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**fr ee**(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

STANDARDS

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)