Oracle Business Intelligence Platform Value Proposition

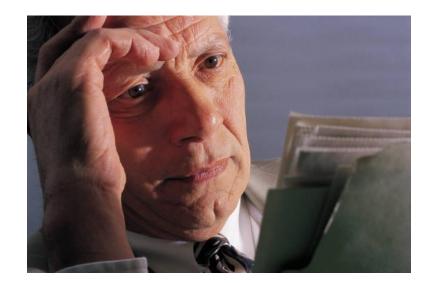


Richard Rodriguez, Corporate Technologies

BI Challenges Today

...not easy to achieve!

- Fragmented
- Inconsistent
- Report-centric
- Restricted
- Non-Intuitive



Hasn't the promise of BI been there for the past decade?

Business Intelligence Value Proposition Enabling the Insight-Driven Enterprise

- 1. Empower Everyone Every person is provided with relevant, complete information tailored to their role.
- 2. Provide Real-time Intelligence **Deliver insight that predicts the best** next step, and deliver it in time to influence the business outcome
- 3. Use Insight to Guide Actions Lead people to take action based on facts to optimize decisions, actions and customer interactions

Becoming an insight-driven enterprise will drive the next level of value creation and competitive advantage for organizations.

How can Business Intelligence help?

- Process optimization and automationExploit new market opportunities faster
- React quickly to changes
- Real-time business insight, KPIs
- Fast, accurate reporting
- Interactive all-in-1 user portals
- Cost savings
- Reduction of redundancies, manual tasks
- Gain compliance

Agility

INNOVATION

Visibility

PACE OF BUSINESS

Efficiencies

GLOBALIZATION

REDUCE COSTS

Business Intelligence

Product Strategy

- Pervasive
 - Intuitive, role-based intelligence for everyone
 - Enables better decisions, actions, and business process
- Comprehensive
 - Integrate information from disparate sources
 - Financial, Operational, Transactional
- Hot Pluggable
 - Open, integrate with existing investments
 - Best with Oracle and non-Oracle environments

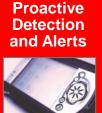
Oracle BI Suite Enterprise Edition

Unified Business Intelligence Infrastructure













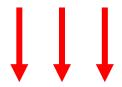
Reporting & Publishing

BI Publisher Financial Reporting Interactive Reporting **SQR Production Reporting**

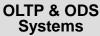
Web Analysis

Common Enterprise Information Model

Oracle BI Server









Data Warehouse **Data Mart**



SAP, Oracle PeopleSoft, Siebel, Custom Apps



Files Excel **XML**



Business Process



Financial Performance Management **Applications**

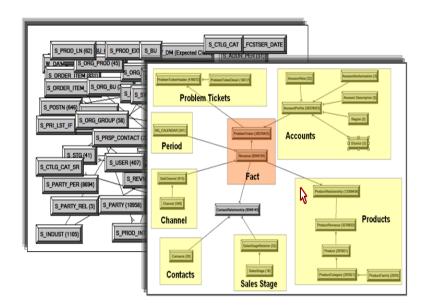


Hyperion Essbase

Oracle BI Server

Next-generation BI and Analytics Server

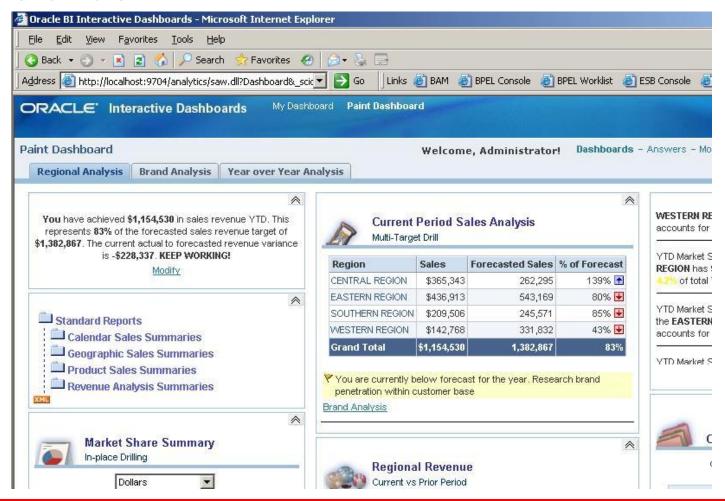
- Simplified business model view
- Advanced calculation & integration engine
- Intelligent request generation and optimized, distributed data access
- Mission critical scalability and performance



BIEE Answers

 Ad-hoc Report Development Links provide access to **Oracle Business** Intelligence functions ORACLE' Answers Dashboards - Answers - More Products - - Settings - - Log Dashboards Catalog Search Manage Catalog My Folders Financial Styled Report This is the start page **Subject Areas** Search for Select a subject page by clicking the A Shared Folders saved requests Paint Demo area to create a **Paint** My Briefing Books **Browse Saved Requests** Paint Exec new request My Filters view requests as stored in the Presentation Shared Filters **Direct Database Request** Use selection pane to access Refresh Display Create Direct Request saved requests and dashboards Reload Server Metadata Create a new SQL request that will be sent directly. to the database. The results of the request, if any, can be displayed and nipulated within Answers. Create New Request and subsequently inco ted into Interactive <u>Toereate a new request, select a Subject</u> Dashboards and Delive Workspace provides list of actions and Create a direct available subject areas database request

 Collection of Answers Reports, Folders, BI Publisher Reports and more





Filters

- Reusable entities to limit the results of a query
- End-user created, can be shared with others
- Standardize conditional data (e.g. Fiscal Year)

Templates

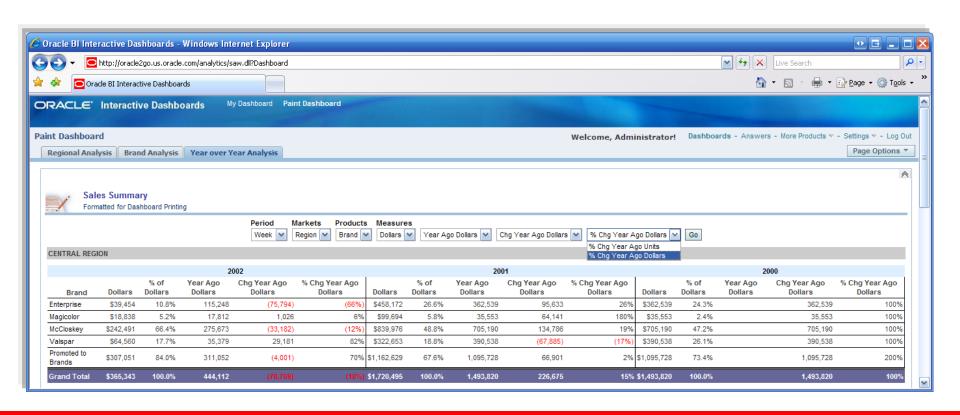
- Reusable, customized cosmetic appearance
- Apply a template to a new or existing requests
- Standardize look and feel of corporate reports

