

Architecture

OpenAlea is a component system.

Each component are installed in a pure Python namespace package named `openalea`.

Components can be used:

by any other Python program,

or can be interconnected together via interfaces and adapters through a specific software bus.

OpenAlea provides also a set of tools for configuring, building and installing a package. see [Compilation and installation framework](#)

OpenAlea contains:

Portable tools (windows/linux) for building packages based on C++ programs with python wrappers.

Distribution tools for installing heterogeneous (C/C++/Python/?) packages in the openalea namespace.

Common data structures (tree graphs, sequences, scene graph?) which can be shared between packages.

A software bus for discovering and module connection via interfaces and adapters.

An application to connect graphically modules in a data-flow paradigm.