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# **conda Documentation**

*Release*

**Anaconda, Inc.**

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*Package, dependency and environment management for any language—Python, R, Ruby, Lua, Scala, Java, JavaScript, C/C++, FORTRAN*

Conda is an open source package management system and environment management system that runs on Windows, macOS and Linux. Conda quickly installs, runs and updates packages and their dependencies. Conda easily creates, saves, loads and switches between environments on your local computer. It was created for Python programs, but it can package and distribute software for any language.

Conda as a package manager helps you find and install packages. If you need a package that requires a different version of Python, you do not need to switch to a different environment manager, because conda is also an environment manager. With just a few commands, you can set up a totally separate environment to run that different version of Python, while continuing to run your usual version of Python in your normal environment.

In its default configuration, conda can install and manage the thousand packages at [repo.continuum.io](http://repo.continuum.io) that are built, reviewed and maintained by Anaconda®.

Conda can be combined with continuous integration systems such as Travis CI and AppVeyor to provide frequent, automated testing of your code.

The conda package and environment manager is included in all versions of Anaconda and Miniconda. [Anaconda Repository](#). Conda is also included in [Anaconda Enterprise](#) , which provides on-site enterprise package and environment management for Python, R, Node.js, Java and other application stacks. Conda is also available on PyPI, although that approach may not be as up to date.



# CHAPTER 1

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Conda

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## CHAPTER 2

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Conda-build

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	Windows	Mac OS X	Linux
Python 3.7	64-bit (exe installer) 32-bit (exe installer)	64-bit (bash installer) 64-bit (.pkg installer)	64-bit (bash installer) 32-bit (bash installer)
Python 2.7	64-bit (exe installer) 32-bit (exe installer)	64-bit (bash installer) 64-bit (.pkg installer)	64-bit (bash installer) 32-bit (bash installer)

### Installation instructions

#### Other resources:

- [Miniconda with Python 3.7 for Power8 & Power9](#)
- [Miniconda with Python 2.7 for Power8 & Power9](#)
- [Miniconda Docker images](#)
- [Miniconda AWS images](#)
- [Archive and MD5 sums for the installers](#)
- [conda change log](#)

These Miniconda installers contain the conda package manager and Python. Once Miniconda is installed, you can use the conda command to install any other packages and create environments, etc. For example:

```
$ conda install numpy
...
$ conda create -n py3k anaconda python=3
...
```

There are two variants of the installer: Miniconda is Python 2 based and Miniconda3 is Python 3 based. Note that the choice of which Miniconda is installed only affects the root environment. Regardless of which version of Miniconda you install, you can still install both Python 2.x and Python 3.x environments.

The other difference is that the Python 3 version of Miniconda will default to Python 3 when creating new environments and building packages. So for instance, the behavior of

```
$ conda create -n myenv python
```

will be to install Python 2.7 with the Python 2 Miniconda and to install Python 3.7 with the Python 3 Miniconda. You can override the default by explicitly setting `python=2` or `python=3`. It also determines the default value of `CONDA_PY` when using `conda build`.

**Note:** If you already have Miniconda or Anaconda installed, and you just want to upgrade, you should not use the installer. Just use `conda update`. For instance

```
$ conda update conda
```

will update conda.

- Get free community support with our [Google group](#).
- Paid [support](#), [training](#) and [consulting](#) options are available. Our teaching philosophy is that the best way to learn is with hands-on experience addressing real-world problems. Courses are available to individuals online, at numerous sites, or in-house at your place of business. We also offer consulting services for the analysis, management and visualization of scientific and business data or optimizing your processing workflows on modern hardware and GPUs.
- Support is included in purchases of [Anaconda Enterprise](#).

### 4.1 Join the conda email group

Join the mailing lists for both [Anaconda](#) and [conda](#). Ask questions, answer questions, discuss ways to use conda, request new features and submit any other comments you may have.

### 4.2 Contribute recipes to GitHub

Submit new recipes to the GitHub repository at <https://github.com/conda/conda-recipes>. When you build a new conda recipe for a program not yet listed in the repository, use a GitHub pull request to submit it to the repository, so that others using that program in the future can reuse it. Recipes are welcome for programs that use any license, such as GPL, BSD, MIT or Apache, and all of the recipes in this repository are released into the public domain.

### 4.3 Report bugs

If you find a bug, search to see if it has already been reported, and then report it if no one else has.

Issues with the conda documentation are tracked on GitHub at <https://github.com/conda/conda-docs/issues>.

