

NAME

asprintf, vasprintf – print to allocated string

SYNOPSIS

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

int asprintf(char **strp, const char *fmt, ...);
int vasprintf(char **strp, const char *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)**. If memory allocation wasn't possible, or some other error occurs, these functions will return **-1**, and the contents of *strp* are undefined.

ATTRIBUTES

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

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

CONFORMING TO

These functions are GNU extensions, not in C or POSIX. They are also available under *BSD. The FreeBSD implementation sets *strp* to NULL on error.

SEE ALSO

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

COLOPHON

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