

SCons tool “cpython” - Reference

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This reference lists all the variables that are used within the “cpython” tool, and the available builders. It is intended for SCons tool developers and core programmers, as a normal user you should read the manual instead.

1. Interna

Internally, the builder is based on the `Install/InstallAs` methods from `SCons.Tool.install`. It makes use of the basic builder’s functions: `installFunc()`, and `add_targets_to_INSTALLED_FILES()`.

2. Builders

2.1. InstallPython

The “InstallPython” method creates `.pyc` or `.pyo` files for `.py` source files and adds them to the list of targets along with the source files. They are later copied to the destination (target) directory.

Example:

```
env = Environment()
hello = File('hello.py')
env.InstallPython('/usr/local/bin/', hello)
env.Alias('install', '/usr/local/bin/')
```

3. Variables

CPYTHON_PYC

Default value is 1, which means that the Python source files get compiled to `.pyc` files. Set this variable to 0 in order to get optimized `.pyo` files, parallel to your installed sources.

CPYTHON_EXE

The path to the external Python executable, used for creating optimized `.pyo` files. Default value is `'python'`.

CPYTHON_PYO_FLAGS

Additional flags for compiling optimized Python files (`.pyo`). The default is `'-O'`.

CPYTHON_PYO_CMD

The command arguments for compiling optimized Python files (`.pyo`). The default value is `'-c 'import sys,py_compile; [py_compile.compile(i) for i in sys.argv[1:]]''`.

CPYTHON_PYCOM

The command line for compiling optimized Python files (`.pyo`). Default is `'$CPYTHON_EXE $CPYTHON_PYO_FLAGS $CPYTHON_PYO_CMD'`.

CPYTHON_PYCOMSTR

The message string for the `'CPYTHON_PYCOM'` command. Default is `'Install file: "$SOURCE" as "$TARGET"'`.

CPYTHON_SUFFIX

Default value is `'.py'`. The suffix for Python source files.