

OGC® GeoPackage Webinar

| Date | Topic | Presentation |
|---------------|-----------------------------------|---------------------------------------|
| July 18, 2017 | OGC® GeoPackage Encoding Standard | GeoPackage_2017 (PDF) |

Notes

Jeff Yutzler first presented the information in the presentation. This was followed by discussion among the participants. Some key points from that discussion:

- GeoPackage fits between [GeoJSON](#), which is very lightweight and text based, and a full-blown spatial database system.
- GeoPackage is broadly implemented - there are 10-15 vendors listed on the [GeoPackage.org](#) site.
- GeoPackage is meant to be lightweight enough for mobile applications. It's possible to package changes to a previous file into a new file and apply those changes to the device, but actual synchronization is not a current feature of the spec or of any extensions, but it could be possible in the future.
- GeoPackage uses the WKB (Well Known Binary) representation for vector data. This comes from the [OGC Simple Features specification](#).
- The GDAL package can translate both ways for Shapefile <-> GeoPackage.
- There is an online GeoPackage to Shapefile converter
- File management becomes easier with GeoPackage vs. Shapefiles since everything is contained in a single file
- For PO.DAAC, it should be possible to distribute SWOT data in both Shapefile and GeoPackage formats
- There are many known limitations for Shapefiles. One source is the ["Shapefile Challenge" web page](#).
- Shapefiles can only contain one geometry type per file.
- GeoPackage can currently handle integer data for images (JPG and PNG). An extension to handle floating point is in the works. A Tile Gridded Coverage extension that used 256x256 TIFF files is being considered. A public comment period should be starting in August.

- There are practical limits to the amount of data that can be put into a GeoPackage file. However, hydrology for the Mississippi river would fit very comfortably
- When thinking about limits to GeoPackage, realize that most of those limits (and more) apply to Shapefiles.

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