Basic GIS Application and Tools

Overview

This chapter will describe and introduce the basic function of GIS. Users who have GIS experience can skip this chapter. The basic detail consist of working with GIS data, tool use in the map viewport, how to work with GIS attribute data, and thematic map tools.

Viewport control

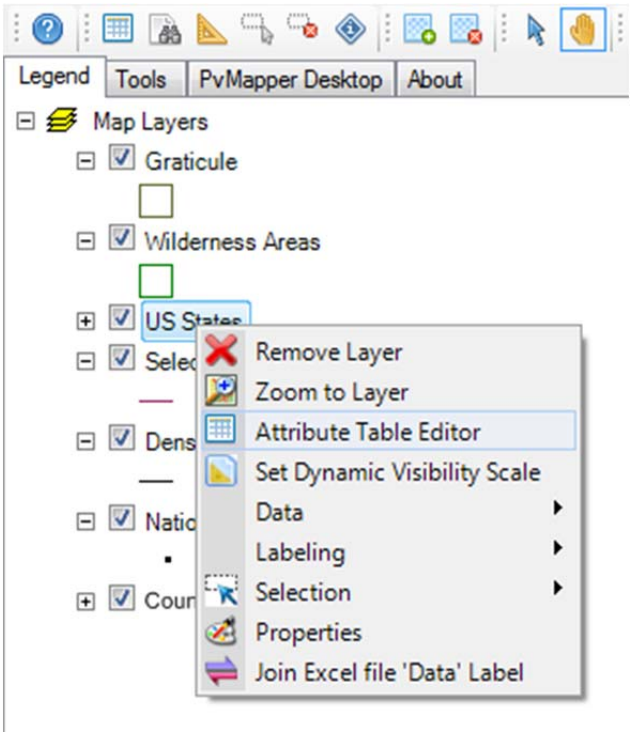
The first step of working with GIS involves a map. A GIS map consists of GIS layers containing one or more user-generated layers for. A user can add a GIS layer user by clicking and browsing for files that GIS supports (*.shp, *.dgd, *asc, *.ogr, etc.). Next, PvDesktop will display selected GIS data as a map on the map panel. These layers can be reordered and hidden as needed (the bottom layer is obscured by the top layer). To remove a layer, first select the moving layer and then click to move the selected layer.

The viewport control common tools are pan , zoom in , zoom out , and zoom to selection . The user can use these tools to control the map viewport, showing the overall map or some specific area.

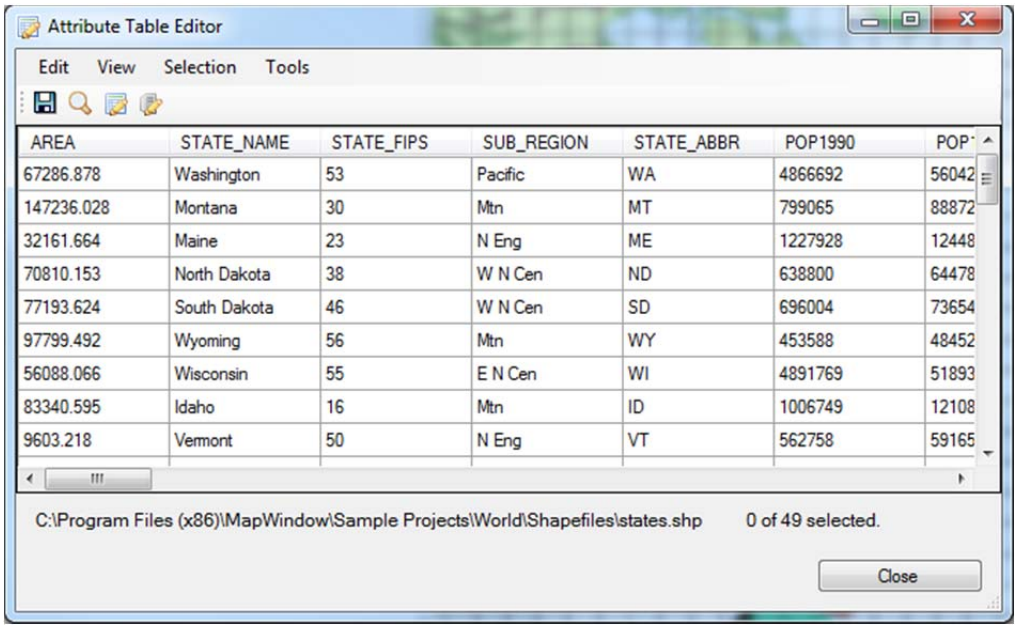
A user can add more data types with the included GDAL extension.

Attribute data tool

Attribute data is a database of the shape objects in map. To see or edit this data the user can click the attribute table editor button , located on the PvDesktop toolbar of ,or right-click the map legend and select the Attribute data editor tool, as shown in the figure below.

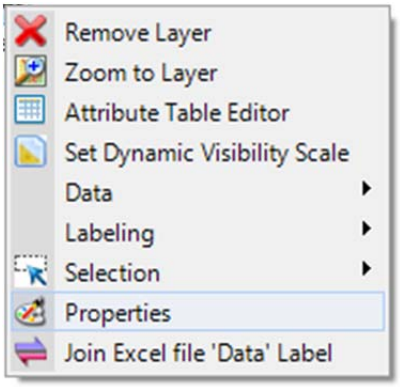


After that, PvDesktop will display the data in the table (figure below). One row of data is represented by one shape object on map. This means the user can select some row on this table map to highlight the selected object on the map. Conversely, the user can select some shape from the map and the table will highlight the object's row too.

