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April 2010

Oracle Spatial User Conference

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SPATIAL

April 2010

Oracle Spatial

User Conference



Oracle Spatial User Conference

April 29, 2010

Hyatt Regency Phoenix

Phoenix, Arizona USA

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Integration of Oracle Spatial and MapViewer with Oracle Business Intelligence

Agenda

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- OBIEE-Spatial demonstration
- Technologies involved
- Pervasive OBIEE-Spatial integration
 - ETL into data warehouse
 - Logical Business Model
 - Ad hoc analysis
 - Map integration
- Methodology walkthrough
- Summary and Q&A

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April 2010

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User Conference

Demo

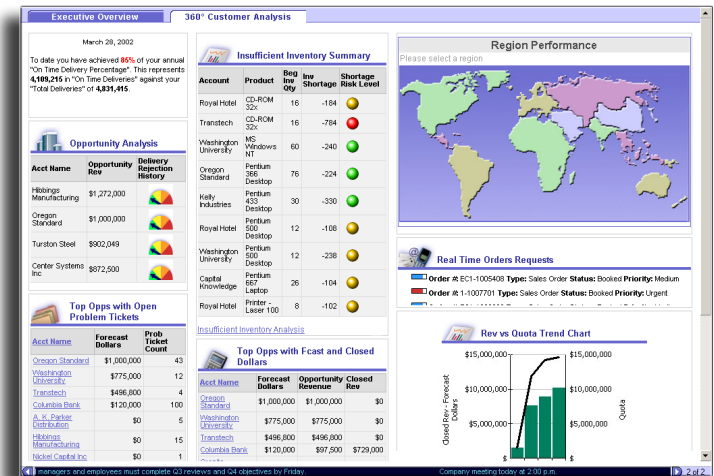
Business Intelligence (BI)



Source
Systems



BI Server



Information delivery

Oracle Business Intelligence Enterprise Edition (OBIEE+)

**Data
Integration**



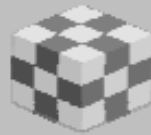
**Ad-hoc
Analysis**



**Interactive
Dashboards**



**Essbase
Analytics**



**Reporting &
Publishing**



**Proactive
Detection
and Alerts**



**Disconnected
& Mobile
Analytics**



**MS Office
& Outlook
Integration**



Common Enterprise Information Model

Integrated Security, User Management, Personalization

Multidimensional Calculation and Integration Engine

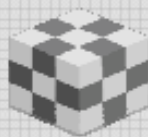
Intelligent Request Generation and Optimized Data Access Services



**OLTP & ODS
Systems**



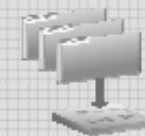
**Data Warehouse
Data Mart**



Essbase



**SAP, Oracle
PeopleSoft, Siebel,
Custom Apps**



**Files Excel
XML**



**Business
Process**

Oracle Business Intelligence Enterprise Edition (OBIEE+)



Common Enterprise Information Model

Integrated Security, User Management, Personalization

Multidimensional Calculation and Integration Engine

Intelligent Request Generation and Optimized Data Access Services



Oracle Business Intelligence Enterprise Edition (OBIEE+)

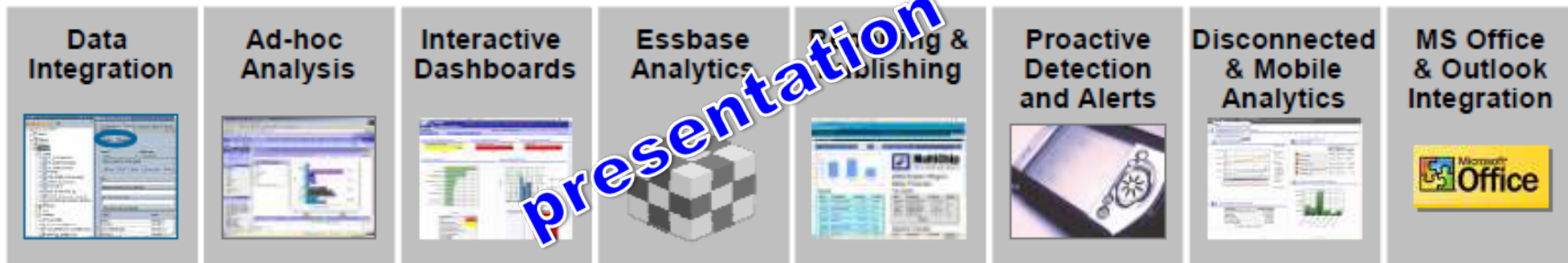


Common Enterprise Information Model

Integrated Security, User Management, Personalization
 Multidimensional Calculation and Integration Engine
 Intelligent Request Generation and Optimized Data Access Services



Oracle Business Intelligence Enterprise Edition (OBIEE+)



