

# INFORMATION FOR SUCCESS

*Simplifying Integration - Cloud, On-Premise, Mobile, and Fast Data*

Oracle Service Integration Customer Reference Booklet  
May 2014



**Hardware and Software, Engineered to Work Together**



More than ever before, technology is key to building differentiation. Leveraging new technology trends and innovations is vital for companies to remain competitive. However it can also result in a hodge-podge of technologies and quickly become a maintenance nightmare for IT. Service Oriented Architecture (SOA) Integration has revolutionized how modern businesses can address this by simplifying IT even while enabling innovation and modernization.

SOA principles have become widely adopted as a foundation for enterprise applications. What began as a basic middleware technology for linking loosely coupled software components has become a key enabler for many of today's hottest technologies including cloud integration, mobile enablement, application integration, Business to Business (B2B), fast data and the internet of things. In addition the engineered systems advantage for Oracle SOA Suite 12c enables faster time to market and lowered total cost of ownership.

Today thousands of organizations across the world are using SOA to help drive innovations, while improving real-time performance and driving down IT costs. In this booklet we've compiled recent case studies across a range of industries including names like Agilent Technologies, Pickles Auction, Fluid-e, Schneider National, Sascar, and Turk Telecom. To find out more about Oracle SOA Suite 12c, go to our website: [www.oracle.com/goto/soa](http://www.oracle.com/goto/soa)

Demed L'Her,  
Oracle, VP Product Management for Oracle Service Integration Products



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**Oracle Customer:****Sascar**

São Paulo, Brazil  
www.sascar.com.br

**Industry:**

Travel and Transportation

**Annual Revenue:**

\$100 to \$500 Million

**Employees:**

850

**Oracle Products & Services:**

- Oracle Exadata Database Machine
- Oracle Exalogic Elastic Cloud
- Oracle WebLogic Suite 11g
- Oracle SOA Suite
- Oracle Coherence

**Oracle Partner:****Service IT Solutions**

www.service.com.br

## Sascar Consolidates Fleet Management Infrastructure and Accelerates Customers' Data Access

"Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud deliver real-time data for our management reports while serving as the platform for our proprietary fleet management and telemetry applications. With Oracle, we can offer more efficient vehicle monitoring and better fleet security to our clients."

— **Cristian Simons**, Systems Development Manager, Sascar

Sascar specializes in real-time vehicle monitoring solutions, with innovative and scalable technology, that allow significant savings due to better fleet use, with reduced operating costs and increased productivity and profitability for transport.

The company uses its proprietary software and GSM/GPRS and satellite technologies to track and monitor vehicles, providing information that helps clients in fleet, risk management, and transportation industries to improve security and productivity. Sascar draws has more than 200 representatives in 23 Brazilian states, and offers 24/7 telephonic assistance through a call center with 200 operators and online support to monitor over 230,000 active vehicles. This enables its customers' transport and logistics managers to track transport-locations in real-time, online.

Sascar has 116,000 registered customers across 15,000 companies and must handle approximately 5,000 users accessing its web portal simultaneously. To support this high transaction volume, the company initiated an IT infrastructure modernization project, including the replacement of approximately 70 servers with Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud.

In addition to supporting Sascar's mission-critical systems—which monitor vehicle paths and routes, speed, mileage, cargo, passengers, and motorcycle transport—Oracle Exadata and Oracle Exalogic provide the foundation for Oracle WebLogic Suite 11g and Oracle SOA Suite, accelerating responses to customer inquiries about vehicle location.

By consolidating its applications into a more robust IT infrastructure with greater performance, stability, and agility, Sascar increased data processing speeds and simplified IT maintenance—essential for a company focused on real-time vehicle monitoring.

### Reinforced Infrastructure for Higher Performance

Vehicle information collected by Sascar currently generates up to 5,000 messages per second. The old infrastructure could not keep up, sending approximately 20% of the messages to a backup queue, which was prone to cause processing delays. The new system is built to scale to 50,000 messages per second, 10x the previous amount handled.

The newly consolidated IT infrastructure on Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud also helped Sascar address many structural IT problems, like lack of storage space and poor core business system performance.

Upon migrating to Oracle Exadata Database Machine, the company implemented Oracle Hybrid Columnar Compression, achieving a 10x data volume compression ratio—supporting Sascar's daily 6-gigabyte data growth and reducing costs by minimizing the need to acquire new storage systems approximately by 50%.

With a focus on delivering quality customer service, the company increased its processing capacity by consolidating all Java applications onto Oracle Exalogic Elastic Cloud—substantially increasing system availability and providing customers with easy access to cargo and fleet information. The improved application response time is important for Sascar’s customers, as they rely on data regarding things such as excessive speed and braking to make decisions that may reduce fuel consumption, cause less wear of the vehicle, decrease in road accidents, and improve maintenance schedules.

“Oracle Exalogic Elastic Cloud is tailor-made for running Oracle WebLogic Suite and Oracle SOA Suite—on which we run our client-facing web platform—as well as other tools we use to determine vehicle positioning and routes over the past few hours, days, or months,” said Cristian Simons, systems development manager, Sascar.

### High Availability and Security

With the Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud implementation—the first project that combined the two platforms in Latin America—Sascar improved business-critical application response times when offering customers access to the data they need.

Sascar’s trackers collect vehicle data through the global positioning system (GPS), and its approximately 60 million vehicles’ positions are transmitted daily through the global system for mobile communications (GSM/ GPRS) network to the company’s data center, where Oracle Exadata Database Machine decodes and stores the information.

According to Simons, many of Sascar’s clients operate like air traffic controllers, planning risk management for load transportation from the moment of departure until arrival at the destination. “Each company must have a large volume of real-time information—such as about vehicle location, departure and arrival, and load/unload data—at hand to support the rapid decision-making needed to recover vehicles or loads when goods are lost due to traffic accident or theft. With Oracle, we can provide our customers with instant access to the vehicle data they need to have complete transport and logistics management.” Simons said.

By adopting a stable and superior IT infrastructure with Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud, Sascar is positioned ahead of the competition in delivering their solutions.

### Challenges

- Create a stable IT infrastructure with superior performance, allowing the company to focus more on improving its proprietary systems—which underpin all Sascar’s operations
- Accelerate data processing for Sascar’s critical applications, which must provide real-time telemetry data to 15,000 companies for 230,000 vehicles and process 5,000 messages per second

- Expand storage capacity to support increasing amounts of customer and fleet data for the launching data services on smart phones and web

### Solutions

- Replaced approximately 70 servers with Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud, boosting performance and availability of the company's mission-critical systems for vehicle monitoring and load and fleet management
- Replaced older applications with a modern, Java-based system built on Oracle WebLogic Suite and Oracle SOA Suite that has significant capacity for growth
- Achieved significant data compression with Oracle Hybrid Columnar Compression, reducing the need to add storage systems to support growth in data services online and on smart phones
- Improved IT security with Oracle Exadata Database Machine's ability to auto-diagnose system breakdowns, enabling the IT department to take corrective action before the company's mission-critical systems are affected
- Integrated and reconciled vehicle monitoring, load and fleet management, and telemetry data to provide high-quality, consistent load and route information to customers

### Why Oracle

After considering alternatives on the market, Sascar selected Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud due to their excellent cost-benefit ratio.

"In addition to the technology benefits of data compression, memory, and processing capacity, Oracle Exadata and Oracle Exalogic Elastic Cloud enabled us to reduce a large number of servers, saving physical space and reducing maintenance costs," said Cristian Simons, systems development manager, Sascar.

### Implementation Process

Before implementing Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud, Sascar carried out a number of proofs of concept.

"We tested Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud capabilities using applications developed especially for this purpose. In addition to proving a significant performance improvement, we rolled them out without any business disruption," Simons said.

### Partner

Oracle partner Service IT Solutions supported Sascar in migrating to Oracle Exadata Database Machine and Oracle Exalogic Elastic Cloud.

"Service IT Solutions professionals understood our business demands, as well as the Oracle solutions that we adopted, which helped us to put our resources to better use," Simons said.

**Oracle Customer:****Directorate General of Civil Aviation (DGAC)**

Paris, France

[www.aviation-civile.gouv.fr](http://www.aviation-civile.gouv.fr)**Industry:**

Travel and Transportation

**Annual Revenue:**

Under \$100 Million

**Employees:**

12,500

**Oracle Products & Services:**

- Oracle WebCenter Portal
- Oracle SOA Suite
- Oracle Identity and Access Management
- Oracle User Productivity Kit
- Oracle Exalogic

**Oracle Partner:****Klee Group**[www.kleegroup.com](http://www.kleegroup.com)**Easyteam**[www.easyteam.fr](http://www.easyteam.fr)

## Directorate General of Civil Aviation (DGAC)

### Streamlines Key Aviation Applications Access, Improves Productivity and Reduces Maintenance Costs

“The Directorate General of Civil Aviation is taking advantage of Oracle Exalogic’s consistent platform to provide a consolidated view of our applications and support our overall modernization strategy. Thanks to Oracle, we have saved roughly one million Euros on maintenance costs for the old applications.”

— **Jean Pierre Desbenoit**, Director of Information Systems and Modernization, Directorate General of Civil Aviation

A part of the French Ministry of Ecology, Energy, Sustainable Development, and Urban Planning (MEEDDAT), the Directorate General of Civil Aviation (DGAC), is the state agency guaranteeing air traffic security and safety. As a service provider for airlines, DGAC manages air traffic for more than 3 million flights per year, supporting 125 million passengers across 500 airports. The organization selected Oracle to ensure structured and efficient Web access to information, consolidate business applications on a single platform, and reduce the complexity and cost of managing its existing information system.

**Challenges**

- Foster collaborative practices, build collective intelligence, improve knowledge sharing, and increase paperless processes to improve air traffic control agents’ productivity
- Accelerate the integration of DGAC business applications as financial, human resources, technical data management, into the new virtual office infrastructure
- Consolidate and standardize key aviation applications on a comprehensive and scalable platform, to reduce management costs and ensure high-availability
- Provide airlines and airports with structured and high performing access to the portal
- Position the information system department -as a vector of transformation and of modernization for the organization

**Solutions**

- Deployed the virtual office infrastructure on Oracle WebCenter Portal, improving communication, collaborative processes and Web applications access for 12,000 employees
- Reduced the size of attachments in the e-mail system by 30% with a collaborative workspace portal that can offer agents the information they need and enhance security management and storage space
- Saved US\$260,000 on annual newspaper subscription costs by allowing every agent to access rich site summary (RSS) flows on the Oracle Portal
- Optimized employee reclassifications and retraining, thanks to training processes accessible to the administrative agent and the financial manager in the virtual office infrastructure provided by Oracle Portal

- Improved technical information traceability and the ability to produce new educational materials and training for agents with Oracle User Productivity Kit
- Enabled structured extranet access to airline companies and airports, allowing them to access airline traffic resources by deploying Oracle WebCenter Portal on Oracle Exalogic
- Consolidated key business applications using Oracle SOA Suite and Oracle Exalogic, to save more than 1,000 worker days annually to maintain applications, and approximately US\$1 million for technical outsourcing,
- Gained the ability to improve reliability and availability of the intranet and extranet by implementing two fully redundant Oracle Exalogic platforms to achieve business continuity

### **Why Oracle**

“We selected Oracle because, from a functional point of view, its solutions meet our users’ expectations. On a technical level, its solutions integrate seamlessly with our existing infrastructure. Oracle also meets our cost and strategy needs in the short, medium, and long term—enabling us to overcome existing information system issues as well as prepare to meet future challenges,” said Jean Pierre Desbenoit, director of information systems and modernization, Directorate General of Civil Aviation.

### **Implementation Process**

With the support of Klee Group, DGAC implemented virtual office architecture on Oracle WebCenter Portal. The platinum partner Easyteam helped the organization to consolidate its key business applications on an Exalogic platform, using Oracle SOA Suite.

### **Partner**

Oracle Platinum Partner Easyteam and Klee Group provided consulting and expertise services to implement a reliable and standardized platform, consistent with the DGAC modernization strategy.

**Oracle Customer:****Globalia Corporación Empresarial S.A.**

Llucmajor, Spain

www.globalia-corp.com

**Industry:**

Travel and Transportation

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

12,000

**Oracle Products & Services:**

- Oracle Coherence
- Oracle Management Pack for Oracle Coherence
- Oracle JRockit
- Oracle WebLogic Server
- Oracle Service Bus
- Oracle Database
- Oracle Consulting
- Oracle Java Mission Control

## Globalia Corporación Empresarial S.A.

### Accelerates Hotel Bookings, Boosts Sales by 40% with In-Memory Data Grid Solution

“From the outset, Oracle Coherence exceeded our high expectations. It enabled us to reengineer our core system for hotel bookings and deliver quotes that are innovative and pioneering for the Spanish tourism industry. Our return on investment was immediate—since we saved money immediately after go-live and delivered a highly successful summer campaign with strong sales growth. We have already started to redesign additional systems that will leverage Oracle Coherence technology.”

— **Vicente Guerola Molina**, Director, Business Development, Globalia Corporación Empresarial S.A.

Globalia Corporación Empresarial S.A. (Globalia), founded in 1997, is a leading tourism group in Spain, based on revenue and number of employees. Globalia is a collection of independent companies, such as tour operators, travel agencies, hotels, an airline, cruise lines, and an airport management company.

#### Challenges

- Meet increasing, ever-changing, tourism-sector business demands with agile IT systems that can manage tourism revenue accounting and customer interactions from business-to-consumer (B2C) or business-to-business (B2B) channels
- Provide availability, response times, and scalability to meet specific tourism and leisure industry demands—such as activity peaks during the summer season, Christmas, and long weekends that generate 80% of annual revenue, and complex hotel sales promotion systems that put a huge burden on underlying IT infrastructures
- Support a new business unit designed to expand Globalia’s business to the worldwide tourism and leisure market by establishing front- and back-end IT systems that can sustain business growth with ambitious service-level agreements (SLA’s)
- Optimize response times to meet group and third-party SLA’s for Welcome, the company’s proprietary, hotel-booking system, so that it serves 95% of requests in less than 700 milliseconds—ensuring that users don’t abandon searches not answered within 2 seconds

#### Solutions

- Deployed Oracle Coherence, Oracle JRockit, and Oracle WebLogic Server to move business logic from database to middleware tier, reducing IT costs and enabling new business models, based on expanded system capabilities—such as Globalia’s powerful, proprietary B2C and B2B channel for selling hotel rooms
- Used Oracle Coherence to reengineer proprietary hotel booking platforms, responsible for daily revenue of up to US\$1.35 million, with a year-on-year growth rate of 100%
- Established a future-proof system that is dimensioned to support 2.5 million B2C and B2B requests per day—such as bookings, confirmations, and cancellations for air and ground travel, hotel rooms, and more—and provide linear scalability for expected growth, while the previous systems were limited to 100,000 requests per day

- Introduced a data grid that supports highly complex business rules for sales promotion, which boosted sales by 40% for the 2012 summer campaign, compared to the previous year's seasonal sales
- Guaranteed low latency for B2C and B2B counterparts—who will reject Globalia's product offerings if they do not receive an immediate response to requests—providing an average response of 100 milliseconds for a request involving 80 hotels, while the old system required up to 30 seconds to process requests during peak hours
- Eliminated database outages due to system changes—such as updates for improved promotions—and reduced database usage by 40%, enabling database utilization for other purposes, such as administering data for the group's tour operators Travelplán and MK Travelplán, which meet tourism demands in Spain and North America
- Made it easier to roll out new promotions with Oracle Coherence's ability to make modifications while the cluster is in production mode, reducing time-to-market for new products and services from days to minutes
- Used Oracle Enterprise Manager Cloud Control's Grid Control feature with Oracle Management Pack for Oracle Coherence to manage and monitor the entire system—nine physical servers, with four dedicated to the company's proprietary hotel booking platform, that host 28 Oracle Coherence nodes for 30 gigabytes of live data—which has been configured with customized alerts to detect potential problems, such as low cache hit rates
- Used Oracle Database as the main source of information, with efficient data loading when a cluster needs to be initialized from scratch, as well as data synchronization to update information when the cluster is running
- Worked with Oracle Consulting to achieve a successful go-live within four months in June 2011, in time to deal with summer tourism

### Why Oracle

“We trust in Oracle for mission-critical systems and considered Oracle Coherence to be the best approach. The data grid, aligned with our strategy to move business logic from the database to the middleware tier, offers all the features that we need to meet our technical and business requirements. Oracle executed a 15-day, proof of concept that demonstrated Oracle Coherence's ability to meet and exceed our requirements,” said Vicente Guerola Molina, director, business development, Globalia Corporación Empresarial S.A.

**Oracle Customer:****Schneider National, Inc.**

Green Bay, Wisconsin

www.schneider.com

**Industry:**

Travel and Transportation

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

18,000

**Oracle Products & Services:**

- Oracle E-Business Suite Release 12.1.1
- Oracle Human Resources
- Oracle Incentive Compensation
- Oracle Learning Management
- Oracle Financials
- Oracle Purchasing
- Oracle iReceivables
- Oracle Order Management
- Oracle Order Management Integration Pack for Oracle Transportation Management, Oracle E-Business Suite, and Siebel CRM
- Oracle Transportation Management
- Oracle Business Intelligence Suite, Enterprise Edition
- Oracle Hyperion Financial Reporting
- Oracle WebCenter Content
- Oracle WebCenter Portal 11g
- Oracle WebCenter Capture
- Oracle Identity and Access Management Suite
- Oracle Identity Manager
- Oracle Identity Manager Connector
- Oracle SOA Suite 11
- Oracle BPEL Process Manager 11g
- Oracle Enterprise Service Bus

## Schneider National, Inc. Implements Next-Generation IT Infrastructure to Continue Leadership in Transportation and Logistics Industry

Schneider National, Inc., a leading provider of truckload, logistics, and intermodal services, serves more than two-thirds of the FORTUNE 500 companies. Its customers rely on Schneider National's transportation and logistics solutions to transport their products reliably, cost-effectively, and safely to markets in 28 countries.

