

File created: 13-Jun-90 01:19:15 {DSK}<usr>local>lde>lispcore>library>VT100KP.;2

changes to: (VARS VT100KPCOMS)

previous date: 7-Dec-87 15:46:07 {DSK}<usr>local>lde>lispcore>library>VT100KP.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::  
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### (RPAQQ VT100KPCOMS

```
((FNS BOTTOMHALFREGION BOXKEYPAD GETEDTKEYPAD GETKEYPAD GRIDBOXREGION INVERTPRINT KPCHARFROMXY
  TOPHALFREGION VT100KPCODE VT100KPFN VTCHAT.KPAPPLMODE)
 (BITMAPS KPARROWSBM)
 (ARRAY KPCHARARRAY)
 (VARS EDTKPH EDTKPHI)
 (ADDVARS (CHATMENUITEMS ("VT100 Keypad" (GETKEYPAD)
  "Brings up a VT100 keypad")))
 ;; Nuke CHATMENU so CHATMENUITEMS will reflect this change
 (VARS CHATMENU)))
```

(DEFINEQ

### (BOTTOMHALFREGION

```
[LAMBDA (REGION) (* ejs%: "19-APR-83 12:13")
  (* * Function to return upper half of a region)
```

```
(create REGION
  LEFT _ (fetch (REGION LEFT) of REGION)
  WIDTH _ (fetch (REGION WIDTH) of REGION)
  HEIGHT _ (LRSH (fetch (REGION HEIGHT) of REGION)
  1)
  BOTTOM _ (fetch (REGION BOTTOM) of REGION))
```

### (BOXKEYPAD

```
[LAMBDA (WINDOW GRIDSPEC) (* ejs%: "19-APR-83 13:41")
  (* * Box the VT100 keypad)
```

```
(PROG (TY TX)
  (for Y from 2 to 5 do (SETQ TY (BOTTOMOFGRIDCOORD Y GRIDSPEC))
    (DRAWLINE 0 TY 168 TY 1 'REPLACE WINDOW))
  (SETQ TY (BOTTOMOFGRIDCOORD 1 GRIDSPEC))
  (DRAWLINE 0 TY (LEFTOFGRIDCOORD 3 GRIDSPEC)
    TY 1 'REPLACE WINDOW)
  (SETQ TX (LEFTOFGRIDCOORD 1 GRIDSPEC))
  (DRAWLINE TX (BOTTOMOFGRIDCOORD 1 GRIDSPEC)
    TX 248 1 'REPLACE WINDOW)
  (SETQ TX (LEFTOFGRIDCOORD 2 GRIDSPEC))
  (DRAWLINE TX 0 TX 248 1 'REPLACE WINDOW)
  (SETQ TX (LEFTOFGRIDCOORD 3 GRIDSPEC))
  (DRAWLINE TX 0 TX 248 1 'REPLACE WINDOW))
```

