

Skip to main content

__Back to top

__ `Ctrl` + `K`

[![conda 25.1.2.dev29 documentation -
Home](../../../../_static/conda_logo_full.svg)](../../../../index.html)

- * [Conda](https://docs.conda.io/projects/conda/)
- * [Conda-build](https://docs.conda.io/projects/conda-build)
- * [Miniconda](https://docs.anaconda.com/free/miniconda/)
- * conda.org

- * [__ GitHub](https://github.com/conda/conda "GitHub")
- * [![Element](../../../../_static/element_logo.svg)](http://bit.ly/conda-chat-room "Element")
- * [__ Discourse](https://conda.discourse.group/ "Discourse")

- * [Conda](https://docs.conda.io/projects/conda/)
- * [Conda-build](https://docs.conda.io/projects/conda-build)
- * [Miniconda](https://docs.anaconda.com/free/miniconda/)
- * conda.org

- * [__ GitHub](https://github.com/conda/conda "GitHub")
- * [![Element](../../../../_static/element_logo.svg)](http://bit.ly/conda-chat-room "Element")
- * [__ Discourse](https://conda.discourse.group/ "Discourse")

Navigation

- * [User guide](../././././user-guide/index.html) __
- * [Getting started with conda](../././././user-guide/getting-started.html)
- * [Installing conda](../././././user-guide/install/index.html) __
 - * [Installing on Windows](../././././user-guide/install/windows.html)
 - * [Installing on macOS](../././././user-guide/install/macos.html)
 - * [Installing on Linux](../././././user-guide/install/linux.html)
 - * [RPM and Debian Repositories for Miniconda](../././././user-guide/install/rpm-debian.html)
- * [Tasks](../././././user-guide/tasks/index.html) __
 - * [Managing conda](../././././user-guide/tasks/manage-conda.html)
 - * [Managing environments](../././././user-guide/tasks/manage-environments.html)
 - * [Managing channels](../././././user-guide/tasks/manage-channels.html)
 - * [Managing packages](../././././user-guide/tasks/manage-pkgs.html)
 - * [Managing Python](../././././user-guide/tasks/manage-python.html)
 - * [Managing virtual packages](../././././user-guide/tasks/manage-virtual.html)
 - * [Creating custom channels](../././././user-guide/tasks/create-custom-channels.html)
 - * [Creating projects](../././././user-guide/tasks/creating-projects.html)
 - * [Viewing command-line help](../././././user-guide/tasks/view-command-line-help.html)
- * [Configuration](../././././user-guide/configuration/index.html) __
 - * [Using the .condarc conda configuration file](../././././user-guide/configuration/use-condarc.html)
 - * [Settings](../././././user-guide/configuration/settings.html)
 - * [Administering a multi-user conda installation](../././././user-guide/configuration/admin-multi-user-install.html)
 - * [Mirroring channels](../././././user-guide/configuration/mirroring.html)
 - * [Disabling SSL verification](../././././user-guide/configuration/disable-ssl-verification.html)

- * [Using non-standard certificates](../../../../../user-guide/configuration/non-standard-certs.html)
- * [Using Custom Locations for Environment and Package Cache](../../../../../user-guide/configuration/custom-env-and-pkg-locations.html)
- * [Improving interoperability with pip](../../../../../user-guide/configuration/pip-interoperability.html)
- * [Using the free channel](../../../../../user-guide/configuration/free-channel.html)
- * [Concepts](../../../../../user-guide/concepts/index.html) __
- * [Commands](../../../../../user-guide/concepts/conda-commands.html)
- * [Packages](../../../../../user-guide/concepts/packages.html)
- * [Package specification](../../../../../user-guide/concepts/pkg-specs.html)
- * [Package search and install specifications](../../../../../user-guide/concepts/pkg-search.html)
- * [Channels](../../../../../user-guide/concepts/channels.html)
- * [Environments](../../../../../user-guide/concepts/environments.html)
- * [Installing with conda](../../../../../user-guide/concepts/installing-with-conda.html)
- * [Performance](../../../../../user-guide/concepts/conda-performance.html)
- * [Conda for data scientists](../../../../../user-guide/concepts/data-science.html)
- * [Plugins](../../../../../user-guide/concepts/conda-plugins.html)
- * [Troubleshooting](../../../../../user-guide/troubleshooting.html)
- * [Cheatsheet](../../../../../user-guide/cheatsheet.html)
- * [Configuration](../../../../../configuration.html)
- * [Commands](../../../../../commands/index.html) __
- * [``conda clean``](../../../../../commands/clean.html)
- * [``conda compare``](../../../../../commands/compare.html)
- * [``conda config``](../../../../../commands/config.html)
- * [``conda create``](../../../../../commands/create.html)
- * [``conda doctor``](../../../../../commands/doctor.html)
- * [``conda env``](../../../../../commands/env/index.html) __
- * [``conda env config``](../../../../../commands/env/config/index.html) __

