

NAME

curl_maprintf, curl_mfprintf, curl_mprintf, curl_msnprintf, curl_msprintf, curl_mvaprintf, curl_mvfprintf, curl_mvprintf, curl_mvsnprintf, curl_mvsprintf - formatted output conversion

SYNOPSIS

```
#include <curl/mprintf.h>
```

```
int curl_mprintf(const char *format, ...);
int curl_mfprintf(FILE *fd, const char *format, ...);
int curl_msprintf(char *buffer, const char *format, ...);
int curl_msnprintf(char *buffer, size_t maxlength, const char *format, ...);
int curl_mvprintf(const char *format, va_list args);
int curl_mvfprintf(FILE *fd, const char *format, va_list args);
int curl_mvsprintf(char *buffer, const char *format, va_list args);
int curl_mvsnprintf(char *buffer, size_t maxlength, const char *format, va_list args);
char *curl_maprintf(const char *format, ...);
char *curl_mvaprintf(const char *format, va_list args);
```

DESCRIPTION

These are all functions that produce output according to a format string and given arguments. These are mostly clones of the well-known C-style functions and there will be no detailed explanation of all available formatting rules and usage here.

See this table for notable exceptions.

curl_mprintf()

Normal printf() clone.

curl_mfprintf()

Normal fprintf() clone.

curl_msprintf()

Normal sprintf() clone.

curl_msnprintf()

snprintf() clone. Many systems don't have this. It is just like **sprintf** but with an extra argument after the buffer that specifies the length of the target buffer.

curl_mvprintf()

Normal vprintf() clone.

curl_mvfprintf()

Normal vfprintf() clone.

curl_mvsprintf()

Normal vsprintf() clone.

curl_mvsnprintf()

vsnprintf() clone. Many systems don't have this. It is just like **vsprintf** but with an extra argument after the buffer that specifies the length of the target buffer.

curl_maprintf()

Like printf() but returns the output string as a malloc()ed string. The returned string must be free()ed by the receiver.

curl_mvaprintf()

Like curl_maprintf() but takes a va_list pointer argument instead of a variable amount of arguments.

To easily use all these cloned functions instead of the normal ones, #define **_MPRINTF_REPLACE** before you include the <curl/mprintf.h> file. Then all the normal names like printf, fprintf, sprintf etc will use the curl-functions instead.

AVAILABILITY

These function will be removed from the public libcurl API in a near future. They will instead be made "available" by source code access only, and then as `curlx_`-prefixed functions. See `lib/README.curlx` for further details.

RETURN VALUE

The **`curl_maprintf`** and **`curl_mvaprintf`** functions return a pointer to a newly allocated string, or `NULL` if it failed.

All other functions return the number of characters they actually outputted.

SEE ALSO

`printf(3)`, **`sprintf(3)`**, **`fprintf(3)`**, **`vprintf(3)`**