C Compiler User's Guide

Updated for the new millenium

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Revision History

Revision C June 1983

Dedication

Thw OS-9 C Compiler was written by James McCosh with OS-9 implementation assistance from Terry Crane and Kim Kempf. The Relocatable Assembler, Linker, and Profiler was edited by Wes Camden and Ken Kaplan.

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Differences between Versions 1.1 and 1.0

This package contains the OS-9 C Compiler Version 1.1. Many improvements and bug fixes have been incorporated since the V1.0 release. If you are upgrading from V1.0

This update...

The remainder of this notice describes the changes made since V1.0.

Chapter 1. The C Compiler System

1.1. Introduction

OS-9 has been tailored to run on your standard, unmodified Dragon/Color Computer. To use it you'll need the following things:

1.2. Starting the System

To start up OS-9 follow these steps:

Chapter 2. Characteristics of Compiled Programs

2.1. The Object Code Module

OS-9 has been tailored to run on your standard, unmodified Dragon/Color Computer. To use it you'll need the following things:

2.2. Starting the System

To start up OS-9 follow these steps:

Chapter 3. C System Calls

This section of the C compiler manual is a guide to the system calls available from C programs.

It is NOT intended as a definitive description of OS-9 service requests as these are described in the OS-9 SYSTEM PROGRAMMER'S manual. However, for most calls, enough information is available here to enable the programmer to write systems calls into programs without looking further.

3.1. System Calls

Abort

Name

`Abort` — stop the program and produce a core dump

Synopsis

```
abort(void);
```

Description

This call causes a memory image to be written out to the file "core" in the current directory, and then the program exits with a status of 1.