Publications / Subscriptions

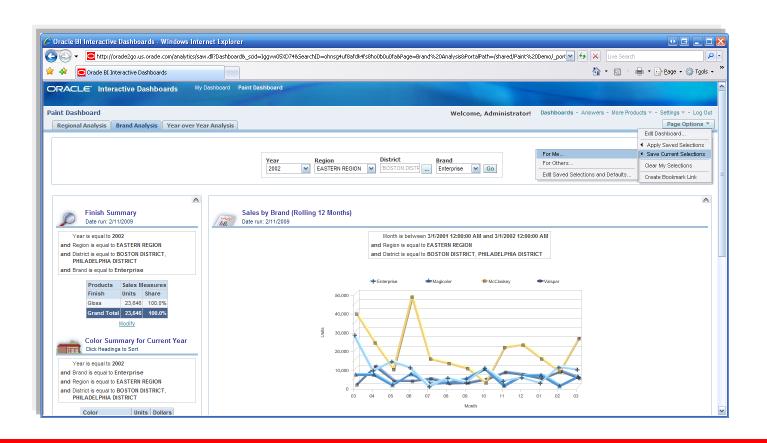
- Features available to all users with Oracle BI Delivers
- Publish iBot for subscription
- Deliver iBot to specified or dynamic users
- Enables cross-departmental visibility

Dashboard Prompts

- Filter all requests embedded on a dashboard
- Constrain choices between columns (Cascading Prompts)
- Change the measures on requests as well
- Single dashboard supports multiple analysis points

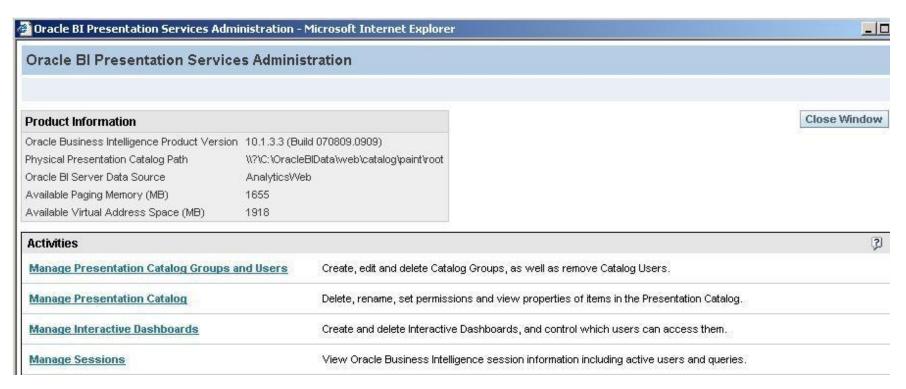


- Personalization
 - Customize a dashboard view, then save your selection
 - Reuse saved selections or share with others



BI EE Web Administration

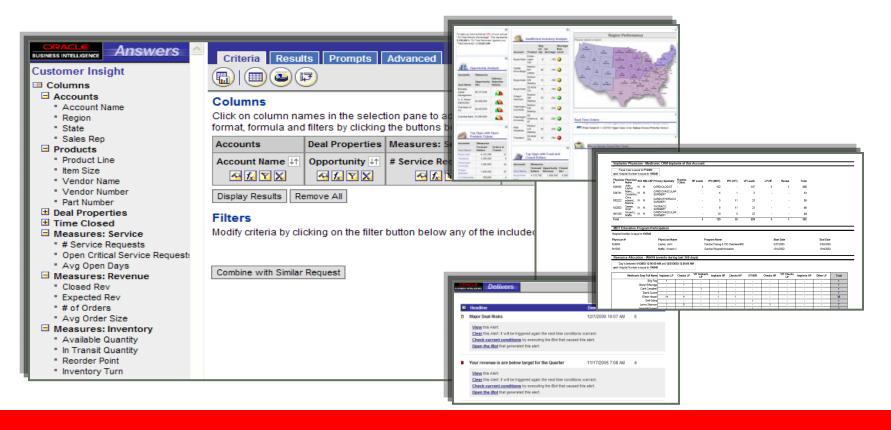
 Use this page to manage Web groups and users, BI Web Catalog, Interactive Dashboards, and account (users and groups) privileges



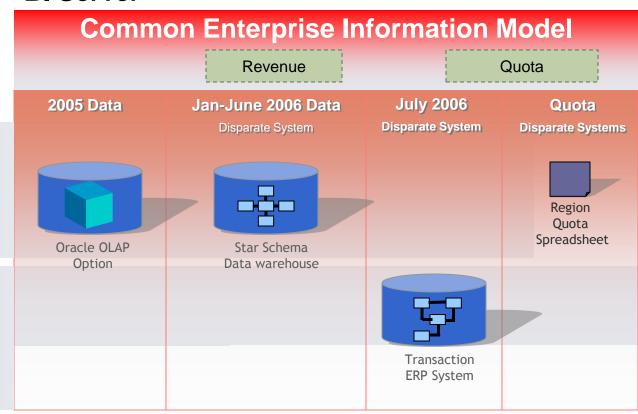
Common Enterprise Information Model

"Model once, deploy everywhere"

End user adoption is about information consistency and availability where and when its needed. The Common Enterprise Information Model breaks down data silos and makes information available on-demand.



BI Server



Aggregated Data



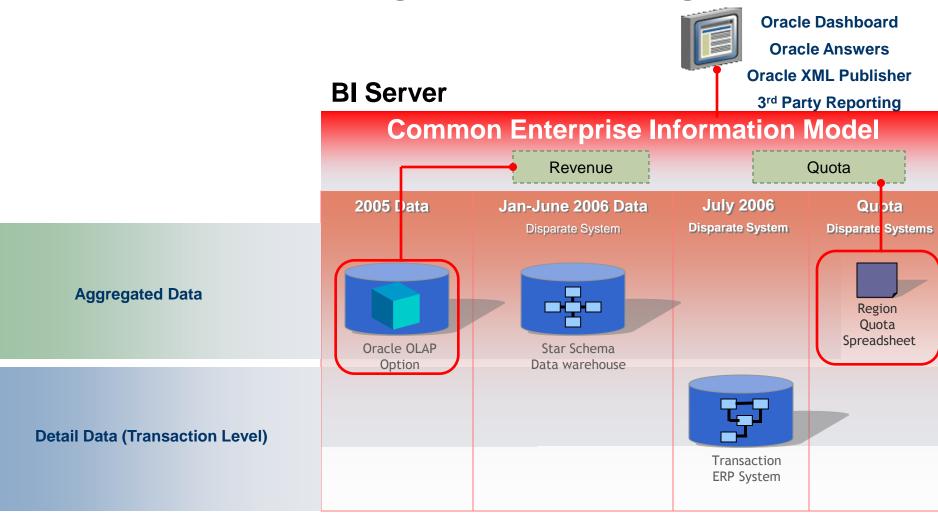
"Show me Revenue against Quota for All Regions in 2005"

