

The geodatabase has 2 major concepts

1 - It is a relational database offers a seamless physical storage location that makes it easy to scale GIS datasets to extremely large sizes and numbers of users. Tables provide the primary storage mechanism for geographic datasets, query and processing.

2 - Geodatabase elements are object-oriented and can extend simple tables, features, and rasters to add rich behavior, data integrity, and data management capabilities. The geodatabase schema includes the definitions, integrity rules, and behavior for each of these extended capabilities. These include properties for coordinate systems, coordinate resolution, feature classes, topologies, networks, raster catalogs, relationships, domains, and more.

The personal GDB (pGDB) is the focus of this site

Since this site focuses on the use and advantages of GDBs for mobile computing and its for mobile commuting, we will focus on the personal geodatabase (pGDB). This is because while ESRI ArcPad data collection software supports all types of GDBs, Trimble GPS Analyst Extension , which is a common choice for processing GPS data, does not support the fGDB.

GDB Types

Type of geodatabase	
Type of DBMS	
Personal geodatabase	MS Access
File geodatabase	A file system folder containing data files
ArcSDE geodatabase	licensed through ArcGIS Server-Workgroup or Enterprise Edition
ArcSDE geodatabase	licensed through ArcGIS Server-Workgroup or Enterprise Edition
IBM Informix Dynamic	Server-Workgroup or Enterprise Edition
Oracle-Standard One,	Standard, or Enterprise Edition. Oracle Spatial or Oracle Locator can be used as
PostgreSQL 8.2.3	
MS SQL Server-Workgroup,	Standard, or Enterprise Edition