

BI Foundation Suite Implementation With Finance (Essbase), Service (OLTP) Integration

Session ID: 10534

Insperty' s case study using OBIEE as enterprise wide reporting solution; Complete spectrum for enterprise wide reporting, analysis, modeling and forecasting for multiple functional groups

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Performance Management



Retirement Services



Expense Management



Human Capital Management



MidMarket Solutions



Payroll Software



Recruiting Services



Time and Attendance



Introduction

Aashish Mahodaya

Supervisor, Customer Relationship Management,
Technology - Business Applications

Leading CRM/Business Intelligence Team,
Working as technical leader for CRM/OBIEE
strategy, development, integration & production
support.



Rama Yalala

Sr. Business Intelligence Architect, Insperity

Sr.BI Architect, solution designer for BI strategy,
development, integration & production support.



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Agenda

- Insperity
- Current OBIEE usage/ Status
- BI Application – Architecture
- OBIEE User Group, Case Study
- OBIEE for multiple Business Units
 - Service Analytics
 - Recruiting Analytics
 - Finance Analytics
- Finance Analytics, Future Plans
- OBIEE 11g/BIFS upcoming advantages



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Insperity - Current CRM/BI Applications



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- Insperity is currently running OBIA 7.9.6.4 and OBIEE 11.1.1.7.1 (BIFS, Hyperion – Essbase)
- OBIEE is integrated with Siebel On Premise CRM version IP2014 (PS12)
 - For approximately 1,400 users
 - Core Siebel modules include CRM Base, Call Center, Email Response, and Field Service
- Oracle 11g DB, SQL Server DB
- Oracle Service Cloud /Right Now – November'2015 Release
- Oracle Siebel On-Demand, Net Suite CRM



CRM/BI Application User Groups



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- Field Service Operations
- Account Teams
- Contact Center Users
- Manager, HR Services
- Client Liaisons
- Account Executives
- HR Specialists
- Performance Specialists
- Team Coordinators
- Payroll Specialists
- Payroll Supervisors
- Orientation Reps
- Safety Consultants
- Benefit Reps
- Health & Welfare
- Recruiting
- Renewals



Insperity CRM/BI business process related to solutions -



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Services Solutions

- Payroll Services
- Recruiting Service
- Employment Screening
- Retirement Services
- Insurance Services

