# Business Intelligence Data Warehouse Development for Provincial Government

#### Situation

Each day the BC Government's Corporate Accounting System Data Warehouse enables more than 3,500 users at the Province of British Columbia to turn information into intelligence for better decision-making and enhanced performance.

In the past, these users – employees of various B.C. Government ministries – logged requests with the Province's Corporate Accounting Services (CAS) office each time they needed to run reports or obtain specific information relevant to their ministries. Reporting out of the Online Transaction Processing (OLTP) system, however, slowed down the system and provided only limited BI functionality. So in 2000, CAS decided to create a new data warehousing system based on Oracle's database technology and business intelligence (BI) tools.

The goal was to create a BI system that empowered users to generate reports quickly and effectively without impeding OLTP application usage and processes.



#### Challenge

- To meet the BI needs of multiple user groups in government: basic, advanced and power users
- To empower more than 3,500 end users in 20 government ministries to create timely reports in formats that met personal and ministry requirements
- To create a trusted and accurate source of financial information for decision support use
- To develop a secure BI system that facilitated data segregation between ministries
- To deploy a flexible suite of BI tools that worked well with existing enterprise systems – particularly the Oracle Financials system
- To develop robust and scalable ETL for backend load processes
- To reduce the total costs associated with creating and maintaining an effective and secure BI environment

#### **Rockland's Solution**

The CAS Data Warehouse created by and maintained by Rockland is the cornerstone of the Business Intelligence and reporting system for BC Government financial information. Every night, data from the Oracle Financials system and supplementary operational systems is transferred over to the warehouse database, where sophisticated ETL processes transform that data into target tables that facilitate end-user reporting.

Reports generated using Oracle's suite of BI tools may range from one page to several thousand pages. Intelligence contained in these reports is used for a variety of purposes – from monthly reconciliation of accounts and budgeting to responding to queries from politicians and others.

For example, a politician may require a very specific piece of information – such as expenses on helicopter rentals over a certain period of time. With the CAS DW, the relevant ministry can access that information quickly without relying on the CAS office to get it for them thereby dramatically enhancing reporting efficiencies.

Oracle Database 10g manages CAS' enterprise data. Rockland's solution helps CAS attain strict security, uptime and performance requirements by using features like Oracle Virtual Private Databases for data segregation and Oracle Partitioning for high performance data loading and access.



Rockland's solution includes a comprehensive data reconciliation framework for systematically assessing quality of information at every processing stage and alerting DW administrators about any potential issues.

Rockland also implemented Oracle Portal, with Oracle Identity Management and single sign-on (SSO) integration to BC Government's main user directory, which serves as a central access point to all CAS applications. From within the portal, users can launch or generate a report, schedule and e-mail its contents, or just view the report online either as an HTML or PDF file.

#### **Key Benefits**

## Rockland's solution for the BC Government has helped them achieve the following benefits:

- Timely and effective reporting and data analysis capabilities for more than 3,500 end users in 20 government ministries
- Secure information access with data segregation between ministries
- Integration of BI solutions with existing enterprise applications, particularly the Financials system
- Fully developed robust ETL and backend processes
- Reduction in total costs associated with creating and maintaining an effective and secure BI environment

### **Technologies Deployed**

- Oracle eBusiness Suite 11i
- Oracle Database 10g Enterprise Edition 64bit with Partitioning Option
- Oracle Application Server 10g
- Oracle Identity Management 10g
- Oracle Portal 10g
- Oracle Discoverer 10g
- Oracle Reports 10g
- Oracle Forms 10g



- Oracle Warehouse Builder 9i
- Oracle Designer 10g
- Appworx Enterprise Job Scheduler by UC4

#### **About Rockland System Solutions**

Rockland's expert consultants deliver strategic value through an integrated approach to Financial/ERP Systems Implementation and Business Intelligence and Data Warehouse Solutions.

Rockland is an "execution" team specializing in Systems Solutions Implementations, and ongoing Service Operations Support. We also have a proven track record delivering these services in a Shared Services environment.

During Project Implementation, we focus on integrating systems with our clients' other applications, business and IT environments to ensure that present and future management information and reporting needs can be supported.

Our Operations Support Services ensure value for Rockland clients by helping them achieve effectiveness and efficiency in the delivery and support of services, ensuring that mediumto long-term strategic objectives are realized.

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