For issues with conda, conda-build, [repo.anaconda.com](https://github.com/conda/conda), [anaconda.org](https://anaconda.org), and specific conda packages, please see *New Issues*.

### 4.4 Presentations and blog posts

- [Packaging and Deployment with conda—Travis Oliphant](#).
- [Anaconda Developer Blog](#).

### 4.5 Conda announcements list

Conda Announcements is a low-traffic email list for news and updates directly from the conda core team. By providing your email address below, you consent to join Conda Announcements. It is not a marketing list. We never sell, give away or distribute your email address to third parties.

- No more than 1 email per week, usually less.
- Project announcements relevant to all conda users.
- No corporate marketing hype.
- No spam.

For convenience, we use MailChimp to manage subscriptions, including [archived announcements](#).

Upon clicking the “Consent and Subscribe” button, you will receive an email that contains a link to confirm your subscription. You must click this link to activate your subscription. You can opt-out at any time by clicking the “Unsubscribe” link included in any email we send through this announcement list, or by contacting [privacy@anaconda.com](mailto:privacy@anaconda.com).

## 5.1 New Issues

If your issue is a bug report or feature request for:

- **a specific conda package:** please file it at <https://github.com/ContinuumIO/anaconda-issues/issues>
- **anaconda.org:** please file it at <https://github.com/Anaconda-Platform/support/issues>
- **repo.anaconda.com:** please file it at <https://github.com/ContinuumIO/anaconda-issues/issues>
- **commands under conda build:** please file it at <https://github.com/conda/conda-build/issues>
- **commands under conda env:** please file it at <https://github.com/conda/conda/issues>
- **all other conda commands:** please file it at <https://github.com/conda/conda/issues>

## 5.2 Development Environment, Bash

To set up an environment to start developing on conda code, we recommend the following steps:

1. Fork the conda/conda repository, clone it locally anywhere you choose (an isolation miniconda will be set up within the clone directory), and set up `git remote` to point to upstream and fork. For detailed directions, see below.

- 1a. Choose where you want the repository located (not location of existing conda)

```
CONDA_PROJECT_ROOT="$HOME/conda"
```

- 1b. Clone the project, with `upstream` being the main repository. Make sure to click the `Fork` button above so you have your own copy of this repo.

```
GITHUB_USERNAME=kalefranz  
git clone git@github.com:$GITHUB_USERNAME/conda "$CONDA_PROJECT_ROOT"
```

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```
cd "$CONDA_PROJECT_ROOT"
git remote --add upstream git@github.com:conda/conda
```

2. Create a local development environment, and activate that environment

```
. dev/start
```

This command will create a project-specific base environment at `./devenv`. If the environment already exists, this command will just quickly activate the already-created `./devenv` environment.

To be sure that the conda code being interpreted is the code in the project directory, look at the value of `conda location`: in the output of `conda info --all`.

3. Run conda's unit tests using GNU make

```
make unit
```

or alternately with pytest

```
py.test -m "not integration and not installed" conda tests
```

or you can use pytest to focus on one specific test

```
py.test tests/test_create.py -k create_install_update_remove_
↪smoketest
```

## 5.3 Development Environment, Windows `cmd.exe` shell

In these steps, we assume `git` is installed and available on `PATH`.

1. Choose where you want the project located

```
set "CONDA_PROJECT_ROOT=%HOMEPATH%\conda"
```

2. Clone the project, with `origin` being the main repository. Make sure to click the `Fork` button above so you have your own copy of this repo.

```
set GITHUB_USERNAME=kalefranz
git clone git@github.com:conda/conda "%CONDA_PROJECT_ROOT%"
cd "%CONDA_PROJECT_ROOT%"
git remote --add %GITHUB_USERNAME% git@github.com:%GITHUB_USERNAME%/
↪conda
```

To be sure that the conda code being interpreted is the code in the project directory, look at the value of `conda location`: in the output of `conda info --all`.

3. Create a local development environment, and activate that environment

```
.\dev\start
```

This command will create a project-specific base environment at `.\devenv`. If the environment already exists, this command will just quickly activate the already-created `.\devenv` environment.

## 5.4 Conda Contributor License Agreement

In case you're new to CLAs, this is rather standard procedure for larger projects. [Django](#) and even [Python](#) itself both use something similar.



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## 6.1 Dependencies

versioneer.py is Public Domain.

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### 6.2.1 LGPL

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