

INFORMATION FOR SUCCESS

Oracle Fusion Middleware Customer Reference Booklet
April 2013



Hardware and Software, Engineered to Work Together



We are at the dawn of a new age of information technology. For too long IT has struggled to cope with increasing complexity while attempting to be responsive to the changing needs of business. Organizations are now embracing the promise of social, mobile, fast data, and cloud computing—in the hope of leveraging a whole new approach to running IT never imagined before. At Oracle, we have been working hard on making the advances of social, mobile, fast data, cloud technologies available to our customers of Oracle Fusion Middleware.

With over 120,000 customers, Oracle Fusion Middleware is the only middleware available from any vendor that provides a complete, open, and integrated approach across all middleware solutions including development tools, application servers, identity management, service integration, data integration, business process management, content management, business intelligence, and enterprise portals. Oracle offers the efficiency of working with a single, strategic partner for all of your middleware requirements, as well as the cost effectiveness of certified integrations with Oracle Database, Oracle Applications, and Oracle Engineered Systems. With market-leading and best-in-class offerings across every product line, Oracle Fusion Middleware can enable you to maximize the processes and applications that drive your business today and provide a foundation for innovation in the future.

I would like to invite you to review a selection of our customer references. These companies have realized significant benefits and we are confident that your company can also realize similar benefits with Oracle Fusion Middleware.

Amit Zavery,
Vice President, Product Development, Oracle Fusion Middleware

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APPLICATION DEVELOPMENT FRAMEWORK (ADF)

Oracle Customer:**ECSTeam, Inc.**

Greenwood Village, Colorado
www.ecsteam.com/oracle

Industry:

Professional Services

Oracle Products & Services:

- Oracle JDeveloper
- Oracle ADF 11g
- Oracle ADF Mobile
- Oracle WebLogic Server

Oracle Partner:**ECS Team**

www.ecsteam.com

ECSTeam, Inc.

“It is amazing to see an application built with familiar ADF concepts and a single common code base running on both Android and iOS with no modifications. The many capabilities provided out-of-the-box is a huge benefit of ADF Mobile that saved us development time.”

— **Kurt Kellner**, CTO, ECSTeam, Inc.

Overview & Goal

ECS is a Professional Services firm that delivers business value through technology and strategic services. A recent project developed is an application known as El Perico for Synergetic Systems Management LLC (SSM). The goal of SSM is to provide affordable information systems with a focus on quality customer service that small to medium sized health agencies can afford. The El Perico application fulfills this goal by providing a comprehensive web-based behavioral healthcare application licensed by agency and user in a Software as a Service (SaaS) model. The latest advancement to El Perico is the ability to provide critical content to mobile devices.

Organization

The intended users of this application are behavioral healthcare providers aiming to improve patient care. In the mobile use case for crisis data, the healthcare provider needs quick access to the relevant information on an individual to assist with emergency situations.

“In a behavioral health crisis situation, it is so important to have instant and secure access to client information. The mobile application for El Perico is a real asset for responding to a crisis or police call – timely resolution helps prevent someone from harming themselves or others.” - Donald R. Naranjo, Ph.D., CEO at Synergetic Systems Management

Solution & Results

El Perico has an explicit “crisis plan” report. Making this information more timely and portable turned out to be a perfect use case for ADF Mobile as it delivers content in a crisis situation to a mobile device anytime, anywhere. The knowledge that ECS already had from their development of the Oracle ADF web-based El Perico SaaS application transferred seamlessly to the ADF Mobile scenario. The straightforward and elegant use case was to make the crisis plan available on a mobile device.

To build the mobile application, ECS leveraged the business services already built for the Web application, exposing Oracle ADF business components as SOAP Web Services, and served these up to the ADF Mobile application through a simple web service data control. This data control enables for binding of components on the Oracle ADF Mobile AMX pages much like you would do in traditional ADF development. Navigation was handled through standard ADF taskflows.

Leveraging the productivity offered by Oracle ADF Mobile, the mobile application was completed with less than 80 hours of development.

The capabilities provided by El Perico Mobile include:

- Secure access to the application and data, using the same credentials the care providers use to access the web-based application
- After logging in, a provider is presented with a list of only the consumers they are authorized to see

- The care providers may choose any of the consumers and get the full Crisis Plan for that consumer. This information was previously only available by printed report or by accessing multiple web-based screens
- From the Crisis Plan, the provider can easily access different areas of the plan and access contact information for the consumer (e.g., home telephone, home address) so that the provider can utilize on-device functions to contact the consumer

Business Value

El Perico Mobile solves one of the most urgent problems for users of El Perico: instant and secure access to consumer data in the event of a crisis. Rapid access to contacts, consumer history and treatment plans are consumer health and timely resolution of a crisis.

Benefits realized by the ECSTeam through the use of ADF Mobile:

- Faster time-to-market
- Reuse of existing skills
- Less than half the development effort of two native apps, iOS & Android, with one solution

A well designed mobile application provides the right information at the right time, and El Perico Mobile is an example of a purpose-built mobile application that drives real business value. Our experience with mobile and the technology provided by ADF and ADF Mobile enabled us to develop this application for Android and iOS devices in an extremely efficient and cost-effective manner.” Greg Opie, Director of Solutions Architecture at ECSTeam.

Application View

From left to right you see the El Perico ADF Mobile application splash screen, alphabetical listing of consumers per health care provider, the details for a specific consumer with native device functionality provided through ADF Mobile components with PhoneGap integration for placing a call or email all available at the touch of a screen, on the last screen a carousel is used to show medication details for the customer.



Oracle Customer:**PT. Sigma Cipta Caraka
(telkomsigma)**

Jakarta, Indonesia

www.telkomsigma.co.id

Industry:

High Technology

Employees:

1,000

Oracle Products & Services:

- Oracle Database
- Oracle Application Development Framework
- Oracle Internet Application Server, Enterprise Edition

PT. Sigma Cipta Caraka (telkomsigma)**Supports 50% More Loan Accounts per Client,
Using Cloud-Based, SaaS Financial Solution—
Increases Processing Speed**

“We were very impressed with Oracle’s strong reputation and had already experienced its products’ high performance. By upgrading our software-as-a-service financial solution with Oracle Database, Oracle Application Development Framework, and Oracle Internet Application Server, we have increased the number of loan accounts our system can support for each client by 50% and improved processing speeds to up to 278 terabytes per second.”

— **Naharus Surur**, Product Manager—Arium CAM, PT. Sigma Cipta Caraka (telkomsigma)

PT. Sigma Cipta Caraka (telkomsigma) is a leading integrated-IT-solutions provider in Indonesia. The company offers a variety of IT consulting, management, software development, and integrated data center services, including cloud computing, software as a service (SaaS), disaster recovery, and financial managed services. It has approximately 250 clients in the banking, telecommunications, manufacturing, and distribution industries, including large international companies, such as the Commonwealth Bank.

One of telkomsigma’s main SaaS offerings is Arium CAM. The cloud-based, end-to-end IT solution enables banking and financial services clients to perform a range of credit and loan services, including loan processing, channeling, payment terms, asset purchasing, invoice discounting, and bulk factoring.

Challenges

- Improve the system performance of its cloud-based, end-to-end financial solution Arium CAM, which was previously running on MySQL
- Provide a high level of system availability and stability for five clients that are using Arium CAM, including large international companies, such as the Commonwealth Bank
- Ensure Arium CAM can scale to accommodate new banking and financial services clients

Solutions

- Increased the number of loan accounts Arium CAM can support for each client by 50%—from 500,000 to 1 million
- Improved financial application processing speeds to up to 278 terabytes per second
- Developed financial applications and interfaces around 30% faster, using Oracle Application Development Framework
- Provided 99.999% system availability, surpassing the company’s SLA of 99%
- Increased client satisfaction by offering a better performing, more stable and reliable cloud-based financial solution, which doesn’t need to be restarted as often
- Improved data analysis significantly by using advanced features, such as parallel processing, built-in analytical functions, and bulk processing

Why Oracle

telkomsigma was attracted to a number of features available in the complete Oracle solution, including partitioning, parallel queries, and analytical functions.

The company was also impressed by Oracle's strong reputation and level of support. It believed Oracle Database and Oracle Internet Application Server could offer the high performance and reliability it was seeking to improve its Arium CAM financial solution.

Implementation Process

telkomsigma began upgrading its Arium CAM cloud-based solution with Oracle Database, Oracle ADF, and Oracle Internet Application Server, Enterprise Edition in January 2011.

The company spent some time assessing its business requirements internally, and customizing the products accordingly.

The upgraded Arium CAM solution went live in November 2011.

Oracle Customer:**Standard Forwarding LLC**

East Moline, Illinois

www.standardforwarding.com**Industry:**

Travel and Transportation

Employees:

680

Oracle Products & Services:

- Oracle Application Development Framework
- Oracle WebCenter Capture
- Oracle WebLogic Server
- Oracle WebCenter Content
- Java Platform, Enterprise Edition

Oracle Partner:**Redstone Content Solutions**www.redstonecontentsolutions.com

Standard Forwarding LLC Cuts Invoicing Costs by US\$350,000, Annually, with Robust and Scalable Content Platform—Transforms Customer Self-Service

“The combination of Oracle Application Development Framework, Oracle WebCenter content management solutions, and Redstone Content Solutions’ expertise enabled us to elevate customer service to new levels, while improving operational efficiency. We’ve cut invoicing costs by more than US\$350,000 annually and can provide better service to more customers, while using the same resources.”
— **Kevin Mishler**, IT Director, Standard Forwarding LLC

Standard Forwarding LLC is a less-than-truckload (LTL) carrier with 17 terminals throughout the Midwest. A wholly owned entity of DHL Freight, the road-freight arm of Deutsche Post DHL, Standard Forwarding provides overnight service within and between Illinois, Iowa, Wisconsin, Indiana, Minnesota, southern Michigan, and cities in Missouri and Nebraska. It operates a modern fleet with 325 tractors and 790 trailers. In 2012, it was named Great Lakes/Midwest LTL Carrier of the Year for the fifth consecutive year in Mastio & Company’s annual Value and Loyalty Benchmarking Study.

Over the years, technology—including onboard systems and track-and-trace capabilities—has been fundamental to the company’s continued success. Standard Forwarding, seeking to improve the efficiency of its document-intensive invoicing process and to expand self-service functionality for customers, worked with Oracle Partner Redstone Content Solutions to transform its invoicing process and customer-service capabilities. Standard Forwarding deployed Oracle WebCenter Content to automate the paper-based invoice creation process, saving approximately US\$350,000 annually in processing, paper, and personnel costs. Redstone Content Solutions also created and helped Standard Forwarding launch a new, easy-to-navigate Website with expanded capabilities that enable customers to conveniently manage every phase of the shipment lifecycle from a single location. Redstone Content Solutions used Oracle Application Development Framework (Oracle ADF), Oracle WebCenter Capture, Oracle WebLogic Server, and Oracle WebCenter Content to build the powerful new solution.

Challenges

- Extend the company’s leadership role in the transportation industry by continually improving operational efficiency and customer service and support capabilities
- Reduce the cost of compiling and posting invoices for the company’s LTL transport services by eliminating a paper-based process that required terminals to ship documentation to headquarters for scanning and processing
- Minimize administrative process duplication to improve operational efficiency and the company’s ability to provide cost-competitive, transport services
- Expand Web-based, self-service capabilities for customers, increasing convenience and putting important details about their shipments at their fingertips when they need them
- Provide a reliable, scalable, and easy-to-use and manage Website and content management environment

Solutions

- Automated document capture required for invoicing with Oracle WebCenter Capture, accelerating invoicing for the company's LTL services
- Saved the company more than US\$350,000 annually in invoice processing and personnel costs
- Created a consolidated, image repository for bills of lading, shipment delivery receipts, and other company records, reducing physical storage costs and accelerating access to documentation
- Used Oracle ADF, Oracle WebCenter Content, and Oracle WebLogic Server to create a new Website with expanded self-service capabilities that let customers manage the entire shipment lifecycle, from quoting through delivery confirmation, via a single location
- Gave customers the power to track their shipments online, reducing calls to the customer service department and enabling them to focus on more complex inquiries
- Enabled the company to continue to provide high-quality customer service with the same number of personnel, even as volume has increased significantly
- Developed the Website using Oracle's standards-based integration framework, making it easy to integrate with other systems, including the company's proprietary enterprise resource planning (ERP) applications, and ensuring the ability to seamlessly add new functionality, moving forward
- Created a modular architecture to deploy, update, and conduct maintenance on a single module without impacting other parts of the Web-based solution

Why Oracle

Standard Forwarding selected Oracle's WebCenter solutions because they offer a complete, open, and integrated portfolio of content, portal, and Web experience management technology in a single suite—enabling scalability and streamlined deployment of new capabilities in the future.

Redstone Content Solutions relied on Oracle ADF, which is built on top of Java Platform Enterprise Edition, to create the company's new content environment. Oracle ADF significantly improves developer productivity with integrated infrastructure solutions for various layers of the application environment.

Partner

Redstone Content Solutions has been Standard Forwarding's strategic consulting partner for nearly seven years. Redstone helped Standard Forwarding to scope and build the company's new Website, including the many applications that pull information from Standard Forwarding's enterprise resource planning environment.

“As an integral part of our team, Redstone Content Solutions has been instrumental in helping us get to where we are today—using Oracle technology and tools to build a world-class Website, packed with self-service functionality that puts all of the services our customers need at their fingertips. We consider Redstone to be an extension of our marketing, customer service, and IT teams,” said Kevin Mishler, IT director, Standard Forwarding.

Oracle Customer:
Sundaram Infotech Solutions
 Tamil Nadu, India
www.sundaraminfotech.com

Industry:
 High Technology

Annual Revenue:
 Under US\$100 Million

Employees:
 150

Oracle Products & Services:

- Oracle Database 11g
- Oracle Application Development Framework 11g
- Oracle JDeveloper
- Oracle Forms
- Oracle Reports
- Oracle WebLogic Server
- Java Platform, Enterprise Edition

Sundaram Infotech Solutions Reduces Total Cost of Ownership by 30% to 40% and System Development Costs by up to 30%

“Choosing Oracle allowed us to offer better financing services to our customers in a competitive market. The ability to deliver a robust, end-to-end solution while reusing Oracle Application Development Framework modules was a significant benefit, reducing development costs by up to 30% and the total cost of ownership by 30% to 40%.”

— R. Krishnamurthy, Group Manager—Projects, Sundaram Infotech Solutions

Headquartered in Chennai, India, Sundaram Infotech Solutions provides enterprise resource management solutions to businesses across India, including its parent company Sundaram Finance. Sundaram Finance was established to support the growth of modern India's road transport industry. The company offers commercial vehicle finance, leasing, asset management, and automobile loans to nearly 100,000 customers.

Built on technologies, such as Oracle Forms and Oracle Reports, Sundaram Finance's previous lending system had expanded to support more than 300 sites across India. The company wanted to upgrade to a Web-based solution, to take advantage of reusable application modules that would reduce development times and costs, while offering faster financing services to customers in remote areas of India. It also wanted to attract and retain developer talent that was keen to work with the latest Oracle technologies.

Sundaram Infotech Solutions upgraded to Oracle Application Development Framework 11g to overhaul Sundaram Finance's lending system. The company reduced development costs for the upgraded lending system by 25% to 30%, while cutting total cost of ownership by 30% to 40%.

Challenges

- Overhaul Sundaram Finance's lending system, to support business growth and more than 300 remote financial services branches across India
- Reduce waiting times for customers in remote areas during approval processes for commercial vehicle finance, and individuals' vehicle loans
- Adopt a system-development methodology, based on reusable application modules to help decrease development costs
- Shorten the learning curve for an in-house development team by eliminating the need to work with AJAX, CSS, Java scripts, and framework patterns
- Embrace the latest technologies to attract and retain developer talent
- Offer a rich, user interface that retains the look of the previous system to ensure a smooth transition for end-users

Solutions

- Reduced development costs for the upgraded lending system by 25% to 30%, by using Application Development Framework 11g's reusable modules, such as restricted, packaged procedures and form-validation triggers

- Cut total cost of ownership by 30% to 40%, by using existing in-house Oracle expertise and resources and reducing ongoing system management costs for remote locations
- Shortened customer waiting times by almost a day in remote areas by shifting to an online finance and loan approval process. Increased the speed of development by 15% to 20% in the later stages of the project by using knowledge gained in earlier stages and identifying pre-existing components for reuse
- Improved deployment and support capabilities in isolated locations by switching to a Web-based lending system, which eliminated the need for technicians to visit remote offices to deploy the system
- Avoided extra, end-user and technician training by retaining a familiar user interface, using technologies, such as Application Development Framework's partial page rendering rather than AJAX to offer client/server functionality over the Web
- Enhanced the efficiency and productivity of its IT team by attracting and retaining developer talent that is keen to work with the latest Oracle technologies
- Significantly improved system performance after upgrading to Oracle Database 11g and introduced the company to new features, such as Oracle Advanced Queuing

Why Oracle

Oracle Application Development Framework 11g was a natural fit for Sundaram Infotech Solutions, as the company could upgrade Sundaram Finance's lending system using existing Oracle assets—such as Oracle Forms 5, Oracle Forms 6i, Oracle Reports 5, and Oracle Reports 6i—and in-house expertise.

"Choosing Oracle allowed the business to offer better financing services to our customers in a competitive market," said R. Krishnamurthy, group manager—projects, Sundaram Infotech Solutions. "The ability to deliver a robust end-to-end solution while reusing Application Development Framework modules was a significant benefit and greatly reduced development costs.

"Technologies, such as Application Development Framework's partial-page rendering also helped us seamlessly offer client/server functionality over the Web without the need to train staff on technologies, such as AJAX," he said.

Implementation Process

Sundaram Infotech Solutions upgraded to Oracle Application Development Framework 11g, Oracle JDeveloper, Oracle Forms, Oracle Reports, Oracle Database 11g, and Oracle WebLogic Server in August 2010. Using the Oracle applications, the company overhauled Sundaram Finance's lending system in just two years.

"Staying with Oracle technologies and a solution based on Java Platform, Enterprise Edition helped ensure a smooth development and implementation process," said Krishnamurthy.

"We also kept down development time and costs—as well as the eventual total cost of ownership—by switching to a Web-based system, so we could deploy and manage the lending system without visiting remote offices."

Oracle Customer:**Synergetic Systems Management, LLC**

Albuquerque, New Mexico
www.synergetic.org

Industry:

Healthcare

Employees:

2

Oracle Products & Services:

- Oracle Application Development Framework
- Oracle WebLogic Server
- Oracle JDeveloper
- Oracle Database

Oracle Partner:**ECS Team**

www.ecsteam.com

Synergetic Systems Management, LLC Speeds Launch of Web-Based Behavioral Health Management System by Using an Application Development

“Oracle technology and development tools made our dream of building a robust, but cost-effective, program management system for behavioral healthcare agencies a reality.”

— **Donald R. Naranjo Ph.D.**, Chief Executive Officer, Synergetic Systems Management LLC

Synergetic Systems Management, LLC (SSM) began with one man’s personal goal to provide an affordable, yet robust, program management system for midsize behavioral healthcare agencies, many of which rely on public funding.

Traditional health agency program management solutions often fail to meet the unique needs of behavioral health organizations, which at times deliver care in patients’ homes and require the ability to carefully track treatment programs and patient visits. Resource optimization is also paramount for these agencies, which often receive public funds to support their operations. With these requirements in mind, SSM’s founder set out to create a Web-based, software-as-a-service (SaaS) offering that did not require agencies to invest in expensive IT infrastructures, and he enlisted Oracle Partner ECS Team to develop El Perico, the company’s behavioral health program management system.

Challenges and Solutions

ECS Team looked to Oracle technology, middleware, and application development tools to build the new solution, counting on their proven reliability and scalability. The group used Oracle WebLogic Server, Oracle JDeveloper, and Oracle Database as the foundation for the SaaS offering. In addition, Oracle’s solutions help to secure protected health information to comply with Health Insurance Portability and Accountability Act (HIPAA) privacy requirements. SSM used Oracle Application Development Framework to efficiently develop the highly functional, flexible, and standards-based system, completing the project on time and on budget.

El Perico has approximately 100 users but can scale to thousands, thanks to its Oracle technology and middleware foundation.

Why Oracle

“We chose Oracle as the foundation for El Perico because its solutions deliver the reliability and scalability we require for our Web-based behavioral health program management system,” said Donald R. Naranjo Ph.D., chief executive officer, Synergetic Systems Management LLC. “In addition, as a start up, we needed to build our powerful solution affordably. Once again, Oracle, with its Oracle Application Development Framework, fit the bill.”

Implementation Process

ECS Team spearheaded development of El Perico, completing the project on time and on budget.

Partner

As a behavioral healthcare professional, SSM's founder did not have the IT expertise or technology infrastructure required to build or launch El Perico. The company's founder enlisted Oracle Gold Partner ECS Team to develop the specialized behavioral health program management solution. ECS brought project management, IT architecture, development proficiency, and a hosted environment to the project.

"ECS Team provides an extremely competent technical staff that delivers on time and on budget. The team has gone above and beyond to educate us and share its IT expertise, specifically around SaaS. We look forward to continuing our successful partnership with ECS Team as we bring El Perico to market," Naranjo said.



BUSINESS PROCESS MANAGEMENT (BPM)

Oracle Customer:**Account NI**

Northern Ireland, United Kingdom
www.accountni.dfpni.gov.uk

Industry:

Public Sector

Employees:

30,000

Oracle Products & Services:

- Oracle Unified Business Process Management Suite
- Oracle SOA Suite
- Oracle Application Development Framework

Oracle Partner:**BT**

www.bt.com

Account NI Streamlines Sales Invoicing and Gains Efficiency for Northern Ireland's Civil Service

"We chose Oracle Unified Business Process Management Suite and Oracle SOA Suite, based on independent analyst reports and Oracle's track record of success within other Northern Ireland governmental departments. Our business managers have validated our choice, saying they now have far greater confidence in our self-service processes."

— **John Crosby**, Director of Finance Shared Services, Account NI

Account NI is the shared service financial processing center for all 12 of the Northern Ireland government's civil service departments, some of their agencies, and nondepartmental public bodies. Some of Account NI's financial responsibilities are to manage accounts payable and accounts receivable functions for a diverse range of government departments, such as the Department of Finance and Personnel, Department for Social Development, and the Department of Enterprise, Trade and Industry. These functions generate large volumes of paperwork related to invoicing, purchasing, and procurement.

The organization chose to deploy Oracle Unified Business Process Management Suite and Oracle SOA Suite, alongside its existing E-Business Suite financial system to reduce the inefficiencies associated with large volumes of paperwork, as well as to improve service to its internal and external customers.

Thanks to Oracle, Account NI is now able to provide one consolidated, shared-services environment for managing processes, from purchasing through to payment of invoices.

Using Oracle Unified Business Process Management Suite, Civil Service departmental staff can issue sales invoices, process receipts and maintain its customer database in a fraction of the original time and at a reduced cost per transaction.

Challenges

- Improve financial transaction processing efficiency across the Northern Ireland Civil Service
- Accelerate repetitive, high volume, business processes, such as customer account maintenance, sales invoicing, and payment handling
- Improve the user experience of conducting financial transactions by reducing processing timelines and removing duplication of effort, inaccuracies, and inefficiencies across a predominantly manual data workflow
- Reduce staff required for processing financial transactions to help the government agency optimize public funds for its core social service and public safety missions
- Eliminate errors associated with manual data entry and enhance customer satisfaction
- Shorten the time to issue sales invoices, apply receipts, and maintain the customer database

Solutions

- Deployed Oracle Unified Business Process Management Suite and Oracle SOA Suite for 1,100 finance users in Northern Ireland Civil Service's 12 departments to standardize and accelerate accounts receivable transactional processing, thereby saving time and improving accuracy, efficiency, and consistency

- Accelerated customer on boarding for accounts payable and the creation of customer records, shortening processes that took as long as three days to around one hour, on average
- Saved time and increased accuracy by replacing the typical user process of downloading an Excel form, manual data entry, e-mail attachment, departmental approval, transfer, printing, manual verification, re-iteration, and archiving with direct keying to Oracle E-Business Suite
- Accelerated key accounts receivable business processes, thereby reducing governmental accountable resources, staff overheads, and manually-intensive administration from approximately four days for sales invoice generation to just an average of 92-minutes, daily, using Oracle business process management (BPM), service-oriented architecture (SOA), and application developer framework (ADF) solutions
- Enabled generating approximately 1,200 sales invoices in a typical month, peaking to just over 2,200 sales invoices for busy months, using Oracle Unified Business Process Management Suite, which take a fraction of the time it took the previous, manual system
- Ensured all Oracle Unified Business Process Management Suite-based business is processed on the same working day when submitted to the shared service center by 4:00 p.m.
- Reduced a team of four, full-time financial transaction process administrators to a part-time team of two, enabling reallocation of staff to more strategic initiatives
- Eliminated manual errors by automatically verifying data in BPM and ADF forms, such as comparing customer details, account codes, and open invoices against live data, resulting in quicker, fully-traceable workflows

Why Oracle

“We looked at independent analyst reports, each vendor’s track record with implementations in other governmental departments, and at their ability to meet the unique needs of a public sector organization—with an emphasis on expenditure rather than profit. We then looked at the best fit with our existing technology and the expertise of our teams and partners, particularly BT. We logically chose Oracle after taking into account all of these factors,” said John Crosby, director, finance shared services, Account NI.

Implementation Process

Account NI and its partner BT ran a proof of concept with Oracle Unified Business Process Management Suite in early 2010. The results were positive, and after four months of design and development by BT, Account NI went live with its first business process management procedure for maintaining its customer database. New BPM processes were subsequently added and now Account NI’s accounts receivable function is serviced by three, business-critical BPM processes for sales invoice generation and accounts receivable receipting.

Looking to the future, Account NI, with the help of BT, plans to extend the BPM solution to other areas of the business, such as the accounts payable function.

Partner

Account NI has a strong, long-term partnership with BT, which secured a 12-year contract with Account NI in 2006.

“BT is constantly exploring better ways to help Account NI, our customer, to do business. We place a particular emphasis on reducing operational inefficiencies, improving service to all internal and external customers, while offering the best value for public money. This is particularly important in the current economic climate,” said Phil Mulhall, Oracle architect at BT. “Adopting Oracle Unified Business Process Management Suite was about realizing these benefits. Working with Account NI, we designed and built a very efficient and effective BPM/SOA solution that really delivers today and for the future. BT’s knowledge of Account NI’s business, coupled with its knowledge of industry-leading software, such as Oracle’s Unified Business Process Management Suite 11g meant that a BPM-based solution could be delivered on time and on budget without compromising the quality of the overall solution.”

Oracle Customer:

**Caja Rural de Ahorro y Crédito
Chavín S.A.A. (CrediChavín)**
Huaraz, Peru
www.credichavin.com

Industry:

Financial Services

Annual Revenue:

Under US\$100 Million

Employees:

250

Oracle Products & Services:

- Oracle Business Process Management Suite
- Oracle WebLogic Suite
- Oracle Linux

Oracle Partner:

**Global Business Solutions Peru
S.A.C.**
www.gbs.pe

Caja Rural de Ahorro y Crédito Chavín S.A.A. (CrediChavín) Supports Microfinance Business Growth with Platform that Optimizes Core Business Processes

“With Oracle Business Process Management Suite, we can continuously monitor all credit operations and better manage business risk. Oracle’s solutions have enabled us to create the reliable and secure risk management environment that is essential for a financial institution.”

— **Eduardo Poletti**, Chief Information Officer, Caja Rural de Ahorro y Crédito Chavín S.A.A. (CrediChavín)

Caja Rural de Ahorro y Crédito Chavín S.A.A. (CrediChavín) is a private financial institution specializing in microfinance in Peru. It is developing microfinance as a sustainable and profitable business that also contributes to economic growth and social inclusion across the country. The company has a 14-agency network, through which it offers savings and credit plans.

CrediChavín wanted to respond more quickly to customers’ credit and savings needs and improve its overall market competitiveness. It also wanted more efficiency in complying with Peru’s banking laws. To accomplish these goals, it began an initiative to deploy a modern IT infrastructure.

CrediChavín chose Oracle solutions, using Oracle WebLogic Suite as an application server and Oracle Business Process Management Suite to create and manage processes, along with the Oracle Linux operating system. On this platform, the company can create and generate business processes, such as credit approvals and financial statement issuance, helping new businesses that are oriented to local vertical markets—for example the cotton market—and also processes that improve customer service.

Challenges

- Develop an up-to-date IT Infrastructure that meets the company’s current needs, such as the flexibility to launch new financial products rapidly to meet emerging market needs, and that can scale to support future business growth, including expansion of its microfinance offerings
- Automate and optimize the company’s business processes, such as online transactions, portfolio tracking, and daily credit provisions, to create real business value and improve customer service
- Reduce the time needed for credit approvals and achieve maximum transparency in all operations to comply with Peruvian banking regulations

Challenges

- Worked with Oracle Partner Global Business Solutions Peru S.A.C. to design a new IT infrastructure using Oracle Business Process Management Suite and Oracle WebLogic Suite
- Implemented automatic alerts that flag threshold limits for client debt, cash balances, and more, reducing the bank’s risk level

- Improved ability to create, automate, and manage business processes, such as credit approvals and financial statement issuance—for better operational efficiency, new business opportunities, and more responsive customer service
- Gained the ability to quickly identify inconsistencies in the company's credit processes, enabling it to make necessary adjustments, work with more accurate figures, and develop more realistic indicators, based on information system data
- Enabled more consistent and timely online financial reports for internal use—for example, to help management evaluate daily financial statements—and to provide reports for external use as required by state agencies that supervise the bank's operation
- Reduced credit approvals from seven days to one day and gained the ability to track approval status online—getting critical financing to customers more quickly
- Commenced online creation of financial reports and debtor credit reports required by the Superintendency of Banking, Insurance, and Private Pension Funds, a process that previously required 15 days to complete
- Used Oracle WebLogic Suite as an application server and Oracle Linux as the operating system, achieving high system availability and scalability
- Gained the ability to monitor and track the company's business portfolio—including deposits, recoveries, disbursements, and delinquencies—using robust reporting capabilities for segmentation by business manager, date, agency, currency, and commodity
- Tracked credit and loan processes, and achieved full control of each client account from initiation to closure

Implementation Process

“The implementation was a multifunctional deployment, because we were coming from a system that had general information, but not much detail. It required the participation of many stakeholders, including accounting, operational, and IT professionals. We planned the implementation internally and worked with Global Business Solutions Peru during the rollout phase. It was a strategic business shift,” said Eduardo Poletti, chief information officer, CrediChavín.

