

NAME

asprintf, vasprintf – print to allocated string

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#define _GNU_SOURCE      /* See feature_test_macros(7) */
#include <stdio.h>

int asprintf(char **restrict strp, const char *restrict fmt, ...);
int vasprintf(char **restrict strp, const char *restrict fmt,
              va_list ap);
```

DESCRIPTION

The functions **asprintf()** and **vasprintf()** are analogs of **sprintf(3)** and **vsprintf(3)**, except that they allocate a string large enough to hold the output including the terminating null byte ('\0'), and return a pointer to it via the first argument. This pointer should be passed to **free(3)** to release the allocated storage when it is no longer needed.

RETURN VALUE

When successful, these functions return the number of bytes printed, just like **sprintf(3)**. On error, **-1** is returned, *errno* is set to indicate the error, and the contents of *strp* are undefined.

ERRORS

See **sprintf(3)** and **malloc(3)**.

ATTRIBUTES

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

Interface	Attribute	Value
asprintf(), vasprintf()	Thread safety	MT-Safe locale

VERSIONS

The FreeBSD implementation sets *strp* to NULL on error.

STANDARDS

GNU, BSD.

SEE ALSO

free(3), **malloc(3)**, **printf(3)**