



Linux Ubuntu 26.04 Manual Pages on command 'atoi.3'

\$ man atoi.3

atoi(3) Library Functions Manual atoi(3)

NAME

atoi, atol, atoll - convert a string to an integer

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <stdlib.h>

int atoi(const char *nptr);

long atol(const char *nptr);

long long atoll(const char *nptr);
```

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

```
atoll():
    _ISOC99_SOURCE
    || /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

The `atoi()` function converts the initial portion of the string pointed to by `nptr` to `int`.

The behavior is the same as

```
strtol(nptr, NULL, 10);
```

except that `atoi()` does not detect errors.

The `atol()` and `atoll()` functions behave the same as `atoi()`, except that they convert the initial portion of the string to their return type of `long` or `long long`.

RETURN VALUE

The converted value or 0 on error.

ATTRIBUTES

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

[illegible]

? Interface	? Attribute	? Value	?
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[illegible]

? atoi(), atol(), atoll() ? Thread safety ? MT-Safe locale ?

[illegible]

VERSIONS

POSIX.1 leaves the return value of `atoi()` on error unspecified. On glibc, musl libc, and uClibc, 0 is returned on error.

STANDARDS

C11, POSIX.1-2008.

HISTORY

C99, POSIX.1-2001, SVr4, 4.3BSD.

C89 and POSIX.1-1996 include the functions `atoi()` and `atol()` only.

BUGS

errno is not set on error so there is no way to distinguish between 0 as an error and as the converted value. No checks for overflow or underflow are done. Only base-10 input can be converted. It is recommended to instead use the strtol() and strtoul() family of functions in new programs.

SEE ALSO

atof(3), strtod(3), strtol(3), strtoul(3)

Linux man-pages 6.17

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atoi(3)