Product Solutions

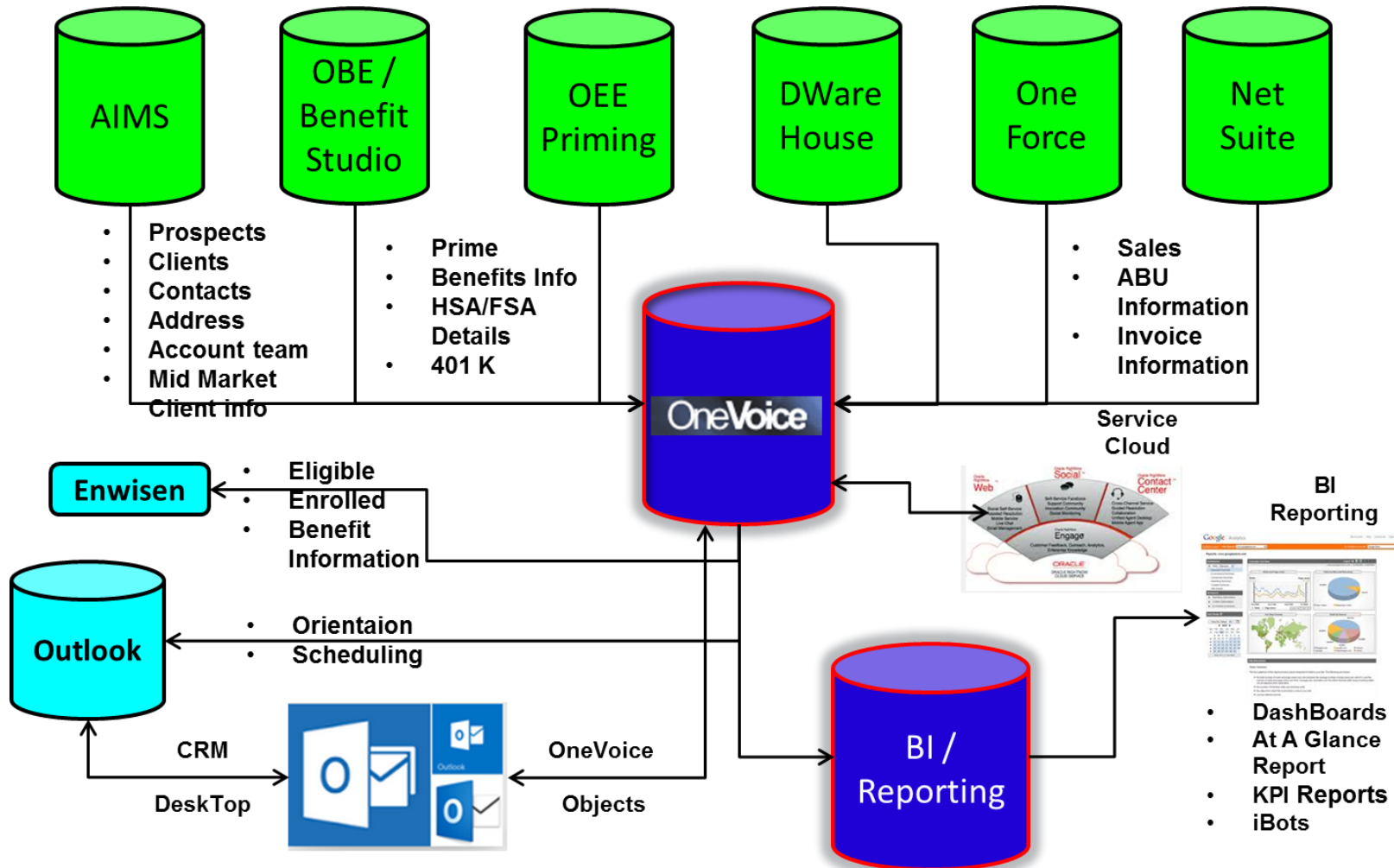
- Performance Management
- Organizational Planning
- Expense Management
- Time & Attendance
- Human Capital Management
- Financial Management



