

File created: 23-Dec-86 12:31:59 {QV}<NOTECARDS>1.3L>LIBRARY>SEdit-IMAGEOBJ.;2

changes to: (VARS Sedit-IMAGEOBJCOMS)  
(FUNCTIONS \_EditNode \_EditSelection \_ImageObj)

previous date: 18-Nov-86 17:49:45 {PHYLUM}<DEFGROUPS>NOTECARDS>SEdit-IMAGEOBJ.;16

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

;;  
;; Copyright (c) 1986 by Xerox Corporation. All rights reserved.

### (RPAQQ Sedit-IMAGEOBJCOMS

```
(( * File created by MILLER)
 (FNS ExtendEditENVtoHandleImageObj UNWIND-PROTECT \\initialize.imageObject \\linearize.imageObject
  \\parse..imageObject \\pretty.print.to.tedit \\set.all.widths \\set.selection.imageObject)
 (GLOBALVARS \\type.imageObject)
 (FUNCTIONS _EditNode _EditSelection _ImageObj)
                                     ; really 'defmacro's

 (P (\\initialize.imageObject))
 (VARS \\right.margin.in.points.default)))
```

(\* \* File created by MILLER)

(DEFINEQ

### (ExtendEditENVtoHandleImageObj

```
[LAMBDA (EditEnv)                                     (* MarkM " 6-Nov-86 20:04")
 ;; Given an existing EditENV, extend it to handle Image Objects correctly (as an ImageHost) if it doesn't already know about them
 (LET ((parseInfo (fetch ParseInfo of EditEnv)))
 (OR (LISTGET parseInfo 'IMAGEOBJ)
 (LISTPUT parseInfo 'IMAGEOBJ '\\parse..imageObject]))
```

### (UNWIND-PROTECT

```
[LAMBDA (value after)                               (* MarkM " 6-Nov-86 20:06")
 value])
```

### (\\initialize.imageObject

```
[LAMBDA NIL                                          ; Edited 23-Dec-86 11:59 by kirk:
 ;; Extend the standard editing environment to know to create an imageObject EditNode when it sees an imageObject
 (SETQ \\type.imageObject (create EditNodeType using \\type.unknown Name _ 'imageObject Linearize _
  '\\linearize.imageObject SetSelection _
  '\\set.selection.imageObject))
 (ExtendEditENVtoHandleImageObj (if (BOUNDP '\\lisp.edit.environment)
  then \\lisp.edit.environment
  elseif (BOUNDP '*EDIT-ENVIRONMENT*)
  then *EDIT-ENVIRONMENT*
  elseif (BOUNDP '\\standard.env)
  then \\standard.env
  else (SHOULDNT "can't find the standard editing env")))
```

### (\\linearize.imageObject

```
[LAMBDA (node context index)                       (* MarkM " 6-Nov-86 20:12")
 ;; The linearize method for imageObjects. Since what I need to do is output a bitmap, I create the appropriate size of bitmap, create a display
 ;; stream for it, and ask the imageObject to display itself into that display stream.
 (LET* ((imageObj (fetch Structure of node))
 (imageBox (PROGN ;; The NILs for CurrentX & RightMargin are consistent with Sketch & Grapher's use of ImageObjects, although,
 ;; Sedit could actually pass these. Feel free to fix it to do so
 (_ImageObj
 imageObj IMAGEBOXFN NIL NIL)))
 (xSize (fetch (IMAGEBOX XSIZE) of imageBox))
 (ySize (fetch (IMAGEBOX YSIZE) of imageBox))
 (yDesc (fetch (IMAGEBOX YDESC) of imageBox))
 (bitmap (BITMAPCREATE xSize ySize))
 (displayStream (DSPCREATE bitmap)))
 (DSPYOFFSET yDesc displayStream)
 ;; The NILs for ImageStreamType & HostStream are consistent with Sketch & Grapher's use of ImageObjects
 (_ImageObj
 imageObj DISPLAYFN displayStream NIL NIL)
 (\\output.bitmap context (CONS yDesc bitmap)))
```

### (\\parse..imageObject



```
(DEFMACRO EditSelection (self selector &REST args)
  `(APPLY* [fetch ,selector of (fetch NodeType of (fetch SelectNode of ,self]
    ,@(CONS self args)))
```

```
(DEFMACRO ImageObj (self selector &REST args)
  `(APPLY* (IMAGEOBJPROP ,self ',selector)
    ,@(CONS self args)))
```

;; really 'defmacro's

```
(\\initialize.imageObject)
```

```
(RPAQQ \\right.margin.in.points.default 300)
```

```
(PUTPROPS SEDIT-IMAGEOBJ COPYRIGHT ("Xerox Corporation" 1986))
```

---

**FUNCTION INDEX**

ExtendEditENVtoHandleImageObj ....1    \\linearize.imageObject .....1    \\set.all.widths .....2  
UNWIND-PROTECT .....1    \\parse..imageObject .....1    \\set.selection.imageObject .....2  
\\initialize.imageObject .....1    \\pretty.print.to.tedit .....2

---

**MACRO INDEX**

\_EditNode .....2    \_EditSelection .....3    \_ImageObj .....3

---

**VARIABLE INDEX**

SEDIT-IMAGEOBJCOMS .....1    \\right.margin.in.points.default .3

---