



Hutchinson 3G: The World's First and Largest 3G LBS Deployment

Oracle Spatial User Conference

Denver, Colorado

March 10, 2005

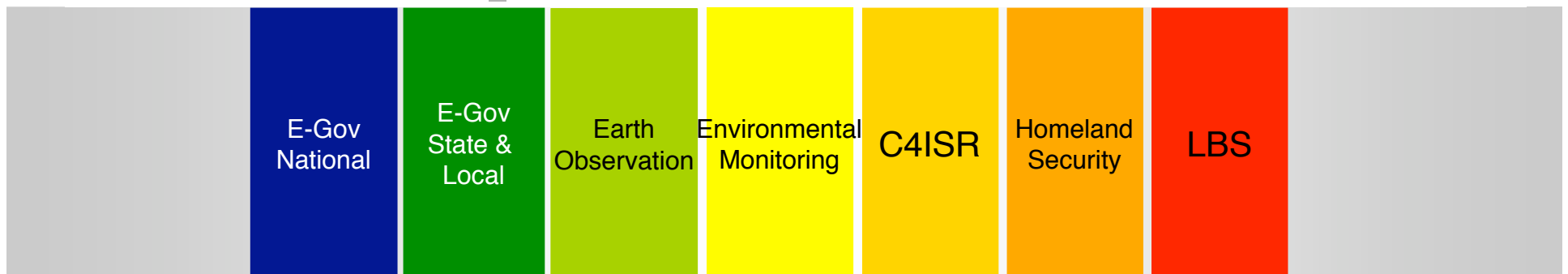


# Pioneering Spatial Interoperability

Oracle Spatial

J2EE

OGC/ISO





Hutchison 3G

[www.three.com](http://www.three.com)

The first and largest  
worldwide 3G LBS  
deployment



ORACLE®



whereonearth



Tele Atlas





# Principles of the 3 Implementation

- Massively Scalable
- Many spatial data sources
- Best of Breed Component Architecture
- Interoperability (for reduced system dependencies)
- Rich API for defining business logic
- Dynamic Portrayal



# Principles of the 3 Implementation

Massively Scalable

- Terabytes of feature data
- Millions of users
- Hundreds of location requests per second
- Hundreds of maps per second



# Principles of the 3 Implementation

Many Spatial Data Sources

- As many as 30 different datasets in Oracle
- TeleAtlas for each country
- As high fidelity as the OS MasterMap
- Terabytes of remote imagery (via WMS)
- Treating business data as geospatial objects



# Principles of the 3 Implementation

Best of Breed Component Architec

- Routing, geocoding, spatial operations, map portrayal all potentially done best by different components
- Potential need for different routing and geocoding engines by region
- Potential need for replacing components over time



# Principles of the 3 Implementation

Interoperability (Reduced System Dependence)

- Common (OGC/Java) interfaces for application development
- Ability to continually develop new applications against the same basic interfaces
- Ability to remove underlying engines with limited system impacts

# Principles of the 3 Implementation

Rich API for defining business logic

- Ability to 'chain' together multiple location, spatial and portrayal processes to support tailored use cases.
- Ability to iteratively define additional complex business logic for new applications.
- Ability to define complex/tailored portrayals of business logic results.

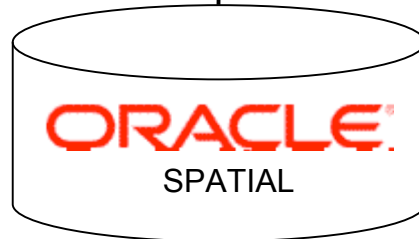
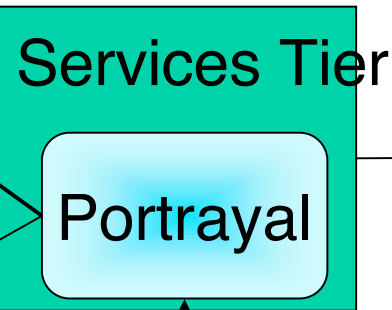
# Principles of the 3 Implementation

