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**AIX  
Operating  
System**

For Personal  
System/2™

**Programming  
Tools and  
Interfaces**

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### First Edition (March 1989)

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## Appendix B. Extended curses Structures

### WINDOW Structure

The *Extended curses* library routines use a structure, *WINDOW*, to hold information about each window that it is working with. Figure B-1 shows the contents of that structure.

---

```
struct _win_st
{
    short    _cury, _curx;
    short    _maxy, _maxx;
    short    _begy, _begx;
    short    _winy, _winx;
    short    _flags;
    short    *_firstch;
    short    *_lastch;
    bool     _clear;
    bool     _leave;
    bool     _scroll;
    ATTR     _csbp;
    NLSCHAR  **_y;
    ATTR     **_a;
    struct    _win_st *_view;
};

#define WINDOW struct _win_st
#define _SUBWIN      001
#define _ENDLINE     002
#define _FULLWIN     004
#define _SCROLLWIN   010
#define _ISVIEW      040
#define _HASVIEW     100
#define _STANDOUT    200
#define _NOCHANGE    -1
```

---

Figure B-1. Structure Definition for WINDOW

---

```

#define PANEL    struct Panel

struct Panel
{
    short int    p_depth ;
    short int    p_width ;
    short int    orow    ;
    short int    ocol    ;
    char         *title  ;
    char         divty   ;
    char         bordr   ;
    char         fill1   ;
    char         fill2   ;
    PANEL        *p_under;
    PANEL        *p_over ;
    PANE         *fpane  ;
    PANE         *dpane  ;
    PANE         *apane  ;
    WINDOW       *p_win  ;
    int          dfid    ;
    char         plobsc  ;
    char         plmodf  ;
    char         PLfill[6] ;
}
;

```

---

Figure B-2. Structure Definition for PANEL

The variables in this structure perform the following functions:

<b>p_depth</b>	Number of rows in panel
<b>p_width</b>	Number of columns in panel
<b>orow</b>	Origin row (top left)
<b>ocol</b>	Origin column
<b>*title</b>	Title string pointer
<b>divty</b>	Divide type code
<b>bordr</b>	Border flag byte

The following fields are used to relate multiple panels on the display:

<b>*p_under</b>	Next panel in chain under this panel
<b>*p_over</b>	Previous panel in chain over this panel

The following fields are used by the library routines. Do not change these fields directly:

<b>*fpane</b>	First pane after divisions
<b>*dpane</b>	First root pane for div
<b>*apane</b>	Current active pane
<b>*p_win</b>	Window struct for panel
<b>dfid</b>	External panel ident

<b>plobsc</b>	Panel obscured flag
<b>plmodf</b>	Panel modified flag
<b>PLfill[6]</b>	Not used

## PANE Structure

The Extended curses library routines use a structure, *PANE*, to hold information about each pane that it is working with. Figure B-3 shows the contents of that structure.

---

```

#define PANE    struct Pane

struct Pane
{
    short int    w_depth ;
    short int    w_width ;
    short int    v_depth ;
    short int    v_width ;
    short int    orow    ;
    short int    ocol    ;
    PANE         *vscr   ;
    PANE         *hscr   ;
    PANE         *nxtpn  ;
    PANE         *prvpn  ;
    PANE         *divs   ;
    PANE         *divd   ;
    char         divty   ;
    char         fill1   ;
    short int    divsz   ;
    char         divszu  ;
    char         bordr   ;
    char         fill2   ;
    char         fill3   ;
    WINDOW       *w_win  ;
    WINDOW       *v_win  ;
    int          pnvsid  ;
    PANEL        *hpanl  ;
    PANEPS       *exps   ;
    char         alloc   ;
    char         plobsc  ;
    char         plmodf  ;
    char         PNfill[5]
}
;

```

---

Figure B-3. Structure Definition for PANE

The variables in this structure perform the following functions:

<b>w_depth</b>	Rows of data in presentation space for this pane.
<b>w_width</b>	Columns of data in presentation space for this pane.
<b>v_depth</b>	Rows being shown on the display of this pane including space for borders.
<b>v_width</b>	Columns being shown on the display of this pane including space for borders.