



GeoPackage Initiatives

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SOFWERX



A platform designed and operated to increase collaboration and innovation, in order to solve challenging warfighter problems.





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CHARTER

- I. Create a forum for accelerating delivery of innovative capabilities to USSOCOM
- II. Facilitate capability refinement thru exploration, experimentation and assessment of promising technology



GeoPackage Rapid Prototyping

Upcoming Activities:

- Related Tables Extension Interoperability Experiment
- “Geospatial to the Edge” Plugfest
- Testbed 14
- Prize Challenge & Warfighter Workshop

Solidify the Standard

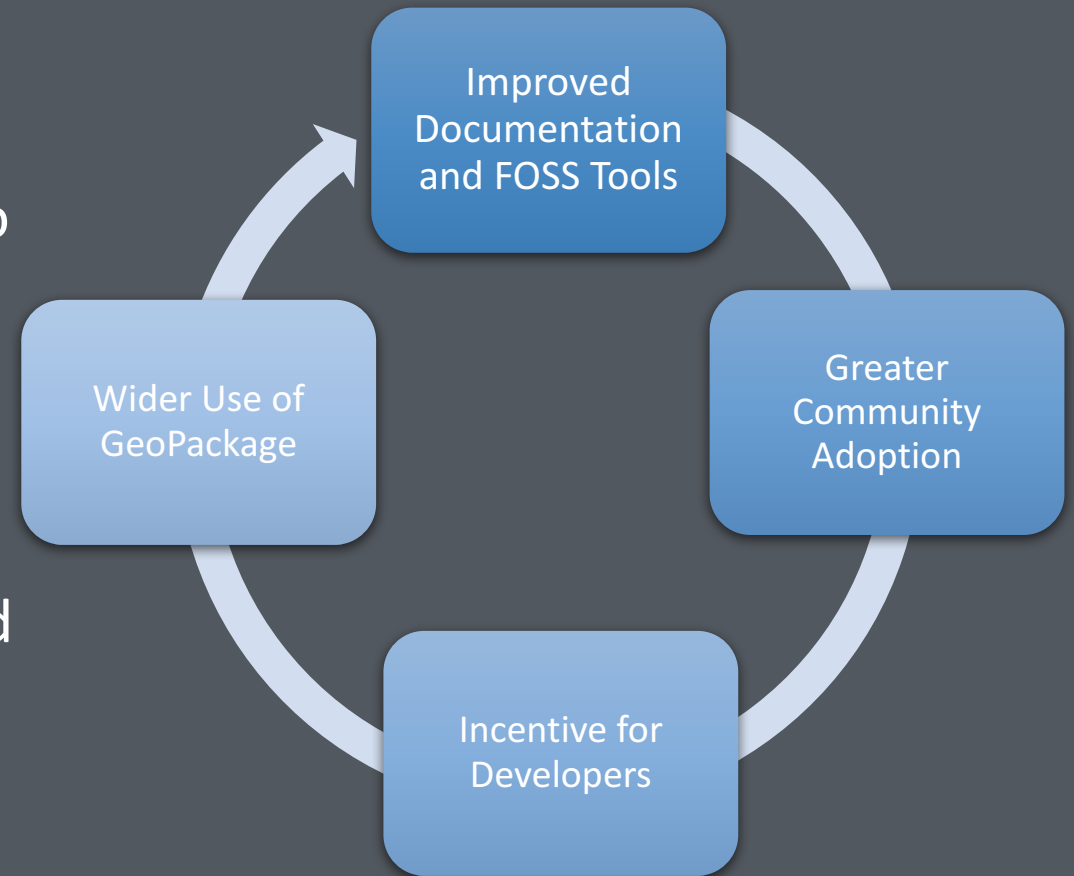
- Mature automated test suite for GeoPackage 1.2 (& beyond) + extensions
- Create comprehensive reference set of GeoPackage files exercising various features of GeoPackage and proposed extensions
- Compile info & links to software and tools around GeoPackage & extensions
- “On-the-fly” validation of GeoPackage files
- Full-featured reference implementations

Improve Usability

- Full GeoPackage (+extension) functionality for open source software
- Explore compression of map data within a GeoPackage
- Standalone utility to selectively split GeoPackage files into multiple smaller files — by layer, area, zoom level/s, or other criteria
- Libraries for sync of GeoPackage to/from map server via WMS/WMTS/WFS
- Method for handling temporally limited data (e.g. hydro-meteorological, seismic, transit, wildfire)

Build Community

- Document GeoPackage and applications for those within & outside the GIS specialty
- Make GeoPackage format more accessible to developers of mobile apps
(via online docs, YouTube videos, conference talks, workshops, prize challenges)
- Provide resources to developers creating open-source solutions using GeoPackage
- Host virtual and in-person discussions around GeoPackage & applications
- Engage communities outside traditional geospatial users / developers



Explore Potential

- Novel applications of disconnected geospatial applications using GeoPackage
- Data Science using multiple types of geospatial (+temporal) data
- Related Tables Extension storing data beyond audiovisual media
 - Data from external sources – OSINT, SIGINT, ...
 - Map symbology in SVG format to be applied as vector layer styling
 - Data collected by variety of sensors
 - Data provenance & versioning
 - Administrative & other non-spatial relationships among map features
- 3D mapping / surveying using autonomous systems
- Automated mapping of data collected by mobile device sensors
- PubSub style data sharing among connected device GeoPackages



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