
SCons tool “cpython” - Reference

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Table of Contents

1. Interna	1
2. Builders	1
2.1. InstallPython	1
3. Variables	1

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 <code>.pyc</code> files. Set this variable to 0 in order to get optimized <code>.pyo</code> files, parallel to your installed sources.
CPYTHON_EXE	The path to the external Python executable, used for creating optimized <code>.pyo</code> files. Default value is 'python'.
CPYTHON_PYO_FLAGS	Additional flags for compiling optimized Python files (<code>.pyo</code>). The default is '-O'.

CPYTHON_PYOCMD	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_PYOCMD'.
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.