

Using OBIEE for Location-Aware Predictive Analytics

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Disclaimer

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



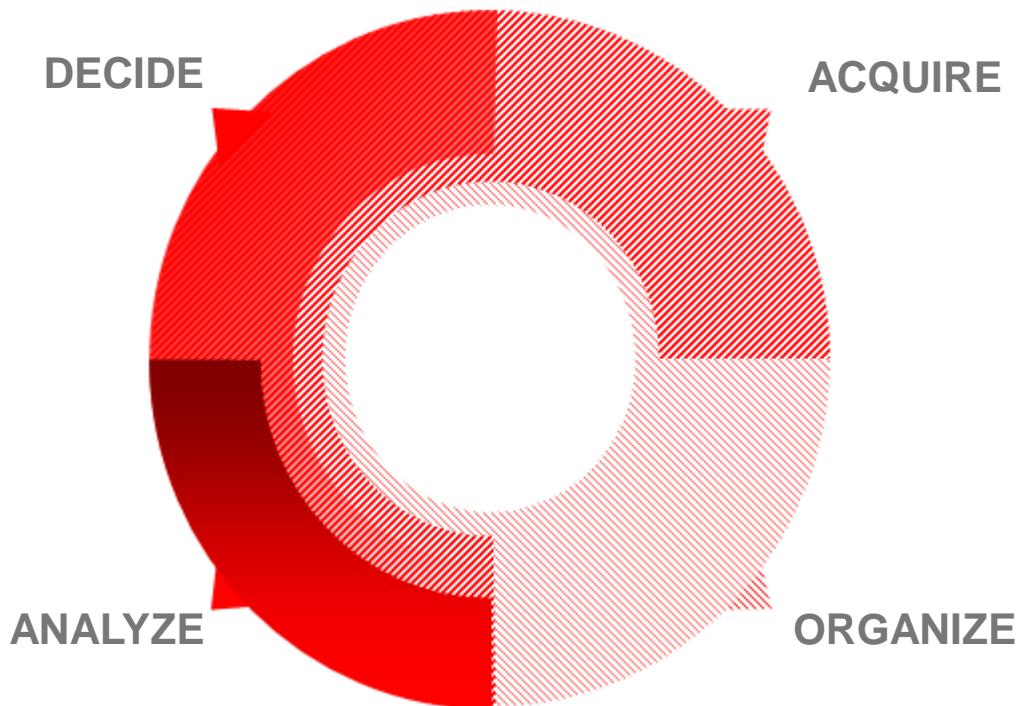
Agenda

- **Introduction**
- **Map visualization, spatial and predictive analytics**
- **Overview of latest MapViewer & Oracle Spatial and Graph 12c features**
- **Q&A**



INTRODUCTION

From Data to Actionable Insights



Make
Better
Decisions

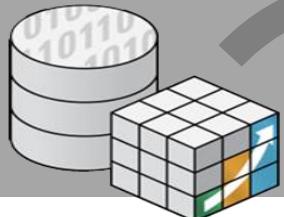


Business Analytics & Unstructured Data

Oracle Business Intelligence

Best platform for integrated ROLAP and MOLAP

BI Server + Essbase
Common Enterprise
Information Model



Oracle Endeca Information Discovery

Best platform for Unstructured Analytics

Endeca Server
Hybrid Search/Analytical Database
Flexible Data Model

Structured Data

OLTP & ODS
Systems



Enterprise Applications
(Oracle, SAP, Others)



Data Warehouse
& Data Marts



Websites



Content Systems,
Files, Email



Unstructured Data

Social Media



Big Data



Big Data

|Discover|



CEP

Oracle
Big Data Appliance

cloudera
hadoop

Oracle
Big Data
Connectors

InfiniBand

Oracle
Exadata

X

Acquire | Organize | Analyze | Decide



InfiniBand



Oracle
Exalytics

Oracle
Real-Time
Decisions



Endeca
Information
Discovery

MAP VISUALIZATION, SPATIAL AND PREDICTIVE ANALYTICS



Spatial Analytics with Oracle

Oracle Spatial and Graph Option*

- Part of Oracle Database
- Advanced Spatial Analytics
 - Data types, models, spatial search (containment & proximity), geocoding
- Graph Features
 - Network Data Model for utilities/transportation
 - RDF Semantic Graph for social applications
- Part of Oracle applications, tools, engineered systems

* Formerly Oracle Spatial option (renamed 7/12)

