

Glossary of ArcView Terms

Active screen: ArcView can display a number of types of information at the same time, but only one of these will be in the foreground and able to be worked with – this is known as the active screen. The other displays (screens) in the background are *inactive*.

ArcInfo Coverage: ArcInfo is the higher level, more complex and comprehensive GIS package of which ArcView is a subset. An ArcInfo coverage consists of data files that contain spatial data and the associated attribute data. These coverages can be imported into ArcView and used as a data source.

ArcView Project: In ArcView, all activity takes place in a *project*. An ArcView project is a collection of associated files or documents (i.e., views, tables, charts, layouts and scripts), which you can work with during a session. The *Project Window* displays the names of all project documents and acts as a gateway to all documents in the project.

ArcView shapefile: A *shapefile* is ArcView's GIS format for storing geometry and attribute information about a set of features. The geometry of the feature is stored as a shape comprised of a set of point, line or polygon coordinates. ArcView creates three files for each "shapefile":

- *.shp* – stores the feature geometry (shape and location information)
- *.shx* - stores the index of the feature geometry
- *.dbf* - a dBASE™ file that stores the attribute information for the features

Attribute table (also called Theme Table): A GIS stores information about map features in a database and links the information to the displayed feature. We call this information the attributes of the feature and display them in the form of a table or spreadsheet. The attributes of a building, for example, might include its address, size, the name of the owner, etc.

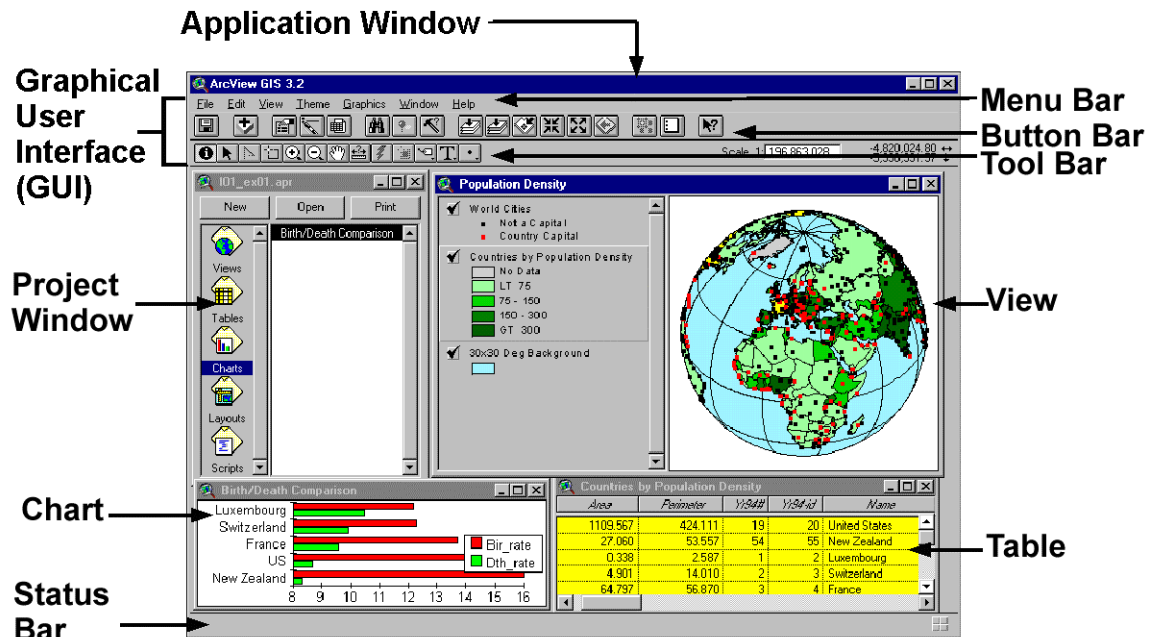
Button bar: See the diagram. Provides quick access (via buttons), to commonly used operations.

Chart: A graphical representation of tabular data. ArcView lets you create six different types of chart (area, bar, column, pie, line and scatter).

Documents: ArcView supports a variety of data sources and presents each with its own window called a *document window*. Each document has its own menus, button and tools. ArcView has five different document types, i.e., Views, Tables, Charts, Layouts and Scripts.

Extensions: These are analogous to "plug-ins" on a browser and are scripted programs that have been developed to increase the functionality of ArcView but are not incorporated in the actual ArcView software. While some of the larger extensions have been developed and are supported by ESRI, there are a number of extensions that are not supported. Some extensions have been developed specifically for military users.

Features: When objects are represented on maps (whether hard copy or digital), they are called *map features* or just *features*. An ArcView display screen can be thought of as a map in digital form. Each feature has a location, a shape and a symbol. In ArcView features are characterized as being point features (e.g., a lamp-post), line features (e.g., a rail-road track), or polygon features (the outline of a house or swamp).



ArcView Screen Nomenclature

Feature data source: One of two possible data sources (the other is an Image data source) that are used by ArcView. It is the means by which vector data is incorporated into ArcView

Graphical User Interface (GUI): The ArcView GUI consists of the various menu, button and tool bars that are found at the top of the application window. It is through the GUI that the user both works with and uses the program (see diagram).

Image data source: The second of two possible data sources (the other is a Feature data source) that are used by ArcView. It is the means by which raster data is incorporated into ArcView.

Layout: This is an ArcView document type that allows you to integrate a range of documents (views, tables and charts) and other graphical elements into a single window so as to create presentation quality maps for printing or plotting.

Menu bar: See diagram. Provides access to ArcView operations through pull-down menus.

Project: See ArcView Project.

Promote button: One of the buttons available when using a Table. It takes highlighted records from the table and promotes them to the top of the table.

Script: A program written in Avenue, ArcView's programming language. Avenue scripts can be used to customize the ArcView interface, automate functions and create new applications.

Table: Displays information about features that can be seen in a view – see Attribute Table.

Theme: A GIS links sets of features and their attributes and manages them together in units called themes. When making a map, for example, we have various layers of information such as topography, transport, rivers, vegetation, buildings etc) that are all superimposed on each other to produce the final map. In GIS terms, these layers are known as themes.

Theme Table – see Attribute Table:

Tool: One of a number of tools in the tool-bar. To operate, it will require input from the mouse. When you place the cursor over a menu, button or tool, the *status bar* (see diagram), at the bottom of the screen, will display an on-line description of the operation that the item under the cursor will perform.

Tool bar: See diagram. Contains tools that perform operations requiring input from the mouse. When you click on a tool, the cursor changes to reflect the tool you have chosen.

View: You can display many themes for the same geographic region in the same view. If a map consists of overlays (themes) such as topography, transport, rivers, vegetation, buildings etc., you can think of the View as being the display of any or all of these themes at the same time.

Reference: ESRI (1992-1998). Introduction to ArcView GIS.