The Semantic Layer
1. Goals
2. What is it?
3. How it is used?
4. All clients
5. All sources
6. Conclusions
THE SEMANTIC LAYER
Semantic Layer Reduces Time to Business Intelligence

**Business Needs**

- Need timely access to data
- Changing business requirements
- Making decisions on trusted information

**Time-to-trusted Information**

**IT/Data Bottlenecks**

- Limited capacity to support users
- Competing priorities
- Lengthy ETL development cycles
Semantic Layer Reduces Time to Business Intelligence

**Business benefits**
- Consistent user experience over all sources
- Empowered users
- Making informed decisions

**Reduce Time-to-trusted Information (and cost)**

**IT/Data benefits**
- Design to support additional sources in minutes or hours
- Increased agility
- Make BI available at the point of consumption
The Semantic Layer provides a secured access to data with simple business terms.
The Semantic Layer components

Data Sources

Connectivity

Query and Analysis

Dashboards and Visualizations

Reporting

Full-Spectrum Business Intelligence

SAP BusinessObjects
The Semantic Layer components

- Data Sources
- Data Foundation
- Universe
- Query and Analysis
- Dashboards and Visualizations
- Reporting
- Full-Spectrum Business Intelligence
- Business layer
- SAP BusinessObjects
The Semantic Layer components

- Data Sources
- Query and Analysis
- Dashboards and Visualizations
- Reporting
- Full-Spectrum Business Intelligence
Need to report the Revenue by Resort in every Country?
Need to report the Revenue by Resort in every Country?

```
SELECT
    RESORT_COUNTRY.COUNTRY,
    RESORT.RESORT,
    sum(INVOICE_LINE.DAYS * INVOICE_LINE.NB_GUESTS * SERVICE.PRICE)
FROM
    INVOICE_LINE INNER JOIN SERVICE ON
    (INVOICE_LINE.SERVICE_ID=SERVICE.SERVICE_ID)
    INNER JOIN SERVICE_LINE ON
    (SERVICE.SL_ID=SERVICE_LINE.SL_ID)
    INNER JOIN RESORT ON
    (SERVICE_LINE.RESORT_ID=RESORT.RESORT_ID)
    INNER JOIN COUNTRY RESORT_COUNTRY ON
    (RESORT.COUNTRY_ID=RESORT_COUNTRY.COUNTRY_ID)
GROUP BY
    RESORT_COUNTRY.COUNTRY,
    RESORT.RESORT
```
Semantic Layer
Open Access to Any client and user

Extend BI to new business audiences by reusing the semantic layer metadata

Access the semantic layer and the underlying data

- From any BI platform tool
  - BusinessObjects Mobile
  - BusinessObjects Live Office
  - BusinessObjects Polestar
  - Crystal Reports,
  - Web Intelligence
  - Xcelsius

- From any web enabled application—Query as a Web Service
  - Deliver secure BI in any application
  - Enable machine-to-machine access to live data
  - Deliver BI to users in their environment
  - Only expose the BI needed by users
Semantic Layer
Access any data type

Universes make it easy to access, analyze and enrich all data in your organization regardless of the underlying source.

Universes do not impose a data warehousing strategy, vendor, a schema, a way to store your data.

Universes provide native access to:
- OLAP sources
- Relational sources
- XML and web services
- JavaBean
Combine with Data Federation for more Agility

Enterprise Information Integration (EII) or data federation is:
- Agile and rapid data integration
- On-demand access to data
- Real-time delivery of information
- **Multi-source access to SAP NW BI (Q1’09)**

Data Federator offers:
- Easy, reliable, and real-time access to disparate data—regardless of data structure and location
- Non invasive technology—no need to write back to production systems
- Deep integration and compatibility with the BI platform
- Flexibility and optimized performance
- Seamless connectivity to an ever-increasing list of databases and data sources
- The most advanced query optimizer available in the market today
CONCLUSIONS
Conclusion

Semantic Layer the foundation for Business Intelligence

1. Agile
   - Any source, any schema, no data transformation needed
   - Multi-source combining SAP and non SAP data
   - Universes on OLAP data sources allow a larger number of users with different profiles to query, report, and analyze on OLAP data sources
   - Lower TCO and faster ROI

2. Consistent access
   - Single User Experience over all data
   - All Business Objects clients
   - Open to any application via Web Services

3. Trusted
   - Reliable
   - Secured
   - Reusable
Further Information

**SAP Public Web:**

BusinessObjects Enterprise Portal:  

SAP Developer Network (SDN):  
[www.sdn.sap.com](http://www.sdn.sap.com)

Business Process Expert (BPX) Community:  
[www.bpx.sap.com](http://www.bpx.sap.com)

BusinessObjects Semantic Layer forum:  

**Related SAP Education and Certification Opportunities**

Thank you!