



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

\$ man atoi.3p

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

atoi ? convert a string to an integer

SYNOPSIS

```
#include <stdlib.h>

int atoi(const char *str);
```

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 call `atoi(str)` shall be equivalent to:

```
(int) strtol(str, (char **)NULL, 10)
```

except that the handling of errors may differ. If the value cannot be represented, the behavior is undefined.

RETURN VALUE

The `atoi()` function shall return the converted value if the value can be represented.

ERRORS

No errors are defined.

The following sections are informative.

EXAMPLES

Converting an Argument

The following example checks for proper usage of the program. If there is an argument and the decimal conversion of this argument (obtained using `atoi()`) is greater than 0, then the program has a valid number of minutes to wait for an event.

```
#include <stdlib.h>

#include <stdio.h>

...

int minutes_to_event;

...

if (argc < 2 || ((minutes_to_event = atoi (argv[1]))) <= 0) {
    fprintf(stderr, "Usage: %s minutes\n", argv[0]); exit(1);
}

...
```

APPLICATION USAGE

The `atoi()` function is subsumed by `strtol()` but is retained because it is used extensively in existing code. If the number is not known to be in range, `strtol()` should be used because `atoi()` is not required to perform any error checking.

RATIONALE

None.

FUTURE DIRECTIONS

None.

SEE ALSO

`strtol()`

The Base Definitions volume of POSIX.1?2017, `<stdlib.h>`

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