



# SIGMA DESIGNS

**OBIEE Security Case Study**  
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**Steve Pankey, OAC**



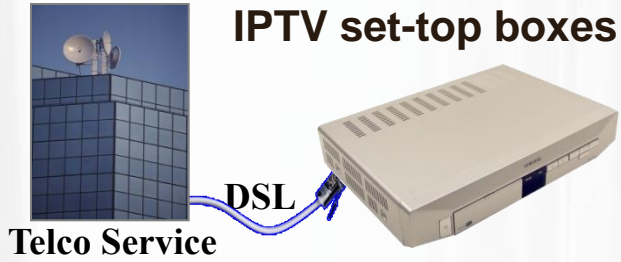
# Sigma Designs



## Media Processor and Connected Home Solutions for Consumer Electronics Products

- Industry-leading media processors
- VXP<sup>®</sup> video processing solutions
- Connected Home solutions: UWB and Z-Wave
- 250+ employees, headquarters in Silicon Valley

# Five high-growth markets



Portable media players



Digital media adapters



HDTVs



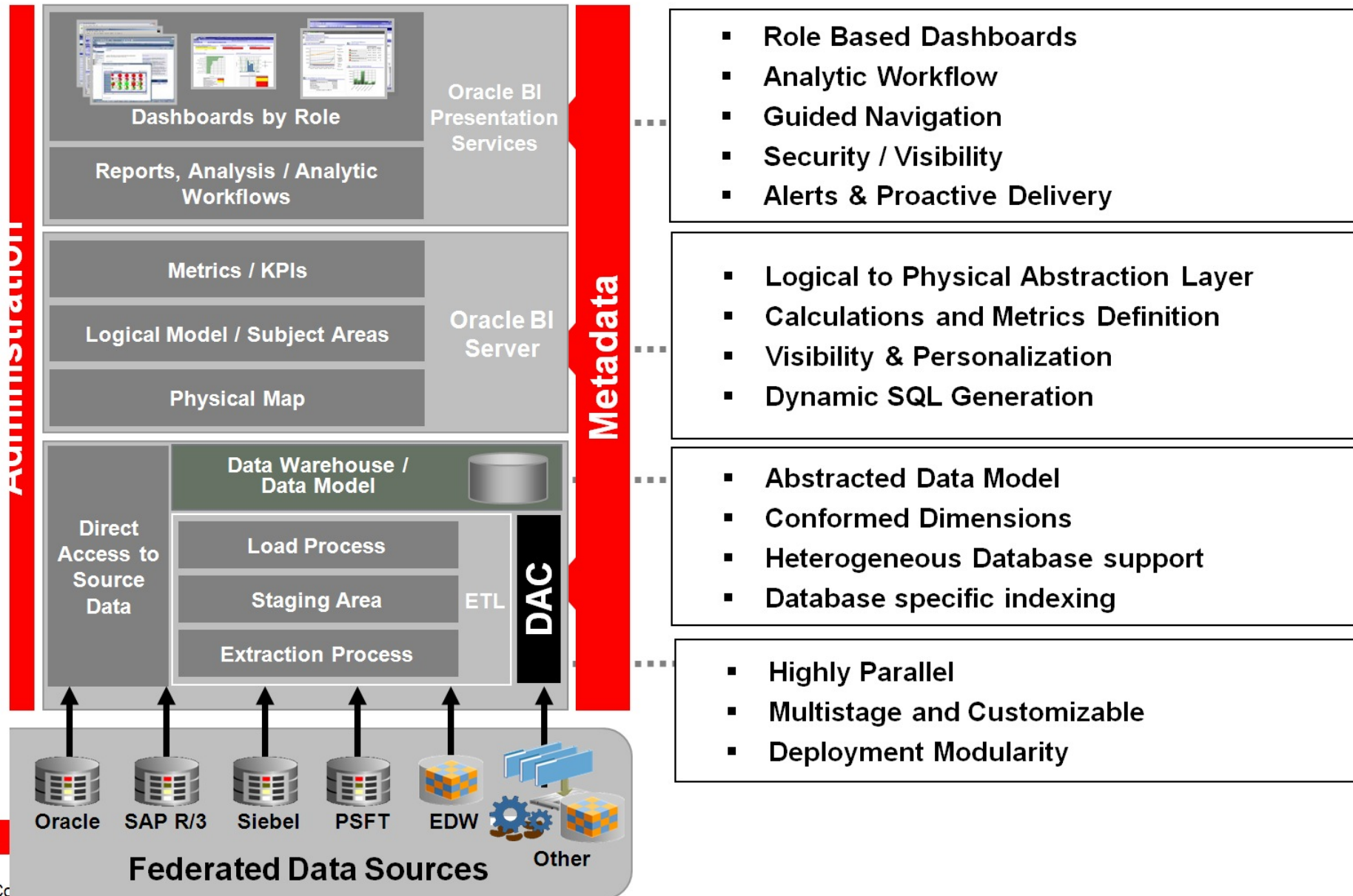
# About OAC Services (OACS)

