

# **SCons Reference Manual 2.2.0**

**Steven Knight**

**SCons Reference Manual 2.2.0**

by Steven Knight

Revision issue-2856:2676:d23b7a2f45e8 (2012/08/05 15:38:28) Edition

Published 2003

Copyright © 2003 Steven Knight

SCons User's Guide Copyright (c) 2003 Steven Knight

# Table of Contents

<b>1. Preface .....</b>	<b>1</b>
1.1. Why SCons?.....	1
1.2. History.....	1
1.3. Conventions.....	1
1.4. Acknowledgements.....	1
1.5. Contact .....	1
<b>2. Builder Reference .....</b>	<b>2</b>
2.1. The Alias Builder .....	2
2.1.1. The Alias Method.....	2
2.2. The CFile Builder.....	2
2.2.1. The CFile Method.....	2
2.3. The Command Builder.....	2
2.3.1. The Command Method .....	2
2.4. The CXXFile Builder.....	2
2.4.1. The CXXFile Method .....	2
2.5. The Install Builder .....	3
2.5.1. The Install Method .....	3
2.6. The InstallAs Builder.....	3
2.6.1. The InstallAs Method.....	3
2.7. The Library Builder .....	3
2.7.1. Linking With a Library.....	3
2.7.2. Creating a Library.....	3
2.7.3. The Library Builder.....	4
2.8. The Object Builder.....	4
2.8.1. The Object Method .....	4
2.9. The PCH Builder.....	4
2.9.1. The PCH Method.....	4
2.10. The PDF Builder .....	4
2.10.1. The PDF Method.....	5
2.11. The PostScript Builder .....	5
2.11.1. The PostScript Method.....	5
2.12. The Program Builder.....	5
2.12.1. The Program Builder.....	5
2.13. The RES Builder .....	5
2.13.1. The RES Method.....	5
2.14. The SharedLibrary Builder .....	5
2.14.1. The SharedLibrary Method .....	6
2.15. The SharedObject Builder.....	6
2.15.1. The SharedObject Method.....	6
2.16. The StaticLibrary Builder .....	6
2.16.1. The StaticLibrary Method .....	6
2.17. The StaticObject Builder.....	6
2.17.1. The StaticObject Method.....	6
<b>3. Construction Variable Reference.....</b>	<b>7</b>
3.1. AR .....	7

<b>A. Errors Generated by SCons.....</b>	<b>8</b>
A.1. X.....	8

# **Chapter 1. Preface**

X

## **1.1. Why SCons?**

X

## **1.2. History**

X

## **1.3. Conventions**

X

## **1.4. Acknowledgements**

X

## **1.5. Contact**

X

# **Chapter 2. Builder Reference**

## **2.1. The Alias Builder**

X

### **2.1.1. The `Alias` Method**

X

## **2.2. The CFile Builder**

X

### **2.2.1. The `CFile` Method**

X

## **2.3. The Command Builder**

X

### **2.3.1. The `Command` Method**

X

## **2.4. The CXXFile Builder**

X

### **2.4.1. The `cxxFile` Method**

X

## **2.5. The Install Builder**

X

### **2.5.1. The `Install` Method**

X

## **2.6. The InstallAs Builder**

X

### **2.6.1. The `InstallAs` Method**

X

## **2.7. The Library Builder**

### **2.7.1. Linking With a Library**

```
env = Environment(CC = 'gcc',
                  LIBS = 'world')
env.Program('hello.c')
```

```
% scons
gcc -c hello.c -o hello.o
gcc -c world.c -o world.o
gcc -o hello hello.o -lworld
```

## **2.7.2. Creating a Library**

```
env = Environment(CC = 'gcc',
                  LIBS = 'world')
env.Program('hello.c')
env.Library('world.c')

% scons
gcc -c hello.c -o hello.o
gcc -c world.c -o world.o
ar r libworld.a world.o
ar: creating libworld.a
ranlib libworld.a
gcc -o hello hello.o libworld.a
```

## **2.7.3. The Library Builder**

X

## **2.8. The Object Builder**

X

### **2.8.1. The Object Method**

X

## **2.9. The PCH Builder**

X

### **2.9.1. The PCH Method**

X

## **2.10. The PDF Builder**

X

### **2.10.1. The `PDF` Method**

X

## **2.11. The PDF Builder**

X

### **2.11.1. The `PostScript` Method**

X

## **2.12. The Program Builder**

X

### **2.12.1. The `Program` Builder**

X

## **2.13. The RES Builder**

X

### **2.13.1. The `RES` Method**

X

## **2.14. The SharedLibrary Builder**

X

### **2.14.1. The SharedLibrary Method**

X

## **2.15. The SharedObject Builder**

X

### **2.15.1. The SharedObject Method**

X

## **2.16. The StaticLibrary Builder**

X

### **2.16.1. The StaticLibrary Method**

X

## **2.17. The StaticObject Builder**

X

### **2.17.1. The StaticObject Method**

X

# **Chapter 3. Construction Variable Reference**

## **3.1. AR**

X

# **Appendix A. Errors Generated by SCons**

X

## **A.1. X**

X