IOUG Spatial SIG

Geospatial Business Intelligence

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Speaker Qualifications

- Steven Pierce – Johnston McLamb Geospatial Solutions
- Steven Pierce speaks regularly at location intelligence conferences and Oracle Spatial user group meetings.
- Steven Pierce works with public, private and regulated sector customers to implement Oracle Spatial based solutions.
Business Intelligence

- Business Intelligence data is important
- The spatial component of BI data is often underutilized
- There have been barriers to mapping BI data
- Those barriers have been overcome
Business Intelligence Reporting

- Many users
- Many reports
- Potentially many geography tables
- Users can create new reports
Business Intelligence Mapping

• Reportable = Mappable
• Must work with any new reports
• User should not have to do anything to make a report mappable
• No connectivity to data warehouse
Traditional Mapping

- Normally content is static
- Often slow
- Interactivity is limited
- Requires extensive development
Traditional Mapping

- Somewhat static, but we need something dynamic
- Often slow, and we have lots of users
- Interactivity is limited, and the interface must be rich
- Requires extensive development, and we did not have time
Solution – Oracle MapViewer

- Provides dynamic data interface
  - NSDP
- Highly performant
  - 100’s of users per server
- Rich client AJAX library
- Requires little development to integrate
  - Primarily Javascript
Solution

- Oracle Maps Non-Spatial Data Provider
  - NSDP for short
- Think Attribute to Spatial Data Joiner (ASDJ)
- Can join any data to a MapViewer theme
- Can join attribute data from any source
- Dynamic styling based on non-spatial attributes
Architecture

BI Reporting Server

Oracle Spatial Database

Oracle Application Server 10.1.3

Parse XML

Map Request

Non-Spatial Data Provider

Oracle MapViewer 10.1.3

BI Data Warehouse

Generate Map

XML report

Oracle MapViewer

Open World

Oracle Application Server 10.1.3
Advantages of NSDP

- No need to add attribute columns to spatial tables
- No need to add spatial columns to attribute tables
- No more views to visualize non-spatial data
- In fact, there’s no reason attribute data needs to be in the database at all
Demonstration
When to use a Non-Spatial Data Provider

- Data source is a web service
- Source database is not directly accessible (Security)
- To avoid data replication
- Maps for scheduled reports
Items Learned in this Session

- Business Intelligence Mapping used to be hard
- Now, Business Intelligence Mapping is possible
- Oracle MapViewer provides a native interface for joining Non-Spatial data to Spatial data
- A NSDP can be used for more than just BI reporting
Questions?
Thank You!
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