Oracle BI Cloud Service

for Departmental Data Mart or Enterprise Data Warehouse?

BIWA Summit – January 2017
## Agenda

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Matthew Vranicar
Senior Vice President, Business Intelligence, AST Corporation

- Joined AST in 2015 to aid in strategic growth initiatives
- Tasked with leading AST’s BI practice and expanding into Big Data
- 30 years of experience in the Oracle and BI consulting arena
- Founded and led growth of BI consulting firm Piocon Technologies, sold to Rolta in 2008
- Previous roles include President and Executive VP of Rolta Americas, CEO of Piocon, Board member of IOUG
- Board member of BIWA – the Oracle BI, Warehousing & Analytics SIG
- Started career with Oracle in 1986 as one of the first 100 Oracle Consultants
### OUR SERVICES
- Enterprise Resource Planning
- Business Intelligence
- EPM-Hyperion
- Middleware
- Managed Services
- CRM/CX
- Education / Oracle University
- Project Advisory Services

### ORACLE PARTNERSHIP
- Oracle Platinum Partner
- Pillar Partner
- Certified Cloud CX Reseller
- Oracle Cloud Marketplace
- Oracle University Approved Education Center
- Oracle University Reseller
- Oracle Accelerator Implementer
- Oracle Managed Cloud Services Implementer
- Small Business Strategy Council
- Oracle Advanced Partner Support Program

### ORACLE SPECIALIZED
- Public Sector
- EBS Human Capital Management
- EBS Financial Management
- EBS Supply Chain Management
- BI Applications
- BI Foundation
- Oracle CX Certified
- Service Oriented Architecture
- Utilities
- Travel & Transportation
- Education & Research
- Application Development Framework 11g
- WebCenter Content 11g
- Access Management Suite Plus 11g
- Hyperion Planning 11
- Database 11g
- Hyperion Financial Management 11
- Essbase
BI · DATA WAREHOUSING · BIG DATA · ANALYTICS

Dashboards & Reporting
- BI Cloud Service (BICS)
- OBIEE
- BI Publisher
- Mobile BI
- Data Visualization

Pre-Built Applications
- Oracle ERP Analytics
- Oracle CRM Analytics
- AST Grants Analytics
- AST Astra

Data Warehouse & Integration
- Data Management
- ETL / ELT
- ODI
- GoldenGate
- Informatica

Enterprise Data Management
- Cloud Data Management
- Master Data Management
- Enterprise Data Quality
- DRM

Big Data & Advanced Analytics
- Big Data Discovery
- Big Data Preparation
- Big Data Visualization

Cloud & Engineered Platforms
- Cloud (PaaS)
- Big Data Appliance
- Exalytics
- Exadata
- Exalogic
BICS Overview

- Fully functional BI Cloud Service
  - Dashboards, Reports, Analytics, Visualizations
  - Data modeling using standard Oracle BI framework

- Database still required, either:
  - Schema as a Service – BIS50
  - NEW – Exadata Pluggable Option
  - Database as a Service – Database Cloud Service (DBCS)
  - On-Premise database – via Remote Database Connectivity (RDC)
  - Oracle SaaS database – Sales, Service, Marketing, ERP, HR, etc.
Fully Functional Answers & Dashboards
Fully Functional Data Visualization

- Guidance
  - Visual grammar
  - Keyword search
  - Pattern brushing

- Richness
  - Viz. Library
  - Advanced Trellising
  - Streamlined Dashboard

- Full Mobile Authoring
Fully Functional Data Modeling

OBIEE Admin Tool
On-Premises Applications

Cloud Data Modeler
Fully Cloud Based
Multi-User

Auto-modeling
Schema Introspection
Data Blending

No Modeling
Database Access Options

ETL
REST API
SQL*NET

Data Sync
On-premise data sources
Web services

Import
End-user upload to
Oracle Cloud Database
Schema or Database Service

Direct Query
Direct query to
on-premise databases
Database Access Options Architecture

- Sales
- Service
- Marketing

BICS

DBCS

Data Sync

ETL

RDC

Files

On-Prem Apps: ERP, CRM, etc.

