environment variable of this project.

The `PATH` of a project contains the binary directories of all dependencies, prepended to the `PATH` inherited from the current shell. The binary directory of a package is the `bin/` subdirectory of the package.

cask exec uses the `PATH` returned by this command when running programs.

cask update

```
cask [GLOBAL-OPTIONS] update
```

Update all dependencies installed in the project.

cask upgrade-cask

```
cask [GLOBAL-OPTIONS] upgrade-cask
```

Upgrade Cask and all its dependencies.

cask version

```
cask [GLOBAL-OPTIONS] version
```

Print version of the current package.

cask files

```
cask [GLOBAL-OPTIONS] files
```

Print the list of all package files.

cask build

```
cask [GLOBAL-OPTIONS] build
```

Byte compile all Emacs Lisp files in the package. The resulting byte code is written to the original path, with the extension replaced by `.elc`.

cask clean-elc

```
cask [GLOBAL-OPTIONS] clean-elc
```

Remove byte compiled files generated by *cask build*.

cask link

```
cask [GLOBAL-OPTIONS] link PACKAGE SOURCE
cask [GLOBAL-OPTIONS] link list
cask [GLOBAL-OPTIONS] link delete PACKAGE
```

Link between this package and a dependency on the local filesystem. A linked dependency avoids the need to download a dependency from a remote archive. The package linked to must either have a `Cask`-file or a `-pkg.el`-file.

`cask link` *package source* links the given *source* directory into the package directory of this project, under the given *package* name.

`cask link list` lists all links, and `cask link delete` *package* deletes the link for the given *package*.

cask package

```
cask [GLOBAL-OPTIONS] package [DISTDIR]
```

Build a package artefact, and put it into the given *DISTDIR*, defaulting to `dist/`.

For single-file packages, this command merely copies the corresponding file to `DISTDIR`, under the correct filename `package-version.el`.

For multi-file packages, this command creates a TAR archive containing the package, as `package-version.tar`. The TAR archive contains an appropriate package descriptor as generated by *cask pkg-file*.

If the *files* of the package contain `.texinfo` files and if **makeinfo** is available, these are compiled to Info before inclusion in the package, to allow for online reading of the manual in Emacs.

Global options

The following options are available on all Cask commands:

--proxy `<proxy>`
> Set Emacs proxy for HTTP and HTTPS:

```
$ cask --proxy "localhost:8888" install
```

--http-proxy `<proxy>`
> Set Emacs proxy for HTTP only.

--https-proxy `<proxy>`
> Set Emacs proxy for HTTPS only.

--no-proxy `<pattern>`
> Do not use a proxy for any URL matching *pattern*.
>
> *pattern* is an Emacs regular expression.

--version
> Print Cask's version.

--debug
> Enable debug information.

--path `<directory>`
> Use *directory*/`Cask` instead of the `Cask` file in the current directory.

--verbose
> Show all output from `package.el`.

1.3.3 Environment variables

EMACSLOADPATH
> The load path for Emacs, see *Library Search(elisp)*.

EMACS
> The command name or executable path of Emacs. Cask will use this Emacs in its commands, i.e. byte-compile files with this Emacs, install packages for this Emacs, and run commands from packages installed for this Emacs.
>
> If empty, Cask tries to find a reasonable default. On OS X, Cask tries the following Emacsen, in this order:
>
> * `~/Applications/Emacs.app`
> * `/Applications/Emacs.app`
> * `/usr/local/bin`
> * `emacs`
>
> On other Unix variants, e.g. Linux, Cask will simply use `emacs`.

CASK_EMACS
> As EMACS, but takes precedence over it. This is most useful for launching Cask inside Emacs which sometimes resets EMACS to other values.

1.4 Cask Domain Specific Language

This document provides a reference on the DSL (Domain Specific Language).

1.4.1 Package metadata

Function package (name, version, description)
> Declare a package with the given *name*, *version* and *description*:

```
(package "ecukes" "0.2.1" "Cucumber for Emacs.")
```

> All arguments are strings. The *version* must be a version understood by Emacs' built-in `version-to-list`.

Function package-file (file)
> Declare a package by taking the package metadata from the given *file*. Relative filenames are relative to the directory of the `Cask` file.

> The package name will be the name of the given *file*, sans directory and extension. The description is taken from the very first line of *file*. The version and the run-time dependencies are taken from the library headers of *file*. See *Library Headers(elisp)* for details about library headers

Function package-descriptor (file)
> Declare all package metadata directly by specifying a package descriptor contained in file with name given by *file*

> See Multi-file Packages for examples on defining packages with the `define-package` function.

