ArcGIS® Desktop Extensions
Specialized GIS Tools and Analysis
ArcGIS Desktop Extensions

Specialized GIS Tools and Analysis

The ArcGIS Desktop products—ArcView®, ArcEditor™, and ArcInfo®—are engineered with a common architecture and a shared extension model. A wide-ranging suite of optional extensions dramatically expands the functional capabilities of these products with specialized geographic information system (GIS) tools. One of the key benefits of this shared extension model is the ability to operate the same ArcGIS® extensions across the line of desktop products, significantly reducing your acquisition, training, and operating costs.

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*Included with ArcInfo Licenses  
**Included with ArcEditor and ArcInfo Licenses
Try Optional ArcGIS Desktop Extensions Free for 60 Days!

If you have a single use license of ArcView or ArcEditor, use the registration wizard found in the ArcGIS Desktop Administrator.

If you have a concurrent use license of ArcView, ArcEditor, or ArcInfo, visit service.esri.com and request a 60-day evaluation keycode.

If you do not have ArcGIS Desktop software, request the ArcView evaluation CD at www.esri.com/evaluate.

Supported Platforms
The ArcGIS Desktop extensions are available for Windows® 2000 and XP (Home Edition and Professional). The ArcGIS Desktop extensions require ArcInfo, ArcEditor, or ArcView.

Evaluate an ArcGIS Desktop Extension
You can evaluate any ArcGIS Desktop extension* at no cost and with no obligation for 60 days.

*Except for ArcGIS Business Analyst and PLTS for ArcGIS.

Extensions
Perform terrain modeling and analysis with ArcGIS 3D Analyst.

Easily share and distribute maps and data with ArcGIS Publisher.
ArcGIS 3D Analyst provides powerful and advanced visualization, analysis, and surface generation tools. Using ArcGIS 3D Analyst, you can seamlessly view extremely large sets of data in three dimensions from multiple viewpoints, query a surface, and create a realistic perspective image that drapes raster and vector data over a surface.

ArcGIS 3D Analyst
Three-Dimensional Visualization and Analysis

With ArcGIS 3D Analyst, you can

- Build surface models from many supported data formats.
- Perform interactive perspective viewing and navigation.
- Create three-dimensional views directly using your GIS data.
- View data from a global to a local perspective.
- Navigate through multiresolution terrain and image data seamlessly.
- Visualize and analyze extremely large datasets (terabytes).
- Extrude two-dimensional representations to three dimensions using attribute data.
- Perform viewshed and line-of-sight analyses, spot height interpolation, profiling, and steepest path determination.
- Model subsurface features—wells, mines, groundwater, and underground storage facilities.
- Calculate surface area, volume, slope, aspect, and hillshade.

Learn more about ArcGIS 3D Analyst at www.esri.com/3danalyst.
ArcGIS Spatial Analyst provides a broad range of powerful spatial modeling and analysis tools. You can create, query, map, and analyze cell-based raster data; perform integrated raster/vector analysis; derive new information from existing data; query information across multiple data layers; and fully integrate cell-based raster data with traditional vector data sources. Integrated with the geoprocessing framework, ArcGIS Spatial Analyst offers easy access to numerous functions in ModelBuilder™, a graphical modeling environment.

With ArcGIS Spatial Analyst, you can:

- Convert features (point, line, or polygon) to rasters.
- Create raster buffers based on distance or proximity from features or rasters.
- Generate density maps and continuous surfaces from point features.
- Derive contour, slope, viewshed, aspect, and hillshades of these surfaces.
- Perform Map Algebra—Boolean queries and algebraic calculations.
- Perform neighborhood and zone analysis.
- Carry out discrete cell-by-cell analysis.
- Perform grid classification and display.

Learn more about ArcGIS Spatial Analyst at www.esri.com/spatialanalyst.
ArcGIS Network Analyst provides network-based spatial analysis including routing, travel directions, closest facility, and service area analysis. Using a sophisticated network data model, users can easily build networks from their GIS data.

ArcGIS Network Analyst enables users to dynamically model realistic network conditions including turn restrictions, speed limits, height restrictions, and traffic conditions at different times of the day.

With ArcGIS Network Analyst, you can

- Find the most efficient travel route.
- Generate travel directions.
- Locate the closest facility.
- Define service areas based on travel time.
- Generate an origin-destination matrix of the cost from each location to all other locations on a network.
- Use your existing GIS data.
- Restrict solutions based on delivery time windows.
- Work with an easy-to-use graphical user interface (GUI).
- Model complete problems using ModelBuilder.

