

# Scrollers

Scrollers are used to control what's displayed within a window, or within a rectangular subsection of a window. When the material to be displayed is larger than the opening available to display it, the user must scroll unseen portions into the opening in order to view them. By default, a scroller has three parts, a bar, a knob, and an optional set of scroll buttons. The scroll buttons for both vertical and horizontal scrollers occupy the lower left corner, where the two scrollers meet. Keeping all the scroll buttons in the same region makes it easy for users to move from one set to the other.

## **Adding Controls in the Scroller Area**

Controls that determine how a scrollable document is viewed can be placed within the area normally occupied by the scrollers (beneath and to the left of the document). Other sorts of controls should not be placed within this area.

Among the controls that can be placed in the scroller area are these:

- An editable text field to display the current page number can be located to the far right of the horizontal scroller. See WriteNow for an example.
- A <sup>a</sup>zoom<sup>o</sup> pop-up list that lets the user scale the display can be located in the area of the horizontal scroller.

See FrameMaker and WriteNow for examples.

- A pop-up list used to control the viewing mode for the display (e.g., preview vs. drawing mode in a graphics application) can be similarly situated to the zoom pop-up list in the area of the vertical scroller.
- <sup>a</sup>Page<sup>o</sup> scroll buttons that scroll from page to page or by viewfuls can be grouped next to the line scroll buttons in the lower left corner where the vertical and horizontal scrollers meet. Since there is no Application Kit support for page scroll buttons, but there might be in the future, a precise arrangement is not currently specified.