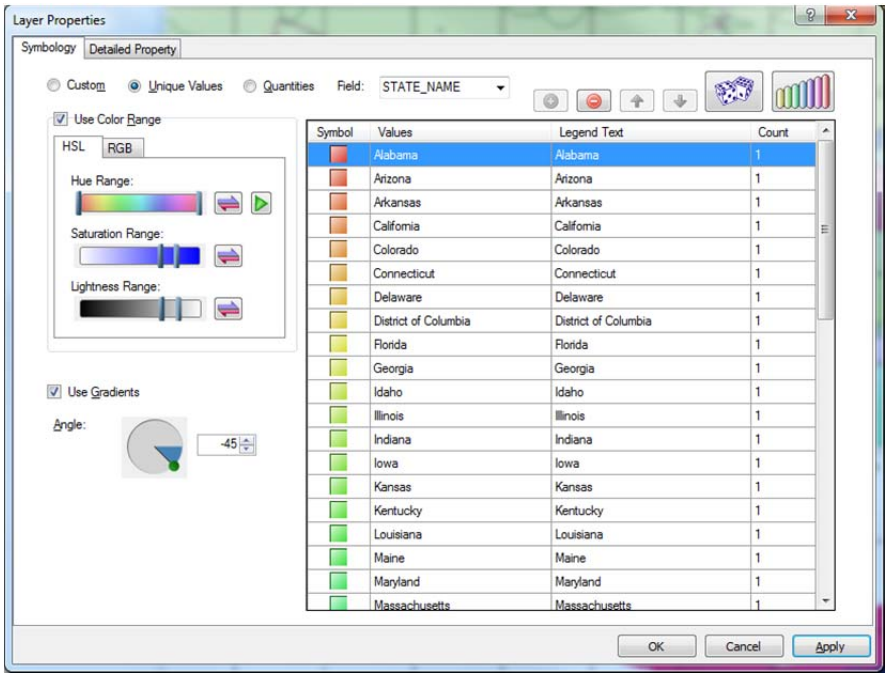


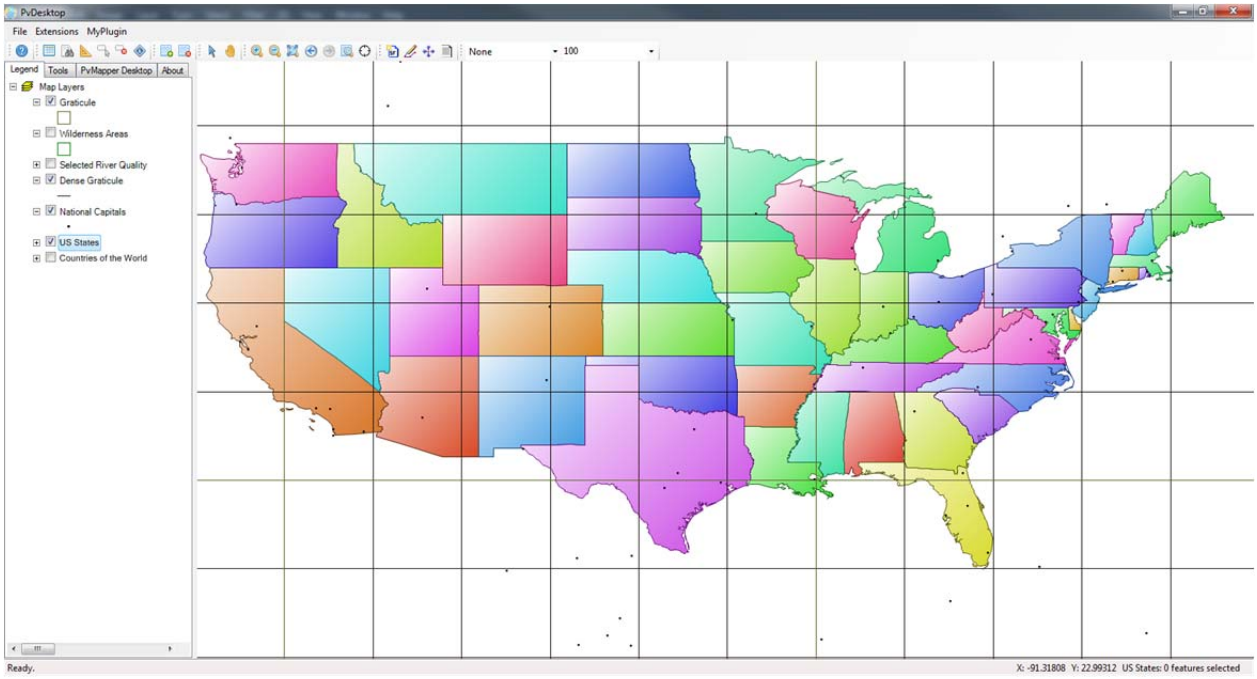
Thematic map tools

Thematic map tools are group of tools for make your layer map more interesting (Layer properties). To open the Layer Properties dialog right-click on the layer under the map legend, then select Properties.



The layer properties dialog contains symbols and detailed properties. These tools are designed to group attribute data of the selected fields. The user can select color and symbol size for making maps as shown in the sample thematic map below.




PvDesktop
File Extensions MyPlugin
None
100
Legend Tools PvMapper Desktop About
Map Layers
Graticule
Wilderness Areas
Selected River Quality
Dense Graticule
National Capitals
US States
Countries of the World
Ready.
X: -91.31808 Y: 22.99312 US States: 0 features selected