

Exporting Data to a File Geodatabase Using Trimble® GPS Pathfinder® Office

April 28, 2014

Trimble GPS Pathfinder Office now supports Esri® File Geodatabase formats in the Import & Export Utilities. This support note describes the process to export to an Esri File Geodatabase in Pathfinder Office.

Note: The export utility utilizes the Esri Geodatabase API which supports ArcGIS® 10.0 and later. To use the Export Utility and a File Geodatabase format you must have access to ArcGIS Standard version 10.0 or later.

Description:

A File Geodatabase is identified by a folder it is in and is a collection of various types of GIS datasets held in multiple files in this folder. It provides a widely available, simple, and scalable geodatabase solution that works across operating systems, scales up to handle very large datasets, and uses an efficient data structure that is optimized for performance and storage.

Availability:

The Esri File Geodatabase export format is available in Pathfinder Office version 5.3 and later by default. If you are running version 5.2, you will need to install the update and then manually create a File Geodatabase export profile.

File Geodatabase Tab:

The Esri File Geodatabase tab in the Export Properties contains controls for selecting options that are specific to the File Geodatabase format. This tab only appears if the selected format is Esri File Geodatabase. The Esri File Geodatabase tab contains the following:

- **Use Alias Names-** SSF files created with the TerraSync™ software version 5.0 or later have alias names for feature and attribute definitions. Alias names are longer (up to 40 characters) than names (up to 20 characters).

The *Use Alias Names* check box enables you to select a source for feature class and field names in the File Geodatabase. If selected, aliases from a data dictionary are used; if not selected, feature/attribute names from a data dictionary are used.



P. O. Box 31, Jerome, ID 83338

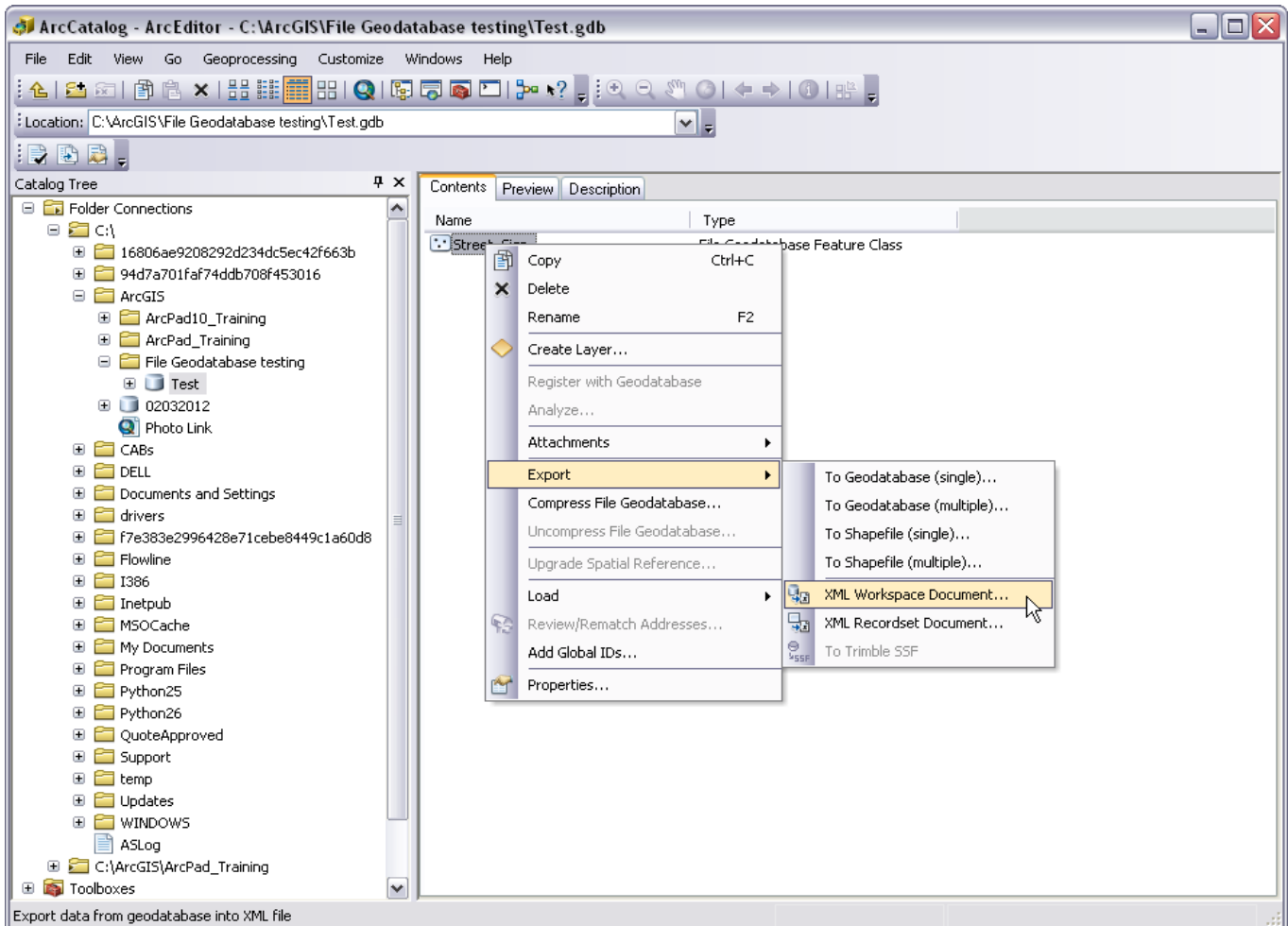
Ph: (208) 324-8006 Fax: (208) 324-8015 www.elecdata.com support@elecdata.com

