

File created: 4-Oct-88 18:01:30 {EG:PARC:XEROX}<JELLINEK>LISPUSERS>PRINTERMENU.;3

changes to: (VARS PRINTERMENUCOMS)  
(FNS PRINTERMENU PRINTERMENU.ADDMENUTOWINDOW PRINTERMENU.ADDORDELETE? PRINTERMENU.INFOHOOK  
PRINTERMENU.SELECTPRINTER PRINTERMENU.WATCH PRINTERMENU.WHENSELECTEDFN PRINTERMENU.CLOSEFN  
PRINTERMENU.INFOHOOK PRINTERMENU.SELECTPRINTER PRINTERMENU.TOFRONTOLIST PRINTERMENU.WATCH  
PRINTERMENU.GETNAME PRINTERMENU.CREATEMENU PRINTERMENU.CREATEPROMPTWINDOW  
PRINTERMENU.TOFRONTOLIST)

previous date: 13-Feb-87 09:11:46 {PHYLUM}<LISPUSERS>MEDLEY>PRINTERMENU.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::  
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#### (RPAQQ PRINTERMENUCOMS

```
[ (FNS PRINTERMENU PRINTERMENU.ADDMENUTOWINDOW PRINTERMENU.ADDORDELETE? PRINTERMENU.AFTERMOVEFN
  PRINTERMENU.CLOSEFN PRINTERMENU.CREATEMENU PRINTERMENU.CREATEPROMPTWINDOW PRINTERMENU.GETNAME
  PRINTERMENU.INFOHOOK PRINTERMENU.SELECTPRINTER PRINTERMENU.TOFRONTOLIST PRINTERMENU.WATCH
  PRINTERMENU.WHENHELDFN PRINTERMENU.WHENSELECTEDFN)
  (INITVARS (PRINTERMENU.POSITION NIL)
    (PRINTERMENU.SHADE1 9345)
    (PRINTERMENU.WATCH.WAIT 5)
    (PRINTERMENU.WINDOW NIL))
  (VARS PRINTERMENU.PRINTERSHADE)
  (GLOBALVARS PRINTERMENU.POSITION PRINTERMENU.SHADE1 PRINTERMENU.WATCH.WAIT PRINTERMENU.WINDOW
    PROMPTWINDOW)
  (DECLARE%: DONTEVAL@LOAD DOCOPY (P (if (POSITIONP PRINTERMENU.POSITION)
    then
    (PRINTERMENU)]))
```

(DEFINEQ

#### (PRINTERMENU

[LAMBDA NIL

; Edited 30-Sep-88 18:38 by hdj

::: Creates a menu window which can be used to alter the value of DEFAULTPRINTINGHOST such that one can add printers, delete printers, and  
::: rearrange the order of printers on the list.

```
(LET* ((PROCESS (FIND.PROCESS "PrinterMenu"))
  (MENU (PRINTERMENU.CREATEMENU))
  (WIDTH (XCL:RECORD-FETCH :MENU :IMAGEWIDTH MENU))
  (HEIGHT (XCL:RECORD-FETCH :MENU :IMAGEHEIGHT MENU))
  LEFT BOTTOM)
  ;; Find out where to put it
  [COND
    ((NOT (POSITIONP PRINTERMENU.POSITION))
      (SETQ PRINTERMENU.POSITION (GETBOXPOSITION WIDTH HEIGHT)
        (SETQ LEFT (fetch (POSITION XCOORD) of PRINTERMENU.POSITION))
        (SETQ BOTTOM (fetch (POSITION YCOORD) of PRINTERMENU.POSITION)))
      ;; Zap PRINTERMENU.WATCH if it's running
      (COND
        (PROCESS (SUSPEND.PROCESS PROCESS)))
      ;; Only one window allowed. Close any old one.
      (COND
        ((WINDOWP PRINTERMENU.WINDOW)
          (WINDOWPROP PRINTERMENU.WINDOW 'CLOSEFN NIL)
          (CLOSEW PRINTERMENU.WINDOW)))
      ;; Create a new window
      (SETQ PRINTERMENU.WINDOW (CREATEW (CREATEREGION LEFT BOTTOM WIDTH HEIGHT)
        NIL 0 T)
        (WINDOWPROP PRINTERMENU.WINDOW 'AFTERMOVEFN (FUNCTION PRINTERMENU.AFTERMOVEFN))
        (WINDOWPROP PRINTERMENU.WINDOW 'RESHAPEFN 'DON'T)
        (WINDOWPROP PRINTERMENU.WINDOW 'DEFAULTPRINTINGHOST (COPYALL DEFAULTPRINTINGHOST))
        (WINDOWPROP PRINTERMENU.WINDOW 'CLOSEFN (FUNCTION PRINTERMENU.CLOSEFN)))
      ;; Add the menu to PRINTERMENU.WINDOW
      (PRINTERMENU.ADDMENUTOWINDOW MENU)
      ;; Start the process to monitor the value of DEFAULTPRINTINGHOST
      (if PROCESS
        then (WAKE.PROCESS PROCESS)
        else (ADD.PROCESS ' (PRINTERMENU.WATCH)
          'NAME "PrinterMenu" 'INFOHOOK (FUNCTION PRINTERMENU.INFOHOOK)
          'RESTARTABLE T))
      ;; Open the menu window and return it
      (OPENW PRINTERMENU.WINDOW)
```

