TERec Page 1

TERec structure

#include < TextEdit.h >

Rect destRect; 8	typedef struct TERec {		<u>Size</u>	Offse	et <u>Description</u>
Rect viewRect; 8 8 Rectangle in which text is visible select Rect selRect; 8 16 Selection rectangle (undocumented) 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 char at start 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 clickLoc; 4 46 (used internally) short clickLoc; 2 50 (used internally) short caretState; 2 56 (used internally) short teLength; 2		-			•
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short lineStarts[16001]; n 96 Array of offsets to start of each line	short	nl ines:	2	Q/I	· ·
		micolaris[10001]			

typedef TERec *TEPtr;

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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 <u>**TENew**</u> or <u>**TEStylNew**</u> to create an edit record and use <u>**TEDispose**</u> to deallocate all memory associated with one.

The <u>textH</u> field of a <u>DialogRecord</u> contains a **TEHandle**, and when you call <u>GetDItem</u> and *iType* returns as <u>editText</u>, 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 <u>WindowRecord</u>. Note that if you change any field values, such as txSize or txFont, be sure to call <u>InvaIRect</u> 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, <u>TextEdit</u> 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 <u>TEStyleHandle</u> 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 <u>LHTable</u>.

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