Common Enterprise Information Model

Integrated Security, User Management, Personalization

Multidimensional Calculation and Integration Engine

Intelligent Request Generation and Optimized Data Access Services



Location Integrations

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Oracle Spatial

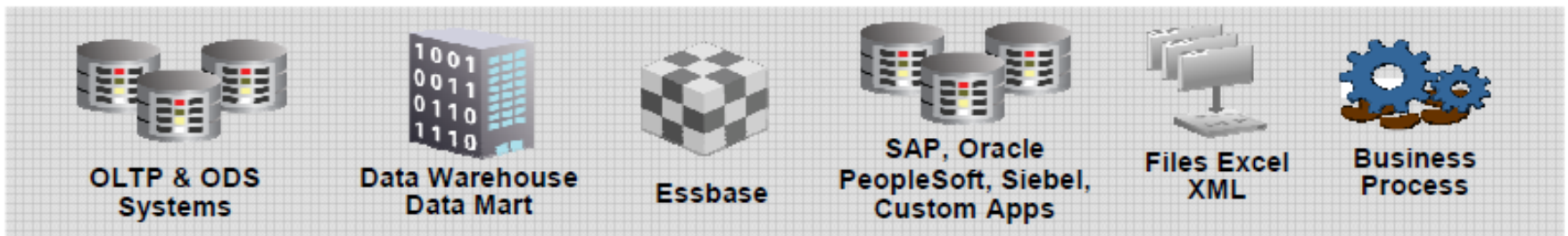


Common Enterprise Information Model

Integrated Security, User Management, Personalization

Multidimensional Calculation and Integration Engine

Intelligent Request Generation and Optimized Data Access Services



Location Integrations

Data Integration



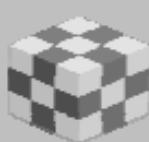
Ad-hoc Analysis



Interactive Dashboards



Essbase Analytics



Reporting & Publishing



Proactive Detection and Alerts



Disconnected & Mobile Analytics



MS Office & Outlook Integration



Common Enterprise Information Model

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OLTP & ODS
Systems



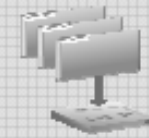
Data Warehouse
Data Mart



Essbase



Oracle
PeopleSoft, Siebel,
Custom Apps



Files Excel
XML



Business
Process

geospatial data
geoprocessing

Location Integrations



Common Enterprise Information Model

Integrated Security, User Management, Personalization

Multidimensional Calculation and Aggregation Engine

Intelligent Request Generation, Optimized Data Access Services

geospatial integration
geospatial data geoprocessing



Location Integrations

location-based queries
map visualization



Common Enterprise Information Model

Integrated Security, User Management, Personalization

Multidimensional Calculation and Aggregation Engine

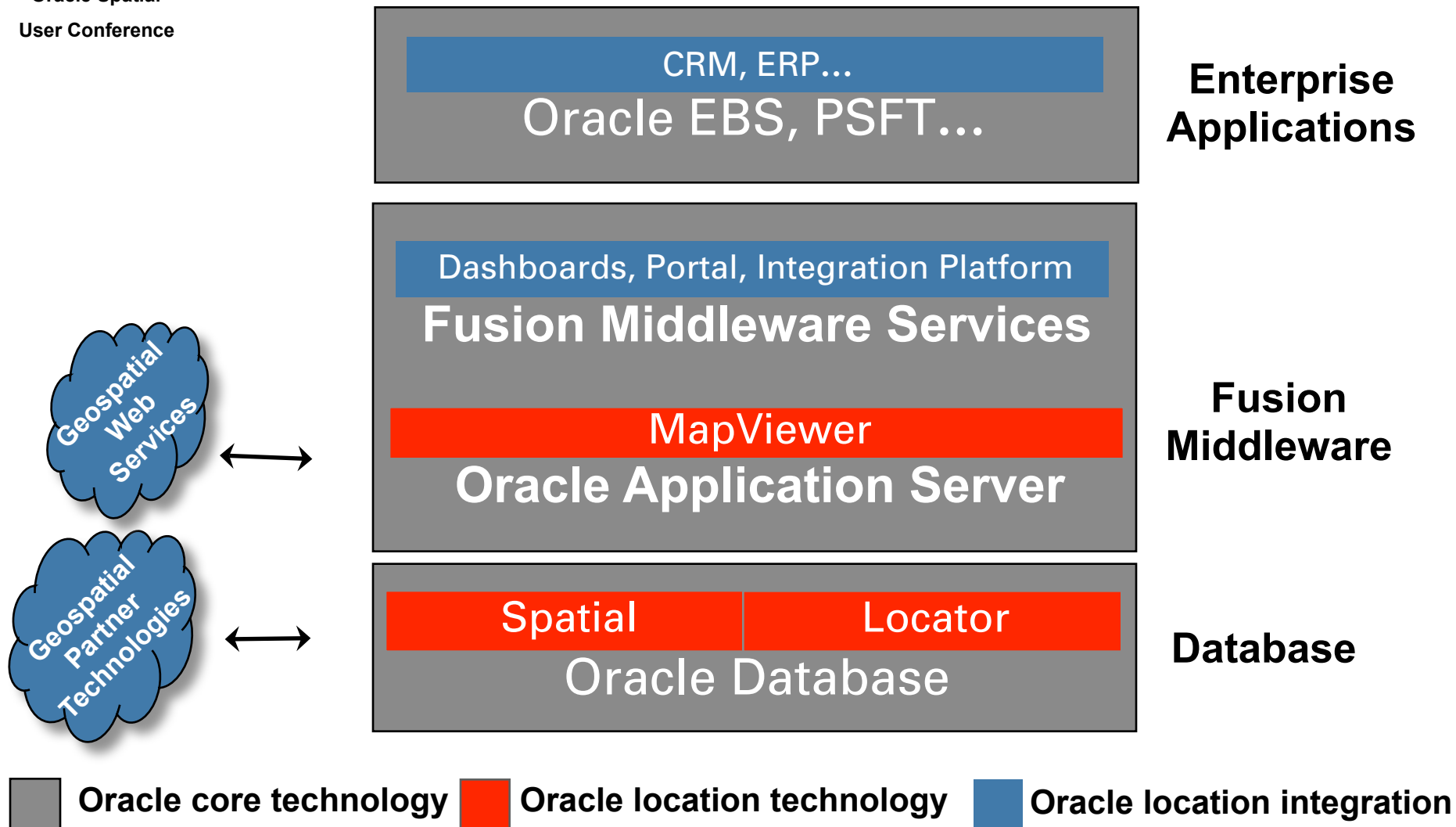
Intelligent Request Generation, Optimized Data Access Services

geospatial
integration



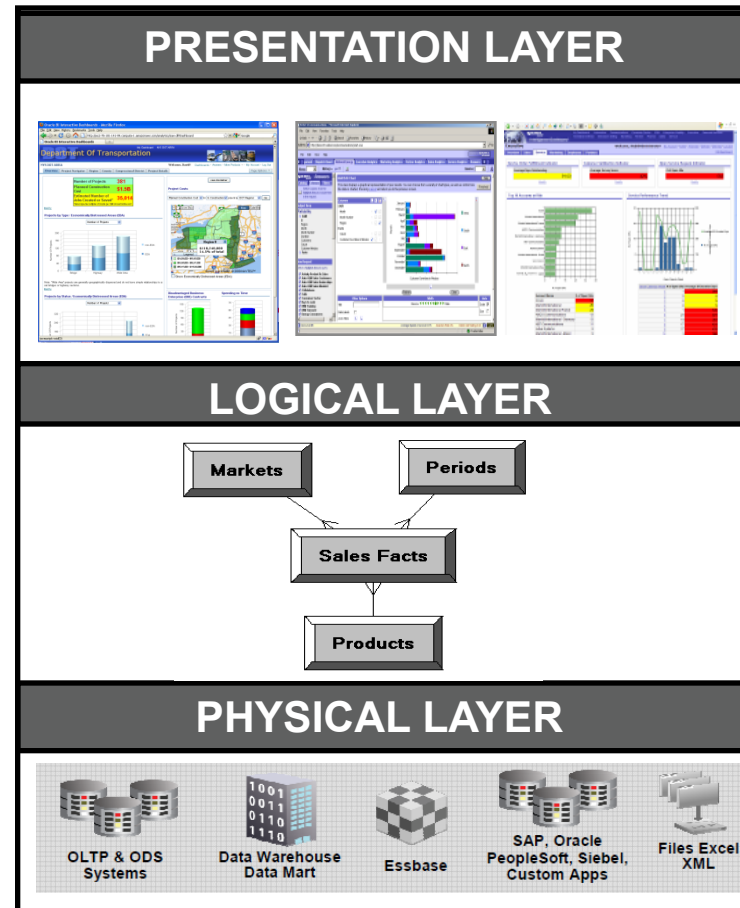
geospatial data
geoprocessing

Oracle Location Features



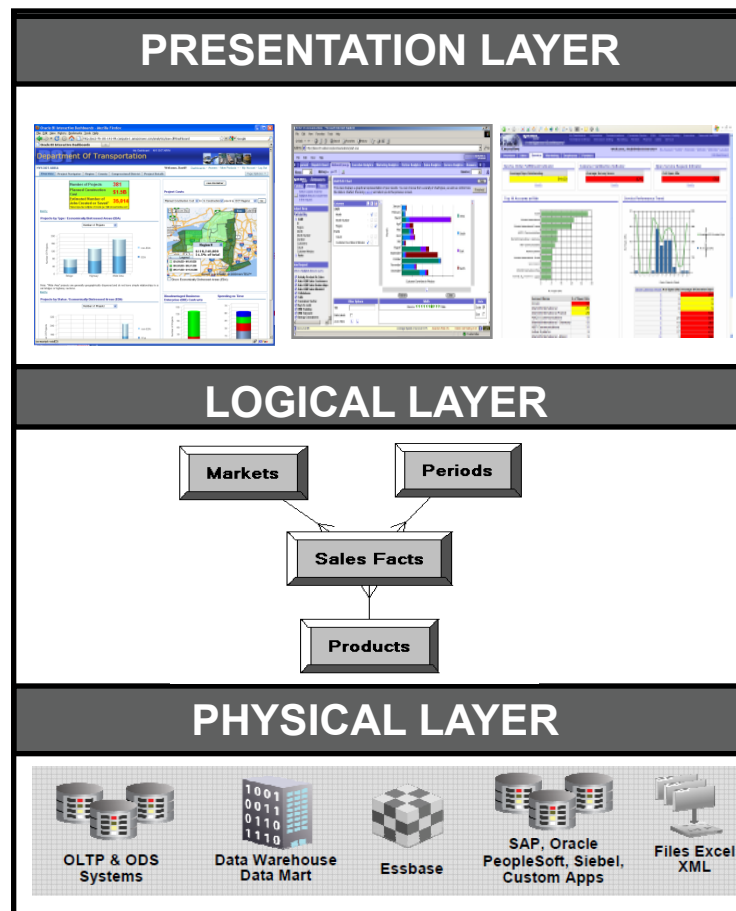
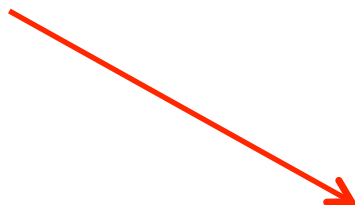
Integration at All Levels