PRINTERMENU.WINDOW))

(PRINTERMENU.ADDMENUTOWINDOW

[LAMBDA (MENU)

; Edited 30-Sep-88 13:30 by hdj

:: Place Menu in PRINTERMENU.WINDOW and shade first two items of menu

```
(LET ((MENU-ITEMS (fetch (MENU ITEMS) of MENU)))
  (ADDMENU MENU PRINTERMENU.WINDOW)
  (SHADEITEM (CAR MENU-ITEMS)
    MENU BLACKSHADE PRINTERMENU.WINDOW)
  (COND
    ((CADR MENU-ITEMS)
     (SHADEITEM (CADR MENU-ITEMS)
       MENU PRINTERMENU.PRINTERSHADE PRINTERMENU.WINDOW))
```

(PRINTERMENU.ADDORDELETE?

[LAMBDA NIL

; Edited 30-Sep-88 11:01 by hdj

::: Add or Delete from DEFAULTPRINTINGHOST

```
(LET ((ITEM (MENU (create MENU
  ITEMS _ ' ("Add printer" 'Add "Allows you to add a printer to DEFAULTPRINTINGHOST")
            ("Delete printer" 'Delete "Allows you to delete a printer from
            DEFAULTPRINTINGHOST"))
  CENTERFLG _ T
  MENUBORDERSIZE _ 1)))
  PRINTER-NAME)
```

:: Pop up a menu to find out if add or delete wanted

(if ITEM

then :: Since we'll be requiring the use of the mouse for a while, spawn a new mouse so things can't get locked up.

(SPAWN.MOUSE)

:: Find out what to Add or Delete

(SETQ PRINTER-NAME (PRINTERMENU.GETNAME ITEM))

:: If nothing selected, do nothing

(if PRINTER-NAME

then :: If Add or Delete, then do it

(SELECTQ ITEM

(Add (COND

((NOT (MEMBER PRINTER-NAME DEFAULTPRINTINGHOST))

(SETQ DEFAULTPRINTINGHOST (CONS PRINTER-NAME DEFAULTPRINTINGHOST))

ITEM)))

(Delete (COND

([SETQ PRINTER-NAME

(for PRINTER-DESCR in DEFAULTPRINTINGHOST

do (COND

((OR [AND (LISTP PRINTER-DESCR)

(STRING-EQUAL PRINTER-NAME (OR (CADR

PRINTER-DESCR

)

(CAR PRINTER-DESCR

])

(AND (NLISTP PRINTER-NAME)

(NLISTP PRINTER-DESCR)

(STRING-EQUAL PRINTER-NAME PRINTER-DESCR)))

(RETURN PRINTER-DESCR]

[COND

((NOT (CDR DEFAULTPRINTINGHOST))

(SETQ DEFAULTPRINTINGHOST NIL))

(T (SETQ DEFAULTPRINTINGHOST (REMOVE PRINTER-NAME

DEFAULTPRINTINGHOST]

ITEM)))

NIL])

(PRINTERMENU.AFTERMOVEFN

[LAMBDA (Window)

