With the geodatabase, all of an individual user’s or organization's GIS data can be stored in a uniform format, in one central location, for easy access and management. The geodatabase (GDB) is designed to make full use of the capabilities of ArcGIS Desktop and ArcGIS Server. It is not just another spatial data format that can be used by ArcGIS - it is an integral part of the ArcGIS system.

GIS Data in the Geodatabase

- Attribute Table
- Feature Class
- Cartographic Representation
- Annotation
- Dimension
- Relationship Class
- Raster Dataset
- Raster Catalog
- Topology
- Geometric Network
- Network Dataset
- Terrain
- Locator
- Survey Dataset
- Toolbox

Multiuser GDB

RDBMS and ArcSDE Technology

Enterprise GDB

Workgroup GDB

Desktop GDB

Single-user GDB

Personal GDB

Functionality

Versioning

Editor 1

Editor 2

Project 1

Project 2

Versioning is the framework that enables multiple users to access and edit the same data simultaneously and provides long transaction (i.e., database changes that span long periods of time) support.

Geodatabase Replication

Parent Replica

Synchronize

Child Replica

Enables GIS data to be shared across two or more geodatabases. Data changes can be made in each geodatabase, then synchronized. Two-way, one-way, and checkout/check-in replication workflows are supported.

Geodatabase Archiving

January

February

March

www.esri.com/geodatabase

Key Benefits of the Geodatabase:

- Store a rich collection of data types in a centralized location.
- Apply sophisticated rules and relationships to the data.
- Define advanced geospatial relational models (e.g., topologies, terrains, networks).
- Maintain integrity of spatial data.
- Work within a multi-user access and editing environment.
- Integrate spatial data with other IT databases.
- Easily scale your storage solution.
- Support custom features and behavior.