In addition to highlighting the professionalism of Global Business Solutions Peru, Poletti emphasized that the implementation went live on schedule.

Partner

CrediChavín and Oracle Partner Global Business Solutions Peru S.A.C. started developing the IT infrastructure in February 2009, after designing the system from the ground up using Oracle WebLogic Suite as an application server, Oracle Business Process Management Suite to create and manage processes, and Oracle Linux as the operating system.

The Oracle system went live in 2010, after extensive testing, user training, and internal certification, as well as after migrating data from the previous system.

Oracle Customer:

Instituto Nacional de Defensa de la Competencia y la Propiedad Intelectual (INDECOPI)

Lima, Peru

www.indecopi.gob.pe

Industry:

Public Sector

Employees:

800

Oracle Products & Services:

- Oracle Database 11g Enterprise Edition
- Oracle Business Process Management
- Oracle Enterprise Content Management Suite
- Oracle WebLogic Server

Oracle Partner:

SOAIN Software Associates S.A.C.

www.swassociates.com.pe

Instituto Nacional de Defensa de la Competencia y la Propiedad Intelectual (INDECOPI) Optimizes Patent Approval Management and Accelerates Customer Service Times by 40%

“Oracle Business Process Manager has been a paradigm shift in process management. By digitalizing and automating our patents information services, we can now manage everything in the simplest way possible, expanding our options for the creation of new services.”

— **Sergio Rodríguez**, Assistant Director, Inventions and New Technologies Directorate, Instituto Nacional de Defensa de la Competencia y la Propiedad Intelectual

Peru's Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual (INDECOPI), the National Institute for the Defense of Competition and Protection of Intellectual Property, is a decentralized public agency that promotes the country's markets and protects consumer rights. It promotes fair and honest competition and safeguards all forms of intellectual property through three directorates: Author's Rights, Inventions and New Technologies, and Trademarks.

Challenges

- Unify the agency's technology infrastructure to create a business process management strategy, starting with the Directorate of Inventions and New Technologies (DIN)
- Consolidate the organization's Web platform to meet new demands for software and process development, such as for patent applications
- Improve and automate information services for citizens and businesses and streamline patent procedures by digitizing documentation

Solutions

- Implemented Oracle Database 11g Enterprise Edition with Oracle Partner SOAIN Software Associates S.A.C., centralizing all records relating to DIN
- Optimized patent information services with Oracle Business Process Management, automating processes to deliver expedient searches, and to create new services, such as alerts to users
- Organized information and provided around-the-clock online access to users with Oracle Enterprise Content Management Suite, reducing use of paper files by 50%
- Used Oracle WebLogic Server to develop a Web site that provides internal and external users access to DIN information, such as patent documentation, through a user-friendly interface, accelerating transaction approvals. Provided automation and online access to reduce non value-added activities, such as manual document copying to obtain patents, by 85%
- Accelerated customer service times by 40% by optimizing procedures, such as searches and online information related to granting patents

Oracle Customer:**JSC Kazakhtelecom**

Almaty, Kazakhstan

www.telecom.kz**Industry:**

Communications

Annual Revenue:

US\$1 to US\$5 Billion

Employees:

30,000

Oracle Products & Services:

- Oracle SOA Suite
- Oracle Unified Business Process Management Suite for Non Oracle Middleware
- Oracle Business Process Analysis Suite
- Oracle Coherence
- Oracle Business Activity Monitoring
- Oracle Communications ASAP

Oracle Partner:**Asia-Soft**www.asia-soft.kz

JSC Kazakhtelecom Creates Open Services Platform for Telecommunication Operators in Kazakhstan

“Our 20 year-long collaboration with Oracle is very telling. Both sides have benefited from this strong partnership.”

— **Vladimir Tarasov**, Director SOA, JSC Kazakhtelecom

JSC Kazakhtelecom, the national telecommunications operator of Kazakhstan, is one of the most dynamically developing telecommunication companies in the Commonwealth of Independent States (CIS) countries, and the first operator to have set up a long, next-generation network in a CIS country.

Challenges

- Create an open services platform for telecommunications operators in Kazakhstan to facilitate the exchange of services
- Integrate operations and billing support systems into end-to-end business processes on a services-oriented architecture (SOA) platform to gain efficiency
- Create a management center to automate core processes, such as interconnecting with new operators or raising the bandwidth of interconnected operators

Solutions

- Leveraged Oracle SOA Suite and Oracle Unified Business Process Management Suite for Non Oracle Middleware to develop the company's business processes management center with distributed data storage and processing nodes, thus automating sales and service processes
- Enabled the company to realize process modifications—such as adding operator bandwidth—in an uninterrupted mode within a period of one-to-ten days, depending on clients' requirements
- Created a business processes repository and a multiple-use Web-services repository, based on Oracle Business Process Analysis Suite to implement distributed data storage and streamline sales and customer service processes
- Leveraged Oracle Coherence data caching tools, Oracle Business Activity Monitoring, and Oracle task flow management tools to reduce development costs, optimize existing processes, and automate the full BPM cycle—from modeling to analysis to subsequent modification—reducing lead times from several days to hours or merely minutes
- Introduced Enhanced Telecommunications Operational Map—an international telecommunications standard—and launched a successful pilot project to automate service activation and deactivation with Oracle Communications ASAP

Oracle Customer:**Scottish Water**

Dunfermline, Scotland

www.scottishwater.co.uk

Industry:

Utilities

Annual Revenue:

US\$1 to US\$5 Billion

Employees:

3,400

Oracle Products & Services:

- Primavera P6 Enterprise Project Portfolio Management
- Oracle Business Process Management
- Oracle BPEL Process Manager

Scottish Water Improves Operational Efficiency and Streamlines Workflow for US\$3 Billion Capital Investment Program

“With Oracle’s Primavera P6 Enterprise Project Portfolio Management and Oracle Business Process Management in place, we now have a fully compliant and consistent approach to our capital investments, resulting in clear visibility of progress across all of our programs.”

— **Cathie Bankier**, Business Change Manager, Asset Management Directorate, Scottish Water

Scottish Water provides water and wastewater services to approximately 5 million customers in 2.4 million households across Scotland. The organization serves a dispersed population living in an area covering approximately 79,000 square kilometers, requiring a large number of small water and waste water treatment works. Scottish Water is the fourth largest water company in the United Kingdom.

Scottish Water manages more than 47,000 kilometers of water pipes, 50,000 kilometers of sewer pipes, 1,837 wastewater treatment works, and 297 water treatment works, plus pumping stations, sludge treatment centers, and reservoirs. The organization has a capital delivery program worth US\$3 billion over a five-year regulatory period, which involves complex financial processes, multiple delivery partners, and regulatory stakeholders.

The company managed this complex and high-value capital delivery program using a number of different software products, manual spreadsheets, and paper-based processes. There was little integration between systems, no continuity between regulatory periods, a difficult reporting environment, and limited audit trail.

Scottish Water worked with Tata Consultancy Services to implement a new enterprise project and portfolio management solution, Primavera P6 Enterprise Project Portfolio Management and Oracle Business Process Management, for all Scottish Water employees and partner organizations working on the capital delivery programs. The systems are fully integrated with existing back office systems, including Oracle’s PeopleSoft Financials.

Since implementation of the capital investment systems and processes (CISP) program, Scottish Water has achieved operational savings equivalent to 19.5 full time employees, streamlined the data and reporting processes to improve regulatory compliance, and it has realized annual tax savings of US\$456,000 with a transparent audit trail.

Challenges

- Streamline capital investment project processes and workflow to meet the efficiencies and regulatory requirements set out by the water industry commissioner
- Eliminate reliance on paper-based capital expenditure forms, remove manual-based systems, and replace with one integrated project management and workflow system
- Improve reporting, control, transparency, and auditability throughout all capital investment projects
- Enable control and management over hundreds of concurrent projects ranging from the replacement of a pumping station to the construction of a new water treatment works

- Integrate project management and workflow with back-office systems including Oracle's PeopleSoft Financials to enable straightforward financial control and reporting

Solutions

- Worked with Oracle Partner Tata Consultancy Services to implement Oracle's Primavera P6 Enterprise Project Portfolio Management to enable management of multiple projects under one program, ranging from small projects lasting a few months to larger scale projects running two years and over multiple regulatory periods
- Built a new workflow using Oracle Business Process Management to drive efficiency throughout the capital delivery programs
- Achieved a total of 19.5 full time employees in operational savings, resulting from improved processes and more efficient working practices
- Ensured compliance with regulatory requirements to become more efficient and achieved an annual tax savings of US\$456,000 with a transparent audit trail
- Trained 500 staff and partners to improve knowledge and understanding of both the new systems and also the capital investment process, resulting in more knowledgeable and able employees and partners
- Enabled partner organizations—such as construction and engineering companies—to access the project management and workflow system, ensuring that all data and information is reliably held in one place and can be quickly and easily accessed
- Integrated system components using service-oriented architecture (SOA) principles aligned with business services

Why Oracle

Oracle was already at the core of Scottish Water's back office systems. The organization already had a number of Oracle systems in place and previous consolidations led to the purchase of an unlimited license agreement.

"Oracle's Primavera P6 Enterprise Project Portfolio Management enables us to simultaneously manage hundreds of projects of varying scale and duration. We have tightened up our processes and improved reporting and control of all our capital investment projects," said Cathie Bankier, business change manager, asset management directorate for Scottish Water.

Partner

Scottish Water chose Tata Consultancy Services following a competitive tender process as it was able to demonstrate significant experience in the capital investment sector. It also had experience in working with Oracle's Primavera modules and Oracle Business Process Management and demonstrated the ability to integrate with Scottish Water's existing Oracle systems.

“During the project, we built up a strong working relationship with Tata Consultancy Services employees. Our Tata account manager was on the steering group and attended regular weekly meetings at Scottish Water. With a strong project manager in place, the project went very smoothly and we met all our timescales and deadlines,” said Cathie Bankier, business change manager, asset management directorate for Scottish Water.

“We would definitely work with Tata Consultancy Services again if we could put in place a similar working structure and also if Tata was able to provide the excellent people we know from their team,” she added.



CLOUD APPLICATION FOUNDATION (CAF)

Oracle Customer:**now TV**

Hong Kong

www.now.com

Industry:

Media and Entertainment

Annual Revenue:

US\$100 to US\$500 Million

Employees:

19,300

Oracle Products & Services:

- Oracle Coherence Grid Edition
- Oracle Database 11g Enterprise Edition

now TV Supports Hundreds of Thousands Concurrent Players with Subzero Response Time

"now TV is providing a first-of-its-kind, real-time, interactive gaming experience that is making a significant impact on viewers and the media industry. The power, reliability, and scalability of Oracle Coherence Grid Edition was absolutely critical in enabling us to deliver the quiz show."

— **Keith Huang**, Vice President, Product Management, Technology and Operations, now TV

From Tuesday through Sunday, tens of thousands of Hong Kong residents take part in an interactive quiz show that is the first of its kind in Asia. Participants use their TV remote control to answer questions in real time, with the winner(s) sharing a cash prize. Launched in February 2011, ATM (Action to Money) is the most talked-about show in Hong Kong, with many believing it represents the future of television programming.

The organization behind ATM is now TV, one of the world's largest and most successful commercial deployments of internet protocol television and Hong Kong's largest pay TV provider. now TV is delivered by PCCW Media Limited, an operating division of HKT Group Holdings Limited (HKT). HKT is a wholly-owned subsidiary of PCCW Limited, Hong Kong's premier telecommunications provider and a leading player in information and communications technologies.

Delivering a real-time game show requires powerful, reliable, and scalable back-end technology to ensure 100% uptime and instantaneous responses to participants. For now TV, one of the key technologies was Oracle Coherence Grid Edition. The solution ensures the company can support hundreds of thousands of concurrent players over the hour-long program and achieve 0.5-second response times. Since the show began airing, now TV has experienced no downtime during the six-days-a-week, live broadcasts.

A New Interactive Gaming Experience

now TV serves Hong Kong with more than 190 channels of local, Asian, and international programming, including premium content, such as Spanish La Liga, Italian Serie A, English FA Cup, French Open, US Open, ATP World Tour, BWF Super Series, World Snooker Tour, and PGA Tour. now TV can be enjoyed on PCCW eye2, a portable media center with an embedded now TV decoder. Selected now TV content and interactive applications can also be accessed through the PCCW Group's 3G mobile network and broadband service. In addition, now TV is a leading producer of news, sports, and infotainment programming and a provider of a wide range of interactive services.

"We wanted to create something that was exciting, innovative, engaging, and allowed audiences to participate in real-time," said Keith Huang, vice president of product management, technology and operations, now TV.

The result was ATM, one of Asia's first interactive game shows. Viewers use their TV remote control to register to play and answer eight multiple-choice questions. They must choose an answer from four choices within 45 seconds. If they choose the wrong answer or fail to answer in time, they are eliminated immediately. Those who answer the eight questions correctly are eligible to win or share in a daily prize pool of US\$12,855 (HK\$100,000). The number of winners and the amount they have won appear on screen at the end of the show. If there is no winner, the prize money is jackpotted to the following night.

“We set out to create a show that is in itself a very entertaining TV program, which viewers will enjoy enormously—but with the added feature that those viewers who want to participate can do so using their remote control at home,” said Felix To, vice president of now HK. “This is a first of its kind for the citizens of Hong Kong and ATM offers viewers in Hong Kong a truly new, immersive TV experience.”

Powerful, Rock-Solid Platform Required

To make this vision of a real-time game show a reality, now TV required a rock-solid backend database and network infrastructure. According to Huang, there were four critical criteria.

“The most crucial requirement is reliability,” he said. “With a real-time, interactive TV show, there is zero tolerance for downtime. If the system fails because it is overloaded, or if there is a malfunction and we can’t process viewers’ responses, it would literally kill off the show. The solution had to be 100% failsafe.

“It also goes without saying that the system has to be powerful and linearly scalable,” he added. “We currently have more than 1 million subscribers. If every one of them wants to play the game, we need to be able to support them. That’s without taking into account new subscribers who sign up because of the game. The solution had to be expandable to accommodate sudden and large increases in subscriber numbers.”

The third criterion is extremely fast response times. “We need to let viewers know immediately if their answer is right or wrong,” explained Huang. “We don’t want them repeatedly pressing the buttons on their remote control, thinking that the lack of response is because their answer didn’t get through. Viewers want to know right away, otherwise they will get bored, frustrated, and switch off.”

The final criterion is accuracy. With viewers projected to number in the tens of thousands, the database has to aggregate large amounts of information in real-time: viewers’ personal details, their answers, whether they answered correctly or incorrectly, and do this in the timeframe allocated.

A comprehensive evaluation of Oracle Coherence Grid Edition revealed that the solution offered the performance, reliability, scalability, and accuracy required for the interactive gaming platform.

Large Numbers of Concurrent Users Supported, Subzero Response Times

The ATM quiz show was launched on February 9, 2011. To attract viewers to the new show, now TV invited its more than 1 million subscribers to a free trial between February 9 and February 20.

Tension was high on the first night of the live broadcast, with everyone from senior station executives to the full production team and system and network specialists in attendance.

Oracle technicians were also on set every night of the 10-day trial period, to provide support for Oracle Coherence and Oracle Database in case anything went wrong. However, there were no issues on the first and subsequent nights.

“The Oracle system performed admirably on the first night, when more and more players signed up to play the game during the login time,” said Huang. “We had no issues with latency. When players answered the questions, it took less than 0.5 seconds for the system to confirm if they had the right or wrong answer.”

The number of players rapidly increased and the Oracle system scaled to support these players with ease. “We did not have any system issues during the trial period and everything has been smooth since we switched to a paid subscription model,” said Huang. “Oracle Coherence has delivered 100% failsafe performance.”

In future, now TV believes TV production teams can develop many more innovations based on the Oracle Coherence and Oracle Database infrastructure of the ATM interactive game show system.

Challenges

- Implement a highly reliable database platform to support the launch of a real-time, interactive TV show, where there is zero tolerance for downtime
- Ensure scalability to support sudden and large increases in player numbers
- Promote fast, accurate response times so players are not kept waiting to find out if their answer is correct

Solutions

- Supported the launch of a real-time, interactive game show that demanded high reliability and scalability and near-instantaneous response times
- Accommodated a record number of concurrent game players and achieved 0.5-second player response times
- Ensured scalability by load-testing the system to support the participation of every now TV subscriber
- Eased the maintenance task by using Oracle Coherence Grid Edition Management Pack to monitor the health of the system and better understand how it works
- Provided the infrastructure to support future interactive television show innovations

Why Oracle

now TV's previous system architecture was very database-centric. While the database provided a robust platform for data storage and transactions, it did not address the unique requirements of a live TV game show.

“For example, the load pattern during the one-hour show means the system has to handle sudden bursts of traffic in a scalable way,” explained Huang. “Both throughput and latency are highly critical because it is a live show and TV audiences expect immediate and accurate responses.”

The company also wanted to minimize risk for the development team. “We needed to balance an out-of-the-box solution that was easy to use and which offered support we could leverage, with our desire to develop components of the platform ourselves,” explained Huang. “By choosing the solid, proven Oracle Coherence software, we were able to focus on our own development and ensure a quick time to market. The software removed some key uncertainties because we knew it would deliver what it promised.”

As a long-time Oracle Database user, now TV was familiar with Oracle’s product capabilities. “We have tried most available technologies in the market and matched them against our very unique requirements,” said Huang. “Our performance, reliability, and scalability requirements were comfortably met with Oracle Coherence.”

now TV also liked that it could use Oracle Coherence Grid Edition Management Pack to monitor the performance of Oracle Coherence.

“We asked the Oracle consultants how we could be more certain of the system’s status and performance,” said Huang. “Thanks to the management pack, we have an in-depth understanding of the system and how it works. We can access reports that detail the system’s health, which helps our operations team.”

Implementation Process

now TV faced two challenges during the implementation. The first was related to testing the system, as it was difficult to simulate a similar load to projected audience numbers for stress-testing. The second challenge was related to the system design, which needed to be linearly scalable to accommodate future business strategies. The complex design also required specialist knowledge to program the extreme transaction processing model.

During the implementation, the now TV team pushed the Oracle Coherence system to its limit to handle anticipated loads.

“The Oracle Coherence programming model is quite simple and intuitive,” said Huang. “Our core development team has long used database technology to build mission-critical transaction processing systems. They were very surprised with the capabilities of Oracle Coherence and the level of performance, scalability, and reliability it brought to our interactive gaming platform.

now TV also had assistance from Oracle technicians on some of the more complex settings of the testing environment, including verifying the performance metrics, loading algorithms, and system parameters.

“The Oracle team assisted us on the architectural validation and provided best practice Oracle Coherence development guidelines to our team,” said Huang. “We received useful suggestions on how we could fine-tune the system performance.”

Oracle Customer:**Orient Overseas Container Line**

Hong Kong, China

www.oocl.com

Industry:

Travel and Transportation

Annual Revenue:

US\$6.5 Million

Employees:

6,000

Oracle Products & Services:

- Oracle Coherence Enterprise Edition
- Oracle Database
- Oracle Real Application Clusters

Orient Overseas Container Line Enhances Visibility and Increases Profits with Greater Data Cache Capabilities

“The oceanic transportation industry is very competitive and commoditized, making access to market and price data critical to gaining an edge. Oracle Coherence Enterprise Edition provides critical, near real-time visibility to our sales representatives, helping us significantly increase our profits and beat analyst estimates.”

— **Matthew Rosen**, Director of Application Development, Orient Overseas Container Line

Orient Overseas Container Line (OOCL) is one of the world's largest integrated container transportation logistics and terminal companies with 230 offices across Asia, Europe, North America, and Australia. It owns and charters vessels that carry general cargo, reefer cargo, and dangerous goods. It is a wholly-owned subsidiary of Orient Overseas International Limited.

Challenges

- Provide employees with access to consolidated, low latency information about asset allocation and price, enabling them to respond to deregulation in the oceanic transportation industry
- Ensure proactive operational monitoring of the shipment lifecycle and exception avoidance to reduce cost and improve customer service
- Develop a database infrastructure that can handle an exponential increase in peak production volume
- Enable sales representatives in OOCL's global offices to access near real-time metrics related to markets and pricing

Solutions

- Replaced a legacy system with Oracle Coherence Enterprise Edition to process more than 1.4 million daily domain state change events, such as price adjustments or order status updates
- Deployed the system to 180 offices and more than 2,000 users located around the globe, enabling the sales team to monitor shipments and trigger appropriate business processes more efficiently, enhancing customer service
- Reduced data latency from hours, or even days, to less than five minutes 98% of the time—which is OOCL's target level—helping the company stay ahead of market dynamics
- Utilized Oracle Real Application Clusters to achieve 99.9% application availability except for planned maintenance outages
- Developed an underlying architecture that can scale to at least three times the current production peak volume
- Leveraged enhanced IT solutions and market visibility, which contributed to profits two times greater than analyst projections for the first half of fiscal year 2010

Oracle Customer:**Turkcell iletisim Hizmetleri A.S.**

Istanbul, Turkey

www.turkcell.com.tr

Industry:

Communications

Annual Revenue:

Over US\$5 Billion

Employees:

2,789

Oracle Products & Services:

- Oracle Complex Event Processing
- Oracle Coherence

Oracle Partner:**Turkcell Technology Research
& Development, Inc.**

www.turkcelltech.com

Turkcell iletisim Hizmetleri A.S. Processes Mobile Network Data of 33 Million Subscribers in Real Time

“Being a market leader in Turkey, it is a differentiating factor for Turkcell to provide services through the best quality network. Using Oracle Complex Event Processing and Oracle Coherence, we ensure seamless communication and enable our subscribers to use our cutting-edge services. This places our company in an advantageous position through differentiation in intensely competitive conditions.”
— **Mert Sengüner**, Network Management Systems Specialist, Turkcell iletisim Hizmetleri A.S.

With more than 33 million subscribers, Turkcell iletisim Hizmetleri A.S. is not only Turkey’s leading mobile telecommunications company, but the third largest operator in Europe, and the 16th largest operator worldwide in terms of number of subscribers. Established in 1994, Turkcell created the first global system for mobile communications (GSM) network in Turkey and is the first Turkish company to be listed on the New York Stock Exchange.

Challenges

- Process almost 3 billion records daily, including data and voice traffic, location updates, and hand-over data produced when moving between cells during a connection, to enable Turkcell to find subscribers’ locations instantly
- Enable instant matching of each subscriber’s international mobile subscriber identity (IMSI) and Turkcell mobile station integrated digital services network (MSISDN) phone number to identify the subscriber in Turkcell’s mobile network
- Measure the performance of application components—such as the time required to read a file or to locate a subscriber—without the need for extra programming

Solutions

- Leveraged the advanced buffering and continuous query features of Oracle Complex Event Processing to process up to 800,000 records per second (almost 3 billion records per day) with a two-node blade cluster
- Leveraged Oracle Coherence to provide fast access to frequently used data to match streamed IMSI information instantly with subscribers’ phone numbers, necessary for identifying them and analyzing their data and voice traffic
- Used the visualize tool in Oracle Complex Event Processing to measure application performance with ease, substantially reducing software development efforts
- Leveraged Java management extension features to enable modifications to event components without requiring an application shutdown
- Ensured continuous availability of mobile network data with Oracle Coherence by enabling internodal communication so that nodes could handle failover situation themselves

Oracle Customer:**Bank of Valletta p.l.c.**

Santa Venera, Malta

www.bov.com

Industry:

Financial Services

Annual Revenue:

US\$100 to US\$500 Million

Employees:

1,600

Oracle Products & Services:

- Oracle Database 11g
- Oracle GoldenGate
- Oracle Tuxedo
- Oracle Solaris
- SPARC Enterprise M5000

Bank of Valletta p.l.c. Guarantee Highest Availability for Customer-Facing Services at Lowest Cost and Risk by Using a Pre-Integrated Infrastructure

“Oracle’s pre-integrated, best-in-class software and hardware underpins the maximum availability architecture that supports our goal of being one of Europe’s best-performing banks.”

— **Joseph Agius**, Executive Head, Information Technology Bank of Valletta p.l.c.

Bank of Valletta is a leading financial services provider in Malta, delivering a full range of financial services, including investment and private banking, fund management, and securities trading. The bank operates 41 branches, a corporate center, six business centers and a wealth management division. As Malta’s oldest financial services provider and one of its largest, Bank of Valletta also operates offices in Australia, Libya, and Milan.

Bank of Valletta uses Oracle Database 11g as the foundation for its critical customer-facing and back-office systems. The bank benefits from third-party tools into which Oracle GoldenGate and Oracle Tuxedo are embedded to ensure continuous uptime and high performance for its online customer services. Oracle’s SPARC Enterprise M5000 servers and Oracle disk storage arrays further improve resource utilization and strengthen resilience and availability. The Oracle solutions help the bank to optimize hardware and software performance, reduce costs and risk, and streamline vendor management.

Challenges

- Ensure continuous availability for the hundreds of thousands of customer transactions processed each day, ranging from branch and back-office transactions to standing orders, direct debits and credits, ATM cash withdrawals and deposits, point of sale transactions, and transactions via internet and cell phones, and the bank’s contact center
- Restore customer service in minutes, should the bank’s core system production site go down
- Maximize performance of retail banking solutions, including savings and deposit accounts as well as mortgages developed by Bank of Valletta using multiple heterogeneous technologies, and adapt retail banking applications rapidly and inexpensively in line with corporate and market requirements
- Guarantee 24/7 uptime for Oracle Database on which the bank runs its e-commerce, risk management, investment, and payment-hub operations, as well as its business intelligence platform
- Reduce IT cost of ownership and business risk while continually improving security, scalability, resilience, and fault tolerance across the entire hardware and software stack that supports the bank’s critical customer operations

Solutions

- Used Oracle GoldenGate, embedded in the BASE24 payment engine that authorizes and manages all card transactions processed by the bank, to replicate transaction data from the primary production site to a backup BASE24 machine located at a secondary site, five kilometers away

- Benefited from Oracle GoldenGate's hot backup capabilities to capture and replicate changes to live transaction logs in less than one minute while preserving the integrity of card holder and transaction data
- Capitalized on the dynamic scalability of Oracle GoldenGate to enable customers to continue withdrawing cash, making card purchases, carrying out internet banking, and shopping online—even during busy times and peak periods, such as evenings, weekends, and prior to holidays
- Deployed Oracle GoldenGate to ensure rapid recovery in the event of an outage of the primary core business application production site
- Gained ability to restore customer access to all services within 20 minutes of failure
- Extracted data from BASE24, daily, into an in-house developed data warehouse, running on Oracle Database 11g, to enable timely financial and market analysis and reporting
- Used Oracle Tuxedo, embedded in the third-party tool used to develop the bank's retail banking applications, to manage load balancing and ensure continuous availability of all customer-facing applications
- Used Oracle Tuxedo to adjust processes and workflows as required to meet the changing needs of customers and comply with new regulatory requirements
- Ran critical customer-facing applications, such as the bank's e-commerce gateway and payments hub, plus essential back-office tasks including risk analysis and business intelligence, on four SPARC Enterprise M5000 servers to ensure 24/7 uptime
- Benefited from bundled SPARC and Solaris solutions to optimize price performance and provide unmatched investment protection
- Leveraged the scalability, bandwidth, and capacity utilization of Oracle disk storage to store more than 28,000 terabytes of transaction data from production and back-up systems and support more transactions in the same footprint to save on power, space, and cooling
- Achieved greater than 99% service availability for the applications running on Oracle Database, and for the third-party applications into which Oracle GoldenGate and Oracle Tuxedo are embedded,
- Benefited from maximum availability infrastructure built on Oracle software and hardware to achieve the highest performance at the lowest cost and risk and support goal of becoming one of the best performing banks in Europe

Why Oracle

"The combination of Oracle software and hardware reduces risk, increases system performance, and drives down costs by giving us pre-engineered hardware and software from a single vendor. Why change a winning formula?" said Joseph Agius, executive head, information technology, Bank of Valletta p.l.c.

Bank of Valletta purchased Oracle Database in 1998 for the unrivalled scalability and reliability it provides for the bank's critical operations. The high performance of the third-party solutions into which Oracle GoldenGate and Oracle Tuxedo are embedded has strengthened Oracle's position as a strategic technology supplier.

Bank of Valletta implemented Sun hardware in 2001 when it upgraded from a mainframe environment. The bank benchmarked several leading hardware vendors and selected Sun for its computing power and ability to optimize space and power requirements and scale to growing application workloads. Sun's storage solutions delivered affordability and business-ready functionality.

Bank of Valletta refreshes and modernizes its hardware and software platforms every five years. The bank always evaluates competitor products but Oracle's solutions continue to provide best performance and value for money. The combined power of Oracle hardware and software ensures upward compatibility of each new generation of hardware and software and has reinforced the bank's decision to build its future on the Oracle platform.

Oracle Customer:**Hundsun Technologies Inc.**

Hangzhou, China

www.hundsun.com

Industry:

High Technology

Annual Revenue:

US\$100 to US\$500 Million

Employees:

2,904

Oracle Products & Services:

- Oracle Database 11g
- Oracle Real Application Clusters
- Oracle Tuxedo

Hundsun Technologies Inc. Improves Overall System Capacity 8x, Cuts Application Batch Processing Time Approximately 90%

“Oracle Tuxedo provides a powerful transaction processing engine and virtually limitless scalability, which has improved our system capacity eightfold, enabled our clients to process millions of transactions much quicker each day, and it has strengthened our reputation and competitiveness.”

— **Xu Changrong**, Vice General Manager, Fund and Institutional Wealth Management Department, Hundsun Technologies Inc.

Hundsun Technologies Inc. is a major supplier of financial software and network services to customers in the asset management, banking, communications, e-commerce, fund management, futures, insurance, securities, and trust sectors. Its fund transfer agent system, known as TA System, has been recommended by the China Securities Regulatory Commission as a benchmark financial software program, and is used by more than 86% of fund management companies in China.

By using Oracle Database 11g with Real Application Clusters, and Oracle Tuxedo to underpin the latest version of TA System, Hundsun Technologies improved system capacity eightfold, reducing application batch processing time from 480 minutes to 53 minutes, and cut approved application accounting time from 55 minutes to just 6 minutes.