- * [`conda env config vars`](../.../commands/env/config/vars/index.html) __
- * [`conda env config vars list`](../.../commands/env/config/vars/list.html)
- * [`conda env config vars set`](../.../commands/env/config/vars/set.html)
- * [`conda env config vars unset`](../.../commands/env/config/vars/unset.html)
- * [`conda env create`](../.../commands/env/create.html)
- * [`conda env export`](../.../commands/env/export.html)
- * [`conda env list`](../.../commands/env/list.html)
- * [`conda env remove`](../.../commands/env/remove.html)
- * [`conda env update`](../.../commands/env/update.html)
- * [`conda info`](../.../commands/info.html)
- * [`conda init`](../.../commands/init.html)
- * [`conda install`](../.../commands/install.html)
- * [`conda list`](../.../commands/list.html)
- * [`conda notices`](../.../commands/notices.html)
- * [`conda package`](../.../commands/package.html)
- * [`conda remove`](../.../commands/remove.html)
- * [`conda rename`](../.../commands/rename.html)
- * [`conda run`](../.../commands/run.html)
- * [`conda search`](../.../commands/search.html)
- * [`conda update`](../.../commands/update.html)
- * [Release notes](../.../release-notes.html)
- * [Glossary](../.../glossary.html)
- * [Developer guide](../.../index.html) __
- * [Architecture](../.../architecture.html)
- * [Contributing to conda](../.../contributing.html)
- * [Development Environment](../.../development-environment.html)
- * [Deep dives](../.../deep-dives/index.html) __

- * [`conda install``](../../deep-dives/install.html)
- * [`conda init`` and `conda activate``](../../deep-dives/activation.html)
- * [`conda config`` and context](../../deep-dives/context.html)
- * [Solvers](../../deep-dives/solvers.html)
- * [Logging](../../deep-dives/logging.html)
- * [Writing Tests](../../writing-tests/index.html) __
- * [Integration Tests](../../writing-tests/integration-tests.html)
- * [Deprecations](../../deprecations.html)
- * [Releasing](../../releasing.html)
- * [Plugins](../../plugins/index.html) __
 - * [Auth Handlers](../../plugins/auth_handlers.html)
 - * [Health Checks](../../plugins/health_checks.html)
 - * [Request Headers](../../plugins/request_headers.html)
 - * [Post-commands](../../plugins/post_commands.html)
 - * [Pre-commands](../../plugins/pre_commands.html)
 - * [Reporter Backends](../../plugins/reporter_backends.html)
 - * [Settings](../../plugins/settings.html)
 - * [Solvers](../../plugins/solvers.html)
 - * [Subcommands](../../plugins/subcommands.html)
 - * [Virtual Packages](../../plugins/virtual_packages.html)
- * [Specifications](../../specs/index.html) __
 - * [Technical specification: solver state](../../specs/solver-state.html)
- * [API](../../api.html) __
 - * [`conda``](../index.html) __
 - * [`__main__``](../__main__/index.html)
 - * [`_vendor``](../_vendor/index.html) __
 - * [`frozendict``](../_vendor/frozendict/index.html)