Direct Upload

Oracle Cloud

On-Premises Network

Oracle SaaS

Remote Access

Oracle Cloud

On-Premises Network
BICS Remote Data Connector

- Enables direct query to on-premises accessible data sources
  - Databases
  - Files
- Secure SSL access with certificate validation
- Requires opening firewall port
- Optimized for WAN transport
Typical Data Warehouse / Mart

Operational Systems
- E-Business Suite ERP
- PeopleSoft HR
- Siebel CRM
- JD Edwards
- Custom Built
- Legacy Systems

External Systems
- Database
- XML
- Web Service
- ...

ETL

Enterprise Data Architecture
- Data Warehouse
- ODS
- Analytic Data Stores
  - Data Marts
  - Dept. Marts
  - Project Marts

BI Solutions
- Query & Reporting
- Statistics & Analytics

Oracle Pillar Partner
Business Intelligence
Oracle BICS Data Storage Options

Operational Systems
- E-Business Suite ERP
- PeopleSoft HR
- Siebel CRM
- JD Edwards
- Custom Built
- Legacy Systems

External Systems
- Database
- XML
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- ...

ETL

On-Premise Database

BICS Data Storage Options

Cloud
- Exadata Service
- DBaaS

BICS

Query & Reporting

Statistics & Analytics

Oracle Pillar Partner
BICS Data Storage Options

- **Schema as a Service – aka BIS50**
  - Most basic storage option, but very limited
    - Single schema only
    - 50GB storage maximum
    - 300GB per month data transfer

- **New Exadata Pluggable DB – full feature starter DB for BICS**

- **Database as a Service**
  - Many options – metered or non-metered, server or virtualized
  - 4 Performance levels – Standard, Enterprise, High, Extreme

- **Exadata as a Service**
  - Metered vs non-metered; Quarter, Half, or Full Rack; Additional OCPU pairs

- **Remote Database Connectivity (RDC)**
  - To On-Premise or Hosted Databases
Schema as a Service Uses

Operational Systems
- E-Business Suite ERP
- PeopleSoft HR
- Siebel CRM
- JD Edwards
- Custom Built
- Legacy Systems

ETL

External Systems
- Database
- XML
- Web Service
...

Schema as a Service

Query & Reporting

BICS

Statistics & Analytics

Analytic Data Stores
- Prototypes
- DEV / TEST

Data Marts
- Dept. Marts
- Project Marts
Database as a Service Uses

Operational Systems
- E-Business Suite ERP
- PeopleSoft HR
- Siebel CRM
- JD Edwards
- Custom Built
- Legacy Systems

External Systems
- Database
- X UCLA
- Web Service...

ETL

Database as a Service

Query & Reporting

Statistics & Analytics

BICS

Oracle Pillar Partner
Business Intelligence
Exadata as a Service Uses

Operational Systems
- E-Business Suite ERP
- PeopleSoft HR
- Siebel CRM
- JD Edwards
- Custom Built
- Legacy Systems

External Systems
- Database
- XML
- Web Service

ETL

Data Warehouse
- Prototypes
- DEV/TEST
- ODS

Exadata as a Service

Analytic Data Stores
- Data Marts
- Dept. Marts
- Project Marts

Query & Reporting

Statistics & Analytics

BICS

AST

Oracle Pillar Partner
Business Intelligence
On-Premise Data via RDC

Operational Systems
- E-Business Suite ERP
- PeopleSoft HR
- Siebel CRM
- JD Edwards
- Custom Built
- Legacy Systems

External Systems
- Database
- XML
- Web Service

Query & Reporting

ETL

BICS Accessing On-Premise Data via RDC

Data Warehouse

ODS

BICS

Statistics & Analytics

Analytic Data Stores
- Data Marts
- Dept. Marts
- Project Marts
Summary of Considerations

- **Schema as a Service**
  - Lowest cost option, but maxes out at 50GB
  - Truly limited to Departmental Data Mart or for Prototype/Dev/Test

- **Database as a Service (Or New Exadata Pluggable)**
  - Many configurations and pricing options to house various data and usage loads
  - Flexible enough to meet many of your needs
  - From Prototyping, to Dev/Test, to Production strength

- **Exadata Service – Industrial strength / Industrial priced**
  - Engineered Systems and all the Performance & Scalability they provide