Oracle Business Intelligence Enterprise Edition



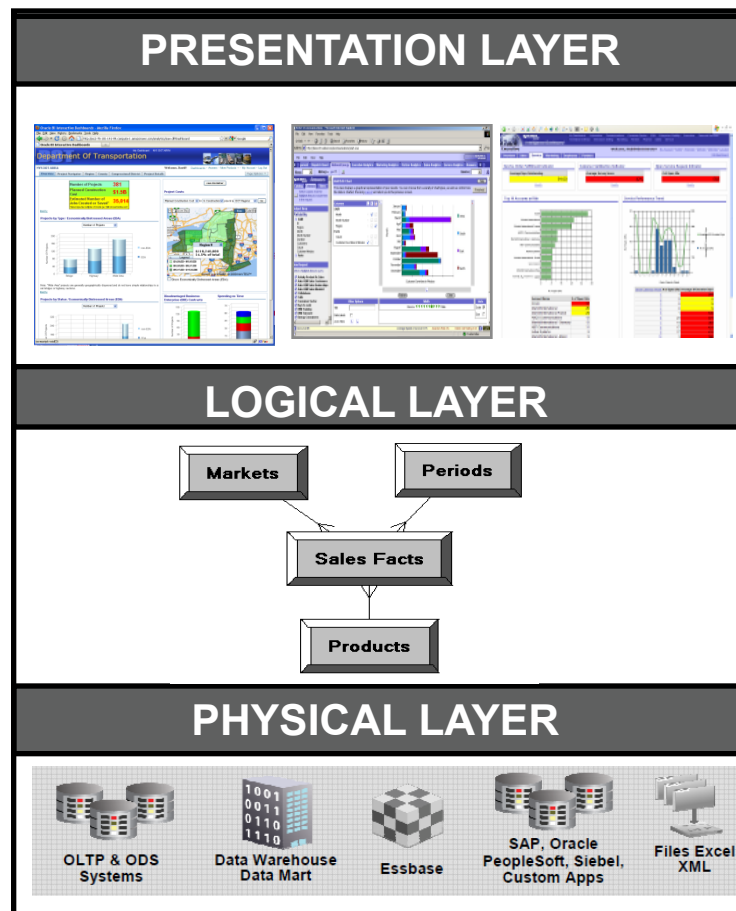
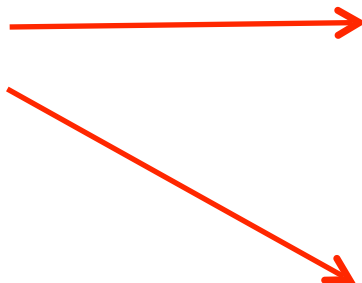
Integration at All Levels

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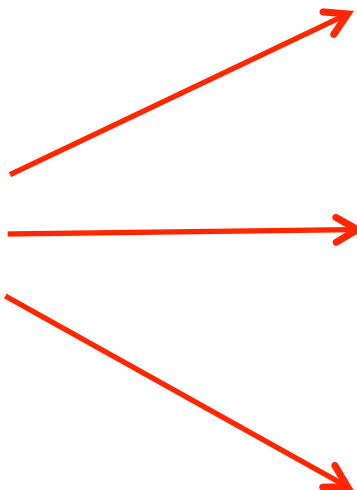
Integration at All Levels

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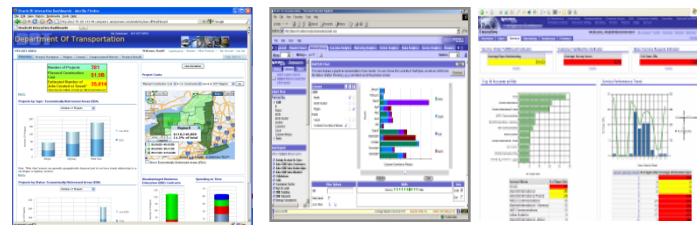


Integration at All Levels

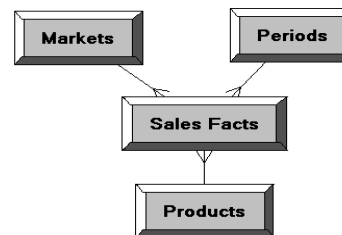
Oracle Business Intelligence Enterprise Edition



PRESENTATION LAYER



LOGICAL LAYER

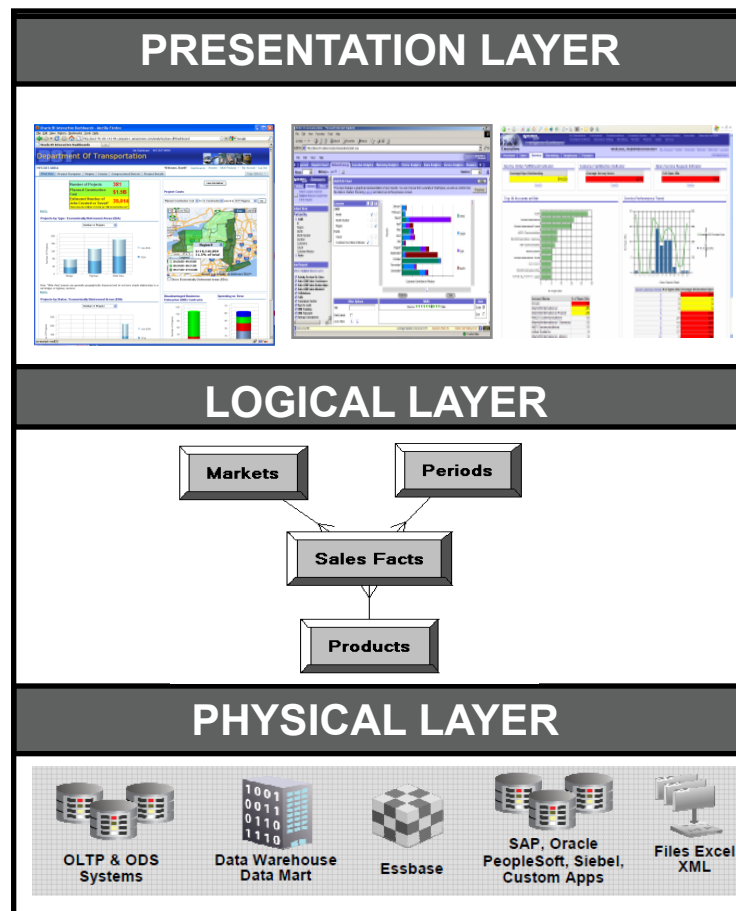
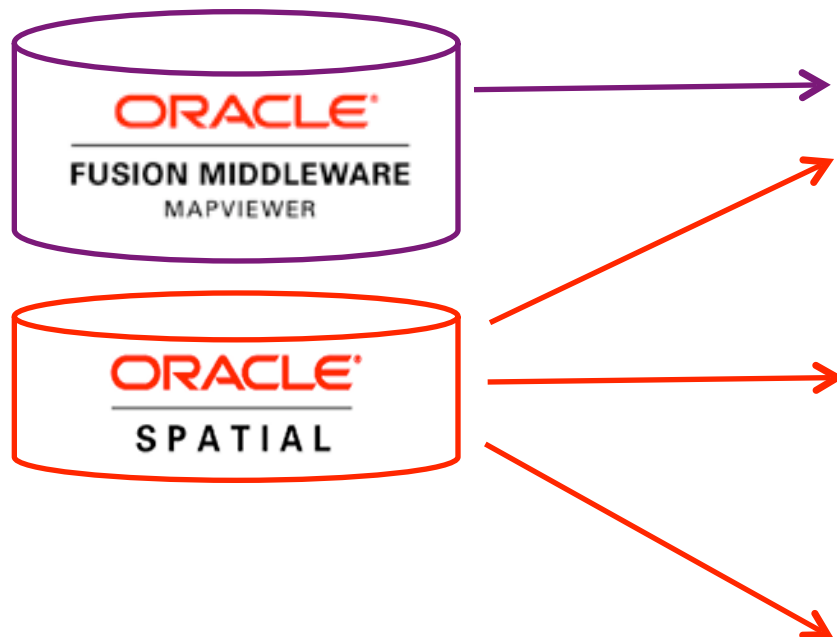


