

# Settings for Groups in Layouts



The Group Settings window provides controls that determine how the set of layers in a geospatial group are displayed. For spatial groups in a layout, you can set coordinate reference system and group clipping options, determine the placement of the group on the page for print layouts, create backgrounds and borders, and set scale range limits for the group. The simpler Group Settings window for a standalone spatial group is described in the Technical Guide entitled *Group Settings for Standalone Groups*.

The Group Settings window can be opened from the Display Manager or the View sidebar legend by pressing the group's Settings icon button in the layer list (for a spatial group only) or by choosing Group Settings from the right mouse-button menu for the group's list entry. Activating the Layout Placement tool in the View window toolbar also automatically opens the Group Settings window (if not already open) for the current active group (group name shown in bold in the Display Manager). To make a group active, simply left-click on its name in the layer list or, with the placement tool active, left-click inside the group's placement box in the view (see the TechGuide entitled *Layout Placement Tool*).

After you make changes in the Group Settings window you can see their effect without closing the window by pressing the Apply pushbutton at the bottom of the window. Press [OK] to accept the change and close the window, or [Close] to discard the changes and close the window. Selecting a different group in the View window with the Layout Placement tool automatically switches an open Group Settings window to show the settings for the new group, even if you have made changes. Turn on the toggle button at the bottom of the Group Settings window to *Automatically apply changes when switch groups*.

## Name

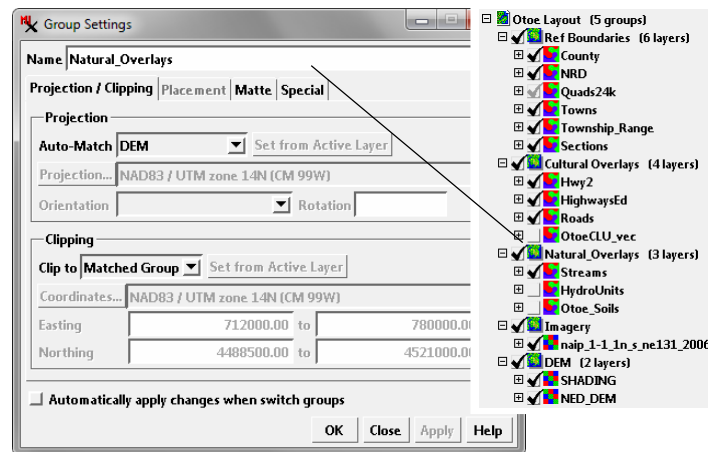
A new display group is given a default name consisting of "Display Group" followed by a number. You can give the group a more meaningful name in the layout by editing the Name field at the top of the Group Settings window.

## Projection / Clipping Panel

The options on the Projection / Clipping tabbed panel are used to set the group coordinate reference system (CRS) and optionally to limit the displayed map extents of the group. The layers in a group can be drawn to automatically match the CRS of one of the layers in the group, another group in the layout, or another CRS that you select manually. The displayed extents of the group can be specified manually or set by the auto-matched layer or group.

The controls on the Projection / Clipping tabbed panel for a group in a layout function much as described in the TechGuide *Group Settings for Standalone Groups*. In a layout, the Auto-Match menu in the Projection controls also includes all other spatial groups as options for matching. The *Clip to* menu in the Clipping controls adds Matched Group to its options.

In a display or page layout with many spatial layers, you can subdivide the layers into different groups based on their content, use one group to set the CRS and extents, and match the CRS and extents of the remaining groups to it (see illustration below). This strategy provides the viewer with a more organized presentation of the data and provides them with easier control of the display (e.g., the ability to hide or show an entire group of related layers at once).



Projection / Clipping panel in the Group Settings window for a group in a display layout for an electronic atlas. This group's coordinate reference system has been set to automatically match that of the bottom group (DEM) in the layout. Its display extents have also been clipped to those of the matched group.

## Placement Panel

The Placement tabbed panel is active for groups in print layouts only. It is used to set the map scale of the group (for spatial groups) and how the group is placed on the page. The panel is also not active for a group that has been set to auto-match another group in the layout, as that setting automatically determines the placement of the group.

**Group Scale:** Use the Group Scale menu and numeric field to set the map scale for a spatial group. The default option is to *Match Layout Design Scale*, which sets the group map scale to be equal to the design scale you have set for the layout (in the Layout Settings window). This would be the typical setting for full-scale map groups in the layout. For some layouts you may need to present map data at different scales. For example, you can include a small-scale index map showing the map location, or detailed (larger-scale) inset maps of local subareas. For these cases you can choose either *Constant* or *Vary With Layout Scale* from the Group Scale menu, then enter the desired map scale in the adjacent numeric field. These choices differ in their result if the layout scale is subsequently changed. The *Constant* option fixes the group scale at the specified map scale, whereas *Vary With Layout Scale* allows the group scale to change in proportion to the change in the layout scale.