BI Server

Common Enterprise Information Model Revenue Quota 2005 Data Jan-June 2006 Data **July 2006** Quota **Disparate System** Disparate System **Disparate Systems** Region Ouota Spreadsheet Oracle OLAP Star Schema Option Data warehouse Transaction **ERP System**

Aggregated Data

"Show me Revenue against Quota for All Regions in 2005"



"Show me Revenue against Quota for All Regions in June 2006"

BI Server Common Enterprise Information Model

Revenue Quota

2005 Data Jan-June 2006 Data July 2006 Quota

Oracle OLAP
Option

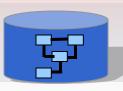
Disparate System

Star Schema
Data warehouse

Disparate Systems

Disparate Systems

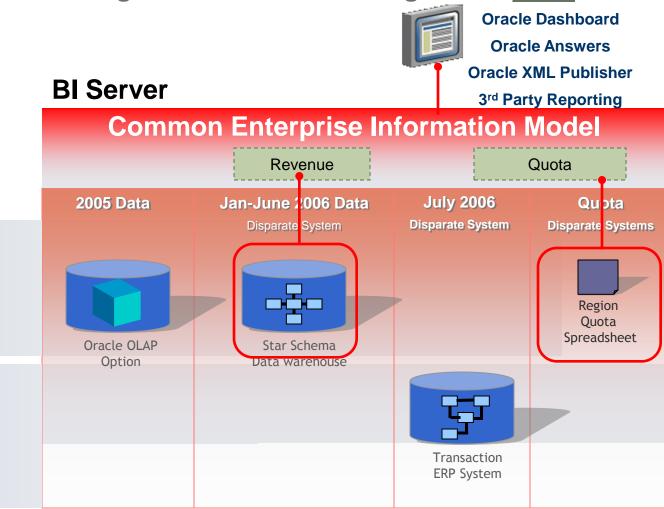
Region Quota Spreadsheet



Transaction ERP System

Aggregated Data

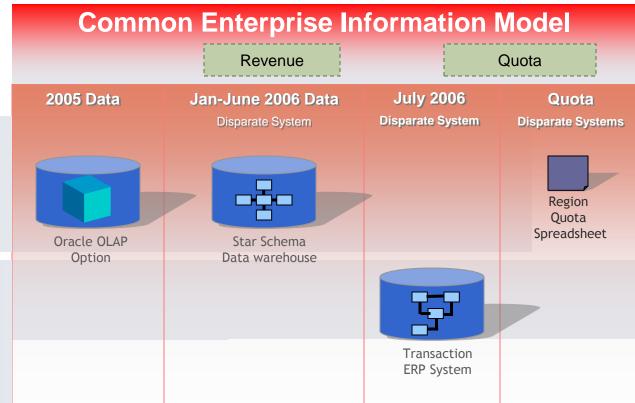
"Show me Revenue against Quota for All Regions in June 2006"



Aggregated Data

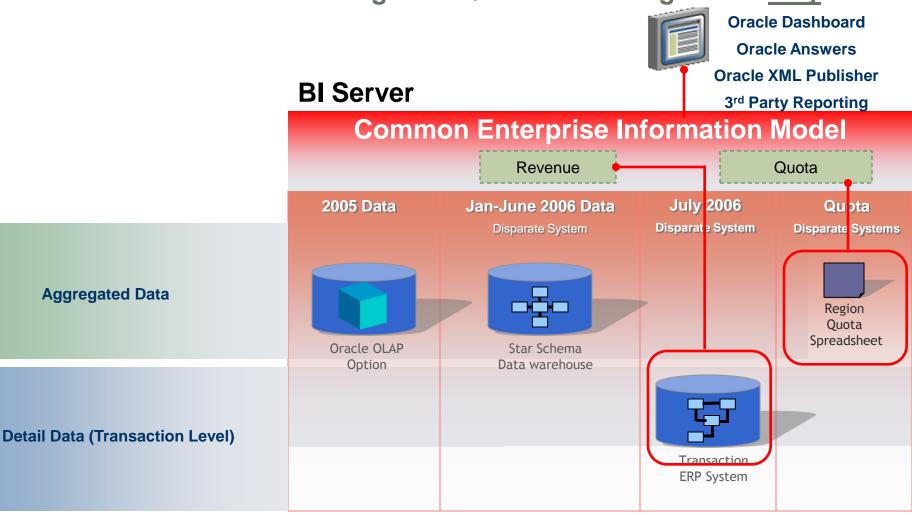
"Show me Revenue against Quota for All Regions in July 2006"

BI Server



Aggregated Data

"Show me Revenue against Quota for All Regions in July 2006"



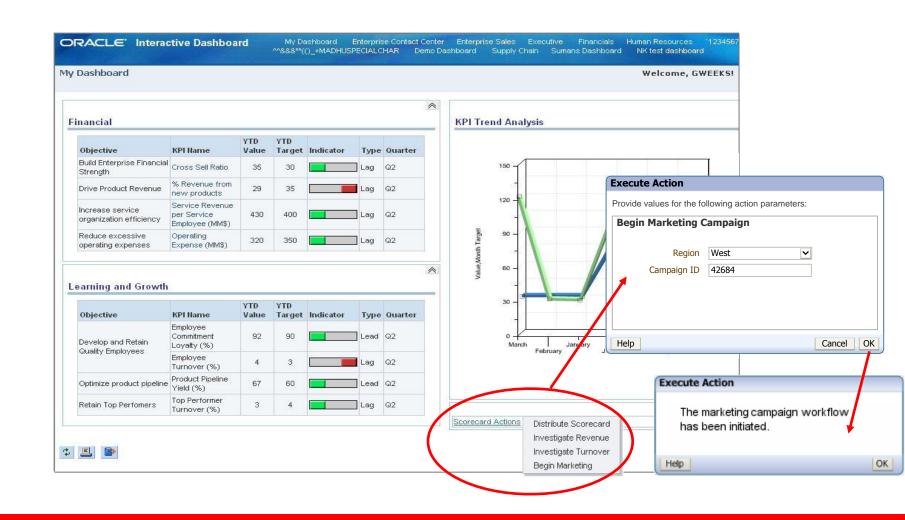
Guided Analytics *Leading Users from Discovery to Action*

This is no longer about a stack of reports. Guided Analytics drives alignment and actions through the organization by modeling and making accessible discovery and decision making best practices.