PHYSICAL LAYER



Integration at All Levels

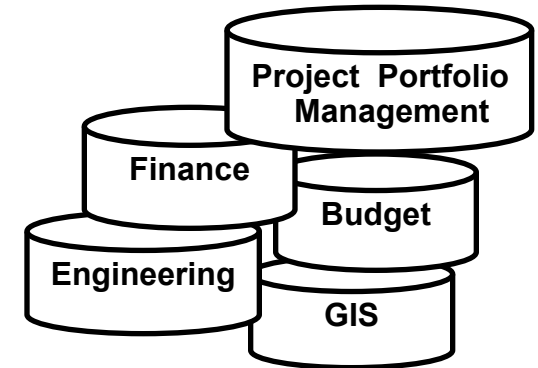
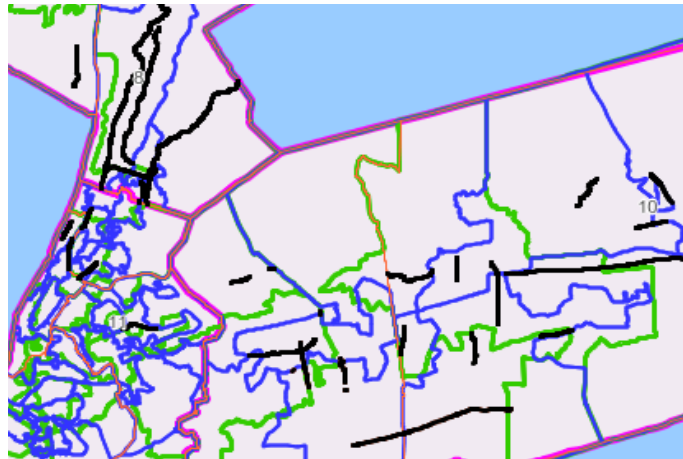
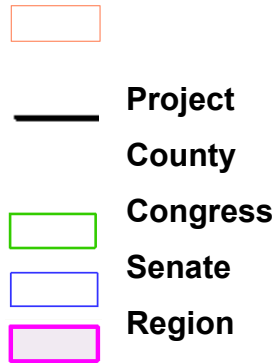
Oracle Business Intelligence Enterprise Edition



Business Requirement



Stakeholders need project reports and analyses from *their* perspective

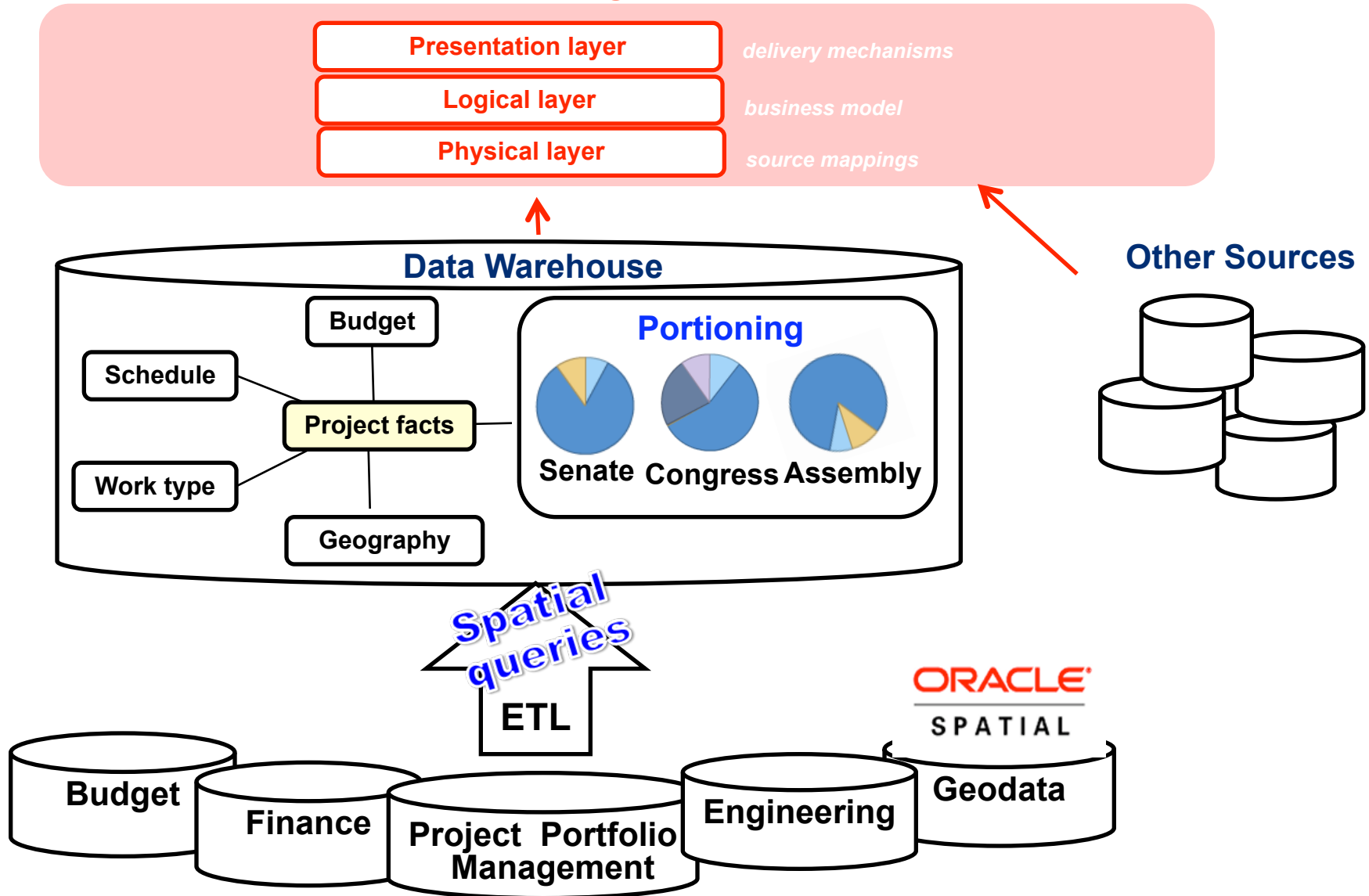


Projects $\longleftrightarrow$ Stakeholder geographies

many many

Spatial Solution

Oracle Business Intelligence Enterprise Edition+



Demo and Walkthrough

Business Requirement



Stakeholders require detailed and summarized proximity of construction to conservation areas



Proximity...