**Challenges**

- Create a next-generation IT platform to efficiently and consistently manage the quote-to-cash process across the company's various business units and support long-term growth objectives
- Improve ability to provide drivers, customers, and business partners with convenient access to the information and services they need
- Improve back-office processes to support greater operational efficiency and profitability

**Solutions**

- Used Oracle applications, middleware, and development tools to create a next-generation IT platform to drive profitability, reduce costs across all divisions, and position Schneider for continued growth
- Leveraged Oracle SOA Suite to integrate Oracle E-Business Suite, Siebel CRM, Oracle Transportation Management, third-party, and custom applications
- Built 400 BPEL processes that generate over 60 million composite instances across five SOA clusters
- Leveraged Oracle B2B for EDI with over 900 trading partners
- Leveraged Oracle Data Integrator and Oracle SOA Suite to set up a shipment hub that provides real-time shipment data to enterprise applications handling more than 500,000 updates per day
- Enabled secure access to enterprise applications
- Implemented a centralized repository for digital content and documents that drives dynamic enterprise portals
- Enabled drivers to quickly update their benefits, view online training, and check their pay statements
- Provides customers and partners with convenient access to the information they need
- Enables more streamlined monitoring and management of software and hardware
- Enabled more consistent processes across functional areas, ranging from sales and operations to finance, improving order accuracy, profitability, on-time service, and payables management
- Reduced days for sales outstanding significantly

- Oracle Business Rules
- Oracle Business Activity Monitoring
- Oracle B2B for EDI
- Oracle Data Integrator
- Oracle Application Integration  
Architecture Foundation Pack
- Oracle Enterprise Manager
- Oracle Application Development  
Framework
- Oracle JRockit
- Oracle WebLogic Suite
- Oracle Coherence
- Oracle Database 11g
- Oracle Real Application Clusters 11g

### Why Oracle

One of Schneider's guiding principles for its enterprise transformation project, which it calls "Quest," was to use Oracle products wherever possible. Oracle's ability to deliver solutions from the operating system and core application server levels, all the way to the application layer was an important factor in Schneider's decision process. It also provided a common set of development tools and that simplified the IT environment and its management.

**Oracle Customer:****Pickles Auctions**

Sydney, Australia  
www.pickles.com.au

**Industry:**

Retail

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

600

**Oracle Products & Services:**

- Oracle BPEL Process Manager
- Oracle WebCenter Content
- Oracle WebLogic Suite
- Oracle CRM On Demand, Enterprise Edition

**Oracle Partner:****Intelligent Pathways**

www.intelligentpathways.com.au

**Rubicon Red**

www.intelligentpathways.com.au

## Pickles Auctions Processes up to 100,000 Web Transactions per Day, Achieves 99% Availability with Loosely-Coupled, Middleware Architecture

“We chose Oracle Fusion Middleware over other products because its best practice, open standards better met our long-term needs. The highly available middleware architecture and infrastructure ensures we can provide customers with a fast, reliable Website, and we update product, marketing, and sales information immediately, rather than waiting overnight.”

— **Harry McKenzie**, Chief Information Officer, Pickles Auctions

Pickles Auctions is Australia’s largest independent auctioneer. The family-run company manages 22 branches across the country and sells more than 250,000 lots each year, including motor vehicles, industrial goods, salvaged vehicles, household merchandise, computer equipment, and more. It sells on behalf of the Australian Government, state governments, insurance companies, fleet and lease companies, local councils, and the general public. Pickles Auctions has grown rapidly in the past 10 years and, in 2011, signed a deal with one of Australia’s largest vehicle manufacturers to sell cars to 250 dealers on its behalf.

Pickles Auctions needed to improve the stability and reliability of its main auction Website. The company implemented Oracle BPEL Process Manager and Oracle WebCenter Content, running on Oracle WebLogic Suite, to provide powerful, scalable, and highly available support. BPEL Process Manager also supports the new online marketplace, Pickles Plus. In addition, Pickles Auctions deployed Oracle CRM On Demand, Enterprise Edition to support a growing volume of customer records.

Oracle BPEL Process Manager integrates Pickles Auctions’ legacy system with its main Website. By decoupling the legacy IT system from the main Website, Oracle BPEL Process Manager ensures 99% availability for the site, and easily supports up to 100,000 auction-related transactions per day. The loosely coupled architecture enables IT staff members to maintain and develop back-end systems without affecting the performance and availability of the main site, and to flow updated product information to the Website immediately. Oracle WebCenter Content enables marketing staff to easily manage and update content for the main Website themselves.

### Growing Online Business Demands Powerful, Reliable IT Infrastructure

Pickles Auctions runs online and onsite auctions, and also offers products at a fixed price. The company operates two Websites. The main Website enables customers to register for onsite auctions and view lot descriptions, as well as take part in auctions without attending in person. It also holds the online auctions. The new PicklesPlus Website is an online marketplace for auctions and fixed-price clearance goods. It allows customers to buy a variety of consumer products in online auctions or at a Buy Now price.

As business grew, the main Website became increasingly unstable and unreliable. The site was intrinsically linked to the legacy auction system, which stored information about all the company’s stock. This caused further reliability problems, since if the IT system went down, the Website went down with it.

“We needed rock-solid middleware products that would help manage and support 200 million Website hits, 350,000 unique visitors, and around 1.4 TB of auction-related data every month,” said Harry McKenzie, chief information officer, Pickles Auctions. “We also needed to ensure the Website was scalable and reliable, to avoid a significant loss in revenue.”

### **Streamlined Integration Ensures Up-to-Date Auction Information**

Pickles Auctions has implemented Oracle BPEL Process Manager and Oracle WebCenter Content, running on a clustered Oracle WebLogic Suite. Oracle BPEL Process Manager mediates between the company’s legacy IT system and its main Website.

By pushing real-time updates about auctions and products from the legacy system to the main Website, Oracle BPEL Process Manager ensures product and auction information on the main Website is accurate, easily accessible, and always up to date.

“Information about all of our auction stock is entered into the legacy system and then propagated across to the main Website, using Oracle BPEL Process Manager,” said McKenzie. “Bids are taken from the Website, and customers can register to form a relationship with us or to attend an auction. All of this information is then transported back to the legacy system.

BPEL Process Manager also integrates between the online auction site, Pickles Plus, the company’s finance system, and third-party vendors.

“We also use Oracle BPEL Process Manager to interface with third-party vendors including motor vehicle manufacturers and lease companies,” added McKenzie. “This streamlines hundreds of transactions involving auction stock throughout the day. Oracle BPEL Process Manager standardized the way we communicate with vendors and increased our business efficiency, which has improved relationships with customers, stock suppliers, and third-party vendors.”

By using a loosely coupled, standards-based integration approach, Pickles Auctions also has the flexibility and agility to adapt to business changes, such as integration with new systems or new vendors.

### **Decoupling Website from Legacy System Provides 99% Availability**

By decoupling the main Website from the legacy IT system, the main Website is no longer encumbered by any issues in the legacy system. This has enabled Pickles Auctions to achieve 99% availability for the site.

“Separating the Website and the legacy system means the Website remains available even if the legacy system goes down,” said McKenzie. “We’ve only had two periods of unscheduled downtime in 18 months—neither of which were the fault of the Oracle infrastructure—compared to the site being unreliable in the past.”

Pickles Auctions can now easily process up to 100,000 auction-related transactions per day through Oracle BPEL Process Manager. Supported by the services-based middleware architecture and infrastructure, the main Website maintains the performance and reliability required to support up to 7,000 requests per minute during peak periods (such as before a highly anticipated auction), far more than would have been possible in the past.

The company can now maintain and develop the back-end system independently without affecting the performance or availability of the main Website.

“This is a major benefit, as it means we can focus on improving the supporting system without worrying about the Website and affecting a customer’s ability to view auction information,” said McKenzie.

“The robust performance and high availability mean our customers can confidently register for auctions and access online data about products,” he added. “By providing a reliable, up-to-date auction Website, we have improved customer satisfaction, maximized revenue, and enhanced market competitiveness.”

The clustered Oracle WebLogic Suite environment supports high availability and reliability through a robust platform for Oracle BPEL Process Manager and Oracle WebCenter Content. It also provides the scalability and reliability to meet the increase in Website transactions as the company grows. The recent upgrade to the clustered WebLogic Suite environment was part of a hardware upgrade, which improved overall system performance, stability, and availability.

### **Easier Content Management**

In the past, Pickles Auctions used a shareware product called InfoGlue as its content management system.

“It was very difficult to publish content using InfoGlue, especially during peak times when traffic would cause the main Website to slow down and occasionally fail, which was not ideal for our auction business,” said McKenzie. “We also relied on the IT team to publish content, which distracted them from core technical duties.”

The company now uses Oracle WebCenter Content to manage marketing campaigns and sales information. The productivity of marketing staff has improved, as they can now easily manage around 300 pages of data on a regular basis themselves, rather than relying on the IT department.

“In the past, marketing changes had to be completed overnight rather than during business hours, so the process didn’t affect the Website’s stability,” said McKenzie. “This meant it could take up to 12 hours for new marketing data to appear on the Website. By using Oracle WebCenter Content to put marketing staff in control of content management, changes made to auction and marketing data are reflected immediately, and we can ensure our customers are well informed.

“We’ve had no issues since we implemented Oracle WebCenter Content,” added McKenzie. “It’s a very good product.”

### Improved Customer Relationship Management

In 2011, after signing a contract with one of Australia’s largest vehicle manufacturers to sell cars to their dealer network, Pickles Auctions realized it needed to replace inefficient manual customer relationship management (CRM) processes. Previously, the company was using spreadsheets to record customer and dealer information. It needed a consolidated CRM system to meet its contractual obligations.

To support the growing number of customers, the company implemented Oracle CRM On Demand, Enterprise Edition. The system is used by 20 users across five departments and supports more than 10,000 customer records.

“Our staff members are finding it easier and more efficient to manage customer information now that we have an integrated CRM system,” said McKenzie. “Data is more accurate and up to date.

“The implementation was very successful—we had Oracle CRM On Demand, Enterprise Edition up and running in about a week,” he added. “The whole system has exceeded our expectations. Oracle CRM On Demand, Enterprise Edition has proved to be a very cost-effective, mature, and robust CRM solution.”

### Challenges

- Ensure the main auction Website remains highly available, even if there are problems with the legacy IT system
- Support 200 million Website hits, 350,000 unique visitors, and around 1.4 TB of auction-related data every month, and enable the Website to scale as the company grows
- Update auction and product data automatically between the Pickles Auctions System and the Website, while ensuring both can be managed separately
- Enable staff to publish marketing information at any time, rather than relying on the IT team
- Replace inefficient manual customer relationship management (CRM) processes with a new CRM system

### Solutions

- Achieved 99% availability for the main Website by loosely coupling it with the legacy system through Oracle BPEL Process Manager, supporting up to 100,000 auction-related transactions per day
- Enabled 20 users in five departments to maintain more than 10,000 customer records

- Ensured customers are well informed by updating sales and marketing data on the Website immediately by using Oracle WebCenter Content, instead of taking 12 hours to upload overnight
- Improved marketing staff productivity by enabling easily updating 300 pages of auction data, rather than relying on the IT department
- Enhanced relationships with suppliers and third-party vendors by using standards-based integration to ensure stock and product data is always accurate
- Protected revenue and enhanced market competitiveness by improving the Website's reliability, availability, and stability
- Reduced the number of customer complaints by ensuring easy registration and product and price information access before each auction
- Gained flexibility and agility to adapt to business changes, such as by integrating with new systems or new vendors
- Improved system availability, reliability, stability, and performance by migrating Oracle WebLogic Suite into a clustered environment, which will also support anticipated business growth in the future
- Managed customer information more efficiently by replacing manual CRM processes with a consolidated online system

### **Why Oracle**

Pickles Auctions considered products from several IT vendors, but chose Oracle Fusion Middleware because its best practice, open standards better met the company's long-term needs.

"We wanted a robust, highly available infrastructure to improve system reliability, stability, and performance," said McKenzie. "We could see that by significantly improving the integration between our legacy auction system and the main Website, the Oracle middleware products would fully support our requirements."

### **Implementation Process**

Pickles Auctions began upgrading its main Website in early 2010. The company implemented Oracle BPEL Process Manager and Oracle WebCenter Content deployed on Oracle WebLogic Suite, as part of the Website upgrade. The new Website went live in August 2011.

In February 2013, Pickles Auctions upgraded Oracle WebLogic Suite to run in a highly available clustered environment to improve the availability and reliability of Oracle BPEL Process Manager.

**Partner**

Pickles Auctions engaged Oracle Specialized Partner Intelligent Pathways to help with the Oracle WebLogic Suite clustering. The company also worked with Oracle Specialized Partner Rubicon Red to address a specific integration requirement using Oracle BPEL Process Manager.

“Both partners were very good,” said McKenzie. “They met all our needs and were always responsive and helpful.”

**Oracle Customer:****ec4u expert consulting AG**

Karlsruhe, Germany

www.ec4u.de

**Industry:**

Professional Services

**Annual Revenue:**

Under \$100 Million

**Employees:**

170

**Oracle Products & Services:**

- Oracle Fusion Marketing
- Siebel Customer Relationship Management 8.1
- Oracle SOA Suite 11g

## ec4u expert consulting AG Increases Marketing Campaigns by 30%

“Oracle Sales Cloud enabled us to consolidate various data repositories into a single source of truth, which optimized sales and marketing and reduced the total cost of ownership. The expertise gained from this in-house implementation is giving us a competitive edge in customer interactions, and empowering us to offer innovative and high-quality products, services, and solutions.”

— **Gregor Bublitz**, Director Expert Services & Fusion CRM, ec4u expert consulting

ec4u expert consulting, founded in 2000, is a leading provider of customer relationship management (CRM), business intelligence (BI), and integration software and services for midsize enterprises, across industries. The company enables customers to successfully establish competitive and sustainable CRM strategies and processes to get a step ahead of the competition. ec4u employs practice-proven approaches founded on technical, methodological, and industry-specific expertise gained from successful implementation of more than 200 CRM projects.

**Challenges**

- Optimize efficiency of marketing campaigns targeted at selling CRM, BI, and system-integration services by eliminating multiple data sources, thus avoiding negative impact of disparate data on IT resources and employee performance
- Consolidate disparate marketing campaign systems to increase the number of successfully executed marketing campaigns without adding staff or IT resources
- Shorten sales cycle for IT services and drive revenue by enabling marketing and sales teams to optimize lead management across the DACH (Germany-Austria-Switzerland) region and increase lead conversion rates
- Gain the expertise to deliver successful Oracle Cloud implementations as standalones, upgrades, or with other applications

**Solutions**

- Deployed Oracle Sales Cloud to consolidate data sources for marketing campaigns, increasing the number of CRM, BI, and system integration marketing campaigns by 30%
- Used Oracle SOA Suite 11g to seamlessly load customer data from Siebel Customer Relationship Management 8.1, which is the company’s main CRM tool, to Oracle Sales Cloud for executing successful marketing campaigns without increasing budgets
- Ensured better data quality with Oracle Marketing Cloud’s ability to automatically store and track data in a common repository, increasing employee productivity by eliminating data consolidation efforts
- Reduced the costs of running marketing campaigns by requiring fewer staff resources and less software maintenance while optimizing campaign accuracy
- Empowered marketers to sell more CRM, BI, and system integration services by leveraging best-in-class marketing and lead generation capabilities, which enabled them to measure the outcome of individual campaigns, marketing impact, and contribution to overall revenue

- Enabled sales teams to increase lead conversion rates for IT services by using Oracle Marketing Cloud's segmentation engine that provides robust lead management and predictive lead recommendations
- Increased the quality of sales and marketing data with Oracle Marketing Cloud's built-in features, such as de duplication, address validation, and phone and e-mail format validation
- Improved the company's consultancy expertise by mapping and visualizing end-to-end business processes of ec4u customers with Oracle Sales Cloud, including integration in back-end systems, and preparing for future migrations of customer systems to Oracle Fusion Applications
- Participated in Oracle's Early Adopters Program to help the company's consultants identify the issues a customer might experience with Oracle Sales Cloud, and provide faster issue resolution, leading to increased customer satisfaction

### Why Oracle

ec4u expert consulting was one of the first Oracle Sales Cloud users worldwide, and it is part of the Oracle PartnerNetwork systems' integration partners that were hand picked to work with Oracle Fusion Applications. For more than a year, ec4u participated in product design reviews, hands-on product testing, validation of user interfaces, and one-to-one engagements with Oracle Product Development.

"Oracle Fusion Applications offer a complete set of deployment options—from on-premise deployments to private clouds, public clouds, and business process outsourcing, or combinations of these. Being part of Oracle Early Adopters Program enabled us to get direct, hands-on access to the next-generation Fusion Applications before general availability. Building this kind of expertise gives us a huge advantage in a highly competitive market for CRM solutions," said Gregor Bublitz, director expert services and Fusion CRM, ec4u expert consulting AG.