- **Remote Database Connectivity (RDC)**
  - Leverage existing On-Premise or Hosted Database investments
  - But you manage the Data Warehouse machines and databases
BICS Top Use Cases

- Agile Enterprise BI Platform
  - New Applications in weeks

- Domain Based Applications
  - Built by SME’s / Partners

- Move Enterprise BI to Cloud
  - Phased rollout
  - Start with Dev/Test
  - Next Targeted Use Cases

- Go All In
  - BICS for Enterprise Analytics
  - Enterprise DW on Database Service
Platform for Agile Application Development

- Deliver quick, pointed apps
  - Convert manual processes
  - Enable mobile
  - Reach users outside enterprise (partners, customers)

- Benefits
  - Quick time to value
  - Mobile enabled
  - IT managed
  - Scale on demand
Actual BICS Use Cases

- HR Analytics for 750 Managers in 30 days
  - Hi-Tech firm integrates Taleo and EBS Financials
  - Started as Prototype with another tool

- Financial Analytics for Business Users
  - Multiple ERPs, Planning, data files and more
  - Complete user-based analytics

- Self-service & Mobile Analytics for Executives
  - Users manage data migration & business rules
  - No dependencies on other parties
Additional BICS Use Cases

- Replace Discoverer with BICS
  - Use as opportunity to rationalize reporting environment
  - Add self-service Visualization capabilities
  - Training and empowerment for business users

- Platform for Innovation
  - Prototype new analytic and reporting needs
  - Easy to scale up/down as required
  - Turn on/off the lights when arriving/leaving
Enterprise BI in the Cloud

• Implement a Cloud Strategy
  – Larger than BI
  – Use Oracle PaaS/SaaS

• Benefits
  – Increased independence and modularity
  – Increased agility
  – Opportunity to dis-entangle various departmental applications
  – Scale on demand
Cloud - ERP, PLM, SCM, SOA, DW, & Analytics on Oracle IaaS & PaaS

EMEA Cloud

**PROD**
- EBS R12/PRIMAVERA/DW/SOA

**Database & DW on Exadata Cloud Service**
- E-Business Suite DB
- Primavera DB
- XYZ App Tier

**Middle-Tier on Dedicated Compute Cloud**
- EBS R12 App Tier
- Primavera App Tier
- XYZ App Tier

**DB Backup on Cloud Storage (Object)**
- E-Business Suite DB Backups
- Primavera DB Backups
- DW + Marts Backups

**BI Cloud Service**
- Custom Reports
- BI Cloud Replication

**SOA Cloud Service**
- EBS Adapter
- SOA Cloud Replication

**DR/ QA DC**

**DR/QA**
- EBS R12/PRIMAVERA/DW/SOA

**Database & DW on Exadata Cloud Service**
- E-Business Suite DB
- Primavera DB
- Custom Oracle DW

**Middle-Tier on Dedicated Compute Cloud**
- EBS R12 App Tier
- Primavera App Tier
- XYZ App Tier

**DB Backup on Cloud Storage (Object)**
- E-Business Suite DB Backups
- Primavera DB Backups
- DW + Marts Backups

**BI Cloud Service**
- Custom Reports
- BI Cloud Replication

**SOA Cloud Service**
- EBS Adapter
- SOA Cloud Replication

**Non-Production**

**TEST & DEV**
- EBS R12/PRIMAVERA/DW

**Cloud Storage (Object)**
- E-Business Suite DB Backups
- Primavera DB Backups
- DW + Marts Backups

**BI Cloud Service**
- Custom Management Utility Host

**SOA Cloud Service**
- EBS Adapter
- Other Adapter

**DB Backup on Cloud Storage (Object)**
- E-Business Suite DB Dev Copy
- Primavera DB Dev Copy
- DW + Marts Dev Copy

**Cloud Storage (Object)**
- Test 1 DB
- Test 2 DB

**ERD, DW DR/ QA**
- Golden DB
- Test Integration

- ZFS Replication
- ZFS Replication
- ZFS Replication
- ZFS Replication
- ZFS Replication
- ZFS Replication
- ZFS Replication

- Active Data Guard
- RMAN
- BI Cloud Replication
- SOA Cloud Replication
Consensus and Debate
Party On!  

Rock On!  

Thank You