(\* RAR " 8-Oct-85 08:43")

(\* Update the value of PRINTERMENU.POSITION)

(PROG [(Region (WINDOWPROP Window 'REGION)

(SETQ PRINTERMENU.POSITION (create POSITION

XCOORD \_ (fetch (REGION LEFT) of Region)

YCOORD \_ (fetch (REGION BOTTOM) of Region])

(PRINTERMENU.CLOSEFN

[LAMBDA NIL

; Edited 30-Sep-88 18:27 by hdj

:: Set the globalvar for the printer menu window to NIL

(SETQ PRINTERMENU.WINDOW NIL)

;; If PRINTERMENU.WINDOW closed, then shut down process to monitor DEFAULTPRINTINGHOST

```
(LET ((PROCESS (FIND.PROCESS "PrinterMenu")))
  (if PROCESS
    then (DEL.PROCESS PROCESS))
```

**(PRINTERMENU.CREATEMENU**

[LAMBDA NIL

; Edited 29-Sep-88 18:19 by hdj

;;; Create and return the menu to be used by PRINTERMENU

```
(create MENU
  ITEMS _ [CONS "-- Default Printer --" (for PRINTER-DESCR in DEFAULTPRINTINGHOST
    collect (COND
      ((LISTP PRINTER-DESCR)
        (OR (CADR PRINTER-DESCR)
            (CAR PRINTER-DESCR)))
      (T PRINTER-DESCR)
    ]
    WHENSELECTEDFN _ (FUNCTION PRINTERMENU.WHENSELECTEDFN)
    WHENHELDFN _ (FUNCTION PRINTERMENU.WHENHELDFN)
    CENTERFLG _ T
    MENUBORDERSIZE _ 1])
```

**(PRINTERMENU.CREATEPROMPTWINDOW**

[LAMBDA NIL

; Edited 29-Sep-88 17:34 by hdj

;;; Return a window to be used to ask for the name of a printer to add to the menu

```
(PROG (Bottom Font Height Left MouseX MouseY Width)
  (SETQ Font (DEFAULTFONT 'DISPLAY))
  [SETQ Width (WIDTHIFWINDOW (ITIMES 60 (CHARWIDTH (CHCON1 "X")
    Font)
  (SETQ Height (HEIGHTIFWINDOW (ITIMES 2 (FONTPROP Font 'HEIGHT)
    T))
  [SETQ Left (COND
    ((IGEQ (IDIFFERENCE SCREENWIDTH (SETQ MouseX LASTMOUSEX))
    Width)
    MouseX)
    (T (IMAX 0 (IDIFFERENCE MouseX Width)
  [SETQ Bottom (COND
    ((IGEQ (IDIFFERENCE SCREENHEIGHT (SETQ MouseY LASTMOUSEY))
    Height)
    MouseY)
    (T (IMAX 0 (IDIFFERENCE MouseY Height)
  (RETURN (CREATEW (CREATEREGION Left Bottom Width Height)
    "Question from PRINTERMENU:" NIL T])
```

**(PRINTERMENU.GETNAME**

[LAMBDA (ITEM)

; Edited 30-Sep-88 18:29 by hdj

;;; Return name of printer to add or delete.

```
(COND
  [(EQ ITEM 'Add)
  ;; Add
  (LET ((WINDOW (PRINTERMENU.CREATEPROMPTWINDOW))
    (PROG1 (PROMPTFORWARD "Enter name of printer to add: " NIL NIL WINDOW NIL 'TTY
      (CHARCODE (EOL ESCAPE LF)))
      (CLOSEW WINDOW)
  (T ;; Delete
    (CL:FORMAT PROMPTWINDOW "~&Select a printer to delete")
    (PROG1 (PRINTERMENU.SELECTPRINTER)
      (CLEARW PROMPTWINDOW])
```

**(PRINTERMENU.INFOHOOK**

[LAMBDA (PROCESS BUTON)

; Edited 30-Sep-88 10:35 by hdj

```
(CL:FORMAT PROMPTWINDOW "~&Monitors the value of DEFAULTPRINTINGHOST for PRINTERMENU.~%~%"])
```