**Oracle Customer:****Entity Solutions**

Melbourne, Australia

[www.entitysolutions.com.au](http://www.entitysolutions.com.au)**Industry:**

Professional Services

**Annual Revenue:**

\$100 to \$500 Million

**Employees:**

82

**Oracle Products & Services:**

- Oracle WebCenter Portal
- Oracle WebCenter Content
- Oracle Application Development Framework
- Oracle SOA Suite

**Oracle Partner:****LogicalTech**[www.logicaltech.com.au](http://www.logicaltech.com.au)

## Entity Solutions Gains Competitive Advantages, Saves 100 Work Hours per Week, Processes Contracts 100% Faster, and Improves Customer Experience

"We chose Oracle WebCenter Portal over products from other vendors, such as Microsoft, for Oracle's superior security, simple architecture, and integrated technology stack that costs less and delivers more than competitors' offerings. By automating our human resource processes, we saved 100 work hours per week, accelerated contract processing by 100%, improved our customer experience, and delivered service excellence."

— **Jonathan Knowles**, Executive Director, Technology & Innovation, Entity Solutions

Entity Solutions is one of Australia's leading workforce management service organizations. The company provides holistic engagement, management, and value-added services for white collar contractors (also referred to as independent professionals and independent contractors) and the organizations employing them. It also offers migration, back office, business establishment, and management services.

It serves more than 400 corporate organizations, recruitment agencies, and more than 2,500 independent contractors.

Entity Solutions' core, brand value and competitor differentiator is service excellence. To continue to lead its competitors in delivering advanced workforce solutions, it strives to provide individualized and streamlined core support services. Entity Solutions decided to automate its human resources (HR) capabilities to support individual independent contractors and meet corporate expectations for secure, online workforce management. It also wanted to improve its customer experience and operating efficiency by consolidating in-house administrative functions and adopting online processes.

By implementing Oracle WebCenter Portal, Oracle WebCenter Content, Oracle Application Development Framework, and Oracle SOA Suite, Entity Solutions delivered a customized online portal to transact, communicate, and share information easily and quickly with its customers. It saved 100 work hours per week by automating manual HR processes, accelerated contract processing and new employee induction time by 100%, reduced paper and printing costs by 30%, improved the user experience, delivered better services, and maintained its leadership position and competitive advantage in the recruitment and contractor services markets.

### Establishes Entity Online, Engages 90% Customers in 12 Months

Entity Solutions implemented Oracle WebCenter Portal to provide an online portal called Entity Online for its corporate customers and independent contractors. The new portal delivers a scalable, efficient, and user-friendly service that enables corporate clients and independent contractors to communicate and transact through an online channel, rather than over the phone, by fax, or in person. The portal also provides intuitive online management capabilities and improves user experience and services provided to both client groups.

For example, customers can download a blank timesheet and fill out the details, such as work hours or allowances, and upload the timesheet through the portal. The customer can also update or change details online, such as new pay rates or effective dates. The updated information is validated through the portal and then transferred into Entity's back-office systems for payroll processing.

In the first 12 months following deployment, 90% of customers—2,000 individuals—signed onto the portal, and actively used its functionality. Entity Solutions also implemented Oracle SOA Suite to seamlessly integrate the portal with several back-office systems such as customer relationship management (CRM), payroll, and invoicing, and enable real time update of the information in the systems. It significantly improved workflow management, data integrity, and operating efficiency.

“As a leader in professional contracting services, we want our workforce solutions to be the best, the easiest to use, and the most time efficient and user-friendly for our customers,” said Jonathan Knowles, executive director, Entity Solutions. “Through Oracle WebCenter functionality, we now have a superior online portal that helps us attract and retain high quality professionals.”

#### **Improves Business Efficiency and Reduces Costs**

Through the Entity Online portal, Entity Solutions automated several previously manual HR processes, such as new contract execution, pay slip distribution, contract extension, and expense claims. It enabled Entity Solutions to streamline communication processes, improve business efficiency and customer service, and reduce costs.

“Our clients can choose to receive broadcast messages via e-mail or SMS,” said Knowles. “For example, independent contractors receive an automated message about successful payroll delivery when we finish our pay run. Entity Online enables us to track processing and delivery of these services, and provides better services to corporate customers and independent contractors.

“Bringing new independent contractors onboard is also much quicker and costs less. We have improved the contract and induction processes by 100% by bringing it online. While we have had strong growth over last 18 months, we haven't needed to increase staff. In fact, we automated most of our administrative workload, so we have been able to lower our headcount by consolidating five administrative branches into one national operations team.”

#### **Reduces Paper and Printing Costs by 30%**

Entity Solutions has moved core business processes online and makes all forms, internal policies and tax information and regulations available on the portal. As a result, the company has cut printing and paper costs by 30% and reduced its environmental footprint.

“Instead of printing contracts, putting them in the mail, manually tracking them, and waiting for them to be returned, we simply upload them into the online portal. We track contract progress online, and engage with the contractor if necessary. When the contract is executed, it is uploaded and stored online,” Knowles said.

### **Gains Secure Corporate Portal and Delivers More Accurate Reports**

Entity Solutions can now provide up-to-date and accurate reports for its corporate customers through dashboard functionality, and meet growing demand from corporate customers for a secure, online reporting channel.

Twelve corporate clients have adopted the Entity Online portal, enabling them to generate reports and integrate these into their own systems. For example, clients can see the summary report for individual payments made independent contractors or to staff managed by Entity Solutions through the reporting dashboard.

Oracle WebCenter Portal’s advanced security functionality also enabled Entity Solutions to gain a competitive advantage in winning new business, by withstanding vigorous external IT assessment and scrutiny.

“We can now show our customers, especially tier-one corporate clients, that our data is secure, particularly as it is sent over a secure portal. They can confidently use the system for planning and budgeting, and gain a holistic view of their workforce. It’s a significant win for us and something we promote within tenders to attract large-scale corporate customers,” Knowles said.

### **Gains Complete Content Management Capabilities, Improves Staff Productivity**

Entity Solutions also implemented Oracle WebCenter Content to store and publish documents, policies, and procedures that are relevant to the services provided to its customers. It delivers the content, such as contractor hiring policies, securely to Entity Online and enables the company to publish the content any time.

All 82 Entity Solutions staff can now easily access and manage the content in the portal through internal workspaces, improving the speed to complete tasks and update information, such as publishing a hiring policy update.

“Staff members have an Oracle WebCenter Portal Workspace screen—called Zeus—on their desktop, and it provides online workflows and user-friendly interface functionality, enabling our staff members to manage the content without IT assistance. We are already seeing significant business advances, especially in reducing overheads and streamlining processes,” Knowles said.

“We have a lot of technical processes, so automated workflows reduce the time for new employees to come up to speed, and to ensure process integrity. The simplicity and intuitiveness of the automated workflows has dramatically improved staff efficiency.”

### Saves 100 Hours Administrative Work per Week

Entity Solutions used Oracle Application Development Framework to implement 40 to 50 task flows, which present as wizard-like applications and guide customers through the online sign-up process and ensure that they input data and perform updates correctly.

For example, Entity Solutions used an automated on-boarding task flow to guide users on how to enter and update information online, such as contract and address details, emergency contacts, visa approvals, banking details, retirement fund contributions. More than 4,000 users use this task flow annually, saving the company 100 hours a week in general administrative tasks, while improving data accuracy.

“We no longer need to provide a helpline, as we have a system that allows users to intuitively and quickly complete the onboarding process. The functionality and the speed to deliver new capabilities to the portal saves in operating costs.” Knowles said.

### Challenges

- Implement an online portal to provide a secure and technologically advanced workforce management solution for corporate customers and individual contractors, delivering the brand promise of providing service excellence
- Automate HR processes for online contract execution and new employee induction program into the company to improve operating efficiency and reduce costs
- Improve productivity by enabling staff to easily access and manage content, such as workforce policies and procedures documents
- Provide more accurate and up-to-date workforce report and integrate data into corporate customers' systems to improve contractor management and provide a holistic view of workforce

### Solutions

- Accelerated contract processing and new employee induction program delivery times by 100%, by implementing a single, online HR portal for corporate and contractor customers, improving operating efficiency and reducing costs
- Achieved 90% contractor engagement in 12 months by providing a scalable, efficient, and user-friendly online portal for independent contractors to manage and update HR information, such as pay rates and timesheets—enhancing customer experience
- Saved 100 hours per week in administrative time by using Oracle Application Development Framework's task flow functionality to guide customers and staff through online processes, such as new contract execution and contract extension
- Slashed paper and printing costs by 30% by using online services for uploading contracts and tracking progress—reducing environmental footprint

- Consolidated administrative functions from five branches to one national office by implementing Oracle WebCenter Portal—reducing headcount costs
- Gained corporate customers' confidence by using dashboard functionality to provide more accurate workforce reports and integrating them securely into their corporate systems, increasing new business from large corporate customers
- Enabled all staff to easily access and manage content such as contractor hiring policies without IT assistance by using Oracle WebCenter Content's workflows and user-friendly interface functionality, improving staff efficiency and reducing overheads
- Ensured seamless integration with back-office systems, such as CRM, finance, payroll, and invoicing by using Oracle SOA Suite, improving workflow management and data integrity

### Why Oracle

Entity Solutions' selected Oracle WebCenter Portal, for its integrated technology stack, superior security, simple architecture, and competitive price point.

"We met with six suppliers, including Microsoft, and found Oracle's solutions checked more boxes than its competitors. We selected Oracle WebCenter Portal as it offered superior security, a simple architecture, and an integrated technology stack that costs less and delivers more than competitor offerings," Knowles said.

### Implementation Process

The implementation process began in April 2011, with a single business unit pilot focused on back office administrative and payroll support. Oracle WebCenter Portal has been in production since mid-2011. The company extends the deployment every three months and consistently gains new functionality and competitive advantage.

Entity Solutions deployed its internal site in January 2013 and the external corporate portal, Entity Online, followed in February 2013.

### Partner

Entity Solutions engaged Oracle partner LogicalTech in an advisory capacity during the product evaluation and selection process. LogicalTech worked with Entity Solutions for more than 18 months, providing technical support and resources, including architectural expertise.

"Of all the suppliers we considered, LogicalTech was the most dedicated to understanding our business and developing the Oracle business case. The team understood our business challenges and clearly articulated how Oracle WebCenter Portal could address them," Knowles said.

"LogicalTech provided a great deal of support and guidance, and delivered a successful deployment. It is now assisting with skill transfer to ensure that we can continue to build our internal expertise."

**Oracle Customer:****Engineers Australia**

Canberra, Australia

[www.engineersaustralia.org.au](http://www.engineersaustralia.org.au)**Industry:**

Professional Services

**Annual Revenue:**

Under \$100 Million

**Employees:**

170

**Oracle Products & Services:**

- Oracle Business Process Management Suite 11g
- Oracle SOA Suite 11g
- Oracle WebLogic Suite 11g
- Oracle WebCenter Content 11g
- Oracle Business Intelligence Publisher 11g
- Oracle Database 11g
- Oracle E-Business Suite Release 12.1
- Sun ZFS Storage 7120
- Sun Blade 6000
- Oracle VM

**Oracle Partner:****Red Rock Consulting**[www.redrock.net.au](http://www.redrock.net.au)

## Engineers Australia Improves and Automates Business Processes and Completes Engineer Enrollments up to 90% Faster with Middleware Platform

“Oracle offered a more comprehensive, cost-effective, and long-term solution than other vendors. By implementing Oracle Business Process Management Suite 11g and Oracle SOA Suite 11g, we have redefined business processes, ensured seamless integration for our eChartered system. We’ve cut the time to complete engineers’ enrollments by up to 90% by moving from paper-based to online processes.”

— **Richard Holmes**, Management Information System (MIS) Renewal Program Manager, Engineers Australia

Established in 1919, Engineers Australia is the national forum in Australia to advance engineering and the professional development of its members. With more than 100,000 members, spanning all engineering disciplines, Engineers Australia is the largest and most diverse professional body for engineers in Australia. The organization offers its Australian and international members a range of services and seeks to advance the science and practice of engineering, cultivate lifelong learning by its members, promote the contribution of the profession as widely as possible, champion professional and ethical conduct, and take the lead in advocacy of the profession.

Engineers Australia needed to replace its aging legacy IT infrastructure, redefine its business processes, and develop new online and customer relationship management (CRM) functions to improve the services it provides to engineers.

The organization’s system, which it calls eChartered, went live in November 2012. It provides new online self-service capabilities that improves the user experience for Engineers Australia members and replaces many cumbersome manual processes. In 2012, the organization implemented Oracle Business Process Management Suite 11g and Oracle SOA Suite 11g, running on Oracle WebLogic Suite 11g, to support the development of its eChartered system.

Engineers Australia moved from paper-based to online processes, improved monitoring, management, and visibility of its chartered engineer processes, and ensured seamless integration for eChartered, thereby reducing the time and effort required to manage members’ enrollments, assessments, and registrations. It now completes the enrollment processes 90% faster, while staff can generate assessment reports in seconds rather than taking 45 minutes, as was the case previously. The organization also has cut the time to develop new system modules by three to four weeks.

### Business Transformation Requires New IT Infrastructure

As the country’s largest and most diverse professional body for engineers, it is vital that Engineers Australia monitors and manages its engineers’ enrollment, registration, renewal, and training as efficiently and cost-effectively as possible. In 2009, the company began to evaluate its legacy IT platform with an eye toward improving the quality and efficiency of its membership enrollment and chartered status certification program. It also wanted to ensure that the fee for a chartered assessment is cost neutral for the organization.

Engineers Australia was managing an aging application system that a small IT vendor developed specifically for the organization. The system's functionality was clunky and outdated, and many processes—such as recording engineers' enrollments and assessing their competency and training submissions—were managed manually. The legacy system was not designed to be an interface that engineers used to complete chartered assessments. Rather, it was designed for administrative staff to track and record key milestones, such as Engineers Australia membership, chartered status, and revenue streams for chartered status.

External consultants reviewed Engineers Australia's legacy application systems and IT infrastructure. They identified a number of issues, including a lack of support for end-of-life products, insufficient functionality for engineers engaging with the organization through the internet, and the high cost and effort of maintaining and developing new services for the specialized infrastructure. The consultants recommended that Engineers Australia enhance the services it offers to engineers by re-engineering its business processes, moving its membership accounting processes from the legacy system onto Oracle E-Business Suite, and incorporating CRM functionality.

In 2010, Engineers Australia launched a management information system (MIS) renewal program to improve the value of the member experience by re-engineering its main business processes and encapsulating them in new applications.

“We wanted to develop better web-based, self-service processes for our engineers,” said Richard Holmes, MIS renewal program manager, Engineers Australia. “We needed to replace the legacy system with commercial, off-the-shelf (COTS) applications and powerful middleware products to cut the cost and effort of IT development and maintenance and ensure seamless system integration.”

### **Supporting the eChartered Project**

Engineers Australia divided its MIS renewal program into several development projects. The organization first addressed its chartered status certification program by creating eChartered, a system that implements the chartered assessment process in accordance with the MIS renewal program architecture.

To become chartered, an engineer must enroll with Engineers Australia and submit up to 18 written documents demonstrating competency in various engineering disciplines. Engineers Australia sends the competency documents to independent assessors, then it confirms with the engineer whether the competency reports have been approved or further work is required.

During the eChartered project, Engineers Australia implemented Oracle BPM Suite, Oracle SOA Suite, and Oracle WebCenter Content. It used Oracle WebLogic Suite's highly available infrastructure to replace the legacy system with automated and web-based procedures.

Engineers Australia also used Oracle BPM Suite to redesign and standardize processes involved in achieving chartered status.

The middleware product removes manual work, improves staff members' control over and visibility into enrollment, approval, and registration processes, and streamlines processes.

Engineers Australia also used Oracle SOA Suite's loosely coupled, services-based architecture to integrate with different systems and applications, including Oracle E-Business Suite Release 12.1, Oracle WebCenter Content, Oracle Business Intelligence Publisher, and a third-party content management System for the web user interface. In addition, the organization implemented a data feed to Salesforce.com's cloud-based CRM software.

The Oracle-based solution's hardware includes Oracle's Sun ZFS Storage 7120 appliance, six Sun Blade X6270 servers, a Sun Blade 6000 chassis, and Oracle VM.

"By consolidating with a primary vendor for hardware, middleware, and applications, we have a partner we can rely on for strategic advice and technical support," Holmes said. "It's good to work with a vendor who understands our business and can help us achieve our goals."

### **Completing Enrollments up to 90% Faster**

Engineers Australia has saved staff and engineers a significant amount of time and effort by automating manual tasks, such as processing engineer enrollment forms.

"For example, in the past it took engineers up to 30 minutes to print and complete a paper enrollment form, then mail, e-mail, or even deliver it by hand," Holmes said. "Once we received the form, it would take up to 20 minutes to manually re-enter the data in the legacy system. Now, an engineer can enter information online in less than five minutes, and it immediately flows from the website into the corporate database via Oracle BPM Suite without manual intervention. It also ensures forms aren't held up in the post."

By more efficiently managing and monitoring chartered engineer processes—and integrating to back-end applications such as Oracle E-Business Suite Release 12.1—Engineers Australia has significantly improved staff workflow and the services it provides to engineers.

"We've completely redefined our processes, based upon the needs of staff and engineers and implemented these on Oracle BPM Suite," Holmes said. "This ensures processes are carried out correctly and consistently and do not progress to the next step before previous stages are completed."

