ArcInfo 8

A NEW STANDARD *in* Professional Gis



ArcInfo 8

A New GIS for the New Millennium

ArcMap: the power of ArcEdit and ArcPlot and more in one modern application

ArcInfo 8 is the most significant release of ArcInfo, ESRI's professional GIS. ArcInfo 8 has been completely redesigned and engineered to be an easy-to-use, fast, modern, and powerful GIS. A key feature of ArcInfo 8 is that it makes sophisticated GIS more usable. New applications like ArcMap and ArcCatalog accomplish this goal by approaching GIS from a new perspective. While the depth of functionality in ArcInfo is tremendous, new user interfaces and wizards make it easy by presenting you with what you need when you need it.

New User Interface

The most striking feature of ArcInfo™ 8 is its new user environment. ArcInfo 8 is accessed through three new applications that represent the fundamental methods of how people interact with a GIS—maps, data, and tools. Users will typically interact with the system by having two or all three of these applications open.



ArcMap

Map-Centric Display and Editing

In ArcInfo 8, display, query, and analysis of your map data are supported by the new, map-centric ArcMap™ application. ArcMap is the environment for working with map data and creating production-quality cartographic output. ArcMap expands on concepts and interfaces first introduced in ESRI's popular ArcView® GIS software. ArcMap gives you, for the first time, the ease of use of ArcView GIS with the full functionality of ArcInfo.

ArcMap includes a fully integrated Object Editor capable of multi-user geographic and attribute entry and update. The Object Editor is implemented in such a way as to ensure a simple, quick, and natural transition from viewing geography to editing geography. The Object Editor can work with coverages, shapefiles, and all-relational geodatabases stored in $ArcSDE^{IM}$.

ArcCatalog

The Spatial Data Browser

ArcCatalog[™] is the data-centric application that locates, browses, and manages spatial data. ArcCatalog provides a quick way to take care of GIS data "housekeeping" so users can get to work quickly on more important tasks. It resembles the Windows Explorer®, but can see down into databases and quickly view geographic data and metadata. It also hosts all data management tasks with easy-to-use interfaces and wizards. It provides the data-centric perspective to ArcInfo.

ArcToolbox

Geoprocessing Tools for Everyone

ArcToolbox brings high-level geoprocessing and distributed GIS within the grasp of all GIS users. It is a new application for performing operations such as data conversion, overlay processing, buffer creation, and map transformation. More than 120 tools are organized in a tree view for easy access. Each tool has a menudriven interface with wizards where appropriate. If you can never seem to remember whether it's the Identity, Union, or Intersect overlay operator you want, no problem; the Overlay



ArcCatalog: data organizer and manager. The lefthand "tree" is a hierarchical view of the data on a user's machine and network. The right-hand pane is a preview of the data layers and maps in a particular folder (directory).

wizard offers easy-to-interpret pictures.

Data Models

ArcInfo 8 supports two primary geographic data models—the georelational model (i.e., coverages and shapes with attributes) as well as a new object-oriented model called a "geodatabase." The new applications of ArcInfo 8 support both of these models.

At ArcInfo 8, the georelational data model is extended into an objectoriented model that allows users to add behavior, properties, and relationships to their data. The geodatabase model allows definition of features that more closely resemble the real world. This object-oriented model is extensible for users with more specialized requirements, allowing for user-definable features. This new data model is implemented as an extension to standard relational database technology. The new model supports topologically integrated feature classes, similar to the current coverage model. However, it extends the coverage model with support for complex networks, relationships among feature classes, and other object-oriented features. The new ArcInfo 8 applications (ArcMap, ArcCatalog, and ArcToolbox) also work with geodatabases as well as with coverages.

Geoprocessing Server

Users of ArcInfo 8 can also take advantage of the new ArcInfo geoprocessing server. At ArcInfo 8, the network becomes your GIS platform. You can compose geoprocessing jobs on a desktop client and submit them for execution on a server. Execute remote ArcInfo applications, schedule geoprocessing for peak performance times, and run ARC Macro Language (AML™) and other scripts directly from ArcToolbox — all via the ArcInfo geoprocessing server.

ArcSDE 8

Streamline Database Administration

ArcInfo 8 includes a fully functional "Personal" version of ESRI's Spatial Database Engine™ (SDE™) technology called Personal ArcSDE. This runs on the Microsoft Jet Database Engine (the database engine used in Access). For users who want to manage their data in another database (e.g., Oracle or SQL Server) operated in a client/server fashion, full ArcSDE 8 is available as an add-on extension.

ArcObjects

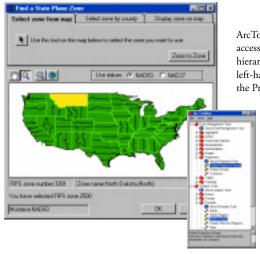
Unlimited Customization Options

Just as ArcInfo 8 addresses the needs of end users by providing out-of-thebox GIS applications, it also provides more advanced users and developers

with a comprehensive customization capability. Even nonprogrammers can customize ArcInfo 8 using the dragand-drop and menu-driven tools. Industry-standard Microsoft® Visual Basic® for Applications (VBA) is in the box for all scripting and application customization jobs. Advanced programmers and commercial application developers will also be satisfied with the completely extensible object-component data model and tools and the open data management API. Any COM-compliant programming language can be used to customize and extend ArcInfo 8.

Other Enhancements

ArcInfo 8 updates and enhances many basic technologies employed in previous versions of ArcInfo. Enhancements include improved versions of the ARC, ArcEdit ™, and ArcPlot ™ applications; the AML and Open Development Environment (ODE) customization capabilities; and extensions such as ArcScan[™]. ArcGrid ™, ARC COGO™, and ArcNetwork™. New features of the basic product include a complete Java[™] development environment that allows users to program complete applications in Java on any supported platform (i.e., a Java ODE API). Also supported are new cartographic generalization tools, updated and new data converters, and much more.



ArcToolbox: geoprocessing made easily accessible. The right window shows the hierarchy of the ArcToolbox tools. The left-hand window is a single panel from the Projection wizard.



For more than 30 years ESRI has been helping people manage and analyze geographic information. ESRI offers a framework for implementing GIS in any organization with a seamless link from personal GIS on the desktop to enterprisewide GIS client/server and data management systems. ESRI GIS solutions are flexible and can be customized to meet the needs of our users. ESRI is a full-service GIS company, ready to help you begin, grow, and build success with GIS.

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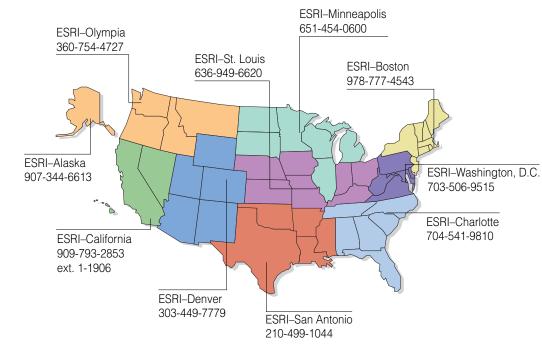
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