

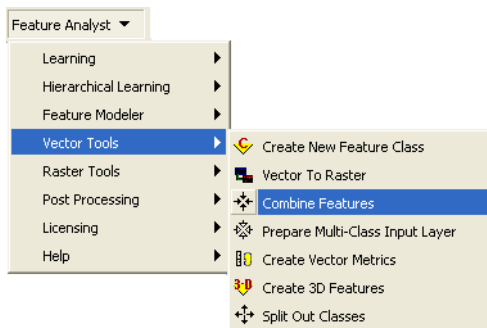
Feature Analyst® QuickStart GUIDE



COMBINE FEATURE LAYERS *4.2 for ArcGIS*

Feature Analyst's Combine Features process allows you to combine multiple, single-class layers into one, multi-class, feature class. This feature is especially useful after you have split feature classes for Hierarchical Learning. Once the separate layers are refined, you can use this option to recombine them back into a single, multi-class layer. To get a wall-to-wall classification of your image, you need to combine the split-out layers.

- 1 Highlight a **split-out class** in the table of contents.
- 2 Choose **Feature Analyst** on the toolbar, choose **Vector Tools** on the drop-down menu, and then choose **Combine Features**.



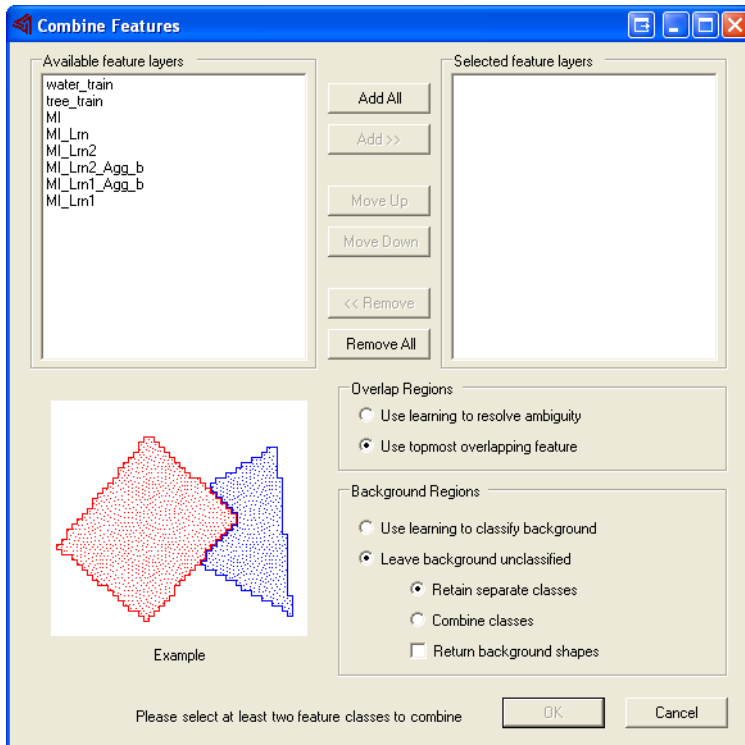
The Combine Features dialog box opens.

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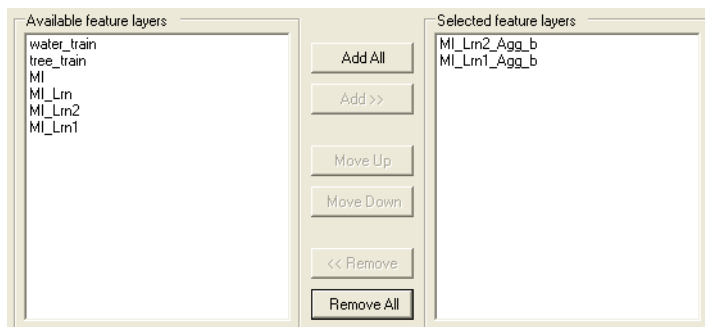
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- 3 In the Available features layers list box, select **each layer** you want to combine and choose **Add**.