Powerful Platform Required to Support Millions of Transactions

Hundsun Technologies’ TA System plays a pivotal back-end role in managing and processing transactions, enabling fund management companies to issue new funds, manage investor accounts, transfer shares to investors’ accounts, and calculate equities, dividends, and fees. The system is also a source of data for other business platforms, such as the investment transaction, accounting clearance, valuation, and customer service systems.

Its critical role in fund management operations means A System must be powerful, highly reliable and available, and secure. For example, on the day a new fund is issued, the TA System must process millions of account-opening and other transaction requests. If it fails to complete all application and transaction requests on the same day or errors occur during processing, investors’ money will not be transferred to the fund management company. This would delay the establishment of the new fund and be detrimental to the business.

“Fund management companies must be able to process all the transactions they receive each day in an efficient, timely, and secure manner,” said Xu Changrong, vice general manager, fund and institutional wealth management department, Hundsun Technologies Inc. “For example, the data from these transactions is then fed into other business systems used by sales agents.

“Because of the massive volume of data involved in transaction processing, we needed a stable, reliable, and powerful database platform for our TA System,” he said. “We decided to build the fourth and latest version of our TA System on Oracle Database 11g with Oracle Real Application Clusters, and to use Oracle Tuxedo middleware.”

System Capacity Improved Eightfold

The Oracle platform has significantly improved the performance of TA System. For example, when processing stored basic data, including 8 million account numbers, it now takes 5 minutes to complete account verification tasks—such as checking the integrity and validity of transaction application data, rejecting invalid applications, and generating account validation reports—compared to 38 minutes in the past. Similarly, it now takes 14 minutes to complete critical fund share trading tasks, such as processing a variety of trade confirmations and rights registrations, instead of 121 minutes.

Application batch processing time has also been reduced from 480 minutes to 53 minutes. In addition, it takes just 6 minutes to complete approved application accounting tasks, such as share transfers, compared to 55 minutes, previously.

Fund management companies can use TA System to calculate fees, interest payments, and the revenue obtained by selling shares. This ensures they can settle millions of transactions with hundreds of sales agencies and affiliated banks efficiently and accurately.

The TA System also offers enhanced security, ensuring confidential customer and financial information is protected from unauthorized access.

“On the whole, the adoption of Oracle has improved the capacity of TA System eightfold, strengthening Hundsun Technologies’ reputation in the market as the leading provider of financial software for fund management companies,” said Xu.

TA System Delivers Better Performance for End Client

TA System has enabled one of Hundsun Technologies’ clients to enjoy improved processing performance. Yinhua Fund Management Co., Ltd is one of the top 10 integrated asset management companies in China, based on the total value of managed assets. The company uses TA System to handle fund applications and share transfers. The system takes just 80 minutes to process an average day’s transactions, such as 2 million new accounts, 8 million existing accounts, 3 million fund purchases and application redemptions, and 15 million share fund transfers.

“TA System on the Oracle platform outperforms other similar solutions in terms of stability, performance, and responsiveness,” said Song Xiaogang, senior IT manager, Yinhua Fund Management. “For a fund-management company like ours, with nearly 10 million customers, this high level of performance is crucial as it directly affects our ability to do business and compete effectively.”

Challenges

- Implement a high-performing, stable, and secure database and middleware platform for TA System, which is used by fund management companies to issue new funds, transfer fund shares, and calculate equities, dividends, and fees

- Process large volumes of fund transaction data quickly, to ensure millions of daily transactions can be cleared efficiently and accurately
- Enable fund management clients to support an ever-increasing number of customers and large data volumes, including 8 million account numbers
- Protect sensitive customer and financial data from unauthorized access

Solutions

- Reduced application batch processing time by around 90%, from 480 minutes to 53 minutes
- Cut approved application accounting time by around 90%, from 55 minutes to 6 minutes
- Completed account verification tasks, such as checking the integrity and validity of transaction application data, in 5 minutes, compared to 38 minutes in the past
- Processed critical fund share trading tasks, such as a variety of trade confirmations and rights registrations, in 14 minutes instead of 121 minutes
- Improved the overall capacity of TA System eightfold, enabling fund management companies to settle millions of transactions with hundreds of sales agencies and affiliated banks efficiently and accurately
- Enabled a fund management client to process an average day's transactions—2 million new accounts, 8 million existing accounts, 3 million fund purchases and application redemptions, and 15 fund share transfers—in just 80 minutes
- Provided a scalable solution that can be easily expanded to support large numbers of customers and transactions
- Prevented confidential customer details and fund management information from being unlawfully accessed using access control tables
- Ensured TA System could be integrated with clients' business systems by opting for an open-standards-based database and middleware platform

Why Oracle

Hundsun Technologies chose Oracle Database 11g with Real Application Clusters, as the products offered “a reliable, stable, scalable, and highly available database environment.” The company chose Oracle Tuxedo, as the middleware was highly reliable, and ensured transaction integrity, linear scalability, and configuration-based deployment.

“Oracle Tuxedo's powerful messaging and transaction processing engine ensures the highest possible availability and throughput for the TA System, which will satisfy the current and future needs of our fund management clients,” said Xu.

“Oracle Tuxedo is easy to expand and provides virtually limitless scalability,” he added.

“For example, the software can automatically create auxiliary services, according to real-time system loads and throughputs to ensure the reliability and performance of mission-critical applications. These features of Oracle Tuxedo make it possible for us to optimize TA system’s performance.”

When Hundsun Technologies tested the latest version of TA System (4.0) against the previous version (3.0), the company found that TA System 4.0 was nearly 10x more efficient than TA System 3.0 in processing transactions. When data volumes were at average levels, TA System 4.0 was 4x faster than the older version for account verification tasks, batch processing, and post-transaction accounting.

“The test results gave us confidence that the Oracle products would deliver the performance required by fund management companies to handle the increasing number of customers and volume of transactions with ease,” said Xu.

The company also liked the access control tables in Oracle Tuxedo, which would enhance the security of the TA System. In addition, Oracle’s open architecture would also ensure TA System could be easily integrated with business systems and hardware platforms used by Hundsun Technologies’ fund management clients.

Implementation Process

Hundsun Technologies built a clustered database environment based on Oracle Database 11g, with Real Application Clusters. Oracle Tuxedo serves as the transaction middleware. TA System uses the message routing, message queuing, communication, application dividing, and password functions of Oracle Tuxedo.

Hudson Technologies began by installing and deploying Oracle Database with Real Application Clusters before installing Oracle Tuxedo. It could then deploy its TA System 4.0, which went live in December 2011.

Oracle Customer:**Machine-to-Machine Intelligence Corp.**

Moffett Field, California
www.m2mi.com

Industry:

High Technology

Oracle Products & Services:

- Oracle WebLogic Server 11g
- Oracle SOA Suite 11g
- Oracle Database 11g
- Oracle VM

Machine-to-Machine Intelligence Corp.**Reduces Its Customers' Datacenter Provisioning Costs by 76% Through Flexible, Open-Standards-Based Middleware**

"Our Network Virtualization application supports more than 5.7 million users and connects to hundreds of thousands of devices. Oracle Fusion Middleware provides the stability, performance, and open standards we need to continue to scale and help our customers stand up cloud environments, quickly and profitably."

— **William Bathurst**, Director of Development, Machine-to-Machine Intelligence

Machine-to-Machine Intelligence (M2Mi) Corp. was founded in California's Silicon Valley in 2006. The company's software defined networking software helps customers across a wide range of industries to automate the rapid provisioning and decommissioning of various devices—including firewalls, load balancers, and network switches, as well as compliance tasks—in complex grid and cloud infrastructures.

M2Mi supports approximately 5.7 million users in 23 countries, across 30 data centers, on a 24x7 basis. Its Network Virtualization application addresses the integration, interoperability, and security issues that enable the optimization of cloud technologies. Server virtualization enables greater capacity and mobility for M2Mi's customers, but it has also created the need for the more complex virtualization and automation required to adapt networking and security in real time. In addition, as M2Mi prepares to release the next version of its software application, it will integrate with new devices and expand its reach to more than 8 million users over the next 18 months.

To support these complex requirements and the company's projected growth, M2Mi needed a rock-solid platform on which to deliver its Network Virtualization application. It turned to Oracle Database 11g, Oracle SOA Suite 11g, and Oracle WebLogic Server 11g to address these needs. M2Mi uses Oracle's security plug-ins, available in Oracle WebLogic Server and Oracle SOA Suite to easily integrate its application into customers' datacenters while fulfilling their unique security requirements and policies.

Providing Flexibility and Performance for Complex Cloud Environments

M2Mi's Network Virtualization application needed to be able to adapt to customers' environments and best practices rather than force specific policies, processes, or architectures on them. In addition, the company's customer environments are comprised of an extremely heterogeneous mix of commercial and custom-built applications. Knitting these together while trying to scale would have impeded M2Mi's growth and competitive advantage.

The extensibility and built-in support of Oracle SOA Suite, along with Oracle WebLogic Server and Oracle Database 11g, enabled M2Mi focus on its core business—expanding the reach of its Network Virtualization application, which is designed to streamline and transform network and security assets from brittle, manual, and static devices into a single, dynamic, responsive resource that can be provisioned through high-level policies and rules.

"We need top-notch stability and accountability. We can't have any crashes. Our application must be self tuning, and we achieve that with Oracle Fusion Middleware," said William Bathurst, director of development, Machine-to-Machine Intelligence.

M2Mi's application exposes services that must integrate with customers' management infrastructures, regardless of the technology platforms they use. Oracle SOA Suite and Oracle WebLogic Server provide the open integration capabilities the company needs to easily integrate its solution into its customers' datacenters.

This approach enables M2Mi's customers to more easily deploy new technologies in their datacenters with minimal integration and new skills training, because the features can be virtualized alongside the existing architecture and aligned to existing business rules. The interoperability of multivendor virtualization and automation relieves organizations from vendor lock-in, makes network management much less complex, and enables organizations to easily assimilate acquired datacenters with different vendors, operating systems, and appliances.

"We are involved in projects where we essentially are talking to hundreds of thousands of devices. To scale to that degree is quite challenging. Our WebLogic clusters enable us to push transactions from one geographically-dispersed cluster to another to handle the load and enable us to scale," Bathurst said.

Accelerating Datacenter Provisioning and Return on Investment

Leveraging Oracle Fusion Middleware, M2Mi's Network Virtualization application helps its customers manage the complexity and diversity found in their networks. As a result, the company's customers have been able to reduce the time it takes to provision new users from weeks to minutes or hours. They can also more easily deliver new applications with a simple, on-boarding tool. Furthermore, the virtualization of these feature-rich assets into deliverable and measurable services allows for the monetization of network and security assets through value-added services, like service level agreements, advanced security features, and compliance monitoring.

"M2Mi is the only comprehensive network virtualization tool on the market with extensive multivendor support, true network and security virtualization, advanced features, and a proven track record with large, enterprise cloud, public cloud, and telecommunications deployments. Our aggressive technology development—which enabled us to get ahead of the market—was definitely enabled by Oracle's platform," said Sarah Cooper, vice president business development, Machine-to-Machine Intelligence Corporation.

"Our solution is also the first to connect the cloud to mobile and machine-to-machine assets by bridging the datacenter or Ethernet network and the telecommunications operator network. Open-standards-based Oracle Fusion Middleware helps us close that gap," Cooper continued.

With M2Mi's Network Virtualization solution—built on Oracle—its customers can realize revenue much more quickly, in eight hours versus in 28 days, due to more rapid deployments. In addition, its customers—many of whom are in the telecommunications industry—have been able to eliminate months of end user, on-boarding backlogs within weeks to retain the pipeline and bring in new revenue. The company has enabled its customers to reduce average provisioning costs by 76%.

M2Mi's solution also helps its customers reduce the errors that plague the manual workflows previously used to administer the network and security, resulting in less downtime, and through the extensibility of Oracle SOA Suite, standardize the entire organization on network and security best practices.

"We have achieved a 260% return on our Oracle investment, based on our current number of users," Cooper said. "In addition, we have greatly reduced the risk for future projects, due to Oracle's standardized architecture and processes."

Supporting New Devices with Out-of-the-Box Functionality

M2Mi is currently developing Network Virtualization Version 5, which will be further optimized on Oracle SOA Suite and Oracle WebLogic Server. In addition, it will build out full integration for orchestrated network virtualization and provisioning with Oracle Enterprise Manager and Oracle Virtual Machine. Following its delivery of full Oracle Enterprise Manager support, M2Mi will push Network Virtualization V5 to existing enterprise and telecommunications customers, followed by release through channel partners in the US, Europe, and Asia.

"We will depend upon Oracle products for enhanced security functionality and scalability as we expand to cover more and more devices. The ability to expose services and apply business security rules to them is important to us. Oracle provides all of these functionalities, out of the box," Cooper said.

The company also intends to integrate its solution with several new technologies, including a quantum key generator and encrypted information exchange services for mobile devices. M2Mi's customers will be able to take advantage of these newly supported devices with much reduced integration and deployment timelines and costs, thanks in part to Oracle Fusion Middleware.

Challenges

- Help customers across a wide range of industries to automate the rapid provisioning and decommissioning of applications and various devices—including firewalls, load balancers, and network switches—as well as compliance tasks, in complex, public and private cloud infrastructures
- Scale to support 5.7 million users, and a projected 8 million users over the next 18 months
- Adapt to customers' environments rather than enforce specific policies, processes, or architectures
- Ensure application stability to meet customers' 24x7 requirements

Solutions

- Leveraged the extensibility and built-in support of Oracle SOA Suite, Oracle WebLogic Server, and Oracle Database 11g to enable hundreds of thousands of devices within customers' datacenters to communicate with each other—and automating key network provisioning processes
- Provided open integration capabilities to easily integrate the company's Network Virtualization application into customers' datacenters, regardless of the technology platforms they use
- Enabled customers to reduce average provisioning costs by 76% and more easily deploy new technologies in their datacenters with minimal integration and new-skills training, while ensuring application stability and performance
- Allowed customers to reduce the time it takes to provision new users from weeks to minutes or hours, as well as more easily deliver new applications with a simple on-boarding tool
- Relieved customers from vendor lock-in
- Provided the scalability to support more than 5.7 million users and position the company to release the next version of its software, which will integrate with new types of telecommunications and machine-to-machine devices
- Helped customers reduce errors that plagued the previously-manual workflows used to administer networks and security, and decrease downtime through the extensibility of Oracle SOA Suite
- Realized a 260% return on investment

Why Oracle

M2Mi was attracted to Oracle Fusion Middleware due to its impressive flexibility. It deployed Oracle's WebLogic Server in multiple geographic locations for streamlined load balancing capabilities. The ability to dynamically provision new WebLogic instances, which support M2Mi's application and services, was absolutely critical.

"Our customers are incredibly demanding. They require the highest levels of quality, performance, scalability, reliability, and manageability within mission-critical environments," said Sarah Cooper, vice president business development, Machine-to-Machine Intelligence Corporation. "Oracle helps us meet these demands. It also invests heavily in the Oracle Fusion Middleware suite and provides great visibility into its roadmap."

Oracle Customer:**Callista Software Services**

Victoria, Australia

www.callista.com.au**Industry:**

Education and Research

Annual Revenue:

Under US\$100 Million

Employees:

112

Oracle Products & Services:

- Oracle JDeveloper 11g
- Oracle Application Development Framework 11g
- Oracle WebLogic Server 11g
- Oracle Forms 11g
- Oracle Reports 11g
- Oracle JRockit Release 28.0.2
- Oracle Identity Management 11g Release 1
- Oracle Database 11g
- Oracle Fusion Middleware 11g

Oracle Partner:**Sage Computing Services**www.sagecomputing.com.au**Red Samurai Consulting**www.redsamuraiconsulting.com**Rubicon Red**www.rubiconred.com

Callista Software Services Improves Client Satisfaction with Student Management Systems Through Advanced, User-Friendly Features and Forms

“Oracle ADF 11g has allowed us to satisfy our customers by providing the first phase in our next-generation student management system. Callista SMS is now user-friendly, highly configurable, and ready for future growth.”

— **Evan Vicary**, General Manager of Technology and Research, Callista

Callista Software Services (Callista) provides enterprise resource planning software and student management systems for about a third of Australia’s tertiary education institutions. The company develops and delivers the Oracle-based Callista Student Management System (SMS), a comprehensive software system for universities and Technical and Further Education (TAFE) institutes. More than 300,000 local and international students around Australia—and hundreds of academic and administrative support staff—use Callista SMS and associated services daily to manage the entire student lifecycle, from initial inquiries about courses, to graduation.

Callista upgraded to Oracle Application Development Framework 11g (Oracle ADF 11g), Oracle JDeveloper 11g, Oracle WebLogic Server 11g, Oracle Forms 11g, and Oracle Reports 11g to align its student management system with evolving tertiary education business practices and requirements. It has improved the system’s functionality by upgrading more than 1,500 forms and reports, improving features available to Callista SMS users, and cutting total costs for clients to apply patching and upgrades.

Challenges

- Modernize its student management system by developing a more user-friendly interface and addressing new demands from users, such as relating the system to applications, like Facebook and Twitter
- Upgrade the system’s architecture from Oracle ADF 10g to Oracle ADF 11g to improve system performance and ensure system updates could be sent to clients with minimum disruption to their daily student management processes
- Migrate more than 1,500 built-in Oracle forms, reports, and Web services to the Oracle Fusion Middleware 11g platform
- Utilize previously unavailable advanced features and benefits of Oracle ADF 11g and Oracle JDeveloper 11g, such as bounded task flows
- Align the student management system with evolving tertiary education business practices and requirements

Solutions

- Developed and implemented the new Callista SMS quickly by reusing Oracle ADF components and applying planning and research methods learned from the implementation of Oracle ADF 10g
- Reduced system downtime for higher education and TAFE institution clients by eliminating the need to redeploy Callista SMS for each patch installation and upgrade

- Enhanced the student management system's performance by migrating approximately 1,300 forms, 70 reports, and eight Web services in Oracle ADF 11g, and building about 300 Oracle ADF pages and 75 bounded task flows (totaling approximately 150 entity objects)
- Cut total costs for clients' patches and upgrades by enabling them to minimize risk of bugs and providing required testing to assure the quality of changes
- Enhanced users' experiences by introducing new capabilities similar to Web-based conventions used on Google or Facebook, and allowing users to easily complete complex, daily, student-management tasks online
- Increased user satisfaction rates by developing new menu features and functions that enabled clients to control color, font, and text size, and create online forms—for course enrollment, for example—that match institution branding
- Improved features available to Callista SMS users by including advanced functions and system extensions, such as the ability to propose, manage, and approve new university courses and units
- Satisfied company and client requirements by continuing to support the current student management system without interruption, while performing a controlled migration to the new system
- Allowed tertiary-education institutions to better communicate with their students and student support staff by building advanced communication features into Callista SMS, such as e-mail, text messaging, and mail-outs
- Improved company reputation and credibility by winning an Oracle Innovation Award 2011 for developing a modern, advanced student management technology using innovative Oracle technology

Why Oracle

Callista chose Oracle ADF 11g, as it was an application that would be easy to transition to and would integrate with existing Oracle Forms and Oracle Database products.

"Oracle ADF 11g was very compatible with the technology we were already using, and Oracle offered support to help our developers with the transition from Oracle Forms to Oracle ADF," said Evan Vicary, general manager of technology and research, Callista.

The company chose Oracle WebLogic Server 11g as the platform for Callista SMS, since it wanted a more modular architecture that could handle a large number of shared libraries.

"We prototyped approximately 1,000 shared libraries on Oracle WebLogic Server, just to make sure that the approach we were using would actually work," said Vicary. "WebLogic Server was able to handle that, which was very reassuring for us."

Another benefit of Oracle WebLogic Server 11g was that Callista could run its entire student management system from the same deployment platform. This would allow a much easier integration between Oracle Forms 11g and Oracle ADF 11g, provide a unified view to Callista SMS users, and allow the company to modernize the system without disrupting clients' daily student management tasks. It would also enable clients to complete upgrades and patching without redeploying their entire system.

Implementation Process

Callista deployed its upgraded student management system in several stages over a period of about two years. In August 2010, the company released a version that ran on Oracle Database 11g to enable clients to move initially to the Oracle 11g platform. In March 2011, it upgraded the system to include Oracle Forms 11g, Oracle Reports 11g, and Oracle WebLogic Server 11g.

In early 2012, Callista released the final upgrade of its student management system, including functions that have been built with Oracle ADF 11g.

"We deployed it in stages, as wanted to deliver the Oracle 11g platform as quickly as possible," said Vicary. "A lot of our clients have invested in local customizations, so we wanted to let them upgrade their local developments first, before rolling out the rest of the system."

Partner

Callista used several Oracle partners at various stages of its student management system upgrade. Sage Computing Services provided the company with training in Oracle JDeveloper 11g and Oracle ADF 11g; Red Samurai Consulting reviewed the system architecture; and Rubicon Red acted as a consulting resource.

"We were happy with the involvement of all the Oracle partners we used," said Vicary.

Oracle Customer:

**Hong Kong Air Cargo Terminals Ltd.
(Hactl)**

Hong Kong
www.hactl.com

Industry:

Travel and Transportation

Employees:

2,600

Oracle Products & Services:

- Oracle WebLogic Suite
- Oracle Database,
Enterprise Edition 11g
- Oracle Business Intelligence Suite,
Enterprise Edition 11g
- Oracle Data Integrator 11g
- Oracle Consulting

Hong Kong Air Cargo Terminals Ltd. (Hactl)

Processes Shipping Manifests 60% Faster, Accelerates Information Searches by More Than 30%

“Based on Oracle WebLogic Suite and Oracle Database, Enterprise Edition 11g, the new cargo management system can handle more than 1,000 concurrent users and complete more than 1.7 million transactions per day. We can process shipping manifests up to 60% faster, significantly improving our customer services.”

— **Cindy Ng**, General Manager—Information Services, Hong Kong Air Cargo Terminals Ltd.

Hong Kong Air Cargo Terminals Ltd. (Hactl) operates the world’s-largest, single, independent cargo handling facility, with a maximum capacity of 3.5 million tons of cargo per year. In 2010, the company handled a record 2.9 million tons for more than 100 airlines and 1,000 freight forwarders. Located at Super Terminal 1 in Hong Kong’s Chek Lap Kok Airport, Hactl currently handles 70% of the air cargo throughput in one of the world’s busiest cities.

Hactl relies on its cargo management system, which it named Community System for Air Cargo (COSAC) to track cargo as it passes through the terminal. In early 2012, the company completed the upgrade of its cargo management system, renaming it COSAC-Plus. The new system, based on Oracle Database, Enterprise Edition 11g and Oracle WebLogic Suite, can support more than 1,000 concurrent users and complete more than 1.7 million transactions each day. As a result, Hactl lowered shipping manifest processing times by up to 60%, reduced scheduled downtime during system upgrades and implementations, and can now search for information more than 30% faster.

New Airport Doubles Tonnage Handled by Cargo Management System

Hactl’s services handle physical cargo, documentation, ramp management, crew transportation services, and intermodal transport services. The Oracle-based COSAC system connects Hactl with airlines and freight operators, as well as government authorities, such as Airport Authority Hong Kong, the Customs and Excise Department, Civil Aviation Department, and Census and Statistics Department. Customers can use COSAC to lodge cargo documents and track cargo.

The COSAC system was initially launched in 1976 at Hong Kong’s former international airport, Kai Tak, and has been upgraded several times. After Hactl moved to Super Terminal 1 at Chek Lap Kok airport in 1998, staff used the legacy COSAC2 system to manage cargo data from a 3,500-compartment, multilevel, container storage system, along with 10,000 compartments accommodating loose cargo.

“Cargo tonnage almost doubled after the move to Chek Lap Kok, combined with an increase in demand for data from customs, airlines, and the International Air Transport Association’s initiatives such as Cargo2000, e-Freight, and e-AWB,” said Cindy Ng, general manager—information services, Hong Kong Air Cargo Terminals Ltd. “To improve efficiency and cope with the increase in the volume and complexity of data, we needed to develop a next-generation cargo management system, and provide a robust and agile platform for our customized cargo management services.”

Hactl is one of two cargo operators based at Chek Lap Kok, with a third operator due to start business in 2013. The increased competition meant Hactl needed to improve the overall efficiency and flexibility of the COSAC system to retain existing customers and attract new business. The company also wanted to offer end-users a more powerful and flexible interface.

In addition, Hactl needed to ensure the transition to the new system and any subsequent upgrades were completed quickly and smoothly. It wanted to avoid excess downtime or other problems that might affect its ability—or the ability of its customers—to provide transport and cargo handling services 24 hours a day.

“COSAC has been the backbone of Hactl’s operations for 36 years, and we continue to invest significantly in ensuring the system is fully up to date and totally robust,” said Ng. “When you handle critical operations round the clock for more than 100 airlines and 1,000 freight forwarders, failure is not an option.”

Shipping Manifests Processed Up to 60% Faster

Redesigning COSAC-Plus to run on Oracle has enabled Hactl to lower document processing time by up to 60%, despite supporting 1,000 concurrent users, conducting more than 1.7 million transactions per day.

“We can now process shipping manifests, which contain thousands of house waybills—which are contracts between shippers and agents for transporting cargo—up to 60% faster than the previous system,” said Ng. “By delivering a faster response to end-users, we have significantly improved our services and customer satisfaction.”

By lowering transaction processing times, Hactl has also enabled its customers, such as airlines and freight forwarders, to more quickly identify and correct errors in the shipping manifests.

“In the air cargo industry, every second counts, so the faster we process shipping documents and information through COSAC-Plus, the sooner our customers can identify and rectify any problems in the paperwork,” said Ng. “This allows cargo to be cleared sooner, without affecting shipment-release times.”

Information Searches Accelerated by More Than 30%

The electronic cargo manifest for each aircraft can consist of thousands of items, making a rapid data entry and search system essential. Using the upgraded, Oracle-based COSAC-Plus, Hactl staff, airline users, freight forwarders, and government departments can now customize the system’s user interface to better suit their requirements. This has improved the speed at which users can search for information by more than 30%.

“By moving to Oracle products, we have enabled COSAC-Plus to optimize functions and customize data fields,” said Ng. “The system can also handle photographs of cargo, which increases the visibility of different items and is extremely popular with customers.”

Oracle Database, Enterprise Edition 11g and Oracle WebLogic Suite have also enabled COSAC-Plus to offer users online help and a choice of English and simplified or traditional Chinese.

“Offering simplified or traditional Chinese in the cargo management solution helps our staff use the system more easily, as well as making it easier for us to work with more businesses in mainland China,” said Ng. “This will help us expand our customer base, which will be especially important once the new cargo operator enters the market in 2013.”

In addition, 95% of the 3,500 people trained to use COSAC-Plus rated the new system as “good” or “very good.”

“Thanks to the user interface customization options, COSAC-Plus makes it easier for our end-users to enter and search for cargo information quickly and accurately,” said Ng. “This is improving the efficiency of the system, boosting customer satisfaction, and will help us remain competitive.”

Scheduled Downtime Reduced During System Upgrades

By using Oracle Database, Enterprise Edition 11g and Oracle WebLogic Suite to upgrade its Cargo Management System to COSAC-Plus, Hactl has reduced its scheduled system downtime during new implementations and upgrades.

“We can now implement changes and upgrades to the Web-based system without taking it completely offline, ensuring we can provide cargo management services 24 hours a day, seven days a week,” said Ng.

Enhanced Business Intelligence Helps Predict Future Cargo Demand

Hactl has implemented Oracle Business Intelligence Suite, Enterprise Edition 11g, to provide an insight into cargo shipment trends and customer behavior. It allows Hactl to better understand customer needs, and to develop strategies for handling cargo at peak times and during the anticipated changes brought about by increased competition.

“Our Oracle-based COSAC-Plus system allows us to more easily understand the trends of cargo movements across different continents and different airlines, which is important in an industry that is constantly changing according to the global economy,” said Ng.

Challenges

- Improve the efficiency, capacity, and uptime of the COSAC-Plus cargo management system, to handle increases in the volume and complexity of data
- Prepare for increased competition in 2013 from a third cargo operator at Hong Kong’s Chek Lap Kok airport
- Enhance the system’s user interface to help improve cargo data entry and searching processes

- Reduce processing times for shipping manifests, to allow customers, such as airlines and freight forwarders, to recognize and correct mistakes faster
- Develop rapid data migration methodology for transferring millions of cargo records from the previous system to COSAC-Plus in a very short timeframe without affecting services

Solutions

- Supported 1,000 concurrent users conducting more than 1.7 million cargo transactions per day
- Reduced processing times for shipping manifests by up to 60%, allowing cargo to be cleared sooner without affecting shipment release times
- Accelerated information searches by more than 30%, and enabled users to quickly identify and correct errors
- Achieved a 95% user satisfaction rate by allowing customers to customize functions and data fields, and by providing photographs of cargo
- Maintained cargo management services 24 hours a day, seven days a week, by reducing scheduled downtime during upgrades and new implementations
- Improved competitiveness by supporting simplified and traditional Chinese, so the company can more easily expand its business to customers in mainland China
- Gained better insights into cargo shipment trends and customer needs, and developed strategies for handling cargo at peak times and during anticipated changes brought about by increased competition
- Migrated customers successfully to COSAC-Plus in small windows of only several hours, spread across four months, using tools such as Oracle Database Integrator

Why Oracle

Hactl chose Oracle, not only for the performance capabilities of Oracle WebLogic Suite, but also for the support from Oracle Consulting and Oracle University when training developers. “We had already deployed other open and proven technologies from Oracle, such as Oracle Database, Oracle WebLogic Server, and Java in COSAC-Plus’ predecessors, and wanted an offering that would integrate best with our existing applications,” said Ng.

“To manage critical, 24/7 operations for the world’s busiest air cargo hub, we needed the performance and specific benchmarks that Oracle WebLogic Suite could provide, and these weren’t met by open source or other offerings,” Ng said.

Although the Oracle technology provided the performance and reliability Hactl needed, the company’s close work with Oracle Consulting was the key to the implementation’s success.

“We engaged Oracle Consulting to provide professional project management and specialized architectural and database designs,” said Ng. “As well as professional skills, the passion and strong bonds the team brought to the project added a differentiating value, which led to a successful implementation and data migration.”