### **Minimized Time Required for Assessments**

The new eChartered system also reduced the time to submit and approve engineers' competency documents. Previously, engineers had to print and mail or e-mail their completed competency documents to Engineers Australia staff for approval—a process that could take up to 20 minutes. Engineers Australia staff would then mail the submitted document to an assessor. Once finished, the assessor had to mail an approval or a request for additional information from the engineer.

Depending on the assessor and the postal system, this process could take weeks.

Now, engineers can submit their competency documents online in just a few minutes. An assessor can log in to the system, immediately see a list of competency documents that need approval, and select and assess a document online. Once they are finished, Oracle BPM Suite registers that this part of the process is complete.

“The process is now so much faster that we can ask two assessors, rather than just one, to check each competency document, minimizing the risk of assessment errors and ensuring that we provide engineers with the best possible service,” Holmes said.

### **Visibility of Long-Running Chartered Processes**

Depending on the engineer’s experience, chartered status can take up to six years. Oracle BPM Suite supports this long assessment time by enabling Engineers Australia to design several different checkpoints and human workflow interactions throughout the qualification process. For example, the organization can determine whether an assessor can review the competency document, or if the engineer needs to send more information.

“We now have visibility into the entire competency assessment process, no matter what stage an engineer is at,” Holmes said. “This ensures that we don’t have to spend time checking engineers’ details and can help them on the next stage of their qualification journey.”

### **Completing Reports 45 Minutes Faster, Reducing IT Costs**

Engineers Australia can now ask an engineer’s employer to approve a sponsorship payment by logging into eChartered for a formal online approval. The engineer also can seek online verification from a senior engineer regarding the competency document by eChartered e-mailing a link to the senior engineer to the website to view and confirm the submitted details. This would not have been possible previously, as it was too time-consuming to send, follow up, and receive documents by e-mail or mail, and then enter the relevant data into the legacy system. Now, verification is received online and the process immediately registers as complete in eChartered.

“Once the assessments and verifications are complete, Oracle BPM Suite automatically requests a report from Oracle Business Intelligence Publisher, confirming competency or providing details about why competency has not been granted,” Holmes said. “Previously, it would have taken staff up to 45 minutes to create a report manually—especially if approval wasn’t granted—and send it to the engineer. Now, the details populate automatically in a standardized report and are e-mailed to the engineer straight away.”

As soon as an engineer is notified that competencies are adequate, they can return to the website and apply for a final professional interview required to be a chartered engineer.

Oracle BPM Suite is also integrated with Oracle WebCenter Content, enabling Engineers Australia to store documents associated with competency assessments, such as engineers' resumes and statutory declarations, in a central repository. This eliminates manual collation and ensures vital documents are not lost.

"We no longer have to print and file the engineers' documentation, and can ensure the documents are accurate and up to date," Holmes said. "Automated online processes also eliminate risking data entry errors and ensure Engineers Australia presents a professional image by using standardized templates for reports and forms. We have also saved approximately US\$20,000 per year on paper and postal costs."

The organization anticipates it will further reduce staff and administration overhead costs as it continues to minimize manual tasks.

#### **Streamlined Credit Card Payment Processes**

Engineers Australia is using Oracle SOA Suite to integrate Oracle E-Business Suite Release 12.1 with the eChartered website, saving engineers and accounting staff significant time when processing credit card payments for enrollment, assessment, and professional interview fees and further minimizing the risk of human error.

Previously, an engineer would call, e-mail, or submit card details on paper forms for processing, which staff would manually enter into the legacy system. Now, submit payment approvals through the payment gateway. The invoice and payment receipt feed straight into Oracle Financials without manual intervention. This is faster and more secure than manual processing.

"Oracle SOA Suite's loosely coupled architecture also ensures we can continue to provide efficient services to our engineers and members by enabling the website credit card payment system to remain active even if there is a problem with the back-end applications," said Holmes.

#### **Accelerating Module Development Time by Three or Four Weeks**

Using Oracle BPM Suite and Oracle SOA Suite significantly reduced the time to develop new services for engineers. By reusing portions of code developed for eChartered's pricing, the organization cut the time to develop similar pricing for its second project, eRenewals, by several weeks.

"It would have taken a month or two to develop pricing from scratch, but by developing reusable pricing processes and functions, we only have to spend a couple of weeks developing the module components specific to each project," Holmes said. "Reusing the same generic functionality for each project will save us significant IT administration, maintenance, development, and testing costs."

Oracle BPM Suite has also made each process more visible to administration and call center staff, enabling them to provide a better service to engineers.

“Now, if an engineer calls to find out how their enrollment or approval process is going, call center staff can easily login to the system and provide that information,” Holmes said. “In the past, they had to ask an IT technician to access that information before calling the engineer back.”

Engineers Australia can easily create virtual servers for the development and test environments using Oracle VM. This ensures the organization has resources and environments to efficiently develop and test new features or services throughout the software development lifecycle.

### Challenges

- Replace commercial, off-the-shelf products for an aging application system developed by a small IT vendor to reduce the time and costs for IT development and maintenance
- Avoid costs for supporting end-of-life products and maintaining and developing new services for a specialized infrastructure
- Improve services to engineers and existing members by redefining business processes and providing online support, rather than relying on manual processes
- Enhance visibility into membership services for administration and call center staff

### Solutions

- Cut time required for enrollment from up to 30 minutes to less than 5 minutes with online rather than mailed enrollment forms
- Saved administration staff up to 20 minutes to process each engineer’s enrollment, by eliminating human error and the need for manual intervention
- Submitted engineering competencies to assessors in a few minutes online, rather than taking more than 20 minutes to post, e-mail, or deliver paperwork by hand
- Enabled engineers to receive e-mail notifications of approvals immediately, rather than taking weeks by post
- Minimized risk of assessment errors and time to approve competencies, by enabling two assessors to check documents online rather than one working from hard copy
- Delivered assessment reports to engineers in a few seconds, rather than 45 minutes, using Oracle BI Publisher to generate reports of approvals or details of why approvals were not granted
- Cut US\$20,000 on paper and postal costs by eliminating printing and posting letters and assessment reports
- Used a loosely coupled SOA-based architecture to integrate with Oracle E-Business Suite and Salesforce.com’s cloud-based CRM software, ensuring the online credit card payment function remains active even if there is a problem

- Reduced time to develop pricing by three to four weeks, by reusing processes, services and code from the eChartered project
- Ensured the chartered engineers process is transparent and managed efficiently throughout the six years that it can take for an engineer to achieve chartered status through Oracle BPM Suite
- Ensured important documents, such as engineers' resumes, photos, and statutory declarations are managed efficiently by implementing Oracle WebCenter Content
- Enhanced members' satisfaction by enabling call center staff to see the progress of an enrollment or assessment during a call, rather than relying on the IT team

### Why Oracle

Engineers Australia wanted to implement best-in-class COTS products and a powerful middleware platform to support its MIS renewal program and develop its new eChartered system.

The organization assessed two top-tier middleware vendors. As an existing Oracle customer, Engineers Australia already had confidence in Oracle's products. After assessing the other products and reading several product-related reports from technology research firm Gartner, the organization decided Oracle offered the highest performing and most cost-effective solution.

"The Gartner reports made it clear that it was important to work with a primary vendor that had an end-to-end solution—hardware, middleware, and applications—for ease of integration, cost-effectiveness, and support," Holmes said. "We kept this in mind when evaluating solutions, and it was a key reason in our decision to choose Oracle."

"Once we engaged with Oracle, it quickly became our preferred vendor. Oracle offered a more comprehensive product footprint and we were very impressed by the extensive toolset in Oracle BPM Suite. We were also confident Oracle offered the best solution in terms of product development to support our long-term plans," Holmes said.

### Implementation Process

Engineers Australia began installing Oracle BPM Suite, Oracle SOA Suite, and Oracle WebLogic Suite in September 2011. The organization also extended its licensing agreement for Oracle Business Intelligence Publisher, Oracle WebCenter Content, and Oracle Database .

Engineers Australia upgraded to Oracle E-Business Suite Release 12.1, including Oracle Financials, in January 2012. It went live with the new eChartered system supported by Oracle BPM Suite, Oracle SOA Suite, and Oracle WebLogic Suite in November 2012.

Engineers Australia has begun its second project, eRenewals, and will use Oracle BPM Suite and Oracle SOA Suite to develop new processes for its membership and migration skills assessment services.

**Partner**

Engineers Australia engaged Oracle Platinum Partner Red Rock Consulting to implement the Oracle Fusion Middleware products and upgrade Oracle E-Business Suite.

“Red Rock helped us implement the products and build the additional functionality and integration required for the eChartered system,” Holmes said. “Red Rock played a major role in the Oracle E-Business Suite implementation. We grew together as a team as we worked on the middleware, and, as a result, it was a very positive experience.”

**Oracle Customer:****Dubai World**

Dubai, United Arab Emirates  
www.dubaiworld.ae

**Industry:**

Professional Services

**Employees:**

7,000

**Oracle Products & Services:**

- Oracle Access Manager
- Oracle Application Server Single Sign-On
- Oracle Active Data Guard
- Oracle BPEL Process Analytics
- Oracle BPEL Process Manager
- Oracle Database, Enterprise Edition
- Oracle Discoverer
- Oracle E-Business Suite Release 12
- Oracle Linux
- Oracle VM 3.1
- Oracle Premier Support

## Dubai World Gains Business Agility, Mitigates Risks, and Reduces Costs with Eco-Friendly, Semi-Virtual Data Centers

“It costs less to migrate to a new system than to maintain end-of-life hardware. Upgrading our Oracle stack on commodity servers using Oracle VM and Oracle Linux provided us with a cost-effective infrastructure that will increase productivity, mitigate risks, and reduce total cost of ownership. And remarkably, we did the entire upgrade and migration without interrupting business at any time or making changes to existing setups and configurations.”

— **Premjit Nair**, Principal Infrastructure Architect, Dubai World

Dubai World is the investment holding company of the Government of Dubai, a key contributor to the economic future of the Emirate of Dubai. The company focuses on strategic growth areas, such as industrial parks and special economic zones, dry dock shipyards and marine terminal operations, urban development projects, and diversified investments.

**Challenges**

- Reduce floor space, power consumption, and cooling requirements and introduce site-level switching capabilities for selected applications—a key requirement, as some important projects had to be postponed due to insufficient data center space and system capacities
- Reduce high support costs for out-of-warranty PA-RISC/EPIC-based HP systems, distributed across two geographically separated data centers by establishing an eco-friendly setup, based on commodity servers
- Establish cost-effective hosting with the capacity for new business projects in Dubai World’s data centers to support the creation of industrial parks and special economic zones, without exceeding the 10 racks already installed or increasing the data centers’ operational costs
- Leverage superior functionality from Dubai World’s Oracle software stack and ensure continued support level for business-critical applications by upgrading to Oracle E-Business Suite Release 12 and Oracle Database, Enterprise Edition 11g

**Solutions**

- Upgraded three instances of Oracle E-Business Suite Release 12—including the associated Oracle Database, Enterprise Edition; Oracle Discoverer; and Oracle Access Manager infrastructure—on Intel-based commodity servers, distributed across two sites, without affecting the existing setup
- Reduced hardware footprint, total cost of ownership, and risks by migrating approximately 100 PA-RISC/EPIC-based HP servers to 70 Intel-based commodity servers running Oracle Enterprise Linux—of which around 45 are virtual servers on Oracle VM
- Ensured much better performance and massive scalability by upgrading to an Oracle-certified software infrastructure with Oracle Premier Support
- Used Oracle Data Guard to optimize disaster recovery and ensure high availability for applications that monitor the emirate’s investments in industrial parks, marine terminal operations, and urban development projects

- Established eco-friendly data centers equipped with Intel-based commodity servers running on Oracle Linux and Oracle VM 3.1, occupying only one rack in each data center instead of the previous 10 racks—which reduces power consumption and cooling requirements by an estimated 50% and releases floor space and power capacity for other business projects without new investments
- Used the latest out-of-the-box performance and security features available in Oracle E-Business Suite Release 12 to avoid the need for customizations, such as for general ledger reconciliation reports, which took significant time and budget to build and maintain
- Added several processor cores to the infrastructure without increasing Oracle licensing costs, as Intel multicore processors come with an Oracle licensing processor factor of 0.5 instead of the Oracle licensing processor factor of 0.75, which is applied to older RISC/EPIC-based processors
- Eliminated customizations that addressed issues cited in previous audit reports with expanded Oracle E-Business Suite Release 12 functionality, such as export of Extensible Markup Language reports from Oracle EBS to Microsoft Excel or portable document format
- Ensured, with a reasonable investment, that Dubai World's hardware and software infrastructure is on the latest technology and fully supported for the next three years, with a lower total cost of ownership than the previous HP-based solution and with substantially fewer risks

#### **Why Oracle**

“We adopted Oracle Linux and Oracle’s virtualization solution as a strategic choice to achieve the vision of bringing our applications, databases, operating systems, and virtualization technologies onto a proven and certified technology stack to enhance Dubai World’s operational excellence,” said Tareq Lootah, head of solution delivery and architecture, Dubai World. “The upgrades of our basic Oracle applications enabled us to deploy cost-effective Intel X86 servers and ensure stable margins.”

“Our migration to Oracle Linux and Oracle VM on Intel X86 platforms brought performance improvements and financial gains. It also ensured excellent support from a single vendor for quicker issue resolutions. We were able to increase the number of processor cores to meet additional processing power requirements without incurring more license costs,” said Srinivas Kalyan, senior infrastructure architect, Dubai World.

**Oracle Customer:****Home Credit and Finance Bank**

Moscow, Russia  
www.homecredit.ru

**Industry:**

Financial Services

**Annual Revenue:**

\$100 to \$500 Million

**Oracle Products & Services:**

- Oracle Service Bus

## Home Credit and Finance Bank Accelerates Getting New Banking Products to Market

“Oracle Fusion Middleware and Oracle Service Bus enabled us to reduce the cost and effort for implementing and developing integrated banking solutions. We also accelerated the time to market for new banking products, such as car loans. The integrated platform enabled us to successfully launch our online banking system and deploy a new front-office application based on a one-stop-shop principle. This was especially important, given our ambitions to increase our presence on the Russian retail banking market.”

— **Alexey Ivanov**, Head of IT Department, Home Credit and Finance Bank

Home Credit and Finance Bank, founded in 1990 and owned today by the Czech investment fund PPF, is a leading Russian retail bank, offering a wide range of commercial banking products. Focusing initially on home mortgage loans, the bank shifted its strategy in 2008 to respond to the economic crisis by concentrating on consumer (cash) loans, which it now offers at 70,000 locations across the country.

Home Credit and Finance Bank wanted to rapidly develop solutions that integrate its numerous banking applications while reducing development costs. The company deployed Oracle Service Bus as a basis for a versatile front-office solution that links all of its IT systems related to banking products, integrating 12 front-, middle-, and back-office systems based on different IT platforms. By re-using integration services to avoid repeated development, simplifying process monitoring, and standardizing integration tasks, Home Credit and Finance Bank significantly accelerated time to market for new banking products, such as car loans and cash loans. It also reduced development costs and programming errors—important achievements in helping Home Credit and Finance Bank to expand its retail banking offerings and regional presence.

At present, all the bank’s IT systems interact with Oracle Service Bus. The deployment solved the bank’s major challenge of integrating heterogeneous front-, middle-, and back-office systems.

### Implementation Process

Home Credit and Finance Bank implemented Oracle Service Bus using in-house resources over a five-month time frame. The bank rolled out the production environment in just three days.

**Oracle Customer:**

**Agilent Technologies Inc.**

Santa Clara, California

www.agilent.com

**Industry:**

High Technology

**Annual Revenue:**

Over \$5 Billion

**Employees:**

18,500

**Oracle Products & Services:**

- Oracle WebCenter Portal
- Oracle SOA Suite
- Oracle BPEL Process Manager
- Oracle Service Bus
- Oracle Business Activity Monitoring
- Oracle WebLogic Server
- Oracle Identity and Access Management Suite
- Oracle Database
- Oracle E-Business Suite
- Oracle iStore
- Oracle Order Management
- Oracle Financials
- Siebel Customer Relationship Management
- Oracle Application Development Framework
- Oracle JDeveloper
- Oracle Consulting

## Agilent Technologies Inc. Delivers Web Content and Cuts IT Integration Costs by US\$1 Million Annually with Middleware

“We increasingly rely on Oracle Fusion Middleware to help us address some of our formidable IT challenges. We have created a portal that is driving more meaningful customer interactions, improving and streamlining identity provisioning and management, and cutting the time to build interfaces. It’s saving us US\$1 million annually in integration costs. That is a powerful value proposition.”

— **Rajesh Gathwala**, Enterprise Architect, Agilent Technologies Inc.

Precision is paramount at Agilent Technologies Inc., a world-leading electronic and bio-analytical measurement company. Through its four lines of business—chemical analysis, life sciences, diagnostics and genomics, and electronic measurement—Agilent helps scientists, researchers, and engineers to accelerate innovation. For examples, its products are used to test more than half of the world’s 1.13 billion cell phones and help pharmaceutical and biotechnology companies to analyze disease causes and develop new treatments. Its solutions also help the military to become more flexible and mobile, and support efforts to keep air, water, soil, and food clean and safe.

