

ArcView Spatial Analyst

Powerful New Spatial Data Modeling for ArcView GIS



A rcView® Spatial Analyst introduces a broad range of powerful new spatial modeling and analysis features previously not available to desktop users. This new extension allows you to create, query, map, and analyze cell-based raster data and to perform integrated raster–vector analysis.

Raster-Vector Integration

Unique to ArcView Spatial Analyst is the ability not only to work with rasterbased data (including the ability to overlay, query, and display multiple raster themes), but also to perform integrated raster–vector theme analysis. This analysis would include a task such as aggregating properties of a raster theme based on an overlaid vector theme. For example, direct mail campaigns can be focused on customers within complex polygon areas that are determined by spatial analysis of drive time and proximity to service centers.



The Value of Raster Analysis

ArcView Spatial Analyst is particularly well suited for providing solutions to problems that require distance or other continuous surface modeling information to be considered as part of the analysis. For example, site suitability analysis often requires combining information about slope (information best represented as raster data) and the location of roads and property boundaries (information best represented as vector data) in order to arrive at the best location for a new facility. Spatial Analyst not only can generate the appropriate surface representation of information from a variety of existing data sources, but it can also derive new information from the overlay of multiple theme types. The results are then used to suggest possible solutions to the original problem.

Data Sources

ArcView Spatial Analyst can create a raster data source from any point, line, or polygon feature source or import data from standard formats including TIFF, BIL, Sun[®] raster, USGS DEM, DTED, and others.

Developer Tools

In addition, ArcView Spatial Analyst also includes a suite of more advanced raster analysis tools that can be accessed through Avenue[™] software requests. ArcView Spatial Analyst combined with Avenue can provide you with hydrologic, cost, distance, and visibility tools on the desktop. Developers are able to deliver highly sophisticated spatial analysis applications based on these extended capabilities.

Supported Platforms

ArcView Spatial Analyst is available for Windows[®] and UNIX[®] and requires the base ArcView GIS Version 3.x software.





With Spatial Analyst you can

- Convert feature themes (point, line, or polygon) to grid themes
- Create raster buffers based on distance or proximity from feature or grid themes
- Generate density maps from themes containing point features
- Create continuous surfaces from scattered point features
- Produce contour, slope, and aspect maps and hill shades of these surfaces
- Perform cell-based map analysis
- Execute Boolean queries and algebraic calculations on multiple grid themes simultaneously
- Perform neighborhood and zone analysis
- Do grid classification and display, and more

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For more information or to order ArcView Spatial Analyst, contact ESRI or your authorized ArcView GIS Desktop Reseller.

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Outside the United States, contact your local ESRI distributor. For the number of your distributor, call ESRI at 909-793-2853, ext. 1-1235.

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