

Oracle Spatial: The Open IT platform for Geospatial Applications

Speaker:

Richard Clement –
State of Alaska, Department of Natural Resources



DNR's Mission:

*To develop, conserve and enhance natural resources
for present and future Alaskans.*

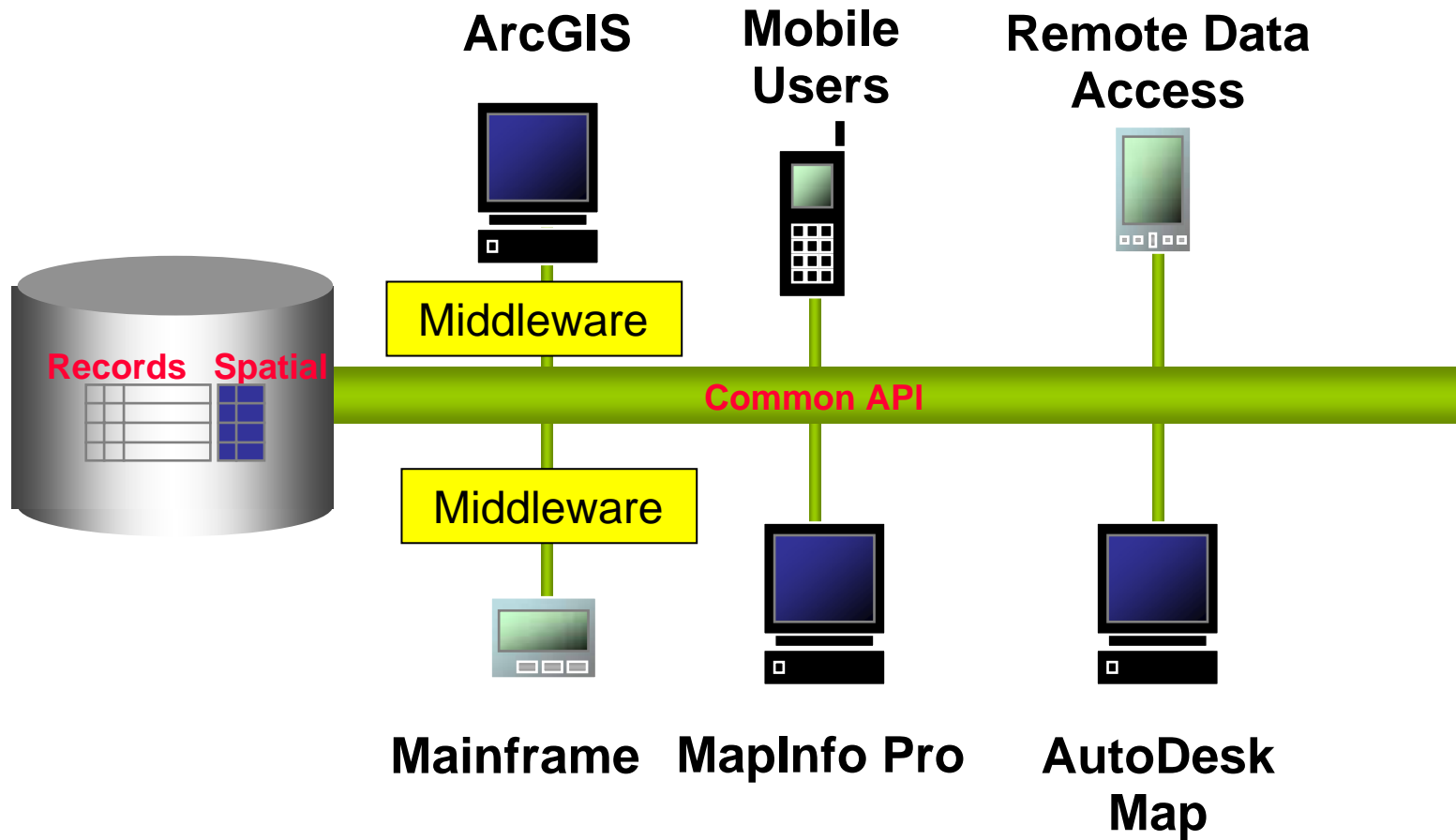
The Open GIS Consortium

OGC is an international industry consortium of more than 230 companies, government agencies and universities participating in a consensus process to develop publicly available geoprocessing specifications. Open interfaces and protocols defined by OpenGIS® Specifications support interoperable solutions