

File created: 15-Jun-90 10:42:39 {DSK}<usr>local>lde>lispcore>internal>library>AR-PIECETREE-PATCH.;2

changes to: (VARS AR-PIECETREE-PATCHCOMS)  
(FNS TEDIT.FAST.RAW.INCLUDE AR.PIECE.CHANGED)

previous date: 20-Apr-90 12:21:43 {DSK}<usr>local>lde>lispcore>internal>library>AR-PIECETREE-PATCH.;1

Read Table: INTERLISP

Package: INTERLISP

Format: XCCS

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```
(RPAQQ AR-PIECETREE-PATCHCOMS ((COMS ;; PATCH for AREDIT for TEDIT modification. (Replace piece table info balanced tree.)  
;; following functions depend on piece table structure.  
(FILES TEDITDECLS)  
(FNS TEDIT.FAST.RAW.INCLUDE AR.PIECE.CHANGED)))
```

:: PATCH for AREDIT for TEDIT modification. (Replace piece table info balanced tree.)  
;; following functions depend on piece table structure.

```
(FILESLOAD TEDITDECLS)
```

```
(DEFINEQ
```

### (TEDIT.FAST.RAW.INCLUDE

```
[LAMBDA (TEXTSTREAM INSTREAM START END INSERTCH#) ; Edited 15-Jun-90 10:42 by jds  
;; takes a text stream and an OPEN stream to include at character INSERTCH#. Note: Start and End are inclusive ptrs, unlike in copybytes and  
;; friends. No interpretation (alternate file type e.g. Bravo) takes place. INSTREAM is not copied, so you'd better not be changing it.  
(LET* [(TEXTOBJ (TEXTOBJ TEXTSTREAM))  
(PCTB (fetch (TEXTOBJ PCTB) of TEXTOBJ))  
(INSPC# (OR (\CHTOPCNO INSERTCH# PCTB)  
(INDEX (fetch CHNUM of (\LASTNODE PCTB)  
PCTB)))  
(INSPC (fetch PCE of (FINDNODE-INDEX PCTB INSPC#)))  
(LEN (- (OR END (GETEOFPTR INSTREAM))  
(OR START (SETQ START 0)) ; INSPC is the piece to make the insertion in  
(COND  
([AND (NEQ INSPC 'LASTPIECE)  
(> INSERTCH# (fetch CHNUM of (FINDNODE-INDEX PCTB INSPC#])  
; Must split the piece.  
(SETQ INSPC (\SPLITPIECE INSPC INSERTCH# TEXTOBJ INSPC#))  
(add INSPC# 1))]  
(\TEDIT.INSERT.PIECES TEXTOBJ INSERTCH#  
(create PIECE  
PFILE _ INSTREAM  
PFPOS _ START  
PLEN _ LEN  
PREVPIECE _ NIL  
NEXTPIECE _ NIL  
PLOOKS _ (fetch (TEXTOBJ DEFAULTCHARLOOKS) of TEXTOBJ)  
PPARALAST _ NIL  
PPARALOOKS _ (fetch (TEXTOBJ FMTSPEC) of TEXTOBJ)  
LEN INSPC INSPC#)  
(add (fetch (TEXTOBJ TEXTLEN) of TEXTOBJ)  
LEN])
```

### (AR.PIECE.CHANGED

```
[LAMBDA (TEXTOBJ TEXTSTREAM CH# REFSTREAM START LEN) ; Edited 15-Jun-90 10:42 by jds  
;; Compares TEXTOBJ/TEXTSTREAM at position CH# with the contents of REFSTREAM from filepointer START for the next LEN bytes. If they're  
;; different, returns T.  
;; Do this by comparing pieces. This is fast in the average case (the piece is unchanged), and takes into account the fact that the textstream may  
;; be backed by REFSTREAM, so file pointers would step on each other.  
(LET* ((PCTB (fetch (TEXTOBJ PCTB) of TEXTOBJ))  
(PIECE# (\CHTOPCNO CH# PCTB))  
PIECE)  
(if (NULL PIECE#)  
then ; Shouldn't happen  
T  
else (SETQ PIECE (fetch PCE of (FINDNODE-INDEX PCTB PIECE#)))  
(do (if (ATOM PIECE)  
then ; Shouldn't happen  
(RETURN NIL))  
(if [NOT (if (EQ (fetch (PIECE PFILE) of PIECE)  
REFSTREAM)  
then ; Same as reference stream--they're same if starts match,  
; assume different otherwise
```

```
(= (fetch (PIECE PPOS) of PIECE)
   START)
else                                     ; Somewhere else, so compare byte by byte
  (SETFILEPTR TEXTSTREAM (SUB1 CH#))
  (SETFILEPTR REFSTREAM START)
  (to (fetch (PIECE PLEN) of PIECE) always (EQ (BIN TEXTSTREAM)
                                                (BIN REFSTREAM])
  then (RETURN T))
(if (> (SETQ LEN (- LEN (fetch (PIECE PLEN) of PIECE)))
      0)
    then (add START (fetch (PIECE PLEN) of PIECE))
          (add CH# (fetch (PIECE PLEN) of PIECE))
          (SETQ PIECE (fetch (PIECE NEXTPIECE) of PIECE))
    else                                     ; That's all the way to the end, so we succeeded
      (RETURN NIL])
```

)

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FUNCTION INDEX

AR.PIECE.CHANGED .....1      TEDIT.FAST.RAW.INCLUDE .....1

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