

**NAME**

strdup, strndup, strdupa, strndupa - duplicate a string

**SYNOPSIS**

```
#include <string.h>
```

```
char *strdup(const char *s);
```

```
char *strndup(const char *s, size_t n);
```

```
char *strdupa(const char *s);
```

```
char *strndupa(const char *s, size_t n);
```

Feature Test Macro Requirements for glibc (see [feature\\_test\\_macros\(7\)](#)):

**strdup()**:

```
_XOPEN_SOURCE >= 500 || /* Since glibc 2.12: */ _POSIX_C_SOURCE >= 200809L || /* Glibc
versions <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

**strndup()**:

Since glibc 2.10:

```
_POSIX_C_SOURCE >= 200809L
```

Before glibc 2.10:

```
_GNU_SOURCE
```

**strdupa()**, **strndupa()**: `_GNU_SOURCE`

**DESCRIPTION**

The **strdup()** function returns a pointer to a new string which is a duplicate of the string *s*. Memory for the new string is obtained with [malloc\(3\)](#), and can be freed with [free\(3\)](#).

The **strndup()** function is similar, but copies at most *n* bytes. If *s* is longer than *n*, only *n* bytes are copied, and a terminating null byte ('\0') is added.

**strdupa()** and **strndupa()** are similar, but use [alloca\(3\)](#) to allocate the buffer. They are available only when using the GNU GCC suite, and suffer from the same limitations described in [alloca\(3\)](#).

**RETURN VALUE**

On success, the **strdup()** function returns a pointer to the duplicated string. It returns NULL if insufficient memory was available, with *errno* set to indicate the cause of the error.

**ERRORS****ENOMEM**

Insufficient memory available to allocate duplicate string.

**ATTRIBUTES**

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
<b>strdup()</b> , <b>strndup()</b> , <b>strdupa()</b> , <b>strndupa()</b>	Thread safety	MT-Safe

**CONFORMING TO**

**strdup()** conforms to SVr4, 4.3BSD, POSIX.1-2001. **strndup()** conforms to POSIX.1-2008. **strdupa()** and **strndupa()** are GNU extensions.

**SEE ALSO**

[alloca\(3\)](#), [calloc\(3\)](#), [free\(3\)](#), [malloc\(3\)](#), [realloc\(3\)](#), [string\(3\)](#), [wcsdup\(3\)](#)

**COLOPHON**

This page is part of release 4.10 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.