that "geo-enable" the Web, wireless and location-based services, and mainstream IT, and empower technology developers to make complex spatial information and services accessible and useful with all kinds of applications.

The OGC has a vision of a world in which everyone benefits from geographic information and services made available across any network, application, or platform.

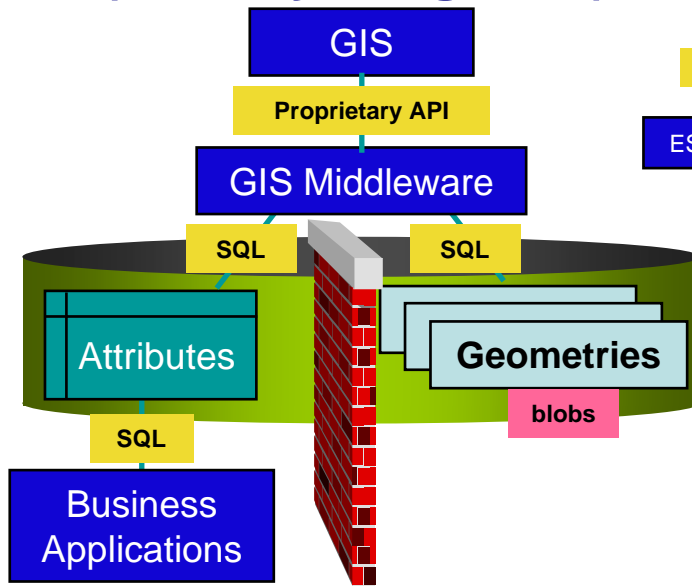
The Database is the Integration Point

Sharing and distributing spatial data



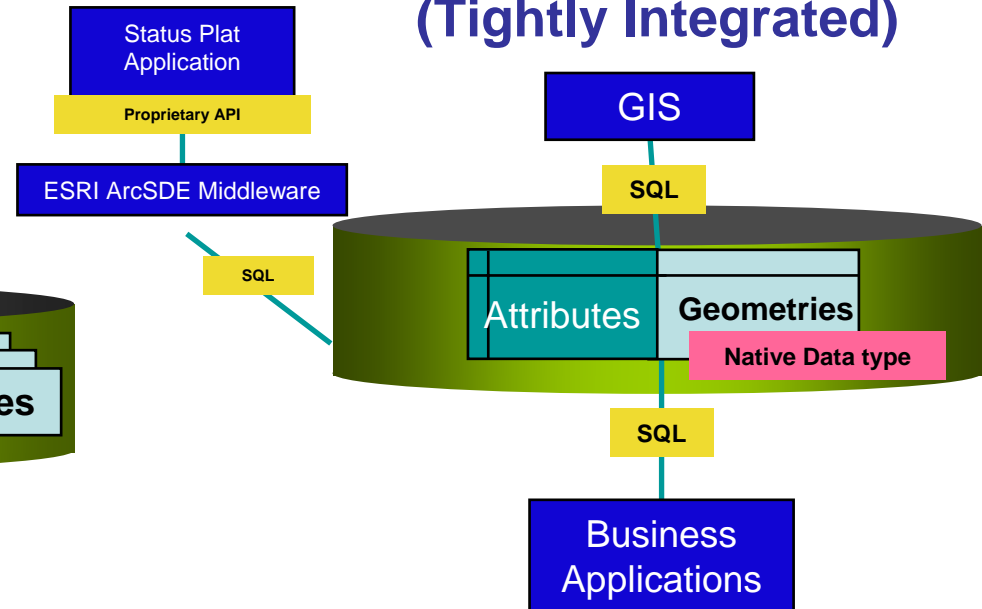
Enterprise GIS Architectures

Middleware (Loosely Integrated)