- **Oracle E-Business Applications & Technology**
  - Delivering quality results for over 12 years to 125+ customers
- **Oracle CRM On Demand Application**
  - Multiple Implementation since 2006 including integration
- **Certified Oracle Partner**
  - Certified Champions: CRM On Demand, Financials, Order Management, Procurement, HR, DBA's, On Demand, Supply Chain Management, Incentive Compensation, OBIEE
  - Certified Oracle Accelerator program participant
- **Consulting Staff**
  - Business consultants with latest functional application knowledge – from the real world!
  - Technical consultants – software developers, DBA's, technical architects, integration experts
- **Regional Area**
  - Silicon Valley / Northern California
  - Offices in Campbell, Local Consulting Team
- **Industry Expertise**
  - High Technology, Semiconductor, Software, Medical Device, and Consumer Goods
- **Approach**
  - Typically vanilla – leverage Oracle functionality
  - Client Ownership, Knowledge Transfer, Sustainability
  - Project success is key to long-term references & relationships

# Why OACS?

- **Local Project Resources**
  - No additional project expenses for travel, other than mileage (15-18% savings)
  - Team members available locally, even after the project
  - No weekend travel
- **Expected Results**
  - Very clear scope included in Statement of Work
    - Unforeseen business changes not included
- **Management Escalations**
  - Executive team is local - possible escalations will be addressed immediately and in person
- **OACS Own Staff**
  - OACS has utilized the same core team for over 12 years. Team has implemented 125+ projects for customers – OACS does not just hire individuals for a project, we provide a proven team!
- **Business process knowledge**
  - OACS has substantial business process knowledge

# Oracle BI Applications Architecture





# Sigma IT Background

- Oracle Applications R12.0.4
  - Implemented 7/1/08
- Oracle BI Applications 7.9.5.1
  - Multiple Business Units
  - Multi-national
- Small IT staff
- Stringent Audit / SOx requirements.





# Sigma BI Security Requirements

- Restrict access to BI data same as EBS security
- Single Sign-on
  - Shared username/password with EBS
- Security at OBIEE Presentation Layer level:
  - Dashboards, Subject Areas, Shared Requests
- Security at the Data Level, as in EBS:
  - Per Ledgers, Operating Units, Inventory orgs, etc.





# Other requirements

- Single point of security administration
  - Use EBS users/responsibilities setups
  - Minimize administration overhead
- Single point of access to BI dashboard per user



# Key Solution Strategy: Match Responsibilities

- Match (exact character match):
  - EBS Responsibilities Name
  - Catalog Group Name
  - Repository Group Name
- Presentation Catalog (PC) and Repository security based on Groups only
  - PC and Repository users not used.
  - Users defined only in EBS.



# Sigma OBIEE Security Solution

- Leverage seeded Oracle BI Apps security
- Integrated Logon
  - User logs into EBS, EBS transfers user to OBIEE
- Integrated “Authentication”
  - Authenticates USER from EBS
- Integrated “Authorization”
  - Fetches active responsibilities as GROUPS
  - Match EBS responsibilities to:
    - Presentation Catalog Groups
    - Repository Groups



# Presentation Catalog (PC) Security

- Controls access to dashboards, pages, reports and features such as Answers and Delivers
- Sigma Solution:
  - Presentation Catalog Groups match EBS responsibility names (exact character match)
  - User's session PC Groups set by EBS query of user's responsibilities
  - Assigned Permission to PC objects using groups.



# Repository Security

- Controls Access to Data
- Sigma Solution:
  - Defined Repository Groups as EBS Responsibilities
  - Set permissions on each Subject Area for broad access control
  - Used Security Manager Groups for data stripes
    - Created Security Manager Groups for each logical striping entity.
    - Assign filters to each group on logical tables
    - Assign Repository Groups to Security Groups.



# Security Execution

- User logs into EBS.
  - EBS Authenticates
  - Sets cookie
  
- User accesses OBIEE
  - Selects OBIEE responsibility in EBS
  - EBS launches OBIEE
  - Fetch cookie, use to authenticate
  - Read EBS for user, responsibilities, etc.