Case Study – OneVoice (CRM/BI Architecture)



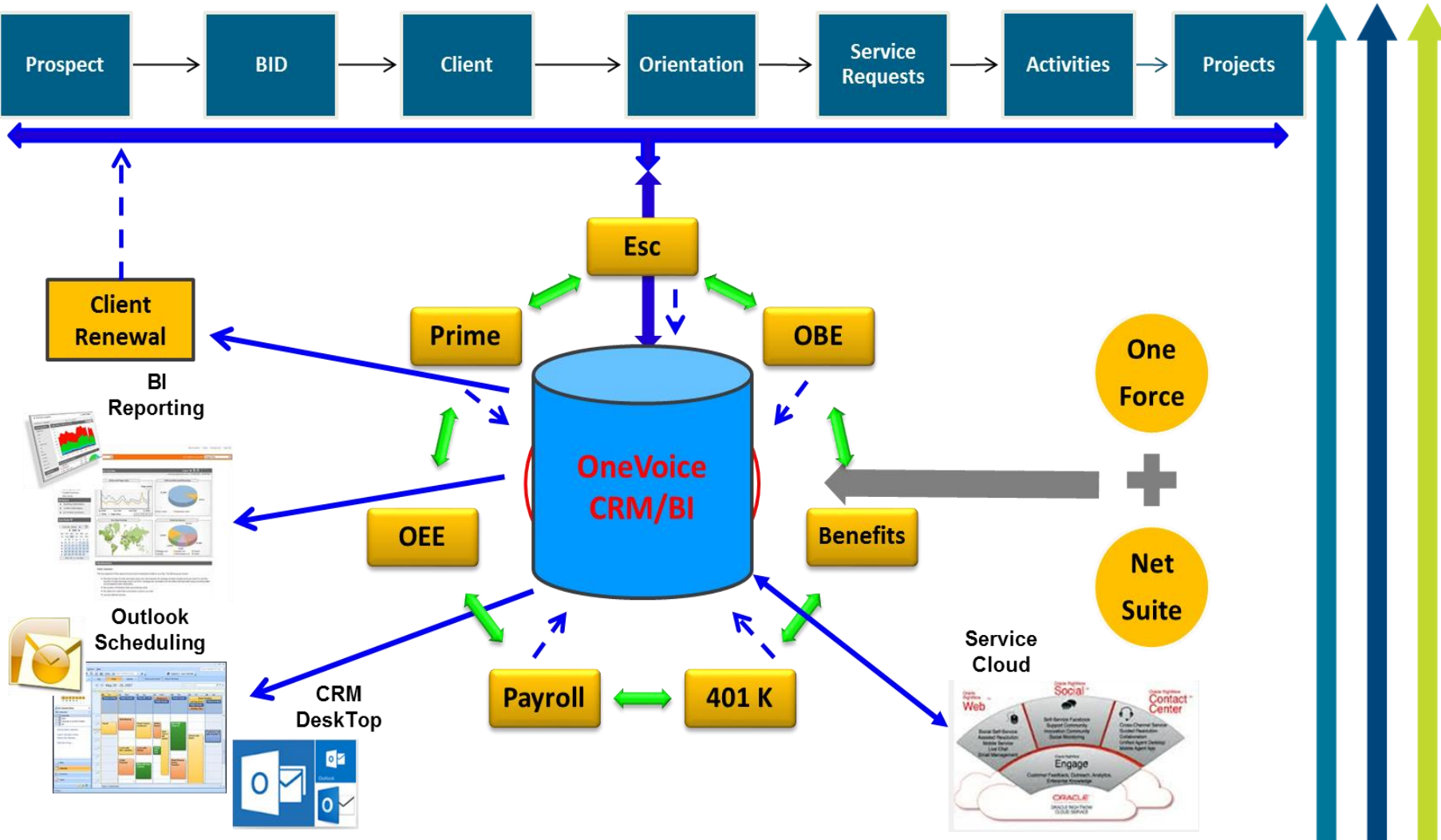
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Case Study – OneVoice (CRM/BI Process Flow)