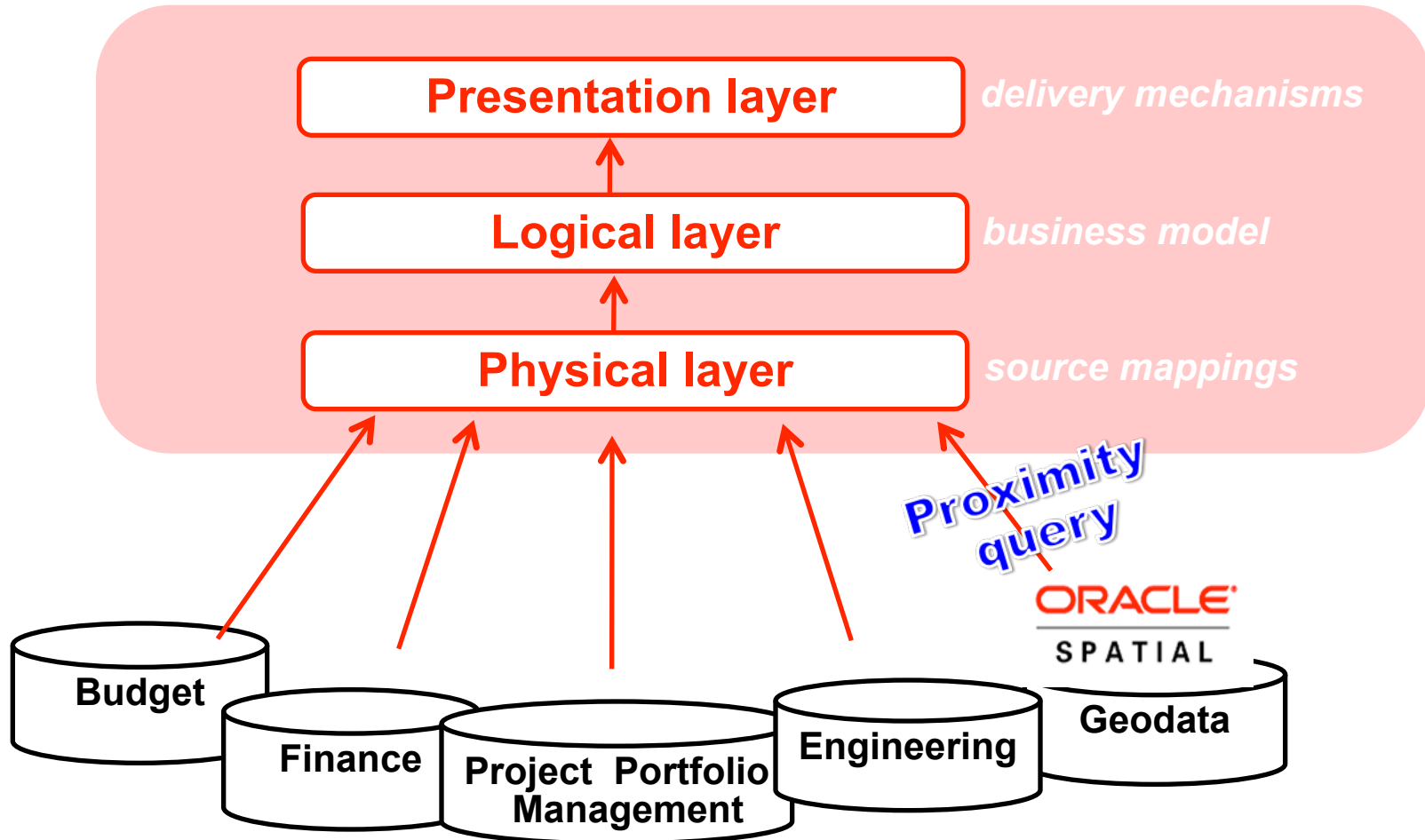
... will not be available in source data

... must be integrated with other data sources

... will be needed by many BI users

Spatial Solution

Oracle Business Intelligence Enterprise Edition+



Demo & Walkthrough

Business Requirement



Ad hoc location analysis must be accessible by SQL savvy users



Location analysis must be...

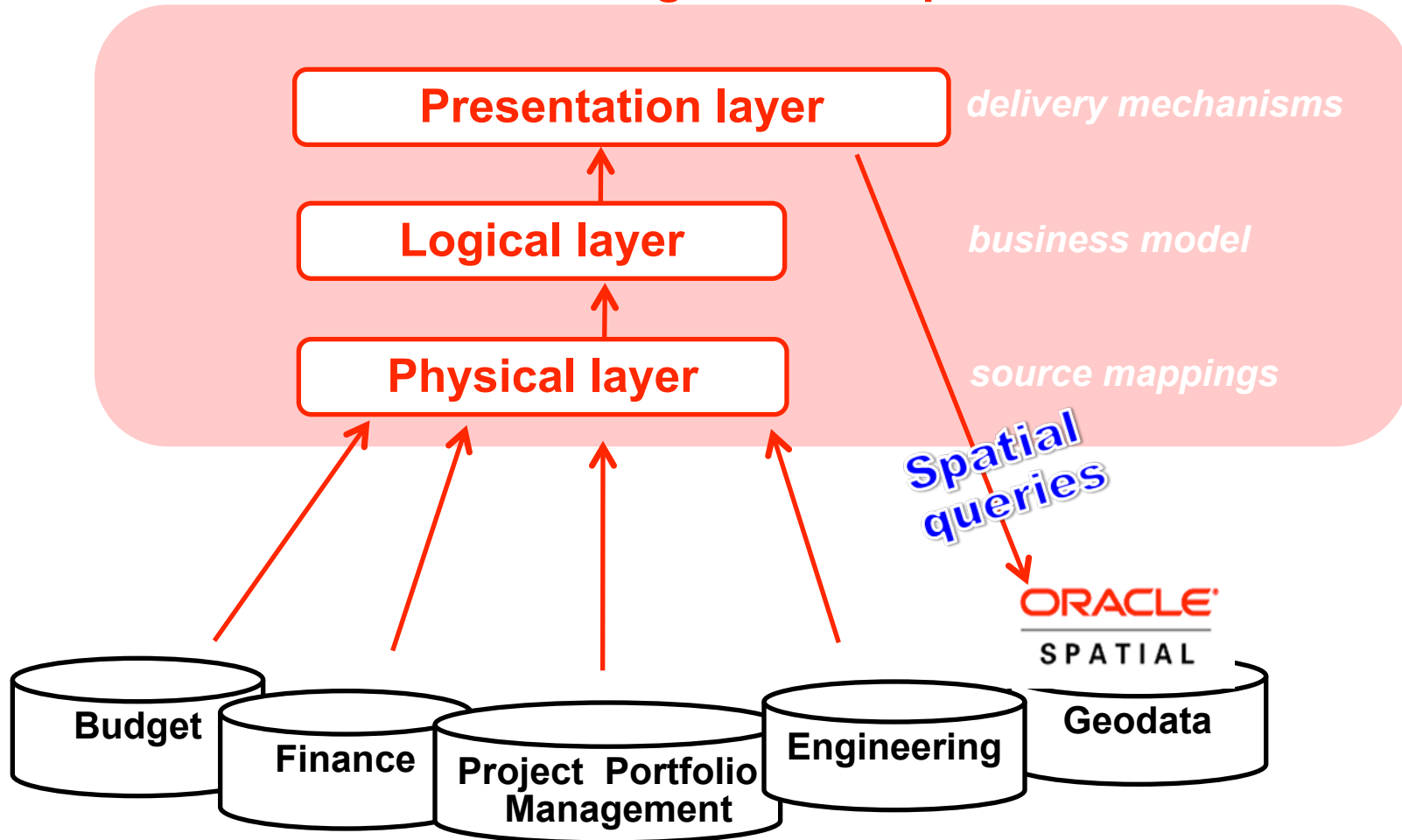
... self service

... integrated with other OBIEE ad hoc analyses

... blend seamlessly into dashboards etc

Spatial Solution

Oracle Business Intelligence Enterprise Edition+



Demo & Walkthrough

Business Requirement



We need interactive maps in our dashboards!!