Learn more about ArcGIS Network Analyst at www.esri.com/networkanalyst
ArcGIS Schematics is an innovative solution for the automation of schematic representations of ArcGIS geodatabases. ArcGIS Schematics allows you to better manage and visualize virtually any linear physical and logical network including social and economic networks. With ArcGIS Schematics, any kind of network including electric power, traffic lights, delivery rounds, and computers can be represented.

ArcGIS Schematics allows you to rapidly check network connectivity, quickly understand network architecture, and shorten the decision cycle by presenting synthetic and focused views of the network.

With ArcGIS Schematics, you can

- Automatically generate schematics from complex networks.
- Perform quality control of network data.
- Optimize network design and analysis.
- Conduct forecasting and planning (modeling, simulation, comparative analysis).
- Dynamically interact with GIS through a schematic view.
- Perform commercial and market analysis.

Learn more about ArcGIS Schematics at www.esri.com/schematics.
ArcGIS Geostatistical Analyst provides a powerful suite of tools for spatial data exploration and optimal surface generation using sophisticated statistical methods. ArcGIS Geostatistical Analyst allows you to create a surface from data measurements occurring over an area where collecting information for every possible location would be impractical. From improving estimation of temperature values to assessing environmental risks or predicting the existence of any geophysical element, ArcGIS Geostatistical Analyst gives anyone with spatial data the ability to investigate, visualize, and create optimal surfaces. ArcGIS Geostatistical Analyst enables you to take advantage of these tools and techniques in a friendly and dynamic GUI.

**With ArcGIS Geostatistical Analyst, you can**

- Explore data variability, look for data outliers, and examine global trends.
- Create prediction, prediction standard error, quantile, and probability maps.
- Use different renderers to visualize surfaces including contours (isolines), filled contours, regular grid (block interpolation), and hillshading.
- Investigate spatial autocorrelation and the correlation between multiple datasets.

Learn more about ArcGIS Geostatistical Analyst at [www.esri.com/geostatisticalanalyst](http://www.esri.com/geostatisticalanalyst).
ArcGIS Survey Analyst adds a rich suite of survey measurement-based processing and analysis tools for improving the spatial accuracy of features and determining the quality of feature locations. ArcGIS Survey Analyst enables you to work with survey observations from field notes, survey equipment, and data collectors and store the survey data directly in a GIS database. ArcGIS Survey Analyst provides the tools to support organizations in which surveyors and GIS technicians work together in a single, integrated environment.

With ArcGIS Survey Analyst, you can

- Create, edit, and manage GIS features using survey measurements.
- Integrate survey measurements into a geodatabase.
- Improve spatial quality and evaluate the accuracy of existing features based on surveyed locations.
- Incrementally improve feature geometry quality by linking survey features to GIS features.
- Perform basic COGO computations.
- Perform survey computations such as traverse and least squares adjustments.

Learn more about ArcGIS Survey Analyst at www.esri.com/surveyanalyst.
ArcGIS Tracking Analyst provides capabilities for sophisticated visualization, exploration, and analysis of time-related data. You can reveal time-related trends or phenomena, allowing you to see where and when an event occurred. You can “replay history” and observe how any time period (hour, day, week, month, etc.) is associated with the occurrence or location of various events. ArcGIS Tracking Analyst allows users to observe temporal data with either future time windows for mission planning or past time windows for historical analysis.

With ArcGIS Tracking Analyst, you can:

- Display point, line, and polygon data.
- Apply layer-specific time windows to manage multiple temporal layers.
- Symbolize time by color, size, or shape to display the aging of the data.
- Interactively play back time-related data.
- Apply actions to individual temporal layers based on attributes, location, or a combination of the two using highlight, suppression, or filter.
- Set temporal offset for comparisons of temporal events.
- Create animation files for AVI output.
- Create a data clock temporal chart for additional analysis.
ArcGIS Data Interoperability eliminates barriers to data sharing by providing state-of-the-art direct data access, complex data transformation, and import/export capabilities. Jointly developed by ESRI and Safe Software—an ESRI Corporate Alliance—this extension is built on Safe Software’s industry-standard Feature Manipulation Engine (FME) technology. ArcGIS Data Interoperability allows GIS professionals to use any standard GIS data within the ArcGIS Desktop environment, regardless of the format. This means that users can directly read, display, and analyze this data using all the tools available within ArcGIS Desktop.

