Group Settings for Standalone Groups

The Group Settings window provides controls that determine how the set of layers in a geospatial group are displayed. The main options are setting the coordinate reference system (CRS) used for displaying the layers and limiting the map extents over which the layers are displayed (*clipping* the group), but additional group options can also be set. This document describes the Group Settings window for a standalone group (one that is not part of a layout). The Group Settings window for a spatial group in a layout is described in the Technical Guide entitled *Settings for Groups in Layouts*.

The Group Settings window can be opened from the Display Manager (Layer Manager in processes other than Display) in several ways:

- press the group's Settings icon button in the layer list
- from the right mouse-button menu for the group's listing
- press the Display Settings icon button in the Display Manager toolbar (which opens the Group Settings window for the active group)

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.

Name
A new display group is given a default name consisting of "Display Group" followed by a number. If you are going to save the group, you will probably want to give it a more descriptive name. You can rename the group by editing the Name field in the Group Settings window.

Design Scale
The Design Scale is the map scale at which layers in the group are intended to be used (and printed, if in a page layout). Digital map data objects are compiled to be accurate at a particular map scale. Ideally the layers in a group should have similar inherent map scale accuracy, and the design scale should be similar to the data compilation scale (if known). The sizes of point symbols and the width of lines for elements in geometric objects can be set based on the design scale of the group or layout in which they are included (see the TechGuides entitled *Creating Styles for Point Elements* and *Creating Styles for Lines and Polygons* for more information).

Projection Controls
The layers in a group can be drawn to automatically match the coordinate reference system (termed *auto-match*) of one of the layers or to match another coordinate reference system (CRS) that you select manually. These options are set using the controls in the Projection box. The Auto-Match menu allows you to auto-match the group CRS to either the First Layer (bottom layer) or the First Image Layer. Selecting None from the Auto-Match menu activates the other Projection controls, including

In the Display process a *group* is a set of one or more layers that are displayed together. A group can contain spatial data layers and map grids or (in map layouts) individual layout elements such as legends, scale bars, and text. Any display has at least one group. In a group with georeferenced spatial data layers, all layers do not have to have the same coordinate reference system (CRS), but all layers are positioned and drawn to match a particular CRS. A group can be saved to a Project File to preserve all of the group and layer display options set while the group was displayed (which may be different than the settings for individual layers when displayed alone).
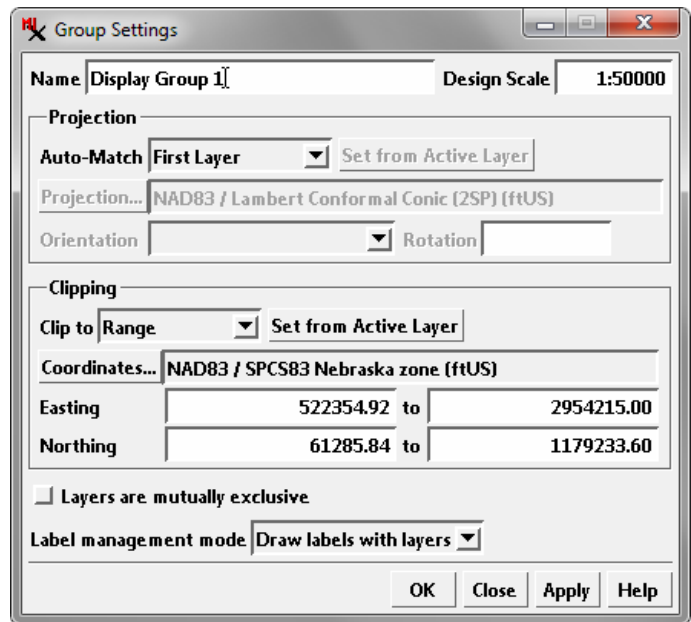
the Set from Active Layer pushbutton; pressing this button automatches the group CRS to that of the layer that is currently active (layer name shown in bold font in the layer list in the Display Manager and the View window sidebar). You can make any layer active by left-clicking on its entry in the layer list.