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OneVoice(CRM)/BI usage



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- OneVoice provides 360 degree view of information for strategic business decisions
- Enhance Contact Center/Service Center productivity/performance
- Increase customer service level, service capacity and service efficiency – Standardization & Automation of business processes.
- Provide read only access to Legacy Application data
- Provide appropriate security controls to information
- BI /Analytics allows insight into customer trending through Dashboards/Analytical Reporting (e.g.. At A Glance Report)
- BIP, real time CRM reporting
- CRM DeskTop, Integration between Siebel & Outlook
- Service Cloud/Right Now (Chat/Co-browse) Siebel Integration



OneVoice (CRM) /BI usage continued..

- Enterprise wide reporting solution (Service, Finance, Recruiting.....)
- Self-service, Ad-hoc reporting tool for power users/end users
- Complete spectrum for reporting, analysis, modeling and forecasting
- Historical Reporting
 - Finance
 - Mid-Market Related Accounts/Growth Forecast
- Predictive Analytics model for Mid-Market
- Integrated with OneVoice.
- Action links to navigate back to source from a specific record.



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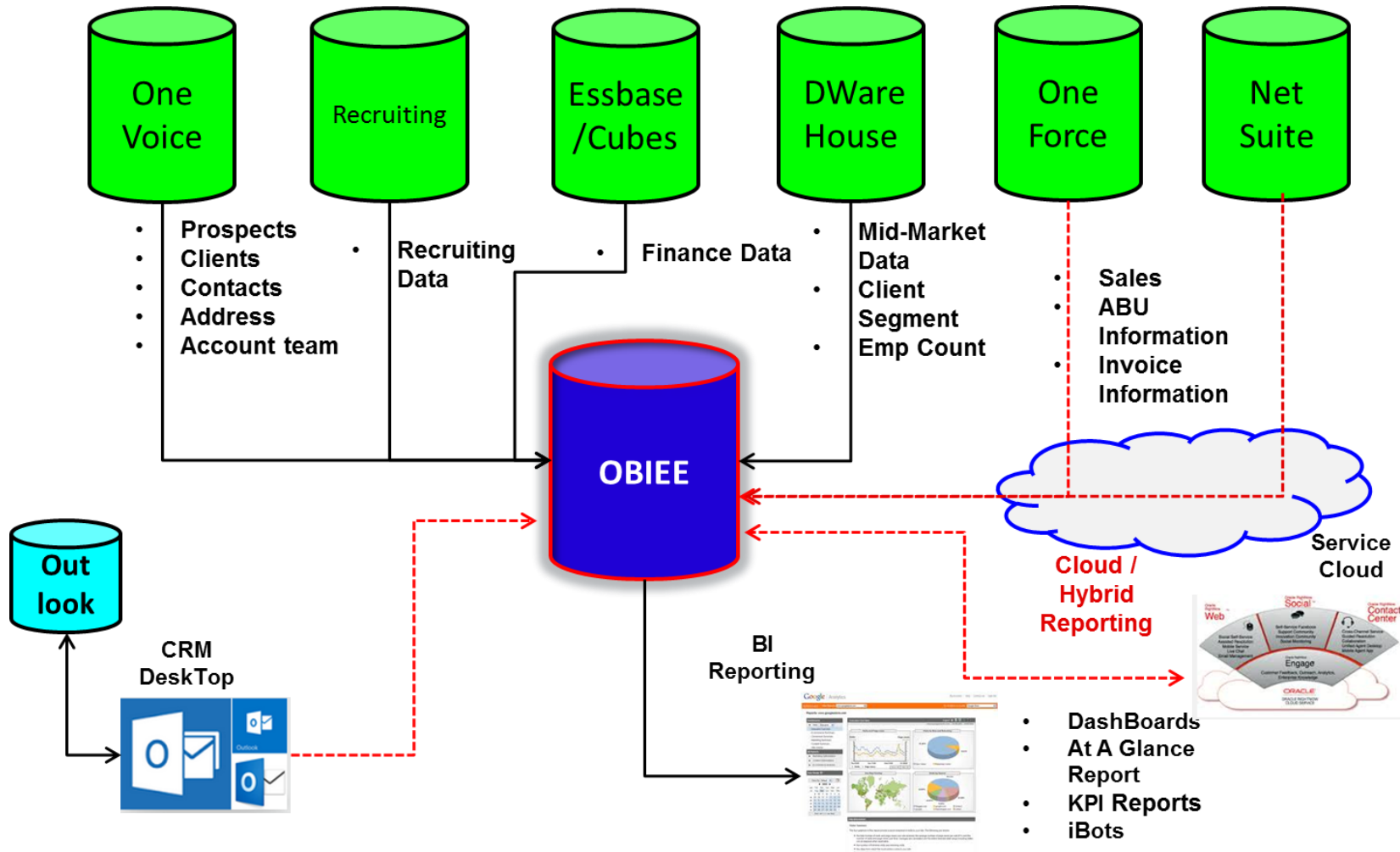
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OBIEE Architecture (Current/Future)



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OBIEE Key Features usage



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- Incremental ETL's for faster processing of data from source to data warehouse.
- Delivers/Agents – proactively monitor business information and Delivers reports to users to their chosen delivery method per set schedule.
- Guided navigation – Navigate to multiple reports.
- Usage Tracking availability
- Data is secured in multiple layers,
 - Row Level – Restrict data for user based on position/ Responsibility assigned in OneVoice
 - Object Level – Dashboard/Reports secured per user responsibility assigned in weblogic.



Service Analytics

- OBIEE Dashboards integrated within CRM Application using Symbolic integration
- At A Glance Dashboard, 360° view of Customer data
- Mid-Market Growth Forecast /Historical Reporting
- Related Accounts
- Enterprise Dashboard
 - Accounts
 - Service Requests
 - Activities
 - Projects
- Service Team Reporting for
 - Across Organization hierarchy
 - Any of the COE's.