1.4.2 Package contents

Function files (**&rest** patterns)
> The files to include in the package built by *cask package*. The *patterns* have the same format as the `:files` in an MELPA recipe, as Cask uses the same library to build packages.

> Each *pattern* in *patterns* is either a simple glob pattern as string or an expression (`target pattern...`). In the former case, all files matching the pattern (relative to the directory of the `Cask` file) are included at the *top-level* of the package. `:defaults` may be used as the first pattern to explicitly include the default patterns. This allows subsequent patterns to append to the defaults.

> In the latter case, *target* is the *unqualified* target directory within the package, each *pattern* describes the contents of the package under the *target* directory recursively.

> Hence, the pattern ("`*.el`" ("`resources`" ("`snippets`" "`*.snippet`"))) would include all `.el` files from the project root in the package root, and all `.snippet` files from the project root in the directory `resources/snippets` under the package root.

1.4.3 Dependencies

Function depends-on (package-name **&optional** , minimum-version)
Function depends-on (package-name, :fetcher, repourl **&optional** , :ref, hash, :branch, name, :files, patterns)
> Specify a dependency of this package.

> *package-name* is the name of a package which is a dependency of this package.

> In the first variant, install the package from a package archive (see *source*), optionally requiring a *minimum-version*.

> In the second variant, install the package from a VCS repository. Replace *fetcher* with any of the following: `:git`, `:bzr`, `:hg`, `:darcs`, `:svn` or `:cvs`. *repourl* is the repository URL to install the package from.

> *ref* and *branch* specify the commit hash or branch name to install from. If both are omitted, default to the `master` branch.

files gives the files from the repository to include in the package, in the same format as `files`. If omitted, try to take the files from the `Cask` file of the repository.

Function development(&rest body)
    Scope all `depends-on` expressions in *body* to development.

    Development dependencies are installed with *cask install*, but are not included in package descriptors generated by *cask pkg-file* and *cask package*.

Function source(alias)
Function source(name, url)
    Add a package archive to install dependencies from.

    In the first variant, add a built-in package archive. In the second variant, add a package archive with the given *name*, and the given *url*.

    Cask includes the following built-in package archives:

    gnu The standard GNU ELPA archive at https://elpa.gnu.org/.

    > **Warning:** Unlike an interactive Emacs, Cask does **not** enable any archive by default. Hence, you **must** explicitly add the `gnu` archive if you need it.

    melpa-stable An archive of stable versions built automatically from upstream repositories, at https://stable.melpa.org/.

    melpa An archive of VCS snapshots built automatically from upstream repositories, at https://melpa.org/.

    marmalade An archive of packages uploaded by users and maintainers, at https://marmalade-repo.org/.

    SC An archive providing packages for Sunrise Commander, at http://joseito.republika.pl/sunrise-commander/.

    org An archive providing packages for Org Mode, at http://orgmode.org/elpa/.

    > Note that unlike the `gnu` archive, which also provides an `org` package, this archive provides the `org-plus-contrib` package, which installs additional extensions for Org Mode maintained by the Org Mode maintainers, which are not included in the standard `gnu` packages for copyright reasons.

1.5 Troubleshooting

1.5.1 Error when running a Cask command

If you run a Cask command and get an error, there are a few things you can try yourself:

- Make sure that you have the latest Cask version. You can determine the current Cask version with `cask --version`.

- Upgrade Cask with `cask upgrade-cask`.

  > **Warning:** Use `cask upgrade-cask` even if you installed Cask with `git pull`. `cask upgrade-cask` will update the internal dependencies of Cask as well.

- If the error persists, remove Cask's internal dependencies, located at `~/.emacs.d/.cask/` *emacs-version*`/bootstrap`, where `emacs-version` is the version of Emacs you are using.

Remove that directory and try again. Cask will automatically download all internal dependencies again.

If Cask still does not work, please report an issue to the issue tracker. Please include Cask output with the `cask --verbose` and `cask --debug` options set, to give us as much information as possible.

Developer guide

This part of the documentation shows how to write extensions for and packages based on Cask, and explains how to contribute to Cask.

2.1 Cask API

This document provides a reference of the public Cask API, which you may use in your own projects and extensions to Cask.

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2.1.1 Cask bundles

A bundle represents a specific Cask project. Essentially, a bundle is a loaded `Cask` file.

2.1.2 Creating bundles

The following functions create bundles.