The company looks to deliver the same precision and innovation to its IT environment. Oracle Fusion Middleware, including Oracle SOA Suite, Oracle Access and Identity Management Suite, and Oracle WebCenter Portal, as well as Oracle Database, Oracle E-Business Suite, and Oracle’s Siebel Customer Relationship Management applications factor heavily into this equation.

Agilent implemented Oracle Fusion Middleware components to reduce IT costs and complexity, accelerate time to value, expand the impact of its enterprise applications, and drive its business forward. It increased electronic measurement customer interactions via the web portal and realized a 60% jump in customer satisfaction with the portal experience. Agilent automated identity provisioning and management capabilities, creating single sign-on and gaining the ability to provision a new employee or consultant for IT access in 20 minutes instead of five days. It also cut the average time needed to build new Oracle Fusion Middleware interfaces and is saving more than US\$1 million annually in integration-related costs.

### Getting to Know You

The markets that Agilent serves change rapidly, so it is important that the company maintains a solid understanding of its customers’ needs and requirements. Agilent’s electronic measurement group understood that its web presence offered an increasingly important and valuable way to interact with customers, provide them with personalized information, and gain new insight into market trends. The company’s disparate web presence and customer information silos, however, did not enable the transparency and agility that Agilent needed to fully realize these benefits. The website also did not support the integrated, seamless customer experience to which the company was aspiring.

“We wanted to provide our electronic measurement group customers with a single myAgilent portal where they could seamlessly interact and conduct business with the company, including checking order status, getting news that is pertinent to them, seeing products that are of interest to them, and even participating in discussion forums.

We achieved this objective with Oracle WebCenter Portal, Oracle Identity and Access Management Suite, and Oracle Application Development Framework,” said Balganesh Krishnamurthy, Solution Architect, Agilent.

Today, the company is creating a single view of customers, whether they come in for a discussion forum or to track an order. Agilent also has a single location to manage identities and can analyze how customers are using the company’s web applications. As important, it can serve up personalized content, based on a user’s interactions with the site.

Agilent went live with its MyAgilent portal in the fall of 2012 and realized several important gains in the first six months. First, the electronic-measurement group is seeing more customer interactions via the web portal and there was a 60% jump in customer satisfaction with the site. Users can now log in a single time to access all portal applications and services. Integration with the company’s Oracle iStore and Oracle Order Management applications—Oracle E-Business Suite solutions— enables customers to seamlessly order parts and track order status. In addition, users can seamlessly open service requests via the portal. Agilent is using Oracle Application Development Framework to efficiently create task flows as well as new applications behind the portal.

Agilent is improving time-to-market for new functionality and web applications, with a target of shrinking the development lifecycle by 60% to three-to-four months, versus 8 to 10 months.

The MyAgilent portal supports 15 languages, and it had more than 120,000 users approximately 12 months after go live. It is equipped with locale detection using geographic internet protocol mapping to set the correct localization for each page’s language and content. During peak use, the portal supports more than 2 million hits in 24 hours.

Thanks to Oracle Identity and Access Management Suite, each user and customer has a centrally managed identity. As a result, users can log in to the portal via different devices and browsers and still receive their personalized content.

“We plan to continue to expand the portal—which we can easily do with Oracle WebCenter Portal—to include functionality for managing contracts, quotes, configurations, and more. Ultimately, the portal will significantly automate the buying cycle, as well as provide a clear and compelling value proposition to customers in exchange for information that enables us to deliver a more personalized experience,” Krishnamurthy said.

### **Realizing the Value of Integrated Identity Management**

Agilent also uses Oracle Identity and Access Management Suite to manage provisioning and access to its enterprise applications. The IT group manages more than 75 applications, including Oracle E-Business Suite and Oracle’s Siebel Customer Relationship Management (CRM) applications. Many of these systems contain highly sensitive data about financial and intellectual property.

The company had been managing user access with a mix of manual, home-grown, and commercial, off-the-shelf, user-provisioning systems. It created multiple processes across the business units and applications, making user identities difficult and expensive to manage and maintain, while complicating the user experience.

Agilent first used Oracle Identity and Access Management Suite to automate access to Oracle E-Business Suite applications, followed by Siebel modules and other third-party systems. The solution provisions workflow for account requests and modification, automates account and password setup, and enables self-service password reset. It also supports user access reviews, automates transfer and termination detection as well as account deprovisioning, and expands illicit provisioning detection.

Today, the company can provision a new employee or consultant in 20 minutes, which represents an important productivity gain. Previously, it took up to five days to complete provisioning, limiting new employee and consultant productivity during their first days onboard. In addition, the company has reduced its number of identity management-related IT service tickets by 25%, enabling it to better leverage internal, IT human resources for more strategic assignments and cut costs. In addition, since the company uses IT outsourcing services, it can leverage the reduction in service tickets as a bargaining tool to drive down future contract costs.

### **Reducing Complexity and Integration Costs**

Agilent's legacy middleware environment consisted of more than 100 TIBCO-based proprietary software components. The standalone interfaces were difficult to manage, had availability issues, and came with a high cost of ownership. In addition, a typical integration could take approximately months to create, which could delay the time to benefit and realizing return on investment, especially in the case of an acquisition. Scalability was also an issue, especially after an acquisition that increased transaction volume 1.5x.

Agilent used Oracle SOA Suite 11g to create a next-generation middleware platform. It spans 41 boundary systems, has 169 touch points—including Oracle E-Business Suite, Siebel CRM, and SAP, Trade Compliance and other enterprise systems. The migration was a high-risk project for Agilent, as many time-sensitive, near real-time, business-critical transactions used the legacy infrastructure and technologies.

“Our new middleware environment is open and standards-based, which reduces time to market and cost of ownership. It is highly scalable. We are also re-using services, which is further improving our agility and the time to market for new IT solutions,” said Rajesh Gathwala, enterprise architect, Agilent.

The company is saving approximately US\$1 million annually with the new environment, thanks to the reduced cost of ownership related to server consolidation—which was cut in half when moving from TIBCO—and lower support costs. Agilent also cut in half the time to build new interfaces and reduced the IT budget devoted to interface maintenance by 60%.

In addition, it accelerated business transaction processing by 20% and increased throughput by 30%.

Longer term, Agilent looks to use the new SOA platform to streamline business-to-business and partner integrations and publish a directory of services that IT can leverage across the enterprise, further accelerating application development.

### **Going Mobile**

Agilent is focusing on enabling users to access critical applications via their mobile devices. Oracle Fusion Middleware, including Oracle SOA Suite and Oracle Identity and Access Management Suite, is used for integrating mobile apps with enterprise systems. The company has relied on its middleware infrastructure to rapidly build mobile applications, delivering six new mobile services, including field sales and purchase approvals.

“Mobile is an important part of our IT strategy moving forward,” Gathwala said. “With Oracle SOA Suite, we can efficiently reuse services and accelerate mobile enablement. For example, we can quickly build services for mobile applications. Oracle Fusion Middleware plays a critical role in our mobile initiatives and continues to deliver valuable return on our investment.”

### **Creating a More Robust Application Server Environment**

In 2009, Agilent began an initiative to migrate several critical J2EE-based business applications from JBoss to Oracle WebLogic Server. These included the company’s external, customer-facing website, content management system, entitlement management tool, entitlement service, and reference data tool. It looked to move away from JBoss, as it had determined that the cost of managing, maintaining, and developing applications with the platform is high. Oracle WebLogic Server provided high availability and accelerated application development. In addition, it included robust out-of-the-box functionality and administrative tools for rapid configuration as well as lower total cost of ownership.

### **Challenges**

- Deliver more integrated customer service, including providing customers with a single, easy-to-use personalized portal that enables them to efficiently interact and conduct business with Agilent
- Strengthened identity and access management capabilities and automate key processes to improve user convenience and employee productivity
- Simplify and accelerate integration development to speed time to market for new applications, including mobile capabilities
- Reduce IT management costs

## Solutions

- Implemented Oracle WebCenter Portal to create a robust personalized portal that enables customers to efficiently interact and conduct business with the company, including checking order status, getting pertinent news, seeing products that are of interest to them, and even participating in discussion forums
- Created a single customer view—regardless of access device or browser—improving the customer experience and increasing the ability to appropriately personalize content
- Provided users with single sign-on access to the portal and enabled customers to seamlessly order parts, create service requests, and track order status thanks to integration with the company's Oracle iStore and Oracle Order Management applications—both Oracle E-Business Suite solutions
- Gained the ability to provision a new employee or consultant for IT access in 20 minutes instead of five days, while improving overall security
- Reduced the number of identity management-related IT service tickets by 25% with Oracle Identity and Access Management Suite, freeing IT resources to focus on other priorities
- Used Oracle SOA Suite 11g to create a next-generation middleware platform spanning 41 boundary systems and 169 touch points, as well as supporting 20,000 users
- Saved US\$1 million annually by replacing a TIBCO-based integration environment with Oracle SOA Suite
- Cut the average time needed to build new application interfaces in half
- Created interfaces to expose applications to mobile devices in approximately six weeks

## Why Oracle

“Oracle Fusion Middleware provides us with versatile solutions—from identity management to web servers—that enable us to reduce IT costs and complexity, accelerate time to value, and drive our business forward. Oracle's out-of-the-box capabilities, administrative tools, and low cost of ownership are extremely appealing and give us the capability to increase our agility in a rapidly evolving market,” Gathwala said.

## Implementation Process

Agilent deployed Oracle SOA Suite to replace more than 100 TIBCO interfaces for all Agilent business units, which run many business-critical and time-sensitive transactions. It completed the project in just seven months.

Oracle Consulting worked with Agilent for its Oracle Identity and Access Management Suite implementation. The company benefitted from Oracle Consulting's knowledge of the solution and streamlined access to product development teams. Oracle Consulting employed its Oracle Unified Method, which helps to develop and implement technology-based business solutions with precise development and rapid deployment.

**Oracle Customer:****CSC**

Falls Church, Virginia  
www.csc.com

**Industry:**

High Technology

**Annual Revenue:**

Over \$5 Billion

**Employees:**

80,000

**Oracle Products & Services:**

- Oracle Identity and Access Management Suite Plus
- Oracle Identity Management
- Oracle Access Manager
- Oracle Identity Federation
- Oracle Directory Services
- Oracle Virtual Directory
- Oracle SOA Suite
- Oracle Service Bus
- Oracle WebCenter Portal
- Oracle WebCenter Sites
- Oracle WebCenter Content
- Oracle Application Development Framework
- Oracle Business Intelligence Suite, Enterprise Edition
- Oracle Database

## CSC Enables Next-Generation Access Management and Flexible Reporting for Large Public Sector Health Agency

“Oracle Fusion Middleware gave us a competitive advantage when bidding for and building a new enterprise reporting platform for a large public-sector healthcare agency. With an end-to-end, single-vendor solution, we could accelerate deployment, reduce costs, and create a highly flexible platform that the agency can scale and adapt as needed.”

— **Manish Bhansali**, Director for Oracle Competency for North America Public Sector, CSC

CSC is a global leader in next-generation IT services and solutions. It helps clients achieve strong returns on their technology investments through its best-in-class industry solutions, domain expertise, and global scale. CSC’s areas of expertise include IT infrastructure services, cloud computing, cyber security, big data, consulting, and industry-focused application solutions.

**Challenges**

- Create a secure IT infrastructure built on a service-oriented architecture (SOA) to empower the modern, public sector enterprise and advance CSC’s governmental IT practice
- Enable a large public-sector healthcare agency to launch a robust, next-generation, secure portal and platform that improves its ability to analyze healthcare quality and costs
- Ensure that the environment is flexible to rapidly accommodate changing regulatory requirements and that it can integrate easily with the agency’s various IT platforms as well as external systems and data sources
- Guarantee the privacy of protected health information in the reporting environment

**Challenges**

- Built a next-generation, SOA-based reporting environment using Oracle Fusion Middleware and Oracle Database with interoperability and scalability that supports thousands of hospitals, a quality improvement organization, and with the capacity to support 800,000 provider organizations and process millions of files during peak periods
- Created an enterprise identity and access management solution for the reporting portal built on Oracle Identity and Access Management Suite Plus that ensures the privacy of protected health information, supports multifactor credentialing, and integrates easily with two commercial cloud services
- Made the portal solution available to agency staff and business partners, securely supporting 1,700 concurrent users
- Created a flexible and open platform using Oracle SOA Suite and Oracle WebCenter Sites that can be adapted easily to meet ever-changing healthcare reporting requirements
- Created a consolidated platform to provide business services to all partners that work with the healthcare agency and ensure that all business capabilities are available in a secure environment

- Decreased administrative and operational costs, optimized the agency's investment with an enterprisewide solution, which improved security and cut the number of help desk calls allowing IT to focus on other priorities
- Enabled the organization to quickly and cost-effectively roll out new services on the platform, thanks to a SOA-based approach
- Created advanced dashboards—using Oracle Business Intelligence Suite, Enterprise Edition—with which users can interact via the portal for a more seamless user experience
- Benefitted during the request for proposal process from Oracle Fusion Middleware components that are designed to work together, reducing costs and accelerating implementation
- Enabled CSC to demonstrate to other agencies its ability to rapidly deliver a robust and highly flexible reporting platform and enterprise access and identity management capabilities using pre-integrated software

#### **Why Oracle**

CSC's project with the healthcare agency was complex and required integration with many internal and external legacy systems. "Oracle Fusion Middleware components gave us a distinct advantage on the integration front, as they are designed to work together, which accelerates deployment and cuts costs," said Andy Andurkar, chief engineer, CSC. "One platform and one vendor with the keys to the kingdom are critical to our success with this project. It would not have been possible to do this five years ago.

#### **Implementation Process**

CSC is in the midst of a multiphase project with the healthcare agency. The platform is live and the agency is on boarding its various business functions, including hospital reporting. The team is releasing new capabilities on an ongoing basis. For example, the agency will roll out quality improvement reporting as well as extended collaboration capabilities this year.

**Oracle Customer:****Qi Rong Pu Hui (Beijing) Technology Ltd.**

Beijing, China  
www.qirong.com.cn

**Industry:**

High Technology

**Annual Revenue:**

Under \$100 Million

**Employees:**

80

**Oracle Products & Services:**

- Oracle Exadata Database Machine
- Oracle WebLogic Server
- Oracle Business Intelligence Suite, Enterprise Edition
- Oracle Business Intelligence Publisher
- Oracle BPEL Process Manager
- Oracle GoldenGate
- Oracle E-Business Suite
- Oracle FLEXCUBE Core Banking

## Qi Rong Pu Hui (Beijing) Technology Ltd. Cuts Customers' IT Costs by 30% and Increases System Availability Fourfold

"We evaluated other vendors, such as IBM, but recognize that Oracle products are more robust than others in the market. By developing our cloud-based banking solution using Oracle hardware, middleware, and software, we have cut our customers' IT costs by 30% and increased system availability fourfold."  
— **Liang Yingjie**, Chief Technology Officer, Qi Rong Pu Hui (Beijing) Technology Ltd.

Qi Rong Pu Hui (Beijing) Technology Ltd. (Qi Rong) is a subsidiary of China Union Financial Service Group (CUFS). The company provides CUFS and other financial institutions with a core banking platform, as well as outsourcing and IT services. It also manages its own data centers in four locations in China.

Qi Rong implemented Oracle hardware, middleware, and software—including Oracle Exadata, Oracle WebLogic Server, Oracle Business Intelligence Suite, Enterprise Edition, and Oracle FLEXCUBE Core Banking—to develop a highly available, managed core banking service (MCBS) solution targeted for midsize banks.

MCBS is a secure, stable, and high-performance software-as-a-service (SaaS) system, which can host a number of specially developed financial modules in a private or public cloud. The system provides Qi Rong's customers with comprehensive, cost-effective, and best-practice solutions for banking services, including core banking, online banking, marketing, and product management. It also enables customers to conduct business analytics.

**Challenges**

- Meet the needs of an increasing number of banks that are looking to outsource IT management and administration
- Stay ahead of the market competition by providing secure, highly-performing, and cost-effective IT services to midsize banks
- Enable customers to focus on business development, marketing efforts, and improving service capacity
- Ensure banks can provide best-practice financial services to clients
- Meet regulatory requirements for 99.95% availability in core banking systems

**Solutions**

- Achieved up to 10x faster core banking batch processing speeds and 12x faster data warehousing speeds for MCBS with Oracle Exadata Database Machine, compared to the legacy IBM platform
- Ensured 99.975% availability for the SaaS MCBS solution with Oracle Exadata and Oracle WebLogic Server, easily meeting the mandated 99.95% availability
- Cut customers' IT operational, maintenance, and administration costs by 30% by providing private or public cloud services through an outsourced operational team

- Increased the availability of customers' banking systems fourfold, using Oracle Exadata and Oracle WebLogic Server's clustering technology
- Reduced MCBS customers' disaster recovery time objectives by 40% with Oracle GoldenGate running on Oracle Exadata
- Enabled customers to develop new financial products and services more than 33% faster—in six months, compared to nine months
- Improved reporting environment stability by running Oracle Business Intelligence Publisher on Oracle Exadata
- Streamlined and simplified system management by using Oracle WebLogic Server's service-oriented architecture and made it easier for deploying or managing core banking services
- Ensured banking customers can provide optimal financial services by using a core banking system based on best-practices and 100%-integrated Oracle technology

#### **Why Oracle**

Qi Rong evaluated a number of database, middleware, and application software products from local and international vendors for its MCBS solution, including IBM, Digital China, and Kingdee. The company chose Oracle solutions because of its confidence in the strength and vitality of the products.

