



# SCons 2.3.1

## Reference Manual

**Steven Knight**

version 2.3.1

Copyright © 2003 Steven Knight

Publication date 2003

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

---

# Table of Contents

1. Preface .....	1
1. Why SCons? .....	1
2. History .....	1
3. Conventions .....	1
4. Acknowledgements .....	1
5. Contact .....	1
2. Builder Reference .....	2
1. The Alias Builder .....	2
1.1. The Alias Method .....	2
2. The CFile Builder .....	2
2.1. The CFile Method .....	2
3. The Command Builder .....	2
3.1. The Command Method .....	2
4. The CXXFile Builder .....	2
4.1. The CXXFile Method .....	2
5. The Install Builder .....	2
5.1. The Install Method .....	3
6. The InstallAs Builder .....	3
6.1. The InstallAs Method .....	3
7. The Library Builder .....	3
7.1. Linking With a Library .....	3
7.2. Creating a Library .....	3
7.3. The Library Builder .....	3
8. The Object Builder .....	4
8.1. The Object Method .....	4
9. The PCH Builder .....	4
9.1. The PCH Method .....	4
10. The PDF Builder .....	4
10.1. The PDF Method .....	4
11. The PostScript Builder .....	4
11.1. The PostScript Method .....	4
12. The Program Builder .....	4
12.1. The Program Builder .....	4
13. The RES Builder .....	4
13.1. The RES Method .....	4
14. The SharedLibrary Builder .....	5
14.1. The SharedLibrary Method .....	5
15. The SharedObject Builder .....	5
15.1. The SharedObject Method .....	5
16. The StaticLibrary Builder .....	5
16.1. The StaticLibrary Method .....	5
17. The StaticObject Builder .....	5
17.1. The StaticObject Method .....	5
3. Errors Generated by SCons .....	6
1. X .....	6

---

# **1** Preface

---

x

## **1. Why SCons?**

x

## **2. History**

x

## **3. Conventions**

x

## **4. Acknowledgements**

x

## **5. Contact**

x

---

# **2** Builder Reference

---

## **1. The Alias Builder**

X

### **1.1. The Alias Method**

X

## **2. The CFile Builder**

X

### **2.1. The CFile Method**

X

## **3. The Command Builder**

X

### **3.1. The Command Method**

X

## **4. The CXXFile Builder**

X

### **4.1. The cxxfile Method**

X

## **5. The Install Builder**

X

## 5.1. The Install Method

X

# 6. The InstallAs Builder

X

## 6.1. The InstallAs Method

X

# 7. The Library Builder

## 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
```

## 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
```

## 7.3. The Library Builder

X

## 8. The Object Builder

X

### 8.1. The Object Method

X

## 9. The PCH Builder

X

### 9.1. The PCH Method

X

## 10. The PDF Builder

X

### 10.1. The PDF Method

X

## 11. The PDF Builder

X

### 11.1. The PostScript Method

X

## 12. The Program Builder

X

### 12.1. The Program Builder

X

## 13. The RES Builder

X

### 13.1. The RES Method

X

## 14. The SharedLibrary Builder

X

### 14.1. The SharedLibrary Method

X

## 15. The SharedObject Builder

X

### 15.1. The SharedObject Method

X

## 16. The StaticLibrary Builder

X

### 16.1. The StaticLibrary Method

X

## 17. The StaticObject Builder

X

### 17.1. The StaticObject Method

X

---

# **3** Errors Generated by SCons

---

x

## **1. X**

x