With ArcGIS Data Interoperability, you can:

- Directly read more than 75 spatial data formats—including Geography Markup Language (GML), XML, WFS, Autodesk®, DWG/DXF, MicroStation® Design, MapInfo® MID/MIF and TAB, Oracle® and Oracle Spatial, and Intergraph® GeoMedia® Warehouse—and export to more than 50 spatial data formats.
- Perform automated conversion between source and destination formats.
- Further manipulate and translate default formats to create custom formats using the Workbench application.
- Enjoy full integration with the ArcGIS geoprocessing environment including the ModelBuilder framework.
ArcGIS Publisher gives you the freedom to easily share and distribute your GIS maps, globes, and data with anyone.

ArcGIS Publisher converts ArcGIS map and globe documents to published map files (PMFs). PMFs are viewable through ArcGIS Desktop products including ArcReader™, a free downloadable product from ESRI.

PMFs contain instructions about the location and symbology of data layers (rendering rules, scale dependencies, etc.) so you can quickly, easily, and securely share dynamic electronic maps locally, over networks, or via the Internet. ArcGIS Publisher also enables you to easily package PMFs together with their data, if desired. Developers can use ArcGIS Publisher extension’s ArcReaderControl to create and distribute royalty-free, customized ArcReader application 2D or 3D maps.

With ArcGIS Publisher, you can

- Easily provide interactive maps and 3D globes to your users.
- Protect your maps and data from inappropriate use.
- Create rich, interactive maps that meet your users’ needs.
- Provide efficient and controlled access to enterprise GIS data.
- Easily package the required data and maps for distribution.
- Build custom viewers for your maps with ArcReaderControl.

Learn more about ArcGIS Publisher at www.esri.com/publisher.
Maplex for ArcGIS is an advanced cartographic text placement extension for ArcGIS Desktop. Using a comprehensive set of placement options, Maplex for ArcGIS automatically positions text to a high cartographic standard. Maplex for ArcGIS generates clear, well-placed labels that minimize (or eliminate) the need for manual editing. The text is placed quickly, without overlap or ambiguity, and with the best aesthetic quality, reducing the time and cost associated with map production. Maplex for ArcGIS is included with ArcInfo, and it can be licensed for ArcView and ArcEditor.

With Maplex for ArcGIS, you can:

- Place high-quality labels.
- Reduce manual editing time using intelligent annotation placement.
- Produce clearer maps that communicate findings.

Learn more about Maplex for ArcGIS at www.esri.com/maplexforarcgis.
ArcScan for ArcGIS provides a powerful and easy-to-use set of tools for raster-to-vector data conversion. ArcScan allows you to create line and/or polygon vector features directly from raster images by interactively tracing the image. ArcScan also provides batch vectorization capabilities to create vector features from a selected area or the entire image. ArcScan provides simple raster editing tools to erase or fill in areas of the raster prior to performing batch conversion to increase efficiency and minimize postprocessing. ArcScan is included with ArcInfo and ArcEditor, and it can be licensed for ArcView.

With ArcScan for ArcGIS, you can

- Create shapefile or geodatabase line and polygon features directly from raster images.
- Perform interactive or batch mode raster-to-vector data conversion.
- Clean up unwanted parts of a raster image prior to batch vectorization.
- Use raster snapping capabilities to make interactive tracing more accurate and efficient.
- Select groups of raster cells by querying for connected areas.

Learn more about ArcScan for ArcGIS at www.esri.com/arcscan.
ESRI® ArcWeb Services provide access to both GIS content and capabilities—on demand when needed—and eliminate the overhead of purchasing and maintaining large datasets. An ArcWeb Services subscription provides you with instant access to imagery and aerial photos, real-time weather and traffic incidents, extensive demographic data, and much more. You can use ArcWeb Services in ArcGIS, or you can use them to build unique Web-based applications.

With ArcWeb Services, you can

- Access terabytes of rich data on demand via the Web including digital orthophoto quarter quadrangle imagery, topographic maps, live weather and traffic, demographic information, and more.
- Perform routing, place finding, and address finding; locate points of interest; and query the accessed data.
- Reduce cost of data storage and maintenance by not having to host data yourself.

Enrich your ArcGIS Desktop with live data via the Web.

Learn more about ArcWeb Services at [www.esri.com/arcwebservices](http://www.esri.com/arcwebservices).

Perform multipoint routing and obtain multilingual driving directions.

Use the included GlobeXplorer® premium aerial and satellite imaging.
ArcGIS Business Analyst

Advanced Business Analysis with a Complete Data Package

ArcGIS Business Analyst is a suite of GIS-enabled tools, wizards, and data that provides a complete solution for site evaluation, selective customer profiling, and trade area market analysis. Running simple reports, mapping the results, and performing complex probability models are among the capabilities ArcGIS Business Analyst offers in an affordable desktop analysis solution.