Implementation Process

COSAC-Plus was developed by Hactl Solutions Ltd. (HSL)—an independent company established in 2009 to provide full air cargo management solutions for all sectors of the industry. HSL began developing the Cargo Management System in July 2009, working closely with Oracle Consulting on the project for three years.

Hactl migrated its customers to the new system in batches between December 2011 and April 2012 to ensure they didn’t experience a lengthy downtime.

“Without the luxury of extended downtime during the upgrade, we used Oracle Data Integrator 11g to migrate millions of records in short windows of only three to four hours,” said Ng. “This approach allowed us to contain and rectify any issues before moving ahead.

“COSAC-Plus is our single largest investment since the building of Super Terminal 1, but this is an international airport so we simply cannot stop the cargo system for long periods to perform an upgrade,” Ng continued. “Thanks to Oracle Data Integrator and the support of Oracle Consulting, we began the migration phase early in the morning on the day after Christmas, and it ran smoothly until all our customers were moved across by April.”

Oracle Customer:**Natura Cosméticos S/A**

São Paulo, Brazil

www.natura.net

Industry:

Consumer Goods

Annual Revenue:

US\$1 to US\$5 Billion

Employees:

7,000

Oracle Products & Services:

- Oracle WebLogic Suite 11g
- Oracle WebLogic Server, Enterprise Edition
- Oracle SOA Suite for Oracle Middleware 11g
- Oracle Service Bus
- Oracle Coherence

Natura Cosméticos S/A Implements New IT Platform to Handle Nearly 110,000 Orders Daily and Maintain Double-Digit Sales Growth

“With Oracle WebLogic Suite 11g, we bridged the gap between our ERP system and our sales-related applications, which support up to 110,000 orders daily. By combining Oracle WebLogic Server with Oracle Coherence, we achieved even better performance and scalability for our new IT platform by virtualizing our servers.”

— **Mauricio Martinez**, IT Architecture Assistant, Natura Cosméticos S/A

Natura Cosméticos S/A (Natura Cosmetics, Inc.) is Brazil’s largest manufacturer of cosmetics and beauty products, which are distributed via a direct sales model. It ranks fourth in Latin America’s beauty and hygiene industry and 13th in the world.

Natura also has a presence in Argentina, Peru, Chile, Mexico, Colombia, and France—where it operates a store and a satellite technology and research center. Its sales force includes 1.36 million consultants—1.13 million in Brazil and nearly 230,000 abroad.

To maintain double-digit sales growth—which it has attained over the last several years, including a 21% increase from 2010 to 2011—Natura needed to more efficiently integrate its enterprise resource planning (ERP) system with customized Java applications that were critical to its business. By combining Oracle WebLogic Suite 11g with Oracle WebLogic Server, Enterprise Edition, the cosmetics manufacturer ensured scalability through virtualization to handle nearly 110,000 online orders daily by internet.

Challenges

- Integrate the manufacturer’s enterprise resource planning (ERP) system with Java applications that are critical to the company’s direct sale cosmetics and beauty product business
- Ensure efficient processing of approximately 110,000 cosmetic and beauty product orders daily to maintain the company’s double-digit annual growth rate
- Improve performance and scalability of critical applications that support order entry from the company’s 1.36 million consultants who sell directly to customers

Solutions

- Implemented Oracle WebLogic Suite 11g and Oracle WebLogic Server, Enterprise Edition to ensure a robust IT platform that integrates back-office systems with other applications critical to cosmetics sales, making it possible for the manufacturer to maintain double-digit sales growth
- Obtained scalability to support increasing demand for the company’s cosmetics and beauty products and reduced the risk of system overload and order processing delays, which the company had previously experienced
- Eliminated application synchronization issues that threatened the performance of the sales, operations, logistics, and IT departments by eliminating thousands of patches and interfaces between legacy systems and the company’s ERP system

- Achieved clustering and virtualization, leading to better performance for the company's critical systems and enabling it to support higher volumes without having to invest in more hardware
- Streamlined IT management and maintenance, freeing the IT team time to focus on other priorities
- Improved system performance and stability by using Oracle Service Bus and the Oracle Coherence Suite distributed memory cache to strengthen communication between critical applications (such as order entry) and the back office

Why Oracle

"We chose Oracle WebLogic products because we have used Oracle's platforms, servers, and database for years and trust this proven infrastructure with our critical applications. Furthermore, the performance and scalability of this environment ensures a good cost-benefit ratio." – Mauricio Martinez, IT Architecture Assistant, Natura Cosméticos S/A

Oracle Customer:**Obopay Mobile Technology**

Mumbai, India

www.obopay.co.in

Industry:

High Technology

Employees:

400

Oracle Products & Services:

- Oracle WebLogic Suite
- Oracle Database

Obopay Mobile Technology India Ensures Secure Mobile Payment Services

“Oracle WebLogic Suite provided us with a scalable, secure, and trustworthy system that is easy to deploy and manage. The application is robust enough to support a large volume of payment transactions, and we are also able to compare and audit data.”

— **Nitin Sharma**, Vice President – Managed IT Services and Security, Obopay Mobile Technology India

Founded in the U.S. in 2005, Obopay Mobile Technology started its India operations in 2007. The company offers mobile banking and payment services that enable customers to send and receive money, pay small businesses, buy goods and services, and pay bills from their cell phones. The service, powered by Obopay, is currently live in Pune, Chandigarh, Nasik, the National Capital Region, and Mumbai, while the company is working towards deploying a full network across the country. Obopay is working closely with industry regulators to establish India's first mobile banking regulations and has partnerships with Nokia, YES Bank, and Union Bank of India.

Challenges

- Implement a scalable platform that will support mobile banking service trials in four cities, followed by a national rollout
- Provide a secure and robust foundation for financial services that is trusted and respected by large, well-established partners, such as Nokia
- Support large numbers of financial transactions through secure, reliable, mobile channels, such as SMS, voice calls, SIM tool kits, and smartphone applications
- Ensure financial transactions are carried out securely and accurately, and that customer details are kept safe

Solutions

- Implemented Oracle WebLogic Suite and Oracle Database to provide a scalable, reliable, and secure platform to support large volumes of transactions, such as person-to-person payments, talk time top-up, and a nationwide rollout of mobile payment services
- Stored details of customer payments and transfers, as well as customer information, such as personal identification and account numbers, securely in a single integrated database
- Generated transactional reports from Oracle Database, such as consumer demographics reports for business intelligence purposes
- Enabled partners to compare mobile payment transactions and check for anomalies by generating daily reconciliation reports
- Gave account agents and partners real-time access to account balances, so customers do not overdraw their accounts



DATA INTEGRATION

Oracle Customer:**MegaFon**

Moscow, Russia
www.megaфон.ru

Industry:

Communications

Annual Revenue:

Over US\$5 Billion

Employees:

8,000

Oracle Products & Services:

- Oracle GoldenGate 11g
- Oracle Database 11g, Enterprise Edition
- Siebel Customer Relationship Management (Siebel CRM)

MegaFon Centralizes 200 Billion Real-Time, Mobile Communications Billing Transactions to Analyze Security and Revenue and Protect Against Fraud

“Oracle GoldenGate 11g has proven to be an extremely reliable, scalable, and easy-to-use solution that seamlessly captures and delivers data for more than 200 billion monthly transactions to our business-critical subsystems for analysis. The solution enables us to stay one step ahead of our competitors by facilitating innovation via rapid, sophisticated analytics.”

— **Alexander Bocharov**, Head of Analytical Systems Development, MegaFon

Founded in May 2002, MegaFon is the only Russian telecommunications provider with a network that spans all of Russia, as well as the Republics of Abkhazia, South Ossetia, and Tajikistan. The company was the first in the country to launch 3G commercial operations. It is now Russia's top provider of mobile internet solutions, and is ranked second highest for the number of active communications subscribers—with 62.8 million at the end of 2011, representing a 9.6% increase from the previous year.

Building on its growth, MegaFon recently acquired Synterra, a Russian mobile carrier. Following the acquisition, the acquired company's billing information was in eight separate regional billing systems across Russia. To sustain growth in the multiple fixed and wireless segments, MegaFon needed a data-centric IT architecture for multiple disparate databases, to ensure accurate, trusted, and timely data for all corporate departments. For example, MegaFon wanted the ability to create smart marketing campaigns built on mobile subscriber profile data with real-time response analysis, so it could facilitate growth by maximizing conversion rates and average revenue per user.

MegaFon deployed Oracle Golden Gate 11g to extract billions of monthly transactions from eight regional billing systems. The data was integrated and centralized onto Oracle Database 11g, Enterprise Edition, and distributed to business-critical subsystems for revenue, fraud, and security analysis. As a result, MegaFon achieved more sophisticated, business-specific analysis for billing and customer data, to improve business decisions, facilitate more targeted customer marketing, and provide for ongoing growth.

Challenges

- Create a central data repository, capable of scaling to collect more than 200 billion pieces of real-time mobile billing information from eight regional billing systems
- Implement a data-centric architecture to provide accurate, trusted, and timely data to various corporate departments, eliminating disparate customer data from divisions within the company
- Optimize physical IT assets by avoiding overuse of the network and IT systems due to extra queries to obtain siloed mobile billing and production information
- Gain more sophisticated analysis of mobile usage information to improve customer marketing initiatives and increase revenue generated from the current customer base
- Improve mobile fraud detection and increase mobile security capabilities by distributing real-time customer data to business-critical subsystems for analysis

Solutions

- Consolidated more than 200 billion monthly billing records from eight billing systems onto a centralized database using Oracle Database 11g, Enterprise Edition, and distributed data to multiple business-critical subsystems for more accurate, sophisticated analysis
- Created a 360-degree view of the mobile subscriber base by consolidating information from an existing Oracle's Siebel Customer Relationship Management application and disparate billing databases, which improved insight into customers
- Deployed Oracle GoldenGate 11g to implement a data-centric IT architecture and provide more accurate, trusted, and timely data for sales, marketing, customer care, and other corporate departments. Lowered hardware and licensing costs using the scalability of Oracle Database 11g, Enterprise Edition to eliminate the need to purchase additional systems and software licenses for increased workloads
- Enabled multiple offices and data centers across Russia to respond quickly to events—especially potential mobile security and fraud issues—thanks to more centralized business information and streamlined access to real-time reporting
- Created sophisticated, targeted marketing campaigns based on enhanced mobile subscriber information, enabling Megafon to maximize market penetration and facilitate continued growth
- Optimized IT resource use by offloading tasks—such as operational reporting and analytics—from billing and operations support systems to the new, centralized database
- Centralized, real-time data collection from multiple sources—including databases for billing, customer-relationship management, and enterprise resource planning. Ensured that field offices and data centers have real-time access to key performance indicators, to better meet strategic goals and increase growth
- Enabled more business-specific analysis of billing data—such as revenue assurance, customer analytics, and fraud detection—to accommodate the company's revenue growth, customer insight, and security requirements

Why Oracle

MegaFon chose Oracle solutions because of performance, ease of implementation and use, scalability and agile management. The solution suite also lowers total cost of ownership, as a single MegaFon engineer maintains the entire Oracle GoldenGate 11g infrastructure.

“Concurrent with MegaFon's goal to offer its customers the greatest potential for modern communications by investing in cutting-edge technologies, Oracle provided a solid technology foundation that helped us bring new offerings to the market, outperform the competition with more sophisticated business planning, and provide outstanding customer service while doing so,” said Alexander Bocharov, head of analytical systems development, MegaFon.

Implementation Process

MegaFon easily completed the implementation on budget, with minimal systems performance optimization required.

Oracle Customer:**National Informatics Centre**

New Delhi, India

www.nic.in

Industry:

Public Sector

Employees:

5,000

Oracle Products & Services:

- Oracle Data Integrator
- Oracle Consulting

National Informatics Centre Centralizes 250 Million Vehicle and Driver Records, Improves Service Quality, and Increases Revenue by up to 50%

“Oracle Data Integrator offered the most cost-effective method of centralizing millions of vehicle and driver records stored in different databases across the country. We have significantly improved the quality of services delivered to citizens and agencies by enabling real-time data sharing, rather than waiting days for hard-copy documents, and we have increased revenue by up to 50%.”

— **Dr. Mahesh Chandra**, Deputy Director General, National Informatics Centre

The Government of India's National Informatics Centre (NIC) is the primary supplier of technology services to government agencies across the country. Established in 1976, the organization provides a national network that serves as the backbone and support for e-governance projects that touch virtually every citizen in the country.

To provide vehicle registration and driver's licensing services, India has more than 1,000 regional transport offices (RTOs) across the country. The offices undertake vehicle inspections, issue plate numbers and registration tags, provide driver's licenses, and collect vehicle taxes and traffic fines. Until two years ago, each RTO maintained its own database, containing details of all vehicles and registered drivers in its area. In 2011, the Government of India decided to centralize these records and asked NIC to oversee the project.

NIC selected Oracle Data Integrator to feed all driver and vehicle records in RTO databases into state-based databases (state registers), then into a single, national database (national register). These records can now be accessed in real time, compared to taking days previously, improving the quality of service to citizens, law enforcement agencies, businesses, and other government agencies. NIC has also reduced the total cost of database ownership by improving data back up and introducing new information services for enforcement staff and citizens, which has increased revenue by up to 50%.

Challenges

- Consolidate vehicle and driver information held in more than 1,000 regional databases into state registers and a single, national register
- Enhance data quality to ensure the accuracy and consistency of reports used for decision-making
- Provide 24x7 data services without shutting down the system and disrupting business operations
- Ensure data integrity in the event of a disaster at RTOs
- Allow faster and more effective access to driver and vehicle records for law enforcement authorities
- Eliminate citizen dissatisfaction with long registration lines and license issuance times
- Relieve staff burden to check driver and vehicle information when preparing reports and interdepartmental communications
- Improve the ability to track vehicles as they move from region to region across India
- Reduce the risk of illegal acts, such as bogus registrations and nonpayment of fines

Solutions

- Centralized more than 250 million vehicle and licensing records from more than 1,000 databases across the country into 35 state registers and 1 national register
- Increased revenue by up to 50%, by enabling staff to use state and national registers to track drivers with outstanding payments, even if they have moved to another state
- Improved citizen satisfaction by reducing processing time for tasks, such as renewing driving licenses and certifying vehicle registrations from three days to one day
- Shortened the waiting time for services, such as paying permit fees and road taxes, from up to four hours to 20 minutes, by introducing online applications and payments
- Reduced the error rate for processing driver's licenses and vehicle registrations from 10% to less than 1%, as citizens can complete applications themselves rather than involving a third party
- Enabled real-time sharing of vehicle and driver data with law enforcement authorities, rather than waiting days for paper records to be sent by post
- Cut staff administration costs by enabling transport offices to quickly search for vehicle and driver data in a single register, which will eventually contain the details of 120 million drivers across the country
- Lowered total cost of ownership by introducing new, information services for enforcement staff and citizens, and by easily replicating data at regular intervals, rather than investing in dedicated hardware and software
- Ensured departmental data is available 24x7 and can be easily viewed using dashboards and scoreboards, enabling efficient query and analysis, with information to be shared with police or insurance companies
- Shortened recovery times and ensured 100% data replication in the event of a disaster, by using Oracle Data Integrator's scheduler agents to regularly feed updates in RTO databases to state registers and vice versa
- Increased the accuracy and reliability of vehicle and driver data through rigorous data cleansing and deduplication techniques, ensuring the accuracy of reports generated to support decision-making
- Improved services by introducing online fee payments, license applications, RTO appointments, and status tracking, minimizing the need for citizens to physically visit RTOs
- Enhanced productivity and staff satisfaction by automating report generation and inter department communications, freeing more employees to provide face-to-face citizen services
- Minimized illegal activities by enabling enforcement officers to access both state and national registers to instantly authenticate driver and vehicle details

Why Oracle

NIC had used Oracle products, including Oracle Database, in a range of areas for more than 10 years. The organization's experience with the software gave it the confidence that Oracle Data Integrator could deliver a single, centralized database using information drawn from more than 1,000 RTOs across the country.

"Maintaining information in small databases held by each RTO was simply not an efficient way of operating," said Dr. Mahesh Chandra, deputy director general, National Informatics Centre. "After reviewing a range of options, we decided to use Oracle Data Integrator as the solution had the robustness and scalability to support the large-scale nature of the project."

Implementation Process

NIC took advantage of Oracle Data Integrator's built-in knowledge modules to help streamline the task of centralizing data from a range of smaller databases, including Oracle Database and Microsoft SQL.

"Oracle Data Integrator enabled us to pull vehicle, driver, and license details from many different places into state-based registers," said Chandra. "From there the data was fed into a single national database. The result is a much more effective system that can better support government, law enforcement, and citizens."

NIC worked with Oracle Consulting during the Oracle rollout. The knowledge module was customized before the data was transferred into state registers and the national PostgreSQL database. The transfer process will be completed in 12 months.

"We realized we had a complex task on our hands, with a very large number of records stored in multiple types of databases across more than 1,000 locations," said Chandra. "However, through the use of Oracle Data Integrator, we were able to centralize this data and provide faster, more efficient access to driver and vehicle information. The solution has made a significant, positive difference to government and law enforcement processes."

Oracle Customer:**Sabre Holdings**

Southlake, Texas

www.sabre.com

Industry:

Travel and Transportation

Annual Revenue:

US\$1 to \$5 Billion

Employees:

Approximately 10,000

Oracle Products & Services:

- Oracle GoldenGate
- Oracle Data Integrator
- Oracle Database 11g
- Oracle Real Application Clusters

Oracle Partner:**HP**

www.hp.com

Sabre Holdings Processes More than 200 Million Daily Transactions, Integrates Over 50 Data Sources, and Accelerates Platform Migrations

“The unique thing about Sabre Holdings is that we use Oracle technologies to offer products to our customers as well as using them internally to help Sabre run our business more effectively and understand trends and dynamics in the travel industry.”

— **Jessica Thorud**, Director, Sabre Holdings

Sabre Holdings is a global travel technology company serving the world’s largest industry—travel and tourism. The company provides software to travel agencies, corporations, travelers, airlines, hotels, car, rail, cruise, and tour operator companies through four businesses: Sabre Travel Network, Sabre Airline Solutions, Sabre Hospitality Solutions, and Travelocity.

More than 1 billion people worldwide use Sabre’s innovative technology to plan, book, and get to their destination at a time and price that is right for them. As the company captures an extremely high volume of transactional data in its reservations, booking, and ticketing systems—among others—it depends on a comprehensive, enterprisewide data warehouse to store, manage, and analyze this information. Sabre also offers a broad range of business intelligence products—that utilize the data warehouse—to provide its customers with the true business intelligence they need to improve their operations, performance, and customer service.

Sabre is focused on innovation and uses leading-edge and flexible technologies—like Oracle Data Integrator and Oracle GoldenGate—for migrations to new systems and with its data warehouse and business intelligence solutions, all which contribute to the company’s success in providing its travel industry customers with the best possible service and information to drive their businesses.

Accelerating Integration as Data Sources and Volumes Expand

Sabre invested in developing data warehousing and business intelligence solutions to meet customer needs that provide timely marketplace and customer insights. These solutions have provided value-added offerings beyond Sabre’s traditional products, enabling the company to retain and grow its customer base while enabling its customers to improve their service offerings.

Sabre launched its data warehouse in early 2003, with four source systems for input. Sabre was using highly customized shell scripting in UNIX to load data into the warehouse and as the number of data sources continued to grow, this process was labor intensive and did not provide reusability for future products.

As the number of data sources and customers grew, managing data integration timelines and reporting schedules for internal and external customers became more challenging. Sabre decided it needed a consolidated platform to quickly bring many new data sources into the warehouse—without requiring the technical know-how for each unique data source format. After evaluating several options, Sabre selected Oracle Data Integrator to meet this need.

When Sabre first implemented Oracle Data Integrator, there were approximately 7 data sources being integrated into the warehouse. Today, the number of data sources stands at 53, which includes core transactional sets like travel booking and ticketing data, as well as controlled data, like airport latitude/longitude, carrier operational data, customer check-in information, and traveler profile data.

The frequency of loading inbound source systems into the data warehouse ranges from trickle feeds to batch files, which vary from every 15 minutes to daily, weekly and monthly. Sabre also uses Oracle Data Integrator for outbound scheduling of data extracts to customers.

“When we first started using Oracle Data Integrator, we had 3 applications, which has grown to 172 applications with more than 3,000 applications executions each day,” said Jessica Thorud, director, Sabre Holdings. “Our job executions vary in frequency, from every three minutes to monthly, and when you multiply that number by the number of applications and customers, our schedule is saturated. That’s all managed by ODI now, which has allowed Sabre to increase productivity and efficiency in development and time to market for enhancements and new solutions.”

Today, Sabre processes approximately 200 million transactions each day through Oracle Data Integrator and approximately 48 million daily transactions through Oracle GoldenGate. The company’s data warehouse environment holds 25 terabytes of data.

Sabre offers a diverse range of data and business intelligence products, from dashboards enabling airlines to measure performance against key performance indicators (KPIs), to a series of prepackaged reports designed for business users, to structured data extracts for customers wanting to run and create their own data warehouses.

Use of Oracle Data Integrator’s scheduling capability improved reliability in customer data extract deliveries through automation and monitoring of the scheduled executions. Sabre also uses Oracle GoldenGate to replicate eight sources directly from source systems on a real-time basis. The only latency in this process is network latency—less than one-300th of a second.

“The unique thing about Sabre is that we use Oracle technologies to offer hosted products to our customers as well as using them internally, to help Sabre run our businesses more effectively and understand trends and dynamics within the travel industry,” Thorud said.

Expanding to New Development Centers

While the number of data sources was increasing, Sabre was also expanding its development centers globally, first from Southlake, Texas to Krakow, Poland, and then adding a center in Bangalore, India. As the development teams expanded globally, Sabre needed to standardize the development process for integrating data. When Sabre started using Oracle Data Integrator, it built standardization into the ODI, providing the framework to better control the development process, worldwide. In addition, Sabre used the product’s framework to plug data quality checks into new projects efficiently.

“Oracle Data Integrator helped us build the framework and then provide that framework to development teams across multiple development centers to help build products,” said Amjad Saeed, development and operations manager, Sabre Holdings. “With this framework, we have been able to introduce new development resources, who have been able to quickly become productive without requiring in-depth knowledge of the source system technologies.”

With Oracle Data Integrator, operational efficiency has significantly improved, as Sabre operations personnel are able to view code in a graphical fashion and optimize it very quickly. Since it started using Oracle Data Integrator, Sabre has added 12 developers in three countries to its team, which has successfully developed and delivered the introduction of more than 50 new data sources into the data warehouse since 2003, supporting multiple business intelligence and customer-data applications.

“Oracle enabled us to become a 24/7 shop—when our US developers leave, someone in Poland or India can pick up code development. This flexibility allowed us to reduce development effort and improve time to market for new products,” Saeed said. “With Oracle Data Integrator, we have improved efficiency in development and seen a 30% to 40% reduction in the time required to bring in a new data source into the data warehouse.”

Bringing Data to the Forefront

Oracle Data Integrator and Oracle GoldenGate are key data integration platforms within Sabre’s data warehouse environment that have enabled Sabre to deliver innovative new data and business intelligence products to customers.

“In the development of dashboards with our customers, we often find that analysts say, ‘You just saved me my entire morning’s work, because in the past I would have to go to into various systems to get this information, and now it’s all pulled into an interface that I can actually use immediately to understand current performance of my airline,’” said Jeff Barnhart, product manager, Sabre Holdings “Carriers, travel agencies, and even Sabre are all faced with that same problem—how to deal with huge data volumes and make sense of them. We provide a real value with our intelligence products.”

Oracle Data Integrator also makes it easy to translate business rules—that help developers make sense of the data—into code. The solution helps Sabre’s developers with its drag-and-drop capability and the built-in transformation functions. The faster rules-to-code time also helps Sabre reduce development effort and, in turn, decrease time to market.

Sabre has also been able to reuse code to streamline the addition of new customers to existing products more efficiently.

“Our previous technology required a lot of effort when we wanted to implement code for a customer that we already had in production with another customer. We had to make multiple changes, which took time and were subject to human error,” Barnhart said. “With Oracle Data Integrator, we can clone the same code, change the variables for the new customer, and off we go. It’s only a two-hour process now for some of our products.”

Migrating to New Platforms

Sabre has also used Oracle GoldenGate to facilitate migrations from databases—in most cases, different versions of Oracle Database, MySQL, and HP NonStop Kernel (NSK) systems—to Oracle Database 11g with Real Application Clusters.

In migrating to Oracle across many systems, Sabre improved on its delivery timelines and streamlined system management. In the case of critical systems, Sabre needs zero downtime during these migrations, and Oracle GoldenGate provides that assurance.

A recent migration project—moving Sabre’s airline ticketing system from the NSK platform to Oracle Database—had additional complexity. Sabre also needed to redesign the database schema during the migration for future growth, and to meet new customer requirements. Sabre turned to Oracle Data Integrator again, using the tool for data transformation once data was migrated to the Oracle Database.

“Having the ability to do the data transformation in Oracle Database, rather than in one of proprietary, middle-tier extract, transform, and load (ETL) engines, is key,” said Dariusz Owczarek, Sabre’s lead database administrator. “It has enabled us to complete the process in the database where we have the most experience, where we have resources that can really improve or tune those transformations and not disrupt existing systems during migration.”

Sabre, working closely with HP, designed a phased-migration approach. The team has already migrated 90% of its customer data for this specific project—with zero downtime or performance impact—and has already activated 30% of customers in production. When the migration is complete, Sabre will have migrated more than 3 terabytes of data, including 200 million ticketing documents across more than 100 airline carriers. Through the initiative, Sabre has reduced complexity, minimized data duplication, and improved processes to identify potential data quality issues. Sabre also estimates the development and delivery time will be reduced by 40% through completing the replatform and refactor in one step and eliminating redundant testing efforts.

Traditionally, replatform (going from NSK to Oracle), data-migration (moving data from source to target) and database refactoring (improving data quality/normalization) is a three-step process, where each step requires separate verification and validation. Sabre’s ticketing solution has combined all three phases into one continuous phase in such a way that it only needs to complete the verification and validation once, and it can perform the migration as a unit of customer (airlines) versus a unit of data by allowing both the old system and new system to operate seamlessly.

“With Oracle, we now know it’s possible to migrate data from the current database right to the redesigned schema in the new database. That’s huge in regards to time savings,” Owczarek said. “We can use this architecture for future migrations. It will allow us to explore new solutions and redesign existing applications and databases, which may not have been possible with previous migration approaches. This approach has reduced our development effort and accelerated time to market for customer product enhancements.”

Challenges

- Develop data warehouse and business intelligence solutions to meet travel industry customer needs for consolidated data and business intelligence (BI) tools that provide timely marketplace and customer insights

- Retain and grow customer base across airlines, travel agents, corporations and hospitality organizations
- Manage continued growth in the number of data sources that need to be integrated into the enterprise data warehouse
- Standardize development processes across three global locations
- Enable repeatable processes in data migration and loading initiatives to improve productivity and operational efficiency and accelerate time to market
- Provide customers with a breadth of easy-to-use BI tools and dashboards to help them make better decisions that lead to improved operations, performance, and customer service

Solutions

- Implemented Oracle Data Integrator and Oracle GoldenGate to support enterprisewide data warehouse and business intelligence solutions for Sabre's customers and its own businesses, as well as to streamline migrations to more advanced systems
- Supported significant growth, incorporating more than 50 new data sources into the data warehouse
- Used Oracle Data Integrator to manage outbound scheduling for customer data delivery, managing more than 3,000 executions each day
- Used Oracle GoldenGate to replicate eight sources directly from source systems in real-time, with only one-300th of a second in network latency
- Standardized development processes across the US, Poland, and India and improved data quality
- Accelerated speed to market for new solutions and enhancements by enabling Sabre to reduce time by 30% to 40% to integrate a new data source into its warehouse
- Used Oracle Data Integrator to reuse code, enabling Sabre to add new customers to existing products more efficiently
- Used Oracle GoldenGate to facilitate migrations from databases to Oracle Database 11g with Real Application Clusters with zero downtime—reducing the development effort and timeline and streamlining system management
- Worked with HP within a very tight timeline to migrate Sabre's airline ticketing system from a NSK platform to Oracle Database, as well as redesign the database schema to add new customer-required functionality
- Processed approximately 200 million daily transactions through Oracle Data Integrator and approximately 48 million daily transactions through Oracle GoldenGate, while maintaining more than 25 terabytes in the data warehouse

Why Oracle

Sabre selected Oracle Data Integrator in 2006 and Oracle GoldenGate in 2007 to support its growing data warehouse and business intelligence solutions. These Oracle middleware products were selected as flexible tools that could be rapidly deployed in a global development environment that uses diverse technology solutions. Sabre also needed a tool to load data into the warehouse and schedule outbound data extracts to external customers and other Sabre applications.

“When we evaluated systems on the market, what we liked about Oracle Data Integrator was the scheduling ease. Our executions were growing each day, and it was becoming a challenge for our teams to keep up with the pace. Oracle Data Integrator provided the foundation for growth of both data sources and customers and allowed us to keep pace with the customer demand,” Thorud said.

When Sabre started to look for a tool to support the database schema redesign in its ticketing system migration, it needed something that could get the job done fast.

“We knew that hiring new people and/or developing custom programs would not be the best bet. We wanted to find a tool to do it for us. Oracle Data Integrator and Oracle GoldenGate helped not only with the migration, but also with the transformation,” Owczarek said.

Implementation Process

Sabre, working with HP, implemented Oracle Data Integrator in 2006 as part of its data warehouse initiative. Hardware and software installation was completed within one week, well under the time estimated for the effort. Sabre trained its development team on Oracle Data Integrator—including onsite training from Oracle for nine developers—starting with overall security and administration all the way to code development.

After completion of training, Sabre targeted an aggressive three-month timeline to migrate 98% of existing applications into Oracle Data Integrator and completed the migration well within that timeframe.

Sabre implemented Oracle GoldenGate in 2007 to support the addition of a new data source into the data warehouse which required integration with a NSK platform. Oracle GoldenGate was selected, based on the ease of integration with the source NSK system, and was implemented and in production within four months. GoldenGate has been adopted and expanded for other business applications within Sabre since the initial implementation.