To manually choose a CRS (which may be different from those of the group's layers) press the Projection pushbutton, which opens the Coordinate Reference System window.   Use this window to select a predefined CRS or choose individual components of a CRS. For more information see the TechGuides entitled *Coordinate Reference System Window*, *Predefined Coordinate Reference Systems*, and *Custom Coordinate Reference System Setup*.

The Orientation menu lets you choose the orientation of the group display relative to its coordinate grid and to cardinal geographic directions: Projection Upright (the default), Upside-Down, Top-to-Left, Top-to-Right, North at Top, South at Top, East at Top, and West at Top. The Rotation field lets you enter an angle to manually rotate the group.

Clipping Controls

The Clipping controls allow you to limit the map extents of the group display. The default setting None in the *Clip to* menu sets the group extents equal to the total extents of all of its layers. Choosing Match from the menu sets the group extents equal to that of the layer used for auto-matching (if any). Choosing Range from the *Clip to* menu activates the other Clipping controls. You can clip the group to the extents of any individual layer by making that layer active and pressing the Set from Active Layer pushbutton. You can also enter minimum and maximum Easting and Northing values in the fields provided to manually define the group extents (see illustrations to the right).

Mutually Exclusive Layers

Turning on the *Layers are mutually exclusive* toggle button sets a special layer visibility option for the group: only one layer in the group can be visible at a time. When you first turn this toggle on, the Show/Hide checkbox is automatically turned off for all except the top layer in the group. You can then turn on the Show/Hide checkbox for any other layer and the previously-visible layer is then automatically hidden.

Label Management Mode

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 (see illustration below). Drawing the labels from all layers last ensures that labels will not be obscured by other map elements.
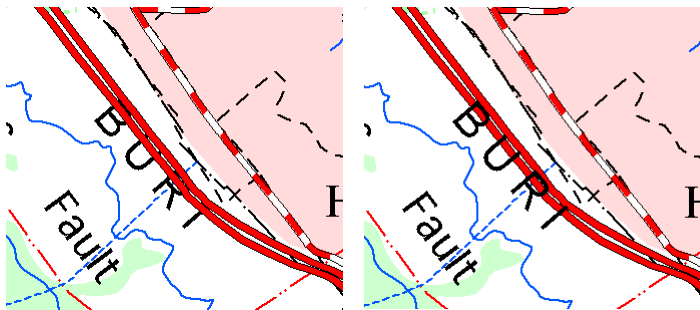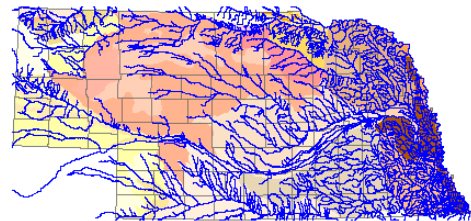
Group with No Clipping
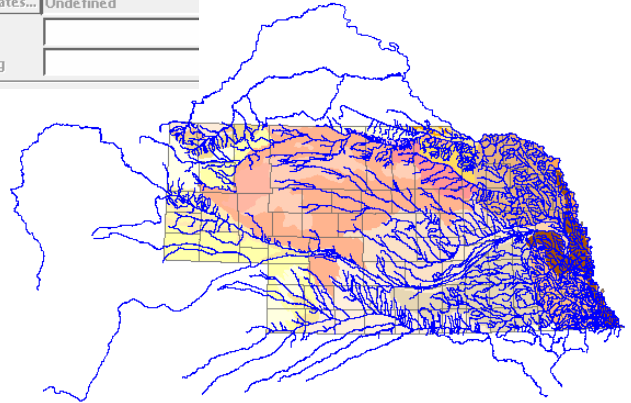
Group Clipped to Matched Layer (first layer)

Group Clipped to Manual Range