

MapInfo SpatialWare®

A Spatial Information Server for RDBMS

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MapInfo SpatialWare is an integrated spatial information management system implemented as a "Spatial Extender" to the IBM Universal Database (GA to be determined), a "Spatial DataBlade" on the Informix Dynamic Server with the Universal Data Option, or as a spatial server on Oracle. It provides on-line spatial data services and improves critical business processes and operational applications. It enables the storage of spatial data in the RDBMS and its rapid retrieval using a sophisticated R-Tree indexing. SpatialWare uses a robust data model, fully scalable client/server architecture for the desktop (PC and UNIX) and an extended SQL-based spatial query language to provide a single source for creating custom spatial solutions.

Major Features:

- integration and management of spatial and business data
- completely integrated interoperability between client and server systems
- central storage and management of large volumes of spatial data
- conforms to proposed SQL/MM and OpenGIS standards
- multi-user access to data
- High quality spatial indexing for enhanced performance

SpatialWare implements the proposed ISO Abstract Data Type (ADT) for spatial data, SQL/MM. It stores all spatial data as objects, and includes the following geometry types: 2 Dimensional points, 3 Dimensional points, Polylines, Splines, Circular Arcs, Lines made up of circular arcs or polylines, Polygons with an exterior boundary, Polygons with an exterior boundary and one or more interior boundaries

SpatialWare has over 130 functions that allow you to analyze and manipulate geospatial data. They are grouped into six categories:

- Spatial Predicates analyze geospatial data types to see if they meet specific conditions. A true or false is returned. Overlaps and Contains are examples of predicates.
- Spatial Measurement Functions return number values that describe a spatial data type's shape, size, angle,

rotation, or position. Examples are Length, Perimeter, and Height.

- Spatial Functions perform operations on spatial data types and return a spatial data type. For example, Union joins two spatial data types and returns the combined result as a new spatial data type.
- Constructor Functions create new spatial data types. For example, Circle is a spatial data type using a point and radius to create the circle.
- Observer Functions return numbers, objects, or conditions from within a spatial data type. Assemble and Radius are examples of Observer Functions.
- General Functions include mathematical functions, identifiers, and indexing functions. For example, Pi and Degrees

Business Applications

SpatialWare allows you to enhance key business processes by connecting data and location. Geospatial analysis can improve a wide variety of business processes:

- Customer Service/Call Center
In the Cellular Telecommunications industry, quickly connecting the location of a trouble call into an engineering trouble reporting system results in major cost savings.
- Property Risk Management
In the Savings and Loan industry, the ability to quickly issue loans in a highly competitive market, while reducing the risks associated with the loans, is a major competitive advantage
- Land Information Management
Government agencies can synthesize data from numerous sources and reduce processing time required to create permits.
- Asset/Facilities Management
Utility companies can quickly identify underground cable and/or pipelines, to speed "call before you dig" applications or upgrades to existing facilities

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