**(PRINTERMENU.SELECTPRINTER**

[LAMBDA NIL

; Edited 30-Sep-88 10:58 by hdj

;;; Return the printer selected with the mouse from the PRINTERMENU menu, or return NIL if none chosen

```
(LET [(MENU (WINDOWPROP PRINTERMENU.WINDOW 'MENU))
  LIST-OF-PRINTERS MENU-POSITION PRINTER SCREEN-POSITION (WINDOW-REGION (WINDOWPROP PRINTERMENU.WINDOW
    'REGION)
  ;; Get the menu in the PRINTERMENU.WINDOW
  [COND
    ((LISTP MENU)
```

```

    (SETQ MENU (CAR MENU))
  ;; Get the list of printers
  (SETQ LIST-OF-PRINTERS (CDR (fetch (MENU ITEMS) of MENU)))
  ;; Wait until mouse button down
  (until (MOUSESTATE (OR LEFT MIDDLE RIGHT)) do (for ITEM in LIST-OF-PRINTERS
    do (SHADEITEM ITEM MENU WHITESHAE PRINTERMENU.WINDOW))
  )
  ;; I didn't use the function UNTILMOUSESTATE because I want to keep control of the mouse until the user clicks it somewhere.
  ;; While mouse button down, if cursor in menu-item region, grayout region
  (while (MOUSESTATE (OR LEFT MIDDLE RIGHT))
    do [COND
      [(INSIDEP WINDOW-REGION LASTMOUSEX LASTMOUSEY)
        (for ITEM in LIST-OF-PRINTERS do (COND
          ((INSIDEP (MENUITEMREGION ITEM MENU)
            (LASTMOUSEX PRINTERMENU.WINDOW)
            (LASTMOUSEY PRINTERMENU.WINDOW))
            (SHADEITEM ITEM MENU GRAYSHAE PRINTERMENU.WINDOW))
          (T (SHADEITEM ITEM MENU WHITESHAE PRINTERMENU.WINDOW)
            (T (SHADEITEM ITEM MENU WHITESHAE PRINTERMENU.WINDOW)
              (SHADEITEM ITEM MENU WHITESHAE PRINTERMENU.WINDOW))
            (EQ ITEM (CAR LIST-OF-PRINTERS))
            BLACKSHAE)
            (T WHITESHAE))
          PRINTERMENU.WINDOW))
        ]
      finally (for ITEM in LIST-OF-PRINTERS do (SHADEITEM ITEM MENU (COND
        ((EQ ITEM (CAR LIST-OF-PRINTERS))
          BLACKSHAE)
        (T WHITESHAE))
          PRINTERMENU.WINDOW))
    ]
  )
  ;; Get the position of the mouse following the click in the coordinates of the PRINTERMENU.WINDOW
  ;; If not in the PRINTERMENU.WINDOW, we're done
  (COND
    ((INSIDEP WINDOW-REGION (create POSITION
      XCOORD _ LASTMOUSEX
      YCOORD _ LASTMOUSEY))
      ;; See if the position of the mouse cursor is inside the menu-item-region for a printer on the menu
      [for ITEM in (CDR (fetch (MENU ITEMS) of MENU)) do (COND
        ((INSIDEP (MENUITEMREGION ITEM MENU)
          (LASTMOUSEX PRINTERMENU.WINDOW)
          (LASTMOUSEY PRINTERMENU.WINDOW))
          (SETQ PRINTER ITEM]
        PRINTER]))
  )

```

**(PRINTERMENU.TOFRONTOFLIST**

[LAMBDA (PRINTER-NAME)

; Edited 29-Sep-88 18:17 by hdj

;;; Move Item to front of DEFAULTPRINTINGHOST

```

  (LET ((THING-TO-MOVE NIL))
    ;; First find the element of DEFAULTPRINTINGHOST to be moved to first place
    (for PRINTER-DESCR in DEFAULTPRINTINGHOST do (COND
      ((OR [AND (LISTP PRINTER-DESCR)
        (STRING-EQUAL PRINTER-NAME (OR (CADR
          PRINTER-DESCR
          )
          (CAR
            PRINTER-DESCR
            ]
          (AND (NLISTP PRINTER-NAME)
            (NLISTP PRINTER-DESCR)
            (STRING-EQUAL PRINTER-NAME PRINTER-DESCR)))
          (SETQ THING-TO-MOVE PRINTER-DESCR))
      ]
    ]
    repeatuntil THING-TO-MOVE)
  )