### (GETEDTKEYPAD

```
[LAMBDA (WINDOW) (* ejs%: "19-APR-83 14:16")
  (* * Function to make an EDT keypad)
```

```
(PROG ((GRIDSPEC (create REGION
  LEFT _ 1
  BOTTOM _ 1
  WIDTH _ 40
  HEIGHT _ 40))
  [FONT (FONTCREATE ' (HELVETICA 8)
  TMP TMP1 BR)
  (CLEARW WINDOW)
  (DSPFONT FONT WINDOW)
  (for LABEL in EDTKPH do (CENTERPRINTINREGION (CAR LABEL)
    (TOPHALFREGION (GRIDBOXREGION (CAADR LABEL)
    (CDADR LABEL)
    GRIDSPEC))
    WINDOW))
  (CENTERPRINTINREGION "Line" [TOPHALFREGION (SETQ TMP (UNIONREGIONS (GRIDBOXREGION 0 0 GRIDSPEC)
    (GRIDBOXREGION 1 0 GRIDSPEC))
    WINDOW)
  (CENTERPRINTINREGION "Enter" [TOPHALFREGION (SETQ TMP1 (UNIONREGIONS (GRIDBOXREGION 3 0 GRIDSPEC)
    (GRIDBOXREGION 3 1 GRIDSPEC))
```

```

WINDOW)
(CENTERPRINTINREGION "Help" (GRIDBOXREGION 1 4 GRIDSPEC)
WINDOW)
(INVERTPRINT (WINDOWPROP WINDOW 'DSP)
T)
(for LABEL in EDTKPHI do (SETQ BR (BOTTOMHALFREGION (GRIDBOXREGION (CAADR LABEL)
(CDADR LABEL)
GRIDSPEC)))
[BITBLT WINDOW NIL NIL WINDOW NIL NIL NIL NIL 'INVERT 'REPLACE NIL
(create REGION
LEFT _ (IPLUS (fetch (REGION LEFT) of BR)
1)
BOTTOM _ (IPLUS (LRSH (IDIFFERENCE (fetch (REGION HEIGHT)
of BR)
(FONTPROP FONT 'HEIGHT))
1)
(fetch (REGION BOTTOM) of BR))
WIDTH _ (IDIFFERENCE (fetch (REGION WIDTH) of BR)
2)
HEIGHT _ (FONTPROP FONT 'HEIGHT)]
(CENTERPRINTINREGION (CAR LABEL)
BR WINDOW))
(SETQ BR (BOTTOMHALFREGION TMP))
[BITBLT WINDOW NIL NIL WINDOW NIL NIL NIL NIL 'INVERT 'REPLACE NIL
(create REGION
LEFT _ (ADD1 (fetch (REGION LEFT) of BR))
BOTTOM _ (IPLUS (fetch (REGION BOTTOM) of BR)
(LRSH (IDIFFERENCE (fetch (REGION HEIGHT) of BR)
(FONTPROP FONT 'HEIGHT))
1))
WIDTH _ (IDIFFERENCE (fetch (REGION WIDTH) of BR)
2)
HEIGHT _ (FONTPROP FONT 'HEIGHT)]
(CENTERPRINTINREGION "Open Line" BR WINDOW)
(SETQ BR (BOTTOMHALFREGION TMP1))
[BITBLT WINDOW NIL NIL WINDOW NIL NIL NIL NIL 'INVERT 'REPLACE NIL
(create REGION
LEFT _ (ADD1 (fetch (REGION LEFT) of BR))
BOTTOM _ (IPLUS (fetch (REGION BOTTOM) of BR)
(LRSH (IDIFFERENCE (fetch (REGION HEIGHT) of BR)
(FONTPROP FONT 'HEIGHT))
1))
WIDTH _ (IDIFFERENCE (fetch (REGION WIDTH) of BR)
2)
HEIGHT _ (FONTPROP FONT 'HEIGHT)]
(CENTERPRINTINREGION "Subs" BR WINDOW)
(SETQ BR (GRIDBOXREGION 0 4 GRIDSPEC))
[BITBLT WINDOW NIL NIL WINDOW NIL NIL NIL NIL 'INVERT 'REPLACE NIL (create REGION
LEFT _ (IPLUS (fetch (REGION LEFT)
of BR)
2)
BOTTOM _ (IPLUS (fetch (REGION BOTTOM)
of BR)
2)
WIDTH _ (IDIFFERENCE (REGION WIDTH)
of BR)
4)
HEIGHT _ (IDIFFERENCE (fetch (REGION HEIGHT)
of BR)
4))
(CENTERPRINTINREGION "Gold" BR WINDOW)
(INVERTPRINT (WINDOWPROP WINDOW 'DSP)
NIL)
(BITBLT KPARROWSBM 0 0 WINDOW (LEFTOFGRIDCOORD 0 GRIDSPEC)
(BOTTOMOFGRIDCOORD 5 GRIDSPEC)
NIL NIL 'INPUT 'REPLACE)
(BOXKEYPAD WINDOW GRIDSPEC])

```

**(GETKEYPAD**

[LAMBDA (WINDOW)

(\* ejs%: "13-May-85 16:27")