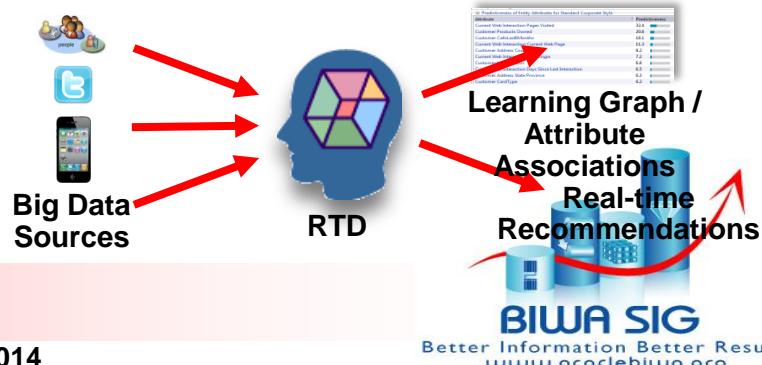
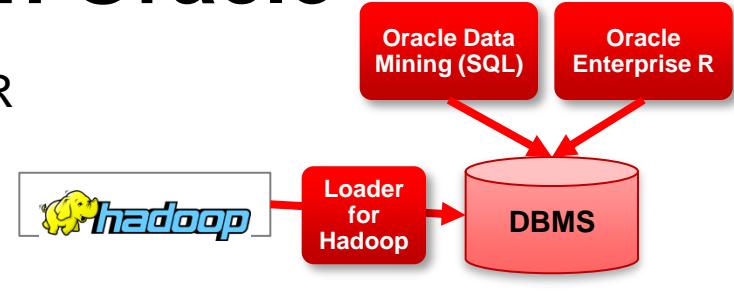
The collage is divided into three main sections:

- Location-Enabled Business Applications:** Shows various business intelligence dashboards and maps, including a map of the United States with state-level data, a grid-based analysis interface, and a map with a legend for Geocoding, Spatial searches, Routing, and Mapping.
- Specialist Geospatial Applications:** Shows detailed engineering and surveying tools, including a 3D model of a road network, a 3D point cloud visualization, and a diagram of fundamental concepts like "Geometry", "Topology", "GeoRaster", "Networks", "LRS", "Geodetic", "Long Transactions", and "3D (Point clouds, LIDAR)".
- Fundamental Concepts and "building blocks":** A diagram illustrating the Oracle Graph model with nodes like "Prime_M", "Subprime_M", "Customer", "Employee", "Document", "Lender", "Lending_Institution", "Mortgage", "Interest", "Lender", and "Lending_Institution", connected by edges representing relationships like "Customer", "Employee", "Document", "Lender", "Lending_Institution", "Mortgage", "Interest", and "Lender".

At the bottom right, there is a logo for BIWA SIG (Better Information Better Results) with the website www.oraclebiwa.org.

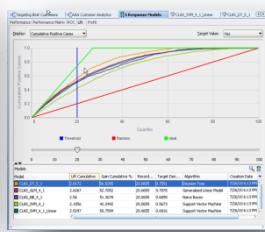
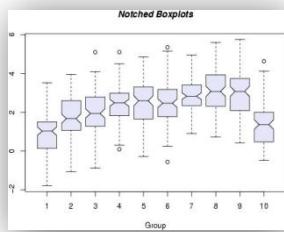
Predictive Analytics with Oracle

- In-database analytics – SQL and Enterprise R
 - Use Big Data Connectors to combine Hadoop and DBMS data for deep analytics
 - Re-use SQL skills to develop deep analytics
 - Or re-use R skills, but on “Big Data” instead of RAM-scale data
- Deep analytics on data within Hadoop using Oracle R Connector for Hadoop
 - Re-use R skills to harness the power of Hadoop
 - Target unstructured data within HDFS
- Oracle Real Time Decisions
 - Predictive learning of relationships between knowledge concepts and business events



