

[Skip to main content](#)

[__Back to top](#)

[__`Ctrl`+`K`](#)

[[!conda 25.1.2.dev29 documentation -](#)

[Home\]\(../../../../../../_static/conda_logo_full.svg\)](#)

[\]\(../../../../../../index.html\)](#)

* [\[Conda\]\(https://docs.conda.io/projects/conda/\)](#)

* [\[Conda-build\]\(https://docs.conda.io/projects/conda-build\)](#)

* [\[Miniconda\]\(https://docs.anaconda.com/free/miniconda/\)](#)

* [\[conda.org\]\(https://conda.org\)](#)

* [\[__ GitHub\]\(https://github.com/conda/conda "GitHub"\)](#)

* [\[!\[Element\]\(../../../../../../_static/element_logo.svg\)\]\(http://bit.ly/conda-chat-room "Element"\)](#)

* [\[__ Discourse\]\(https://conda.discourse.group/ "Discourse"\)](#)

* [\[Conda\]\(https://docs.conda.io/projects/conda/\)](#)

* [\[Conda-build\]\(https://docs.conda.io/projects/conda-build\)](#)

* [\[Miniconda\]\(https://docs.anaconda.com/free/miniconda/\)](#)

* [\[conda.org\]\(https://conda.org\)](#)

* [\[__ GitHub\]\(https://github.com/conda/conda "GitHub"\)](#)

* [\[!\[Element\]\(../../../../../../_static/element_logo.svg\)\]\(http://bit.ly/conda-chat-room "Element"\)](#)

* [\[__ Discourse\]\(https://conda.discourse.group/ "Discourse"\)](#)

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`](../../gateways/index.html) __
- * [anaconda_client`](../../gateways/anaconda_client/index.html)
- * [connection`](../../gateways/connection/index.html) __

- * [` adapters`](../../gateways/connection/adapters/index.html) ____
- * [` ftp`](../../gateways/connection/adapters/ftp/index.html)
- * [` http`](../../gateways/connection/adapters/http/index.html)
- * [` localfs`](../../gateways/connection/adapters/localfs/index.html)
- * [` s3`](../../gateways/connection/adapters/s3/index.html)
- * [` download`](../../gateways/connection/download/index.html)
- * [` session`](../../gateways/connection/session/index.html)
- * [` disk`](../../gateways/disk/index.html) ____
- * [` create`](../../gateways/disk/create/index.html)
- * [` delete`](../../gateways/disk/delete/index.html)
- * [` link`](../../gateways/disk/link/index.html)
- * [` lock`](../../gateways/disk/lock/index.html)
- * [` permissions`](../../gateways/disk/permissions/index.html)
- * [` read`](../../gateways/disk/read/index.html)
- * [` test`](../../gateways/disk/test/index.html)
- * [` update`](../../gateways/disk/update/index.html)
- * [` logging`](../../gateways/logging/index.html)
- * [` repodata`](../../gateways/repodata/index.html) ____
- * [` jlap`](../../gateways/repodata/jlap/index.html) ____
- * [` core`](../../gateways/repodata/jlap/core/index.html)
- * [` fetch`](../../gateways/repodata/jlap/fetch/index.html)
- * [` interface`](../../gateways/repodata/jlap/interface/index.html)
- * [` lock`](../../gateways/repodata/lock/index.html)
- * [` subprocess`](../../gateways/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``](../index.html) __
- * [`hookspec``](../hookspec/index.html)
- * [`manager``](../manager/index.html)
- * [`post_solves``](../post_solves/index.html) __
- * [`signature_verification``](../post_solves/signature_verification/index.html)
- * [`reporter_backends``](../reporter_backends/index.html) __
- * [`console``](../reporter_backends/console/index.html)
- * [`json``](../reporter_backends/json/index.html)
- * [`solvers``](../solvers/index.html)
- * [`subcommands``](../subcommands/index.html) __

- * [`doctor``](../subcommands/doctor/index.html) __
- * [`health_checks``](../subcommands/doctor/health_checks/index.html)
- * [`types``](../types/index.html)
- * [`virtual_packages``](../index.html) __
- * [`archspec``](../archspec/index.html)
- * [`conda``](../conda/index.html)
- * ``cuda``
- * [`freebsd``](../freebsd/index.html)
- * [`linux``](../linux/index.html)
- * [`osx``](../osx/index.html)
- * [`windows``](../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)
* __
* [ `virtual_packages` ](./index.html)
*
```

`cuda`#

Detect CUDA version.

Functions#

`cuda_version`() | Attempt to detect the version of CUDA present in the operating system.

---|---

`cached_cuda_version`() | A cached version of the cuda detection system.

`conda_virtual_packages`() |

`_cuda_driver_version_detector_target`(queue) | Attempt to detect the version of CUDA present in the operating system in a

cuda_version()#

Attempt to detect the version of CUDA present in the operating system.

On Windows and Linux, the CUDA library is installed by the NVIDIA driver package, and is typically found in the standard library path, rather than with the CUDA SDK (which is optional for running CUDA apps).

On macOS, the CUDA library is only installed with the CUDA SDK, and might not be in the library path.

Returns: version string (e.g., '9.2') or None if CUDA is not found.

`cached_cuda_version()`#

A cached version of the cuda detection system.

`conda_virtual_packages()`#

`_cuda_driver_version_detector_target(_queue_)`#

Attempt to detect the version of CUDA present in the operating system in a

subprocess.

On Windows and Linux, the CUDA library is installed by the NVIDIA driver package, and is typically found in the standard library path, rather than with the CUDA SDK (which is optional for running CUDA apps).

On macOS, the CUDA library is only installed with the CUDA SDK, and might not be in the library path.

Returns: version string (e.g., '9.2') or None if CUDA is not found.

The result is put in the queue rather than a return value.

__On this page

* Functions

* ``cuda_version()``

* ``cached_cuda_version()``

* ``conda_virtual_packages()``

* ``_cuda_driver_version_detector_target()``

[__Edit on GitHub](https://github.com/conda/conda/edit/main/docs/source/dev-guide/api/conda/plugins/virtual_packages/cuda/index.rst)

[__Show Source]([../../../../../_sources/dev-](#)

guide/api/conda/plugins/virtual_packages/cuda/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")

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