ArcGIS for .NET Developers

Build GIS Functionality into Your .NET Applications

ArcGIS® provides the foundation for .NET developers to build and deploy geographic information system (GIS) applications and services on the Microsoft® .NET platform.

Highlights

- Robust Web Application Developer Framework (ADF™) built on ASP.NET
- Web controls that are specific for building GIS applications
- AJAX-enabled controls built on ASP.NET AJAX technologies
- Tight integration into Visual Studio® 2005 and 2008 integrated development environments (IDEs)
- JavaScript™ libraries providing access to use Web controls in a scripting environment
- Application programming interfaces (APIs) for SOAP and REST to interact programmatically with a GIS Web service
- A mobile developer toolkit to create and deploy mobile client applications
- Developer Windows® Form controls to build or extend custom desktop applications
- Software developer kits (SDK) and dedicated Resource Center Web sites that centralize the various online resources for each developer product

Desktop Applications

Create custom desktop applications.

- Build focused geospatial applications with advanced analysis using ArcGIS Engine and the .NET Framework.
- Embed 2D and 3D mapping controls in existing applications using the ArcGIS Engine .NET controls.
- Extend ArcGIS Desktop applications with custom commands, tools, and menus.
- Consume ArcGIS services such as geocoding, mapping, geoprocessing, network analysis, and globe services using the ArcObjects™ API.

Mobile Applications

Build focused mobile GIS applications using the ArcGIS Mobile SDK.

- Create a specialized mobile user experience for displaying spatial information using a map control and the .NET Compact Framework.
- Synchronize changes between mobile devices and the GIS server.
- Capture and display GPS locations.
- Build tools to create new points and lines and update the shape of existing features on your map.

Web Applications

Create and integrate GIS data and capabilities using the ArcGIS Server .NET Web ADF.

- Web controls that support the ASP.NET 2.0 callback pattern and the ASP.NET AJAX partial postback pattern
- JavaScript libraries to leverage browser technologies to support client and server synchronization
- A common data source API that allows you to integrate and interact with multiple sources at the same time in your Web application
- Samples, projects, a Web mapping application template, and sample data

Web Services

Create GIS Web services and application Web services.

ArcGIS provides two APIs, SOAP and REST, for interacting with ArcGIS Server services as a Web resource. Developers can also use ArcGIS APIs, REST, and SOAP to interact with an ESRI data source through a custom application Web service.

Supported Platforms

- Windows XP
- Windows Server® 2000, 2003, and 2008
- Windows Vista®
- Windows Mobile® 5.0 and 6.0

Learn more about integrating ESRI developer products and tools into your applications. In the United States, call ESRI at 1-800-447-9778. Send e-mail inquiries to info@esri.com. Outside the United States, contact your local ESRI distributor at www.esri.com/distributors.



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