

tcgetattr()

The `tcgetattr()` function gets the parameters associated with a terminal referred to by a file descriptor, and stores them in a structure.

It's defined in the "termios.h" system header.

It's part of the POSIX Terminal Interface for controlling I/O behavior.

```
#include <termios.h>
#include <unistd.h> // POSIX compliance

// "fd" is the file descriptor associated with a terminal
// "termios_p" will be filled with the terminal parameters
int tcgetattr(int fd, struct termios *termios_p);
```

Returns 0 on success. In case of failure, returns -1 and sets "errno".

struct termios

This structure, defined in "termios.h" system header, can be used to:

- Enable or disable echo
- Switch between canonical and non-canonical mode
- Set baud rates and other I/O behaviors

```
#include <termios.h>

struct termios
{
    tcflag_t c_iflag; // input modes
    tcflag_t c_oflag; // output modes
    tcflag_t c_cflag; // control modes
    tcflag_t c_lflag; // local modes
    cc_t    c_cc[NCCS]; // special characters (like VINTR, VEOF, etc.)
};
```