### **Spatial Display**

## **Define Region Toolset**

A Define Region toolset is provided in the View window in certain processes to allow you to easily define an area of the input object for processing (for example, an extraction area). Turning on the Define Region icon button reveals a number of associated tool icon buttons that allow you to draw one or more shapes to define the region. You can also select a region object from a Project File or save a region to a file; a Region Manager panel is available in the View Sidebar to facilitate these actions. The region you define with these tools is shown as the Defined Region layer in the layer list in the View sidebar.

#### **Drawing Shapes to Define a Region**

Icon buttons for Rectangle, Circle, Ellipse, and Polygon drawing tools are provided. You can use any of these drawing tools alone or in combination to draw and add shapes to the Defined Region layer. After drawing a shape, right-click or press the Add to Region icon button to add the shape to the defined region, which is then shown with a partially-transparent fill color. Press the Subtract from Region icon button to remove the area outlined by the active shape from the defined region.

Pressing the Action / Settings icon button opens a menu with options to Clear Drawing Tool (which clears the current tool

graphic) and to Clear Region (which clears the entire Defined Region). This menu also lets you set the Line mode for the Polygon drawing tool (Draw or Stretch).

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#### Adding a Previously-Saved Region

You can also add one or more previously-saved region objects to the defined region by taking the following steps:

- Press the Region icon button in the Define Region toolbar. This activates the Region Manager panel in the View window sidebar if it is not already active (see illustration below).
  Sidebar
- Press the Add Region icon button in the Region Manager to open the Select Region Objects window.



🗄 Display Layout 1

• Navigate to the desired Project File, select the region

object, and press OK on the selection window. The region is then listed in the User Added section of the list in the Region Manager, and its outline is shown as a graphic in the View.

• Right-click or press Add to Region in the Define Region toolbar to add the outlined area to the defined region.





Region Manager icon button: press to show or hide the Region Manager panel

#### Saving the Defined Region

You can save the defined region to a Project File for later use. The Region Manager panel in the sidebar provides a tree control that lists all groups and layers in the View. The list entry for a group can be expanded to show its contained layers by left-clicking on the "+" control to the left of the group entry. Expand the group containing the region and

left-click on the Defined Region layer entry to highlight it. Then press the Save Region icon button in the Region Manager panel to open a Select window to navigate to or create a Project File and to name the output region object.

# Save Region

#### **Other Region Operations**

Pressing the Action icon button on the toolbar of the Region Manager panel opens a menu with options to



Remove Islands and to Compute Convex Hull for a region you have selected in the list. Icon buttons are also provided to allow you to create various combinations of two or more regions in the list (Union, Intersect, Exclusive Union, and Subtract). See the Technical Guide entitled *Combining Regions* for more information on region combinations.