Users demand...

... “Google-style” mapping

... “2-way” map integration

... seamless integration with BI analyses

Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

Presentation layer

Logical layer

Physical layer

Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

Presentation layer

Logical layer

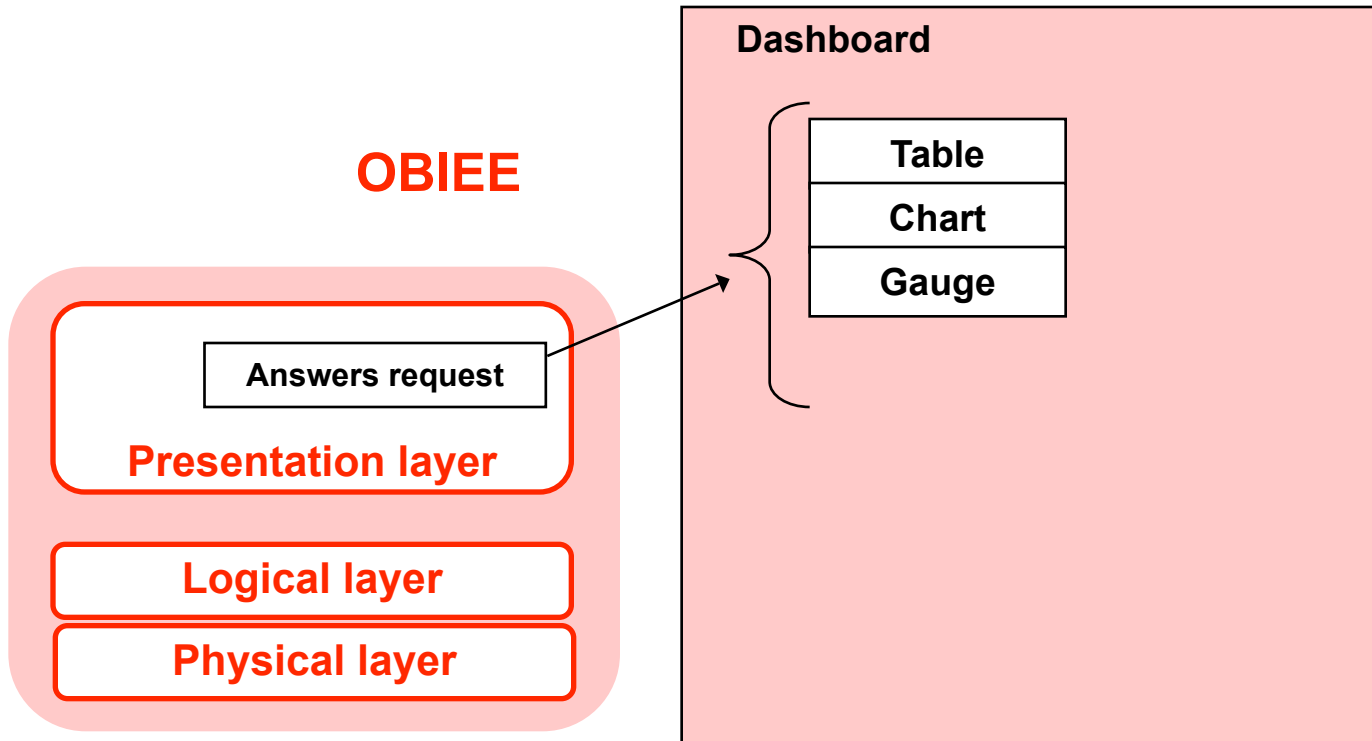
Physical layer

Dashboard

Table

Chart

Gauge



Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

Presentation layer

Logical layer

Physical layer

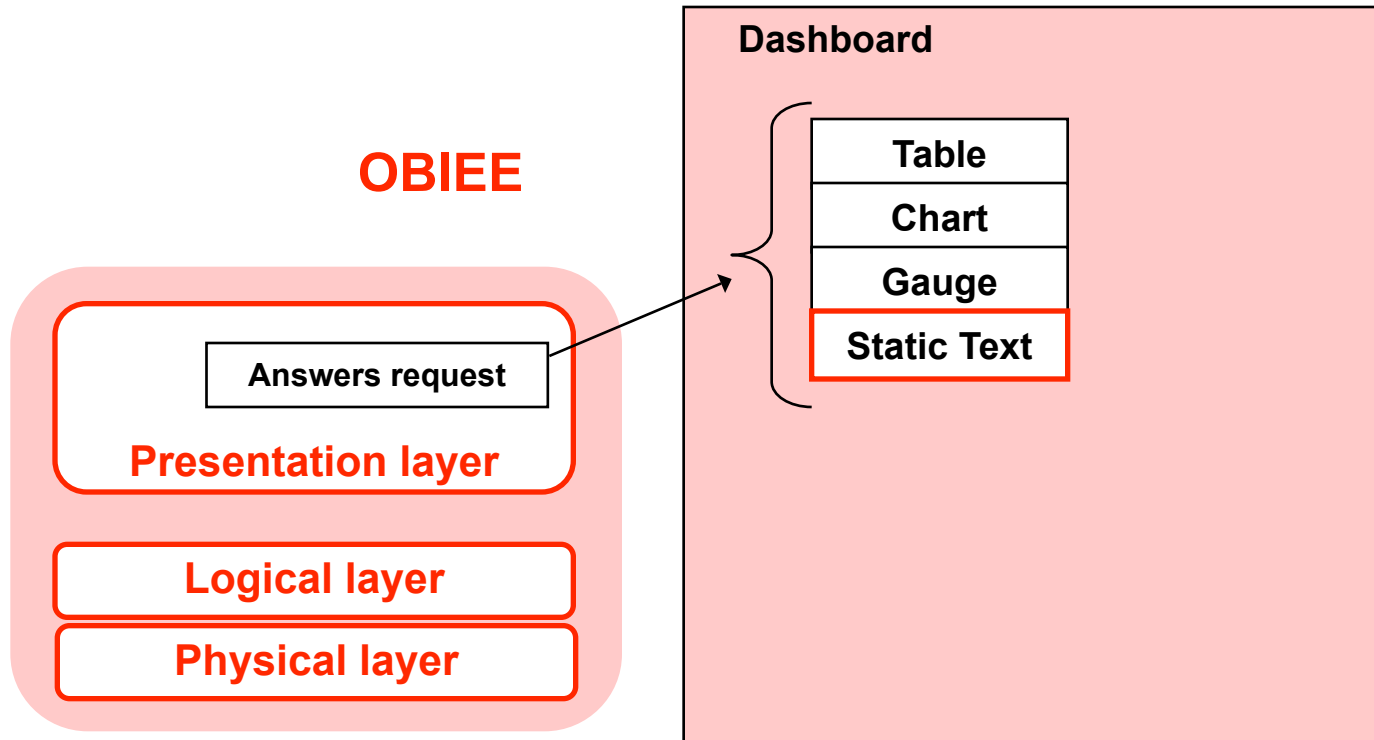
Dashboard

Table

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Gauge

Static Text



Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

Presentation layer

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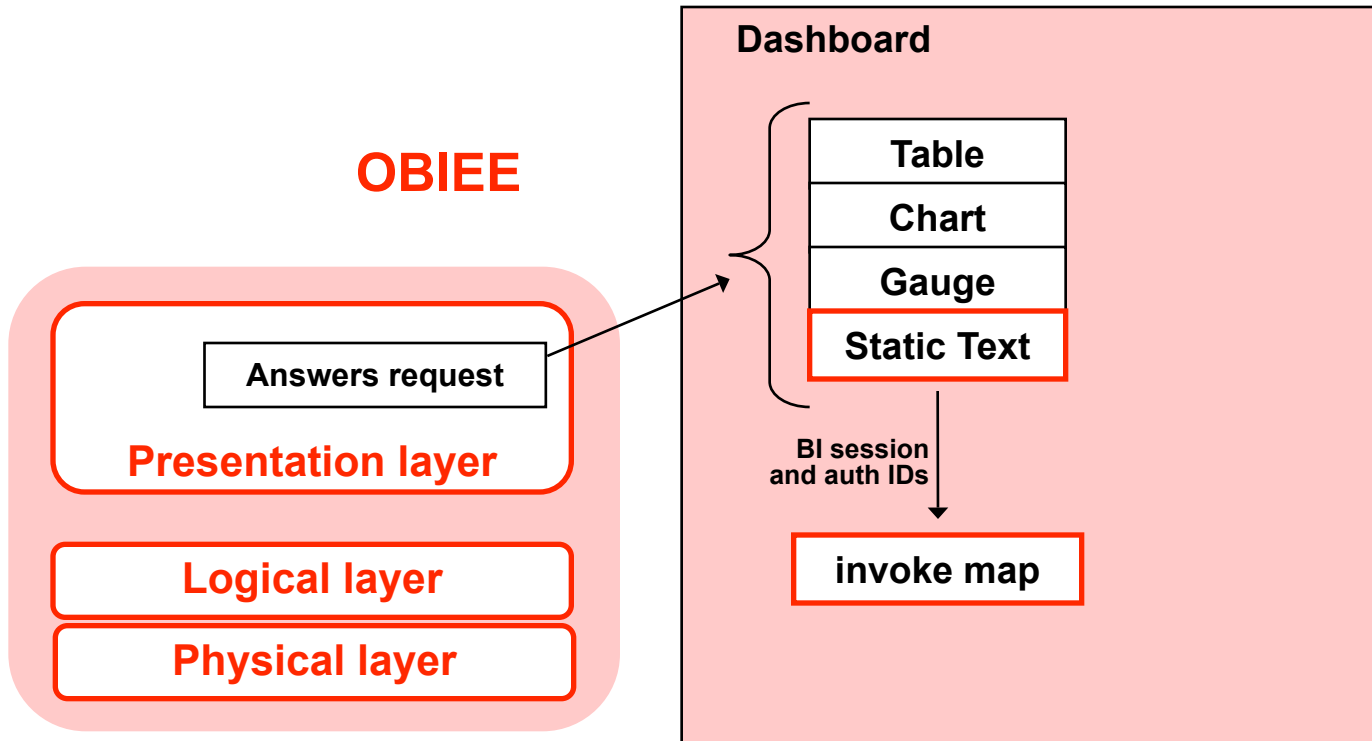
Chart

Gauge

Static Text

BI session
and auth IDs

invoke map



Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

Presentation layer

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Static Text

BI session
and auth IDs

invoke map

mapping metadata

geospatial data

Oracle Spatial

Database

Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

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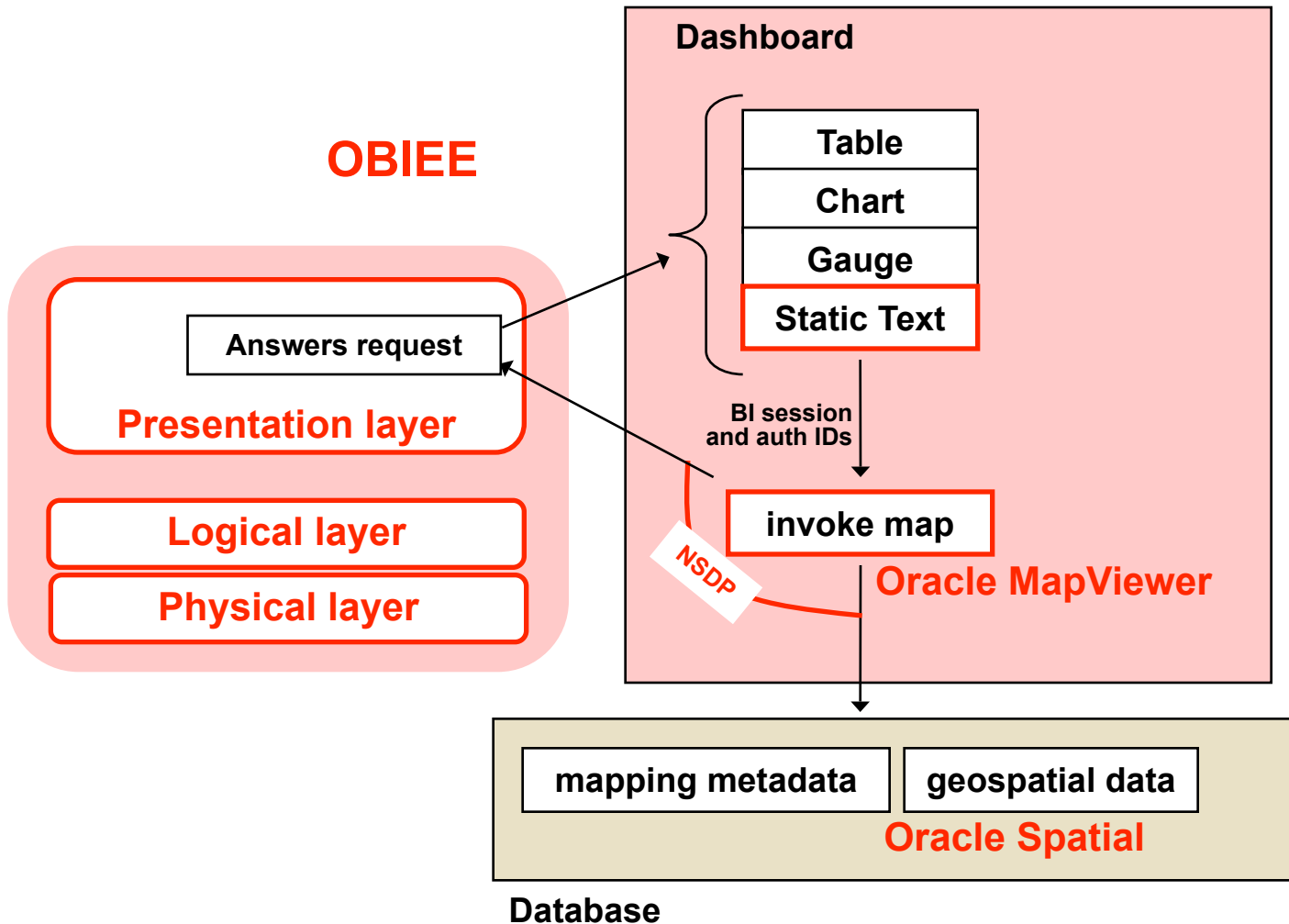
mapping metadata

