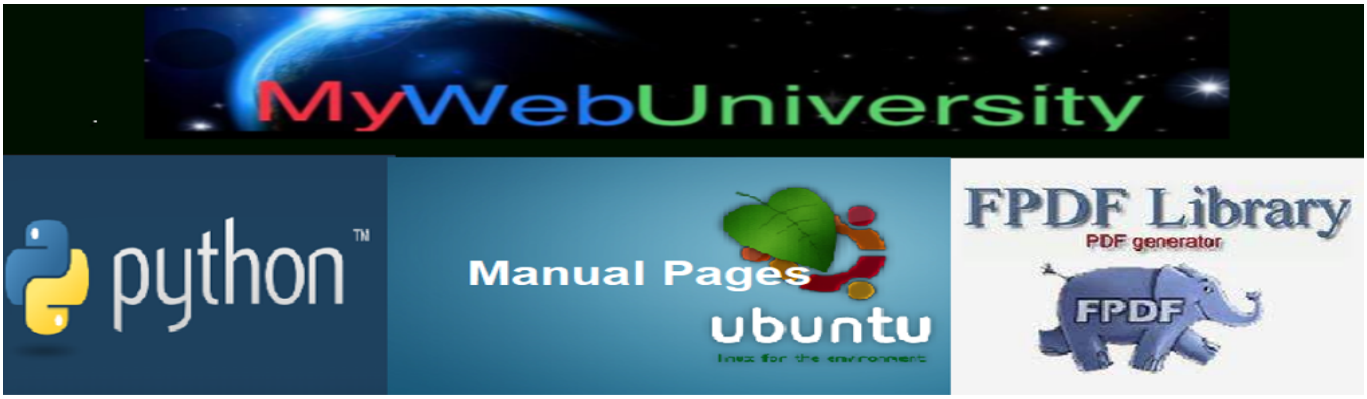

Rocky Enterprise Linux 9.2 Manual Pages on command 'acosl.3'

$ man acosl.3

ACOS(3) Linux Programmer's Manual ACOS(3)

NAME

acos, acosf, acosl - arc cosine function

SYNOPSIS

```
#include <math.h>

double acos(double x);

float acosf(float x);

long double acosl(long double x);
```

Link with -lm.

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

acosf(), acosl():

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
    || /* Since glibc 2.19: */ _DEFAULT_SOURCE
    || /* Glibc versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

These functions calculate the arc cosine of x; that is the value whose cosine is x.

RETURN VALUE

On success, these functions return the arc cosine of x in radians; the return value is in the range [0, pi].

If x is a NaN, a NaN is returned.

If x is +1, +0 is returned.

If x is positive infinity or negative infinity, a domain error occurs, and a NaN is re? turned.

If x is outside the range [-1, 1], a domain error occurs, and a NaN is returned.

ERRORS

See math_error(7) for information on how to determine whether an error has occurred when calling these functions.

The following errors can occur:

Domain error: x is outside the range [-1, 1]

errno is set to EDOM. An invalid floating-point exception (FE_INVALID) is raised.

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

Interface	Attribute	Value
acos(), acosf(), acosl()	Thread safety	MT-Safe

CONFORMING TO

C99, POSIX.1-2001, POSIX.1-2008.

The variant returning double also conforms to SVr4, 4.3BSD, C89.

SEE ALSO

asin(3), atan(3), atan2(3), cacos(3), cos(3), sin(3), tan(3)

COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at https://www.kernel.org/doc/man-pages/.