“As an Oracle partner, we have been devoted to Oracle software since we first implemented Oracle E-Business Suite for a customer in 2004,” said Liang Yingjie, chief technology officer, Qi Rong Pu Hui (Beijing) Technology Ltd. “With our rich experience in the technology industry, we know Oracle products are more robust than others in the market. Oracle also has a better reputation and is a stronger brand.”

#### **Implementation Process**

Qi Rong began developing MCBS in October 2010. The company worked closely with Oracle's core solution and software application teams, as well as Oracle Consulting, to ensure a smooth implementation, integration, and verification processes.

MCBS went live in April 2011 running on an IBM platform. The company upgraded to Oracle Exadata in October 2011.

**Oracle Customer:****MICROS Systems, Inc.**

Columbia, Maryland

www.micros.com

**Industry:**

High Technology

**Annual Revenue:**

\$500 Million to \$1 Billion

**Employees:**

4,800

**Oracle Products & Services:**

- Oracle SOA Suite
- Oracle JDeveloper
- Oracle Application Development Framework
- Oracle Fusion Middleware
- Oracle WebCenter Portal
- Oracle WebLogic Suite
- Oracle Database

## MICROS Systems, Inc. Develops Intuitive Interface and Improves Functionality of Hospitality and Retail Enterprise Applications

“Oracle Application Development Framework has enabled us to rapidly develop a rich and compelling user interface that is so intuitive our hotel-enterprise employees require very little training.”

— **Boro Petrovic**, Chief Technology Officer, MICROS Systems, Inc.

MICROS Systems, Inc. is a leading enterprise application provider for the hospitality and retail industries worldwide. More than 330,000 MICROS systems are currently installed in table-service and quick-service restaurants, hotels, motels, casinos, leisure and entertainment, and retail operations in more than 180 countries. Beyond being the only full-systems solutions provider for all market segments within the hospitality and specialty retail industries, MICROS is also the industry leader in providing cloud services through its data centers around the globe. MICROS provides hardware and software for point-of-sale (POS) and operational applications, as well as back-office applications for inventory, labor, and financial management.

For more than 15 years, MICROS—an Oracle Platinum Partner—has worked closely with Oracle, applying industry best practices in the development of its application suite for the hospitality industry, OPERA 5, which was built on Oracle Forms and the Oracle Database. MICROS wanted to develop the next generation of this suite, OPERA 9, to maintain its competitive advantage. As part of this process, MICROS needed to evolve its legacy system into a modern solution with a feature-rich, attractive, user interface that could be distributed via the cloud.

With Oracle SOA Suite, MICROS was able to evolve its suite of hosted enterprise applications to integrate smoothly for customers ranging from hotels and casinos, to airports, while also providing those customers with a friendly and intuitive user interface—all without losing data from the company’s legacy system.

**Challenges**

- Create an intuitive and easy-to-learn user interface that significantly reduces the time needed to train ever-changing hotel, restaurant, and other client personnel
- Deploy an open application architecture to achieve full integration and smoothly running functionality with customer hotel and restaurant reservation, pricing, and other back-office systems
- Gain ability to customize services to the individual brand and hotel needs
- Support local languages and legal requirements with minimal customizations as well as Web 2.0 interactive information sharing
- Enhance business processes by modernizing the application user interface to provide global access and mobile device compatibility, while enhancing workflow and collaboration functions
- Improve agility by building applications on SOA to enable various services to evolve independently of one another
- Leverage the data and knowledge built into the existing Oracle Forms-based solution without impacting the modernization efforts

## Solutions

- Transitioned OPERA from a client-server application to a full Web client with Oracle SOA Suite and Oracle WebCenter, enabling mobile access and integration with Web 2.0 technologies to better meet hospitality and service industry client needs
- Designed and developed OPERA 9 using Oracle Application Development Framework and Oracle JDeveloper, ensuring the preservation of data from the legacy system and improving system agility
- Enabled smooth response to hospitality market trends and product requirements without major re-investments in infrastructure, software, and hardware
- Evolved platform to deliver customizable specialty hospitality system services through a software-as-a-service platform and more traditional deployments to support tighter integration with various hotels and restaurants' SOA environments and third-party applications
- Deployed an open application architecture to achieve full integration and smooth functionality with hotel and restaurant reservation, pricing, and other back-office systems
- Enhanced multichannel user interface to allow access through traditional methods or via mobile devices, while also reducing training time for hotel and restaurant staff
- Improved application performance regardless of the end-user's location, even when accessed over networks with higher latency
- Supported localizations to better serve the global client base, while also improving development productivity

## Why Oracle

One of the biggest challenges for MICROS was to leverage the information from the existing Oracle Forms-based solution, while at the same time modernizing its products and services. The company selected Oracle because its Fusion Middleware technologies—including Oracle Application Development Framework—enabled the company to integrate the more than one thousand worker-years invested in the legacy system into the new technology.

## Implementation Process

MICROS Systems' developers drove the implementation process, and were able to easily learn the Oracle Application Development Framework environment through online training sessions, the Oracle Technology Network, and with the assistance of Oracle's Worldwide Alliances and Channels team.

"Thanks to the wizard-driven and declarative nature of the Oracle Application Development Framework and the rich library of user interface visual components within it, our developers were proficient in the new environment quickly, enabling high productivity for producing visually attractive applications," said Boro Petrovic, chief technology officer, MICROS Systems, Inc..

**Oracle Customer:****ProveIT Ltd**

London, United Kingdom  
www.proveitltd.co.uk

**Industry:**

High Technology

**Employees:**

23

**Oracle Products & Services:**

- Oracle Event Processing

## ProveIT Ltd Uses Event Processing Solution to Enable Banks to Release Billions of Dollars of Capital Set Aside for Risk Exposure

“Oracle Event Processing was instrumental in bringing RiskIT to market. With Oracle Event Processing at its core, RiskIT offers customers real-time insight into their risk exposure and helps banks comply with strict regulations, thereby significantly reducing risk exposure, capital provisioning and trading costs.”

— **Graham V. Smith**, Managing Director, ProveIT Ltd

Established in 1987, ProveIT is the leading complex event processing (CEP) solutions provider, striving to optimize business performance through comprehensive data exploitation. Recognizing how critical real-time information is to many organizations, including those in the banking and financial industry, ProveIT developed a real-time risk analysis platform, RiskIT, with Oracle Event Processing at its core.

RiskIT provides organizations with real-time insight into their risk exposure. It helps banks and financial institutions to significantly reduce trading costs and enables them to release billions of dollars in additional funds that the regulator has set aside for risk exposure because RiskIT provides aggregated global risk exposure on-demand.

### Challenges

- Provide customers with a comprehensive, real-time risk management system enabling them to assess market risk immediately rather than after two or three days
- Ensure that the system can be implemented quickly to help banks and financial institutions comply with strict rules instituted by the Financial Services Authority (FSA) following the 2008 financial crisis
- Enable customers to capture and consolidate data from multiple systems to accurately assess market risk in real-time

### Solutions

- Developed a risk management system with Oracle Event Processing at its core to deliver real-time risk management information to banks, financial institutions, and utility companies and to meet strict Financial Services Authority (FSA) regulations
- Reduced, by up to half, the amount banks are legally required to deposit overnight to cover any potential losses, with accurate, up-to-date risk information, releasing billions of dollars for overnight trading in other geographic regions
- Provided banks with a real-time audit trail to fully explain profit and loss and value at risk volatility and to pin-point the cause, significantly reducing human involvement and therefore reducing the cost of exception handling through the middle and back office
- Enabled banks to drill down into data to present a real-time risk assessment, allowing banks to immediately understand status and thereby improve decision-making during volatile market conditions, a process that previously could take up to two days to complete
- Extracted data from up to 50 systems in each bank—including data fed from Bloomberg and Reuters—to assess the global profit and loss account in real-time and determine the bank’s exposure to risk

- Cut implementation time from a typical three year risk transformation program for a comparable custom-built solution to between three and six months by implementing RiskIT

### **Why Oracle**

ProveIT was confident that running its risk management system on Oracle Event Processing would deliver an easy-to-integrate solution that would meet its financial services customers' specific demands.

"Most customers have Java-based middleware, and with Oracle Event Processing we can not only deliver a faster, smoother integration into existing systems, but also provide real-time insight into complex trade scenarios at banks. Similar products from other vendors are built on C++ or native languages which would require further integration and longer implementation cycles. Oracle Event Processing was the obvious choice," said Mark Bruce, technical director, ProveIT Ltd.

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

Moffett Field, California  
www.itconvergence.com

**Industry:**

High Technology

**Annual Revenue:**

Under \$100 Million

**Employees:**

700

**Oracle Products & Services:**

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

## Machine-to-Machine Intelligence Corp. Intelligence 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:****G.James Australia**

Brisbane, Australia  
www.gjames.com

**Industry:**

Industrial Manufacturing

**Annual Revenue:**

\$100 to \$500 Million

**Employees:**

2,300

**Oracle Products & Services:**

- Oracle E-Business Suite Release 12
- Oracle Financials
- Oracle Payroll
- Oracle Time and Labor
- Oracle Discrete Manufacturing
- Oracle Enterprise Asset Management
- Oracle Configurator
- Oracle SOA Suite 11g
- Oracle Business Intelligence Suite, Enterprise Edition
- Oracle Consulting

**Oracle Partner:****Intelligent Pathways**

www.intelligentpathways.com.au

## G.James Australia Generates Financial Reports 50% Faster, Cuts Application Integration from One Year to Three Months

“As a manufacturer of glass and aluminum products, it is vital that we have the right data at hand to schedule and track production. Oracle E-Business Suite Release 12 enables us to streamline our production workflow, produce financial reports 50% faster, and it improves our overall cash position.”

— **Bruce Moy**, Director of IT, G.James Australia

Established in 1917, G.James Australia is a family-owned manufacturer of glass and aluminum products used in the construction of residential, commercial, high-rise, and monumental buildings. The company is headquartered in Brisbane, Queensland and has 54 offices around Australia, Malaysia, and Singapore. It employs 2,300, worldwide.

G.James Australia replaced its legacy enterprise resource planning (ERP) system in 2007 with Oracle E-Business Suite Release 12 modules for Oracle Financials, Oracle Payroll, Oracle Enterprise Asset Management, and Oracle Time and Labor. It also implemented Oracle SOA Suite, and Oracle Business Intelligence Enterprise Edition. In 2011, the company deployed Oracle Discrete Manufacturing and Oracle Configurator, and it upgraded to Oracle SOA Suite 11g.

The Oracle solution has enabled G.James Australia to generate financial reports 50% faster, gain more visibility into customer and manufacturing data, speed production, easily calculate manufacturing equipment depreciation, and quickly integrate new ERP applications.

### Legacy ERP System Hinders Reporting and Analysis

In 2004, G.James Australia started looking for a new ERP package to replace a COBOL-based system. This had been in place since the early 1990s and was used to run its financials and store-manufacturing-related data.

“After about eight years, we purchased the code from the supplier so we could modify the system to suit our needs,” said Bruce Moy, director of IT, G.James Australia. “This was not only time-consuming, but good COBOL programmers are harder to find these days, which is reflected in the prices they charge for their services.”

In addition, G.James Australia could not extract accurate costing or sales analysis data, and most of its staff did calculations using spreadsheets or pen and paper. It took two days to view financial data related to individual creditors, a week to manually calculate the depreciation status of its manufacturing equipment, and a month to analyze stock and other manufacturing information.

“As a manufacturer, it is vital that we have the right data at hand to schedule and track the production of our glass and aluminum products,” said Moy. “Oracle E-Business Suite Release 12 enables us to streamline our production workflow, produce financial reports 50% faster, and improve visibility into our overall cash position.”

### Companywide Reporting Times Slashed

G.James Australia has 70 business divisions worldwide, which are all profit centers that must report financials at the end of each month. The company uses Oracle Financials to close monthly reports from all its divisions in 10 days, 50% faster than with the previous system.

Financial staff and senior managers can also view financial data related to individual creditors and instantly produce a report.

“It used to take two days to determine if a customer was paying bills or how a project was tracking against budget,” said Moy. “Now, our receivables are being closed at the end of each day and accountants are no longer wasting time searching for information.

“These staff members have more time to chase outstanding debt and get money into the business faster. They are also freed up to do more stock and other manufacturing analyses on a weekly basis. This sort of analyses used to take a month,” said Moy. “In addition, credit and treasury staff can now access accurate data about the company’s cash position whenever required.””

### Payroll Time Cut from Four Days to 10 Hours

Remote branch offices now use Oracle Time and Labor to enter payroll data, which is received at the head office and processed immediately through Oracle Payroll, rather than using pen and paper to record payroll information and mail or fax it to head office.

“In the past, we had to run four separate payrolls, one for each major production division,” said Moy. “Now we run all the payrolls together on the same day, reducing the time it takes to pay employees from four days to 10 hours.”

### Calculated Exact Asset Depreciation Immediately

G.James Australia uses Oracle Enterprise Asset Management to gain a more accurate view of the depreciation status of its manufacturing equipment.

“We can calculate this depreciation immediately,” said Moy. “Previously, it would take our staff one week each month using spreadsheets to do these calculations.”

The company also uses Oracle Discrete Manufacturing to streamline its manufacturing system by automating the development of manufacturing schedules and enabling the capture and generation of standard costs for materials used in the manufacturing process.

“We can now determine where every product is along the production line and provide accurate schedules to the staff,” said Moy. “Importantly, the solution allows us to decide immediately whether each order has been profitable or not, which helps us make decisions about whether it is worthwhile to continue producing a particular product before it’s too late.”

### **Faster Product Configuration and Manufacturing Times**

Oracle Configurator allows configuring G.James Australia's products quickly and easily. The company can now create a bill of materials and choose the most efficient route through the factory to produce a particular product.

"We can ensure we use factory assets, including labor, in the most productive way," said Moy. "This has reduced the labor time required to manufacture each product by 7% and cut our overall manufacturing times by 5% to 7%.

"We can take a factory schedule, determine if it's overloaded, and select alternative manufacturing routes," Moy continued. "For example, the system shows us that a piece of glass is in production and whether it will be shipped on time or delayed. As a result, our customers receive an exact delivery date for the product, and there is no second-guessing."

These improved processes have also enabled G.James Australia to increase the number of shipments that are received by customers on time and in full to between 87% and 92% each week.

### **Single Engine Eases Migration**

G.James Australia used Oracle SOA Suite to develop a single data transfer engine between the new Oracle E-Business Suite Release 12 modules and the company's old ERP system. With Oracle SOA Suite 11g in place, IT staff didn't have to write an interface between Oracle Financials and the old system for each data field.

"We kept running on the old system as we implemented the new Oracle platform," said Moy. "Using Oracle SOA Suite, we deployed the engine and applied it to every data table we needed. We applied different rules for each data transfer (between the old and new platforms), so we didn't have duplicate files.

"This reduced the time it took to integrate and convert data from six months to six weeks because programmers no longer had to crunch hard code. Oracle SOA Suite is the link that is used to build the whole integrated application. Without the solution, the entire project would have taken up to two years, and that level of integration wouldn't have been possible. Instead, it only took just over a year," he said.

### **Easily Integrated New Applications**

Using the Oracle SOA Suite platform, G.James Australia can now quickly and easily integrate new applications, such as Oracle Discrete Manufacturing and a third-party, customized, extrusion manufacturing application.

"To enhance our aluminum extrusion business, we have integrated bespoke, extrusion manufacturing software with the ERP system," said Moy. "The majority of the required aluminum manufacturing data is already available in Oracle Discrete Manufacturing, so we just need to feed this through Oracle SOA Suite into the new extrusion system."

G.James Australia reused existing SOA services for the integration of Oracle Discrete Manufacturing and the extrusion manufacturing application. Without Oracle SOA Suite, this integration project would have taken staff a working year, but using the existing SOA infrastructure, the company completed it in three working months.

“We have about 20 disparate systems running our business, which all needed to be connected with our ERP solution,” said Moy. “Using Oracle E-Business Suite and Oracle SOA Suite, we could integrate these systems without hard wiring them. Oracle SOA Suite has definitely improved our ability to update or integrate a new solution.”

### **Data Analysis Completed Significantly Faster**

G.James Australia is also using Oracle SOA Suite to improve its data analytics capabilities. Oracle SOA Suite enables the company to collate data from its ERP and other business-critical systems and feed it through into the Oracle Business Intelligence Enterprise Edition reporting tool.

“Using Oracle SOA to integrate our business systems with Oracle’s intelligence reporting tools has significantly reduced the time it takes us to analyze data,” said Moy. “For example, it used to take 15 days to complete our end-of-month manufacturing analysis, using spreadsheets to manipulate the raw data. Now, we can feed the data straight into Oracle Business Intelligence Enterprise Edition and complete our end-of-month manufacturing analysis in 3 days.”

