

File created: 24-Sep-2023 13:54:45 {WMEDLEY}<lispusers>bitmapfns.;2

edit by: rmk

changes to: (FNS READPRESS)

previous date: 3-Jun-86 14:13:59 {WMEDLEY}<lispusers>bitmapfns.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

::  
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```
(RPAQQ BITMAPFNSCOMS ((FNS READBINARYBITMAP WRITEBINARYBITMAP WRITEBM WRITEBMLST READBMLST READBM READPRESS  
WINDOWBM)  
(DECLARE%: DONTCOPY (MACROS RPCHK))))
```

(DEFINEQ

(**READBINARYBITMAP**

[LAMBDA (WIDTH HEIGHT FILE)

(\* Imm " 4-JAN-83 00:19")

(\* reads a bitmap from the output file.)

```
(PROG ((BM (BITMAPCREATE WIDTH HEIGHT)))  
(\BINS (GETSTREAM FILE 'INPUT)  
(fetch BITMAPBASE of BM)  
0  
(ITIMES (fetch BITMAPRASTERWIDTH of BM)  
(fetch BITMAPHEIGHT of BM)  
2))  
(RETURN BM]))
```

(**WRITEBINARYBITMAP**

[LAMBDA (BITMAP FILE)

(\* JWogulis "26-Dec-84 15:06")

```
(\BOUTS FILE (ffetch BITMAPBASE of (SETQ BITMAP (\DTEST BITMAP 'BITMAP]  
0  
(ITIMES (ffetch BITMAPHEIGHT of BITMAP)  
(ffetch BITMAPRASTERWIDTH of BITMAP)  
BYTESPERWORD]))
```

(**WRITEBM**

[LAMBDA (FILE BITMAP)

(\* Imm " 6-Jun-85 16:46")

```
[BOUT16 FILE (ffetch BITMAPWIDTH of (SETQ BITMAP (\DTEST BITMAP 'BITMAP]  
(BOUT16 FILE (ffetch BITMAPHEIGHT of BITMAP))  
(WRITEBINARYBITMAP BITMAP FILE]))
```

(**WRITEBMLST**

[LAMBDA (FILE LST)

(\* JWogulis "26-Dec-84 15:06")

```
(PROG [(F (OPENSTREAM FILE 'OUTPUT 'NEW]  
(for I in LST do (WRITEBM F I))  
(CLOSEF F]))
```

(**READBMLST**

[LAMBDA (FILE)

(\* JWogulis "26-Dec-84 15:08")

```
(bind (F _ (OPENSTREAM FILE 'INPUT 'OLD)) until (EOFP F) collect (READBM F) finally (CLOSEF F]))
```

(**READBM**

[LAMBDA (FILE)

(\* Imm " 6-Jun-85 16:46")

```
(READBINARYBITMAP (BIN16 FILE)  
(BIN16 FILE)  
FILE]))
```

(**READPRESS**

[LAMBDA (FILENAME)

; Edited 24-Sep-2023 13:54 by rmk

(\* Imm " 2-Jun-86 22:34")

```
(RESETLST  
(PROG (WW HT MICAWIDTH MICAHEIGHT BITMAP TOTCOUNT (OFD (OPENSTREAM FILENAME 'INPUT 'OLD))  
X WIDTH)  
(RESETSAVE NIL (LIST 'CLOSEF OFD))  
(RPCHK 256) (* Edotcode)  
(SETQ WW (IQUOTIENT (BIN16 OFD)  
16)) (* Width)  
(SETQ HT (BIN16 OFD)) (* Height)  
(until (SELECTC (SETQ X (BIN16 OFD))  
((IPLUS 512 3) (* Edotmode and 3)  
(RPCHK 2) (* Edotsize)  
(SETQ MICAWIDTH (BIN16 OFD)))
```

```

      (SETQ MICAHEIGHT (BIN16 OFD))
      NIL)
    (1 (* Edotwindow)
      (BIN16 OFD)
      (SETQ WIDTH (BIN16 OFD))
      (RPCHK 0)
      (RPCHK HT)
      NIL)
    (3 T)
    (GO ERROR)))
  [\BINS OFD (fetch BITMAPBASE of (SETQ BITMAP (BITMAPCREATE (ITIMES WW 16)
    HT)))
    0
    (ITIMES 2 (SETQ TOTCOUNT (ITIMES HT WW)
      (RPCHK 0) (* Entity list terminator)
      [COND (* more checks, not necessary)
        (NIL (* Nop, setx)
          (PROGN (RPCHK (IPLUS 65280 238))
            (RPCHK 0)
            (RPCHK (IPLUS 65280 239)) (* Nop, sety)
            (RPCHK 0)
            (RPCHK (IPLUS 65280 252)) (* Nop, show dots)
            (RPCHK 0]
          (RETURN BITMAP)
        ERROR
        (ERROR "Sorry, unrecognized PRESS file format. READPRESS isn't very general.")))]))

```

(WINDOWBM

```

[LAMBDA (BITMAP POSITION) (* JWogulis "26-Dec-84 15:37")
  (IF (AND POSITION (NOT (POSITIONP POSITION)))
    THEN (ERROR "NOT A POSITION" POSITION))
  [IF (NOT POSITION)
    THEN (SETQ POSITION (GETBOXPOSITION (IPLUS 8 (BITMAPWIDTH BITMAP))
      (IPLUS 8 (BITMAPHEIGHT BITMAP))
      (PROG ((WIND (CREATEW (LIST (CAR POSITION)
        (CDR POSITION)
        (IPLUS 8 (BITMAPWIDTH BITMAP))
        (IPLUS 8 (BITMAPHEIGHT BITMAP))))
          NIL 4)))
      (BITBLT BITMAP 0 0 WIND)
      (RETURN WIND])
  )
  (DECLARE%: DONTCOPY
  (DECLARE%: EVAL@COMPILE
  (PUTPROPS RPCHK MACRO ((N)
    (OR (EQ (BIN16 OFD)
      N)
      (GO ERROR))))
  )
  (PUTPROPS BITMAPFNS COPYRIGHT ("Xerox Corporation" 1983 1984 1985 1986))

```

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