For the ticketing system data migration project, Sabre and HP divided the initiative into four phases: new data-model design and data mappings specification, Oracle GoldenGate and Oracle Data Integrator proof of concept, data-transformation interfaces development and implementation, and data-migration deployment and validation. Sabre conducted a separate database infrastructure build-out in parallel, including installing a high availability Oracle Database 11g with Real Application Clusters infrastructure that has Oracle GoldenGate bidirectional failover replication.

Partner

HP Enterprise Services is an experienced Oracle technology implementation partner, collaborating with Sabre to design and build solutions that enable Sabre to bring high-performance, high-availability, and innovative solutions to the travel and transportation market. HP provides consulting, architecture, and infrastructure delivery, including server and mainframe hosting, network engineering and operations, maintenance, and a variety of other full lifecycle services.

“HP works to define and implement the technology strategy for Sabre’s mission-critical systems, which are some of the highest transaction rate systems in the world,” said, Seamus Egan, vice president Oracle Alliance, HP. “We are pleased to partner with Sabre to deliver best-in-class enterprise solutions to the travel and tourism industry, based on Oracle’s excellent data transformation tools”

Owczarek added, “On our migration project, HP gave us a high level of comfort by providing dedicated resources. When we started using Oracle Data Integrator, HP worked with us on volume-performance testing for six months, and then turned the program over to its excellent support team. HP executes the migration schedule, piece by piece, completely covering our certification and production environment.”

Oracle Customer:**Starwood Hotels & Resorts
Worldwide, Inc.**

Stamford, Connecticut
www.starwoodhotels.com

Industry:

Travel and Transportation

Annual Revenue:

Over US\$5 Billion

Employees:

154,000

Oracle Products & Services:

- Oracle Exadata Database Machine
- Oracle GoldenGate
- Oracle Linux
- Oracle Advanced Customer Support Services
- Oracle Solution Support Center
- Oracle Advanced Monitoring

Starwood Hotels & Resorts Worldwide, Inc. Manages Hotel Profitability, Worldwide, with Near-Real-Time Reporting on Engineered Data Warehouse System

“Oracle Exadata Database Machine enables us to move forward with an environment that provides our hotel managers and corporate executives with near-real-time information to make optimal business decisions and provide ideal amenities for our guests.”

— **Gordon Light**, Business Relationship Manager, Starwood Hotels & Resorts Worldwide, Inc.

Starwood Hotels & Resorts Worldwide, Inc. is one of the leading hotel and leisure companies in the world with 1,112 properties in nearly 100 countries and 154,000 employees at its owned and managed properties. Starwood is a fully integrated owner, operator and franchisor of hotels, resorts and residences with the following internationally renowned brands: St. Regis®, The Luxury Collection®, W®, Westin®, Le Méridien®, Sheraton®, Four Points® by Sheraton, Aloft®, and ElementSM. The Company boasts one of the industry’s leading loyalty programs, Starwood Preferred Guest (SPG), allowing members to earn and redeem points for room stays, room upgrades and flights, with no blackout dates. Starwood also owns Starwood Vacation Ownership Inc., a premier provider of world-class vacation experiences through villa-style resorts and privileged access to Starwood brands.

Starwood Hotels has significantly increased the number of hotels it operates over the past few years through global corporate expansion, particularly in the Asia Pacific region. This has resulted in a dramatic rise in the need for business critical information about Starwood’s hotels and customers. All Starwood hotels globally use a single enterprise data warehouse to retrieve information critical to efficient hotel management, such as that regarding revenue, central reservations, and rate plan reports. In addition, Starwood Hotels’ management runs important daily operating reports from the data warehouse for a wide range of business functions. Starwood’s enterprise data warehouse spans almost all areas within the company, so it is essential not only for central-reservation and consumption information, but also to Starwood’s loyalty program, which relies on all guest information, sales information, corporate sales information, customer service and other data that managers, analysts, and that executives depend on to make operational decisions.

The company is committed to knowing and servicing its guests, yet, “as data growth and demands grew too great for the company’s legacy system, it was falling short in delivering the information hotel managers and administrators required on a daily basis, since central reservation system (CRS) reports could take as long as 18 hours,” said Richard Chung, Starwood Hotels’ director of data integration.

Chung added that hotel managers would receive the transient pace report—which presents market-segmented information on reservations—five hours later than it was needed. Such delays prevented managers from adjusting rates appropriately, which could result in lost revenue. After reviewing several vendor offerings, Starwood Hotels selected Oracle Exadata Database Machine X2-2 HC Full Rack and Oracle Exadata Database Machine X2-2 HP Full Rack, running on Oracle Linux.

“With the implementation of Exadata, Starwood Hotels can complete extract, transform, and load (ETL) operations for operational reports in 4 to 6 hours, as opposed to 18 to 24 hours previously, a six-fold improvement,” Chung said. Real-time feeds, which were not possible before, now allow transactions to be posted immediately to the data warehouse, and users can access the changes in 5 to 10 minutes instead of 24 hours, making the process up to 288-times faster.

Accelerated data access allows all Starwood properties to get the same, up-to-date data needed for their reports, globally. Previously, hotel managers in some areas could not do same-day or next-day analyses. There were some locations that got fresh data and others that got older data. Hotel managers, worldwide, now have up-to-date data for their hotels, increasing efficiency and profitability, improving customer service by making sure rooms are available for premier customers, and improving the company’s ability to manage room occupancy rates. Additional reporting tools, such as those used for CRM and sales and catering also benefited from the improved processing. Other critical reporting has benefited as well.

Marketing campaign management is also more efficient now that managers can analyze results in days or weeks instead of months.

In addition, the company is using Oracle GoldenGate to feed data from central reservations systems, other OLTP applications and external vendors, improving ETL times, sometimes making them as much as 100% faster. Moving forward, Starwood plans to use GoldenGate to help the company achieve near-real-time reporting.

Starwood Hotels chose Oracle Advanced Customer Support Services to deliver Oracle Solution Support Center, which provides an advanced support delivery manager and a dedicated team of advanced support engineers that work closely with the Starwood team to provide 24/7, personalized support. Finally, Oracle Advanced Monitoring maximizes availability of the company’s database products by continually monitoring and tuning Starwood’s enterprise data warehouse solution.

Why Oracle

“We reviewed a number of vendors, but only one worked best with our architecture. Our data analysis environment requires many complex calculations, with multiple data layers. Oracle Exadata processes the information efficiently, and we have been impressed with the performance improvements. We have used Oracle products for a long time, and choosing Oracle Exadata enables us to preserve existing IT and human capital investments, particularly in our data warehouse infrastructure” said Marcello Iannuzzi, project manager, Starwood Hotels & Resorts Worldwide, Inc.

Implementation Process

The first phase of the implementation involved moving data from the legacy warehouse to Oracle Exadata and involved migrating 26 terabytes of data—which equates to hundreds of billions of rows and approximately 1,500 tables from the previous environment.

Oracle Customer:**Suddenlink Communications**

St. Louis, Missouri

www.suddenlink.com

Industry:

Communications

Annual Revenue:

US\$1.6 Billion

Employees:

5,246

Oracle Products & Services:

- Oracle Data Integrator
- Oracle Database 11g
- Oracle Real Application Clusters

Suddenlink Communications Improves Customer Data Management Quality and Performance

“With Oracle Data Integrator as our standard for data replication outside of the data warehouse, we have improved data quality and performance, which ultimately helps us better serve our customers.”

— **Fred Linnenbrink**, Director, Oracle Database Administrator Group, Suddenlink Communications

Suddenlink Communications, a subsidiary of Cequel Communications Holdings, is the eighth-largest cable broadband company in the United States, with approximately 1.3 million residential customers and thousands of commercial customers in Arkansas, Louisiana, North Carolina, Oklahoma, Texas, West Virginia, Missouri, and Arizona.

Challenges

- Enable Suddenlink to bring the processing of customer billing data in house, which required accurate and rapid replication of data from a DB2 database to an Oracle Database
- Improve ability to handle the vast amount of customer data required to compete effectively in the broadband cable market
- Manage increased competition in the cable industry by delivering a superior customer experience, in part by improving the company’s customer on boarding and billing processes

Solutions

- Deployed Oracle Data Integrator to replace a legacy data replication tool used to migrate data from a third-party billing system into Oracle Database while ensuring data quality
- Upgraded to Oracle Database 11g and deployed Oracle Real Application Clusters to improve system performance
- Accelerated data model maintenance, which previously led to up to four hours of downtime each month and now requires only 10-to-15 minutes of downtime
- Increased stability of customer data by deploying a service oriented architecture and standardizing access for the 10 applications that require customer data
- Ensured that customer systems have more synchronized data regarding customers’ service choices and billing rates to accelerate customer on boarding
- Re-architected data marts, reducing size of the indexes, which were previously up to 100 gigabytes, to improve performance and make the migration of customer data easier and faster
- Improved tracking and resolving errors during data migration
- Reduced 15-to-20 hours weekly needed to resolve errors down to only three errors that have required manual intervention



EXALOGIC

Oracle Customer:**Cognizant**

Teaneck, New Jersey
www.cognizant.com

Industry:

Professional Services

Annual Revenue:

Over US\$5 Billion

Employees:

150,400

Oracle Products & Services:

- Oracle Exalogic Elastic Cloud
- PeopleSoft Enterprise Service Automation
- PeopleSoft Financials
- PeopleSoft Human Resources
- PeopleSoft Supply Chain Planning
- Oracle Content Manager
- Oracle Advanced Customer Support Services

Cognizant Reduces Server Requirements by 67%, Gains Scalability On Demand and Improves Application Speed by 50% with Engineered System

“We chose Oracle Exalogic to run our business-critical PeopleSoft Enterprise application environment. With Oracle Exalogic, we have not only doubled our application processing speeds to increase the performance and reliability of our business applications, but we have also significantly reduced total ownership and set the stage for future growth. We’re eager to share this technology with our customers, as we know firsthand the value it can deliver.”

— **Sathish Venkataraman**, Associate Director, Cognizant Application Services, Cognizant

Cognizant is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping companies build stronger businesses. The firm has more than 800 customers that span five continents and every major industry. Cognizant has experienced rapid growth in recent years, and the organization expects that pace to continue.

Cognizant’s employees rely on Oracle’s PeopleSoft applications for their enterprise transactions, including human resources, financial, and supply chain management processes. The company also runs Oracle Content Manager.

As the organization continued to expand, its PeopleSoft application infrastructure, running on IBM, was having difficulty scaling to meet user demands. Response time was increasing for the system, which had more than two terabytes of data running on it. Employees were becoming frustrated and, if left unchecked, response time issues would begin to impact productivity in the professional services firm. In addition, the company had been adding servers as the environment grew, which created a greater IT maintenance burden in terms of time and dollars spent. For example, the weekly maintenance window had expanded to require between 8 and 12 hours and a dedicated person over the weekends.

Cognizant replaced its multiple Web, application, integration, and batch servers with Oracle Exalogic Elastic Cloud. The company gained on-demand server scalability for its PeopleSoft applications and Oracle Content Manager environment, enabling it to support a user base that is twice as large, yet with 67% fewer application and Web servers than its legacy, IBM environment. It also accelerated message processing speed by 50% and cut its maintenance window to less than two hours per week.

Challenges

- Improve response times for business-critical Oracle Content Manager and PeopleSoft applications, including human resources, financial management, and time-sheet systems that the professional services firm relies on to bill clients accurately and promptly for consulting engagements and IT services
- Implement a data infrastructure that can support sustained rapid growth as the firm expects to expand
- Consolidate servers to reduce maintenance requirements, energy costs, and the environmental footprint

Solutions

- Deployed Oracle Exalogic Elastic Cloud X2-2 Half Rack to run the company's PeopleSoft Enterprise applications and its Oracle Content Manager environment—gaining on-demand scalability and the ability to support a user base that is twice as large, with 67% fewer application and Web servers than the company's legacy IBM environment
- Improved the downstream, integration-processing throughput rate by 50%, enabling applications to be more responsive
- Automated recurring maintenance activities to support a global consulting workforce that needs access to key business applications seven days a week, reducing the application maintenance window to less than 2 hours, compared to previously requiring between 8 and 12 hours weekly
- Accelerated time-to-market for new and enhanced application services, for example: the company can now introduce new functionalities with ease, such as customer evaluations
- Enabled all 150,400 employees to more efficiently enter their biweekly time sheets, which is essential to producing accurate and timely billing for the company's IT services
- Accelerated time-sheet processing speeds from 7,200 messages per hour to 14,000 messages per hour, enabling the organization to process all employee timesheets within eight hours and to bill clients promptly for its professional consulting services
- Accelerated transaction response time and application performance, greatly improving the general user experience, boosting productivity, and enabling employees to focus on adding value to client projects
- Reduced data-center floor space requirements, thereby eliminating unnecessary overhead costs
- Eliminated the need for a dedicated employee to manage weekend server and application maintenance
- Enabled application scalability to a scale up to double loads with one-third fewer Java virtual machines (JVM) and half the Tuxedo threads of its earlier, IBM-based, AIX system
- Provided sufficient head room for further expansion without needing additional JVMs or Tuxedo threads
- Reduced the server footprint by supporting the entire application layer, including applications, Web, batch, application, and integration broker layers, with just four Exalogic nodes, compared to 11 physical, IBM servers, providing the opportunity to support company growth without needing additional Exalogic nodes
- Reduced the application maintenance window from 10 hours to less than 2 hours with the help of the centralized facility available in Exalogic, which automated weekly Web and application server maintenance, required fewer support resources, and increased availability for end users
- Improved application performance by at least 50% across the board, without any tuning effort and processed integration-broker messages at least 50% faster

Why Oracle

“We were up for a hardware refresh just as our business began to expand exponentially,” said Shankar Sathyanarayanan, associate director for Oracle solutions practice, Cognizant. “We knew this was the time to align our hardware environment with our core business applications. While we evaluated multiple solutions alongside Oracle Exalogic, no other vendor provided the same scalability and manageability as Oracle. Also important to our decision was the intrinsic value of Oracle’s engineered systems, which, by design, optimized performance of Oracle applications.”

Implementation Process

Cognizant worked with Oracle Advanced Customer Support Services for capacity planning. With Oracle’s help Cognizant installed Oracle Exalogic on time, on budget, and with minimal disruption to the business.

Oracle Customer:**Hyundai Motor Company**

Seoul, Republic of Korea

www.hyundai.com**Industry:**

Automotive

Annual Revenue:

Over US\$5 Billion

Employees:

90,000

Oracle Products & Services:

- Oracle Exalogic Elastic Cloud
- Oracle Exadata Database Machine
- Oracle WebLogic Server
- Oracle WebCenter Content 11g
- Oracle Solaris 11

Oracle Partner:**Hyundai Autoever**www.hyundai-autoever.com/eng**Softcamp Inc**www.softcamp.com**Samil PwC Advisory**www.pwc.com/kr/en

Hyundai Motor Company Document Cuts Repository Management and Access Times Approximately 85%, Saves More Than US\$1 Million in Yearly Printing and Paper Costs

"We chose Oracle Exalogic, Oracle Exadata, and Oracle WebCenter Content to support our new document-centralization system over their competitors as Oracle offers stable storage for petabytes of data and high processing speeds. We have cut the overall time spent each day on document-related work by around 85%, saved more than US\$1 million in paper and printing costs, laid the foundation for a smart work environment, and supported our future growth in the competitive car industry."

— **Kang Tae-jin**, Manager, General Affairs Team, Hyundai Motor Company

Established in 1967, Hyundai Motor Company is one of the world's fastest-growing car manufacturers, ranked as the fifth-largest in 2011. The company also operates the world's largest integrated automobile manufacturing facility in Ulsan, Republic of Korea, which can produce 1.6 million units per year. The company strives to enhance its brand image and market recognition by continuously improving the quality and design of its cars.

To maximize the company's growth potential, Hyundai Motor Company undertook a project to improve business efficiency and reinforce data security by centralizing the company's sales, financial, and car manufacturing documents into a single repository.

The company implemented Oracle Exalogic Elastic Cloud, Oracle Exadata Database Machine, Oracle WebLogic, and Oracle WebCenter Content 11g to ensure high performance and stability for its new document-centralization system. It has saved more than US\$1 million per year in printer, paper, and toner costs, reduced the time staff spent on requesting and receiving documents from supervisors by 50%, and cut approximately 85% of the daily time required for overall document-related work.

Challenges

- Introduce a smart work environment to improve staff productivity and efficiency, and take advantage of rapid company growth due to new, enhanced car designs
- Replace a legacy document system managed by individual staff to improve collaboration, the visibility of corporate documents, and sharing of work-related files between employees
- Improve the security and storage of documents containing corporate intellectual property, and prevent intellectual property loss when staff leaves the company
- Eliminate delays when downloading files from the central server to a PC
- Build a large, single document repository to more efficiently manage and share data between 30,000 staff at the company's headquarters
- Establish a scalable system that can be extended to Hyundai offices around the world

Solutions

- Lowered the overall time spent each day on all document-related work by approximately 85%—from 4.5 hours to around 42 minutes on an average day

- Saved more than US\$1 million per year in printer, paper, and toner costs, and laid the foundation for a completely paperless environment
- Reduced staff's time spent requesting and receiving documents about car sales or designs from supervisors by 50%, by storing and managing all documents across the corporation in a single repository
- Cut the time required to draft new-car manufacturing, sales, and design documents by 20%, by allowing employees to reference high-quality data, such as marketing strategy and product planning documents already in the system
- Enhanced staff productivity at company headquarters by 9% by reducing the document-related tasks of 30,000 administrative and research and development staff
- Improved data processing and simultaneous load-handling speeds, significantly
- Ensured the system could scale to hold 3 petabytes of car sales, manufacturing, and design data by 2013 and be deployed at branches worldwide
- Protected intellectual property related to car designs by enabling secure, systematic, and centralized content management
- Increased employees' productivity further by allowing access to documents from anywhere, at any time, through Web and mobile interfaces
- Created task-appropriate categorization standards for documents and established a systematic process to assign staff with proper access rights, according to job description
- Enabled employees to identify which supervisor has authority over confidential documents and request access to those documents, if required
- Prevented confidential documents from being leaked and improved data security by using Oracle WebCenter Content's document-tracking function
- Improved work quality by enabling staff to search for, reference, and use completed documents and relevant subject-matter experts in the system
- Enhanced document storage and control by allowing documents stored in the company's central hard drive to be accessed by the document-centralization system
- Increased the speed of sharing and backing up large volumes of documents by using Oracle WebCenter Content's cloud service and allowing employees to access documents even if no supervisors are available
- Maximized convenience, efficiency, and satisfaction for end-users by offering a familiar user interface and identical processes and functions when creating or editing a document
- Deployed the system in a short timeframe, as the Oracle engineered systems are designed to easily link and synchronize databases with the middleware tier

Why Oracle

After conducting a large-scale benchmark test, Hyundai Motor Company chose Oracle Exalogic, Oracle Exadata, Oracle WebLogic Server, and Oracle WebCenter Content 11g, as they provided better performance, stability, storage, and scalability than their competitors.

“We had issues with the network speed in our previous system, so excellent system performance was our highest priority when reviewing vendor solutions,” said Kang Tae-jin, manager, general affairs team, Hyundai Motor Company. “We chose Oracle Exalogic, Oracle Exadata, and Oracle WebCenter Content 11g to support our new document-centralization system over their competitors, as Oracle offers stable storage for petabytes of data and high processing speeds.

“Hyundai Motor Company is currently one of the fastest growing automobile manufacturers in the world, and it continues to carry out innovations inside and outside the company to strengthen global competitiveness and promote internal growth,” he continued. “By basing the document-centralization system on Oracle Exalogic, Oracle Exadata, Oracle WebLogic Server, and Oracle WebCenter Content, we will contribute to our Work Smart Campaign, build the company’s collective intelligence, and improve our long-term business competitiveness.”

Implementation Process

Hyundai Motor Company completed the first phase of implementing Oracle Exalogic Elastic Cloud, Oracle Exadata Database Machine Half Rack, Oracle WebLogic Server, and Oracle WebCenter in January 2012. It went live with the new document-centralization system in June 2012.

“Linking and synchronizing databases with the middleware tier can be challenging and time-consuming tasks for the IT department, but the Oracle-engineered system has been designed to simplify these tasks, enabling us to implement the system in a short timeframe,” said Kang.

Hyundai Motor Company conducted further enhancement tasks in August 2012. It continues to make various functional enhancements suitable for each research laboratory and manufacturing plant, and to convert the system for mobile platforms.

Partner

Hyundai Motor Company worked with Oracle Diamond Partner PwC’s Samil PwC Advisory for consulting services, Oracle Partner Hyundai Autoever for the product implementation, and Oracle Partner Softcamp Inc. for data security solutions.

“As the consulting partner, Samil PwC Advisory provided a solid basis for the project by analyzing the previous IT and business environments and designing systematic policies,” said Kang. “Implementation partners Hyundai Autoever and Softcamp Inc. worked hard to apply their vast experience and expertise to support the successful implementation and operation of our new document-centralization system.”

Oracle Customer:**PHH Corporation**

Mount Laurel, New Jersey

www.phh.com

Industry:

Financial Services

Oracle Products & Services:

- Exalogic Elastic Cloud X2-2 Half Rack
- Exalogic Elastic Cloud Software
- Exadata Database Machine Half Rack

PHH Corporation Improves Business Agility, Lowers Overall IT Costs

PHH Corporation is a leading provider of mortgage solutions and automotive fleet management services through its two subsidiaries, PHH Mortgage and PHH Arval. It offers end-to-end mortgage solutions to customers, including financial institutions, credit unions, real estate companies, and government agencies. In addition, it manages nearly 570,000 vehicles for corporate and government clients across North America.

Challenges and Solutions

PHH Corporation needed to implement a flexible technology framework to provide greater agility in a rapidly evolving market, as well as an improved means to capitalize on new business opportunities. The Oracle solution facilitates these goals and lowers overall IT costs.

“We chose Oracle Exalogic Elastic Cloud X2-2 Half Rack and Oracle Exadata Database Machine X2-2 HC Half Rack to help standardize our IT infrastructure, centrally manage our systems, free up resources, and maintain tighter control over unstructured data and storage growth,” said Jeff Bell, chief information officer for PHH Corporation. “Oracle technology and resources are critical to the success of our common technology platform.”

Oracle Customer:**SquareTwo Financial**

Denver, Colorado

www.squaretwofinancial.com

Industry:

Financial Services

Annual Revenue:

US\$100 to US\$500 Million

Employees:

266 (as of November 2011)

Oracle Products & Services:

- Oracle Exadata Database Machine
- Oracle Exalogic Elastic Cloud
- Oracle Consulting

SquareTwo Financial Increases Database Transaction Speed Four-Fold, Improves Scalability to Meet Exponential Company Growth

“Oracle Exadata Database Machine X2-2 HC Quarter Rack and Oracle Exalogic Elastic Cloud give us the scalability we need to ensure the company continues to grow and evolve. They enable us to handle thousands of concurrent users and provide optimal performance to ensure we maintain constant contact with customers and leverage revenue opportunities. In addition, their out-of-the-box functionality enabled us to implement the products in just 134 days.”

— **Bill Weeks**, Senior Vice President and Chief Information Officer, SquareTwo Financial

SquareTwo Financial, a leader in the US\$100 billion asset-recovery and management industry, plays an integral role in maintaining the integrity of a credit-based economy, including bringing much needed liquidity to the financial services sector through purchases of distressed assets. It is also involved in the recovery of those assets through its pioneering network of legal partners, who liquidate the debt. As one measure of SquareTwo Financial's current success, the company now does business with eight of the top-10 credit card issuers in the United States. SquareTwo Financial considers technology a company cornerstone, which is a key differentiator from competitors in the industry, and a driver of its business success. SquareTwo Financial's state-of-the-art debt collection management system, called eAGLE, is integral to the company's core business areas of acquiring and managing debt. It also serves as the foundation for SquareTwo Financial's Partners Network, which includes 36 affiliates across the United States. The eAGLE system assesses and loads debt, then distributes that debt to SquareTwo Financial's Partners, where payment processing and reconciliation occur.

SquareTwo Financial began searching for a technology solution when its legacy hardware infrastructure neared end of life and would soon be unable to keep pace with the company's exponential growth. In January 2011, eAGLE had 800 daily users, and by October 2011, the system had 1,500 daily users, processing approximately 680,000 user transactions. The company needed to enhance its scalability to meet such a growth in demand. In addition, it needed to enhance system performance. With the legacy system, the data warehouse process ran for approximately 16 hours and then cut off data at 6 p.m. to ensure it was available for the next morning—meaning it was incapable of processing a full day's worth of data.

SquareTwo Financial reviewed different hardware solutions and then chose Oracle Exadata Database Machine X2-2 HC Quarter Rack and Oracle Exalogic Elastic Cloud. After a 90-day-trial, the company worked with Oracle Consulting to install the new solutions in 44 days. With the implementation, SquareTwo Financial increased database transaction speed four-fold and realized a 28% improvement in performance. Initial performance tests showed that eAGLE could handle as many as 25,000 daily users—demonstrating it had the scalability to handle additional growth.

In addition, the data warehouse process can now commence at 10 p.m. to ensure SquareTwo Financial processes a full day's worth of data.

Challenges

- Enhance hardware scalability to ensure the system maintains optimal functionality while the number of users, from SquareTwo Financial and its partners, increases exponentially
- Accelerate system processing speed to increase the number of transactions franchise partners—who work with end consumers to liquidate debt—can process per day to enhance customer contacts and subsequently revenue
- Implement the new hardware solution quickly to ensure the company can keep pace with data demands
- Reduce data warehouse processing time to ensure processing a whole day's worth of data
- Decrease IT maintenance costs with a consolidated environment

Solutions

- Implemented Oracle Exadata Database Machine X2-2 HC Quarter Rack and Oracle Exalogic Elastic Cloud to serve as the foundation for eAGLE—the company's debt collection management system—to handle a significant increase of daily users, which had increased from 800 to 1,500 in 10 months
- Leveraged Oracle Exadata and Oracle Exalogic to increase database transactions approximately four-fold and enhanced performance by 28%
- Improved system scalability, including the ability to handle as many as 25,000 daily users without decreasing performance
- Processed 100 more transactions per day per franchise collector, enabling more customer contacts and revenue opportunities
- Gained the ability to commence data warehouse processing four hours later than with the legacy system, ensuring a whole day's worth of data can be processed
- Used Oracle Exadata and Oracle Exalogic to reduce, from 98 to 2, the number of environments requiring updates for new system roll-outs
- Leveraged Oracle Exalogic Elastic Cloud to enhance performance speed by 1 second, even as the load on the system continued to increase, an improvement from 2.5 to 3 seconds per transaction, to 1.5 to 2 seconds

Why Oracle

SquareTwo Financial chose Oracle Exadata Database Machine X2-2 HC Quarter Rack and Oracle Exalogic Elastic Cloud after reviewing many potential hardware solutions, including options from IBM, and participating in a 90-day proof-of-value period with the product. In addition, SquareTwo Financial was already using a number of Oracle solutions, including Oracle SOA Suite and Oracle Identity Management, giving the company a consolidated platform to reduce maintenance costs and ensure optimal performance.

Finally, Oracle Exadata and Oracle Exalogic maintained the out-of-the-box functionality necessary to implement the product quickly and cost effectively.

Implementation Process

Quickly implementing Oracle Exadata Database Machine X2-2 HC Quarter Rack and Oracle Exalogic Elastic Cloud was critical for SquareTwo Financial, as its data demands were growing rapidly. First, an Oracle team visited SquareTwo Financial and completed an Excite Review to determine exactly the company's hardware needs. After determining a quarter rack was the best fit for SquareTwo Financial's data demands, a 90-day proof-of-value period commenced. Following a successful trial period, SquareTwo Financial worked with Oracle Consulting to implement Oracle Exadata and Oracle Exalogic in 44 days.



IDENTITY MANAGEMENT

Oracle Customer:

Australian Hearing

Sydney, Australia
www.hearing.com.au

Industry:

Healthcare

Annual Revenue:

Under US\$100 Million

Employees:

1,173

Oracle Products & Services:

- Oracle SOA Suite
- Oracle Exadata Database Machine
- Oracle Access Manager
- Oracle Identity Management
- Oracle Enterprise Manager
- Oracle Enterprise Single Sign-On Suite Plus
- Oracle E-Business Suite Release 12
- Oracle Advanced Customer Support Services

Oracle Partner:

Professional Continuity

www.professional-continuity.com.au

Australian Hearing Improves System Response Time by 250%, Saves Around US\$500,000 Per Year

“We considered other vendors but could see Oracle Exadata and Oracle middleware products would offer the highest performing and most cost-effective solution. We have reduced month-end financial data processing time by 92%, saved US\$495,000 a year on IT maintenance and administration costs, and significantly improved patient and staff satisfaction.”

— **Peter Gasparovic**, CIO, Australian Hearing

Australian Hearing is an Australian Government agency that provides hearing services and assisted listening devices to children, young adults up to the age of 26, and eligible senior citizens over the age of 65. The agency has 115 permanent hearing centers and offers hearing services from an additional 380 sites, such as doctor surgeries and social security centers, one or two days per week. The agency’s clinicians see around 4,500 patients per day, helping them manage their hearing impairments and achieve a better quality of life.

Australian Hearing wanted to improve the reliability, performance, and integration of its enterprise resource planning (ERP), customer relationship management (CRM), appointment scheduling, payroll, and employee performance systems. In 2011, the agency implemented Oracle Exadata Database Machine, Oracle SOA Suite, Oracle Access Manager, Oracle Enterprise Single Sign-On Suite Plus, Oracle Identity Management, and Oracle Enterprise Manager. It also upgraded to Oracle E-Business Suite Release 12.

The Oracle products have reduced the time taken to process month-end financial data by 92%, saved US\$495,000 per year on IT administration costs, achieved 100% system availability, and cut the time taken to integrate a cloud-based payroll application from an anticipated 30 days to just 2 days. Clinicians can also enter patient data in seconds, compared to up to five minutes previously, and keep scheduled appointment times. This has significantly enhanced staff and patient satisfaction and restored confidence in the IT department.

The Need for Stable, Integrated Applications

Australian Hearing was operating a number of disparate business management systems, including an Oracle E-Business Suite ERP application, a CRM application, a bespoke appointment scheduling application, and payroll and employee performance applications hosted in a public cloud from Affinity. The agency was running its ERP, CRM, and appointment scheduling system on an unstable server infrastructure that had reached end-of-life.

