TextEdit Width Hooks

TextEdit's width hooks are called each the time the width of various components of a line is calculated. This section describes two new hooks, **nWIDTHHook** and **TextWidthHook**, and their relationships with the original **WIDTHHook** hook. The new hook **nWIDTHHook** allows you access to **TextEdit**'s measuring routine for non-Roman script systems and provides a way for you to replace this routine with your own script-compatible measuring routine. **TextWidthHook** provides a way for you to replace the new calls to the **TextWidth** function in **TextEdit** with your own measuring routine.

> **Note:** To test for the availability of the new width-measuring hooks, you can call the **Gestalt** function with the gestaltTextEditVersion selector. A result of gestaltTE2 or greater returned in the response parameter indicates that the new width measurement hook **nWIDTHHook** is available. A result of gestaltTE5 or greater returned in the response parameter indicates that the new text width measurement hook **TextWidthHook** is available. (For details, see
> **Determining the Version of TextEdit**.)

> **TextWidthHook** is available for version 6.0.7 (or higher) systems with non-Roman script systems installed. However, there is no **Gestalt** constant that indicates this availability.

The original **WIDTHHook** hook is available to provide backward compatibility for your applications. **TextEdit** still uses **WIDTHHook**; however, it now performs additional checks to determine whether to use **WIDTHHook** or **nWIDTHHook**. **TextEdit** first determines whether a non-Roman script system is installed. If it is, **TextEdit** uses the new **nWIDTHHook** routine even if an application has overridden **WIDTHHook** with a different measuring routine. If **TextEdit** finds that only the Roman Script System is installed, it checks to see if **WIDTHHook** contains the address of **TextEdit**'s default routine for measuring. If it does, **TextEdit** uses the **nWIDTHHook** routine. Otherwise, an application has provided a different measuring routine to be used for system software with only the Roman Script System installed, so **TextEdit** uses this routine instead of its own default routine.

It is possible for you to provide alternate routines for both of these hooks to guarantee that your routine is always used. However, unless the routine measures correctly for non-Roman scripts, you should only replace **WIDTHHook** and **TextWidthHook**.

The appropriate font, face, and size characteristics have already been set into the current port by the time any of these routines is called.

The default action for **WIDTHHook** is to call the **QuickDraw** function **TextWidth** and return.

The default action for **nWIDTHHook** is to call the **Script Manager**'s **Char2Pixel** function or **TextWidth** to measure accurately for non-Roman scripts. For more information on **Char2Pixel**, see **Worldwide Software Overview**. For comprehensive details, refer to *Macintosh Worldwide Development: Guide to System Software*.

For a discussion of the slop value, see **Worldwide Software Overview** description.

TextEdit also includes the new **TextWidthHook** routine that provides a way for you to replace the new **TextWidth** calls in **TextEdit** with your own measuring routine. You must use **TextWidthHook** in addition to **WIDTHHook** and **nWIDTHHook** to replace **TextEdit**'s measuring routines completely.

>   **Note:** There is a **TextWidth** call in the **TextBox** procedure that does not use this hook because no <u>edit record</u> is allocated.

The default action for **TextWidthHook** is to always call the **QuickDraw TextWidth** function (the same default action as for the original **WIDTHHook** routine).