- * [`_version``](../_version/index.html)
- * [`activate``](../activate/index.html)
- * [`api``](../api/index.html)
- * [`auxlib``](../auxlib/index.html) __
 - * [`collection``](../auxlib/collection/index.html)
 - * [`compat``](../auxlib/compat/index.html)
 - * [`decorators``](../auxlib/decorators/index.html)
 - * [`entity``](../auxlib/entity/index.html)
 - * [`exceptions``](../auxlib/exceptions/index.html)
 - * [`ish``](../auxlib/ish/index.html)
 - * [`logz``](../auxlib/logz/index.html)
 - * [`type_coercion``](../auxlib/type_coercion/index.html)
- * [`base``](../base/index.html) __
 - * [`constants``](../base/constants/index.html)
 - * [`context``](../base/context/index.html)
- * [`cli``](../cli/index.html) __
 - * [`actions``](../cli/actions/index.html)
 - * [`common``](../cli/common/index.html)
 - * [`conda_argparse``](../cli/conda_argparse/index.html)
 - * [`find_commands``](../cli/find_commands/index.html)
 - * [`helpers``](../cli/helpers/index.html)
 - * [`install``](../cli/install/index.html)
 - * [`main``](../cli/main/index.html)
 - * [`main_clean``](../cli/main_clean/index.html)
 - * [`main_commands``](../cli/main_commands/index.html)
 - * [`main_compare``](../cli/main_compare/index.html)
 - * [`main_config``](../cli/main_config/index.html)

- * [main_create](../../cli/main_create/index.html)
- * [main_env](../../cli/main_env/index.html)
- * [main_env_config](../../cli/main_env_config/index.html)
- * [main_env_create](../../cli/main_env_create/index.html)
- * [main_env_export](../../cli/main_env_export/index.html)
- * [main_env_list](../../cli/main_env_list/index.html)
- * [main_env_remove](../../cli/main_env_remove/index.html)
- * [main_env_update](../../cli/main_env_update/index.html)
- * [main_env_vars](../../cli/main_env_vars/index.html)
- * [main_export](../../cli/main_export/index.html)
- * [main_info](../../cli/main_info/index.html)
- * [main_init](../../cli/main_init/index.html)
- * [main_install](../../cli/main_install/index.html)
- * [main_list](../../cli/main_list/index.html)
- * [main_mock_activate](../../cli/main_mock_activate/index.html)
- * [main_mock_deactivate](../../cli/main_mock_deactivate/index.html)
- * [main_notices](../../cli/main_notices/index.html)
- * [main_package](../../cli/main_package/index.html)
- * [main_pip](../../cli/main_pip/index.html)
- * [main_remove](../../cli/main_remove/index.html)
- * [main_rename](../../cli/main_rename/index.html)
- * [main_run](../../cli/main_run/index.html)
- * [main_search](../../cli/main_search/index.html)
- * [main_update](../../cli/main_update/index.html)
- * [python_api](../../cli/python_api/index.html)
- * [common](../../common/index.html) __
- * [_logic](../../common/_logic/index.html)

- * [`_os``](../../common/_os/index.html) __
- * [`linux``](../../common/_os/linux/index.html)
- * [`osx``](../../common/_os/osx/index.html)
- * [`unix``](../../common/_os/unix/index.html)
- * [`windows``](../../common/_os/windows/index.html)
- * [`compat``](../../common/compat/index.html)
- * [`configuration``](../../common/configuration/index.html)
- * [`constants``](../../common/constants/index.html)
- * [`disk``](../../common/disk/index.html)
- * [`io``](../../common/io/index.html)
- * [`iterators``](../../common/iterators/index.html)
- * [`logic``](../../common/logic/index.html)
- * [`path``](../../common/path/index.html) __
- * [`_cygpath``](../../common/path/_cygpath/index.html)
- * [`directories``](../../common/path/directories/index.html)
- * [`python``](../../common/path/python/index.html)
- * [`windows``](../../common/path/windows/index.html)
- * [`pkg_formats``](../../common/pkg_formats/index.html) __
- * [`python``](../../common/pkg_formats/python/index.html)
- * [`serialize``](../../common/serialize/index.html)
- * [`signals``](../../common/signals/index.html)
- * [`toposort``](../../common/toposort/index.html)
- * [`url``](../../common/url/index.html)
- * [`core``](../../core/index.html) __
- * [`envs_manager``](../../core/envs_manager/index.html)
- * [`index``](../../core/index/index.html)
- * [`initialize``](../../core/initialize/index.html)