- Attributes in database and accessible by all applications
- Geometries in database - but in **proprietary binary format**
- Geometry is only accessible via **proprietary interfaces**

Spatially Enabled Database (Tightly Integrated)



- Geometries **fully integrated** within the database using **native DBMS type**
- Geometry data accessible by all applications
- Access based on **open standards**
- Oracle's solution **supported by all GIS vendors**

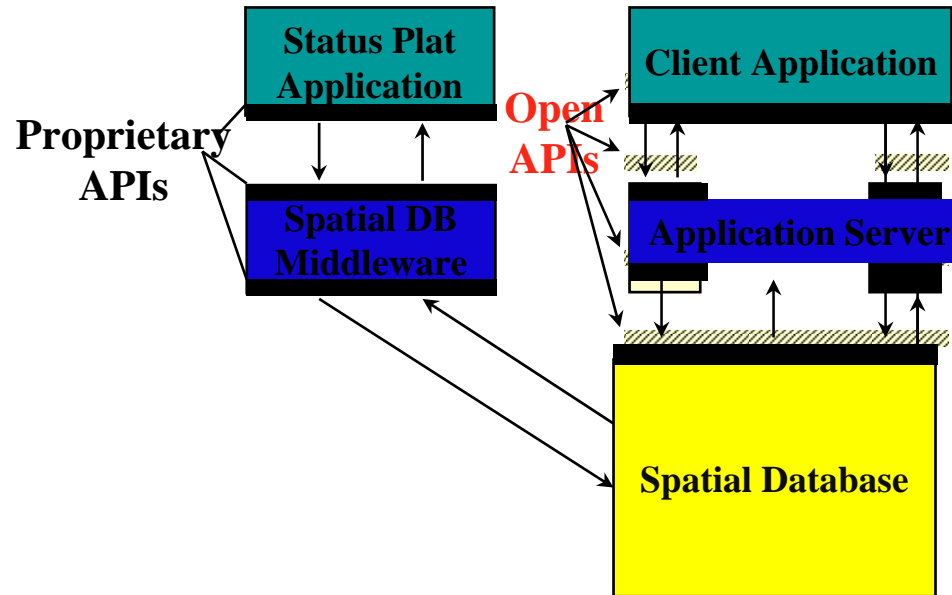
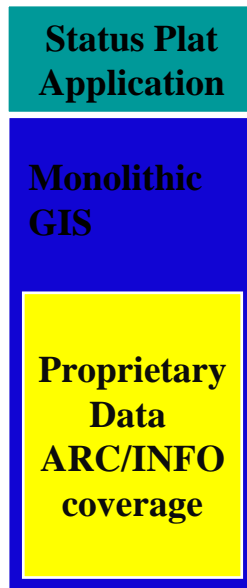
From GIS to Spatial to Location

...

Yesterday



Today



GML
SQL

Oracle Database10g Location Features

Locator

- Points, lines, polys
- 2D, 3D, 4D data
- Spatial Operators
 - Within-distance
 - Spatial Relations
- Coordinate Systems
- Long Transactions
- Table Partitioning*
- Object Replication*
-
- Oracle10g Standard & Enterprise

Spatial

- All Locator features
- Over 330 Spatial functions and Operators
- Linear Referencing
- Spatial Aggregates
- Coordinate Transforms
- Network Data Model
- Topology Data Model
- GeoRaster
- Geocoder and Router
- Spatial Analytic Functions
- ✓ Location Service Quick Start
- ✓ GeoRaster Compression
- ✓ RDF Database

