Top 10 Reasons to use a File Geodatabase

A scalable and speedy choice for single users or small groups.

1 Improved versatility and usability

The file geodatabase is stored as a system folder that contains binary files that store and manage geospatial data. It is available at all ArcGIS Licence levels and functions in the same fashion on Windows and UNIX (Solaris and Linux) operating systems.

2 Optimized performance

The data structure of a file geodatabase is optimized for performance and storage. Although individual feature classes can be as large as 1 terabyte (TB) in size and contain hundreds of millions of features they still provide fast performance.

3 Few size limitations

Database size is limited only by available disk space by default, individuals tables and feature classes can be up to 1TB. With the use of configuration keywords, this can be expanded to 256TB.

4 Creating Mosaic Datasets

*Mosaic datasets are used to manage, display, serve, and distribute raster data. It can be stored in any Esri supported geodatabase and is part of core ArcGIS 10 software.

5 Easy data migration

A File Geodatabase is designed to include advanced components such as subtypes, domains and geometric networks, to name a few. These components will allow the single user File Geodatabase to be easily migrated to the multi-user Enterprise Geodatabase.

6 Improved editing model

File geodatabases do not lock down the whole geodatabase if a user is editing a feature class. An edit model similar to that used for shapefiles is deployed. This model supports a single data editor and many data viewers concurrently.

7 Allows the use of data compression

Vector data can be stored in a file geodatabase in a compressed, read-only format that reduces storage requirements. Compression reduces the geodatabase's overall footprint on disk without reducing performance.

8 Allow updates to spatial index settings

Spatial indexes are used in ArcGIS to quickly locate features when you display, edit, or query data. An appropriate spatial index is important, especially when you are working with large datasets.

9 Customizable storage configuration

When creating a dataset, apply optional configuration keywords to customize data storage. Keywords optimize storage for a particular type of data to improve storage efficiency and performance.

10 Using attachments to manage associated feature content

*Attachments can provide a flexible way to manage additional information that is related to features. Attachments are similar to hyperlinks but multiple files can be associated with a feature. Attached files are stored in the geodatabase.

* Requires ArcGIS for Desktop Standard or Advanced Licencing to enable and manage.

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