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Here Comes ArcView 8.1

By Glenn Letham

Move over ArcView 3.2… Here comes the ArcGIS family and ArcView 8.1. We're pleased to offer up a quick look at ArcView 8.1 - one of the new COM-based components that make up ArcGIS. - If you have any comments about ArcView's move to the 8x series, please share them with us.

On April 24, 2001 ESRI officially announced the release of ArcView 8.1 (See the Official News Release Here). According to ESRI, ArcView 8.1 is the most significant release in the history of ArcView. Particularly significant about this release is the notable jump from the 3x release series to the 8x series. The 8.1 release marks the first release of a complete, single, integrated system for geographic data creation, management, integration, and analysis - otherwise known as ArcGIS. ArcGIS clients include ArcView, ArcEditor, ArcInfo, and the ArcGIS servers ArcSDE and ArcIMS. ArcGIS is billed as a "modular" system in the sense that it is scalable, allowing users to build the system in pieces.

The ArcGIS Family

When you dicuss ESRI products from now on, you must think of the ArcGIS family. For a good overview of the ArcGIS suite the article *Unlock Worldwide Resources with ArcGIS* provides a good overview. the following is a list of products in the ArcGIS family:

ArcView - data visualization, query, analysis. Users are able to create and edit simple geographic features. The core components of ArcView include ArcMap, ArcCatalog, and ArcToolbox.

- **ArcMap** - used for all mapping and editing tasks as well as for map-based analysis

WebLinks

- ArcGIS
- ArcView 8.1
- Geography Network

Sponsors

- *ArcCatalog* - browse, manage, create, and organize your geographic and tabular data.
- *ArcToolbox* - ArcToolbox for ArcView and ArcEditor contains 36 of the most commonly used tools and extensions for data conversion and management (note, the Toolbox for ArcInfo contains 170 tools!)

ArcEditor - (new) all the functionality ArcView and adds the power to create and edit features in a multiuser geodatabase or coverage.

ArcInfo - includes all the functionality of ArcEditor and adds advanced geoprocessing capabilities.

ArcSDE - adds database services to the ArcGIS family

ArcIMS - provides Internet enabled services

* Users can deploy multiple ArcGIS clients (ArcView, ArcEditor, ArcInfo) seats and ArcGIS servers (ArcSDE and ArcIMS) If your looking for the latest book targetted at the ArcGISuser, check out Getting to Know ArcGIS Desktop

So, what about ArcView 8.1?

ArcView 8.1 has been designed with a completely new architecture, which will provide a significantly enhanced user experience. ArcView 8.1 maintains the base functionality of ArcView GIS 3.x, but with a host of improvements. Some of the **new features** provided in this release include:

- a catalog for browsing and managing data
- on-the-fly coordinate and datum projection
- metadata creation
- customization with built-in Visual Basic for Applications
- new geographic editing tools
- support for static annotation
- enhanced cartographic tools
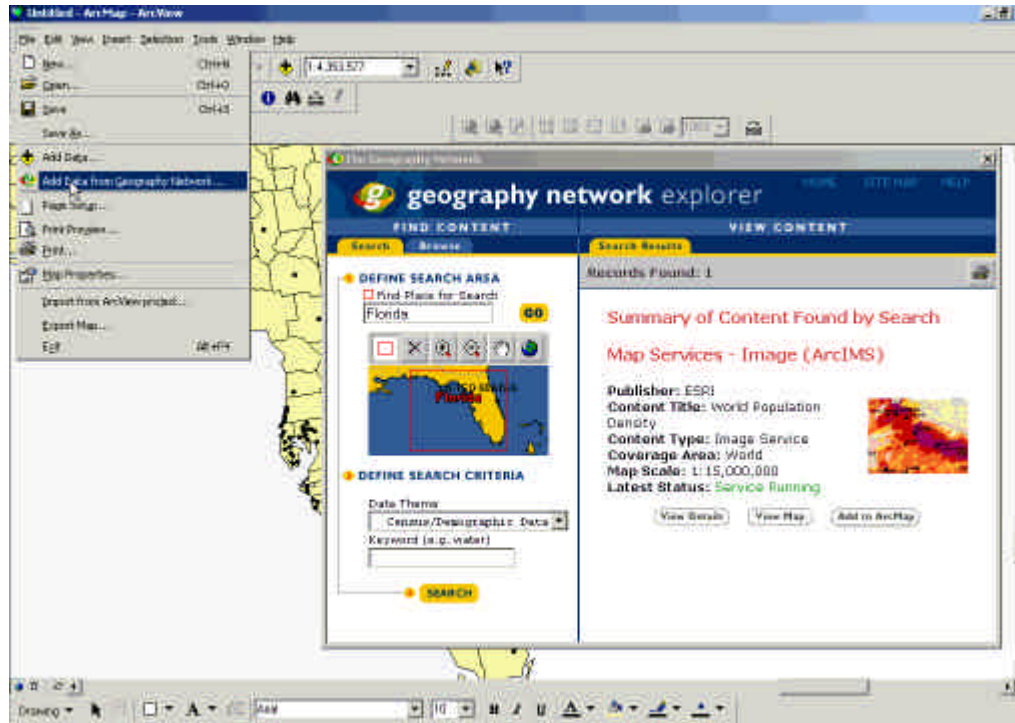- the ability to add data from the Geography Network (www.geographynetwork.com).

One of the most noticeable additions to the new product suite is the ability to add data

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directly from the Geography Network. With a few simple commands data from the Geography Network is instantly integrated into ArcMap for visualization and analysis. Adding data is simple; a separate window pups-up providing instant access to a wealth of data available via the Geography Network server. Once seleted, the data themes are loaded into the current data view and can immediately be queried, themed, or analyzed.

Selecting the "Add data from Geography Network" function brings up a new window for easy selection/addition of data
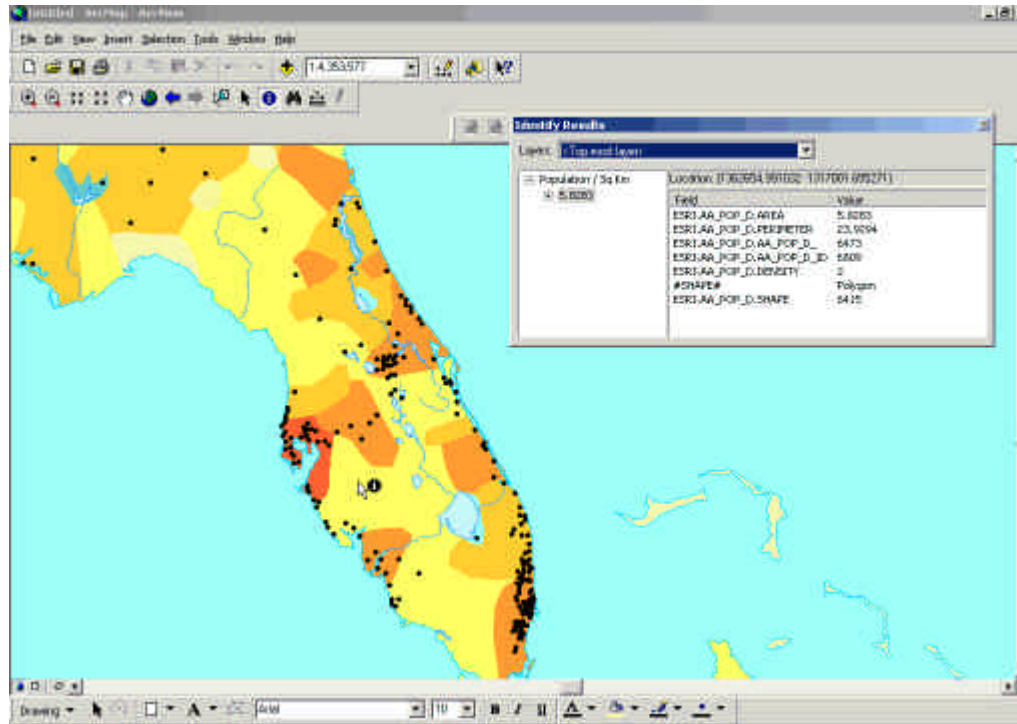
Once the data has been selected from the Geography Network it is displayed in the current view and available for viewing, querying, and analysis.