Function cask-setup (project-path)
    `Setup cask for project at PROJECT-PATH.`

    `This function return a `cask-bundle' object.`

Function cask-initialize (**&optional** project-path)
    `Initialize packages under PROJECT-PATH or `user-emacs-directory'.`

    `This function return a `cask-bundle' object.`

2.1.3 Bundle paths

These functions return various paths associated with a bundle:

Function cask-file (bundle)
    `Return path to BUNDLE Cask-file.`

Function cask-path (bundle)
    `Return BUNDLE root path.`

Function cask-load-path (bundle)
    `Return Emacs `load-path' (including BUNDLE dependencies).`

Function cask-exec-path (bundle)
    `Return Emacs `exec-path' (including BUNDLE dependencies).`

Function cask-elpa-path (bundle)
    `Return full path to BUNDLE elpa directory.`

2.1.4 Package metadata of bundles

These functions give access to the metadata of the package, represented by the bundle.

Function cask-package-name (bundle)
    `Return BUNDLE name.`

    `If BUNDLE is not a package, the error `cask-not-a-package' is signaled.`

Function cask-package-version (bundle)
    `Return BUNDLE version.`

    `If BUNDLE is not a package, the error `cask-not-a-package' is signaled.`

Function cask-package-description (bundle)
    `Return BUNDLE description.`

    `If BUNDLE is not a package, the error `cask-not-a-package' is signaled.`

2.1.5 Bundle contents

Function cask-files (bundle)
    Return BUNDLE files list.

    This is done by expanding the patterns in the BUNDLE path. Files
    in the list are relative to the path.

2.1.6 Bundle dependencies

Function cask-dependencies (bundle **&optional** , deep)
    Return BUNDLE's runtime and development dependencies.

    If DEEP is true, return all dependencies, recursively.

    Return value is a list of `cask-dependency' objects.

Function cask-runtime-dependencies (bundle **&optional** , deep)
    Return BUNDLE's runtime dependencies.

    If DEEP is true, return all dependencies, recursively.

    Return value is a list of `cask-dependency' objects.

Function cask-development-dependencies (bundle **&optional** , deep)
    Return BUNDLE's development dependencies.

    If DEEP is true, return all dependencies, recursively.

    Return value is a list of `cask-dependency' objects.

Function cask-installed-dependencies (bundle **&optional** , deep)
    Return list of BUNDLE's installed dependencies.

    If DEEP is t, all dependencies recursively will be returned.

Function cask-add-dependency (bundle, name **&rest** , args)
    Add dependency to BUNDLE.

    NAME is the name of the dependency.

    ARGS is a plist with these optional arguments:

     `:version' Depend on at least this version for this dependency.

     `:scope' Add dependency to a certain scope. Allowed values are
     'development and 'runtime.

     `:files' Only include files matching this pattern.

     `:ref' Fetcher ref to checkout.

     `:branch' Fetcher branch to checkout.

    ARGS can also include any of the items in `cask-fetchers'. The

```
plist key is one of the items in the list and the value is the
url to the fetcher source.
```

Function cask-has-dependency (bundle, name)
```
    Return true if BUNDLE contain link with NAME, false otherwise.
```

Function cask-find-dependency (bundle, name)
```
    Find dependency in BUNDLE with NAME.
```

Function cask-dependency-path (bundle, name)
```
    Return path to BUNDLE dependency with NAME.

    If no such dependency exist, return nil.
```

2.1.7 Dependency links

These functions deal with dependency links.

See also:

cask link

Function cask-links (bundle)
```
    Return a list of all links for BUNDLE.

    The list is a list of alist's where the key is the name of the
    link, as a string and the value is the absolute path to the link.
```

Function cask-link (bundle, name, source)
```
    Add BUNDLE link with NAME to SOURCE.

    NAME is the name of the package to link as a string.  SOURCE is
    the path to the directory to link to.  SOURCE must have either a
    NAME-pkg.el or Cask file for the linking to be possible.
```

Function cask-link-delete (bundle, name)
```
    Delete BUNDLE link with NAME.
```

Function cask-linked-p (bundle, name)
```
    Return true if BUNDLE has link with NAME.
```

2.1.8 Dependency sources and package archives

These functions let you add and remove dependency sources, i.e., package archives where to get dependencies from.

Function cask-add-source (bundle, name-or-alias **&optional** , url)
```
    Add source to BUNDLE.

    NAME-OR-ALIAS is either a string with the name of the source or a
    symbol, which refers to some of the keys in
    `cask-source-mapping'.

    Second argument URL is only required unless alias.  If no alias,
    URL is the url to the mirror.
```

Function cask-remove-source (bundle, name)
```
    Remove source from BUNDLE with NAME.
```

2.1.9 Dependency operations

These functions provide operations on dependencies, such as updating, or installing them:

Function cask-install(bundle)
    Install BUNDLE dependencies.