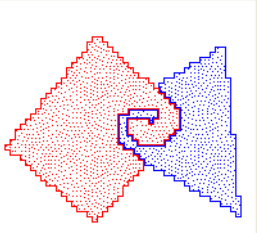
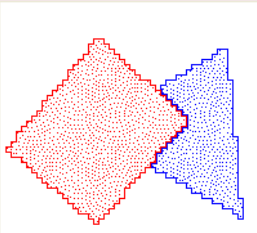
Tip: You can also double-click on a feature layer in the Available feature layers list box to add it to the Selected feature layers list box.

The selected feature classes move to the Selected feature layers list box.

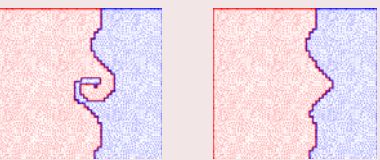
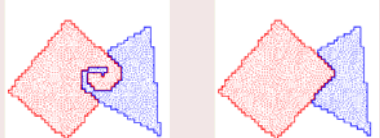


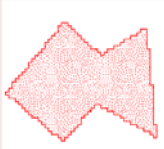
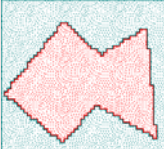
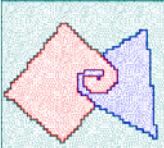
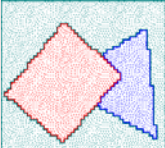
- 4 In the Selected feature layers list box, arrange your selected feature layers by order of importance for preserving feature boundaries by selecting the layer(s) and choosing **Move Up** or **Move Down**.

- 5 Under Overlap Regions, select an **overlap option** to resolve any overlapping of features according to the following:

OPTION	FUNCTION
Overlap Regions	Not available when options under Background Regions include Combine classes.
<p>Use learning to resolve ambiguity</p> 	<p>Performs a learning pass to resolve the overlap between the files.</p> <p>When feature boundaries overlap when combining layers, Feature Analyst creates an area of interest for the overlap region and reclassifies the features according to the examples available in each feature class.</p>
<p>Use topmost overlapping feature</p> 	<p>Preserves feature boundaries according to layer order in the Selected feature layers list box.</p> <p>When feature boundaries overlap when combining layers, Feature Analyst uses the order of the selected feature layers in the Selected feature layers list box to determine which feature boundaries will be preserved. The first layer listed will have boundary precedence over the second layer, the second over the third and so on.</p> <p>Selected by default.</p>

- 6 Under Background Regions, select a **background option** for classifying areas of the image (called background) that are not included in any of the result classes. Refer to the descriptions below for assistance.

OPTION	FUNCTION
Background Regions	
<p>Use learning to classify background</p> 	<p>Uses a learning pass to classify any remaining empty regions as one of the input feature classes.</p> <p>Allows you to reclassify any empty regions when combining layers. Creates an area of interest for the empty region and classifies the features according to the examples available in each feature class.</p>
<p>Leave background unclassified</p>	<p>Leaves the background area of the image unclassified. When you select this option, you must also select one of the associated sub-options.</p> <p>Selected by default.</p>
<p>Retain separate classes</p> 	<p>Leaves the combined classes as separate.</p>

OPTION	FUNCTION
<p>Combine classes</p> 	<p>Combines the separate classes into a single class. The system will return a background as unclassified shapes.</p>
<p>Return background shapes</p>   	<p>Returns the background area as a separate class, labeled as background.</p>

7 Choose **OK**.

The Save Feature As dialog box opens.

8 Accept the **default file name** and **file location**.

-or-

Provide a **new name** and **location** for the file and choose **Save**.

The Feature Analyst Process box opens, displaying the progress of combining the feature classes.

The resulting combined feature class appears in the table of contents and displays in the workspace.

