

The Bureau of Labor Insurance Creates a Robust Labor Protection and Service Network



Bureau of Labor Insurance
Taipei, Taiwan
www.bli.gov.tw/

Industry:

Public Sector

Oracle Products & Services:

Oracle Database
Oracle Application Server
Oracle Portal
Oracle Data Warehousing

Key Benefits:

- Supported 6 terabyte of application data and an 8 terabyte data warehouse, as well as more than 800,000 additional entries per month
- Enabled real-time data interchange with selected banks and external clients
- Ensured seamless re-development and migration to the new Oracle platform

“Due to the massive amount of data and complex business content, we have high standards for the usability, efficiency, reliability, security, load, transaction integrity, extendibility, portability, and manageability of hardware and software systems. The Oracle 10g solution is the database and application platform that best fulfills all these demands.” – Yen Yong-jen, Chief of Information, Bureau of Labor Insurance, Commission of Labor Affairs, Executive Yuan

Established 57 years ago, Taiwan’s labor insurance service now covers a record-breaking 8.79 million people. The Bureau of Labor Insurance (BLI) plays an important role in the social insurance and social security system of Taiwan. In addition to continually improving its performance and introducing new services, the BLI aggressively integrates government and public resources to create a winning environment for Taiwan’s labor force, industry, and the government.

The BLI covers labor insurance, employment insurance, occupational accident protection, wage advance and disbursement, farmer’s insurance, and social aids. With more than 8 million people insured, the BLI adds an average of 1 million data entries for newly insured constituents and about 4.46 million data entries a month for the labor pension. Moreover, data in every entry must be recorded in detail and retained permanently. As a result, the BLI needs a robust database and infrastructure.

To cope with increasingly complex business content and fast-growing data volumes, the BLI is changing the architecture of its IT systems. The business is moving from a closed mainframe environment to an open Unix platform. The five-year transition began in September 2005. With application data volumes reaching 6 terabyte and the data warehouse up to 8 terabyte, the BLI has progressively upgraded its database from Oracle8i to Oracle9i to Oracle 10g. It has also introduced the latest grid computing technology to enhance the overall usability, reliability, stability, and manageability of its systems.

Easy Pension Enquiry

To cope with the new labor pension scheme, the BLI introduced a Labor Insurance Protection (LIP) card so users could query pension payments in their bank accounts. It is estimated that over 1 million LIP cards will be issued by 2008. Details of labor insurance duration and payment records will be added to the LIP card.

To cope with the growing volume of LIP cards and the continuous addition of new functions, while supporting real-time enquiries from four banks (Land Bank, E. Sun Bank, Taishin Bank, and Taipei-Fubon Bank), the BLI needed to update its back-office systems. The organization decided to implement the LIP card system on the open Unix platform.

The BLI plans to move all new business systems to the new platform. In addition to the LIP card system, the BLI's personnel, attendance, and document systems will be moved to the Oracle 10g platform during Stage 1 of the project.

Unlike ordinary business systems that have a limit on data retention time, all data stored by the BLI must be retained permanently. Therefore, the reliability of the database system must be exceptionally high to load massive amounts of historical data and support millions of new entries.

The database and back-office systems also need to be closely integrated with the systems of the four banks to allow users to make labor insurance and labor pension enquiries from the ATMs of these banks using their LIP card. Database stability is therefore crucial.

In addition to banks, external clients of the BLI include government units such as the Ministry of the Interior, the Council of Agriculture, the Bureau of Employment, Vocational Training, the Financial Data Center, the Bureau of National Health Insurance, and county/city governments. Most of these organizations exchange data with the BLI. The database system must be flexible enough to cope with the increasing data transactions from external clients.

To address these requirements, the BLI adopted grid computing, based on its successful experience with Oracle database systems.

The open Oracle 10g solution supports cross-platform operations while the BLI progressively moves from closed to open systems.

Moving Towards an Open System

The BLI maintains 20 master systems and subsystems to handle 400 tasks. These master systems support the underwriting business, financial management, labor and farmer insurance cash payments, occupational accident medical payments, employment insurance payments, occupational accident labor protection payments, advance and disbursement of overdue wages, pensions, farmer's insurance, allowances for older farmers, daily life allowances for the elderly, accounting management, statistics and analysis, customer service, document management, control and evaluation, personnel management, relief loans, administration support, and fund utilization management.

According to the BLI, most of its AP systems are currently running on the closed mainframe system, with only a few running on open systems. Following the five-year Computer Server System Upgrading Plan and once new business system development is complete, Stage 2 will see the BLI transfer other systems to the Oracle platform. According to BLI estimates, the welfare allowances system will be re-developed and moved to Oracle 10g in 20 months. During Stage 3, the BLI plans to transfer the farmer's insurance and the labor insurance data of over 10 million people to Oracle 10g.

The BLI also uses Oracle 10g to underpin its data warehouse, which produces statistics and reports and handles liquidation.

“In the Computer Server System Upgrade project, both software and hardware systems must support a clustered architecture and Web services, using Java as the program development language,” said Yen Yong-jen, chief of information, Bureau of Labor Insurance. “These systems must also fulfill our requirements of high usability, efficiency, reliability, security, load, transaction integrity, extensibility, portability, and manageability. The Oracle 10g solution is the database and application platform that best fulfills all these demands.”

The Bureau of Labor Insurance handles a range of labor insurance services in Taiwan, including labor insurance, employment insurance, occupational accident protection, wage advance and disbursement, farmer's insurance, and social aids.