    Install all available dependencies.

    If some dependencies are not available, signal a
    `cask-missing-dependencies' error, whose data is a list of all
    missing dependencies. All available dependencies are installed
    nonetheless.

    If a dependency failed to install, signal a
    `cask-failed-installation' error, whose data is a (DEPENDENCY
    . ERR), where DEPENDENCY is the `cask-dependency' which failed
    to install, and ERR is the original error data.

Function cask-update(bundle)
    Update BUNDLE dependencies.

    Return list of updated packages.

Function cask-outdated(bundle)
    Return list of `epl-upgrade' objects for outdated BUNDLE dependencies.

2.1.10 Byte compilation

These function let you byte compile all Emacs Lisp files in a bundle:

Function cask-build(bundle)
    Build BUNDLE Elisp files.

Function cask-clean-elc(bundle)
    Remove BUNDLE Elisp byte compiled files.

2.1.11 Packaging

These functions create packages and package descriptors:

Function cask-define-package-string(bundle)
    Return `define-package' string for BUNDLE.

Function cask-define-package-file(bundle)
    Return path to `define-package' file for BUNDLE.

Function cask-package(bundle **&optional** , target-dir)
    Build an ELPA package of BUNDLE.

    Put package in TARGET-DIR if specified. If not specified, put in
    a directory specified by `cask-dist-path' in the BUNDLE path.

2.1.12 Miscellaneous functions

Function cask-caskify(bundle **&optional** , dev-mode)
    Create Cask-file for BUNDLE path.

    If DEV-MODE is true, the dev template is used, otherwise the
    configuration template is used.

Function cask-version()
    Return Cask's version.

2.2 Contributing to Cask

This document provides guidelines and information on contributing to Cask.

Cask is on GitHub, and a discussion group is available at https://groups.google.com/forum/#!forum/cask-dev.

2.2.1 Testing

Cask comes with a rich set of test cases. When fixing bugs or implementing new features, please add the corresponding test cases as well.

Running tests

1. `make start-server` to start the fake package server, which is used throughout the tests.
2. `make test` to run all tests. Use `make unit` to only run the unit tests, and `make ecukes` to only run the integration tests.
3. Repeat 2. as long as you need.
4. `make stop-server` to stop the fake package server started in 1.

2.2.2 Documentation

Cask includes a comprehensive user guide. Please try to extend it accordingly when you implement new features.

The documentation is written in reStructuredText, using Sphinx and sphinxcontrib-emacs. The former is a generic documentation tool, and the latter extends it with specific support for Emacs Lisp projects.

Setup

To build the documentation locally, you need to go through a little setup first.

Make sure that you have Python 2.7 and virtualenv available. To install virtualenv, use the following command:

```
$ pip install --user virtualenv
```

Then add `~/Library/Python/2.7/bin` (on OS X) or `~/.local/bin` (on other Unix variants) to `PATH`.

Note: You probably need to install **pip** first. It is available in the package repositories of most Linux distributions, as python-pip or similar. If pip is not available for your Linux distribution, or if you are using OS X, please follow the instructions to install pip.

Now create a virtualenv for the documentation, and install the requirements:

```
$ mkdir -p ~/.virtualenvs
$ virtualenv -p python2.7 ~/.virtualenvs/cask
$ pip install -r doc/requirements.txt
```

Now you are set up to build the documentation.

Building

Now you are ready to build the documentation.

First, switch to the virtualenv and make sure that the requirements are up to date:

```
$ source ~/.virtualenvs/cask/bin/activate
$ pip install -r doc/requirements.txt
```

Then you can build the HTML documentation, or verify all links in the documentation:

```
$ make html   # Build HTML documentation to build/doc/html/
$ make linkcheck  # Check all links in the documentation
```

2.2.3 Pull requests

If all tests passes, and the documentation builds, please send us a pull request with your changes.

Note: Usually we work on a WIP branch, named v*major*.*minor*-wip. Your pull request should target this branch, if present. Otherwise just base your pull request on master.

CHAPTER 3

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```

```
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```

```
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```

```
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notice like this when it starts in an interactive mode:

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```

CHAPTER 4

Index

The index provides a sorted list of all symbols, variables and concepts explained throughout Cask's documentation:

- genindex

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