Which Pipeline software installation method is right for me?

John Pritchard - 2024-11-27 - Comments (0) - Data processing and analysis software resources

Which software installation method is right for me?

ESO now supports several alternative methods for installation of the ESO software pipelines and workflow managers -- EsoReflex and EDPS.

Each method has pros & cons, so which is the right one for you?

This article presents the (known) main pros & cons for each installation method to help you make an informed choice for the best solution for you.

MacPorts (for macOS)
For MacOS, both MacPorts and Homebrew installation is supported. Homebrew binary packages are available for most current versions of MacOS and hardware, whereas MacPorts will install from source for current versions of MacOS and hardware (except Monterey on Intel).

Note, if you already have MacPorts installed, we recommend you keep using MacPorts, unless *you* want to try out or prefer HomeBrew.

RPM (for Fedora and CentOS).
For Fedora and CentOS, we provide RPM binary packages which can be installed natively for a system wide installation.

HomeBrew (for macOS, Linux and Windows (via WSL2+Linux))
We do not provide binary packages that can be installed in Ubuntu or other Debian (or other non-Debian) systems via native package managers, so Homebrew is a good compromise that provides the convenience of a package management system and the power of natively compiled software.

Apptainer (for Linux, container technology)
Apptainer is a container platform designed for scientific and high-performance computing. It provides a way to encapsulate software environments and dependencies, making it easier to run complex applications in a consistent manner across different systems. A particular advantage of using Apptainer over a native installation is that the pipelines can be installed in user space, and if necessary several versions of a pipeline can be installed without interfering with each other.

Source installation (for macOS, Linux and Windows (via WSL2+Linux))

Installation from source code should be considered as "for experts".