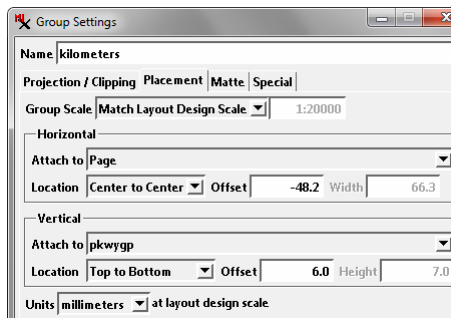
**Placement Controls:** The controls in the Horizontal and Vertical

(continued)

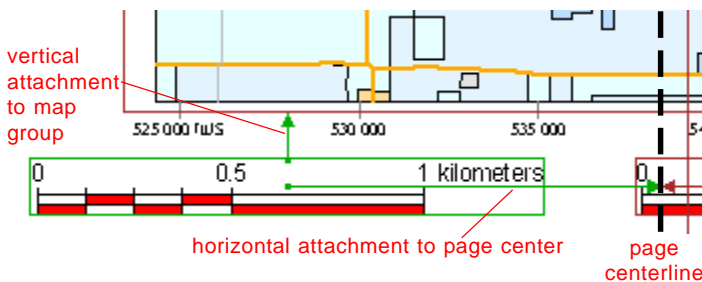
cal boxes are used to determine the positioning of the group and what other page element(s) the group is attached to. Using the *Attach to* menus, a group can be attached horizontally and/or vertically to the page (the default option) or the page margin; in these cases the group's position is completely independent of that of other groups in the page layout. The *Attach to* menus also list all other groups in the layout, so you can also choose to attach the current group horizontally and/or vertically to another group (which we can refer to as the reference group). If the reference group is moved, any attached groups then move along with the reference group.

The Location menus for horizontal and vertical attachment allow you to choose edge or center attachment points for the current group and the item it is attached to. The location options for horizontal and vertical attachment are listed to the right.

Attachment Location Options (Current Group to Item Attached to)	
Horizontal:	Vertical:
Left to Left	Top to Top
Left to Center	Top to Center
Left to Right	Top to Bottom
Center to Left	Center to Top
Center to Center	Center to Center
Center to Right	Center to Bottom
Right to Left	Bottom to Top
Right to Center	Bottom to Center
Right to Right	Bottom to Bottom



The *kilometers* scale bar shown below with the Layout Placement tool has its center attached horizontally to the page center (vertical dashed black line) and its top attached vertically to the map group (*pkwygp*) above it.



The Offset field shows the distance between the group's horizontal or vertical attachment point (designated center or edge location) and the corresponding point on the item it is attached to. The offset units (at the design scale) are set using the Units menu below the Vertical controls; you can choose from millimeters, centimeters, inches, or points. Offset values can be positive (if the group point is to the right or below the attachment point) or negative (if the group point is to the left or above the attachment point). You can edit the value in the Offset field directly to shift the group's position, or use the Layout Placement tool to reposition the group. Position changes made using the Placement tool update the values in the Offset fields in the Group Settings window.

The Width and Height fields on the Placement panel show the dimensions of the group on the page. These fields cannot be edited for a georeferenced spatial group or a scale bar group, as these dimensions are determined by the group map scale and clipping settings. For non-spatial groups such as legends and text, no map scale applies, so you can edit either the Width or Height field to change the size of the element on the page.

If you turn off the *Lock Size in Layout Placement tool* toggle button on the Placement panel, you can also use the Layout Placement tool to drag an edge or corner of the group's placement box to resize it. Resizing the placement box for a spatial group with the Layout Placement tool results in a change in the group scale.

## Matte Panel

The controls on the Matte tabbed panel allow you to create decorative effects for the group. You can set a background color or color spread, create a drop-shadow, and add decorative borders. See the TechGuide entitled *Matte Graphic Effects in Layouts* for more information and examples.

## Special Panel

The Special tabbed panel includes miscellaneous group settings. You can use the Scale Range Visible fields to enter minimum and/or maximum map scales so that the entire group is automatically hidden when the display scale is outside the specified range (see the TechGuide entitled *Display Layers, Elements, and Groups by Scale*). The *Mutually exclusive group set* menu lets you assign the group to a numbered set in which only one group can be visible at a time. Turning on the Show/Hide checkbox for one group in the set automatically hides the previously visible group in the set. Turning on the *Layers are mutually exclusive* toggle button, in contrast, means that only one layer in the current group can be visible at a time.

You can save a layout as a template for creating a series of layouts at the same scale and page size. Some groups in a layout template, such as logos and north arrows, can be designated as static or fixed; other groups are assumed to have replaceable content, for which you are prompted when you select the template (see the *Making Map Layouts* tutorial). The *Save layers to template "as-is"* toggle on the Special panel sets a group as static (not requiring replacement of layers) if the layout is saved as a template.

The *Label management mode* menu is provided to deal with groups in which one or more layers include label elements or dynamic labels. The menu choices are *Draw labels with layers* and *Draw labels last*. If labels are drawn with each layer, elements from overlying layers may cross and obscure the labels. Drawing the labels from all layers last ensures that labels will not be obscured by other map elements (see the TechGuide entitled *Group Settings for Standalone Groups* for an illustration of the effect of this setting).

