KEY CAPABILITIES
• SDO_GEOMETRY Package

OTHER ORACLE DATABASE LOCATOR CAPABILITIES
• Spatial geometry object data type
• Fast spatial R-tree indexing
• Spatial relationship operators: distance, area, and length functions+
• Open, standard SQL access to spatial operations
• Whole Earth geometry model – comprehensive treatment of geodetic data
• Function-based spatial indexes
• Long transactions
• Integration with Oracle Fusion Middleware MapViewer 11g map visualization tool
• Coordinate system support based on the European Petroleum Survey Group (EPSG) data model
• Explicit coordinate transformations

Information about the Oracle Spatial and Graph option can be found in a separate data sheet at www.oracle.com/goto/spatial

A detailed listing of Oracle Database Locator feature and Oracle Spatial and Graph option is in the Oracle Spatial and Graph Developer’s Guide, 12c Release 1.

Every Oracle database includes built-in location features that enable any business application – from department to enterprise – to directly incorporate location information and realize competitive advantages. Oracle’s open, native spatial support eliminates the cost of separate, proprietary systems, and is supported by all leading geospatial tool vendors. Only Oracle delivers industry-leading security, performance, scalability, and manageability for mission critical spatial assets stored in Oracle’s native type. This feature overview highlights capabilities of the Oracle Locator feature of Oracle Database 12c – the industry’s leading spatial database management platform.

Easily Location-Enable All Your Applications

Most business information has a location component, such as customer addresses, sales territories, and physical assets. Businesses can take advantage of their geographic information by incorporating location analysis into their information systems. This allows organizations to make better decisions and respond to customers more effectively. Oracle Database 12c provides the foundation for deploying enterprise-wide spatial information systems and location-enabled e-Business applications.

Oracle Database Locator, a feature of Oracle Database (Express Edition, Standard Edition, Standard Edition One, and Enterprise Edition), provides core location functionality needed by most customer applications and partner solutions. Developers can easily incorporate location information directly in their applications and services using Locator. This is possible because location data is fully integrated in the Oracle server itself. Geographic and location data are manipulated using the same semantics applied to the CHAR, DATE or INTEGER types that are familiar to all users of SQL.

Oracle Database Locator feature is not a solution for more complex geospatial applications. Oracle Spatial and Graph, an option to Oracle Database Enterprise Edition, extends the Locator feature, and provides an even more robust foundation for geospatial and business applications that require advanced spatial analysis and processing in Oracle Database. It includes support for all geospatial data types and models, including vector and raster data, and topology and network models; as well as routing and geocoding engines.

Oracle Database Locator Feature Highlights

The SDO_GEOMETRY package is now part of Oracle Database Locator feature. This means that many of the commonly used spatial functions and operators, such as intersection, difference, distance, and within distance are
However, to take advantage of the dramatic performance improvements for these spatial functions and operators (Vector Performance Acceleration feature), the Oracle Spatial and Graph option is required. This gives users about 50X faster spatial joins, touch, contains, overlaps, and complex masks.

**Manage Critical Spatial Data Assets with Enterprise-Class Security, Scalability, Performance**

For your mission-critical spatial data assets, only Oracle can provide the security, scalability, and performance of the industry’s leading database, to manage multi-terabyte datasets and serve communities ranging from tens to tens of thousands of users. Only by using Oracle’s native spatial data type (versus Long Raw or BLOB) can you take advantage of the features below:

- Oracle Exadata Database Machine
- Partitioning support for spatial indexes
- Parallel index builds for spatial R-tree indexes
- Parallel spatial queries
- Replication (some features available with Enterprise Edition only)
- Spatially-driven multi-level security

**Supported By All Leading Geospatial Tools and Applications**

Oracle Database Locator feature is directly integrated with the leading geospatial, mapping and location services technology vendors. Since Oracle’s spatial data type is compliant with open standards, Oracle can serve as an interoperable, central geospatial data repository for providing data to any partner application.

A list of partners is available at: www.oracle.com/technetwork/database/options/spatialandgraph/spatial.

With Oracle Database Locator feature, Oracle brings the power and value of location analysis to all your business applications. Only Oracle provides world-class performance, scalability, security, and manageability to your spatial data assets, while reducing costs, with support from every leading geospatial vendor.