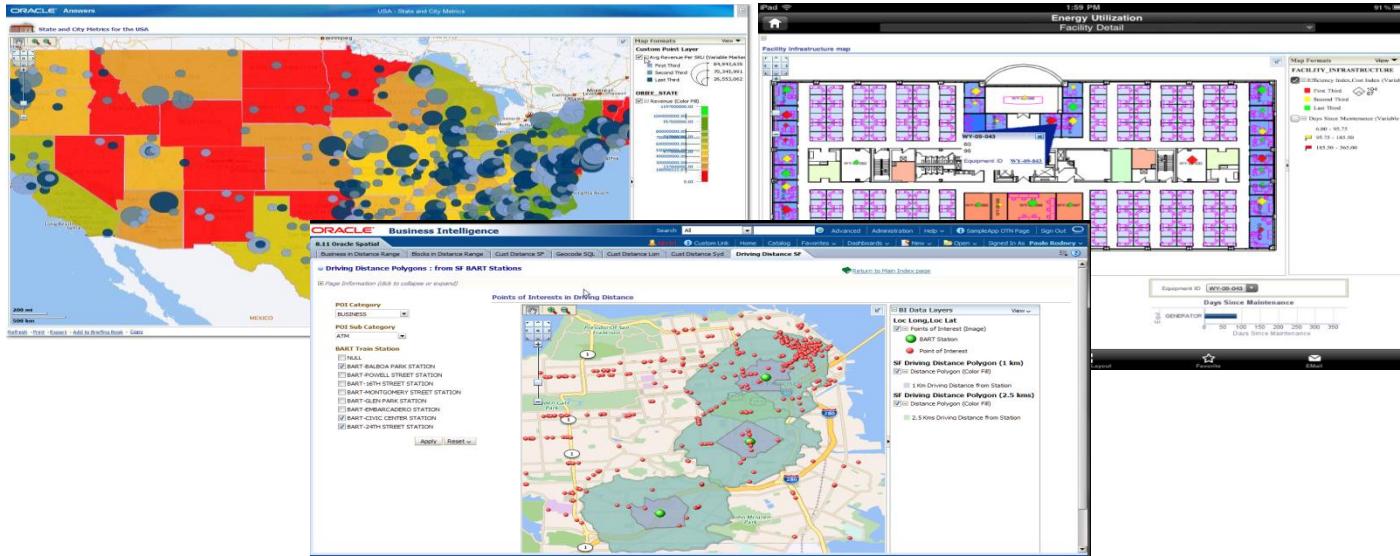
Oracle Advanced Analytics

Advanced In-Database Predictive Analysis



- Comprehensive predictive analytic platform built inside database
 - Data mining, text mining
 - Statistical analysis (based on R)
 - Built for data analysts / scientists
- Scalable & parallel: analyzes huge volumes of data
- Tightly integrated with SQL, enabling broad usage
- Minimizes expensive data movement
- Increases security & performance
- Works inside Exadata and Big Data Appliance





Geo-Spatial Visualizations & Predictive Analytics DEMONSTRATIONS



Oracle MapViewer – 11.1.1.7 Capabilities

- Rich client interactivity – HTML5 API
- Map data editing
- 3rd party data sources
- Support for online map services (eg HERE)
- Refreshed Web console
- Separate MVDEMO samples app
- A glassfish based quick start kit

10am Thurs session here – more BI & Mapping (Chris Hughes – Oracle)



Oracle Spatial and Graph

Dramatic Performance and Simplified Application Development

ORACLE®
DATABASE 12^c

Up to 100x Faster Spatial Operations

Parallel Raster Query and Processing

Extended 3D and Point Cloud Support

Network Data Model Feature Modeling

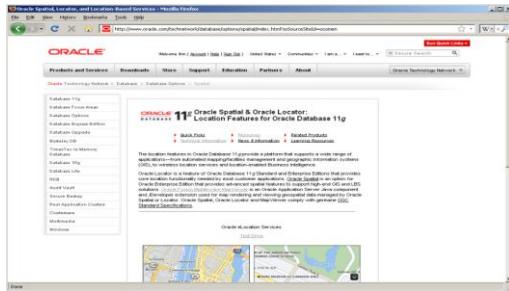
Multi-modal routing

Large Scale Drive Time Analysis



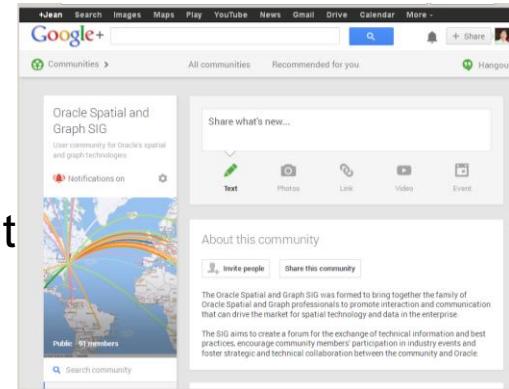
For more information

- Oracle Business Analytics: oracle.com/bi
 -  [@OracleAnalytics](https://twitter.com/OracleAnalytics), [@OracleBITech](https://twitter.com/OracleBITech)
 -  www.youtube.com/evolvingBI
- Oracle Spatial and Graph:
 - **Spatial and Graph**
www.oracle.com/technetwork/database/options/spatialandgraph
 - **Oracle Fusion Middleware MapViewer**
www.oracle.com/technetwork/middleware/mapviewer/
demos, downloads, white papers, case studies & more
- Sample Application
 - <http://www.oracle.com/technetwork/middleware/bi-foundation/obiee-samples-167534.html>



Join the community

- **Oracle Spatial & Graph Special Interest Group:**
Connect and exchange knowledge with the user community
 - Talk to board members (Steve Lytle - Chair) tonight after this session
 - Join our groups: LinkedIn, Google+, IOUG SIG
 - Visit [OTN Spatial – Community](#)
Search online for “**Oracle Spatial and Graph Community**”
 - Email oraclespatialsig@gmail.com
- **SIG 2014 Events**
 - May 19-21: Location Intelligence & Oracle Spatial Summit, Washington DC





Oracle Spatial Summit and Location Intelligence

May 19-21, 2014, Washington, DC

Join this premier training event for mapping & spatial technologies – from the Oracle product team & Spatial and Graph SIG. Attend technical talks and hands-on labs, led by Oracle experts and users

Call For Speakers Open! Submit by Feb. 1
Early Bird registration
*Complimentary registration for government attendees

www.locationintelligence.net/dc



Q&A