

GIServOhio Server Software and Development Environment

GIServOhio functionality is provided through variety of client and server software products and environments.

Client Software

ArcGIS 9.1 Desktop (ArcView, ArcInfo, ArcExplorer) is the primary GIS client desktop software used by ESS develop and maintain spatial data. ArcGIS Desktop is developed by Environmental Systems Research Institute.

Server Software

ArcIMS (Internet Map Server) 9.1 delivers spatial content and maps to web sites and applications through the use of managed services. ArcIMS creates template HTML and JavaScript viewers. ArcIMS is developed by Environmental Systems Research Institute.

Subcomponents:

- Metadata Explorer
- GIS Portal Toolkit 3.1

ArcGIS Server 9.1 is a server platform and development framework that delivers high-end GIS functionality to distributed clients. ArcGIS Server is developed by Environmental Systems Research Institute.

ArcSDE (Spatial Database Engine) 9.1 is a middleware application residing between ArcGIS client and server products and a DBMS. ArcSDE manages spatial data and user access to spatial data stored in the DBMS. ArcSDE is developed by Environmental Systems Research Institute.

Express Server 5.0 distributes large image datasets (aerial photographs) to ArcGIS client and server applications. Raster data currently available through LizardTech include the USGS Digital Orthophotography Quarter Quads (DOQQs) and the 2004 and 2005 National Agricultural Inventory Program (NAIP) photography. Express Server is developed by LizardTech.

Enterprise Geocoding Service is a “black-box” address standardization and geocoding engine that is callable through vendor supplied APIs (.NET, Java, ActiveX, C++) or through a web service provided by ESS. Enterprise Geocoding Service functionality is currently provided through Group 1 Software’s AddressBroker. Addressbroker standardizes addresses and assigns latitude and longitude coordinates. This enables the addresses to be placed on a map through thick client applications such as ArcView or customized Web based applications built on ArcIMS. Standalone address processing applications can also be built using any of the vendor supplied APIs; C, C++, Java, ActiveX or .NET. AddressBroker is developed by the Centrus division of Group1 Software.

EarthWhere 4.1 is an image provisioning system delivers customized imagery content to distributed users. ESS is currently stabilizing EarthWhere under Windows. EarthWhere is developed by SANZ.

SQL Server 2000 is used to store spatial data in GIServOhio. Most vector and some raster data sets are stored in SQL Server 2000. All reads and writes to spatial data is facilitated by ArcSDE.

Development Environment

Development of client applications is achieved through various development environments and toolsets.

ArcObjects, VB.NET, JavaScript, HTML, PERL, Python, C#.NET, ArcIMS Administrator and Author, and ArcGIS Server Application Developer Framework (ADF).

ESS’ preferred development environment for GIServOhio is Microsoft .NET framework using C#.