With ArcGIS Business Analyst, you can

- Evaluate new locations.
- Identify your customers.
- Review site performance.
- Measure the impact of a new store or competitor.
- Evaluate store performance by measuring customer proximity and penetration.
- Create simple, drive-time, and threshold areas.
- Identify market "pull" by creating desire lines drawn between customers and their assigned stores.
- Build and implement marketing programs.

Learn more about ArcGIS Business Analyst at www.esri.com/ba.
PLTS for ArcGIS is a suite of turnkey software applications developed for high-volume database production, maintenance, quality control, cartographic product generation, and workflow management. ESRI offers PLTS for ArcGIS in a number of solutions for users in different industries. These solutions allow organizations to turn standard, static products into a multiuse, enterprise-wide database, enabling them to serve various digital and hard-copy cartographic products. In addition, users can create custom solutions by implementing their own business rules.

With PLTS for ArcGIS, you can

- Utilize the industry-specific business rules and data models found within each solution.
- Make edits more efficiently with single-click editing tools.
- Collect data from digital sources and hard-copy maps.
- Use a standard map series or design a custom one using wizards.
- Have multiple map layouts and create map books rapidly.
- Batch export and print map sheets.
- Coordinate the data review effort in your enterprise by logging error information easily and accurately.
- Perform batch validation of a geodatabase.
- Organize, standardize, and streamline project workflows to provide a consistent user experience and reduce repetitive setup processes.
- Simplify creation and management of geodatabase versions with standard tools facilitating multiuser editing.

PLTS for ArcGIS provides digital and hard-copy cartographic product generation.

PLTS for ArcGIS suite of products

Quality control, single-click editing, cartographic product generation, and workflow management components enable an efficient production flow.

Learn more about PLTS for ArcGIS at www.esri.com/plts.
Job Tracking for ArcGIS (JTX) is a workflow management application designed to improve the efficiency of any multiuser GIS project. It provides advanced job tracking and workflow management tools to help your organization save time and money. Using Job Tracking for ArcGIS (JTX), you can complete GIS tasks while allocating resources, automating tasks, and tracking the status and progress of jobs from beginning to end.

With Job Tracking for ArcGIS (JTX), you can

- Centralize job information for easy access and retrieval.
- Automatically record a history of job actions.
- Define the tasks within a workflow.
- Complete GIS tasks while tracking staffing resources and time schedules.
- Warehouse a complete record of feature edits.
- Manage geodatabase versions.

Learn more about Job Tracking for ArcGIS (JTX) at www.esri.com/jtx.
ArcGIS Support and Educational Services

ESRI has a long-standing commitment to serving and responding to the GIS user community, which is exemplified by its breadth of support services. ArcGIS support and educational services consist of technical maintenance programs designed to meet the needs of different types of users, software releases and updates, technical support, online support services, publications, training, and consulting services.

ArcGIS Maintenance Program
The ArcGIS Maintenance Program is a cost-effective program that includes software updates, technical support, and many other benefits. Maintenance is offered as an annual subscription, making it easy to plan for the cost of support and software updates. Users who subscribe to maintenance receive 12 months of technical support and all software updates occurring during those 12 months. For more information, visit www.esri.com/maintenance.

Technical Support
ESRI offers a rich array of technical support and user community resources to help you meet your GIS challenges. From 24/7 technical support to online user groups and a variety of self-help resources, ESRI has the tools to make you successful. For more information, visit support.esri.com.

Training
ESRI instructor-led courses are offered at ESRI facilities and client sites around the world. Courses are developed by education specialists who are experts in ESRI software and industry applications. For more information, visit www.esri.com/training.

The ESRI Virtual Campus is a leader in GIS education on the Web, making GIS courses and a global GIS learning community accessible to anyone with an Internet connection. For more information, visit campus.esri.com.

Publications
ESRI Press books and workbooks on geographic information science, GIS technology, and GIS applications are used in formal university and corporate training programs everywhere. Publications help the first-time learner as well as the professional user. Publications are available through major booksellers and from ESRI at www.esri.com/esripress.

Professional Services
ESRI GIS professionals offer consulting, design, programming, and implementation services as well as database design and assistance in data publishing. For more information, visit www.esri.com/consulting.
For more than 35 years, ESRI has been helping people manage and analyze geographic information. ESRI offers a framework for implementing GIS technology in any organization with a seamless link from personal GIS on the desktop to enterprise-wide 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.

**Corporate**

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Send e-mail inquiries to info@esri.com

Visit ESRI’s Web site at www.esri.com

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