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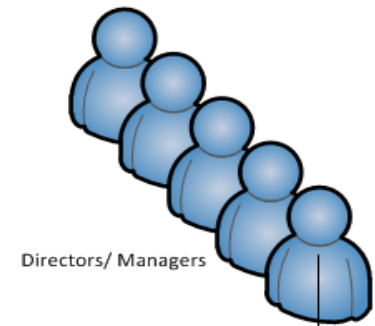
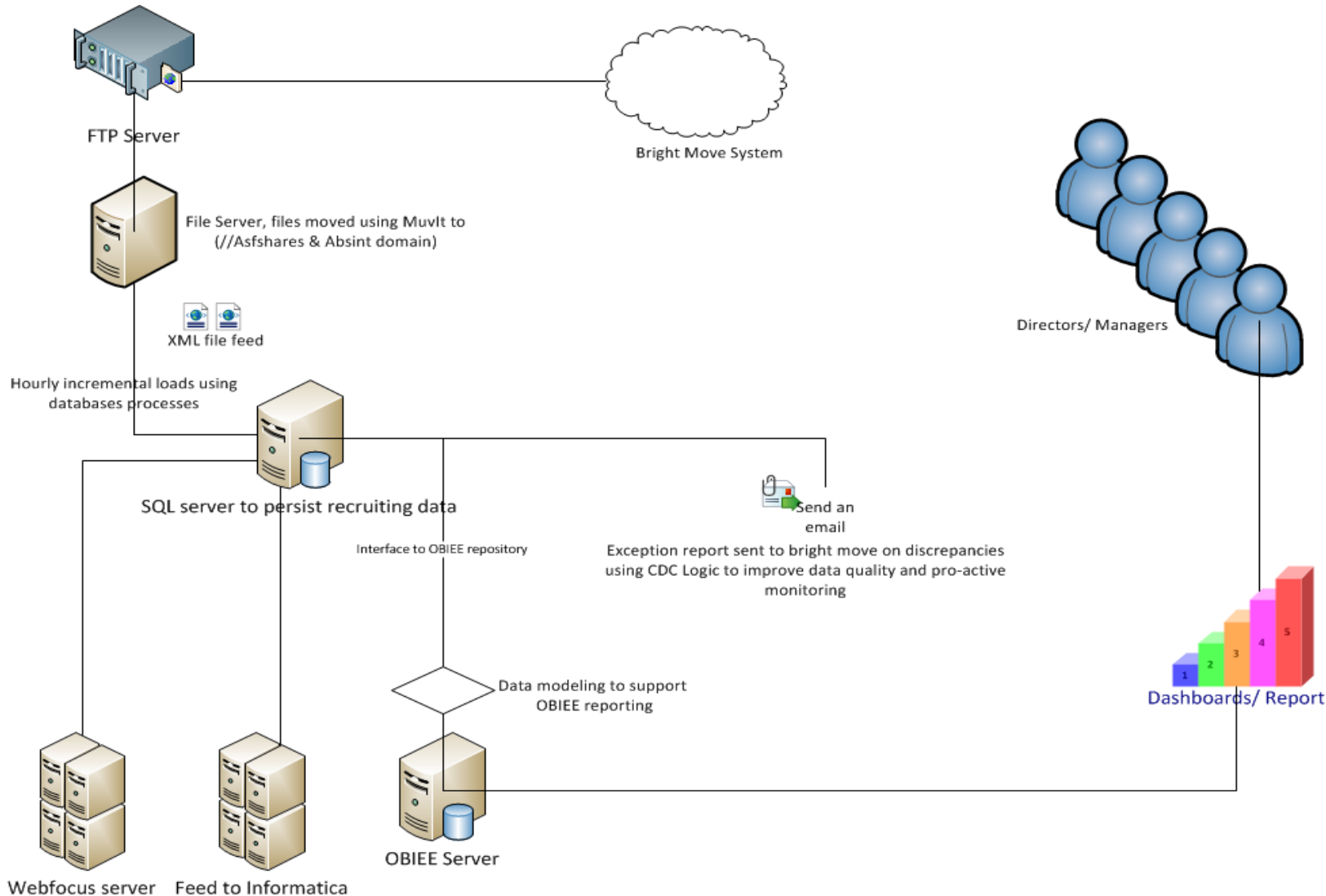
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Recruiting Analytics System Architecture



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Webfocus server Feed to Informatica

Recruiting Analytics

- Replacing Birst (outsourced solution), with in-house reporting solution.
- Key Take Away's -
- OBIEE provides the ability to build extensive reports and dashboards that couldn't be achieved with Birst.
- Easy access for Recruiting Directors/Managers to login and check for detailed analysis on their team performance.
- Identify training gaps with detailed analysis.
- Ability to build ad-hoc reporting per User request.
- Directors/Managers will be able to deliver more professional reports to our Clients.



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Recruiting Analytics continues..