Action From Insight

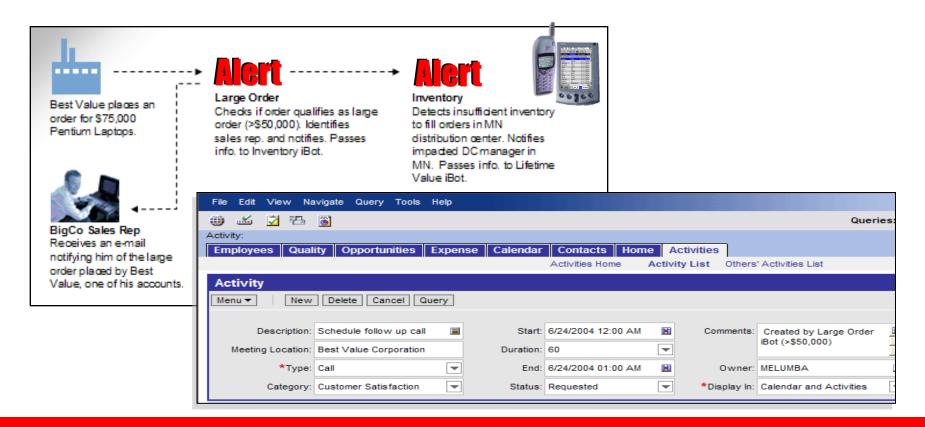
Example: Invoking a business process from BI Dashboard



Sense and Respond

Real-Time Proactive Monitoring and Response

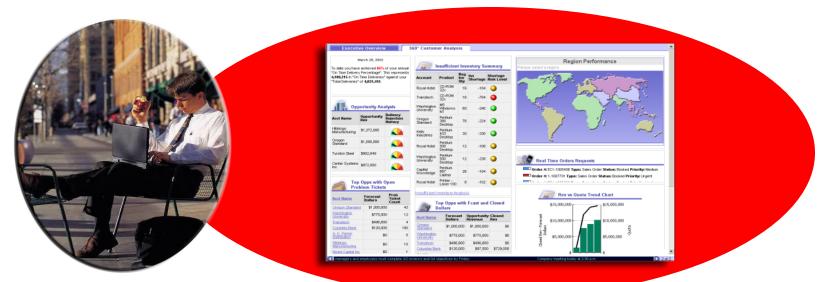
Delivers/Analytic Agents provides true real-time in context sense and respond capabilities across systems tailored for any user on any device.



Oracle Disconnected Analytics

Full-Featured Disconnected Client

The user experience is identical to the connected user. Dashboard and Answers functionality will act identically as if the user were connected to the server.



Disconnected BI Server

Business Model

Server Cache

Calculations

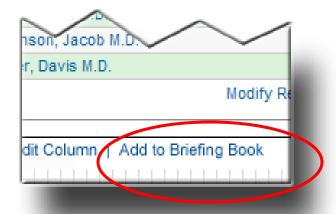




Oracle Briefing Books

"Pack & Go"

Bring along an electronic "Briefing Book" which is a collection of your most important dashboards. Briefing Books are <u>extremely</u> small, and can be delivered daily for enterprise collaboration.



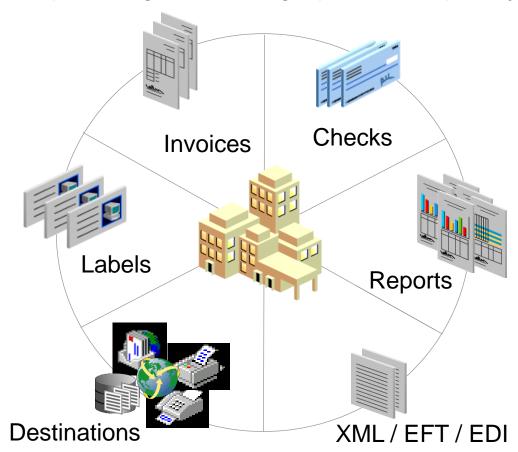
The bottom of every Dashboard page
has an
"Add to Briefing Book"
Link that automatically builds an
electronic briefing book that you carry
with you.



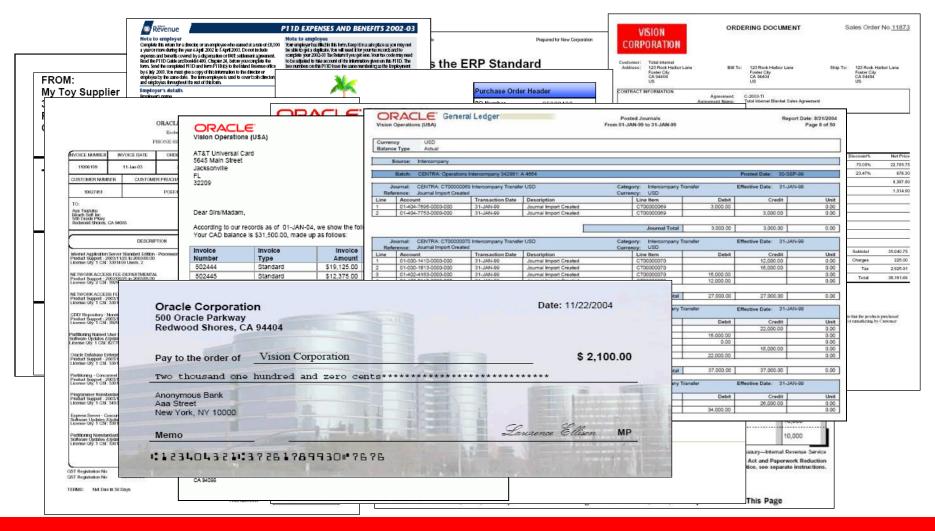
Oracle Reporting and Publishing

Precision control over report format, layout, and output – enabling creation and distribution of "pixel-perfect" reports regardless of graphical complexity.

Oracle Reporting and
Publishing leverages the
Common Enterprise
Information Model for broad
destinations and formats



Oracle BI Publisher - One Solution for all Business Documents



BI Publisher

- Pixel Perfect Report Development
- Can leverage BI EE Semantic Layer as well as other sources (JDBC, Web Services, SQL, HTML)



Hot Pluggable

Open, Integrate with Existing Investments



Any JSR 168 Portal



BOBJ, COGN MSTR



Actuate, Oracle Apache FOS



Excel, Outlook, Lotus Notes

BI Server

Common Enterprise Information Model

Security



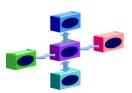
Oracle Custom MSFT AD iPlanet Novell Others ...

Data Access



Oracle RDBMS
Oracle OLAP Option
IBM DB2
Microsoft SQL Server
& Analysis Services
Teradata
SAP BW
XML, Excel, Text
Others ...

ETL



Oracle Informatica Ascential Sunopsis Others ..