The lack of system integration and poor system performance were significantly affecting Australian Hearing’s operational efficiency, as well as patient and staff morale. The agency experienced up to four system outages per week, which lasted at least several hours each time. Without access to its appointment scheduling and CRM applications, clinicians couldn’t attend to patients, who then had to wait up to three months for another appointment. On occasions when the system was out for an entire day, Australian Hearing would lose up to US\$1 million in revenue.

The poor system performance meant it could take up to five minutes for clinicians to enter patient data. They often had to write information on paper to enter into the system later or to store manually.

The lack of integration also meant human resource (HR) staff had to enter employee information separately into the ERP system and payroll application. It took 19 hours to generate month-end reports, and daily sales and other operational reports had to be batch processed overnight.

“We had so many system problems that administrative staff and clinicians completely lost faith in the IT department,” said Peter Gasparovic, CIO, Australian Hearing. “Clinicians were embarrassed in front of patients, and admin staff wasted time on manual processes. We were also running out of space for filing cabinets! And despite outsourcing our IT management, system maintenance was so arduous we also required 28 full-time equivalent (FTE) IT staff in-house.”

System Response Times Improved by an Average of 250%

By replacing 12 ageing servers with Oracle Exadata Database Machine, Australian Hearing dramatically improved the system performance of its CRM and appointment scheduling applications, and its upgraded Oracle E-Business Suite.

“We tested the performance of Oracle E-Business Suite running on Oracle Exadata during one of busiest times—the first two hours of the business day,” said Gasparovic. “The results showed a 250% average improvement in data throughput on Oracle Exadata at 6.2 terabytes per second (TPS), compared to our legacy IT infrastructure processing 2.5 TPS.”

Oracle Exadata has also improved average user I/O speeds by 200%, with the average wait time going down from 2 milliseconds (MS) to 0 MS.

“If we drill down even further on the individual disk I/O times, we can see Oracle Exadata is actually around three times faster than the old hardware,” he said.

Month-End Financial Data Processed 92% Faster

By improving system performance, Oracle Exadata reduced the time taken to process month-end financial data from up to 19 hours to between 1.5 and 2 hours.

“In the past, financial staff would leave month-end reports running when they went home on Friday and deal with any issues or errors on Monday morning,” said Gasparovic. “Now, they finish the data processing and reporting before close of business, and don’t need to worry about it over the weekend.”

Staff can also easily generate daily and ad hoc financial, sales, and operational reports themselves, rather than waiting 24 hours for the IT staff to create them.

“We produce a number of daily sales reports showing how many hearing services and devices we have provided, and how many patients have requested additional devices not covered by the government’s voucher scheme,” said Gasparovic. “These are important as they show the expenses, profit, and loss of each hearing center and provide clinicians with a clearer view of our patients’ requirements.”

“In the past, it would take a day or more for the IT department to consolidate information from different hearing centers and distribute these reports. Now, it takes five minutes every morning for center managers to generate their own reports, which show up-to-date information about the center’s performance. This helps them make better informed decisions.”

100% System Availability Eliminates Revenue Loss, Improves Patient Satisfaction

Since implementing Oracle Exadata, Australian Hearing has experienced 100% system availability and eliminated data bottlenecks. Clinicians no longer have to reschedule patient appointments as the appointment scheduling application is always available, and they can now enter and process patient details in seconds, compared to taking up to five minutes previously.

By minimizing system downtime, Australian Hearing also avoids losing millions of dollars in revenue.

“Clinicians are delighted by the huge performance improvements, as they are no longer face the embarrassment of explaining to patients that the system is slow or unavailable,” said Gasparovic. “Patient satisfaction has also significantly improved, as we’ve reduced the length of appointments and no longer have to reschedule them, with a delay of up to three months’ time because the system is down.”

Application Integration Time Reduced by More Than 90%

Australian Hearing is using Oracle SOA Suite to integrate its Oracle E-Business Suite and CRM systems, custom appointment scheduling application, and cloud-based payroll and employee performance applications. Oracle SOA Suite has replaced 180 complex, point-to-point integration links and enabled IT staff to reuse services and portions of code when integrating applications. This has reduced the time required for integration activities and minimized the risk of lengthy system downtime associated with big integration projects.

Using Oracle SOA Suite, Australian Hearing integrated its cloud-based payroll application with its other business systems in just 2 days, compared to the 30 days it estimated it would take using point-to-point integration.

“In addition, 18 months ago, the government requested we extend the age range of patients we provide services to from 25 to 26 years old,” said Gasparovic. “It sounds straightforward, but, using the point-to-point integration, it took six months to update all 180 links and test the applications to ensure the change was consistent throughout. After implementing Oracle SOA Suite, we tested the same change and completed the whole project in just 15 days.”

Payrolls Prepared 50% Faster

By integrating the cloud-based payroll application with Oracle E-Business Suite and other business systems, Oracle SOA Suite has reduced the time taken for HR staff to update payroll information by 50%.

“HR staff now only has to enter data once when preparing the company payroll, and it automatically flows through into the payroll application,” said Gasparovic. “We’ve also reduced the time taken to set up IT network access for new employees and can keep more accurate records of significant changes made to employee details for future reference.

“Overall, we have freed up three people, who previously worked on HR data entry, to complete more valuable tasks, such as business analysis,” he said. In addition, Australian Hearing has improved data integrity by reducing the risk of human error and enabling staff to better monitor and manage any data inconsistency issues.

“HR staff was amazed by the change in the quality of the newly integrated data, and happy the user interface remained very similar,” said Gasparovic. “All the complexity is in the back-end applications, which meant we didn’t need to retrain staff.”

Increased Staff and Clinician Productivity

Using Oracle SOA Suite, Australian Hearing has reduced the amount of paper documents clinicians need to carry to the 380 additional sites at which they offer hearing services. By integrating the CRM application with the appointment scheduling system and the content management system, clinicians now automatically see patient files containing contact, diagnosis, and previous appointment information on their laptops.

“Clinicians previously carried up to six bags containing patient files to offsite appointments, which would take about a day for admin staff to prepare in advance, and then refile once they had been updated,” said Gasparovic. “By integrating the systems we have laid the foundation for a paperless office, and significantly improved staff and clinician efficiency.”

Service Desk Calls Reduced by 20%

Australian Hearing has now deployed single sign-on across its integrated business systems. Staff members can more easily remember their own passwords, and this has reduced calls to the service desk by 20%.

“Previously, our IT service desk was inundated with calls during the first week of every month from staff requiring multiple password changes,” said Gasparovic. “Now that employees only have one password to remember and update—and no longer need to report problems with system performance—we have reduced our service desk from nine to three FTE employees, freeing up other IT staff to complete more valuable, technical tasks.”

Single sign-on has also improved data security, as employees no longer keep multiple notes containing passwords on their desks, which could previously be seen by patients and other members of staff.

Saved US\$495,000 per Year on IT Administration Costs

By implementing Oracle Identity Manager, Oracle Access Manager, and Oracle Enterprise Single Sign-On Suite Plus, Australian Hearing has saved US\$495,000 per year on IT administration costs.

By implementing Oracle Identity Manager, Oracle Access Manager, and Oracle Enterprise Single Sign-On Suite Plus, Australian Hearing has saved US\$495,000 per year on IT administration costs.

“We’ve reduced the IT staff’s workload by more than six thousand hours per year, by eliminating the need for them to complete manual tasks such as resetting passwords, creating and disabling accounts, and granting application access to employees,” said Gasparovic.

Australian Hearing has also saved significantly on licensing costs for Oracle SOA Suite and Oracle Identity Manager projects.

“Oracle Exadata allows guest machines to be pinned to CPUs, so we only need to license a portion of a physical machine,” said Gasparovic. “In addition, by allowing us to reuse services and application codes, Oracle SOA Suite saves system development time and costs.”

IT Staff Engagement Increased to 82%

By improving system performance and implementing Oracle Enterprise Manager to better monitor any performance issues, Australian hearing has also significantly improved IT staff productivity and morale.

“Each year we conduct an employee engagement survey, and IT staff used to record an engagement level of about 17%,” said Gasparovic. “After we began making changes to the IT infrastructure, that figure rose to 54%. Then, after implementing Oracle Exadata, Oracle Enterprise Manager, and Oracle SOA Suite, it increased to 82%.

“Admin staff and clinicians now have more confidence in the IT staff’s abilities,” he said. “The IT department has won numerous internal awards, including Department of the Year.”

Challenges

- Integrate Oracle E-Business Suite, a CRM system, a bespoke appointment scheduling application, and payroll and employee performance applications hosted in a cloud
- Replace unstable servers that had reached end-of-life and crashed up to four times a week, for hours at a time, resulting in approximately US\$1 million revenue loss for each day they were down
- Ensure clinicians can enter and process patient data immediately, and don’t have to reschedule appointments due to system downtime
- Improve patient satisfaction and staff morale, and restore confidence in the IT department
- Reduce manual data entry requirements and the time taken to generate daily and monthly sales and financial reports
- Minimize IT costs by reducing inefficient maintenance tasks and the number of IT and service desk staff required

Solutions

- Improved average data throughput rates by an average of 250%, increasing transactions per second from 2.5 TPS to 6.2 TPS
- Accelerated average user I/O speeds by 200%, and individual disk I/O speeds by 3x
- Reduced the time to process month-end financial data by 92%—from up to 19 hours to between 1.5 and 2 hours
- Saved US\$495,000 per year on IT costs, and reduced workload by more than six thousand work hours per year, by eliminating manual administration tasks such as resetting passwords or creating new user accounts
- Enabled clinicians to process patient details in seconds, rather than taking up to five minutes previously by ensuring 100% system availability
- Allowed HR staff to update payroll information 50% faster, by ensuring they only have to enter data once, and freeing up as many as three staff for more valuable tasks
- Enabled hearing center managers to make better informed decisions by allowing them to generate accurate, daily sales reports in five minutes rather than waiting 24 hours for IT staff to create them
- Improved data security and reduced staff calls to the IT service desk requesting password changes by 20%, by providing a single sign-on
- Lowered the number to three service desk staff required, freeing the remaining six staff members to complete more valuable, technical tasks
- Integrated Oracle E-Business Suite and a cloud-based payroll application with the other business systems in just 2 days, compared to an estimated 30 days
- Completed a change to patient age-range data in 15 days during tests, compared to taking six months previously
- Enhanced patient satisfaction by reducing the length of appointments and eliminating the need to reschedule them up to three months' in advance
- Improved IT staff productivity and morale, increasing employee engagement from 17% to 82% in annual surveys
- Saved development time and licensing costs by reusing services and application codes, and minimized the risk of lengthy system downtime
- Reduced the time taken to set up IT network access for new employees and kept more accurate records of significant changes made to employee details for future reference
- Provided clinicians with a clear view of patient files on a laptop, rather than carrying six bags of paper documents—which required up to a day to prepare—to offsite appointments
- Laid the foundation for a paperless office and significantly improved staff and clinician efficiency

- Enabled financial staff to finish month-end data processing and reporting before close of business each week, rather than leaving it running over the weekend
- Improved data integrity by reducing the risk of human error and enabling staff to better monitor and manage any data inconsistency issues
- Eliminated the need to retrain staff by maintaining a similar user interface and ensuring front-end applications remain easy to use
- Restored employee and clinician confidence in IT staff, prompting the IT department to win numerous internal awards, including Department of the Year

Why Oracle

Australian Hearing was already running Oracle E-Business Suite and wanted to enhance the application's functionality—as well as improve the integration and performance of its bespoke appointment scheduling application—by standardizing on Oracle infrastructure and middleware products.

The organization did consider other vendors but felt that Oracle Exadata and Oracle Fusion Middleware would offer the highest performing and most cost-effective solution.

“We could see the combination of Oracle SOA Suite and Oracle Exadata would enable us to achieve the full benefits of upgrading to Oracle E-Business Suite Release 12, and significantly improve the functionality, performance, and integration of our internal and cloud-based systems,” said Gasparovic. “We have been so impressed we’re also hoping to integrate two clinical hearing test systems in the future.”

Implementation Process

Australian Hearing implemented Oracle SOA Suite, Oracle Identity Manager, Oracle Enterprise Single Sign-On Suite Plus, and Oracle Access Manager in May 2011.

It then deployed Oracle Exadata and Oracle Enterprise Manager in July 2011, and upgraded to Oracle E-Business Suite Release 12 in September 2012.

Partner

Australian Hearing engaged Oracle partner Professional Continuity to implement Oracle SOA Suite, Oracle Identity Manager, and Oracle Access Manager. The agency then worked with Oracle Advanced Customer Support Services for the Oracle Exadata and Oracle Enterprise Manager implementations.

“Professional Continuity was sensational,” said Gasparovic. “It provided excellent implementation services and honored our fixed-price agreement despite the project running over time. We were so impressed, we are now using its sister company to host our disaster recovery solution.

“We were also very pleased with the professional implementation and administration services provided by Oracle Advanced Customer Support Services,” he said.

Oracle Customer:**Avea İletişim Hizmetleri A.Ş.**

Istanbul, Turkey

www.avea.com.tr

Industry:

Communications

Annual Revenue:

Over US\$5 Billion

Employees:

2,600

Oracle Products & Services:

- Oracle Identity and Access Management 11g
- Oracle Consulting

Avea İletişim Hizmetleri A.Ş. Telecommunication Provisions 6,000 Business Users with Optimized, Role-Based Access Management

“With the help of Oracle Consulting, we’ve deployed a fully customized and scalable identity management architecture, based on Oracle Identity and Access Management 11g and Oracle Identity Analytics 11g. It enabled us to efficiently provision users for many mission-critical applications—Oracle and third-party.”

— **Ulvi Cemal Bucak**, Security Planning and Operations Manager, Avea Telecommunication Services A.Ş.

Avea Telecommunication Services A.Ş. (Avea İletişim Hizmetleri A.Ş.), the sole operator in the Turkish global system for mobile communications (GSM) working in the 1800 MHz (megahertz) frequency band, provides mobile communication services to 98% of Turkey’s population through its next-generation network. With roaming agreements covering 197 countries, Avea is growing rapidly and currently serves 12.8 million subscribers.

Avea’s previous access management solution was unable to cope with growing requirements for advanced role modeling (the ability to determine precise roles of employees and external users and how these mapped to the company’s IT resources). The company required streamlined and user-friendly access to new applications and for its help desk, and it needed more detailed and real-time reporting about user roles and entitlements to ensure compliance with regulations.

Avea worked with Oracle Consulting to establish role-based access management through Oracle Identity and Access Management 11g. It also facilitated role mining with Oracle Identity Analytics 11g. The solution manages access to critical business applications and systems for 6,000 business users—such as for billing, the corporate directory, Oracle’s Siebel Customer Relationship Management (Siebel CRM), and customized customer relationship management (CRM) applications. As a result, Avea achieved a dramatic increase in user provisioning performance and call center efficiency by enabling agents to rapidly change their profiles. It also eased compliance with regulations imposed by the Information Technologies and Communications Authority of the Republic of Turkey.

The Oracle solution puts the company in a position to leverage synergies with Turkish Telecom Group, of which Avea is a part. The solution is capable of providing identity federation for the foreseeable future by linking electronic identity and attributes of all staff across Turkish Telecom Group, using data stored in multiple, distinct, identity management systems.

Challenges

- Provide streamlined and user-friendly access for 16 enterprise applications for different user groups, including customer care, IT, human resources (HR), billing, sales, research and development, regulatory and legal, and quality and security assurance
- Mitigate risks and drive performance gains by organization-wide implementation of advanced role modeling to determine users, roles, and access of each position to the company’s numerous IT systems, ensuring that new employees have immediate access and former and departing employees can no longer enter any of the company’s systems

- Fulfill demands from business users—such as the help desk—to provide access management to new applications and provide enhancements to access management reporting to ensure it is detailed enough and delivered in real-time

Solutions

- Worked with Oracle Consulting to establish role-based access management for 6,000 in-house employees and external business users to 16 IT systems—such as Microsoft Office Communication Server and Siebel CRM—with Oracle Identity and Access Management 11g, increasing user provisioning efficiency and reducing exposure to risk
- Facilitated role mining with Oracle Identity Analytics 11g, enabling the company to determine with precision the roles of employees and external users and mapping this to the company's IT resources to mitigate risks and drive performance gains
- Exported the role analysis to Oracle Identity and Access Management to ensure that the role-based identity approach is applied to all user groups, including customer care, IT, human resources, billing, sales, research and development, regulatory and legal, and quality and security assurance
- Provided seamless access for 6,000 business users to critical business applications and systems—used for billing, the corporate directory, Siebel CRM, and customized CRM applications—through connectors specifically developed by Oracle Consulting, according to Oracle's Identity Connector Framework architecture, which separates dependencies for an application being implemented from other system dependencies
- Achieved a dramatic increase in user provisioning performance by automating the creation of roles, based on structured organizational data through Oracle Identity and Access Management's dynamic engine and connectors and input from the SAP HR system, reducing employees' day-to-day tasks and saving up to 95% of Avea help desk staff's time
- Met managers' requirement to deliver customized, detailed, and real-time reporting for all user groups and enabled a regular review throughout the organization of users, roles, and access each role has to the company's numerous IT systems
- Increased efficiency and performance in Avea's call centers by enabling agents to rapidly change their profiles, ultimately enabling them to quickly issue calls from a different call segment other than his or her call center without changing location or rebooting systems
- Provided a better user experience with the newly designed user interface of Oracle Identity and Access Management to the HR's Organizational Development Department, which allows viewing and searching identities and access codes for 6,000, in-house employees and external business users, enabling important cost savings and efficiency gains by reducing the time spent to request, approve, and audit entitlements
- Enabled Avea to comply with regulations imposed by Turkey's Information Technologies and Communications Authority—which requires the company to manage all business users' corporate-wide access privileges—and with the Payment Card Industry Data Security Standard (PCI DSS)

- Leveraged synergies with Turkish Telecom Group, of which Avea is a part, as these organizations have systems and user groups in common—such as for call centers, points of sale, CRM, and HR management—with plans to deploy identity federation by linking electronic identity and attributes of all staff across Turkish Telecom Group, using data stored in multiple, distinct, identity management systems

Why Oracle

“When we decided to implement role-based access management throughout the organization, Oracle Identity and Access Management seemed the natural choice for us, because we have had excellent experience with other Oracle solutions. Oracle Consulting did a great job in helping us to deploy stage one of our identity management project to existing platforms, as well as new applications, which were previously handled separately. Overall, the deployment represents a major improvement, compared to our previous solution,” said Ulvi Cemal Bucak, security planning and operations manager, Avea İletişim Hizmetleri A.Ş.

Oracle Customer:**Centrica plc**

Windsor, United Kingdom

www.centrica.com

Industry:

Utilities

Annual Revenue:

Over US\$5 Billion

Employees:

39,432

Oracle Products & Services:

- Oracle Identity Federation

Oracle Partner:**aurionPro SENA**

www.aurionprosen.com

Centrica plc Slashes Annual Helpdesk Costs with Simplified Sign-On for 45,000 Users

“With Oracle Identity Federation, we have avoided significant costs while improving user experience, security, and management control. We’ve achieved a very successful, enterprisewide implementation, and I do not believe we would have realized the same results for the same investment with another vendor.”

— **Chris Wilton**, Senior Project Manager, Centrica plc

Centrica plc is an integrated energy company operating in seven countries, including the United Kingdom and the United States. A top-30, FTSE-100 company, the organization secures and supplies electricity and gas for 30 million consumer and business customers.

Centrica undertook a two-year strategic identity and access management program to improve user experience, strengthen security, and improve management control. As part of this program, Centrica brought its human resources (HR) applications in-house and implemented employee and manager self-service for 45,000 users. Single sign-on was a key to delivering seamless, self-service functionality, and Centrica worked with Oracle partner aurionPro SENA to implement Oracle Identity Federation to enable secure access for employees and partner organizations.

Challenges

- Implement an enterprise-level, single-sign on solution that the company can use initially for self-service access to HR and payroll applications with the ability to roll out to additional applications in future
- Provide 45,000 internal and external users—including employees and gas and electricity partner organizations—with secure application access
- Reduce the number of helpdesk calls and costs associated with password and log-in issues

Solutions

- Avoided significant annual costs spent on managing password resets
- Reduced the number of helpdesk queries related to logging-on to just 100 within the first two months of operation, coming from a total of 45,000 employee and third-party users
- Enabled single sign-on for the Web-based, self-service HR application across different domains, using industry best practice SAML2 authentication
- Consolidated, streamlined, and simplified administration of 45,000 system users delivering gas and electricity services, to strengthen security, reduce costs, and improve management control
- Used IT assets to their fullest extent to support Centrica’s efforts to deliver the best energy services to businesses and consumers

Implementation Process

Oracle partner aurionPro SENA worked with Centrica to implement Oracle Identity Federation within six months, finalizing the design and providing a technical consultant on-site throughout the implementation.

“The aurionPro SENA team members were very professional, very helpful, and extremely knowledgeable. They played an integral role in helping us to optimize our investment in a secure, streamlined, and robust identity management solution and were especially proactive in transferring knowledge to our support partner, Infosys. I would definitely recommend them,” said Chris Wilton, senior project manager, Centrica.

Oracle Customer:**Merck & Co., Inc.**

Whitehouse Station, New Jersey

www.merck.com

Industry:

Life Sciences

Annual Revenue:

Over US\$5 Billion

Employees:

86,000

Oracle Products & Services:

- Oracle Identity Management 11g
- Oracle Identity Governance Suite

Merck & Co., Inc. Adopts Federated Identity Management Model to Streamline Authorized Access to Applications While Ensuring Security and Compliance

“Compliance is all about demonstrating that you have control of your world. With Oracle Identity Management 11g, we have taken big steps forward when it comes to managing privileged accounts. Oracle streamlines the process for accepting trusted identities and granting access to target applications in a very holistic way.”
— **Keith Respass**, Director, Identity and Access Management Center of Excellence, Merck & Co., Inc.

One of the world’s largest pharmaceutical companies, Merck & Co., Inc. discovers, develops, manufactures, and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures. At the heart of Merck’s operations are thousands of researchers and scientists who invent, develop, and test new pharmaceutical products in a network of laboratories around the world.

As a pharmaceutical company, Merck operates in a highly regulated environment. As such, it must ensure that its employees, as well as other partners, can access the resources that they need to conduct research, while maintaining the ability to prevent unauthorized access to sensitive information and de provision employees rapidly when needed, such as following completion of a research initiative. Merck required an identity management system that could simplify the access management process for 160,000 internal users and approximately 90,000 external users.

Merck selected Oracle Identity Management 11g and Oracle Identity Governance Suite to help the IT department establish a centralized, repeatable federated identity management service that not only effectively provisions access to Merck’s extensive Web-based research applications but also enables security professionals to easily control and audit which users can access which resources at which times to ensure compliance with various regulatory mandates, such as the Health Insurance Portability and Accountability Act (HIPAA).

The company also created a foundation for a paradigm shift in its approach to identity and access management. With Oracle Identity Management 11g Release 2 the company hopes to launch a business-centric approach to identity management and access control that will enable users to select the entitlements they need, put them in an electronic shopping cart, and check out. The system will enable users to view only entitlements for which they are authorized, based on their roles and responsibilities.

Challenges

- Maintain constant control over user access to the company’s Web-based life sciences research applications and data assets to ensure compliance with HIPAA and other industry regulations designed to ensure the privacy of patent data
- Provide authorized researchers and clinicians with access to information when they need it to support research and development (R&D) productivity
- Enable industry partners to gain access to job-specific information while ensuring information security

- Ensure a sustainable identity and access management strategy as the company migrates from Oracle's Sun identity management platform to newer Oracle technology

Solutions

- Deployed Oracle Identity Management 11g to enhance identity management and access control for Merck's 160,000 internal users, outbound credentials for hosted applications in the cloud, and inbound credentials for its approximately 90,000 external users
- Implemented privileged account management capabilities—including a password checkout system for root, database, and application accounts—while ensuring compliance to HIPAA patient data protection standards
- Improved ability to efficiently manage authorization with automated entitlement reviews that identify individuals who no longer need access to a research application or data asset, as well as auto expiration capabilities
- Streamlined the process for accepting trusted identities and granting access to target applications, accelerating access for researchers and supporting objectives to improve R&D productivity
- Provided business managers with control over their domains to make entitlement decisions in a timely and efficient manner, while meeting compliance requirements
- Allowed third-party users to directly request access and permissions through the Oracle environment—enabling quicker information access and capabilities that facilitate collaboration
- Utilized Oracle Identity Governance Suite to better understand which users need which privileges, allowing Merck to create preset roles and identities for users to seamlessly pick up when they join a specific team or clinical environment
- Created a foundation for a business-centric approach to identity and access management with Oracle Identity Management 11g Release 2, which will enable users to select the entitlements they need from a catalog of pre-authorized entitlements, put them in an electronic shopping cart, and check out rapidly
- Gained a coexistence path so that Merck can continue to use Oracle's Sun identity management solutions while it upgrade to newer Oracle technology, as Oracle Identity Management recognizes the Sun protocols—allowing the company to keep the same plug-ins and intercept user calls to applications, and the same checks to the policy engine

Oracle Customer:**Türk Telekom Group**

Istanbul, Turkey

www.turktelekom.com.tr

Industry:

Communications

Annual Revenue:

US\$1 to \$5 Billion

Employees:

29,000

Oracle Products & Services:

- Oracle Identity Manager
- Oracle Access Manager
- Oracle Directory Services 11g

Oracle Partner:**Biznet Bilisim Sistemleri ve****Danismanlik A.S.**

www.biznet.com.tr

Türk Telekom Group Uses Identity and Access Management Solution to Ensure Security and Help 25,000 System Users Be More Productive

“Oracle Identity Management enables us to administer user access privileges throughout the entire identity management lifecycle with the highest efficiency—from initial on-boarding to final de-provisioning of an identity, both within and beyond the firewall. The solution is complete, integrated, hot-pluggable, and eliminates all latent security risks of more than 25,000 users. We could not have made a better choice.”

— **Sertaç Celik**, User Management Manager, Türk Telekom Group

Türk Telekom Group, the leading communication and convergence technology group in Turkey, provides integrated telecommunication services from Public Switched Telephone Network (PSTN) and Global System for Mobile Communications (GSM) to broadband internet. Türk Telekom—the country’s most valuable brand (by net present value of the estimated future cash flows attributable to the brand) for the last three years according to Brand Finance—is Europe’s fifth largest and the world’s 11th largest fixed-line communications operator with nine group companies and more than 10 million customers. The group has a modern network infrastructure covering all of Turkey and offers a wide variety of services to residential and commercial customers, including mobile communications (Avea), broadband services (TTNET), wholesale data services (Pantel International), convergence services (Argela), IT solutions (Innova), online education (Sebit), online gaming (Sobee), and call center services (AssisTT).

Türk Telekom Group wanted to improve its ability to efficiently manage identities and access privileges for more than 25,000 IT system users belonging to eight different user groups, such as call centers, points of sale, and internal departments. The group deployed Oracle Identity Manager, Oracle Access Manager, and Oracle Directory Services 11g to establish real-time, automated identity lifecycle management and ensure single-sign on for all business applications, including legacy systems.

Challenges

- Streamline the process of creating user identities inside Türk Telekom Group—a company with wide-ranging organizational structures in 81 Turkish provinces
- Manage the access of 25,000 users belonging to eight different user groups—such as the company’s call centers and telecommunication points of sale, which are independent companies, as well as Türk Telekom’s internal departments—to complex and large-scale applications, for example Telekom Order Management and Customer Retention Management
- Shorten the time required to manage user lifecycles on legacy systems that do not support changes in business rules, such as the deactivation of a user identity in the company’s HR systems
- Establish a simple, standardized process to create users for different types of applications—such as Java, .net, or customer relationship management (CRM) applications—that have each their own user repository, which would otherwise require a new user ID mapping for each application and a single identification for each user of that application

- Create new user identities and access rights in the shortest time frame possible, because access is blocked during the modification and users have to be able to sign in to mission-critical systems—such as the company's telecommunication network operations center—without delay

Solutions

- Established real-time, automated identity lifecycle management for more than 25,000 IT system users with Oracle Identity Manager, ensuring compliance with the company's business rules and security standards at all times and providing users with the correct access privileges to applications and systems
- Deployed Oracle Access Manager to ensure that 15,000 internal users and 10,000 external users have an easy and secure way to access their applications—such as Local Network Sharing System, PSTN Accrual System, or Digital Subscriber Liner Customer Services System—with just one user name, one password, and single-sign on for all applications, including legacy systems
- Facilitated self-service registration for users who have legal Türk Telekom accounts, so they are automatically registered and authenticated with their valid user ID, including legacy systems, to speed up the registration process and obtain accurate user data
- Enabled 15,000 internal users to self-register within 48 hours of launching Oracle Identity Manager and Oracle Internet Directory, without any performance problems
- Reduced the average daily time spent by helpdesk agents on user account and password related issues from five hours (45% of all calls) to 20 minutes (3% of all calls)
- Integrated Oracle Identity Manager, Oracle Access Manager, and Oracle Internet Directory 11g with 13 mission-critical applications—such as Siebel CRM, ERP, local network sharing system, and payment collecting system—to establish a more cost-efficient, centralized user management lifecycle
- Ensured that access privileges are automatically granted and revoked with on-boarding and departure of employees, giving new employees much faster access to systems than before, and substantially enhancing the company's security by immediately revoking the access rights of employees that leave the firm
- Facilitated the generation of access and activity reports—stratified by user, applications, time, durations, IP addresses, and more—providing detailed figures as well as quick overviews, a critical feature for monitoring corporate data security and application workloads over the course of a business day
- Delegated administration for specific organizations within Türk Telekom Group—such as the group's call centers where staff changes are frequent—to the managers of those organizations, who are faster and more accurate than Türk Telekom's internal departments when it comes to providing and revoking identification and access rights of their users
- Enabled resource managers to be much more aware of user lifecycles in their business unit and process internal and external audits under their own responsibility

Why Oracle

“We needed advanced identity and access management capabilities to support a complex application grid with more than 25,000 users belonging to different internal and external user groups. Oracle Identity Management occupies a dominant position in the Turkish telecommunication industry, some of our group companies have extensive positive experiences with Oracle, and we enjoy an excellent relationship with Oracle. Our assumption that Oracle offers the best user solution for provisioning and reconciling identities and workflows proved correct, because we achieved the results that we were looking for,” said Sertaç Celik, User Management Manager, Türk Telekom Group.