(\* Function to return a window containing a VT100 keypad)

```

(PROG [GRIDSPEC [BFONT (FONTCREATE '(HELVETICA 18 BRR)
[LFONT (FONTCREATE '(HELVETICA 10 BRR)
(KPWINDOW (OR WINDOW (LET [(POS (GETBOXPOSITION (WIDTHIFWINDOW 160)
(HEIGHTIFWINDOW 240 T)
(CREATEW (create REGION
LEFT _ (fetch (POSITION XCOORD) of POS)
BOTTOM _ (fetch (POSITION YCOORD) of POS)

```

```

                                WIDTH _ (WIDTHIFWINDOW 160)
                                HEIGHT _ (HEIGHTIFWINDOW 240 T))
                                "VT100 Keypad"]
(GRID (SETQ GRIDSPEC (create REGION
                                LEFT _ 1
                                BOTTOM _ 1
                                WIDTH _ 40
                                HEIGHT _ 40))
      4 6 0 KPWINDOW)
(CLEARW KPWINDOW)
(DSPFONT BFONT KPWINDOW)
(for J from 0 to 2 do (for I from 1 to 3 do (CENTERPRINTINREGION (MKSTRING (IPLUS (ITIMES J 3)
                                                                    I))
                                                                    (GRIDBOXREGION (SUB1 I)
                                                                    (ADD1 J)
                                                                    GRIDSPEC)
                                                                    KPWINDOW)))
(CENTERPRINTINREGION "0" (UNIONREGIONS (GRIDBOXREGION 0 0 GRIDSPEC)
                                          (GRIDBOXREGION 1 0 GRIDSPEC))
  KPWINDOW)
(CENTERPRINTINREGION "--" (GRIDBOXREGION 3 3 GRIDSPEC)
  KPWINDOW)
(CENTERPRINTINREGION "." (GRIDBOXREGION 2 0 GRIDSPEC)
  KPWINDOW)
(CENTERPRINTINREGION "," (GRIDBOXREGION 3 2 GRIDSPEC)
  KPWINDOW)
(DSPFONT LFONT KPWINDOW)
(for I from 0 to 3 do (CENTERPRINTINREGION (CONCAT "PF" (ADD1 I))
                                          (GRIDBOXREGION I 4 GRIDSPEC)
                                          KPWINDOW))
(CENTERPRINTINREGION "ENTER" (UNIONREGIONS (GRIDBOXREGION 3 0 GRIDSPEC)
                                              (GRIDBOXREGION 3 1 GRIDSPEC))
  KPWINDOW)
(BITBLT KPARROWSBM 0 0 KPWINDOW (LEFTOFGRIDCOORD 0 GRIDSPEC)
  (BOTTOMOFGRIDCOORD 5 GRIDSPEC)
  NIL NIL 'INPUT 'REPLACE)
(OR WINDOW (WINDOWPROP KPWINDOW 'BUTTONEVENTFN 'VT100KPFN))
(BOXKEYPAD KPWINDOW GRIDSPEC])

```

**(GRIDBOXREGION**

[LAMBDA (GRIDX GRIDY GRIDSPEC)

(\* ejs%: "18-APR-83 09:53")

(\* Function to return the source system region of a grid box)

```

(create REGION
  LEFT _ (LEFTOFGRIDCOORD GRIDX GRIDSPEC)
  BOTTOM _ (BOTTOMOFGRIDCOORD GRIDY GRIDSPEC)
  WIDTH _ (fetch (REGION WIDTH) of GRIDSPEC)
  HEIGHT _ (fetch (REGION HEIGHT) of GRIDSPEC])

```

**(INVERTPRINT**

[LAMBDA (DSP FLG)

(\* ejs%: "19-APR-83 13:18")

```

(COND
  (FLG (DSPSOURCETYPE 'INVERT DSP))
  (T (DSPSOURCETYPE 'INPUT DSP]))

```

**(KPCHARFROMXY**

[LAMBDA (X Y)

(\* ejs%: "19-APR-83 14:17")