```

;;; Now place the element in first place

```

  (SETQ DEFAULTPRINTINGHOST (CONS THING-TO-MOVE (REMOVE THING-TO-MOVE DEFAULTPRINTINGHOST)))

```

**(PRINTERMENU.WATCH**

[LAMBDA NIL

; Edited 30-Sep-88 18:37 by hdj

;;; Every PRINTERMENU.WATCH.WAIT seconds check to see if DEFAULTPRINTINGHOST has changed. If it has, then update the printer menu.

```

  (do ; forever
    (COND
      ([NOT (EQUAL DEFAULTPRINTINGHOST (WINDOWPROP PRINTERMENU.WINDOW 'DEFAULTPRINTINGHOST)
        (PRINTERMENU))
        (BLOCK (ITIMES PRINTERMENU.WATCH.WAIT 1000))
    ]
  )

```

**(PRINTERMENU.WHENHELDFN**

[LAMBDA (Item Menu Button)

(\* Ridder%: " 2-Aug-85 13:30")

(\* \* Print an appropriate message in PROMPTWINDOW.)

```
(PROG ((Menuitems (fetch (MENU ITEMS) of Menu)))
(COND
  ((EQ Item (CAR Menuitems))
   (printout PROMPTWINDOW "This item allows you to add or delete printers" T))
  (T (printout PROMPTWINDOW "Will make " Item " the first element of DEFAULTPRINTINGHOST" T]))
```

**(PRINTERMENU.WHENSELECTEDFN**

; Edited 30-Sep-88 18:27 by hdj

```
[LAMBDA (ITEM MENU BUTTON)
```

;; Respond to item selected in menu

```
(PROG ((MENU-ITEMS (fetch (MENU ITEMS) of MENU)))
```

;; If the value of DEFAULTPRINTINGHOST has been changed outside of PRINTERMENU, or if the monitor process has been killed, then update  
;; the menu and return

```
(COND
  ((OR [NOT (EQUAL DEFAULTPRINTINGHOST (WINDOWPROP PRINTERMENU.WINDOW 'DEFAULTPRINTINGHOST))
        (NOT (FIND.PROCESS "PrinterMenu"))])
   (PRINTERMENU)
   (RETURN NIL)))
```

;; If selecting the 'title bar', then popup the add-or-delete menu and add or delete a printer

```
(if (EQ ITEM (CAR MENU-ITEMS))
  then (if (PRINTERMENU.ADDORDELETE?)
           then (PRINTERMENU))
       (RETURN NIL))
```

;; If a printer was selected, move it to the top of the menu and the front of DEFAULTPRINTINGHOST

```
(PRINTERMENU.TOFRONTOLIST ITEM)
(DELETEMENU MENU NIL PRINTERMENU.WINDOW)
(PRINTERMENU.ADDMENUTOWINDOW (PRINTERMENU.CREATEMENU))
(WINDOWPROP PRINTERMENU.WINDOW 'DEFAULTPRINTINGHOST (COPYALL DEFAULTPRINTINGHOST))
```

)

```
(RPAQ? PRINTERMENU.POSITION NIL)
```

```
(RPAQ? PRINTERMENU.SHADE1 9345)
```

```
(RPAQ? PRINTERMENU.WATCH.WAIT 5)
```

```
(RPAQ? PRINTERMENU.WINDOW NIL)
```

```
(RPAQQ PRINTERMENU.PRINTERSHADE 33825)
```

```
(DECLARE%: DOEVAL@COMPILE DONTCOPY
```

```
(GLOBALVARS PRINTERMENU.POSITION PRINTERMENU.SHADE1 PRINTERMENU.WATCH.WAIT PRINTERMENU.WINDOW PROMPTWINDOW)
)
```

```
(DECLARE%: DONTEVAL@LOAD DOCOPY
```

```
(if (POSITIONP PRINTERMENU.POSITION)
  then (PRINTERMENU))
)
```

```
(PUTPROPS PRINTERMENU COPYRIGHT ("Robert Ridder" 1985 1987 1988))
```

---

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