Oracle BI Suite Enterprise Edition Common BI Infrastructure

All Oracle BI Suite Modules:

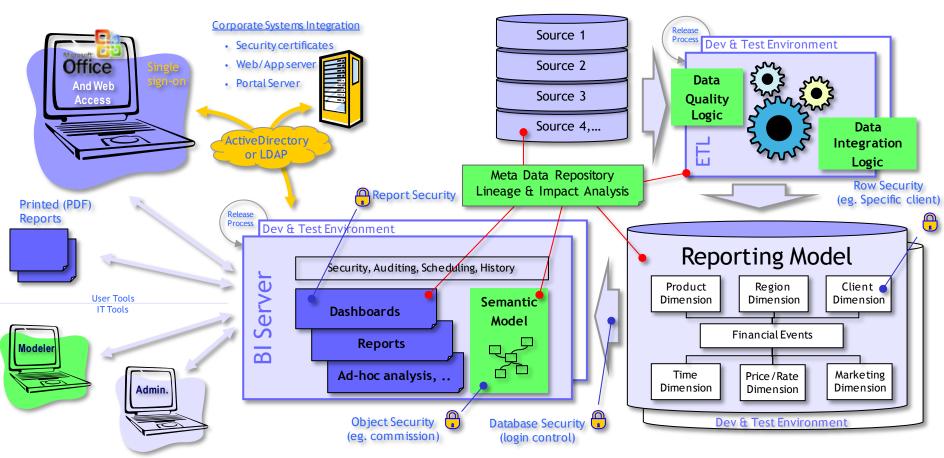
- Oracle Interactive Dashboards
- Oracle Answers
- Oracle Delivers
- Oracle Disconnected Analytics
- Oracle Briefing Books
- Oracle BI Server
- Oracle BI Administration Tool

Share Common:

- √ Security Services
- ✓ Metadata Services
- √ Reporting Objects (Views)
- ✓ Query Intelligence Engine
- √ User Experience
- √ Administration

CTI – BI Architecture Practices

Applying data access, data quality and security logic at the right points in the architecture to **protect data access** and **ensure data quality**; deliver coherent and standardized data across each report; provide derived calculation data types and automatic aggregations; dramatically **simplify report data access** and **shield reports from future data model changes**.



Oracle BI - Summary

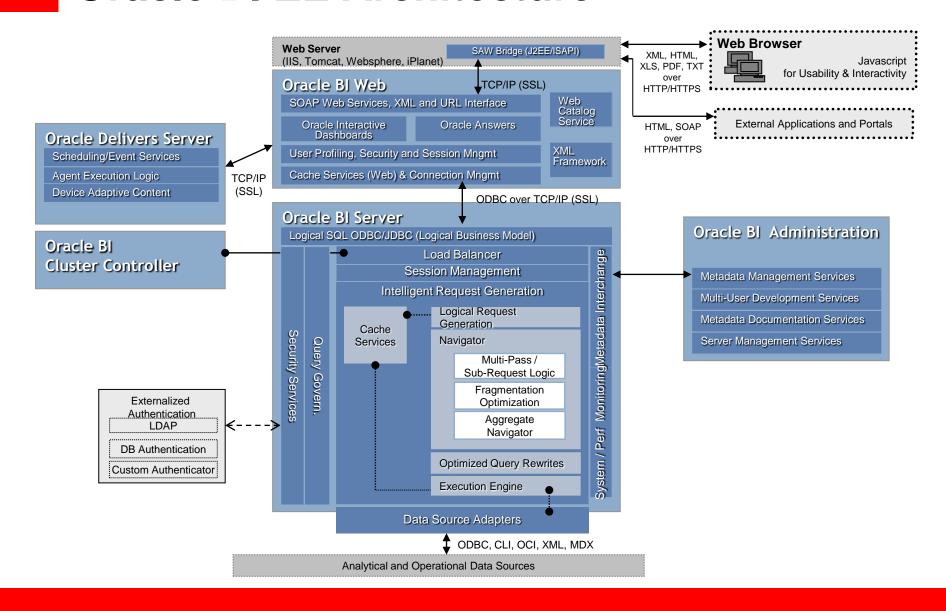
- Oracle BI enables you to create <u>interactive</u> <u>reports, dashboards, and ad-hoc queries</u> against <u>any data sources</u> within your business
- 2. Oracle BI is a **general purpose BI system**, even in non-Oracle environments
- 3. Oracle BI <u>helps organizations become aligned</u> to ensure more intelligent decision making



