

# Shapefile Search Tool

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## Purpose

- Created for EcoTrust
- Needed a way to find available shapefiles that are stored in an ArcSDE geodatabase
- Taking too much time for them to search the database every time they needed data

## Common Objects

- IWorkspaceFactory
  - ShapefileWorkspaceFactory
- IFeatureWorkSpace – open feature datasets
- IFeatureLayer – access feature layer
- IMxDocument – active map
- IMap – active map
- IGxDialog – file dialog object

## Rubberband Objects

- IActiveView
- IScreenDisplay
- IRubberBand – rectangular extent drawn by the user
- ISimpleFillSymbol – fill of the rubberband
- IRgbColor – outline color of the rubberband
- IEnvelope – geometry of the rubberband
- IElement – access to the RectangleElement class
- IGraphicsContainer – manages frame elements and text elements
- IStatusBar

## Database Objects

- IFDOToADOConnection
  - Connection to the personal geodatabase
- IWorkspace
- IWorkspaceFactory

## Geoprocessor Objects

- IGeoprocessor – access to geoprocessor tools
- IStatusBar – access to the bar at the bottom of the ArcMap window
  - IAnimationProgressor
- IDataset
- IFeatureLayer
- IVariantArray – array to setup properties of a tool

## Functionality

- Time function
  - Used to create a unique file name
- Geoprocessing Tools
  - CreateFeaturesFromTextFile
  - Clip
- Loops
  - Database search
  - Add shapefiles to map
  - Clip

## User Guide

- Click the 'Add Basemap' button
- Click the 'Vector Search' button
- Using the mouse, click and drag the rubberband on the map covering the area you are interested in
- Wait
- After the search is finished, the Available Shapefiles form appears.

## User Guide

- Select the shapefiles you want to add
  - Hold the 'control' key to select multiple shapefiles
  - If you're not happy with the extent, select 'Cancel' to go back to the base map
- Click 'Add to Map'
- If you want the added shapefiles clipped to the extent, select 'Yes'
  - To not clip, select 'No'

## Code Sources

- ESRI Developer's Network
- Burke, Robert. Getting to Know ArcObjects: Programming ArcGIS with VBA. ESRI Press 2003
- Chang, Kang-Tsung. Programming ArcObjects with VBA: A Task Oriented Approach. CRC Press 2008
- EcoTrust

Questions???