abs

Name

`abs` — Placeholder

Synopsis

```
abs(type arg1);
```

Description

Placeholder

access

Name

`access` — Placeholder

Synopsis

```
access(type arg1);
```

Description

Placeholder

chain

Name

`chain` — Placeholder

Synopsis

```
chain(type arg1);
```

Description

Placeholder

chdir

Name

`chdir` — Placeholder

Synopsis

```
chdir(type arg1);
```

Description

Placeholder

chmod

Name

`chmod` — Placeholder

Synopsis

```
chmod(type arg1);
```

Description

Placeholder

chown

Name

`chown` — Placeholder

Synopsis

```
chown(type arg1);
```

Description

Placeholder

close

Name

`close` — Placeholder

Synopsis

```
close(type arg1);
```

Description

Placeholder

crc

Name

`crc` — Placeholder

Synopsis

```
crc(type arg1);
```

Description

Placeholder

creat

Name

`creat` — Placeholder

Synopsis

```
creat(type arg1);
```

Description

Placeholder

defdrive

Name

`defdrive` — Placeholder

Synopsis

```
defdrive(type arg1);
```

Description

Placeholder

dup

Name

`dup` — Placeholder

Synopsis

```
dup(type arg1);
```

Description

Placeholder

exit

Name

`exit` — Placeholder

Synopsis

```
exit(type arg1);
```

Description

Placeholder

getpid

Name

`getpid` — Placeholder

Synopsis

```
getpid(type arg1);
```

Description

Placeholder

getstat

Name

`getstat` — Placeholder

Synopsis

```
getstat(type arg1);
```

Description

Placeholder

getuid

Name

`getuid` — Placeholder

Synopsis

```
getuid(type arg1);
```

Description

Placeholder

intercept

Name

`intercept` — Placeholder

Synopsis

```
intercept(type arg1);
```

Description

Placeholder

kill

Name

`kill` — Placeholder

Synopsis

```
kill(type arg1);
```

Description

Placeholder

lseek

Name

`lseek` — Placeholder

Synopsis

```
lseek(type arg1);
```

Description

Placeholder

mknod

Name

`mknod` — Placeholder

Synopsis

```
mknod(type arg1);
```

Description

Placeholder

modload

Name

`modload` — Placeholder

Synopsis

```
modload(type arg1);
```

Description

Placeholder

munlink

Name

`munlink` — Placeholder

Synopsis

```
munlink(type arg1);
```

Description

Placeholder

os9

Name

`os9` — Placeholder

Synopsis

```
os9(type arg1);
```

Description

Placeholder

open

Name

`open` — Placeholder

Synopsis

```
open(type arg1);
```

Description

Placeholder

os9fork

Name

`os9fork` — Placeholder

Synopsis

```
os9fork(type arg1);
```

Description

Placeholder

pause

Name

`pause` — Placeholder

Synopsis

```
pause(type arg1);
```

Description

Placeholder

prerr

Name

`prerr` — Placeholder

Synopsis

```
prerr(type arg1);
```

Description

Placeholder

read

Name

`read` — Placeholder

Synopsis

```
read(type arg1);
```

Description

Placeholder

sbrk

Name

`sbrk` — Placeholder

Synopsis

```
sbrk(type arg1);
```

Description

Placeholder

setpr

Name

`setpr` — Placeholder

Synopsis

```
setpr(type arg1);
```

Description

Placeholder

setime

Name

`setime` — Placeholder

Synopsis

```
setime(type arg1);
```

Description

Placeholder

setuid

Name

`setuid` — Placeholder

Synopsis

```
setuid(type arg1);
```

Description

Placeholder

setstat

Name

`setstat` — Placeholder

Synopsis

```
setstat(type arg1);
```

Description

Placeholder

signal

Name

`signal` — Placeholder

Synopsis

```
signal(type arg1);
```

Description

Placeholder

stacksize

Name

`stacksize` — Placeholder

Synopsis

```
stacksize(type arg1);
```

Description

Placeholder

strass

Name

`strass` — Placeholder

Synopsis

```
strass(type arg1);
```

Description

Placeholder

tsleep

Name

`tsleep` — Placeholder

Synopsis

```
tsleep(type arg1);
```

Description

Placeholder

unlink

Name

`unlink` — Placeholder

Synopsis

```
unlink(type arg1);
```

Description

Placeholder

wait

Name

`wait` — Placeholder

Synopsis

```
wait(type arg1);
```

Description

Placeholder

write

Name

`write` — Placeholder

Synopsis

```
write(type arg1);
```

Description

Placeholder

Chapter 4. C Standard Library

The Standard Library contains functions which fall into two classes: high-level I/O and convenience.

4.1. Function Calls

atof

Name

`atof` — Placeholder

Synopsis

```
atof(type arg1);
```

Description

Placeholder

fflush

Name

`fflush` — Placeholder

Synopsis

```
fflush(type arg1);
```

Description

Placeholder

feof

Name

`feof` — Placeholder

Synopsis

```
feof(type arg1);
```

Description

Placeholder

findstr

Name

`findstr` — Placeholder

Synopsis

```
findstr(type arg1);
```

Description

Placeholder

fopen

Name

`fopen` — Placeholder

Synopsis

```
fopen(type arg1);
```

Description

Placeholder

fread

Name

`fread` — Placeholder

Synopsis

```
fread(type arg1);
```

Description

Placeholder

fseek

Name

`fseek` — Placeholder

Synopsis

```
fseek(type arg1);
```

Description

Placeholder

getc

Name

`getc` — Placeholder

Synopsis

```
getc(type arg1);
```

Description

Placeholder

gets

Name

`gets` — Placeholder

Synopsis

```
gets(type arg1);
```

Description

Placeholder

isalpha

Name

`isalpha` — Placeholder

Synopsis

```
isalpha(type arg1);
```

Description

Placeholder

l3tol

Name

`l3tol` — Placeholder

Synopsis

```
l3tol(type arg1);
```

Description

Placeholder

longjmp

Name

`longjmp` — Placeholder

Synopsis

```
longjmp(type arg1);
```

Description

Placeholder

malloc

Name

`malloc` — Placeholder

Synopsis

```
malloc(type arg1);
```

Description

Placeholder

mktemp

Name

`mktemp` — Placeholder

Synopsis

```
mktemp(type arg1);
```

Description

Placeholder

putc

Name

`putc` — Placeholder

Synopsis

```
putc(type arg1);
```

Description

Placeholder

puts

Name

`puts` — Placeholder

Synopsis

```
puts(type arg1);
```

Description

Placeholder

qsort

Name

`qsort` — Placeholder

Synopsis

```
qsort(type arg1);
```

Description

Placeholder

scanf

Name

`scanf` — Placeholder

Synopsis

```
scanf(type arg1);
```

Description

Placeholder

setbuf

Name

`setbuf` — Placeholder

Synopsis

```
setbuf(type arg1);
```

Description

Placeholder

sleep

Name

`sleep` — Placeholder

Synopsis

```
sleep(type arg1);
```

Description

Placeholder

strcat

Name

`strcat` — Placeholder

Synopsis

```
strcat(type arg1);
```

Description

Placeholder

system

Name

`system` — Placeholder

Synopsis

```
system(type arg1);
```

Description

Placeholder

toupper

Name

`toupper` — Placeholder

Synopsis

```
toupper(type arg1);
```

Description

Placeholder

ungetc

Name

`ungetc` — Placeholder

Synopsis

```
ungetc(type arg1);
```

Description

Placeholder

Appendix A. Compiler Generated Error Messages

The error codes are shown in both hexadecimal (first column) and decimal (second column). Error codes other than those listed are generated by programming languages or user programs.

Appendix B. Compiler Phase Command Lines

The error codes are shown in both hexadecimal (first column) and decimal (second column). Error codes other than those listed are generated by programming languages or user programs.

Appendix C. Interfacing to Basic09

The error codes are shown in both hexadecimal (first column) and decimal (second column). Error codes other than those listed are generated by programming languages or user programs.

Appendix D. Relocating Macro Assembler Reference

The error codes are shown in both hexadecimal (first column) and decimal (second column). Error codes other than those listed are generated by programming languages or user programs.