Implementation Process

In February 2011, the system went live with integration to six different IT systems of Türk Telekom Group, after a seven-month implementation period. The implementation was on time and within budget.

Currently, Oracle Identity Manager and Oracle Access Manager administer identities and access rights for 13 major applications, such as Data Services System, Vendor Logistic System, Telekom Vendor Portal, Telekom Order Management, and Digital Subscriber Liner Customer Services System.

Partner

“Oracle partner Biznet, who has a very experienced team with a track record of six years of successful identity management implementations, provided us with concepts, not just products. Biznet cooperated during the analysis, design, and testing phases with us and provided the customizations required for our Demand Management System and Java applications. Now that we are in the operational phase, Biznet provides us with the necessary expertise and support to guarantee the availability of Oracle Identity Manager at all times,” Celik said.



SERVICE-ORIENTED ARCHITECTURE (SOA)

Oracle Customer:**Farmers Insurance Group, Inc.**

Los Angeles, California

www.farmers.com

Industry:

Insurance

Annual Revenue:

Over \$5 Billion

Employees:

25,000

Oracle Products & Services:

- Oracle SOA Suite
- Oracle Service Bus
- Oracle Enterprise Repository
- Oracle SOA Management Pack Enterprise Edition

Oracle Partner:**CSC**

www.csc.com

Wipro

www.wipro.com

Farmers Insurance Group, Inc. Speeds Time-to-Market for New Products and Channels with Service-Oriented Architecture

“Oracle Enterprise Repository is an indispensable part of our SOA and IT governance strategies, and it improves the support for our business objectives. In addition, it provides the single source of truth for our SOA assets and their dependencies.”

— **Goutham Nellutla**, Head of Technology Solutions, Personal Lines, Farmers Insurance Group, Inc.

Farmers Insurance Group is a leading U.S. insurer of automobiles, homes, and small businesses. It also provides a wide range of other insurance and financial services products. A wholly owned subsidiary of Zurich Financial Services, Farmers Insurance serves more than 10 million households with more than 15 million individual policies across all 50 states through the efforts of more than 30,000 exclusive and independent agents and nearly 24,000 employees.

Farmers wanted to manage its operations more efficiently, and support company growth and expansion into new markets. To meet its goals, Farmers implemented Oracle Enterprise Repository to provide 360-degree visibility into all enterprise IT assets for service-oriented-architecture (SOA)—improving IT governance and support for business objectives. The company also used Oracle Service Bus to standardize data provisioning and facilitate an SOA approach to accelerate the introduction of new products and entry into new markets. Farmers reduced the time required to build IT services by two-thirds—accelerating time to market and enabling the company to build nearly 100 new services since deployment.

Challenges

- Accelerate time to market for new services and reduce operational costs to maintain a competitive edge in the insurance sector
- Adopt an SOA approach to enable the reuse of services to maximize cost efficiencies, reduce application development timelines, and advance standardization
- Increase data visibility across multiple lines of business, including auto, fire, and commercial claims, to ensure that IT investments align with business strategies
- Optimize and extend the company’s existing IT investment
- Facilitate regulatory compliance and provide the agility to enter new insurance markets by easily dropping new components into the company’s existing IT infrastructure

Solutions

- Implemented Oracle Enterprise Repository to provide 360-degree visibility into all enterprise IT assets for SOA—improving IT governance and support for business objectives
- Used Oracle Service Bus to standardize data provisioning and facilitate an SOA approach to accelerate the introduction of new products and entry into new insurance markets
- Established an SOA foundation to ensure application scalability to support the company’s 10-year roadmap for business and IT

- Reduced the time required to build new IT services by two-thirds—enabling Farmers to build nearly 100 services since deployment and accelerate time to market for new insurance products and services
- Gained the agility to horizontally and vertically scale new IT environments—eliminating the need for time and financial resources to build previously siloed infrastructure components for new lines of business
- Enabled the company to quickly integrate 21st Century into Farmer's billing platform following its acquisition, using Oracle Service Bus—reducing integration efforts (time and labor) by 60% and costs by 50% over traditional integration methods
- Expanded services portfolio 10-fold since the early days of Farmers' SOA initiative without exponentially increasing personnel for support, thanks to Oracle's ease of use
- Reduced the time required to meet regulatory requirements for entering new markets—enabling Farmers to onboard new business channels in just four-to-six weeks
- Minimized customized configurations to easily integrate components for strategic initiatives, including billing, claims, policy administration, and customer management components from various vendors
- Used an SOA approach to facilitate and accelerate the electronic signature process, which is very time sensitive in some states—improving the ease of doing business with the company as well as facilitating compliance
- Deployed Oracle SOA Management Pack Enterprise Edition to gain real-time information on the number of service calls and length of response times, enabling IT to ensure 99.999% availability and a two-second response time for every service—as specified in internal IT service level agreements
- Ensured that Farmers can respond to growing business demands, and quickly and efficiently process 3 million daily transactions via Oracle Service Bus
- Gained the ability to support increasingly mobile end users, including agents and customers, thanks to Oracle SOA Suite and the ability to reuse back-end services, which has, for example, enabled the company to rapidly develop mobile applications for agent look-up, billing, and claims filing
- Improved manageability of service features by providing visibility into Farmers' security reference architecture

Why Oracle

“We chose Oracle as our SOA platform because, across all of the technology areas we wanted to improve, it had the greatest breadth and depth of solutions. Oracle delivered ease of doing business, configurability, and scalability to meet the demands of distributed global environments like ours. It is a superb match,” said Goutham Nellutla, head of technology solutions, personal lines, Farmers Insurance Group, Inc.

Implementation Process

Farmers spent significant time and resources on its SOA strategy phase, as well as in developing its governance and reference architecture and service delivery roadmap—all of which are essential for a successful initiative. Since rolling out SOA, Farmers has built nearly 100 services, many of which it has re-used to accelerate deployment of other initiatives.

Partner

Farmers has worked with two partners through the course of its SOA lifecycle. It collaborated with CSC and Wipro to outline the company's initial SOA strategy. The company continues to work with Wipro, using an onshore/offshore model, for development, design, and maintenance services.

Oracle Customer:**Life Technologies Corporation**

Carlsbad, California

www.lifetechnologies.com

Industry:

Life Sciences

Annual Revenue:

US\$1 to US\$5 Billion

Employees:

More than 10,000

Oracle Products & Services:

- Oracle SOA Suite
- Oracle Service Bus
- Oracle Application Development Framework
- JD Edwards EnterpriseOne Financials
- JD Edwards EnterpriseOne Order Processing
- Siebel Service
- Agile Product Collaboration
- Agile Product Portfolio Management

Life Technologies Corporation Integrates Applications, Improves Shipment Accuracy, On Boards Acquisition in Two Months, and Speeds Time to Market

“Oracle Fusion Middleware has enabled us to achieve real-time integration between our core business systems, including our JD Edwards EnterpriseOne environment, Siebel CRM applications, Agile product lifecycle management systems, and our warehouse management environment. It is opening up new possibilities, as it helps improve shipping accuracy and inventory control, quickly integrate new companies, and accelerate time to market for new products. And, we’re just getting started.”

— **Sreedhar Reddy**, Senior Manager, Enterprise Resource Planning and Middleware Development, Life Technologies Corporation

Life Technologies Corporation is a global biotechnology tools company dedicated to improving the human condition. It was created from the merger of Invitrogen Corporation and Applied Biosystems Inc. in November 2008. Its product portfolio includes technologies for capillary electrophoresis-based sequencing, next-generation sequencing, mass spectrometry, sample preparation, cell culture, ribonucleic acid (RNA), interference analysis, functional genomics research, proteomics, and cell biology applications, as well as clinical diagnostic applications and water testing analysis. The company has a presence in approximately 160 countries, and holds more than 3,100 patents and exclusive licenses.

Life Technologies wanted to find an efficient way to achieve real-time integration between its JD Edwards EnterpriseOne, Siebel customer relationship management (CRM), Agile product lifecycle management (PLM), and warehouse management environments. It had been relying on batch processing, which did not provide the real-time data the organization required, especially in its very active warehouse network.

The company used Oracle Fusion Middleware, including Oracle SOA Suite, Oracle Service Bus, Oracle Application Integration Architecture, and Oracle Application Development Framework, to achieve the real-time integration it required. It has reduced missing product shipments and losses associated with them and rapidly integrated a new acquisition in just two months—30% faster than if the company had used traditional integration methodologies. Life Technologies also accelerated the creation of new stock keeping units (SKUs), speeding time to market for new products. Further, it reduced the time, expense, and potential for error associated with rekeying data into multiple systems.

Challenges

- Achieve real-time integration between the company’s enterprise resource planning (ERP), CRM, manufacturing, warehouse management, and product lifecycle managements systems to automate, accelerate, and improve the accuracy of core business processes, from the creation of new life sciences instrumentation and diagnostics products, to order fulfillment
- Enable the company to rapidly integrate acquired companies to jumpstart return on investment

- Ensure more accurate data about the company's instrumentation and diagnostics products and eliminate the time, expense, and potential errors associated with rekeying data into multiple systems
- Improve IT team productivity and accelerate IT initiatives through the ability to reuse integration components

Solutions

- Used Oracle Fusion Middleware, including Oracle SOA Suite, Oracle Service Bus, Oracle Application Integration Architecture, and Oracle Application Development Framework, to achieve real-time integration of Oracle's JD Edwards EnterpriseOne applications with the company's warehouse management system, Siebel CRM applications, Agile PLM applications and more, providing more accurate information and expanded visibility across the enterprise
- Eliminated missing shipments of the company's life sciences instruments and diagnostics products and reduced associated lost revenue
- Improved inventory control—reducing the incidence of shelf-life expiration for perishable products, such as dry ice—thanks to more efficient and accurate information exchange between JD Edwards EnterpriseOne ERP applications and the company's warehouse management environments
- Enabled efficient processing of 25% of the company's US\$3.8 billion in revenue using Oracle Fusion Middleware
- Gained the ability to integrate a new company into Life Technologies' ERP environment in just two months to jumpstart return on investment, reusing existing Web services to complete the project 30% faster than with traditional integration methods
- Created a business workflow application that automated and decreased turnaround time for creating new SKUs, helping to speed time to market for new instrumentation, diagnostic, and testing products
- Eliminated time, expense, and potential for error associated with rekeying data into multiple systems
- Created a foundation to consolidate manufacturing applications for a more efficient environment and develop real-time dashboards for expanded visibility into shipments, warehouse activity, manufacturing, and more

Oracle Customer:**Rosendin Electric, Inc.**

San Jose, California

www.rosendin.com

Industry:

Engineering and Construction

Annual Revenue:

US\$500 Million to US\$1 Billion

Employees:

2,200

Oracle Products & Services:

- Oracle Fusion Middleware 11g
- Oracle SOA Suite
- Oracle BPEL Process Manager
- Oracle WebLogic Suite
- Oracle E-Business Suite
- Oracle Financials
- Oracle Purchasing
- Oracle Projects
- Oracle Linux

Oracle Partner:

AT&T

Rosendin Electric, Inc. Automates Procure-to-Pay Process with Service-Oriented Architecture

"We have transformed our procure-to-pay process with Oracle Fusion Middleware 11g. We can place and receive orders for critical supplies, such as electrical components, much more quickly. We're also better equipped to take advantage of early-pay discounts and are reducing our costs associated with procure-to-pay processes."

— **Anand Tamboli**, Director, Business Applications, Rosendin Electric, Inc.

Rosendin Electric, Inc. is an employee-owned electrical engineering, power, and communications provider and the largest privately held electrical contractor in the United States. It provides electrical design, installation, and maintenance services to customers in many industries, including the public sector, healthcare, utilities, and manufacturing.

Challenges

- Automate the procure-to-pay process to accurately and efficiently place orders with vendors and process invoices—helping to ensure that the company's electrical construction projects remain on schedule and on budget
- Maintain quality service and valued relationships with customers and vendors, such as electrical component providers, without compromising profitability
- Improve productivity of staff involved in the procure-to-pay process, allowing them to focus on strategic priorities

Solutions

- Chose Oracle's Fusion Middleware, including Oracle SOA Suite, Oracle BPEL Process Manager and Oracle WebLogic Suite, to integrate procure-to-pay processes with Rosendin Electric's top vendors through electronic data interchange (EDI)
- Integrated the company's Oracle E-Business Suite modules with the EDI solution, eliminating the need to manually place and confirm the receipt of orders via phone, fax, and e-mail when doing business with the company's major vendors, including electrical component providers
- Created a repeatable standard for communication between internal and external data systems
- Eliminated the need to rekey data into various systems, freeing up staff time to focus on other projects and reducing errors
- Enabled the company to more consistently manage and take advantage of early-pay discounts on a growing portion of its more than US\$400 million in annual purchases
- Used Oracle BPEL Process Manager to automate purchase approvals for select items below a set dollar limit, further accelerating order placement
- Worked with Oracle Partner AT&T to build and complete the integration, which is expected to save more than US\$1 million
- Deployed the solution on Oracle Linux for high performance

Oracle Customer:**Sybron Dental Specialties, Inc.**

Orange, California

www.sybrondental.com**Industry:**

Healthcare

Employees:

4,100

Oracle Products & Services:

- Oracle SOA Suite 11g
- Oracle BPEL Process Manager
- Oracle B2B for EDI
- Oracle XML Gateway
- Oracle WebLogic Server
- Oracle Database 11g
- Oracle E-Business Suite
- Oracle Financials
- Oracle Manufacturing
- Oracle Quality
- Oracle iStore
- Oracle Internet Expenses
- Oracle Human Resources

Oracle Partner:**Zensar Technologies**www.zensar.com

Sybron Dental Specialties, Inc. Automates Business-to-Business Electronic Data Interchange with Service-Oriented Architecture

"Oracle SOA Suite 11g enabled us to completely transform the way we do business. The solution has advantages over other middleware offerings, as it can easily integrate with Oracle E-Business Suite and third-party solutions. With accurate and timely access to data, we can work more closely with our distributors, reduce costs, and support future growth."

— **Carlos Salazar**, IT Director, Software Development, Sybron Dental Specialties, Inc.

Sybron Dental Specialties Inc. is a high technology, dental and infection-prevention product manufacturer. The company develops innovative technologies and manufactures and markets products for the dental and medical professions—serving clinicians worldwide and, ultimately, improving the health and beauty of their patients. In the dental space, Sybron addresses endodontics, restorative dentistry, and orthodontic markets. On the medical side, in conjunction with dental products, Sybron offers high-quality, infection-prevention and magnification/illumination products for healthcare professionals.

When Sybron Dental Specialties used older versions of Oracle SOA Suite and Oracle B2B for EDI, it faced many challenges with supporting its processes. The company wanted to upgrade to a more scalable service-oriented architecture (SOA) environment to integrate with its distributors, ease complexity in tracking sales and shipment data, reduce costs, and support future business growth.

To address these challenges, Sybron Dental Specialties chose Oracle Fusion Middleware components, including Oracle SOA Suite 11g, Oracle BPEL Process Manager, and Oracle WebLogic Server to integrate procure-to-pay processes with Sybron Dental Specialties' 12 distributors, through electronic data interchange (EDI). The company used Oracle SOA Suite to manage processing its dental and medical product transactions via the company's Website, and it established plans to develop a mobile application for order processing in the future. It also implemented Oracle BPEL Process Manager to successfully process transactions, and reduced the time needed to complete a business transaction by 25%.

Challenges

- Develop IT infrastructure to enable complete information exchange through a Web interface between Sybron Dental Specialties and its distributors
- Reduce complexity in tracking sales and shipment data for the company's dental, dental implant, and infection prevention products to ensure on-time deliveries
- Ensure faster response to customer inquiries
- Eliminate errors throughout the ordering and production processes
- Embrace industry standards
- Shorten sales cycles

Solutions

- Integrated procure-to-pay processes with Sybron Dental Specialties' 12 distributors through EDI

- Built an order management platform on Oracle WebLogic Server to deliver maximum performance, reliability, availability, and scalability, and ensure continuous operation for a business-critical, customer-facing system
- Integrated the company's Oracle E-Business Suite modules with Oracle SOA Suite 11g's business-to-business EDI functionality, eliminating the need to manually place and confirm the receipt of orders via phone, fax, and e-mail when doing business with major distributors, and reducing time needed to complete a business transaction by 25%
- Used Oracle SOA Suite to manage processing for dental product transactions via Sybron's Website and established plans to develop a mobile application for order processing in the future
- Used Oracle BPEL Process Manager to successfully process 7,000 transactions per day
- Enhanced customer service by shipping products more quickly and gaining the ability to provide accurate and real-time information in response to customers
- Sent customers their electronic shipping information, enabling them to cut processing time at their receiving warehouses by half, which does not include the time saved through having access to accurate shipment records in the inventory system
- Reduced IT administration effort by enabling just one, part-time employee to manage the entire infrastructure—enabling valuable resources to focus on higher value activities
- Eliminated the need to rekey data into various systems, freeing up staff to focus on other projects and reducing errors
- Created a repeatable standard for communication between internal and external data systems
- Introduced Oracle Database 11g to store large files for critical human resources, financial, and manufacturing business data
- Laid the groundwork to extend existing Oracle B2B for EDI integrations to other distributors and develop new EDI document interchanges
- Worked with Oracle partner Zensar Technologies to establish a service-oriented architecture (SOA) platform to address business and IT structural challenges, progressing toward a centralized, integrated vision in which business and technology work together
- Positioned the company to take advantage of future application upgrades and mobile capabilities by staying on the most current Oracle technology, including SOA technology

Why Oracle

Previously, Sybron Dental Specialties had multiple, disparate systems in place to process EDI. Eventually, it chose Gentran as its main EDI processor. After some time, the company wanted to consolidate its systems, instead of upgrading, and saw an opportunity to take a step forward with an Oracle-based service-oriented architecture. Sybron decided to replace its Gentran solutions with Oracle Fusion Middleware.

“The Oracle solution provided the greatest flexibility, had proven itself in the market, and required very little maintenance,” said Carlos Salazar, IT director, software development, Sybron Dental Specialties, Inc. “We wanted to open up our back-office, riding on Oracle’s vision for Oracle Fusion Middleware, which we saw as the gate of interoperability for other systems. If I had to use one word to describe our Oracle solution, it would be ‘enabler.’”

Implementation Process – When Sybron Dental Specialties embarked on its Oracle SOA Suite 11g implementation, it had been using 10g for a year, but the company wanted to migrate its existing EDI transactions to the latest version.

From October to December 2010, the company tested the newest version to ensure it fit into its overall IT infrastructure. In the second phase, Sybron migrated all EDI transactions to Oracle SOA Suite 11g, which took an additional six months. By June 2011, the company moved all transactions to the newest version, and completed the project on time and within budget.

Partner

Zensar Technologies partnered with Sybron Dental Specialties to implement Oracle B2B for EDI to enable the company’s 12 distributors to exchange EDI. Zensar developed a proof of concept, executed an initial investigation into Oracle’s solutions, and proposed Oracle SOA Suite 11g as the best-fitting product that addressed all Sybron Dental Specialties’ business requirements. Sybron also worked with Zensar for its Oracle XML Gateway expertise. Zensar worked closely with Sybron to complete the implementation in record time.

“Zensar is an SOA specialized partner and has extensive experience and industry knowledge in delivering entire SOA solution stacks to customers globally,” Salazar said. “Our engagement with Zensar reiterates the company’s commitment to deliver Oracle solutions to customers in a timely manner thereby giving them a competitive edge.”

Oracle Customer:**Telenet**

Mechelen, Belgium

www.telenet.be

Industry:

Communications

Annual Revenue:

US\$500 Million to US\$1 Billion

Employees:

1,800

Oracle Products & Services:

- Oracle SOA Suite 11g
- Oracle Service Bus

Telenet Uses Service-Oriented Architecture to Reduce Time to Market for New Products and Services

“The migration to a service-oriented architecture enables us to create reusable services, which significantly decreases service development time and time to market for new product offerings and services.”

— **Stefan Mampaey**, Lead Architect, Telenet

Telenet began as a pioneer provider of broadband services in Europe in 1996. Today, the company is a leader in Belgium’s residential high-speed internet, telephony, and digital television markets. Telenet Solutions, a business-focused department of the company, commands the Belgian/Luxembourg business market, offering a complete business communications solutions portfolio for organizations and corporations.

Challenges

- Develop a service-oriented architecture (SOA) that enables creating reusable services that share common functionalities, for example: a multichannel mobile order intake
- Define a new reference architecture, based on functional and technical principles, supporting the company’s multichannel product and service offerings strategy
- Migrate the existing platform that integrates shared services, such as channel and connectivity services, onto new technology, with as little impact on service availability as possible and without losing network stability
- Improve architecture transparency on different levels (for examples, data routing and data activity), to more easily manage and maintain product and service offerings
- Create reusable services to improve back-office efficiency for new business initiatives and decrease the time to market for new residential and business communications product offerings and services

Solutions

- Implemented Oracle SOA Suite on production and nonproduction environments to create a new service-oriented architecture that supports the reuse of services, with the first successful use at the launch of a new mobile telephony service
- Defined a new reference architecture that aligns the business model and strategy, based on a platform using Oracle Service Bus as an interface layer with legacy systems
- Eliminated the dated integration platform and upgraded to a more modern technology stack without impacting business
- Improved routing and data usage transparency, minimizing the complexity of managing and maintaining different systems
- Created new reusable services—which already accounted for about 10% of all services—saving 80% of the development efforts after three or more reuses, and lowering the time to market for new product offerings and business services, including multichannel order intake



WEBCENTER

Oracle Customer:**Ancestry.com**

Provo, Utah

www.ancestry.com

Industry:

Media and Entertainment

Annual Revenue:

US\$100 to US\$500 Million

Employees:

1,100 worldwide

Oracle Products & Services:

- Oracle WebCenter Sites
- Oracle RightNow Web Self Service Cloud Service
- Oracle RightNow Knowledge Foundation Cloud Service

Ancestry.com Creates an Engaging Online Experience That Improves Customer Satisfaction

"With Oracle WebCenter Sites, we have empowered our product and marketing teams to make site changes and launch campaigns much more quickly to meet customer needs, while enabling engineering resources to focus on other strategic activities."

— **Blane Nelson**, Chief Architect, Applications, Ancestry.com

Ancestry.com is the world's largest online resource for family history, with approximately 2 million subscribers worldwide. In the past 16 years, the company's online collection has grown to include more than 11 billion historical records, 41 million family trees and more than 4 billion profiles. In addition to its flagship site, Ancestry.com offers several localized Websites around the globe.

As an internet company, Ancestry.com knows the importance of delivering a fresh and engaging online experience that converts site visitors into paying and loyal customers. However, the company relied on engineering resources to update its Web presence. As the company grew, this model became increasingly unsustainable. The company realized that when its marketing team came up with a new idea, it would take eight to twelve weeks before that idea ever became customer-facing via the Web presence.

With Oracle WebCenter Sites, Ancestry.com significantly reduced time-to-market for its online initiatives by empowering its marketing and product teams to manage many aspects of the Web experience themselves. Site changes, which previously required a long lead time can now be made almost instantly by marketers without IT help—enabling Ancestry.com to easily respond to trends and create a fresher and more engaging experience.

Ancestry.com also uses Oracle RightNow for its online self support and knowledge base, which includes 3,000 articles and averages 200,000 visitors per month. The company has also used the solution to respond to more than 1 million customer e-mail inquiries and to collect customer satisfaction ratings—ensuring that Ancestry.com maintains its excellent customer service levels.

Challenges

- Accelerate time to market for launching new site content and services
- Enable product and marketing teams to easily manage, update, and schedule new Web content thereby reducing reliance on engineering resources
- Provide a more engaging experience that enables the company to more easily and quickly connect with customers, through Web, mobile, and social channels
- Implement a Web experience management solution that is highly scalable and flexible enough to integrate with a complex IT infrastructure and many legacy systems
- Provide customers with tools, information, and support they need to get the most out of their investment in Ancestry.com

Solutions

- Implemented Oracle WebCenter Sites to more easily and quickly update the Web presence, and launch new online initiatives

- Minimized dependence on engineering resources and enabled business users to instantly make site changes without IT help—a process that previously took at least one month
- Reduced significantly the time needed to launch a new online marketing campaign—from eight to twelve weeks to just a few days
- Integrated Oracle WebCenter Sites into new areas of the Ancestry.com site on an ongoing basis, enabling the company to build on early successes and allow business users to refresh content, even within legacy areas of the site
- Supported the growing international business with business-user-friendly tools for managing their Web presence in multiple languages across eight countries
- Used Oracle RightNow to develop an online support and a knowledge base, including 3,000 articles and serving 200,000 visitors per month
- Enabled the company to respond to approximately 300,000 customer queries each month and answer customer questions within 24 hours
- Reduced customer calls by 38%, customer e-mails by 50%, and customer hold times by 18%
- Provided a common environment for delivering knowledge across all communication channels—phone, e-mail, Web, and chat
- Helped the company achieve 95.5% customer satisfaction scores, and improved retention rates, while saving millions each year through greater contact center efficiency

Why Oracle

Ancestry.com originally surveyed 40 Web experience management solutions, based on recommendations from product and marketing teams. The company narrowed the list down to five, then three, before holding a technology bake-off for the finalists.

“In our business, we need to constantly provide our customers with a fresh and engaging Web experience. We also have a huge amount of online content and a number of legacy systems with which we needed to integrate. We looked at the site-authoring experience, the features each system supported, and the technical specifications. Oracle WebCenter Sites was identified as the right fit for our current needs,” said Blane Nelson, chief architect, applications, Ancestry.com.

Implementation Process

Ancestry.com implemented Oracle WebCenter Sites three years ago. The company chose an initial project—an international Website launch—which took two-and-a-half months.

“After the initial project, we went through several other site areas. Projects are as large as updating all home pages or as small as updating a small area of legacy content, and Oracle WebCenter Sites provides the flexibility we need,” Nelson said.

Ancestry.com implemented Oracle RightNow in 2003 and upgraded to latest version in February 2012.

Oracle Customer:**Canadian Partnership Against Cancer**

Toronto, Ontario

www.partnershipagainstcancer.ca**Industry:**

Healthcare

Employees:

90

Oracle Products & Services:

- Oracle WebCenter Content 11g
- Oracle WebCenter Portal 11g
- Oracle Identity Management 11g

Oracle Partner:**Apps Systems**www.apps-systems.com

Canadian Partnership Against Cancer Improves Online Access to More Health Information Resources with Knowledge Management Platform

"Based on customer surveys and discussions, we knew we had to upgrade our back-end architecture to improve Web navigation and make it easier for users to find the information they need. Oracle provided us with the necessary platform functionality to develop the business-driven interface we needed."

— **Wayne Roberts**, Director, Information Technology, Canadian Partnership Against Cancer

Bringing together cancer experts, government representatives, and patient and survivor groups in a coordinated, highly collaborative approach to cancer control, the Canadian Partnership Against Cancer (the Partnership) is a uniquely Canadian response to a global health challenge. Funded by the federal government, the partnership implemented Canada's first national cancer control strategy, using a focused approach to help prevent cancer, enhance the quality of life of those affected by cancer, lessen the likelihood of dying from cancer, and increase the efficiency of cancer control in Canada.

The organization had been using Oracle products to support its portal (cancerview.ca) since 2009, and over time it recognized a need to upgrade and reorganize its back-end systems to support its growing online community.

In January 2012, the Partnership launched a redesigned version of cancerview.ca to better showcase cancer control efforts underway across the country, enrich the user experience, and enable people to more easily find information. These enhancements included streamlining the site's navigation, reorganizing content, and applying search engine optimization best practices to help Canadians with a professional or personal interest in cancer to gain quick access to quality tools and resources.

Further, as the organization is small and isn't IT focused, it wanted improved content publishing functions that enable business users and content creators to easily update and add to the information available on the Web site. The partnership used Oracle WebCenter and Oracle Identity Management to streamline back-end processes, enhance basic search functionality, and make it easy for those who aren't expert IT users to add and update content and communities. With Oracle, the partnership can provide professionals and patients with a balanced and broad range of online cancer content, including high-value cancer information from partners and improved interactivity.

Challenges

- Improve overall Web site navigation structure, so users can easily search more than 800 pages of content on cancer prevention, treatment, and palliative care
- Streamline back-end Web systems to better manage the organization's 200-plus online health-related communities that represent more than 2,000 cancer control professionals, using the tool to exchange information across jurisdictions and organizations
- Create a more user-friendly interface that supports multiple languages and provides separate entry points for healthcare professionals and for patients and families
- Provide business users with a streamlined publishing process to more easily add, review, and approve new content

Solutions

- Increased customer and healthcare partner satisfaction with online self-service tools, providing an interactive, modern user experience built on Oracle WebCenter Content and Oracle WebCenter Portal
- Increased accessibility of pan-Canadian cancer control information for partners, government agencies, and other stakeholders by creating different entry points for professionals and for patients with Oracle Identity Management
- Enabled the more than 200 health-focused communities integrated within the site to quickly create and customize collaborative communities to support local work and connect with other groups
- Improved search integration, so the site's growing community—including hospitals, universities, public health units, patients, and families—can easily search for information and services in English and French to support care
- Reduced support costs by enabling business users to create collaborative groups and independently maintain content
- Minimized IT backlog by allowing users to turn on new functionality, as they need it, to support more sophisticated online communities, including social capabilities, like blogs, wikis, and discussion forums
- Experienced an upward trend in users accessing the site's online tools and resources to make more informed decisions to decrease cancer risk

Why Oracle

When the Partnership decided to implement a knowledge management platform to support its work, it knew it needed a well-integrated enterprise system that met its long list of business requirements.

"The Oracle WebCenter platform functionality aligned very well with our business requirements," said Wayne Roberts, director, information technology, Canadian Partnership Against Cancer. "We are a small organization with limited resources, so we needed a robust system that was sophisticated enough to provide us the tools we needed, but was simple enough that our business users and partners could easily manage the platform. Oracle has provided that and more."

Why Oracle

Oracle Partner Apps Systems has deep expertise with Oracle Fusion Middleware technologies. The company engaged with the partnership in the spring of 2011, starting with a proof of concept pilot. In July 2011, the companies started the redesign. Apps Systems and its consultative expertise, throughout the implementation process, ensured the upgrade to the new content management platform was executed smoothly. The new site launched in early 2012.

