

File created: 9-Apr-87 11:43:55 {ERIS}<LISPUSERS>KOTO>PLOTINSKETCH.;3

changes to: (FNS IMAGE.OBJECT.CHANGED PLIO.EDITCLOSEFN)
(VARS PLOTINSKETCHCOMS)

previous date: 8-Apr-87 11:38:56 {ERIS}<LISPUSERS>KOTO>PLOTINSKETCH.;2

Read Table: OLD-INTERLISP-FILE

Package: INTERLISP

Format: XCCS

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(RPAQQ **PLOTINSKETCHCOMS** ((FNS PLIO.IMAGEBOXFN PLIO.BUTTONEVENTINFN PLIO.REINSERTOBJ PLIO.EDITCLOSEFN)
(VARS IMAGE.OBJECT.CHANGED)))

(DEFINEQ

(**PLIO.IMAGEBOXFN**

[LAMBDA (PLOTIOBJ IMAGESTREAM CURRENTX RIGHTMARGIN)

(* thh: " 6-Aug-86 09:09")

(* * Determines size of plotimageobj)

(PROG ((IMAGEWIDTH (IMAGEOBJPROP PLOTIOBJ (QUOTE WIDTH)))
(IMAGEHEIGHT (IMAGEOBJPROP PLOTIOBJ (QUOTE HEIGHT)))
(PLOT (IMAGEOBJPROP PLOTIOBJ (QUOTE OBJECTDATUM)))
(SCALE (COND
(IMAGESTREAM (DSPSCALE NIL IMAGESTREAM))
(T 1)))
NEWREGION MINSIZE)

(* * this doesn't work with Sketch which has no rightmargin)
(if (GREATERP (TIMES SCALE IMAGEWIDTH)
(DIFFERENCE RIGHTMARGIN CURRENTX)) then
(if (NOT (EQ (IMAGESTREAMTYPE IMAGESTREAM)
(QUOTE DISPLAY))) then (HELP "PLOT image object too big"))
(PROMPTPRINT "Image object too wide. Choose a smaller
region") (SETQ MINSIZE (MINSTREAMREGIONSIZ
IMAGESTREAM PLOT)) (SETQ NEWREGION
(GETREGION (CAR MINSIZE) (CDR MINSIZE)))
(SETQ IMAGEWIDTH (fetch WIDTH of NEWREGION))
(IMAGEOBJPROP PLOTIOBJ (QUOTE WIDTH) IMAGEWIDTH)
(SETQ IMAGEHEIGHT (fetch HEIGHT of NEWREGION))
(IMAGEOBJPROP PLOTIOBJ (QUOTE HEIGHT)
IMAGEHEIGHT)))

(RETURN (**create** IMAGEBOX
XSIZE _ (TIMES SCALE IMAGEWIDTH)
YSIZE _ (TIMES SCALE IMAGEHEIGHT)
YDESC _ 0
XKERN _ 0])

(**PLIO.BUTTONEVENTINFN**

[LAMBDA (PLOTIMAGEOBJ WINDOWSTREAM SELECTION RELX RELY WINDOW TEXTSTREAM BUTTON)
(* thh: " 6-Aug-86 10:34")

(PROG ([CHOICEMENU (CONSTANT (**create** MENU
CENTERFLG _ T
ITEMS _ (QUOTE ((Select (QUOTE SELECT)
"Select the image object")
(Reshape (QUOTE RESHAPE)
"Reshape the image objcet")
(Plot% Window (QUOTE EDIT)
"Open a window containing plot"]
(PLOT (IMAGEOBJPROP PLOTIMAGEOBJ (QUOTE OBJECTDATUM)))
(IMAGEWIDTH (IMAGEOBJPROP PLOTIMAGEOBJ (QUOTE WIDTH)))
(IMAGEHEIGHT (IMAGEOBJPROP PLOTIMAGEOBJ (QUOTE HEIGHT)))
MINSIZE NEWREGION WIN NEWPLOT)

(* * consider selection if BUTTON=NIL to handle plots in Koto version of Sketch)

(COND
((OR (NOT BUTTON)
(EQ BUTTON (QUOTE LEFT)))
(SELECTQ (MENU CHOICEMENU)
(RESHAPE (SETQ MINSIZE (MINSTREAMREGIONSIZ (WINDOWPROP (**fetch** PLOTWINDOW **of** PLOT)
(QUOTE DSP))
PLOT)) (* Assumes the WINDOWSTREAM has been changed to fit the
imageobj)
(SETQ NEWREGION (GETREGION (CAR MINSIZE)
(CDR MINSIZE)
(CREATEREGION (DSPXOFFSET NIL WINDOWSTREAM)
(DSPYOFFSET NIL WINDOWSTREAM)
IMAGEWIDTH IMAGEHEIGHT)))
(IMAGEOBJPROP PLOTIMAGEOBJ (QUOTE WIDTH)
(**fetch** WIDTH **of** NEWREGION))
(IMAGEOBJPROP PLOTIMAGEOBJ (QUOTE HEIGHT)
(**fetch** HEIGHT **of** NEWREGION)) (* Redraw the Image object)

```

      (RETURN (QUOTE CHANGED)))
    (EDIT (SETQ NEWPLOT (COPYPLOT PLOT NIL (GETBOXREGION (WIDTHIFWINDOW IMAGEWIDTH)
                                                          (HEIGHTIFWINDOW IMAGEHEIGHT T))
                                     "Plot Edit Window")))
    (SETQ WIN (OPENPLOTWINDOW NEWPLOT))