## Dynamic Portrayal

SVG  
GIF, JPEG, PNG, WBMP  
text, html, xml  
Java objects

Rules

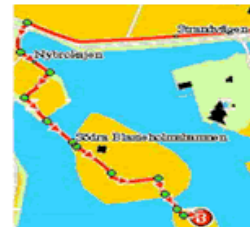
Distributed  
Symbol  
Libraries



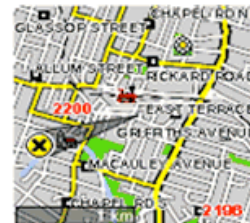
# Principles of the 3 Implementation Dynamic Portrayal



Hong Kong



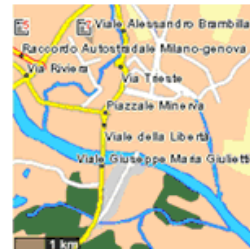
Sweden



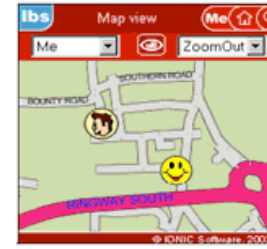
Australia



UK



Italy



Personal Icons



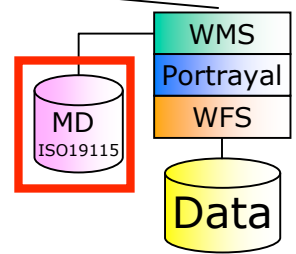
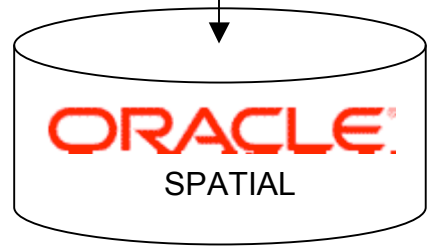
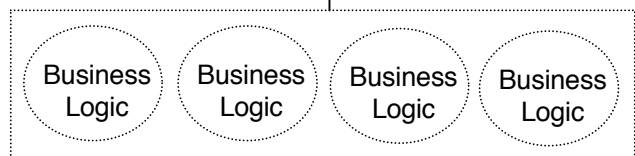
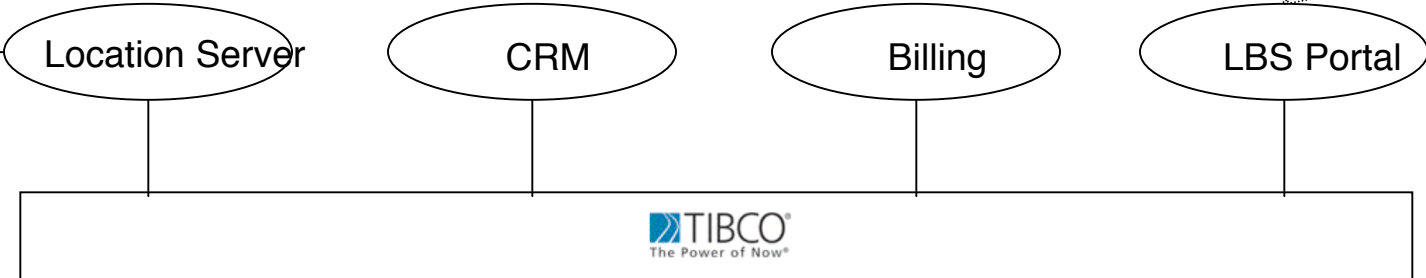
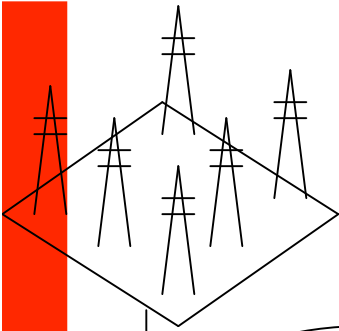
Anti-clash