"Apps Systems is a valued partner, working with us from start to finish and helping us to update our Web site to more effectively serve our internal and external users," Roberts said.

Oracle Customer:**Singapore Land Authority**

Singapore

www.sla.gov.sg**Industry:**

Public Sector

Employees:

550

Oracle Products & Services:

- Oracle WebCenter Portal 11g
- Oracle WebLogic Server 11g
- Oracle SOA Suite 11g
- Oracle Service Registry 11g
- Oracle Service Bus 11g
- Oracle Database,
Enterprise Edition 11g
- Oracle Real Application Clusters
- Oracle Spatial

Oracle Partner:**Mahindra Satyam**www.mahindrasatyam.com

Singapore Land Authority Saves US\$11.5 Million in Application Costs for 70 Government Agencies Through Geospatial Data Sharing

“Without our GeoSpace portal, developed using Oracle solutions, 70 government agencies would need to spend a total of US\$9 million on application development and US\$2.5 million in annual maintenance to enjoy the data sharing capabilities and benefits that this portal offers.”

— **Chan Chin Wai**, CIO, Singapore Land Authority

The Singapore Land Authority (SLA) is a statutory board under Singapore’s Ministry of Law. SLA’s key business functions include managing government-owned land and buildings, land sales and leases, acquisitions, and allocations. The authority is the leading geospatial agency in Singapore, and it hosts the national geospatial information database.

Using Oracle’s internet, database, and middleware technologies, SLA developed GeoSpace, a portal that provides powerful integrated data and metadata searches for textual and spatial data. The portal enables more than 70 agencies in Singapore to discover, share, and analyze over 360 layers of geospatial data provided by 34 government departments, saving a total of US\$9 million in application development costs and US\$2.5 million in annual system maintenance costs.

The Need for Integrated Geospatial Data

Government agencies, such as the Land Transport Authority, Urban Redevelopment Authority, and Health Promotion Board, rely on accurate, current geospatial data to allocate and manage land and provide the best possible amenities to the public. Between 2001 and early 2011, SLA used its land information exchange network (LandNet) system to share land data between departments.

Although LandNet served its purpose by providing Web-based access to a central repository of geospatial data, it lacked a fully functional service-oriented architecture (SOA), needed for the capability to decentralize access to Web-based data and metadata-based search and evaluation.

“For Singapore public agencies to make better decisions on planning, operations, and service delivery, we needed to enhance the geospatial information’s potential by linking and integrating geospatial and textual data from various sources,” said Ng Siau Yong, director, geospatial division, Singapore Land Authority. “This would allow it to be quickly discovered, evaluated, assessed, and analyzed by multiple government agencies.”

Realizing the Vision of Collaborative Government

In 2009, the SLA established the Singapore Geospatial Collaborative Environment (SG-SPACE), a national collaborative initiative to create and sustain an environment where geospatial data, policies, and technologies are integrated to foster innovation and knowledge, and share geospatial data between government, businesses, and the community.

The underlying technical platform supporting this operation is GeoSpace, a portal that provides powerful integrated data and metadata searches for textual and spatial data. The portal enables 70 agencies in Singapore to discover, share, and analyze more than 360 layers of geospatial data provided by 34 government departments. This data includes maps and other documents that define geographic locations or objects and their boundaries.

The Web-based application—which integrates with geographic information systems (GIS)—enables staff at these agencies to analyze population figures, types of terrain, and other land-related information to provide graphically richer and more comprehensive transport, health, and infrastructure services to the people of Singapore.

SLA developed GeoSpace using Oracle WebCenter Portal 11g to create the portal, harvest metadata, and provide a framework to enable online discussion forums over a real-time, map-based collaboration platform. Oracle WebLogic Server 11g is used as the application server.

Oracle SOA Suite 11g, Oracle Service Registry 11g, and Oracle Service Bus 11g, were used to register and provide SOA capabilities for geospatial services and modular applications programming interfaces (APIs), such as creating a system for registering and consuming map and geospatial processing services. This architecture, powered by Oracle Service Bus 11g, enabled the integration of heterogeneous services in a seamless manner, and offered standard features, such as reusability, governance, monitoring, auditing, and reporting of all data services and APIs.

GeoSpace is the first portal of its kind to provide one-stop search for spatial and nonspatial data. The portal is linked with the Singaporean government's textual data repository—which mainly contains structured textual data, such as national statistics, survey results, and socio-economic information—using a customized Oracle Database and Google Search appliance to provide powerful geospatial and location search capabilities.

The portal could also enable officers from different Singapore government agencies to create online forums and discuss common issues using a map-based collaboration application. Further, it could offer online and offline data modeling capabilities that would enable government officers across the 70 agencies to generate different views of geospatial data, and integrate data, such as field photographs, textual information, satellite imagery, and sensory data, from other sources.

“GeoSpace plays a part in helping realize Singapore's vision of an integrated government, by enabling agencies to share data, processes, and systems to deliver innovative services to the public,” added Ng.

Improving Service, Cutting Costs with Innovative Web Applications

SOA—created using Oracle solutions—provides government agencies with reusable GeoSpace data services, tools, and APIs to reduce the time and cost of delivering new services and applications, and it helps avoid duplicating tasks.

The geospatial cloud capability offered by GeoSpace helps government agencies avoid capital expenditure to establish a GIS infrastructure for building their own geospatial applications. They can consume geospatial data and application services directly from GeoSpace to rapidly develop internal systems with minimum cost and effort.

“Without GeoSpace, 70 government agencies would need to spend a total of US\$9 million in application development costs and US\$2.5 million in annual maintenance costs to enjoy the data sharing capabilities and benefits that this portal offers,” said Chan Chin Wai, CIO, Singapore Land Authority.

“We can make changes to applications 30% faster than previously, due to GeoSpace’s robust SOA framework. In addition, we have eliminated data duplication and reduced storage costs by around 60% (US\$1.2 million) by implementing rules—such as a ‘data service format matrix’, which enables an automatic refresh and publication of data services according to preset rules to ensure information is only created once and can be used multiple times.”

SLA and other agencies have created several innovative applications using the GeoSpace system as a foundation. The OneMap portal, for example, enables citizens in Singapore to use maps to discover bus routes, find property prices by area, search for emergency services, and even identify the best areas for bird watching.

Another application from Singapore’s National Environmental Agency is helping Singapore fight dengue fever by disseminating near-real-time data on infection clusters.

“These applications not only help improve the productivity and efficiency of public officers, they offer insight and spatial analytics that enable them to make more informed decisions and better serve the people of Singapore,” said Ng.

Reducing Time and Effort Required to Share Relevant Data

GeoSpace makes it easy for agencies to share spatial data, such as maps, and nonspatial data—such as documents and images—by providing several customized, Web-based geocoding and data modeling tools. This helps reduce the cost of publishing and consuming data shared using GeoSpace.

Agencies also use integrated tools to prepare and package geospatial and textual data before sharing it with other agencies. In addition, information is always up-to-date because it is updated daily, rather than quarterly, as with the previous system.

The number of government departments providing spatial and nonspatial information online has jumped from 14 to 34 since the SLA introduced GeoSpace, an increase of 142%. GeoSpace has also encouraged 1,500 agency staff to use the portal, up from the 363 staff sharing information before the solution was deployed.

Future Plans

GeoSpace is an important part of the Singapore Government’s ‘iGov 2015’ plan to improve electronic service delivery to citizens. It also forms a major part of the foundation for Singapore’s National IT Master Plan, to improve all central IT services and applications managed by government.

“Government agencies have started building their own geospatial systems using GeoSpace’s APIs and Web services,” said Chan. “These include applications, such as a slope analyzer, time series analyzer, and site suitability analyzer.”

Challenges

- Eliminate duplication of geospatial data—such as maps, and documents that define geographic locations—and nongeospatial data, such as textual documents and images, across government agencies in Singapore
- Unlock vast amounts of geospatial data by linking and integrating data from various government departments and other sources, so it can be discovered, evaluated, and assessed by multiple agencies
- Enable 70 government agencies to share and analyze geospatial and nongeospatial data
- Develop innovative Web-based applications that improve services that the government provides to Singaporeans

Solutions

- Enabled 70 government agencies in Singapore to discover, share, and analyze more than 360 layers of geospatial data provided by 34 government departments
- Saved government agencies a total of US\$9 million in application development costs and US\$2.5 million in annual maintenance costs, by deploying SOA to take advantage of reusable data
- Enabled agencies to make changes to applications 30% faster than before due to GeoSpace’s robust SOA framework
- Cut storage costs by 60% and eliminated data duplication, by implementing rules to ensure spatial information in GeoSpace is only created once and can be used multiple times
- Ensured up-to-date geospatial information is always available for agency staff to analyze, by updating it daily rather than quarterly
- Increased the number of government departments in Singapore providing online spatial and nonspatial information from 14 to 34, an increase of 142%
- Encouraged 1,500 agency staff to use the portal by improving data sharing, compared to 363 staff sharing data before the solution was deployed
- Reduced the cost of publishing and consuming geospatial data and nongeospatial data, and made it easier to share across multiple agencies, by using customized, integrated, Web-based geocoding and data-modeling tools
- Improved productivity, served the Singaporean public more effectively, and enabled staff to make better informed decisions by developing richer and innovative Web services

- Allowed different government officers to potentially collaborate and work more effectively by discussing common issues through online forums
- Provided online and offline data modeling capabilities that could enable government officers to generate different views of geospatial data and integrate data from other sources

Why Oracle

The SLA's initial LandNet solution was the first geospatial system in the world to use Oracle Database with Real Application Clusters, which enabled the agency to deploy a single Oracle Database across pools of servers to provide protection from unplanned server outages.

As GeoSpace potentially needed to serve hundreds of data services and thousands of tools and API services used by several agency applications, adequate monitoring, faster service response, and high service availability were critical to its success. SLA decided to remain with Oracle technologies as it could see Oracle Service Bus 11g offered the reliable infrastructure it required.

The authority then chose Oracle WebLogic Server 11g as a stable application that can quickly adapt to and support potential changes in GeoSpace. It chose Oracle WebCenter 11g, as it was imperative that GeoSpace was highly integrated with the rest of the architectural components but still provided social-media-style collaboration and portal features, such as real-time, map-based communication, discussion forums, and document sharing.

Implementation Process

SLA began the GeoSpace project in 2009. It completed the system design, development, and testing in December 2010 and successfully rolled out GeoSpace on April 1, 2011.

The implementation was completed on schedule and within budget.

Partner

SLA engaged Oracle Specialized Partner Mahindra Satyam to provide system integration, development, testing, maintenance, and operational services during the GeoSpace project.

SLA was happy with Mahindra Satyam's services during the implementation, as the team met all the project's needs and requirements. Mahindra Satyam continues to provide SLA with services for system enhancements, new applications, facility management, and helpdesk support and maintenance for GeoSpace.

Oracle Customer:

Textron, Inc.

Providence, Rhode Island

www.textron.com

Industry:

Aerospace and Defense

Annual Revenue:

Over US\$5 Billion

Employees:

32,000

Oracle Products & Services:

- Oracle WebCenter Sites

Oracle Partner:

Element Solutions

www.elementsolutions.com

Textron, Inc. Consolidates Website Management to Reduce Costs and Enable IT to Work on Strategic Activities

“Oracle WebCenter Sites enables our IT staff to get out of the way and allow marketing and communications professionals to leverage their knowledge of customer needs to independently update Website content. In addition, the solution provides a foundation that enables us to integrate our marketing campaigns with emerging communications channels, such as social media and mobile platforms.”
— **Brad Hof**, Manager, Advanced Business Solutions and Web Communications, Textron Inc.

Textron Inc. is one of the world’s best known multi-industry companies and is a pioneer of the diversified business model. Founded in 1923, it has grown into a network of businesses—including Bell Helicopter, E-Z-GO, Cessna, and Jacobsen—with facilities and a presence in 25 countries, serving a diverse and global customer base. Textron is ranked 236th on the Fortune 500 list of the largest US companies.

With numerous subsidiaries and more than 50 public Websites, Textron needed a Web experience management solution to centralize control, minimize costs, and enable more efficient operations. Specifically, the company wanted to take IT out of the picture as much as possible, enabling sales and marketing leads for subsidiaries to make Website updates as they deem appropriate for their business.

Textron worked with Oracle partner Element Solutions to consolidate its Website management systems onto Oracle WebCenter Sites. The implementation enabled Textron’s subsidiaries to adjust more quickly to customer demands and Textron’s IT staff to concentrate on other processes, such as writing code and developing new workflows, enabling them to enhance company processes. In addition, Textron can use Oracle WebCenter Sites to integrate its Website updates more closely with social media and mobile platforms, enabling marketing and communications teams to make updates anytime and everywhere. The initiative has enabled Textron to save money by freeing IT up to work on more important tasks, instituting new e-commerce and mobile initiatives to better engage customers, and by ensuring efficient Website management processes to quickly adjust to customer demands.

Challenges

- Consolidate management for more than 50 public Websites for subsidiaries, such as Bell Helicopter, E-Z-GO, Cessna, and Jacobsen onto one central Web experience management platform
- Enable marketing and communications professionals at Textron’s subsidiaries to make Website changes—such as product offerings when new helicopters or airplanes are created—without having to work with IT
- Reduce costs by enabling IT professionals to spend more time performing strategic tasks—such as writing code and project workflows—that ensure greater overall efficiency for the conglomerate
- Develop e-commerce and mobile initiatives, as well as integrate Websites with social media, to enable subsidiaries to better interact with customers

Solutions

- Used Oracle WebCenter Sites to integrate Web experience management capabilities for all Textron brands, including Bell Helicopter, E-Z-GO, Cessna, and Jacobsen
- Developed Website templates to enable marketing and communications professionals to easily make updates to their Websites, without having to work with IT
- Reduced Website management costs, as it costs more for IT to coordinate Website updates as opposed to marketing and communications
- Enabled IT to concentrate on other activities to enhance overall operations for Textron, such as project workflows
- Acquired a platform that enables marketing teams to integrate their Websites with social media and mobile platforms, allowing subsidiaries to make updates and contact customers anytime and everywhere—including through tablets and smartphones
- Reduced the time it takes to update content on a Website, including press releases, by enabling communications professionals to make updates directly
- Developed more appealing visual designs for Websites to help enhance customer purchases

Why Oracle

“We considered a number of products, but chose Oracle WebCenter Sites because it provides the best user interface. We reviewed customer references and analyst reports, and Oracle WebCenter Sites was consistently at the top of the list,” said Brad Hof, manager, advanced business solutions and Web communications, Textron Inc.

Partner

Textron is updating its Websites to Oracle WebCenter Sites on a continual basis. For bigger Websites, such as www.bellhelicopter.com and www.cessna.com, it works with Oracle partner Element Solutions. Element Solutions took the lead for the integration on those two Websites, completing the projects within expected time and on budget. Element Solutions finished the upgrade to Cessna’s site in 12 months, and Bell Helicopter’s in 6 months. In addition, Element Solutions used Oracle WebCenter Sites to develop a multilanguage global intranet for Textron’s 30,000 employees.

Oracle Customer:**Toyo Engineering Corporation**

Tokyo, Japan

www.toyo-eng.co.jp/en**Industry:**

Engineering and Construction

Annual Revenue:

US\$1 to US\$5 Billion

Employees:

3,956

Oracle Products & Services:

- Oracle WebCenter Content

Oracle Partner:**NS Solutions**www.ns-sol.co.jp

Toyo Engineering Corporation Provides 24/7, Worldwide Access for Project Personnel Through Cloud-Based Project Document Management System

“Electronic document management is an indispensable way to improve project information flow between our global engineering subsidiaries, construction sites, and external companies in remote locations. Oracle WebCenter Content enabled us to establish a dynamic business information management system that can quickly deliver the latest design information to the relevant project execution offices and show a project’s progress, based on the status of various documents.”

— **Toshio Hayashi**, Deputy General Manager—IT Management and Control Unit, Toyo Engineering Corporation

Toyo Engineering Corporation (Toyo) was established in 1961 after the company separated from the engineering and maintenance section of Toyo Koatsu (now known as Mitsui Chemicals). Since then, Toyo has worked on thousands of plant engineering projects in more than 50 countries, and it is a globally recognized leader in its field.

Toyo rebuilt its project document management system to improve collaboration and communication between globally dispersed subsidiaries, external companies, and project teams. As a result, it anticipates it will save US\$2.4 million (200 million yen) per year on printing, copying, and delivery expenses and expects to significantly reduce e-mail volume.

Improving Communication and Collaboration

Toyo offers a wide range of technical services for the energy, oil refinement, chemical, pharmaceutical, and food industries. Its services include facility and equipment management, plant construction, system construction, master planning, and maintenance.

Toyo needed to improve collaboration between global subsidiaries, external companies, and staff in remote locations. It also wanted to enhance communication between project management teams, and engineering, procurement, construction, and other business process units, so each department had timely access to the latest design, engineering, and project information.

In 2010, Toyo rebuilt its project document management system, using cloud services provided by Oracle Partner NS Solutions, based on Oracle WebCenter Content.

“Electronic document management is an indispensable way to improve project information flow between our global engineering subsidiaries, construction sites, and external companies in remote locations,” said Toshio Hayashi, deputy general manager—IT management and control unit, Toyo Engineering Corporation. “Oracle WebCenter Content enabled us to establish a dynamic business information management system that can quickly deliver the latest design information to relevant execution offices and show a project’s progress, based on the status of various documents.”

Larger Projects Inspired Innovative Document Management System

The foundation of Toyo’s business operations is Global Toyo, a global network organization that covers 17 countries.

Global Toyo includes subsidiaries in China, India, Korea, and Malaysia that cooperate in engineering, procurement, and construction processes for Toyo's projects. Branch offices in Europe, the U.S., and the Middle East also work with local engineering companies to coordinate the needs of clients.

In 2009, Toyo began improving its document management system as part of a management plan to further enhance the company's ability to execute projects globally. The plan was motivated by complications due to an increase in the scale of Toyo's projects and the number of project participants from global subsidiaries and external companies. Toyo was winning bids for bigger projects that required a larger number of documents, such as process and instrument diagrams, engineering drawings, and calculation sheets. The projects also required more communication documents, all of which were stored as paper copies.

It is crucial to Toyo's project management team to deliver project information quickly and accurately. As the company grew, it became harder for project management teams to manage official correspondence containing information about design and construction materials, for example. Project structures and communications among the many subsidiaries within Global Toyo also became increasingly complicated. This led to an increase in the number of e-mails sent by project staff.

"We faced increasingly complex communications and greater volumes of documents caused by more intricate project structures," said Hayashi. "E-mail is an effective way of delivering information between individual users, but the increase in communications led to project staff receiving an unmanageable flood of mail."

Rising E-mail Volume Hinders Project Management Processes

Toyo initially developed a Letter Management System (LMS) using IBM Lotus Notes to improve the company's information flow and reduce the number of e-mails sent between staff. The LMS worked like a bulletin board system containing official project correspondence, such as engineering instructions and financial transactions. The correspondence was prepared in the LMS and shared between members of the project.

However, the LMS wasn't available to clients and project personnel outside of Toyo, so Toyo's staff had to resort to further e-mails. Project managers received up to 400 e-mails per day, which disrupted their project management work.

"E-mail is a person-to-person communication, whereas we needed to manage our engineering projects organization to organization," added Michio Nagasawa, business process IT team leader, IT management and control unit, Toyo Engineering Corporation. "Our official project document management system had to be a shared model to prevent documents from being duplicated and scattered in different locations. We needed to store information in a single, well-managed repository."

In addition, Toyo was transferring its global project management from its Japanese headquarters to its local subsidiaries.

It was therefore important to share knowledge about productive techniques and ideas from Japan with global subsidiaries and affiliated companies to advance their independence.

The company also wanted to move to a new policy that required staff to regard an electronic document as equally valid as a hard copy signed by hand.

Cloud Platform Enables 24x7 Access

In February 2011, Toyo launched a new project document management system called SHOKA, which means 'bookshelf' in Japanese.

Based on Oracle WebCenter Content with a workflow function in a cloud environment, Toyo established a flexible, scalable, and highly durable document management system that allows global project personnel to use it 24 hours a day, 365 days a year.

"The strength of SHOKA is that it can be accessed from anywhere through a secure internet connection, whether you are working in Japan or overseas," said Shuntaro Saito, project IT group, IT management and control unit, Toyo Engineering Corporation. "This enables remote users to continue their project work exactly as if they were at head office."

SHOKA has also increased clients' satisfaction by providing increased data security. According to Saito, some clients expressly ask to use SHOKA to manage their documents as they appreciate the higher security of the cloud environment during a project involving a variety of staff.

Cloud-Based Document Repository to Significantly Reduce E-mail Volume

Toyo's ultimate goal is to automate all its project information and store it in SHOKA's cloud-based document repository.

At present, SHOKA covers about 50% of all project information, including official project deliverables, some work-in-progress documents, and files transferred to and from vendors. Once the system includes the new Oracle-based LMS, it will contain 100% of Toyo's project information.

SHOKA will also support a more flexible communication style, reduce e-mails significantly, and ensure managers can focus on making more timely decisions about engineering and construction projects.

Consolidated System Improves Operational Efficiency

SHOKA makes it easier for project personnel to search for documents from each department, subsidiary, and external company involved in a project. Users can now instantly access the latest design information and see the current status of construction schedules and project progress. This will improve project execution efficiency.

"Based on Oracle WebCenter Content with revision management and search functions, we have established a work culture with a positive attitude towards digital documents," said Nagasawa.

“We developed new document management procedures to standardize document folder structures, electronic file naming rules, and document authorization methods. If these procedures differ between each project, it is hard for project members to find the relevant documents, so the standard procedures help us share relevant information more efficiently.

“We will also soon see even greater achievements from sharing information from a consolidated central database,” he added.

Expected to Save an Estimated US\$2.4 Million per Year

In addition to quick and accurate document delivery, Toyo anticipates it will save at least US\$2.4 million (200 million yen) per year on printing, copying, and delivery expenses.

To ensure these savings, Hayashi said he will work to reduce in-house storage capacity and e-mails during project execution.

“Oracle WebCenter middleware is highly valued,” he said. “It is the engine of our new project document management system. Our goal now is to achieve full-scale system operation, including innovating our business processes and continually investing in IT.”

Challenges

- Reduce e-mail volumes from up to 400 per day for each project manager
- Simplify communication between globally dispersed project personnel caused by increases in project sizes
- Enhance communication between project management teams and engineering, procurement, construction, and other business process units
- Deliver the latest design data to relevant departments in a timely manner
- Share and deliver knowledge about productive techniques and ideas from Japan with global subsidiaries and external companies
- Adopt a shared document management model to prevent project documents from being duplicated and scattered in different locations
- View and understand a project’s progress through the status of documents
- Change business processes to ensure electronic documents are regarded as valid as hard copies

Solutions

- Enabled project personnel from global subsidiaries and external companies to use a cloud-based project document management system 24 hours a day, 365 days a year
- Expected to save an anticipated US\$2.4 million (200 million yen) per year on printing, copying, and delivery expenses
- Increased clients’ satisfaction by ensuring high security for project data

- Improved project efficiency by establishing a centralized document management system for staff to instantly search for project or design documents rather than sending e-mails
- Expected to significantly reduce e-mail volume by enabling managers to focus on making more timely decisions about engineering and construction projects
- Enhanced user satisfaction by providing staff with access to documents from remote locations as if they were at head office
- Established a work culture with a positive attitude towards digital documents
- Shared project information with project personnel more efficiently by standardizing project document folder structures, electronic file naming rules, and document authorization methods

Why Oracle

Based on a recommendation from NS Solutions Corporation, Toyo opted for the highly durable, enterprise-class Oracle WebCenter Content instead of a general purpose document management package.

“We wanted to build a flexible, scalable, and durable system that is available globally, 24 hours a day, 365 days a year,” said Nagasawa. “We realized that a generic package operated on our own servers would not satisfy these requirements.”

Implementation Process

Toyo and NS Solutions began working together on the project document management system in October 2009. The companies investigated whether to adopt a new system or continue using Toyo’s legacy, third-party document management systems.

In April 2010, Toyo and NS Solutions built the system’s foundation and developed basic functions. Between October 2010 and January 2011, they tested the new system and worked on operational stability.

The new project document management system went live globally in February 2011.

Advice from Toyo Engineering Corporation

- It’s not enough when developing a new project document management system to simply extend a file server system where files are only stored and transferred, not managed and controlled
- The key to success is to establish a flexible and scalable system, with serious consideration about how various stakeholders can manage documents globally
- A document management system is a valuable repository of information that is a source of competitiveness, so extensive efforts should be made to establish the best one

Partner

NS Solutions is well acquainted with document management systems for the engineering industry. The Oracle Partner helped Toyo Engineering investigate and compare different ways of continuing with the company's legacy systems and how to introduce document management packages.

NS Solutions recommended the Oracle content management and portal solution with the workflow function as a base, which Toyo could operate it with absonne (NS Solutions' cloud platform).

Appendix

Page	Customer Name	Country	Revenue	Industry	Product	Partner
23	Account NI	United Kingdom		Public Sector	BPM	BT
120	Ancestry.com	United States	US\$100 to US\$500 Million	Media and Entertainment	Oracle WebCenter Sites	
91	Australian Hearing	Australia	Under US\$100 Million	Healthcare	IDM	Professional Continuity
98	Avea iletisim Hizmetleri A.S.	Turkey	Over US\$5 Billion	Communications	IDM	
41	Bank of Valletta p.l.c.	Malta	US\$100 to US\$500 Million	Financial Services	Tuxedo	
26	Caja Rural de Ahorro y Crédito Chavín S.A.A. (CrediChavín)	Peru	Under US\$100 Million	Financial Services	BPM	Global Business Solutions Peru S.A.C.
52	Callista Software Services	Australia	Under US\$100 Million	Education and Research	Weblogic	Sage Computing Services, Red Samurai Consulting, Rubicon Red
122	Canadian Partnership Against Cancer	Canada		Healthcare	Oracle WebCenter Content, Oracle WebCenter Portal	Apps Systems
101	Centrica plc	United Kingdom	Over US\$5 Billion	Utilities	Oracle Identity Management, oracle Identity Analytics	aurionPro SENA
80	Cognizant	United States	Over US\$5 Billion	Professional Services	Exalogic	
10	ECSTEAM, Inc.	United States		Professional Services	ADF	
109	Farmers Insurance Group, Inc.	United States	Over US\$5 Billion	Insurance	SOA	CSC, Wipro
55	Hong Kong Air Cargo Terminals Ltd. (Hactl)	China		Travel and Transportation	Weblogic	
44	Hundsun Technologies Inc.	China	US\$100 to US\$500 Million	High Technology	Tuxedo	
83	Hyundai Motor Company	China	Over US\$5 Billion	Automotive	Exalogic	Hyundai Autoever, Softcamp Inc, Samil PwC Advisory
28	Instituto Nacional de Defensa de la Competencia y la Propiedad Intelectual (INDECOPI)	Peru		Public Sector	BPM	SOAIN Software Associates S.A.C.

Appendix

Page	Customer Name	Country	Revenue	Industry	Product	Partner
29	JSC Kazakhtelecom	Kazakhstan	US\$1 to US\$5 Billion	Communications	BPM	Asia-Soft
112	Life Technologies Corporation	United States	US\$1 to US\$5 Billion	Life Sciences	SOA	
48	Machine-to-Machine Intelligence Corp.	United States		High Technology	Weblogic	
64	MegaFon	Russia	Over US\$5 Billion	Communications	Oracle GoldenGate	
103	Merck & Co., Inc.	United States	Over US\$5 Billion	Life Sciences	Oracle Identity Management, oracle Identity Analytics	
66	National Informatics Centre	India		Public Sector	Oracle Data Integrator	
60	Natura Cosméticos S/A	Brazil	US\$1 to US\$5 Billion	Consumer Goods	Weblogic	
34	now TV	Hong Kong	US\$100 to US\$500 Million	Media and Entertainment	Coherence	
62	Obopay Mobile Technology	India		High Technology	Weblogic	
39	Orient Overseas Container Line	China	US\$6.5 Million	Travel and Transportation	Coherence	
86	PHH Corporation	United States		Financial Services	Exalogic	
12	PT. Sigma Cipta Caraka (telkomsigma)	Indonesia		High Technology	ADF	
114	Rosendin Electric, Inc.	United States	US\$500 Million to US\$1 Billion	Engineering and Construction	SOA	AT&T
69	Sabre Holdings	United States	US\$1 to US\$5 Billion	Travel and Transportation	Oracle GoldenGate, Oracle Data Integrator	HP
30	Scottish Water	Scotland	US\$1 to US\$5 Billion	Utilities	BPM	Tata Consultancy Services
124	Singapore Land Authority	Singapore		Public Sector	Oracle WebCenter Portal	Mahindra Satyam
87	SquareTwo Financial	United States	US\$100 to US\$500 Million	Financial Services	Exalogic	
14	Standard Forwarding LLC	United States		Travel and Transportation	ADF	Redstone Content Solutions
76	Starwood Hotels & Resorts Worldwide, Inc.	United States	Over US\$5 Billion	Travel and Transportation	Oracle GoldenGate, Exadata	
78	Suddenlink Communications	United States	US\$1.6 Billion	Communications	Oracle Data Integrator	
17	Sundaram Infotech Solutions	India	Under US\$100 Million	High Technology	ADF	
115	Sybron Dental Specialties, Inc.	United States		Healthcare	SOA	Zensar Technologies

Appendix

Page	Customer Name	Country	Revenue	Industry	Product	Partner
19	Synergetic Systems Management, LLC	United States		Healthcare	ADF	ECS Team
118	Telenet	Belgium	US\$1 to US\$5 Billion	Communications	SOA	
129	Textron, Inc.	United States	Over US\$5 Billion	Aerospace and Defense	Oracle WebCenter Sites	Element Solutions
131	Toyo Engineering Corporation	Japan	US\$1 to US\$5 Billion	Engineering and Construction	Oracle WebCenter Content	NS Solutions
105	Türk Telekom Group	Turkey	US\$1 to US\$5 Billion	Communications	IDM	Biznet Bilisim Sistemleri ve Danismanlik A.S.
40	Turkcell İletisim Hizmetleri A.S.	Turkey	Over US\$5 Billion	Communications	Coherence	Turkcell Technology Research & Development, Inc.

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Hardware and Software, Engineered to Work Together

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