### **NAME**

curl\_maprintf, curl\_mfprintf, curl\_msnprintf, curl\_msnprintf, curl\_msprintf curl\_mvaprintf, curl\_mvfprintf, curl\_mvsprintf, 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_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_mvsnprintf(const char * format, va_list args);
```

### **DESCRIPTION**

These are all functions that produces 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 it it failed.

All other functions return the number of character they actually outputed.

# **SEE ALSO**

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