- The ability to send our recruiting data to our Onboarding Primer for some clients.
- Data is more accurate with the Incremental loads throughout the day, whereas Birst data was only updated nightly.
- OBIEE Agents for scheduling reports are more extensive than Birst's report scheduler.



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Essbase – OBIEE Integration

- OBIEE 11.1.1.7.1
- ESSBASE – 11.1.1.4
- Essbase 9+ connection type
- Import cube multiple times to flatten measures.
- Security Authentication using Shared Services or database authentication.
- Move from Web Analysis to OBIEE Dashboard to gain functionality of filtering data with ease.



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Essbase – OBIEE Integration continues...

- Drill down to relational Database – Horizontal and Vertical federation.
- Horizontal federation achieved through modeling business layer using Multiple logical table sources for columns.
- Underlying relational database needs to be in sync with the cube member names.



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Finance Analytics – Current Status



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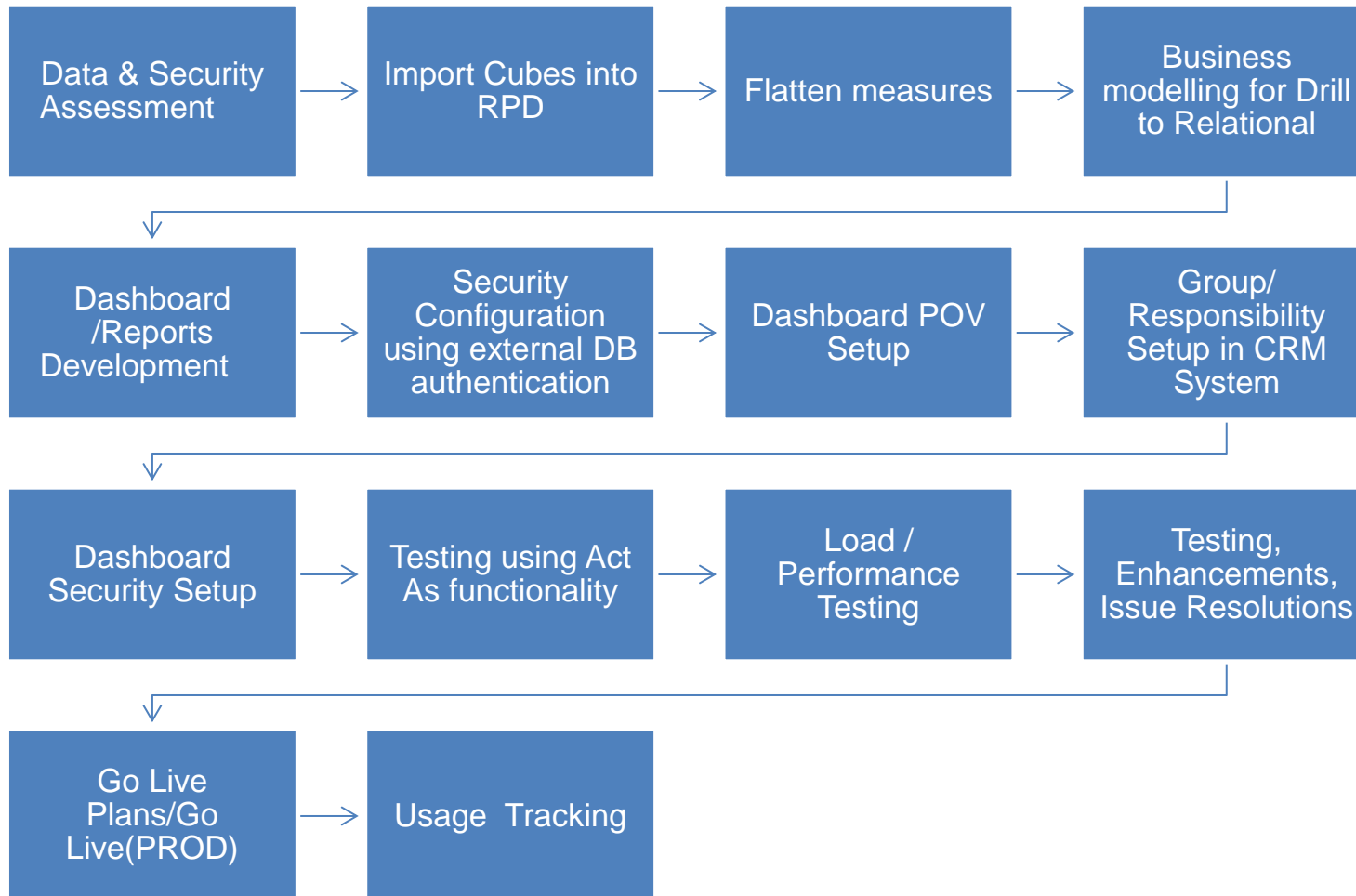
- PEO Opex Dashboard
- Actuals Vs Budget Analysis
- Actuals Vs Prior Year Analysis
- Improved drill to detail functionality
- Replacing Web Analysis Reporting Solution
- Executive Summary for various management groups



