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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'fegetround.3p' command**

**\$ man fegetround.3p**

FEGETROUND(3P)      POSIX Programmer's Manual      FEGETROUND(3P)

### PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

### NAME

fegetround, fesetround ? get and set current rounding direction

### SYNOPSIS

```
#include <fenv.h>

int fegetround(void);

int fesetround(int round);
```

### DESCRIPTION

The functionality described on this reference page is aligned with the ISO C standard. Any conflict between the requirements described here and the ISO C standard is unintentional. This volume of POSIX.1?2017 defers to the ISO C standard.

The fegetround() function shall get the current rounding direction.

The fesetround() function shall establish the rounding direction represented by its argument round. If the argument is not equal to the value of a rounding direction macro, the rounding direction is not changed.

### RETURN VALUE

The `fegetround()` function shall return the value of the rounding direction macro representing the current rounding direction or a negative value if there is no such rounding direction macro or the current rounding direction is not determinable.

The `fesetround()` function shall return a zero value if and only if the requested rounding direction was established.

## ERRORS

No errors are defined.

The following sections are informative.

## EXAMPLES

The following example saves, sets, and restores the rounding direction, reporting an error and aborting if setting the rounding direction

fails:

```
#include <fenv.h>
#include <assert.h>
void f(int round_dir)
{
    #pragma STDC FENV_ACCESS ON
    int save_round;
    int setround_ok;
    save_round = fegetround();
    setround_ok = fesetround(round_dir);
    assert(setround_ok == 0);
    /* ... */
    fesetround(save_round);
    /* ... */
}
```

## APPLICATION USAGE

None.

## RATIONALE

None.

## FUTURE DIRECTIONS

None.

## SEE ALSO

The Base Definitions volume of POSIX.1-2017, <fcntl.h>

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2017

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