- * [`link``](../../core/link/index.html)
- * [`package_cache_data``](../../core/package_cache_data/index.html)
- * [`path_actions``](../../core/path_actions/index.html)
- * [`portability``](../../core/portability/index.html)
- * [`prefix_data``](../../core/prefix_data/index.html)
- * [`solve``](../../core/solve/index.html)
- * [`subdir_data``](../../core/subdir_data/index.html)
- * [`deprecations``](../../deprecations/index.html)
- * [`env``](../../env/index.html) ____
- * [`env``](../../env/env/index.html)
- * [`installers``](../../env/installers/index.html) ____
- * [`base``](../../env/installers/base/index.html)
- * [`conda``](../../env/installers/conda/index.html)
- * [`pip``](../../env/installers/pip/index.html)
- * [`pip_util``](../../env/pip_util/index.html)
- * [`specs``](../../env/specs/index.html) ____
- * [`binstar``](../../env/specs/binstar/index.html)
- * [`requirements``](../../env/specs/requirements/index.html)
- * [`yaml_file``](../../env/specs/yaml_file/index.html)
- * [`exception_handler``](../../exception_handler/index.html)
- * [`exceptions``](../../exceptions/index.html)
- * [`exports``](../../exports/index.html)
- * [`gateways``](../index.html) ____
- * [`anaconda_client``](../anaconda_client/index.html)
- * [`connection``](../connection/index.html) ____
- * [`adapters``](../connection/adapters/index.html) ____
- * [`ftp``](../connection/adapters/ftp/index.html)

- * [`http`](../connection/adapters/http/index.html)
- * [`localfs`](../connection/adapters/localfs/index.html)
- * [`s3`](../connection/adapters/s3/index.html)
- * [`download`](../connection/download/index.html)
- * [`session`](../connection/session/index.html)
- * `disk` ____
- * [`create`](create/index.html)
- * [`delete`](delete/index.html)
- * [`link`](link/index.html)
- * [`lock`](lock/index.html)
- * [`permissions`](permissions/index.html)
- * [`read`](read/index.html)
- * [`test`](test/index.html)
- * [`update`](update/index.html)
- * [`logging`](../logging/index.html)
- * [`repodata`](../repodata/index.html) ____
- * [`jlap`](../repodata/jlap/index.html) ____
 - * [`core`](../repodata/jlap/core/index.html)
 - * [`fetch`](../repodata/jlap/fetch/index.html)
 - * [`interface`](../repodata/jlap/interface/index.html)
- * [`lock`](../repodata/lock/index.html)
- * [`subprocess`](../subprocess/index.html)
- * [`history`](../history/index.html)
- * [`instructions`](../instructions/index.html)
- * [`misc`](../misc/index.html)
- * [`models`](../models/index.html) ____
 - * [`channel`](../models/channel/index.html)

- * [dist`](../../models/dist/index.html)
- * [enums`](../../models/enums/index.html)
- * [leased_path_entry`](../../models/leased_path_entry/index.html)
- * [match_spec`](../../models/match_spec/index.html)
- * [package_info`](../../models/package_info/index.html)
- * [prefix_graph`](../../models/prefix_graph/index.html)
- * [records`](../../models/records/index.html)
- * [version`](../../models/version/index.html)
- * [notices`](../../notices/index.html) __
- * [cache`](../../notices/cache/index.html)
- * [core`](../../notices/core/index.html)
- * [fetch`](../../notices/fetch/index.html)
- * [types`](../../notices/types/index.html)
- * [views`](../../notices/views/index.html)
- * [plan`](../../plan/index.html)
- * [plugins`](../../plugins/index.html) __
- * [hookspec`](../../plugins/hookspec/index.html)
- * [manager`](../../plugins/manager/index.html)
- * [post_solves`](../../plugins/post_solves/index.html) __
 - * [signature_verification`](../../plugins/post_solves/signature_verification/index.html)
- * [reporter_backends`](../../plugins/reporter_backends/index.html) __
 - * [console`](../../plugins/reporter_backends/console/index.html)
 - * [json`](../../plugins/reporter_backends/json/index.html)
- * [solvers`](../../plugins/solvers/index.html)
- * [subcommands`](../../plugins/subcommands/index.html) __
 - * [doctor`](../../plugins/subcommands/doctor/index.html) __
 - * [health_checks`](../../plugins/subcommands/doctor/health_checks/index.html)