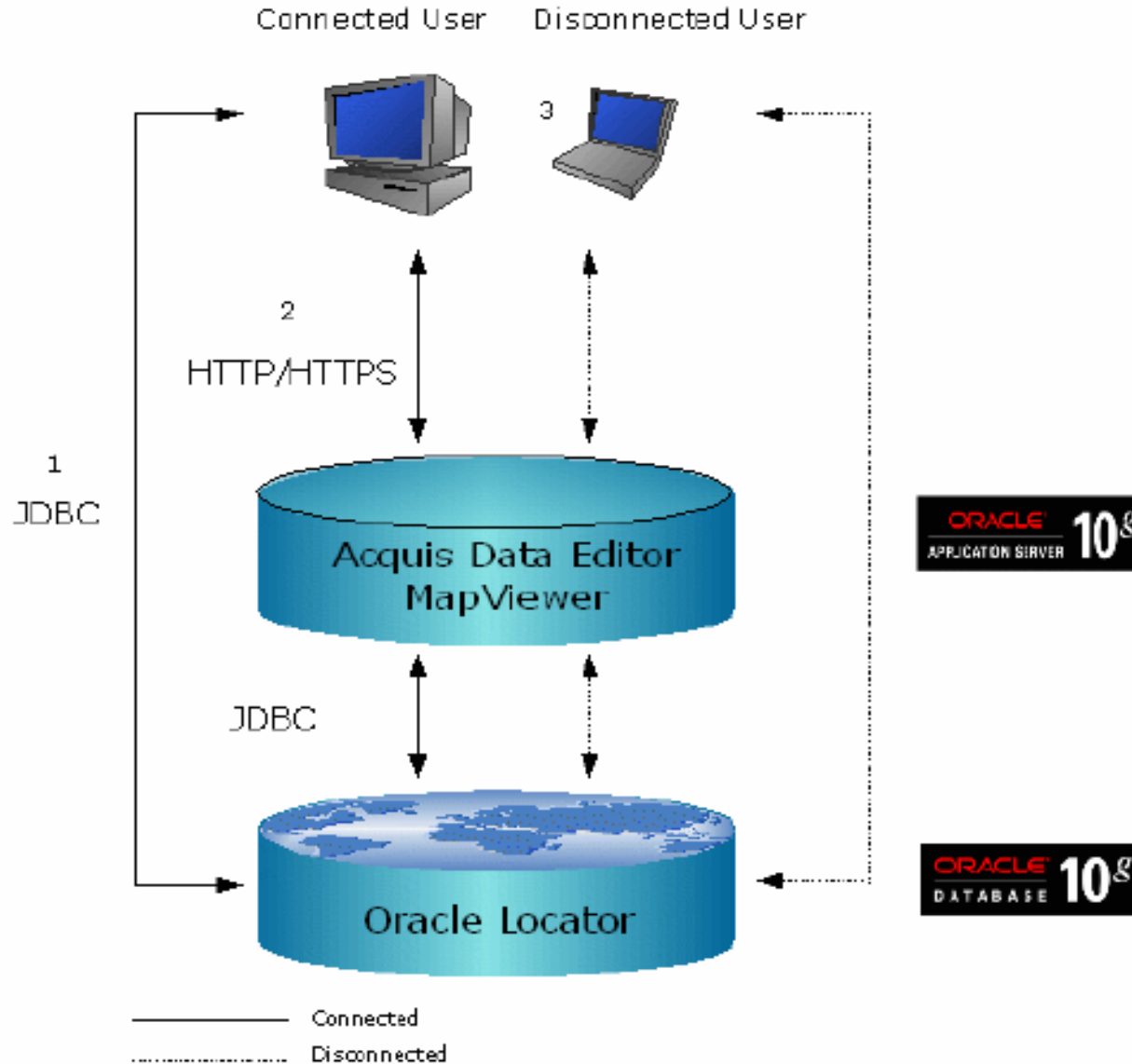


DNR had this choice of vendors using the ARC/INFO coverage model...



Now DNR has this choice of vendors using Oracle Spatial

Example of the possibilities using an Open IT Platform for Geospatial Applications



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Thank You! Questions?

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