- **Spatial Reference XML**—Exporting to File Geodatabase from the GPS Pathfinder Office software requires the XML data for your target spatial reference. This can be generated from ArcCatalog. This requires ArcGIS Standard version 10.0. The format of the spatial reference in the XML from version 10.1 or later has a work around that is mentioned later in this document.

Open ArcCatalog™ and navigate to a feature class which has the same coordinate system that you want your exported feature classes to have.

Right-click the feature class, click *Export* then click *XML Workspace Document*.

Note- If this option is grayed out, you may not have the ArcGIS Standard license).

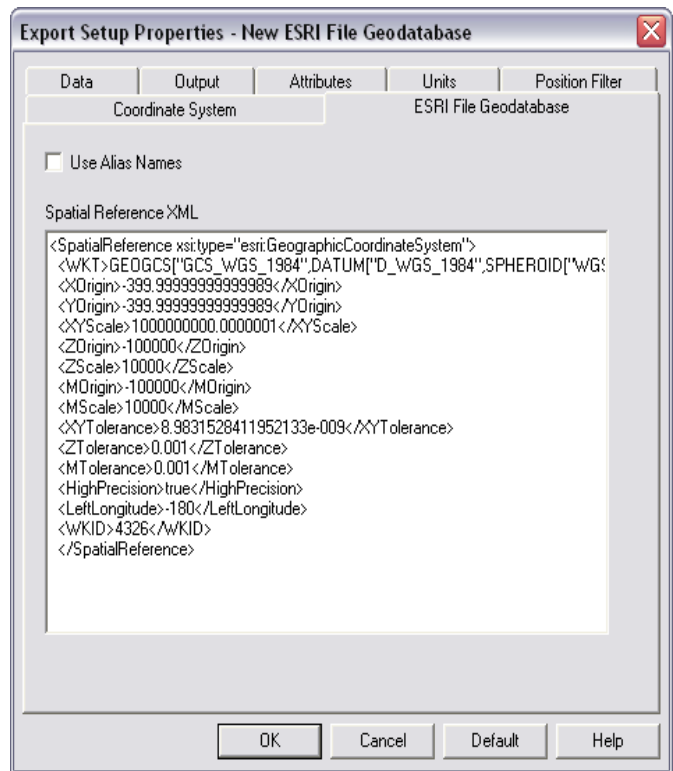


Select the *Schema Only* export option and specify the output location. Click *Next* and then click *Finish*.