(\* Function to convert a mouse click to a VT100 keypad character)

```

(PROG ((GRIDSPEC (create REGION
  LEFT _ 1
  BOTTOM _ 1
  WIDTH _ 40
  HEIGHT _ 40)))
  (RETURN (ELT KPCHARARRAY (IPLUS (GRIDXCOORD X GRIDSPEC)
  (ITIMES 4 (GRIDYCOORD Y GRIDSPEC))

```

**(TOPHALFREGION**

[LAMBDA (REGION)

(\* ejs%: "19-APR-83 12:13")

(\* Function to return upper half of a region)

```

(create REGION
  LEFT _ (fetch (REGION LEFT) of REGION)
  WIDTH _ (fetch (REGION WIDTH) of REGION)
  HEIGHT _ (LRSH (fetch (REGION HEIGHT) of REGION)
  1)
  BOTTOM _ (IPLUS (fetch (REGION BOTTOM) of REGION)
  (LRSH (fetch (REGION HEIGHT) of REGION)
  1])

```

**(VT100KPCODE**

[LAMBDA (CHAT.STATE VT100.STATE VALUE)

(\* ejs%: "13-May-85 16:29")

(\* \* Function to return string for keypad hit)

(PROG ((KPMODE (**fetch** (VT100.STATE KEYPADMODE) **of** VT100.STATE))  
 (CMODE (**fetch** (VT100.STATE CURSORMODE) **of** VT100.STATE)))  
 (RETURN (COND

[(FMEMB VALUE '(UP DOWN LEFT RIGHT))

(COND

(CMODE (SELECTQ VALUE  
 (UP "ŸOA")  
 (DOWN "ŸOB")  
 (RIGHT "ŸOC")  
 (LEFT "ŸOD")  
 ""))

(T (SELECTQ VALUE  
 (UP "Ÿ[A"]  
 (DOWN "Ÿ[B"]  
 (RIGHT "Ÿ[C"]  
 (LEFT "Ÿ[D"]  
 ""))

(T (COND

(KPMODE (SELECTQ VALUE  
 (0 "ŸOp")  
 (1 "ŸOq")  
 (2 "ŸOr")  
 (3 "ŸOs")  
 (4 "ŸOt")  
 (5 "ŸOu")  
 (6 "ŸOv")  
 (7 "ŸOw")  
 (8 "ŸOx")  
 (9 "ŸOy")  
 (- "ŸOm")  
 (% "ŸOl")  
 (%. "ŸOn")  
 (ENTER "ŸOM")  
 (PF1 "ŸOP")  
 (PF2 "ŸOQ")  
 (PF3 "ŸOR")  
 (PF4 "ŸOS")  
 ""))

(T (SELECTQ VALUE

(0 "0")  
 (1 "1")  
 (2 "2")  
 (3 "3")  
 (4 "4")  
 (5 "5")  
 (6 "6")  
 (7 "7")  
 (8 "8")  
 (9 "9")  
 (- "-")  
 (%. ".")  
 (% " ")  
 (ENTER " ")  
 ""))

(PF1 "ŸOP")  
 (PF2 "ŸOQ")  
 (PF3 "ŸOR")  
 (PF4 "ŸOS")  
 ""))

**(VT100KPFN**

[LAMBDA (WINDOW)

(\* ejs%: "18-Nov-85 14:15")

(PROG ((X (LASTMOUSEX WINDOW))

(Y (LASTMOUSEY WINDOW))

(GRIDSPEC (**create** REGION

LEFT \_ 0

BOTTOM \_ 0

WIDTH \_ 40

HEIGHT \_ 40))

(CHAT.STATE (WINDOWPROP (PROCESS.WINDOW (TTY.PROCESS))

'CHATSTATE))

VT100.STATE REGION VALUE GX GY)

(COND

((MOUSESTATE UP)

(RETURN))

((NOT (INSIDEP (DSPCLIPPINGREGION NIL WINDOW)

X Y))

(MENU (**create** MENU

ITEMS \_ ' ("EDT Keypad" (**GETEDTKEYPAD** WINDOW)