Essbase-OBIEE Integration Process



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Essbase as an OBIEE Data Source



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The screenshot displays the Oracle BI Administration Tool interface for a coreapplication_OH601898404 (Server BIEPM1). The interface is divided into three main panes:

- Presentation:** Lists various sample applications such as A - Sample Sales, B - Sample Quotas, C - Sample Headcount, E - Sample Essbase, F - Sample Essb Federated, H - Sample Olap, M - Datamining, O - Fusion Order Demo, and U - Usage Tracking.
- Business Model and Mapping:** Lists sample applications such as 1 - Sample App, 2 - Essbase Sample, 3 - Sample Federated, 5 - Olap Sample, 7 - Datamining, 8 - Fusion Order Demo (OLTP), and 9 - Usage Tracking.
- Physical:** Shows a hierarchical view of the physical data sources, including 01 - Sample App Data (ORCL), 02 - Sample App Xml Data, 03 - Essbase Sample E1, 04 - Essbase Sample E2 (Default Import), 05 - Oracle OLAP (DB Views), 07 - Oracle DataMining, 08 - Fusion Order Demo (OLTP), 09 - System DB (ORCL), and a connection pool named **biepm1** containing a **BISAMPLE** schema with various tables like Customers, Employees, Marital Status, Measures, Month of Year, Months, Products, and BISAMPLE - measure.

At the bottom of the window, the status bar indicates the database is "biepm1" and contains cubes. A "NUM" button is visible in the bottom right corner.



BIFS Architecture



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Oracle BI Domain - Enterprise Installation

Host 1

Host 2

Clustered Java Components (WebLogic Domain)

Managed Server | Cluster Node 1

Node Manager

Managed Server | Cluster Node 2

Node Manager

Action Services | BI Office | RTD

EAS | BI Publisher | Workspace

Financial Reporting | BI Composer

Security Services | Calc Manager

Web Service SOA

Hyperion Provider Services

BI Presentation Services Plug-In

Action Services | BI Office | RTD

EAS | BI Publisher | Workspace

Financial Reporting | BI Composer

Security Services | Calc Manager

Web Service SOA

Hyperion Provider Services

BI Presentation Services Plug-In

Administration Server

WLS Administration Console

Fusion Middleware Control

JMX MBeans

Administration Server (Inactive)

WLS Administration Console

Fusion Middleware Control

JMX MBeans

Clustered System Components (BI Instance)

Oracle BI System Components (Host 1)

OPMN

Oracle BI System Components (Host 2)

OPMN

Essbase Studio Server

BI Scheduler

BI JavaHost

BI Server

Essbase Agent

Essbase App

BI Presentation Services

Cluster Controller

Essbase Studio Server

BI Scheduler (Passive)

BI JavaHost

BI Server

Essbase Agent (Passive)

Essbase App

BI Presentation Services

Cluster Controller (Passive)

Configuration Files, BI Repository, Essbase Repository, Presentation Catalog, Security, Identity Management, Connection Configuration, Database Configuration, Log Files

Host 1

Host 2

BIFS Integrated with Essbase



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Pros

- One Place administration for services
- Security Configuration in Enterprise Manager
- OBIEE integrated in Workspace EPM
- Point of Views on Dashboards
- Smartview Integration

Cons

- Essbase Server can only run on Active-Passive Cluster
- Complete change from Shared Services administration
- Limited functionality of Workspace EPM
- Requires additional level of security to filter data for POVs

