Red Hat Enterprise Linux Release 9.2 Manual Pages on 'atan.3' command

$ man atan.3

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

NAME

   atan, atanf, atanl - arc tangent function

SYNOPSIS

   #include <math.h>

   double atan(double x);

   float atanf(float x);

   long double atanl(long double x);

   Link with -lm.

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

   atanf(), atanl():

      _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 principal value of the arc tangent of x;

   that is the value whose tangent is x.

RETURN VALUE

   On success, these functions return the principal value of the arc tan?

   gent of x in radians; the return value is in the range [-pi/2, pi/2].

   If x is a NaN, a NaN is returned.

   If x is +0 (-0), +0 (-0) is returned.

   If x is positive infinity (negative infinity), +pi/2 (-pi/2) is re?

turned.

ERRORS

No errors occur.

ATTRIBUTES

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

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????????????????????????????????????????????????????????
?Interface          ? Attribute   ? Value   ?
????????????????????????????????????????????????????????
?atan(), atanf(), atanl() ? 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

acos(3), asin(3), atan2(3), carg(3), catan(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/.

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