

ERDAS IMAGINE®

Vector Integration

White Paper

Integration with ESRI Geodatabase and other vector formats

The use of ESRI's ArcObjects environment in ERDAS IMAGINE® facilitates integration with ArcGIS® software and data formats. This means that ERDAS IMAGINE is better able to act as an "extension" to ArcGIS, providing advanced image processing and remote sensing capabilities, while transparently interacting with ESRI data formats, such as the Geodatabase.

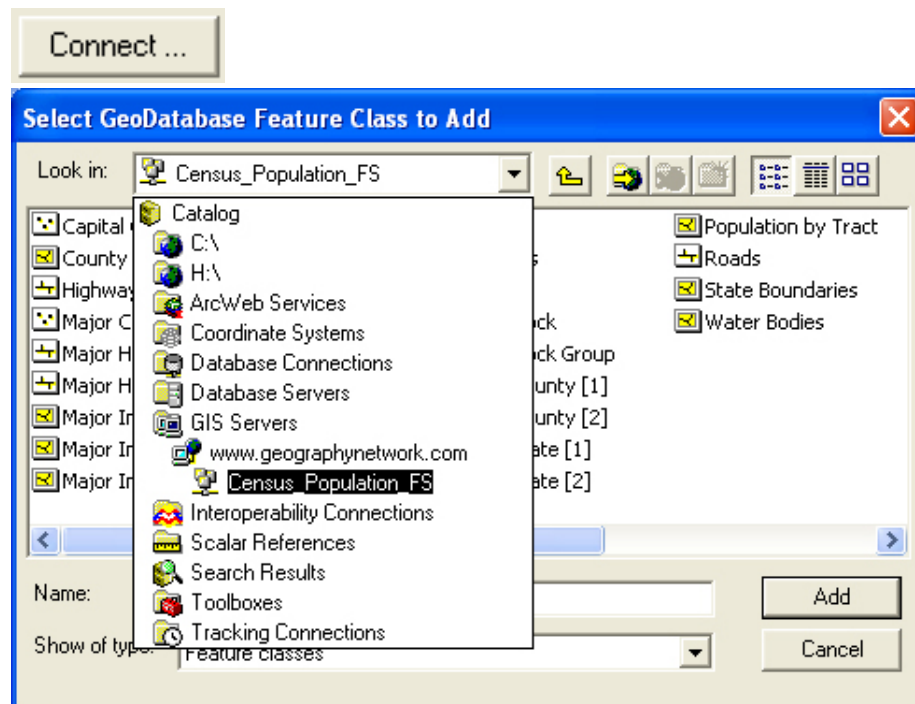
IMAGINE Geodatabase Support

Because of the overlap in the ERDAS and ESRI customer base, there is a large demand for common access to data. The Geodatabase Object model from ArcObjects allows ERDAS IMAGINE to provide common access to vector data sources.

The IMAGINE vector format DLL has been extended to add access to vector data from the following sources:

- Personal Geodatabase
- Enterprise Geodatabase
- VPF
- Geography Network
- ArcIMS
- CAD (DGN, DXF, DWG)
- Etc.

Of these formats, only the Simple Personal Geodatabase can be accessed in a read/write fashion, with capabilities limited to the ArcView licensing level. All other sources are read-only.



Because ERDAS IMAGINE already has a mechanism for Vector Format DLLs, this new vector DLL has been implemented by using the ArcObjects Geodatabase Object Model to provide a single interface that can access all of these sources. Consequently all the formats mentioned above are accessed by selecting the single “ArcGIS Geodatabase” file type.

By using the Vector Format DLL interface, these new sources will be available throughout the ERDAS IMAGINE software package. The following is a list of the types of read-only operations which exist within ERDAS IMAGINE and can therefore be applied to the data sources accessed by the Geodatabase vector DLL.

- Display vectors on top of an image
- Include vectors in a map composition
- Display attributes associated with vectors in a table or the Form View
- Apply attribute-based symbolization to features
- Use features (points, lines, polygons) in supervised classification
- Use features in Spatial Models
- Use features in the Surfacing Tool
- Use features to define Areas of Interest (AOIs) to geographically constrain any type of process that supports AOIs

The following types of edits would only apply to the Simple Personal Geodatabase.

- Edit features (if the feature source is editable)
- Edit attributes (if the feature source is editable)
- Add/Create columns (if the feature source supports this)

IMAGINE Geodatabase Licensing

Use of the Geodatabase data sources has been made as simple to perform as possible. There are two ways of providing the support:

If there is a pre-existing installation of ArcGIS on that same computer (to provide the necessary ArcObjects) using any of the Geodatabase capabilities within ERDAS IMAGINE will consume an ArcView-level license. A remote ArcGIS license server can also provide the ArcView license.

If there is no licensed installation of ArcGIS available on the same computer as ERDAS IMAGINE then the user can install the necessary tools from the “IMAGINE Geodatabase Support Installer”. This will not only install the necessary objects and libraries but will also provide licensing for the capabilities described above.