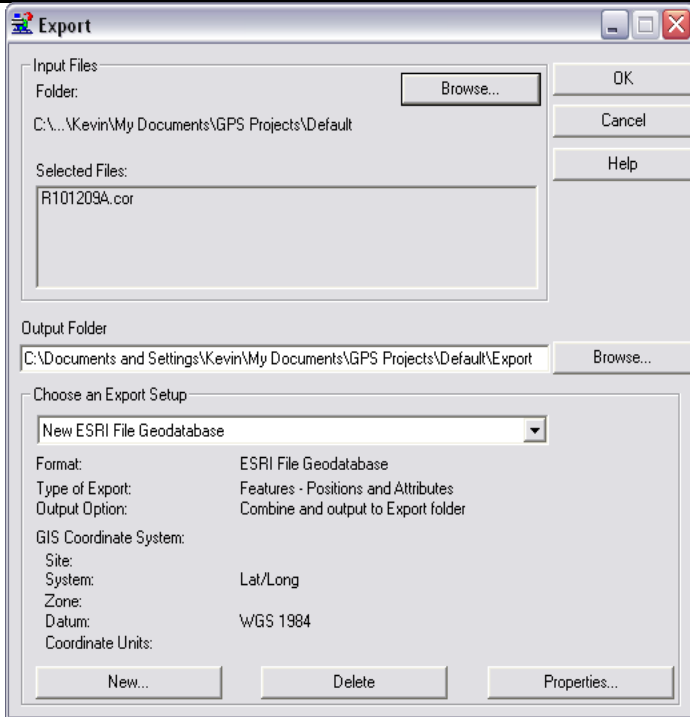
Open the XML file in Internet Explorer® and then scroll down to find the *SpatialReference* data. Copy all the information enclosed within the <SpatialReference></SpatialReference> brackets.

```
<SpatialReference xsi:type="esri:GeographicCoordinateSystem">
<WKT>GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID
["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT
["Degree",0.0174532925199433],AUTHORITY["EPSG",4326]]</WKT>
<XOrigin>-400</XOrigin>
<YOrigin>-400</YOrigin>
<XYScale>999999999.99999988</XYScale>
<ZOrigin>-100000</ZOrigin>
<ZScale>10000</ZScale>
<MOrigin>-100000</MOrigin>
<MScale>10000</MScale>
<XYTolerance>8.983152841195215e-009</
XYTolerance>
<ZTolerance>0.001</ZTolerance>
<MTolerance>0.001</MTolerance>
<HighPrecision>>true</HighPrecision>
<LeftLongitude>-180</LeftLongitude>
<WKID>4326</WKID>
<LatestWKID>4326</LatestWKID>
</SpatialReference>
```

Note-To get this to work on ArcGIS 10.1 or later the line <LatestWKID>4326</LatestWKID> will need to be removed.



Paste this information into the Spatial Reference XML field on the Esri File Geodatabase tab in the Export Properties in Pathfinder Office. Make sure to remove the '-' from before <SpatialReference..> if it is there.



In the *Input File* section, browse to the data file you are exporting. Be sure to note the *Output Folder* location and change as desired. Make sure the GIS coordinate system is set to the desired coordinate system for the geodatabase.

If it needs to be changed, click *Properties*, select the *Coordinate System* tab, and click *Change* to select the proper coordinate system information. When you click **OK**, a new File Geodatabase will be created, and your selected files will become feature classes in the geodatabase.

Note: Files cannot be appended to an existing File Geodatabase. A new database will be created on each export.

Known Limitations (from GPS Pathfinder Office Help):

- The Export utility utilizes the Esri Geodatabase API which supports ArcGIS 10.0 and later.
- The SSF file format has different data types than Esri File Geodatabases. Reference the GPS Pathfinder Office Software Help “*Export Utility Help > Formats > Esri File Geodatabase*” for additional information regarding the different data types.
- Due to restrictions of the current version of the File Geodatabase API, it is not yet possible to link attributes back to domains in the exported File Geodatabase.
- Some characters in non-Western European character sets may export incorrectly.
- Geodatabase DateTime data types always require date information. When exporting a Time attribute from a SSF file, a default date of 1/01/3800 is added to the attribute. This also affects the GPS Time metadata. (Note: DateTime data types do not require a time component, so Date attributes from an SSF are exported as just date data with no default time).
- Photos are exported as paths only; images themselves are not exported.