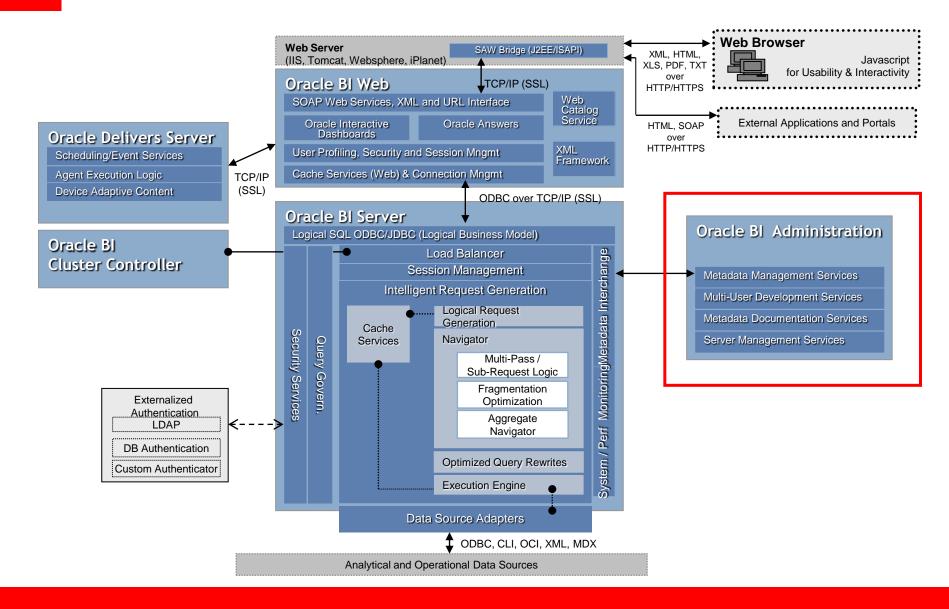
Appendix

Architecture

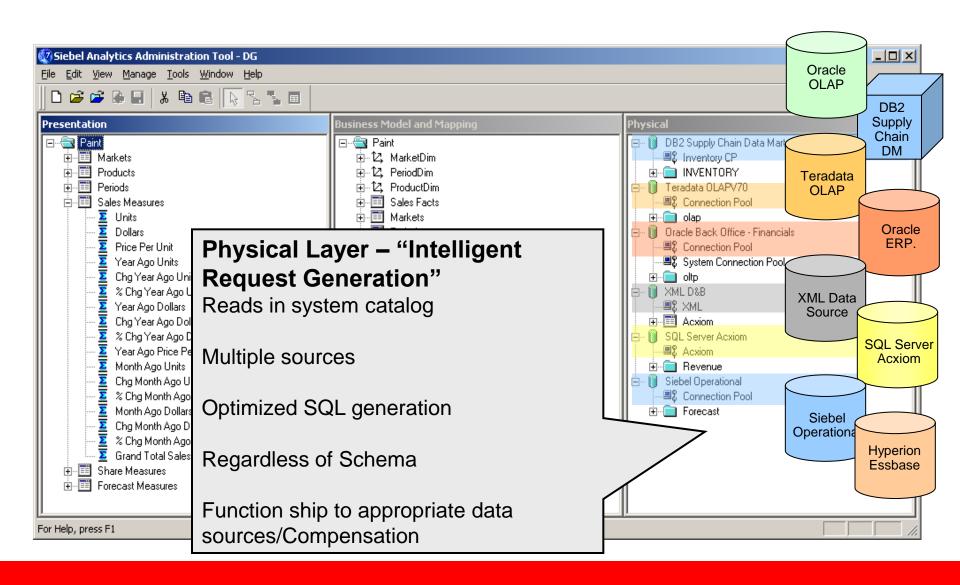
Oracle BI EE Architecture



Oracle BI EE Architecture



Enterprise Business Model Administration



Enterprise Business Model Administration

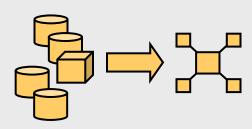
Business Model Layer – "Calculation Engine"

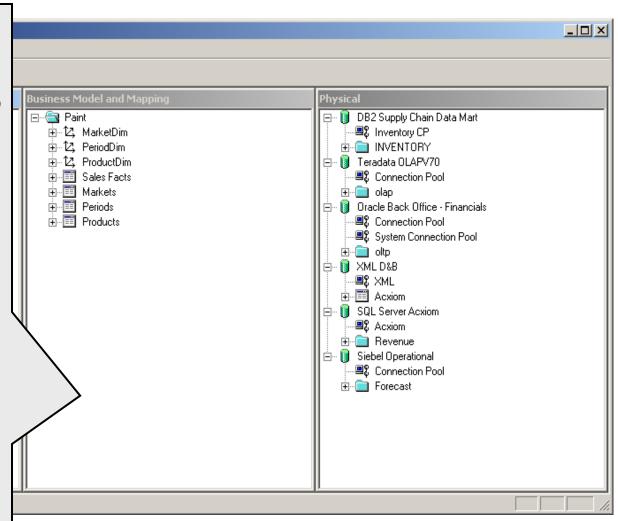
Physical complexity converted to logical subject areas

Drill-Paths

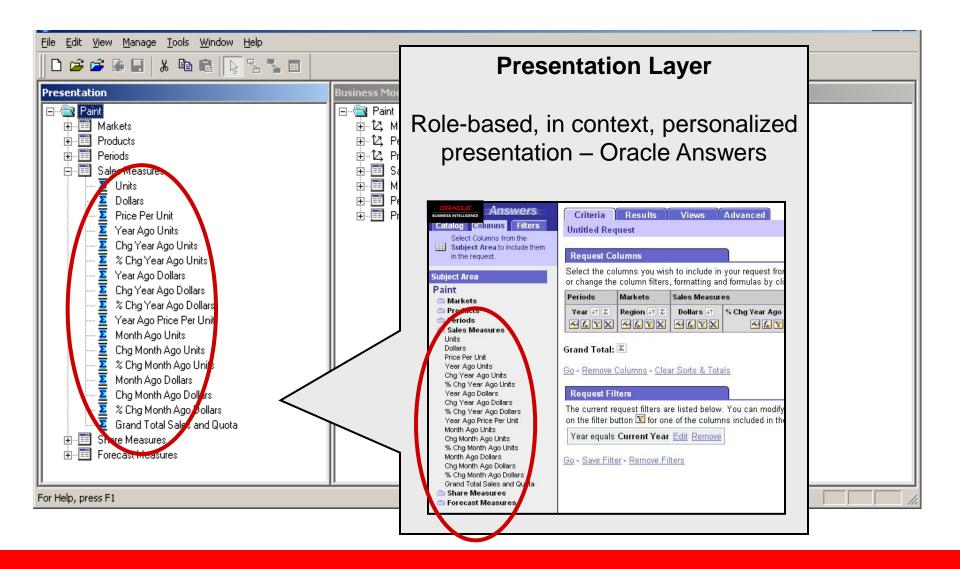
Complex/Derived Measures (Level-based, time series, dimension-specific, nested)

Aggregate/Fragment Aware

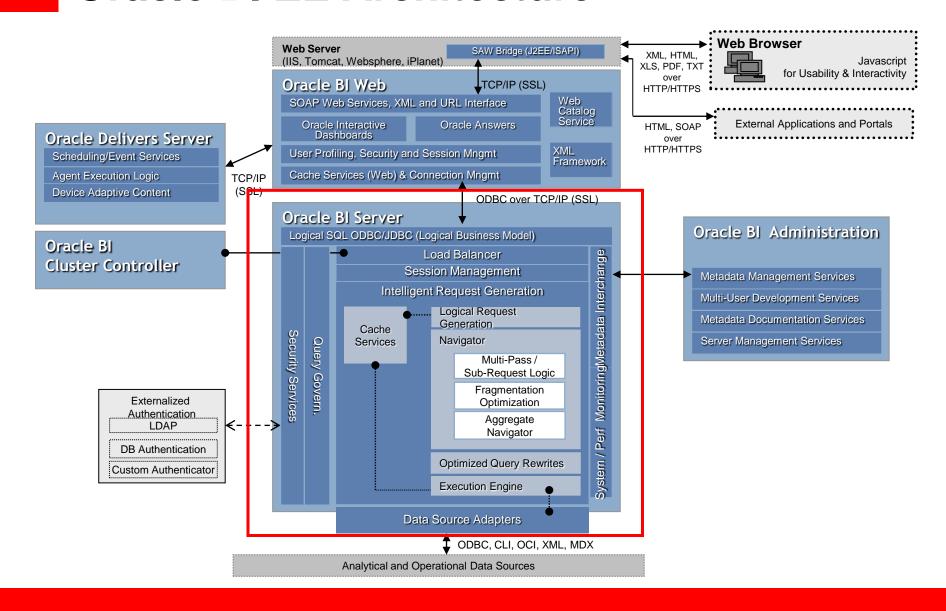




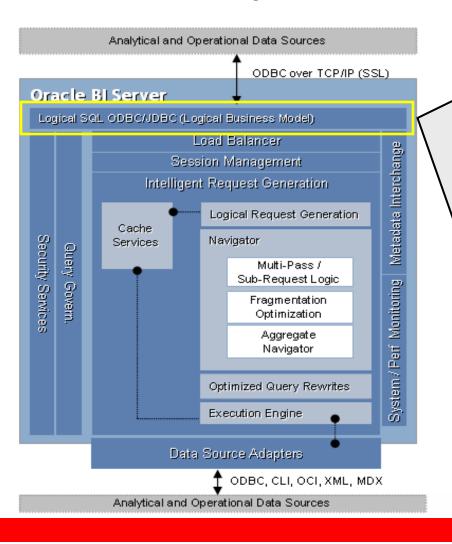
Enterprise Business Model Administration