geospatial data

Oracle Spatial

Database

Basic MapViewer NSDP Join to Answers Request



Basic MapViewer NSDP Join to Answers Request

OBIEE

Answers request

Presentation layer

Logical layer

Physical layer

Dashboard

Table

Chart

Gauge

Static Text

Map tied to analytics

BI session
and auth IDs

invoke map

NSDP

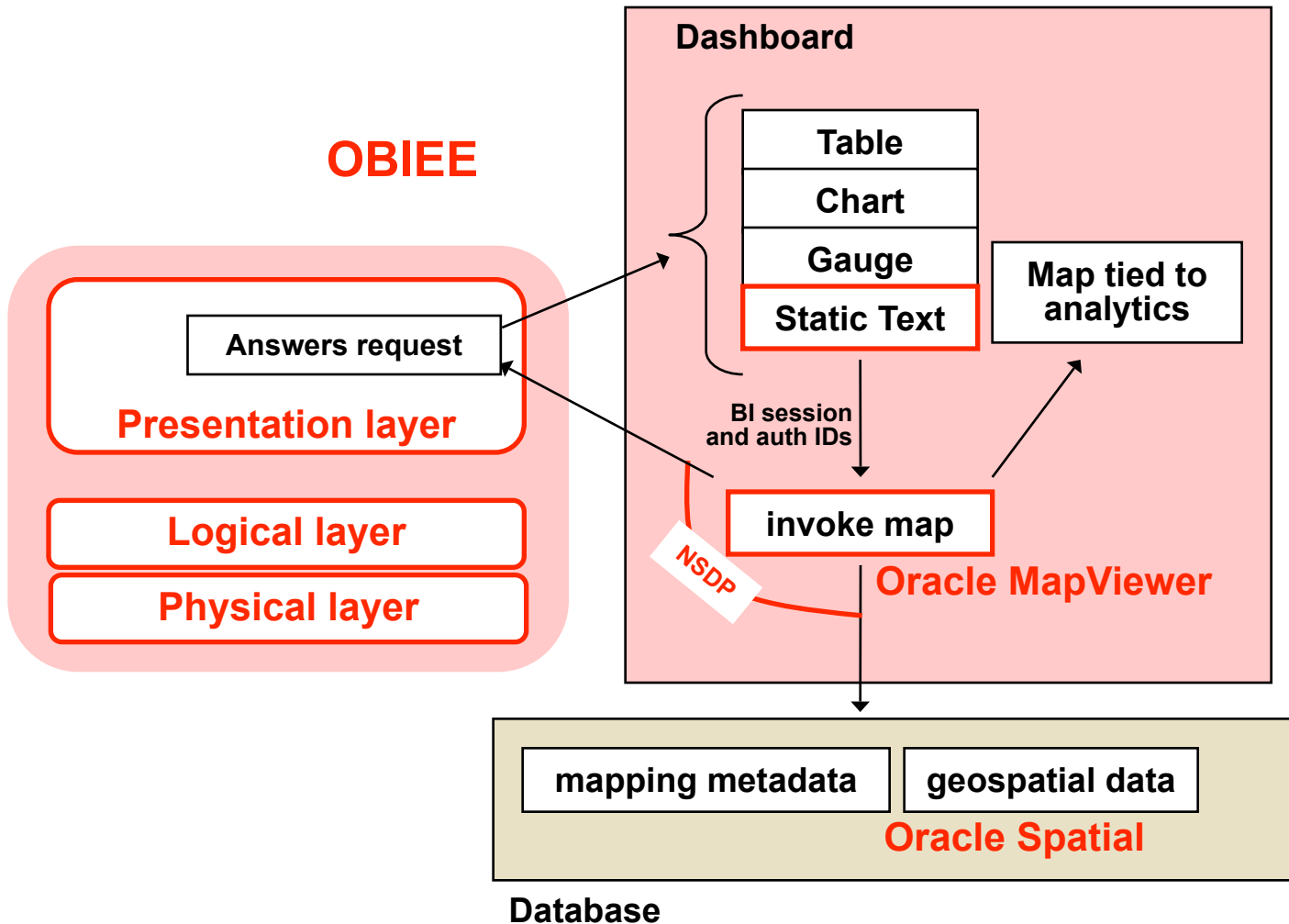
Oracle MapViewer

mapping metadata

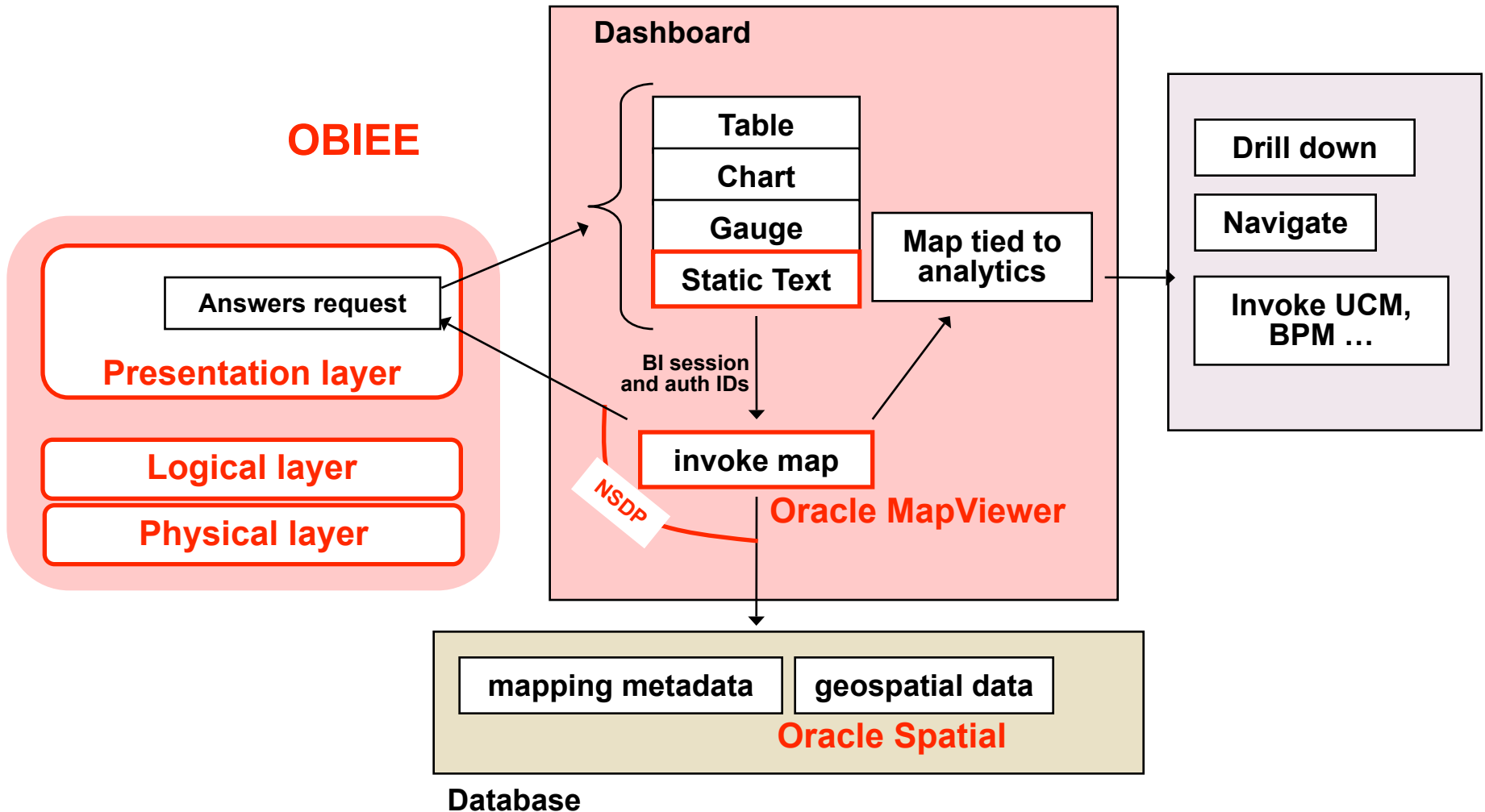
geospatial data

Oracle Spatial

Database



Basic MapViewer NSDP Join to Answers Request



Demo & Walkthrough

Summary

- Spatial integration at every level of OBIEE
- Representative of universal integration opportunities
- Integration points driven by business needs
- Essential MapViewer integration will streamline in 11g