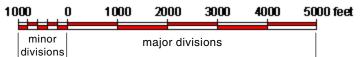


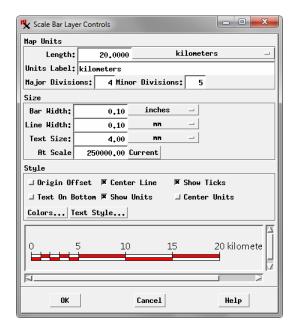
Scale bars graphically show the correspondence between actual distances and their scaled distances on the map. You can add one or more scale bars to any page layout or display layout using the Add Scale Bar icon button on the Display Manager. Scale bars are automatically drawn to the specified length and scale and can be subdivided into major units with alternating colors and with distance labels and optional tick marks at the unit boundaries. The first major division can be further subdivided into minor divisions. Scale bar settings are specified using the Scale Bar Layer Controls window (illustrated to the right), which opens automatically when you press the Add Scale Bar icon button. This window is divided into Map Units, Size, and Style control panes and a preview pane that updates automatically to show the result of the current settings.

Map Units Controls

Use the controls in the Map Units pane to set the bar length, distance unit, and divisions of the bar. Enter a ground-distance value in the Length field to set the scaled length of the bar and choose a distance unit from the menu button to the right of the field. Choose a length and distance unit that are appropriate to the scale of the map and the size of the area depicted. Distance labels are automatically placed at the ends of the scale bar.







To subdivide the bar, enter an integer number greater than one in the Major Divisions field. Distance labels are automatically placed at the division boundaries. In order for these distances to be round numbers, the bar length should be an integer multiple of the number of divisions. You can set the colors for the odd and even bar divisions using the Colors button in the Style controls (see below). To subdivide the first major division, enter an integer value greater than one in the Minor Divisions field.

Size Controls

Controls in the Size pane are used to set the Bar Width (vertical thickness), the Line Width of the border, division, and tick mark lines, and the Text Size for the labels. Enter values in these fields and choose the measurement units (size on the page) from the adjacent menu buttons. These menus provide the following unit choices: inches, millimeters, points, or pixels. The Text Size field updates automatically if you change the ascender height for the Text Style (see below).

The At Scale field by default shows the scale you have set for the page or display layout, which determines the size of the scale bar on the page and/ or on screen. In most cases you should accept this



default scale value so the bar accurately represents the map scale. You can override the default value if needed to set a different map scale for the scale bar, such as for an index map or detail map which depicts features at a different scale than the overall layout.

Style Controls

The Style pane includes six toggle buttons that set different styles for the scale bar. These style options, which are illustrated on the previous page, can be used singly or in combination.

Origin Offset: The origin (0 distance label) is placed by default at the left end of the scale bar. Turning on the Origin Offset toggle shifts the origin to the beginning of the second major division, which means that minor divisions (if used) are shown to the left of the 0 distance label.

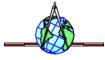
Center Line: Turn on the Center Line toggle to draw a vertically centered line through the length of the scale bar. The color alternation of major and minor divisions is reversed above and below the center line.

Show Ticks: Turn on the Show Ticks toggle to draw vertical tick marks in addition to the distance labels at the major division boundaries.

Text On Bottom: Labels and tick marks are shown by default above the scale bar. Turn on this toggle to show these items below the bar.

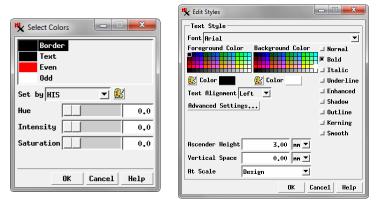
Show Units: Turn on this toggle button to include the distance unit as part of the distance label at the right end of the scale bar.

Center Units: This toggle applies only if the Show Units toggle is turned on. By default the distance label at the right end of the scale bar is positioned so that the distance value is centered at the bar end. Turn on the Center Units toggle to center the entire label text (distance plus unit) at the bar end.



The Colors pushbutton in the Style pane opens the Select Colors window, which allows you to set colors for the Border (all scale bar lines), Text, and Even and Odd scale bar divisions. You can select predefined colors from a palette or design colors using a choice of color models.

The Text Style pushbutton opens the Edit Styles window for text, which allows you to choose a font, style, color, and size (ascender height) for the bar labels. See the Technical Guide entitled *Setting Text Styles* for more information.



Positioning the Scale Bar

Each scale bar in a layout occupies its own group. In a page layout you can change the position of a scale bar on the page by selecting its entry in the Display Manager list and turning on the Placement tool in the View window (see the TechGuide entitled *Placement Tool for Map Layouts*). In a display layout you can reposition a scale bar by right-clicking on its entry in the Display Manager list and choosing Group Settings from the right mouse-button menu to open the Group Settings window; use the Horizontal and Vertical attachment controls on the Placement tabbed panel to set the group position (see the TechGuide entitled *Settings for Groups in Layouts* for details).