# Solution Setup Steps

1. Define EBS setups for BI access:
  - Responsibility, Profile, Function, Menu
2. Create map of EBS Responsibilities to BI Objects
3. Create Presentation Catalog Groups to match EBS Resp.
4. Set security on Presentation Catalog objects
5. Create Repository Security Groups to match EBS Resp.
6. Set security on Repository objects
7. Define Security Groups for data striping.
8. Setup Session Variables, Init Blocks, Connect Scripts





# Sigma User's Experience

- Users have single login URL, username, and password
- Users only see dashboards, pages and reports that they have been authorized to see
- Users see common reports but with different data slices, based on EBS access/security

# EBS Logon Page



The screenshot shows a Windows Internet Explorer browser window displaying the Oracle EBS Logon Page. The browser's address bar shows the URL: `http://artemis.sdesigns.com:8014/OA_HTML/RF.jsp?function_id=28716&resp_id=-1&resp_`. The page features the Oracle logo at the top left and a navigation bar with "Login" and "Tools" options. Below the navigation bar is a banner image showing a globe and a row of five small photos of people. The main content area contains a login form with the following fields and buttons:

- \*User Name**: A text input field with the example text "(example: michael.james.smith)".
- \*Password**: A text input field with the example text "(example: 4u99v23)".
- Login** and **Cancel** buttons.
- Login Assistance** link.
- Accessibility**: A dropdown menu currently set to "None".
- Select a Language:** A link for "English".

The browser's status bar at the bottom indicates "Done", "Local intranet", and "100%" zoom level.



# EBS Home Page

**ORACLE** E-Business Suite

Oracle Applications Home Page

## Navigator

[Personalize](#)

- [Application Diagnostics](#)
- [GL Manager - HK](#)
- [GL Manager - SG](#)
- [GL Manager - US](#)
- [Inventory](#)
- [OBIEE](#)
- [Payables Manager - US](#)

### OBIEE

- [Oracle BI Answers](#)
- [Oracle BI Dashboards](#)

[Logout](#) [Preferences](#) [Help](#)

[Privacy Statement](#)





# OBIEE Default Dashboard

| Company Name                   | Group Account Number | Opening Amount | Debit Amount | Credit Amount | Closing Amount |
|--------------------------------|----------------------|----------------|--------------|---------------|----------------|
| Sigma Designs (Asia) Ltd.      | CASH                 |                |              |               | 5              |
| Sigma Designs Inc              | CASH                 |                |              |               | 3              |
| Sigma Designs Technology Singa | CASH                 |                |              |               | 7              |





# Authorization

## My Account - Windows Internet Exp

### My Account

Make changes to your account information.

#### General

Display Name

User ID

### Group Membership

This list shows the groups to which you belong.

|                       |
|-----------------------|
| Authenticated Users   |
| GL Manager - HK       |
| GL Manager - SG       |
| GL Manager - US       |
| Inventory             |
| Payables Manager - US |

[Join Catalog Group \(password required\)](#)



# Security Example: Madhu


ORACLE® Interactive Dashboards    My Dashboard    General Ledger    Tom's Dashboard

**My Dashboard**      Welcome, Madhu Kulkarni!    Dashboards -- More Products ▾ - My Account

Page Options ▾

| Company Name                   | Group Account Number | Opening Amount | Debit Amount | Credit Amount | Closing Amount |
|--------------------------------|----------------------|----------------|--------------|---------------|----------------|
| Sigma Designs (Asia) Ltd.      | CASH                 |                |              |               | .5             |
| Sigma Designs Inc              | CASH                 |                |              |               | .3             |
| Sigma Designs Technology Singa | CASH                 |                |              |               | .7             |

powered by ORACLE®





# Security Example: Steve

**ORACLE** Interactive Dashboards My Dashboard General Ledger Inventory Order Fulfillment Order Management  
Payables Profitability Receivables

**My Dashboard** Welcome, Steve Pankey! Dashboards - Answers - More Products ▾ - Settings ▾ Page Options ▾

| Company Name                   | Group Account Number | Opening Amount | Debit Amount | Credit Amount | Closing Amount |
|--------------------------------|----------------------|----------------|--------------|---------------|----------------|
| Sigma Designs (Asia) Ltd.      | CASH                 |                |              |               | 5              |
| Sigma Designs Europe           | CASH                 |                |              |               | 9              |
| Sigma Designs Inc              | CASH                 |                |              |               | 3              |
| Sigma Designs Technology Canad | CASH                 |                |              |               | 2              |
| Sigma Designs Technology Japan | CASH                 |                |              |               | 9              |
| Sigma Designs Technology Singa | CASH                 |                |              |               | 7              |
| Sigma International Limited    | CASH                 |                |              |               | 6              |
| Zensys A/S                     | CASH                 |                |              |               | 0              |

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# Ongoing Security Admin Tasks:

- Ongoing:
  - Create new EBS users, assign Responsibilities
  - Add/Change/Remove EBS Responsibilities for existing users
- Periodic:
  - When new Responsibilities added to EBS:
    - Repeat initial setup steps for:
      - Presentation Catalog Groups
      - Repository Groups
- Major OBIEE enhancements:
  - New Subject Areas, Dashboards, etc.
  - Repeat initial implementation steps



# Questions?





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