Oracle BI EE Architecture



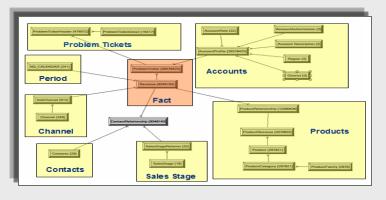
Common Enterprise Information Model

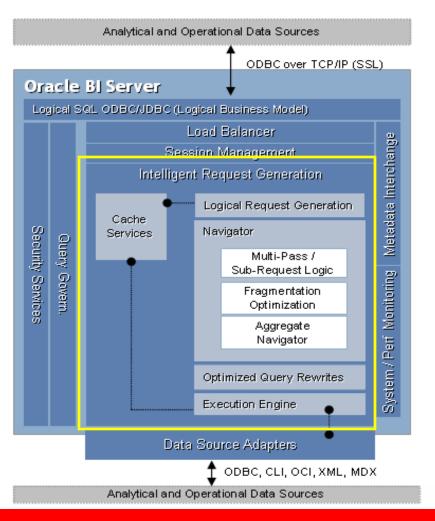


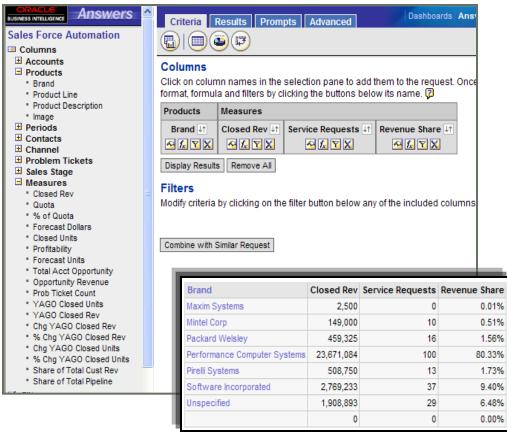
Simplified Logical Model

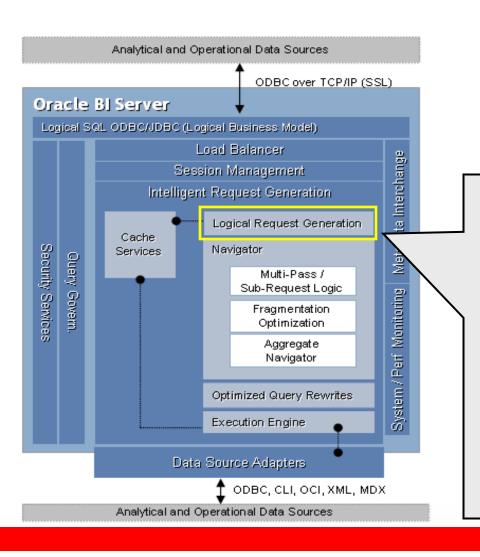
The Oracle BI server presents as a logically modeled database enabling the Common Enterprise Information Model.

This provides powerful calculation, computation and federation capabilities to 3rd party tools as well as our own.





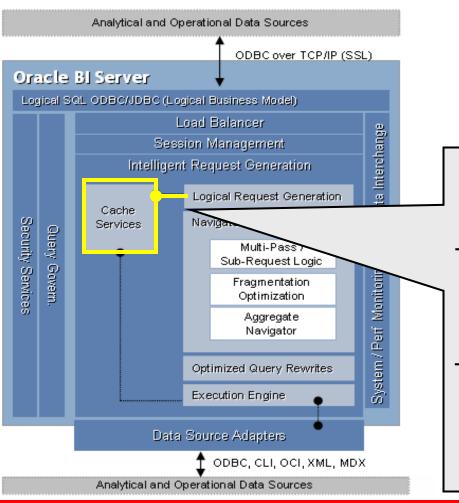




Brand	Closed Rev	Service Requests	Revenue Share
Maxim Systems	2,500	0	0.01%
Mintel Corp	149,000	10	0.51%
Packard Welsley	459,325	16	1.56%
Performance Computer Systems	23,671,084	100	80.33%
Direllia			-00/

A logical request comes in asking for

- Brand,
- Closed Revenue (GL)
- Service Requests (Call Center)
- Share of Revenue (Derivation)

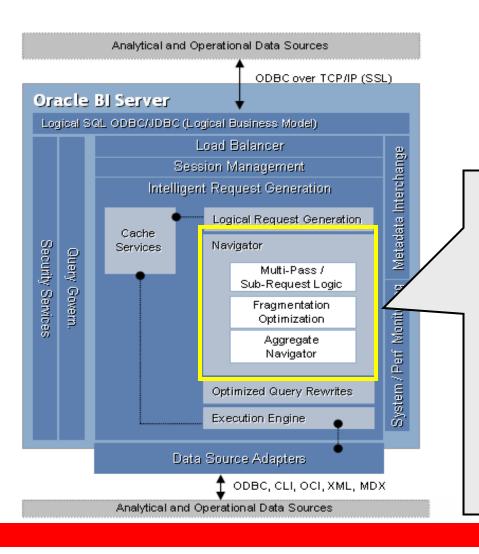


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Performance Computer Systems	23,671,084	100	80.33%
Pirell: e		12	700/

Oracle BI Server Cache

The Server will check to see if this request can be fulfilled via a prior request using Server Cache.

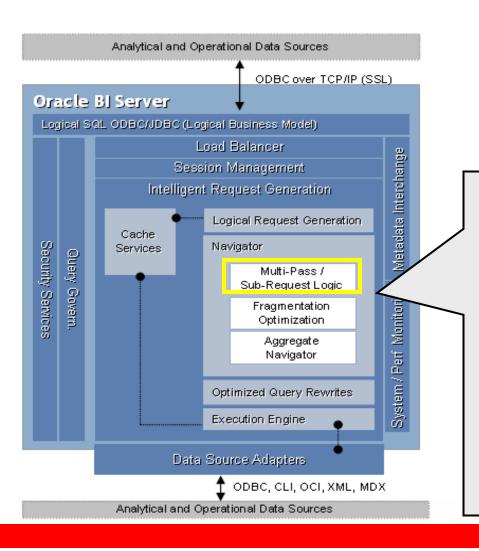
This is an on-demand intelligent shareable and secure cache that can support: Subsets, Aggregations and Derivations



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Navigator

If it is the request is cannot be fulfilled by cache then the server will intelligently process the request



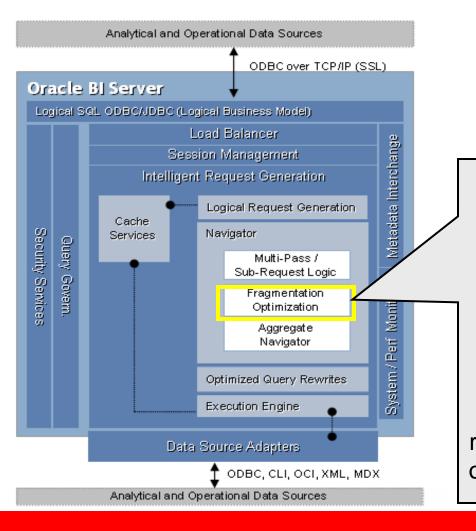
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Direlline			

Multi-Pass/Sub-Request Logic

Does this analysis require sophisticated analysis such as an OLAP calculation?

