

**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**

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