

Conda Crash Course

ChatGPT

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1 Introduction

Conda is an open-source package management and environment management system that runs on Windows, macOS, and Linux. It quickly installs, runs, and updates packages and their dependencies. Conda can also create, save, load, and switch between project-specific environments on your local computer.

2 Installation

To install Conda, you can download either Anaconda or Miniconda from their official websites:

- **Anaconda:** A full distribution with many scientific packages pre-installed. (<https://www.anaconda.com/products/distribution>)
- **Miniconda:** A minimal installer with only Conda and its dependencies. (<https://docs.conda.io/en/latest/miniconda.html>)

Follow the installation instructions for your operating system.

3 Creating and Managing Environments

3.1 Creating an Environment

To create a new environment, use the following command:

```
conda create --name myenv
```

You can also specify the Python version and other packages to be installed in the environment:

```
conda create --name myenv python=3.11 numpy scipy
```

3.2 Activating an Environment

To activate an environment, use the following command:

```
conda activate myenv
```

To deactivate the environment, use:

```
conda deactivate
```

3.3 Listing Environments

To list all available environments, use:

```
conda info --envs
```

3.4 Removing an Environment

To remove an environment, use:

```
conda remove --name myenv --all
```

4 Managing Packages

4.1 Installing Packages

To install a package in the current environment, use:

```
conda install package_name
```

You can also install multiple packages at once:

```
conda install numpy scipy matplotlib
```

4.2 Updating Packages

To update a package, use:

```
conda update package_name
```

To update Conda itself, use:

```
conda update conda
```

4.3 Removing Packages

To remove a package, use:

```
conda remove package_name
```

5 Creating and Using requirements.txt Files

5.1 Exporting an Environment

To export the list of packages in an environment to a `requirements.txt` file, use:

```
conda list --export > requirements.txt
```

5.2 Installing Packages from a requirements.txt File

To install packages listed in a `requirements.txt` file, use:

```
conda install --file requirements.txt
```

6 Conclusion

This crash course provides a brief overview of Conda's basic functionalities. For more detailed information, refer to the official Conda documentation at <https://docs.conda.io>.