[Revenue Share]

The Server will determine the best possible way to provide this calculation/computation



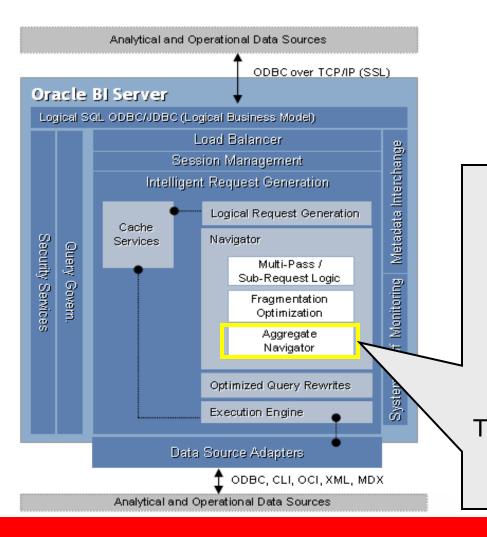
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Packard Welsley		459,325	16		1.56%
Performance Computer Syste	s	23,671,084	100		80.33%
Pirellia				_	~~~

Fragmentation Optimization

Does this request span across partitions or silos of data?

[Closed Revenue and Service Requests]

The server will determine based on the request if it should navigate to both or only one. It will automatically resolve fan traps.



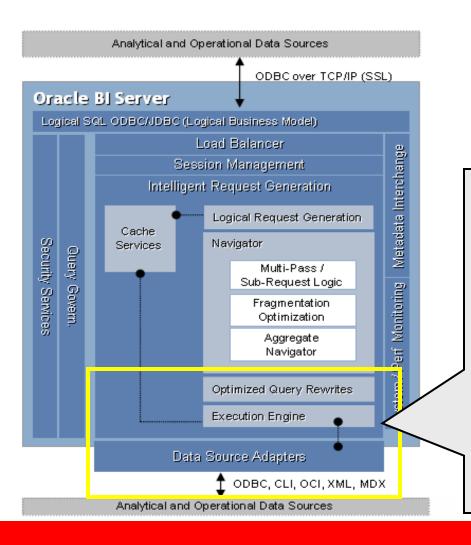
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Performance Computer Systems		3,671,084	100	80.33%
			12	700/

Aggregate Navigator

Is there an aggregate that can better satisfy this request versus hitting the detail?

{Brand Summary Table}

The Server will apply approprate summary redirection to provide the quickest response.



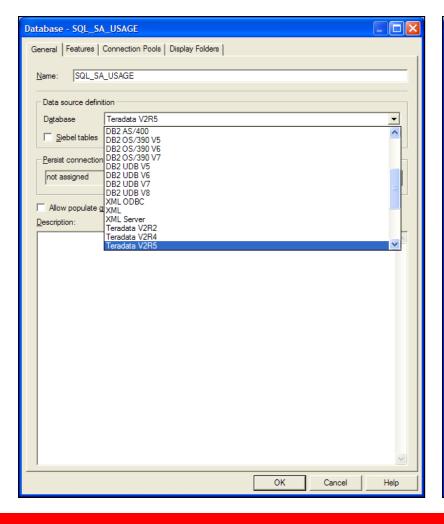
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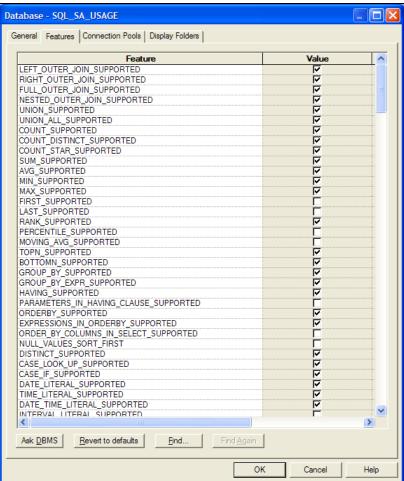
Optimized Query Rewrites

What can be function-shipped down to the database versus performed /supplemented by the computation capabilities of the Server.

The server will provide a consistent set of functionality to the user regardless of underlying datasource.

Exploiting Native Database Functionality

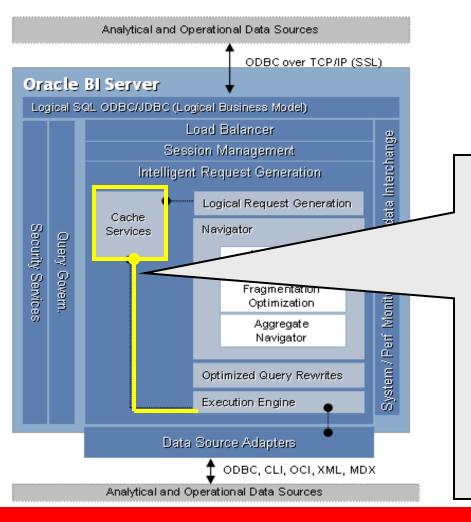




Optimized Native SQL Rewrites





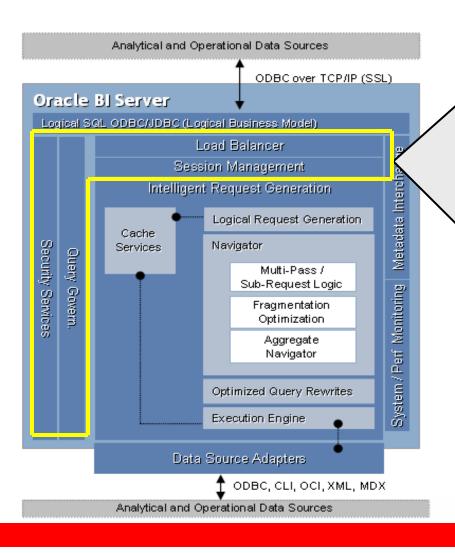


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Performance Computer Systems	23,671,084	100	80.33%
Pirali: a		12	

Cache Services

The request once executed will now be available to other users as a cache entry.

System Services



System Services

Clustering:

Add stacks as needed in a share nothing clustered environment.

Session Management and Governance:

Query throttling via connection pools and authorization

Security Services:

Integration with OID, LDAP with sophisticated data driven personalization mechanisms.