Ortho Imagery



3D Portrayal





# IONIC's Lessons Learned

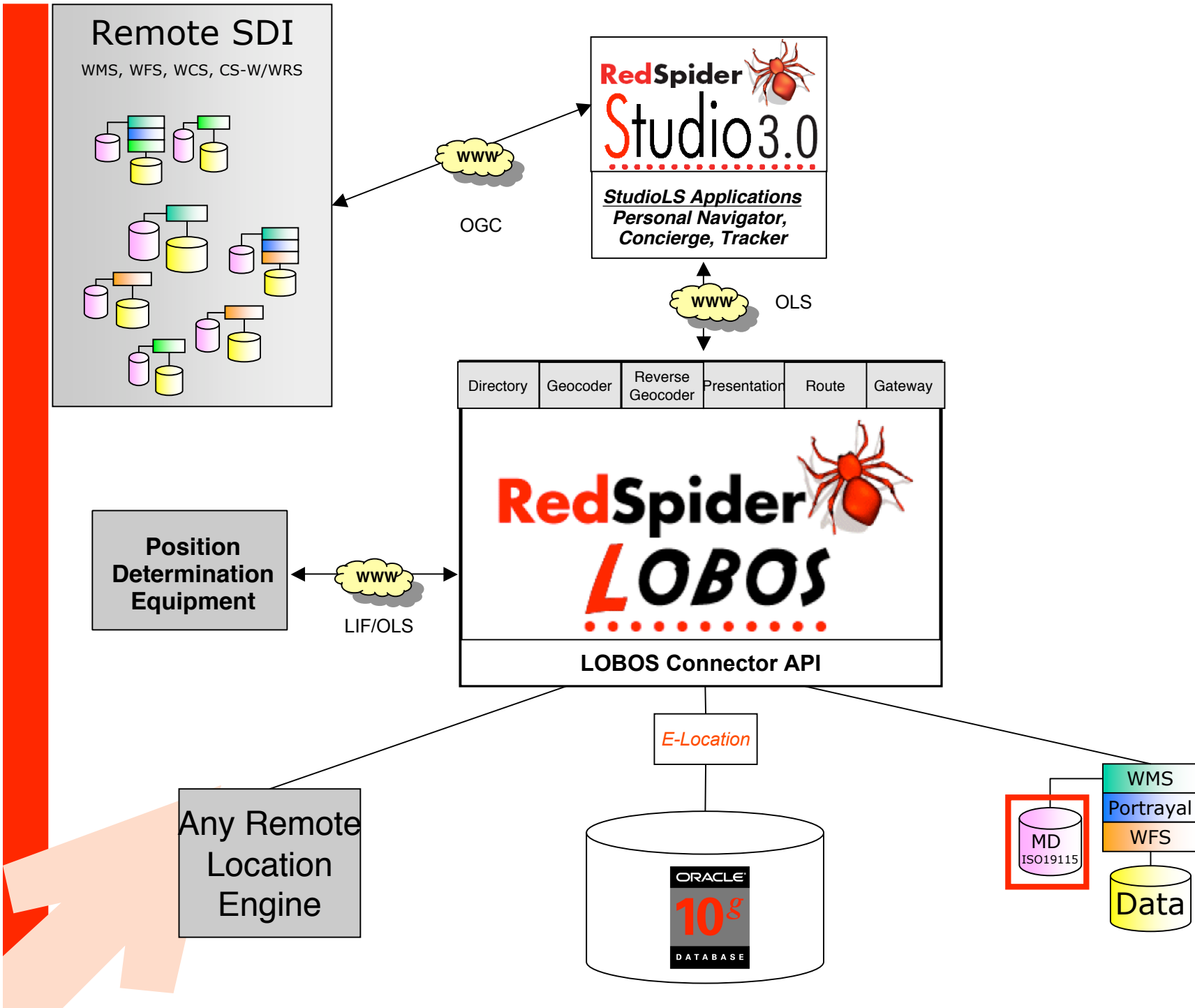
- We learned what it meant to be deployed on huge server farms with distributed, clustered J2EE application servers with huge redundancy, fail-over, scalability, and logging on a large and segmented Oracle spatial database and other legacy infrastructure.
- Having street data twice (in Telcontar binaries and Oracle Spatial) was one to many.
- Business logic developed during '3' deployment was standard and reusable
- Emerging OGC/OpenLS web services had value



**LOBOS = LBS + OLS + OGC + IONIC**

**LOBOS = Location Based OGC Solution**

**IONIC's RedSpider LOBOS is a Product  
Specifically Designed to Deploy Interoperable  
Location-Based Business Solutions**





Thank you for  
your attention



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