std::freopen

```
std::FILE* freopen( const char* filename, const char* mode, std::FILE* stream );
```

First, attempts to close the file associated with `stream`, ignoring any errors. Then, if filename is not null, attempts to open the file specified by filename using mode as if by fopen, and associates that file with the file stream pointed to by `stream`. If filename is a null pointer, then the function attempts to reopen the file that is already associated with `stream` (it is implementation defined which mode changes are allowed in this case)

Parameters

filename – file name to associate the file stream to

mode – null-terminated character string determining new file access mode

File access mode string	Meaning	Explanation	Action if file already exists	Action if file does not exist
"r"	read	Open a file for reading	read from start	failure to open
"w"	write	Create a file for writing	destroy contents	create new
"a"	append	Append to a file	write to end	create new
"r+"	read extended	Open a file for read/write	read from start	error
"w+"	write extended	Create a file for read/write	destroy contents	create new
"a+"	append extended	Open a file for read/write	write to end	create new
File access mode flag "b" can optionally be specified to open a file in binary mode. This flag has no effect on POSIX systems, but on Windows, for example, it disables special handling of `'\n'` and `'\x1A'`. On the append file access modes, data is written to the end of the file regardless of the current position of the file position indicator.				
File access mode flag "x" can optionally be appended to "w" or "w+" specifiers. This flag forces the function to fail if the file exists, instead of overwriting it. (C++17)				
The behavior is undefined if the mode is not one of the strings listed above. Some implementations define additional supported modes (e.g. Windows (https://msdn.microsoft.com/en-us/library/yeby3zcb.aspx)).				

stream – the file stream to modify

Return value

stream on success, a null pointer on failure

Notes

std::freopen is the only way to change the narrow/wide orientation of a stream once it has been established by an I/O operation or by std::fwide.

Microsoft CRT version of **std::freopen** does not support any mode changes when filename is a null pointer and treats this as an error (see documentation (https://docs.microsoft.com/en-us/cpp/c-runtime-library/reference/freopen-wfreopen)). A possible workaround is the non-standard function _setmode() (https://docs.microsoft.com/en-us/cpp/c-runtime-library/reference/setmode) .

Example

The following code redirects stdout to a file

Run this code

```cpp
#include <cstdio>

int main()
{
    std::printf("stdout is printed to console\n");
    if(std::freopen("redir.txt", "w", stdout)) {
        std::printf("stdout is redirected to a file\n"); // this is written to redir.txt
        std::fclose(stdout);
```

```
        }
}
```

Output:

```
stdout is printed to console
```

See also

fopen	opens a file (function)
fclose	closes a file (function)

C documentation for **freopen**