



State and Federal Information Management Program – Business Intelligence

Overview

Oracle Business Intelligence (BI) is a portfolio of technology and applications that provides the industry's first integrated, end-to-end Enterprise Performance Management System, including BI foundation and tools - integrated array of query, reporting, analysis, alerting, mobile analytics, data integration and management, and desktop integration - as well as category-leading financial performance management applications, operational BI applications, and data warehousing.

Like most state and federal government programs today, this agency provides information and services to the public and to other government agencies. Upon its establishment, the agency was charged with consolidating, managing and dispensing information related to a state's commercial activities. The agency needs to make sure the service they provide is accurate, available, fast, and secure.

The agency has several key responsibilities, including the maintenance of an extensive library of data, which is utilized to fulfill data requests. This library of both state and federal historic data is relevant to the needs of analysts and economists and is relied upon by governing boards to make critical decisions where accuracy and reliability are vital.

Challenges

Gathering the data required for this library and making it available for analysts, economists, and decision makers presented many challenges:

- Consolidating data from multiple sources into a single, comprehensive database
- Tracking the flow of data from source to end-user for quality assurance
- Providing end-users with the data they need, in the format they need, when they need it
- Applying value-added information and metadata to end-users for standardization purposes and to give the data additional context

Solution Details

With the agency providing key components of the business logic for consolidating the disparate data sources, Zirous architected a solution leveraging Oracle's Business Intelligence Suite (BI) and Oracle Application Express (APEX). BI provided the front-end user experience with the data, giving multiple, concurrent end-users the ability to navigate through the different data sets via an easy-to-use web interface. Web applications developed with APEX provided agency administrators a simpler way to manage aspects of the data otherwise done manually through command line calls via the operating system or database.

Technology

Stack:

Oracle Database 11g
Oracle WebLogic Server 11g
Oracle Business Intelligence 11g
Oracle Application Express 4.0+



The final product has addressed the aforementioned challenges in the following ways:

- With the agency providing key business logic and Zirous providing an APEX application for managing the data extraction process, the agency is now able to easily load and refresh the various data sets through an easy-to-use web interface.
- Additionally, with the APEX application provided for data extraction, the agency is now able to answer the who, what, and when questions of how the data got from point A to point B. Not to mention the ability to archive data for easy backup and recovery.
- BI querying and analysis tools have provided the agency, and its end-users, the ability to quickly find answers to the questions they have in a variety of output formats.
- And finally, utilizing APEX applications to enhance the already rich metadata tracking capabilities built-in to BI has greatly increased the agency's overall capability to provide the data as much context as needed, making their BI environment a more complete, one-stop place for data analysis.

