Union – Computes a geometric intersection of the Input Features. All features will be written to the Output Feature Class with the attributes from the Input Features, which it overlaps. The output contains all of the input data. *(Also see Intersect or Merge.)*

Where do I Find it?

- Open ArcToolbox.
- Analysis Toolbox – Overlay Toolset – Union
Parameters:

**Input Features** – A list of the input feature classes or layers. All the Input Features must be polygons. With ArcView and ArcEditor licenses the number of input features is restricted to 2.

* The ranks is generally doesn’t have to be addressed. This has to do with cluster distances. For more info see help.

**Output Feature Class** – The feature class to which the results will be written.

**Join Attributes** – Determines which attributes from the Input Features will be transferred to the Output Feature Class.

- **ALL** – all the attributes from the Input Features will be transferred to the Output Feature Class. This is the default.
- **NO_FID** – All the attributes except the FID from the Input Features will be transferred to the Output Feature Class.
- **ONLY_FID** – Only the FID field from the Input Features will be transferred to the Output Feature Class.

**XY Tolerance** – The minimum distance separating all feature coordinates (nodes and vertices) as well as the distance a coordinate can move in X or Y (or both).

* Generally things are fine if you leave the default.

**Gaps Allowed (checkbox)** – Gaps are areas in the output feature class that are completely enclosed by other polygons (donut holes). This is not invalid, but it may be desirable to identify there for analysis. To find the gaps in the output, set this option to NO_GAPS, and a feature will be created in these areas. To select these features, query the output feature class based on all the input features’s FID values being equal to -1.

- **CHECKED** – No feature will be created for areas in the output that are completely enclosed by polygons. This is the default.
- **UNCHECKED** – A feature will be created for the areas in the output that are completely enclosed by polygons. This feature will have blank attributes.

**Hints:**

- All inputs must be polygons.
- Tool may generate multipart features – use Multipart to Singlepart tool.