ArcGIS provides flexibility when configuring a system since it is modular and scalable. It is modular in the sense that you acquire the system in pieces. ArcView provides data visualization, query, analysis, and integration capabilities along with the ability to create and edit simple geographic features. ArcEditor, a brand new software product, includes all the functionality ArcView and adds the power to create and edit features in a multiuser geodatabase or coverage.

ArcView Extensions

The following are the ArcGIS 8.1 extensions that operate with ArcView 8.1:

- *Spatial Analyst* - USed for surface creation, raster analysis, and grid algebra, it combiness the capabilities of ArcView Spatial Analyst and ARC GRID. Supports TIFF, BIL, SunRaster, USGS DEM, SDTS, and DTED data formats.

- **ArcGIS 3D Analyst** - combining the capabilities of ArcView 3D Analyst and ARC TIN, 3D Analyst enables 3 dimensiual visualization and analysis. this is the tool to build surface models, perform perspective viewing, rotate, tilt, and fly-through simulations, and to model real-world surface features.

- (NEW) **ArcGIS Geostatistical Analyst** - surface interpolation and exploratory spatial data analysis

- **ArcGIS StreetMap USA** - street display and geocoding, initially for US and Europe. Supports a number of common geocoding functions.

- **ArcPress for ArcGIS** - a graphics metafile rasterizer used to enhance the process of printing large or high-quality maps. It boosts the capabilities of low-end printers by rendering PostScript quality images on non-PostScript devices. Users will realize increased color output control and printing speed.

- **MrSID Encoder** - The MrSID Encoder for ArcGIS enables you to efficiently use very large georeferenced images in ArcGIS. Can handle rasters up to 50 MB. An optional extension will support images up to 500 MB in size and will provide for multiple image mosaicing.

According to ESRI, additional extensions are planned for release in the future.

Hardware and Software requirements [recommended] ArcView 8.1

- Intel Pentium 3
- Minimum 450 Mhz with 128 Mb RAM
- Recommended 650 Mhz or higher with 256 Mb RAM or higher
- Windows NT sp 6a/Windows 2000
- Note, the recommended configuration is highly recommended if you're going to be using extensions such as 3D Analyst.
- You are not required to uninstall ArcView 3.x to install and run ArcGIS 8.1. ArcGIS 8.1 defaults to an \arcexe81 folder and will not conflict with ArcView 3.x.

More About The New ArcGIS COM-based Architecture

The collection of software components that make up ArcGIS is known as ArcObjects. More than 1,100 individual COM-based components are provided in a well-documented data model. Developers will likely be pleased to learn that customization is now performed using the built-in Microsoft Visual Basic for Applications (VBA) scripting capabilities or a COM-compliant programming language such as Visual Basic, Visual C++, or Delphi. Because of this reliance on industry standards, ArcGIS is IT compliant and open.

Myself, I'll be watching with anticipation to see how quickly the ArcView user community embraces the ArcView 8x series. Word has it that ESRI will continue to support the 3x series (likely due to the reluctance of a number of users to upgrade their OS to NT or Windows 2000). With the annual ESRI conference only sweveral weeks away its a given that ArcView 8.1 and ArcGIS will be the talk of the event.

What do you think about ArcView 8.1 and what are your expectations?
Post your comments here

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