### **Challenges**

- Replace a time-consuming and inconvenient COBOL-based system that had been used since the early 1990s to run financials and store-manufacturing-related data
- Enable staff to extract accurate costing or sales analysis data
- Automate calculations for creditor, payroll, and depreciation figures, which were being completed using time-consuming spreadsheets or pen and paper
- Integrate new and existing company systems with Oracle E-Business Suite quickly and easily

### **Solutions**

- Produced monthly, companywide financial reports 50% faster, reducing time from 20 days to 10 days
- Enabled accountants to close receivables at the end of each day and produce a creditor’s report for senior managers instantly, rather than taking two days
- Reduced the time taken to analyze manufacturing and stock information from one month to one week

- Increased the number of shipments that are received by customers on time and in full to between 87% and 92% each week
- Cut the time taken to pay staff from four days to 10 hours, by running one combined payroll rather than four separate ones
- Provided the head office with payroll data for processing immediately, rather than using pen and paper to record payroll information and mailing or faxing it to head office
- Enabled staff to work out equipment depreciation instantly, rather than spending one week calculating it using spreadsheets
- Reduced time required to manufacture each product by 7% and cut overall manufacturing times by 5% to 7%
- Completed end-of-month manufacturing analysis in 3 days, compared to 15 days previously
- Improved visibility of the company's overall cash position by enabling credit and treasury staff to access accurate data about the company's cash position whenever required
- Freed financial employees to chase outstanding debt and get money into the business faster
- Improved glass and aluminum manufacturing processes by streamlining workflows, automating schedules, and improving configuration processes
- Enabled managers to determine the profitability of each order and decide immediately if it's worthwhile to continue producing a particular product
- Ensured customers received an exact product delivery date by generating more accurate factory schedules, showing the most efficient route for a particular product
- Eliminated the need for IT staff to write an interface for each data field and avoided duplicating files while integrating data between the new ERP system and the old system
- Completed the data transfer and integration for the new ERP system in six weeks rather than six months, and the entire ERP project in 13 months, rather than two years
- Integrated Oracle Discrete Manufacturing and a bespoke extrusion manufacturing application in three working months, rather than a working year

### Why Oracle

G.James Australia spent two years evaluating potential suppliers before selecting Oracle. Initially, approximately 10 vendors, including Oracle and SAP, were invited to develop an interim solution that could be demonstrated to the company.

"We wanted to see how each platform handled multiple currencies in the costing and invoicing areas, as well as how they would handle trade offshore, in U.S. dollars," said Moy. "Following this testing, we felt that the Oracle solution was the most suitable for our needs."

In addition, Oracle has an office in Brisbane, unlike SAP, which is represented by a reseller. “We want to deal directly with a company and be in contact with the people who develop the solutions,” said Moy.

Moy and his IT staff were also given the opportunity to meet with Oracle’s Executive Vice President of Product Development Thomas Kurian, who heads up a team responsible for Oracle’s product strategy.

“He went through the vision that Oracle had for its applications and how Oracle SOA Suite would be used to integrate Oracle’s solutions,” said Moy. “This gave us confidence that Oracle had a sound roadmap for the future.”

### **Implementation Process**

G.James Australia implemented Oracle Financials, Oracle Payroll, Oracle Enterprise Asset Management, Oracle Business Enterprise Intelligence Edition, and Oracle SOA Suite in May 2007. In June 2011, the company upgraded to Oracle SOA Suite 11g. It then deployed Oracle Discrete Manufacturing and Oracle Configurator in September 2011.

The Oracle solution had to be designed to handle the unique organizational structure within G.James Australia. “Family members own various parts of the business, and the tax liability for each individual is different,” said Moy. “This was a challenge, but it worked out well in the end.”

G.James Australia took three months to test the initial Oracle solution and train staff that had limited experience using a graphical user interface.

“Business users also had to get used to owning the application, unlike previously when the IT department owned the code,” said Moy.

Oracle Consulting provided some advice to G.James Australia’s IT staff during the initial implementation in 2007, working closely with its practice leaders through a series of design workshops. In 2011, Oracle Consulting also provided external consulting services during the implementation of Oracle Discrete Manufacturing and Oracle Configurator.

### **Partner**

Oracle Partner Intelligent Pathways provided consulting guidance for G.James Australia’s Oracle Business Enterprise Intelligence Edition implementation in 2007.

“The implementation was successful and we were happy with Intelligent Pathways’ services,” said Moy.

**Oracle Customer:**

**Avery Berkel**

Smethwick, United Kingdom  
www.averyberkel.com

**Industry:**

Industrial Manufacturing

**Industry:**

Under \$100 Million

**Annual Revenue:**

330

**Oracle Products & Services:**

- Oracle Real-Time Scheduler
- Oracle BPEL Process Manager
- Oracle SOA Suite

# Avery Berkel Automates Field Service Scheduling, Improves Technician Productivity by 28% and Reduces Service Costs

“With Oracle Real-Time Scheduler, we can highlight and deal with issues within our business quickly and easily, allowing us to provide outstanding service to our customers, with a lower cost model.”

— **Timo van Weenen**, Customer Services Operations Manager, Avery Berkel

Avery Berkel is the United Kingdom’s largest provider of retail weighing and food-processing solutions. In addition to manufacturing award-winning counter-service scales, the company services a wide range of scales and food-processing equipment in major grocery chains and independent food retailers throughout the United Kingdom. Avery Berkel delivers a 24/7 repair and maintenance service through a nationwide network of technicians, backed by a centralized operations and support team.

Avery Berkel needed to increase the efficiency of its machine-servicing operations to minimize costs and improve service to its customers. The company deployed Oracle Real-Time Scheduler to automate service scheduling and provide a complete, end-to-end, call-management process.

The new systems have improved call qualification accuracy by 86%, improved the productivity of field service technicians by 28%, and reduced service costs, with a 25% reduction in mileage traveled by technicians.

### Challenges

- Improve response times to grocer and retailer service requests and increase customer service level agreement (SLA) adherence to maximize the uptime of customers’ commercial scales and food processing equipment
- Increase the productivity of the field service team focused on maintaining business critical equipment at retail sites
- Reduce service operations costs
- Improve information logging and qualification to support continuous service improvement
- Implement a paperless, end-to-end call management system to improve productivity for service operations

### Solutions

- Ensured SLA adherence and accelerated service response times by automating assignment of service-request calls received via e-mail, electronic data interchange linkage, telephone and the Web portal to appropriately trained technicians
- Built a seamless interface between third-party back-office systems and Oracle Real-Time Scheduler using Oracle BPEL Process Manager, replacing time-consuming manual scheduling processes with fully automated event-driven workflows
- Eliminated the backlog of overdue planned maintenance visits for scales and food-processing equipment through automated scheduling

- Cut labor costs by reducing the number of field-service technicians by 31%, through efficiency and productivity gains from the new system while improving and sustaining adherence to customer SLAs
- Reduced service costs by integrating the new call-logging system with Oracle SOA Suite to increase call qualification accuracy to 86%, eliminating unnecessary service visits to retail customers
- Provided managers with accurate, up-to-date information on all servicing issues to support service-improvement decisions
- Enhanced call center efficiency by implementing a paperless, end-to-end call management process

#### **Why Oracle**

After examining a number of competitive scheduling automation solutions, Avery Berkel selected Oracle Real-Time Scheduler. Oracle's flexibility and willingness to invest in helping Avery Berkel build a robust business case for the new solution were critical to the decision. The solution also provided the robust functionality that Avery Berkel required. Oracle's ability to provide both software and technology was another important factor.

"The support team from Oracle clearly demonstrated how the solution could help us meet our business requirements, and we've seen exceptional productivity improvements and cost savings as a result," said Timo van Weenen, customer services operations manager, Avery Berkel.

**Oracle Customer:****Fluid-e**

Paris, France  
www.fluid-e.com

**Industry:**

Consumer Goods

**Employees:**

20

**Oracle Products & Services:**

- Agile Product Collaboration
- Agile Product Portfolio Management
- Agile Product Governance and Compliance
- AutoVue 2D Professional for Agile
- Oracle WebLogic Server 11g
- Oracle SOA Suite
- Oracle Application Development-Framework
- Oracle Database
- Oracle Data Integrator Enterprise Edition

## Fluid-e Builds a Collaborative Supply Chain Portal—Helps Food Manufacturers Increase Sales by 5% and Reduces Transport Costs by 60%

“Thanks to Oracle’s Agile product lifecycle management applications and Oracle Fusion Middleware solutions, we quickly provided the ARIA Poitou Charentes association of food manufacturers and retailers with a highly available collaborative portal, delivered via the cloud. The portal allows more than 20 food product suppliers to access new distribution channels and increase their sales.”  
— **Maël Barraud**, CEO, Fluid-e

A new player on the consumer goods market, Fluid-e provides a business-to-business (B2B) collaborative platform that connects manufacturers, wholesalers, e-commerce providers, and retailers, so they can optimize supply chain processes in real time. Using Oracle solutions and a software as a service delivery model, the collaborative platform allows the food manufacturers and retailers of the ARIA Poitou Charentes Association, a regional food industry organization, to offer consumers quality products at the right time and at the right price throughout the year.

**Challenges**

- Facilitate collaboration between regional food producers and retail-chains who are members of the ARIA Poitou Charentes Association to improve distribution channels for local products and increase sale revenues via a highly collaborative and accessible, B2B, cloud-based platform
- Boost production of regional products—such as cheese, seafood, and cold cuts—and allow suppliers to increase their sales through access to new distribution channels—including supermarkets and hypermarkets, such as Auchan and SuperU, while optimizing delivery schedules and transport costs
- Encourage sustainable development and reduce transportation carbon emissions through shared logistics
- Increase the support of other manufacturers, producers, and distributors for the collaborative project and develop this B2B approach in other regions of France to distribute all types of consumer goods

**Solutions**

- Used Oracle Fusion Middleware solutions to create and launch—in just six months—a new, cloud-based, B2B collaborative portal, allowing 20 food manufacturing companies and retailers of the ARIA Poitou Charentes Association to offer quality food products while controlling costs of transportation and goods
- Enabled 50 food-product suppliers, supermarkets, hypermarkets, and transporters to optimize management of product catalogs, orders, deliveries, and delivery follow-ups
- Allowed retail chains to process their orders daily using a single instance of Oracle Database, and to increase availability to better satisfy consumer demand
- Created a highly reliable and scalable B2B platform with plans to integrate 20 new retailers and 10 manufacturers into the portal

- Improved service of retail chains with Oracle Business Intelligence Enterprise Edition's ability to generate indicators regarding each store's product availability and transportation costs, to adjust production in response to consumer demand
- Enabled food producers to distribute their products in large retail chains and hypermarkets and increase their sales by 5% through the use of the collaborative portal, which is based on Oracle's technologies
- Helped manufacturers reduce transportation costs by 40% to 60%, on average, and cut carbon emissions by 50% by using pooled and local delivery services managed via the portal
- Gained the ability to automate logistical processes for 50 midsize enterprises, including supermarkets, shippers, and producers, with Oracle B2B and electronic data interchange functions, integrated within Oracle SOA Suite, eliminating the need to manage orders and deliveries by through phone calls, faxes, and paper use

#### **Why Oracle**

“We selected Oracle Fusion Middleware and Oracle's Agile product lifecycle management for process applications to build our new Supply Chain portal. We made the strategic choice of capitalizing on a single technology platform to ensure the rapid development of collaborative portals that are appropriate for distributing any type of products. With the reliable Oracle infrastructure in place, our customers are now confident about externalizing their supply chain processes on the cloud, and this allows us to better serve them while growing our business,” said Maël Barraud, CEO Fluid-e.

**Oracle Customer:****Arcor SAIC**

Córdoba, Argentina

www.arcor.com

**Industry:**

Consumer Goods

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

20,000

**Oracle Products & Services:**

- JD Edwards EnterpriseOne 9.1
  - Financials Managed Cloud Services
  - Advanced Pricing Managed Cloud Service
  - Capital Asset Management Managed Cloud Service
  - Grower Management Managed Cloud Service
  - Grower Pricing and Payments Managed Cloud Service
  - Inventory Management Managed Cloud Service
  - Sales Order Management Managed Cloud Services
  - Transportation Management Managed Cloud Services
  - Warehouse Management Managed Cloud Service
  - Requirements Planning Managed Cloud Service
- Demantra Demand Management Managed Cloud Service
- Demantra Predictive Trade Planning Managed Cloud Service
- Siebel CRM Managed Cloud Services
- Siebel Quote and Order Capture Managed Cloud Service
- Oracle Hyperion Planning
- Oracle SOA Suite
- Oracle Database, Enterprise Edition Managed Cloud Service

## Arcor SAIC Uses the Cloud to Unify and Improve Availability of Core Business Applications and Optimize IT Team Resources

“With Oracle Managed Cloud Services administrating our IT platform for the Arcor group in Argentina, we’ve gained in performance, flexibility, and reliability for our systems and business processes. The challenge that lies before us is to take this model to the other countries where we operate to strengthen our overall IT strategy.”

— **Oscar Botto**, Chief Information Officer, Arcor SAIC

Arcor SAIC, a leading food manufacturing company in Argentina, is a leading global producer of sweets and the main exporter of candy from Argentina, Brazil, Chile, and Peru. Arcor has 39 production facilities (29 in Argentina, 5 in Brazil, 3 in Chile, 1 in Mexico and 1 in Peru). It specializes in manufacturing candy, cookies, chocolates, ice cream, and food products, including Arcor, La Campagnola, and Topline brands. In 2004, through its participation in Bagley Latinoamerica S.A., the company formed with the Danone Group in manufacturing cookies, alfajors, and cereals for Latin America, becoming one of the leading companies in the region. Grupo Arcor has a production volume of three million kilograms per day and sells its broad product line in 120 countries across the world.

In 2009, Arcor looked to transform its IT platform to integrate systems and business processes—from sales to production planning—across the various countries in which it operates. “We began an initiative, called Antares, which called for a review of the company’s commercial, industrial, administrative, and logistic processes. The required changes went far deeper than a system migration and would have an impact on all operations at a global level,” said Oscar Botto, CIO, Arcor.

The company looked to standardize and streamline processes as well as to expand visibility across its various operating groups. Arcor moved from a classic IT model, one with applications that were complex to administer, to uploading applications and technologies into Oracle’s private cloud, administrated by Oracle Managed Cloud Services to the reduce total cost of ownership and create a reliable and scalable IT infrastructure. It began in Argentina—which represents 60% of the group’s business. With Arcor’s software residing in a single Oracle data center, Arcor could optimize configuration, performance, availability, and ensure timely management and maintenance of its critical business systems.

### Moving Beyond Finances

Although Arcor initially selected JD Edwards EnterpriseOne Managed Cloud Service to standardize administrative and financial processes across the group, the environment extends much further today. “We integrated solutions including Oracle’s Demantra demand planning and Oracle’s Siebel customer relationship management solutions to better serve the business,” Botto said. Arcor now stores all of the group’s business information, including sales, purchasing, and product information, on Oracle Database, Enterprise Edition Managed Cloud Service. It also benefits from a service level agreement for availability and issue resolution.

Additionally, Arcor chose Demantra Demand Management Managed Cloud Service and Demantra Predictive Trade Planning Managed Cloud Service to support product demand forecasting.

“We used spreadsheets, and everything was in silos,” said Renata Fontana, IT demand management manager, Arcor. “Now, we can predict monthly and annual demand for more than 1,200 candy and cookie products. The process has become a continuous forecasting cycle, starting 16 months in advance and involving various departments, such as marketing, sales, and manufacturing. We adjust figures quarterly, based on Demantra-generated estimates.”

This insight has improved efficiency, from demand planning, to production and final distribution. There is now better visibility, improving collaboration between sales and manufacturing efforts, as when manufacturing must determine production to meet sales projections.

In addition, Arcor selected Oracle Hyperion Planning for its financial planning. “With JD Edwards, we can determine factory profitability. Using Oracle Hyperion Planning, we took the financial data produced by JD Edwards and examined profitability, product-by-product. There is greater detail and precision, which enables us to make informed decisions about markets, products, and which factories we should use for manufacture. Today, our discussions are based on market data. We used to get our information from spreadsheets, but this data wasn’t integrated. Today, for example, we all see the same marketing and logistics information, which is key for mass-consumption companies, such as Arcor,” Botto said.

### **Better Management, Greater Efficiency**

Building strong relationships with customers and suppliers is also a priority for Arcor, as how it manages data even determines how products are priced, down to the gram, based on production costs. The company uses Siebel Sales and Siebel Quote and Order Capture Managed Cloud Service to centrally manage client and product master data, order management, and product return processes.

The credit management workflow cycle for new clients—including distributors, supermarkets, and wholesalers—flows smoothly, from registration, to determining which products the client can purchase with manager approval.” Before the Siebel deployment, the technologies used were not scalable, and we ran the risk that important data, such as customer credit data, would be missing, as we could not integrate information from different countries,” Fontana said.

In addition, Arcor deployed a service-oriented architecture (SOA) using Oracle SOA Suite to integrate the solutions from Oracle and other providers, simplifying IT infrastructure administration.

### **Challenges**

- Redefine, simplify, and integrate the group’s industrial, administrative, and commercial processes, within a standard resource planning platform for all business units, to increase productivity and implement best practices

- Deploy productive and administrative processes- including purchase of raw materials for food production, inventory management and fixed asset control- using managed cloud services to gain process efficiency and simplify administration of the IT infrastructure

### Solutions

- Selected Oracle Managed Cloud Services to manage Arcor's private cloud and integrate global processes in a reliable and unified platform
- Standardized financial, commercial, and logistics administration within JD Edwards EnterpriseOne 9.0, which has more than 4,500 users and manages over 164 million daily transactions across 29 food production facilities and executive offices in the country—improving operational efficiency
- Implemented Oracle SOA Suite to integrate Arcor systems with those of other entities, including the Federal Administration of Public Revenue, the Revenue Agency of Buenos Aires province Companhia Colabora Internacional (shipping control), various banking, and foreign trade brokers—complying with company's tax obligations and improving visibility into shipments, stock in transit, and export destinations
- Used Siebel Quote and Order Capture and Siebel Sales for product master data administration—from product conception to sales—and for client administration, from presentation to registration—replacing several spreadsheets and achieving a unified workflow
- Integrated demand planning, distribution, production, and supply processes, using Demantra Demand Management—gaining visibility and greater insight into performance for improved decision-making

### Why Oracle

“We selected Oracle Managed Cloud Services because we understand that the company that develops the software and solutions knows them best and, therefore, can provide the best service,” Botto said. “We have reinvested the time and resources previously spent managing software and hardware into value-added initiatives.”

