



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

\$ man uname.3p

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

uname ? get the name of the current system

SYNOPSIS

```
#include <sys/utsname.h>

int uname(struct utsname *name);
```

DESCRIPTION

The `uname()` function shall store information identifying the current system in the structure pointed to by `name`.

The `uname()` function uses the `utsname` structure defined in `<sys/utsname.h>`.

The `uname()` function shall return a string naming the current system in the character array `sysname`. Similarly, `nodename` shall contain the name of this node within an implementation-defined communications network. The arrays `release` and `version` shall further identify the operating system. The array `machine` shall contain a name that identifies the hardware that the system is running on.

The format of each member is implementation-defined.

RETURN VALUE

Upon successful completion, a non-negative value shall be returned.

Otherwise, -1 shall be returned and `errno` set to indicate the error.

ERRORS

No errors are defined.

The following sections are informative.

EXAMPLES

None.

APPLICATION USAGE

The inclusion of the `nodename` member in this structure does not imply that it is sufficient information for interfacing to communications networks.

RATIONALE

The values of the structure members are not constrained to have any relation to the version of this volume of POSIX.1-2017 implemented in the operating system. An application should instead depend on `_POSIX_VERSION` and related constants defined in `<unistd.h>`.

This volume of POSIX.1-2017 does not define the sizes of the members of the structure and permits them to be of different sizes, although most implementations define them all to be the same size: eight bytes plus one byte for the string terminator. That size for `nodename` is not enough for use with many networks.

The `uname()` function originated in System III, System V, and related implementations, and it does not exist in Version 7 or 4.3 BSD. The values it returns are set at system compile time in those historical implementations.

4.3 BSD has `gethostname()` and `gethostid()`, which return a symbolic name and a numeric value, respectively. There are related `sethostname()` and `sethostid()` functions that are used to set the values the other two functions return. The former functions are included in this specification, the latter are not.

FUTURE DIRECTIONS

None.

SEE ALSO

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

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