**SUMMARY**

- **Extend Functionality** — Store spatial data in your databases for better data management
- **Better Data** — Eliminate redundant geographic data files and provide better data integrity, recovery and security
- **Flexibility** — Analyze data at the database tier or the client tier, depending upon your architecture
- **Cost-Effective** — Centralize your data and reduce the resources needed to maintain it saving both time and money
- **Scalability** — From the desktop to throughout the enterprise, SpatialWare can be integrated into any environment
- **Ease of Use** — Employ native SQL to access location functions enabling existing applications to use both spatial and non-spatial data

**Overview**

MapInfo® SpatialWare® software enhances the value of your spatial data by enabling it to be stored, managed and quickly retrieved from leading commercial database management systems including IBM® Informix® and Microsoft® SQL Server.

SpatialWare is the first spatial information management system to implement SQL-based advanced spatial access, analysis and modelling in a database environment. For the occasional user, or the sophisticated database programmer, it sets a new standard in ease of use and seamless integration. Simply stated, SpatialWare allows you to enhance key business processes by connecting data and location.

**Description**

SpatialWare enhances the value of your data by extending the storage and analysis capabilities of your database environment. SpatialWare enables location-based, or spatial data, to be easily integrated with non-spatial data both on the desktop and across the enterprise ensuring data accessibility, scalability, integrity, reliability and security.

Storing key business information and customer location information in your database enables you to query both spatial and non-spatial data types within a single SQL Server query. SpatialWare provides a consistent and standard-based environment enabling an enterprise to integrate spatial data within the organizational database environment. This empowers organizations to collect, manage, analyze and visualize data in a spatial context, as well as the traditional non-spatial context. Decision makers can now visualize and analyze large amounts of complex data — better, faster and easier than ever before.

**Key Features**

- Complete server-based spatial information management system
- Efficient, flexible spatial data storage for MapInfo and other spatial data storage in leading commercial database management systems
- Powerful, fully-integrated Standard Query Language (SQL) extensions for spatial operations
- Highly scalable to thousands of users and terabytes of spatial data
- Integration and management of spatial and business data in a single database environment
- Central storage and management of large volumes of spatial data
- Standards-based spatial operators such as buffer, contains, adjacent to, overlap, length, union, slope, area and perimeter

www.spatialware.com
• Sophisticated SpatialWare Operator extensions like Difference, Convex Hull, Clean, Relate, Cross and many others

• 1000 predefined coordinate systems are supported as well as custom user-defined projection systems

• SpatialWare supports data extract and import in both OGC WKB (Well Known Binary) and WKT (Well Known Text) formats

SpatialWare Components

SpatialWare contains the three components needed to spatially-enable a database:

SPATIAL DATA TYPE is used to define the data structure and storage mechanism needed to store, retrieve and maintain the data so it can be used by client software. The geometries stored can be either two- or three-dimensional.

SPATIAL INDEXING provides a structure to handle the spatial data using an indexing scheme based on Range-Tree (R-Tree) technology. R-Tree indexing is well suited for spatial data and requires no knowledge of the data itself to achieve optimal performance.

SPATIAL OPERATORS extend the SQL interface so you can query using common spatial operations. SpatialWare includes over 150 spatial operators to analyze and manipulate location data. Grouped into six categories, they include:

• Spatial Predicates such as Overlaps and Contains

• Spatial Measurement Functions including length, perimeter and height

• Spatial Functions perform operations on spatial data types and return a new spatial data type

• Constructor Functions create new spatial objects

• Observer Functions return numbers, objects, or conditions from within a spatial object such as number of coordinates, begin point, end point and assemble status

• General Functions include mathematical functions, identifiers, and indexing functions such as Pi, degrees and functions that may be specific to a particular database environment

ODBC Client Connectivity

SpatialWare provides an open connection through the use of any ODBC compatible software. Data can be accessed using the tools provided by the database vendors. For example, Microsoft SQL Server Query Analyzer can be used to submit traditional SQL statements using spatial operators and predicates.

Multiple Client Support

SpatialWare supports MapInfo products including MapInfo Professional®, desktop mapping software; MapXtreme® 2005 (for .NET) and MapXtreme Java software developer tools; and Envinsa, the enterprise location platform.

Specifications

<table>
<thead>
<tr>
<th>IBM INFORMIX</th>
<th>MICROSOFT</th>
<th>REQUIRED ELEMENTS</th>
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<tbody>
<tr>
<td>• Informix Dynamic Server with the Universal Data Option 9.3 64-bit HP/UX 11.0 operating environment</td>
<td>• Microsoft SQL Server 2000/2005 32-bit and either Microsoft Windows XP, Windows 2000/2003 Server</td>
<td>• TCP/IP Network</td>
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<tr>
<td>• Informix Dynamic Server with the Universal Data Option 9.3 32-bit Sun Solaris 2.8</td>
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<td>• System administration and database privileges for installation</td>
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• CD recommended on server, or cross mountable, for installation