TERec   structure

#include <TextEdit.h>

typedef struct **TERec** {		Size	Offset	Description
Rect	destRect;	8	0	Rectangle in which text is drawn
Rect	viewRect;	8	8	Rectangle in which text is visible
Rect	selRect;	8	16	Selection rectangle (undocumented)
short	lineHeight;	2	24	Distance between lines (see "style" notes)
short	fontAscent;	2	26	Max distance above baseline for txFont
Point	selPoint;	4	28	Point selected with mouse, in local coordinates
short	selStart;	2	32	Offset in hText of char at start of selection
short	selEnd;	2	34	Offset in hText of character at end of selection
short	active;	2	36	(used internally)
ProcPtr	wordBreak;	4	38	Routine handles word breaks (0=standard)
ProcPtr	clikLoop;	4	42	Rtn gets control while mouse down (0=std)
long	clickTime;	4	46	(used internally)
short	clickLoc;	2	50	(used internally)
long	caretTime;	4	52	(used internally)
short	caretState;	2	56	(used internally)
short	just;	2	58	0=justify left, 1=center, -1=justify right
short	teLength;	2	60	Number of characters in hText
Handle	hText;	4	62	Leads to characters to be edited
short	recalBack;	2	66	(used internally)
short	recalLines;	2	68	(used internally)
short	clikStuff;	2	70	(used internally)
short	crOnly;	2	72	>0 for word wrap, <0 for newline only at CR
short	txFont;	2	74	Font to be used (See Notes on style-awareness)
Style	txFace;	1	76	Text Style to be used; eg, bold, italic, … (")
char	filler;	1	77	(unused)
short	txMode;	2	78	Transfer Mode; eg, srcCopy, srcOr, ...
short	txSize;	2	80	Size, in points, to use (<0 means style-aware)
GrafPtr	inPort;	4	82	GrafPort in which text is displayed/edited
ProcPtr	highHook;	4	86	Routine to perform highlighting (0=standard)
ProcPtr	caretHook;	4	90	Routine to display caret (0=standard)
short	nLines;	2	94	Number of lines of text in hText
short	lineStarts[16001];	*n*	96	Array of offsets to start of each line
} **TERec** ;		96+*n*		(*n* is nLines * 2)

typedef TERec ***TEPtr;**

```
typedef TERec **TEHandle;

typedef char Chars[32001]; array of 0 to 32000  signed bytes
typedef Chars *CharsPtr;
typedef Chars **CharsHandle;
```

Notes: A **TEHandle** (leading to a **TERec**) is used in nearly every TextEdit call. This data structure is often called an "edit record".   Use **TENew** or **TEStylNew** to create an edit record and use **TEDispose** to deallocate all memory associated with one.

The textH field of a DialogRecord contains a **TEHandle**, and when you call **GetDItem** and *iType* returns as editText, then the *iHandle* value is the hText field of that **TERec** .

Uncharacteristic of the Mac ROMs, TextEdit provides few functions dedicated to modifying fields of this record. Thus, you may need to twiddle this structure more than say, a WindowRecord. Note that if you change any field values, such as txSize or txFont, be sure to call **InvalRect** so the change is displayed; eg:

   InvalRect(&(*hTE)->viewRect);

and, of course, call **TEUpdate** when you get an update message for the window.

Style-Aware Edit Records

Starting with Sytem 4.1, and included in the 256K ROMs, TextEdit supports a flexible system for applying "styles" (i.e., formatting characteristics such as font, size, face, and color) to the text of an edit record. See **TextEdit With Style** for an overview.

Style-aware edit records are created via **TEStylNew** and are backward compatible with the older-style edit records. The only differences are:

   The txSize field is used to indicate a "new-style" edit record. If it is a negative value, then this is style-aware edit record. If positive or 0, this is the old, familiar record.

   The txFont and txFace fields are combined into a 4-byte field which is used as a TEStyleHandle leading to all kinds of style-relevant information.

   The lineHeight and fontAscent fields identify whether the text is displayed at a fixed height or is calculated on a line-by-line basis, based upon the tallest style in a line. A value of -1 in either field specifies the variable-height line scheme. See LHTable.

When **TEStylNew** creates a TERec, it sets txSize, lineHeight, and fontAscent to -1, and allocates and intializes the TEStyleRec and related structures and places a TEStyleHandle into the four bytes starting at txFont.