"Put up an EDT Keypad")

```

("Plain Keypad" (GETKEYPAD WINDOW)
"Put up a Plain keypad"))
CENTERFLG _ T))
(RETURN)))
(COND
[ (type? CHAT.STATE CHAT.STATE)
(SETQ VT100.STATE (fetch (CHAT.STATE TERM.STATE) of CHAT.STATE))
(COND
((NOT (type? VT100.STATE VT100.STATE))
(RETURN]
(T (RETURN)))
(SETQ GX (GRIDXCOORD X GRIDSPEC))
(SETQ GY (GRIDYCOORD Y GRIDSPEC))
[SETQ REGION (COND
((OR (AND (EQ GX 0)
(EQ GY 0))
(AND (EQ GX 1)
(EQ GY 0)))
(UNIONREGIONS (GRIDBOXREGION 0 0 GRIDSPEC)
(GRIDBOXREGION 1 0 GRIDSPEC)))
((OR (AND (EQ GX 3)
(EQ GY 0))
(AND (EQ GX 3)
(EQ GY 1)))
(UNIONREGIONS (GRIDBOXREGION 3 0 GRIDSPEC)
(GRIDBOXREGION 3 1 GRIDSPEC)))
(T (GRIDBOXREGION GX GY GRIDSPEC]
(BITBLT WINDOW NIL NIL WINDOW NIL NIL NIL NIL 'INVERT 'REPLACE NIL REGION)
(SETQ VALUE (KPCHARFROMXY X Y))
(UNTILMOUSESTATE UP)
(BITBLT WINDOW NIL NIL WINDOW NIL NIL NIL NIL 'INVERT 'REPLACE NIL REGION)
(BKSYSBUF (VT100KPCODE CHAT.STATE VT100.STATE VALUE])

```

**(VTCHAT.KPAPPLMODE**

[LAMBDA (CHAT.STATE VT100.STATE FLG) (\* ejs%: "13-May-85 16:08")

(\* \* Set or reset keypad application mode)

(replace (VT100.STATE KEYPADMODE) of VT100.STATE with FLG])

)

(RPAQQ KPARROWSBM



)

(RPAQQ KPCHARARRAY

(READARRAY-FROM-LIST 24 'POINTER 0 '(0 0 %. ENTER 1 2 3 ENTER 4 5 6 %, 7 8 9 - PF1 PF2 PF3 PF4 UP DOWN LEFT RIGHT NIL)))

(RPAQQ EDTKPH

- ("Select" (2 . 0))
- ("Word" (0 . 1))
- ("Eol" (1 . 1))
- ("Char" (2 . 1))
- ("Advance" (0 . 2))
- ("Backup" (1 . 2))
- ("Cut" (2 . 2))
- ("Del C" (3 . 2))
- ("Page" (0 . 3))
- ("Sect" (1 . 3))
- ("Append" (2 . 3))
- ("Del W" (3 . 3))
- ("Fndnxt" (2 . 4))
- ("Del L" (3 . 4)))

(RPAQQ EDTKPHI

- ("Reset" (2 . 0))
- ("Case" (0 . 1))
- ("Del Eol" (1 . 1))
- ("Specins" (2 . 1))
- ("Bottom" (0 . 2))
- ("Top" (1 . 2))
- ("Paste" (2 . 2))
- ("Und C" (3 . 2))
- ("Cmnd" (0 . 3))
- ("Fill" (1 . 3))
- ("Replace" (2 . 3))
- ("Und W" (3 . 3))
- ("Find" (2 . 4))
- ("Und L" (3 . 4)))

(ADDTOVAR CHATMENUITEMS ("VT100 Keypad" (GETKEYPAD) "Brings up a VT100 keypad"))

:: Nuke CHATMENU so CHATMENUITEMS will reflect this change

(RPAQQ **CHATMENU** NIL)

(PUTPROPS **VT100KP COPYRIGHT** ("Venue & Xerox Corporation" 1985 1987 1990))

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