NAME

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

SYNOPSIS

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

```
int curl_mprintf(const char * format, ...);
int curl_msprintf(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_mvprintf(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.

AVAILABILITY

These functions will be removed from the public libcurl API in the future. Do not use them in any new programs or projects.

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)