```

(* Cache some info some that changes to NEWPLOT may be reinserted into TEXTSTREAM.
Windowprops are used because they are not copied (HACK))

(* sketch doesn't pass down anything for TEXTSTREAM arg so must use viewer window instead)

```

      (WINDOWPROP WIN (QUOTE SOURCEHOST)
                    (OR TEXTSTREAM WINDOW WINDOWSTREAM))
      (WINDOWPROP WIN (QUOTE SOURCEIMAGEOBJ)
                    PLOTIMAGEOBJ)
      (WINDOWADDPROP WIN (QUOTE CLOSEFN)
                        (QUOTE PLIO.EDITCLOSEFN)
                        T)

```

(* handle reinsert by a closefn rather than an new menu item --
similar to the behavior of Sketch image object edits (PLOTADDMENUITEMS NEWPLOT
(QUOTE RIGHT) (QUOTE ((Reinsert PLIO.REINSERTOBJ "Change source image object")))))

```

      (RETURN T))
    (RETURN NIL)))
  (T (RETURN NIL])

```

(PLIO.REINSERTOBJ

[LAMBDA (PLOT)

(* thh: " 6-Aug-86 09:48")

(* allows modified plot to be reinserted in document)

(* modified to work with Sketch as well as TEdit sources)

```

  (PROG ((PLOTWINDOW (fetch PLOTWINDOW of PLOT))
        HOST OBJ)
    (SETQ HOST (WINDOWPROP PLOTWINDOW (QUOTE SOURCEHOST)))
    (SETQ OBJ (WINDOWPROP PLOTWINDOW (QUOTE SOURCEIMAGEOBJ)))
    (COND
      ((NOT (IMAGEOBJP OBJ))
       (HELP "Not an IMAGEOBJ" OBJ)))
    (IMAGEOBJPROP OBJ (QUOTE OBJECTDATUM)
                  (COPYPLOT PLOT))
    (IMAGEOBJPROP OBJ (QUOTE WIDTH)
                  (WINDOWPROP PLOTWINDOW (QUOTE WIDTH)))
    (IMAGEOBJPROP OBJ (QUOTE HEIGHT)
                  (WINDOWPROP PLOTWINDOW (QUOTE HEIGHT)))
    (IMAGE.OBJECT.CHANGED HOST OBJ])

```

(* Destructively change imageobj to retain EQ ness)

(PLIO.EDITCLOSEFN

[LAMBDA (W)

(* thh: " 8-Apr-87 11:38")

(* this plot window is from an image object. Reinsert plot if requested)

(* later could test if plot has been changed -- if no changes don't ask to reinsert)

```

  (LET (RESULT)
    (SETQ RESULT (SELECTQ (MENU (CONSTANT (create MENU
                                              TITLE _ "Change source image object?"
                                              ITEMS _ (QUOTE ((Yes (QUOTE YES)
                                                                    "this image used in the document
                                                                    instead of the one that is there.")
                                                                    (No (QUOTE NO)
                                                                    "the changes made to this image will
                                                                    not be put into the document.")))
                                CENTERFLG _ T)))
          (YES (PLIO.REINSERTOBJ (WHICHPLOT W))
              NIL)
          (NO NIL)
          (NIL
           (QUOTE DON'T)))
    (OR RESULT (WINDOWDELPROP W (QUOTE CLOSEFN)
                              (QUOTE PLIO.EDITCLOSEFN)))
    RESULT])

```

(* user selected outside the menu --
abort the close)

(* clean up window prop -- required since currently
PLOT.CLOSEFN calls CLOSEW!)

(DEFINEQ

(IMAGE.OBJECT.CHANGED

[LAMBDA (HOST OBJECT)

(* thh: " 9-Apr-87 10:15")

(* notifies HOST that OBJECT has changed and needs to be
redisplayed)

```
( * * currently assumes object is in TEdit or Sketch)

(LET (CANONICALHOST)
  (COND
    ([SETQ CANONICALHOST (CAR (NLSETQ (TEXTSTREAM HOST)
      (TEDIT.OBJECT.CHANGED CANONICALHOST OBJECT)))
    ([SETQ CANONICALHOST (CAR (NLSETQ (INSURE.SKETCH HOST)
      (SK.MARK.DIRTY CANONICALHOST)
      (* INSURE.SKETCH noerrorflg doesn't work)
      (* this sets SKETCHCHANGED prop of all viewers on the sketch)
      (for SKW in (SKETCH.ALL.VIEWERS CANONICALHOST) do (REDISPLAYW SKW)))
      (T (HELP "Can't update image object in " HOST]))
    )
  )
  (PUTPROPS PLOTINSKETCH COPYRIGHT ("Xerox Corporation" 1987))
```

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