OBIEE / Essbase Integrated Infrastructure (Foundation Suite)



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ORACLE Enterprise Manager 11g Fusion Middleware Control

Enterprise Manager

coreapplication Business Intelligence Instance

Change Center: Lock and Edit Configuration Restart to apply recent changes

Overview Availability Capacity Management Diagnostics

Processes Failover

Processes

Name	Status	Host
BI Presentation Services	↑	adc1140209.us.oracle.com
coreapplication_obips1	↑	
BI Servers	↑	
BI Schedulers	↑	
BI Cluster Controllers	↑	
BI JavaHosts	↑	

Start All Stop All Restart All Start Selected

Configure Components

Oracle Business Intelligence 11g 11.1.1.7.0 - Step 7 of 14

Install

Security

Permission Class: oracle.security.jps.ResourcePermission

Resource Type: oracle.essbase.server

Resource Name: /EssbaseCluster-1

Permission Actions: administrator

Log Messages

Severity	Date/Time	Component	Message
Warning	Dec 7, 2012 11:26:51 AM GMT	OracleBIServerC	Warning: Clusterin
Warning	Dec 7, 2012 11:10:13 AM GMT	OBIPS	Populating app role
Warning	Dec 7, 2012 08:10:09 AM GMT	OBIPS	Populating app role
Warning	Dec 7, 2012 05:10:09 AM GMT	OBIPS	Populating app role
Warning	Dec 7, 2012 02:10:05 AM GMT	OBIPS	Populating app role

More recent warnings

View / Search Log Files

Search all the log files using the Log Viewer

Logging

- Presentation Services Log
- Server Log
- Scheduler Log
- JavaHost Log
- Cluster Controller Log
- Essbase Log
- Action Services Log
- Security Services Log
- Administrator Services Log

OBIEE Features for Essbase

- Display Hierarchies in Subject Area
- Federate MDX and relational data sources together
 - Combine Essbase data on Dashboards/Reports
- Null Suppression Options
- MDX Query Builder /BIP
 - GUI based query builder
- Smartview Integration
- EPM Workspace Integration
- Run Time Substitution Variables
- Fully interactive graphical dashboards



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Finance Analytics – Future Plans

- Foundational Migration to BIFS & enhancement to executive reporting
- Single source for Finance Reports
 - FR Reports integrated in the OBIEE Finance workspace
- Beyond 2016
 - New dashboard development
 - Executive view
 - Business unit specific view(s)
 - Additional data sources (other Essbase cube like AIMS_LAW &/or other data sources)
 - Mobile Capability Available
 - Self service reporting



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BI Foundation Suite & Capabilities



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- Eliminate cost redundancy by standardizing on a single Business Intelligence platform.
- Hyperion Essbase and OBIEE consolidated on one server
 - Integrated Essbase/Cubes with OBIEE
 - Integrated Login for Finance Reporting
 - Data Security
 - Role based
 - Data level
- Self Service BI
- BICS (OBIEE on Cloud) – Next Generation architecture
- On Premise, On Cloud, Hybrid Reporting
- Data Analyzer, New Data Discovery/Interactive visualization client



Usability Issues / Challenges



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- Simplified /Consistent UI
 - Simplicity
 - Mobility
 - Extensibility
- Browser Compatibility
 - Actions Links – IE/Chrome
 - Column Properties Issues – Chrome
 - Iframe integration with Open UI
- Essbase Dashboard Issue
 - Drill to parent causes BI Server hang
 - “My Customization” does not reflect substitution variable change
- Application Integration (On-premise/Cloud)
 - On Premise/Cloud (Net Suite) CRM – BI Integration



BI Foundation Suite Implementation with Finance(Essbase), Service (OLTP) Integration

- Current Architecture of BI Foundation Suite, Essbase bundled with OBIEE in Active-Passive clustered configuration
- Migration of standalone EPM applications to fully integrated BIFS environment
- Considerations, challenges and resolutions in implementing Essbase filters in Fusion Middleware
- Next Generation architecture, Future plans for On-Premise, Cloud, Hybrid solutions for strategic data analysis
- OBIEE 11g/BIFS upcoming advantages for multiple functional domains like Self-service reporting, data mashups



Questions, Comments, Feedback....



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Thank You !!!

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