# **SCons Build Support for Eclipse**

#### What is SCons?

SCons is an open source software build tool which tries to fix the numerous weaknesses of *make* and its derivatives. For example, the missing automatic dependency extraction, *make*'s complex syntax to describe build properties and cross-platform issues when using shell commands and scripts. *SCons* is a self-contained tool which is independent of existing platform utilities. Because it is based on Python, a *SCons* user has the full power of a programming language to deal with all build related issues.

It was long past time for autotools to be replaced, and SCons has won the race to become my build system of choice. Unified builds and extensibility with Python—how can you beat that?

Eric S. Raymond, author of The Cathedral and the Bazaar

```
#include <iostream>
int main(int argc, char **argv) {
    St::cout << "Hello.world" << std::endl;
}

#Problems  Tasks  Console  Tasks  Console  Socons Dependencies  Socons Targets

Scons [TestEXE]

== Running Scons at 27.12.10 01:13 ===

Command line: /usr/local/bin/scons -u --jobs=4
scons: Reading Sconscript files ...
scons: done reading Sconscript files ...
scons: Building targets ...
scons: Building argets ...
stons: building argets ...
stons: building argets ...
strand pain.cpp: In function 'int main(int, char**)':
main.cpp:11: error: 'st' has not been declared
scons: *** [Debug/main.o] Error 1
scons: building terminated because of errors.
Duration 1003 ms.
```

# Use SConsolidator to build your projects in Eclipse

Maintaining a *SCons*-based *C/C++* project with Eclipse *CDT* meant that all the intelligence *SCons* puts into your project dependencies had to be re-entered into Eclipse *CDT*'s project settings, so that its indexer and parser would be able to know your code's compile settings and enable many of its features. In addition, *SCons*' intelligence comes at the price of relatively long build start-up times - when it (re-) analyses the project dependencies - which can become annoying when you just fix a simple syntax error.

SConsolidator addresses these issues and provides tool integration for SCons in Eclipse for a convenient development experience.

#### **Main Features**

- Conversion of existing C++ CDT managed build projects to SCons projects
- Import of existing SCons projects into Eclipse with wizard support
- · Interactive mode to quickly build single C/C++ source files speeding up round-trip times
- A special view for a convenient build target management of all workspace projects
- Graph visualization of build dependencies that helps in debugging SCons build issues

# Works out of the box

SConsolidator has been successfully used to import the following SCons-based projects into Eclipse:

- MongoDB
- Blender
- FreeNOS
- Doom 3
- COAST

# Contribute

SConsolidator is available at Github.

# Found a bug or have a feature request?

Report bugs and feature requests on Github.

### Try it out now!

Follow the instructions in Installation and give it a try!

#### **Further information**

More information on SConsolidator can be found in the Getting Started.



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Due to severe budget cuts of our government we, the Institute for Software at University of Applied Sciences of Eastern Switzerland in Rapperswil, require the financial help of our users to keep maintenance and extension of our Eclipse CDT plug-ins continuing. If you are using our plug-in please donate an amount showing your valuation of the plug-in to help. The money will be used to ensure for maintenance and extension of our C++ support with Eclipse CDT exclusively. Please contact us for further information.

http://sconsolidator.com/