- * [`types``](../plugins/types/index.html)
- * [`virtual_packages``](../plugins/virtual_packages/index.html) __
 - * [`archspeg``](../plugins/virtual_packages/archspeg/index.html)
 - * [`conda``](../plugins/virtual_packages/conda/index.html)
 - * [`cuda``](../plugins/virtual_packages/cuda/index.html)
 - * [`freebsd``](../plugins/virtual_packages/freebsd/index.html)
 - * [`linux``](../plugins/virtual_packages/linux/index.html)
 - * [`osx``](../plugins/virtual_packages/osx/index.html)
 - * [`windows``](../plugins/virtual_packages/windows/index.html)
- * [`reporters``](../reporters/index.html)
- * [`resolve``](../resolve/index.html)
- * [`testing``](../testing/index.html) __
 - * [`cases``](../testing/cases/index.html)
 - * [`fixtures``](../testing/fixtures/index.html)
 - * [`gateways``](../testing/gateways/index.html) __
 - * [`fixtures``](../testing/gateways/fixtures/index.html)
 - * [`helpers``](../testing/helpers/index.html)
 - * [`integration``](../testing/integration/index.html)
 - * [`notices``](../testing/notices/index.html) __
 - * [`fixtures``](../testing/notices/fixtures/index.html)
 - * [`helpers``](../testing/notices/helpers/index.html)
 - * [`solver_helpers``](../testing/solver_helpers/index.html)
- * [`trust``](../trust/index.html) __
 - * [`constants``](../trust/constants/index.html)
 - * [`signature_verification``](../trust/signature_verification/index.html)
- * [`utils``](../utils/index.html)
- * [`conda_env``](../conda_env/index.html) __

* [`cli``](../../conda_env/cli/index.html)

* [`installers``](../../conda_env/installers/index.html)

* [`__`](../../index.html)

* [Developer guide](../../index.html)

* `__`

* [`gateways``](../index.html)

*

`disk``

Functions#

`exp_backoff_fn``(fn, *args, **kwargs) | Mostly for retrying file operations that fail on Windows due to virus scanners

---|---

`mkdir_p``(path) |

`mkdir_p_sudo_safe``(path) |

Attributes#

`on_win`` |

---|---

`TRACE`` |

`MAX_TRIES`` |

on_win#

TRACE _ = 5_#

MAX_TRIES _ = 7_#

exp_backoff_fn(_fn_ , _* args_, _** kwargs_)#

Mostly for retrying file operations that fail on Windows due to virus scanners

mkdir_p(_path_)#

mkdir_p_sudo_safe(_path_)#

__On this page

- * Functions
- * Attributes
- * ``on_win``
- * ``TRACE``
- * ``MAX_TRIES``
- * ``exp_backoff_fn()``
- * ``mkdir_p()``
- * ``mkdir_p_sudo_safe()``

[__Edit on GitHub](<https://github.com/conda/conda/edit/main/docs/source/dev-guide/api/conda/gateways/disk/index.rst>)

[__Show Source]([../../../../../_sources/dev-guide/api/conda/gateways/disk/index.rst.txt](https://github.com/conda/conda/blob/main/docs/source/dev-guide/api/conda/gateways/disk/index.rst.txt))

© Copyright 2017, Anaconda, Inc.

Created using [Sphinx](<https://www.sphinx-doc.org/>) 7.4.7.

[Analytics Dashboard __]([https://docs-conda-io.goatcounter.com "Analytics Dashboard"](https://docs-conda-io.goatcounter.com/AnalyticsDashboard))

Built with the [PyData Sphinx Theme](<https://pydata-sphinx-theme.readthedocs.io/en/stable/index.html>) 0.15.4.