



## ***Linux Ubuntu 26.04 Manual Pages on command 'arc4random\_buf.3'***

***\$ man arc4random\_buf.3***

arc4random(3)                      Library Functions Manual                      arc4random(3)

### NAME

arc4random, arc4random\_uniform, arc4random\_buf - cryptographically-secure pseudorandom number generator

### LIBRARY

Standard C library (libc, -lc)

### SYNOPSIS

```
#include <stdlib.h>

uint32_t arc4random(void);

uint32_t arc4random_uniform(uint32_t upper_bound);

void arc4random_buf(size_t n;
                    void buf[n], size_t n);
```

### DESCRIPTION

These functions give cryptographically-secure pseudorandom numbers.

arc4random() returns a uniformly-distributed value.

arc4random\_uniform() returns a uniformly-distributed value less than upper\_bound (see BUGS).

arc4random\_buf() fills the memory pointed to by buf, with n bytes of pseudorandom data.

The rand(3) and drand48(3) families of functions should only be used where the quality of the pseudorandom numbers is not a concern and there's a need for repeatability of the results. Unless you meet both of those conditions, use the arc4random() functions.

### RETURN VALUE

arc4random() returns a pseudorandom number.

arc4random\_uniform() returns a pseudorandom number less than upper\_bound for valid input, or

## ATTRIBUTES

[illegible][illegible][illegible]

BSD.

OpenBSD 2.1, FreeBSD 3.0, NetBSD 1.6, DragonFly 1.0, libbsd, glibc 2.36.

An `upper_bound` of 0 doesn't make sense in a call to `arc4random_uniform()`. Such a call will fail, and return 0. Be careful, since that value is not less than `upper_bound`. In some cases, such as accessing an array, using that value could result in undefined behavior.

getrandom(3), rand(3), drand48(3), random(7)

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```
arc4random(3)
```