

Using Geoprocessing Tools in .NET and Java

Goals of the workshop

- Learn how to access and execute geoprocessing tools in .NET and Java.
- Learn how to access licensing and extensions.
- Learn how to define geoprocessing environment settings.
- Learn how to access custom tools such as models and scripts.
- Learn how to examine resulting messages.
- Learn how to perform batch processing of tools (data iteration).
- Learn how to access the properties of datasets.
- Examples will be demonstrated in .NET and Java.

Major topics covered

- What is geoprocessing and why do we need to know about it?
- How to execute geoprocessing tools using the Geoprocessor coarse-grained object.
- Accessing licensing and extensions.
- The Geoprocessor and Toolbox assemblies.
- Running custom tools such as model tools.
- Generate a custom assembly to represent a custom toolbox.
- Using existing ArcObjects such as an IFeatureClass as tool input.
- Working with geoprocessing results.
- Setting geoprocessing environments such as extent, output coordinate system, cell size, etc.
- Batch processing for repeated tasks. Use of list functions to list data.
- Work with multiple inputs using multivalue, valuetable . . .
- Geoprocessing messages—how to get informative, warning, and error messages.
- Describing properties of data such as spatial reference, extent, fields, and geometry.
- Learn how to execute geoprocessing server tools.
- Learn how to use the geoprocessing events listener to get tool messages during execution.