



# SCons 4.4.0

Reference Manual

Steven Knight

version 4.4.0  
Copyright © 2003 Steven Knight  
Publication date 2003

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

---

# Table of Contents

1. Preface .....	1
1.1. Why SCons? .....	1
1.2. History .....	1
1.3. Conventions .....	1
1.4. Acknowledgements .....	1
1.5. Contact .....	1
2. Builder Reference .....	2
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 .....	2
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 .....	3
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 .....	4
2.11. The PDF Builder .....	4
2.11.1. The PostScript Method .....	4
2.12. The Program Builder .....	4
2.12.1. The Program Builder .....	4
2.13. The RES Builder .....	4
2.13.1. The RES Method .....	4
2.14. The SharedLibrary Builder .....	5
2.14.1. The SharedLibrary Method .....	5
2.15. The SharedObject Builder .....	5
2.15.1. The SharedObject Method .....	5
2.16. The StaticLibrary Builder .....	5
2.16.1. The StaticLibrary Method .....	5
2.17. The StaticObject Builder .....	5
2.17.1. The StaticObject Method .....	5
3. Errors Generated by SCons .....	6
3.1. X .....	6

---

# **1**

## **Preface**

---

x

### **1.1. Why SCons?**

x

### **1.2. History**

x

### **1.3. Conventions**

x

### **1.4. Acknowledgements**

x

### **1.5. Contact**

x

---

# 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



---

## 3 Errors Generated by SCons

---

x

### 3.1. X

x