

NAME

form - curses extension for programming forms

SYNOPSIS

```
#include <form.h>
```

DESCRIPTION

The **form** library provides terminal-independent facilities for composing form screens on character-cell terminals. The library includes: field routines, which create and modify form fields; and form routines, which group fields into forms, display forms on the screen, and handle interaction with the user.

The **form** library uses the **curses** libraries. To use the **form** library, link with the options **-lform** **-lcurses**.

Your program should set up the locale, e.g.,

```
setlocale(LC_ALL, "");
```

so that input/output processing will work.

A curses initialization routine such as **initscr** must be called before using any of these functions.

Current Default Values for Field Attributes

The **form** library maintains a default value for field attributes. You can get or set this default by calling the appropriate **set_** or retrieval routine with a **NULL** field pointer. Changing this default with a **set_** function affects future field creations, but does not change the rendering of fields already created.

Routine Name Index

The following table lists each **form** routine and the name of the manual page on which it is described. Routines flagged with "*" are ncurses-specific, not present in SVr4.

curses Routine Name	Manual Page Name
current_field	form_page (3X)
data_ahead	form_data (3X)
data_behind	form_data (3X)
dup_field	form_field_new (3X)
dynamic_field_info	form_field_info (3X)
field_arg	form_field_validation (3X)

form(3X)

form(3X)

field_back	form_field_attributes(3X)
field_buffer	form_field_buffer(3X)
field_count	form_field(3X)
field_fore	form_field_attributes(3X)
field_index	form_page(3X)
field_info	form_field_info(3X)
field_init	form_hook(3X)
field_just	form_field_just(3X)
field_opts	form_field_opts(3X)
field_opts_off	form_field_opts(3X)
field_opts_on	form_field_opts(3X)
field_pad	form_field_attributes(3X)
field_status	form_field_buffer(3X)
field_term	form_hook(3X)
field_type	form_field_validation(3X)
field_userptr	form_field_userptr(3X)
form_driver	form_driver(3X)
form_driver_w	form_driver(3X)*
form_fields	form_field(3X)
form_init	form_hook(3X)
form_opts	form_opts(3X)
form_opts_off	form_opts(3X)
form_opts_on	form_opts(3X)
form_page	form_page(3X)
form_request_by_name	form_requestname(3X)*
form_request_name	form_requestname(3X)*
form_sub	form_win(3X)
form_term	form_hook(3X)
form_userptr	form_userptr(3X)
form_win	form_win(3X)
free_field	form_field_new(3X)
free_fieldtype	form_fieldtype(3X)
free_form	form_new(3X)
link_field	form_field_new(3X)
link_fieldtype	form_fieldtype(3X)
move_field	form_field(3X)
new_field	form_field_new(3X)
new_fieldtype	form_fieldtype(3X)
new_form	form_new(3X)
new_page	form_new_page(3X)

form(3X)

pos_form_cursor	form_cursor(3X)
post_form	form_post(3X)
scale_form	form_win(3X)
set_current_field	form_page(3X)
set_field_back	form_field_attributes(3X)
set_field_buffer	form_field_buffer(3X)
set_field_fore	form_field_attributes(3X)
set_field_init	form_hook(3X)
set_field_just	form_field_just(3X)
set_field_opts	form_field_opts(3X)
set_field_pad	form_field_attributes(3X)
set_field_status	form_field_buffer(3X)
set_field_term	form_hook(3X)
set_field_type	form_field_validation(3X)
set_field_userptr	form_field_userptr(3X)
set_fieldtype_arg	form_fieldtype(3X)
set_fieldtype_choice	form_fieldtype(3X)
set_form_fields	form_field(3X)
set_form_init	form_hook(3X)
set_form_opts	form_field_opts(3X)
set_form_page	form_page(3X)
set_form_sub	form_win(3X)
set_form_term	form_hook(3X)
set_form_userptr	form_userptr(3X)
set_form_win	form_win(3X)
set_max_field	form_field_buffer(3X)
set_new_page	form_new_page(3X)
unfocus_current_field	form_page(3X)*
unpost_form	form_post(3X)

RETURN VALUE

Routines that return pointers return **NULL** on error, and set **errno** to the corresponding error-code returned by functions returning an integer. Routines that return an integer return one of the following error codes:

E_OK

The routine succeeded.

E_BAD_ARGUMENT

Routine detected an incorrect or out-of-range argument.

E_BAD_STATE

Routine was called from an initialization or termination function.

E_CONNECTED

The field is already connected to a form.

E_INVALID_FIELD

Contents of a field are not valid.

E_NOT_CONNECTED

No fields are connected to the form.

E_NOT_POSTED

The form has not been posted.

E_NO_ROOM

Form is too large for its window.

E_POSTED

The form is already posted.

E_REQUEST_DENIED

The form driver could not process the request.

E_SYSTEM_ERROR

System error occurred (see **errno(3)**).

E_UNKNOWN_COMMAND

The form driver code saw an unknown request code.

NOTES

The header file **<form.h>** automatically includes the header files **<curses.h>** and **<eti.h>**.

In your library list, **libform.a** should be before **libncurses.a**; that is, you want to say **"-lform -lncurses"**, not the other way around (which would give you a link error when using static libraries).

PORTABILITY

These routines emulate the System V forms library. They were not supported on Version 7 or BSD versions.

The menu facility was documented in SVr4.2 in *Character User Interface Programming (UNIX SVR4.2)*.

It is not part of X/Open Curses.

Aside from ncurses, there are few implementations:

- ⊕ systems based on SVr4 source code, e.g., Solaris.
- ⊕ NetBSD curses.

A few functions in this implementation are extensions added for ncurses, but not provided by other implementations, e.g., **form_driver_w**, **unfocus_current_field**.

AUTHORS

Juergen Pfeifer. Manual pages and adaptation for ncurses by Eric S. Raymond.

SEE ALSO

curses(3X) and related pages whose names begin "form_" for detailed descriptions of the entry points.

This describes **ncurses** version 6.2 (patch 20210220).