### Implementation Process

Arcor SAIC began its enterprise, IT initiative in 2009, implementing JD Edwards EnterpriseOne 9.0 in Argentina, administrated by Oracle Managed Cloud Services in a private cloud in Oracle's data center in Austin, Texas. This approach aligned with the standardized global business process model that the company established in its Antares Program. Between 2010 and 2012, Arcor expanded its relationship with Oracle Managed Cloud Services to include Demantra, Siebel, and Hyperion solutions.

To integrate solutions from Oracle and other IT providers, including a third-party electronic invoicing system, Arcor deployed a services-oriented architecture using Oracle SOA Suite.

The company is now expanding its private cloud for Argentina to branches in Uruguay, Paraguay, Bolivia, Mexico, the United States, and Colombia.

**Advice from Arcor SAIC**

- Expand ability to focus on core business needs by outsourcing IT infrastructure to the cloud, which ensures the scalability required for growth
- Integrate critical applications to support business processes and eliminate information silos
- Standardize processes following industry best practices
- Engage the participation of key people in each process, to leverage their functional knowledge and organizational representation

**Oracle Customer:****Jurlique**

Mount Barker, Australia  
www.jurlique.com.au

**Industry:**

Consumer Goods

**Employees:**

350

**Oracle Products & Services:**

- Oracle SOA Suite Release 11.1.1.5
- Oracle WebLogic Server 11g
- Oracle BPEL Process Manager 11g
- Oracle Business Activity Monitoring 11g
- Oracle Application Development Framework 11g
- JD Edwards EnterpriseOne Order Processing

**Oracle Partner****Red Rock Consulting**

www.redrock.net.au

## Jurlique Automates Online Ordering and Completes Skincare Product Transactions 50% Faster During Peak Periods

“Oracle SOA Suite enabled us to cost-effectively deploy new online services in less than six months, and complete skincare product transactions 50% faster during peak sales periods. We will also take advantage of reusable components to build more cutting-edge services in the future.”

— **Wojciech Peretko**, CIO, Jurlique

Established in 1985, Jurlique is an Australian manufacturer of natural skincare products. The company operates a 153-acre farm in South Australia, where it uses biodynamic farming techniques to optimize the potency of its plants to create products that offer highly effective results.

Recently, Jurlique has experienced significant growth in online sales in the U.S. When Jurlique’s products were featured on The Today Show in the U.S., the company received 16,000 orders in a 24-hour period, and it took more than one month to settle the orders.

Jurlique quickly realized it needed to automate its online ordering process to cut down transaction processing time and deliver a better service to its customers. This would involve integrating its online ordering application with the JD Edwards EnterpriseOne system to create a streamlined service-oriented architecture (SOA) framework.

SOA has reduced the time it took to complete online product orders by at least 20%, and it accelerates delivery times from order to shipment by 50%.

**Challenges**

- Automate processing Web-based orders to support growth in online skincare product sales, particularly in the U.S.
- Improve customer service by reducing the weeks of manual processing required to reconcile thousands of daily product orders during peak times, such as Christmas
- Support sudden spikes in orders due to promotional activities, such as product coverage on television
- Automate the wholesale product ordering process, from the time a retail customer orders a product online, to when the package leaves the warehouse
- Enable staff to enter and manage customer orders using mobile devices

**Solutions**

- Deployed a service-oriented architecture (SOA), providing real-time orders by integrating Website functions with the company’s core JD Edwards EnterpriseOne Order Processing module without need for custom coding
- Reduced time to complete online product orders by at least 20% by automating settlement processes
- Cut the time to reconcile skincare product orders during peak periods, such as special events or Christmas, by 50%

- Enabled customer service staff to identify transaction failures and resubmit these orders 10% faster
- Improved transaction data by allowing customers to enter their delivery address or details online, which reduced the number of missed deliveries to almost zero
- Accelerated delivery times from order to shipment by 50%—reducing it from a minimum of four hours to a maximum of two hours
- Ensured orders are available in the warehouse and ready for shipment within 15 minutes
- Allowed skincare product orders placed by 2:00 p.m. to be delivered to customers the same day, extending the cut-off time for same-day delivery by two hours
- Reduced invoice settlement time from days to seconds by integrating and automating credit card payment and invoice settlement processes with a single merchant payment account
- Enabled quicker order entry by tracking subscription IDs and storing credit card details when orders were authorized and making this information available for future transactions
- Sped up deployment through SOA for new online services, improving engagements between the IT department and the rest of the organization
- Allowed sales staff to process sales orders on mobile devices by using Oracle Application Development Framework 11g and Oracle SOA Suite to build a Mobile Ordering System that is integrated with the JD Edwards EnterpriseOne Order Processing module
- Improved visibility of enterprise business processes by using BPEL Process Manager to initiate and track processes across applications to identify areas for improvement
- Allowed just one person from the IT team to easily manage server capacity using Oracle WebLogic Server
- Redeployed customer service staff in Australia, the U.K., and the U.S. from manual data entry to more active customer-facing roles, due to automation
- Expected to decrease application downtime and risks related to upgrading to JD Edwards EnterpriseOne 9.1 by eliminating the need to recode interfaces and test customizations
- Anticipated a reduction in the time to complete server maintenance each month using Oracle Business Activity Monitoring
- Supported growth in online orders, particularly from overseas markets, as a result of faster, more efficient order processing

#### **Why Oracle**

Jurlique chose Oracle SOA Suite Release 11.1.1.5, Oracle WebLogic Server 11g, BPEL Process Manager 11g and Oracle Application Development Framework 11g because the solutions enabled the company to deploy new online services at a low cost.

“Jurlique is a small organization with a limited IT budget,” said Wojciech Peretko, CIO, Jurlique. “The Oracle solutions will support future growth in our organization as we roll out new services for our staff and customers.”

### Implementation Process

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The online ordering system—which is integrated with the JD Edwards EnterpriseOne system—was developed between January and June 2011 using Oracle SOA Suite Release 11.1.1.5, BPEL Process Manager 11g, and Oracle WebLogic Server 11g.

During the implementation, Red Rock Consulting worked with Jurlique to develop and test the core online SOA application that enables the JD Edwards system to authorize orders for credit card payments and automatically settle invoices.

The solution also uses credit card subscriptions to safely store sensitive personal information in a service provider database instead of locally in the JD Edwards EnterpriseOne system. This ensures Jurlique is compliant with the requirements of the Payment Card Industry Data Security Standard, which protects cardholder data by making sure companies securely process, store, and transmit credit card information.

The new Web-based wholesale ordering system is being developed using Oracle Application Development Framework 11g and reusing services from the first online ordering system deployment. It is expected to go live in the second half of 2012.

### Partner

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Red Rock Consulting developed the online ordering system integration and had it ready for testing in only a few days. Since then, the organization has helped build more proof-of-concept and production applications.

One of these applications is a shipment notification system, which instantly sends e-mails to customers when shipments are recorded in JD Edwards EnterpriseOne, and a dashboard that illustrates order-processing flows in real time.

Red Rock Consulting also integrated a system used at Jurlique's warehouse in the United Kingdom with JD Edwards EnterpriseOne to process sales orders and receipts in the warehouse.

"We have been impressed by Red Rock Consulting's technical staff and its ability to create new applications so quickly," said Peretko. "Its experience was very useful, as we don't have this sort of expertise in-house."

**Oracle Customer:****Rioprevidência**

Rio de Janeiro, Brazil  
www.rioprevidencia.rj.gov.br

**Industry:**

Public Sector

**Industry:**

Under \$100 Million

**Annual Revenue:**

250,000

**Oracle Products & Services:**

- Oracle Enterprise Manager
- Oracle Business Process Management Suite
- Oracle Real Application Clusters
- Oracle WebCenter Portal
- Oracle WebLogic Server, Enterprise Edition
- Oracle SOA Suite

## Rioprevidência Dispenses Civil Service Benefit Funds 80% Faster by Using Automated Processes to Determine Eligibility

“The technological environment fostered by the implementation of Oracle Enterprise Manager, Oracle Business Process Management Suite, Oracle Real Application Clusters, Oracle WebCenter Portal, Oracle WebLogic Server, Enterprise Edition, and Oracle SOA Suite, has allowed us to digitalize millions of documents, eliminate the use of paper, and to redefine the administrative work flow involved in allocating pensions. This has resulted in significant time savings while improving the services we provide to public servants.”

— **Luis Claudio Gomes**, Vice President, Rioprevidência - Single Social Security Fund of the State of Rio de Janeiro

Founded in 1999, Rioprevidência is the independent public authority that manages financial assets earmarked for salaries, pensions, and other social security benefits. The agency determines eligibility and manages and executes benefit payments, such as pensions and retirement benefits, for active and retired public servants of the State of Rio de Janeiro and their dependents.

**Challenges**

- Digitize documents, such as medical certificates, personal identification, and proof of contributions associated with 500,000 beneficiaries to reduce the risk of data loss and improve the agency’s ability to securely manage and distribute social security benefits
- Provide greater speed and transparency in the process of determining pension eligibility for public servants and their dependents by automating administrative processes

**Solutions**

- Implemented Oracle Enterprise Manager and Oracle Fusion Middleware components in the iGov Pad application environment, enabling the agency to launch a digital pension qualification application, which will eliminate the use of paper
- Automated and accelerated the pension dispensation process by 80% by eliminating inaccurate data records and allowing analysts to have rapid and simultaneous access to documents, which shortened benefit eligibility analysis from 60 to 12 days
- Eliminated paper from nearly 500 procedures related to monthly pension enrollment, saving approximately US\$420,000 (R\$1 million) annually by reducing physical storage requirements
- Digitized, preserved, and outsourced storage of relevant documentation—which the agency must retain for up to 200 years—accelerating queries, preventing document deterioration, and improving security
- Facilitated electronic exchange of reports with the Federal Court of Auditors, the federal agency responsible for financial oversight of public entities
- Created an IT platform that will enable the agency to expand remote services, such as online retirement enrollments to public servants and their dependents

### **Why Oracle**

“We assessed the use of Oracle solutions within other state agencies, and this gave us total confidence in our decision to adopt them ourselves. Another important factor was the high degree to which the technology supported our internal processes, which allowed us to go beyond just document digitalization to actually transitioning from an analog to a digital process with complete confidence and security,” said Luis Claudio Gomes, vice president, Rioprevidência.

### **Implementation Process**

“The agency implemented Oracle Enterprise Manager, Oracle Business Process Management Suite, Oracle Real Application Clusters, Oracle WebCenter Portal, Oracle WebLogic Server, Enterprise Edition, and Oracle SOA Suite in 18 months, as scheduled.

“The project involved several stages, from document digitalization to user training, and we are very pleased with the flexibility and efficiency gains we’ve realized,” Gomes said.

**Oracle Customer:****Norway Post AS**

Oslo, Norway  
www.posten.no

**Industry:**

Public Sector

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

20,000

**Oracle Products & Services:**

- Oracle SOA Suite
- Oracle WebLogic Suite

**Oracle Partner:****Accenture**

www.accenture.com

**Capgemini**

www.capgemini.com

## Norway Post AS Post Improves Customer Service and Saves Major Annual Costs by Boosting Call-Center Productivity

“Thanks to Oracle’s cloud integration solution, our cloud CRM service works great with our on-premise, back-end systems. The advantages are significant, including major cost savings.”

— **Trond Guneriusen**, Service Manager, Internal Integration, Norway Post AS

Norway Post AS, founded in 1647, is the Norwegian postal service. The company, owned by the Norwegian Ministry of Transport and Communications, manages mail distribution throughout the country and has businesses in other parts of the Nordic region. In 2002, Norway Post changed its corporate structure to become a joint-stock company in preparation for Norwegian postal market deregulation.

**Challenges**

- Streamline operations and reduce costs, including IT expenses for the company’s five customer-service call centers in response to shrinking revenues, as the volume of mail has fallen 40% since 1999
- Enable customer-service representatives to more efficiently and accurately help customers, including answering questions, tracking missing or delayed mail, and making compensation payments
- Increase customer and employee satisfaction
- Expand insight into customer behavior and preferences and use the information to improve service and product offerings
- Create a solution that is easy to roll out to new organizations as Norway Post acquires additional companies

**Solutions**

- Implemented Oracle SOA Suite and Oracle WebLogic Suite to integrate the company’s cloud-based, Salesforce.com, customer-relationship management (CRM) system with its customer-service call centers’ on-premise, back-end systems—such as those used to manage customer lists, addresses, financial and procurement systems, and a mail-tracking solution—so employees can access them from a single, user interface and deliver faster and more thorough assistance
- Cut time needed to access customer and tracking information from back-office systems—improving customer and employee satisfaction
- Saved major costs annually, thanks to improved call-center productivity
- Achieved additional significant savings in time and effort and improved data quality by ensuring that information changes made in the integrated, back-end system are automatically synchronized in all other integrated systems, thanks to Oracle SOA Suite
- Expanded customer insight through more efficient customer-service call centers, enabled by cloud integration—which improves services and increases customer satisfaction and the company’s profitability

- Created a solution that makes it easy for companies that Norway Post acquires to implement—accelerating time to value
- Eliminated previous skepticism toward integration between cloud computing and on-premise back-end systems to facilitate more benefits from this type of solution by using it in other parts of the organization

#### **Why Oracle**

“We chose the Oracle solution for cloud-integration middleware because of its high reliability and flexibility. We had used Oracle extensively for a long time, so it was also a matter of making the most of our investment in our Oracle-based strategic integration platform,” said Trond Guneriussen, service manager, internal integration, Norway Post AS.

#### **Partner**

Accenture implemented the cloud integration solution and Capgemini implemented Norway Post’s specific configurations into the cloud solution.

**Oracle Customer:****Dubai Customs**

Dubai, United Arab Emirates  
www.dubaicustoms.ae

**Industry:**

Public Sector

**Annual Revenue:**

3,000

**Oracle Products & Services:**

- Oracle SOA Suite
- Oracle Business Intelligence Enterprise Edition
- Oracle Database
- Oracle Real Application Clusters
- Java Platform, Enterprise Edition 1.5

## Dubai Customs Assesses 20,000 Customs Declarations per Day, Reduces Average Time for Processing a Declaration from Four Hours to Less Than Ten Minutes

“Oracle works as our strategic partner to help sustain Dubai’s trade growth and business continuity. Thanks to Oracle technology, we deployed mission-critical applications with real-time capabilities and standardized workflows as an integrated solution and delivered a high-performance risk assessment engine capable of assessing more than 20,000 customs declarations per day.”

— **Younis Othman**, IT Director, Dubai Customs

Strategically located in the United Arab Emirates between the Eastern and Western markets, Dubai is one of the major trading hubs in the world. Dubai Customs, established more than one hundred years ago, provides its customers with exemplary services to facilitate the trade of goods and the movement of people in Dubai. In addition to customs activities, Dubai Customs works to achieve other strategic goals, such as monitoring intellectual property rights of traded goods, offering community protection against fraud and prohibited goods, delivering information technology innovation, and facilitating a legitimate world trade movement.

**Challenges**

- Deploy a high-performance relational database management system (RDMS) to support a in-house developed risk engine that analyzes each customs declaration and decides—based on complex mathematical modeling—if the declaration must be verified manually
- Achieve high availability for mission-critical applications to support core functions with zero down time—such as enabling self-service customs solutions
- Support cost-effective application scalability to meet the anticipated trading activity growth of more than 20% per year
- Enhance application integration capabilities with a robust, reliable out-of-the-box solution and reduce total cost of ownership (TCO)

**Solutions**

- Deployed Oracle Database to deliver a high-performance online risk scoring and assessment engine, with a database engine capable of supporting complex risk profile queries, to automate the credibility assessment of customs declarations
- Gained the ability to handle multiple data sets—such as exporter/importer, broker, merchandise, volume and origin/destination—match the data against risk profiles, communicate the outcomes seamlessly to numerous applications, and assess an average of 20,000 trade transactions per day (expected to increase to 40,000 in two years’ time)
- Reduced the time needed to clear a customs declaration from four hours to less than 10 minutes by supporting integration and performance requirements with numerous releases of in-house developed applications with Oracle SOA Suite

- Reduced risk engine application TCO by more than 60%, monitoring the solution with only two administrators
- Deployed and integrated mission-critical applications based on Java Platform, Enterprise Edition 1.5 and Oracle SOA Suite with real-time capabilities and standardized workflows—such as Mirsal 2, a feature-rich channel for Dubai’s trading community that clears 87% of all trade transactions in less than 10 minutes
- Exceeded the expected performance of mission-critical applications with advanced query construction and processing capabilities, resulting in transaction processing times of a fraction of a second
- Increased the organization’s capability to react to business changes on the fly—such as creating new risk profiles or executing risk impact analysis for new profiles—without involving IT staff by providing web-based self-service applications using Java Platform, Enterprise Edition
- Used Oracle Business Intelligence Enterprise Edition to provide managers with self-service, interactive dashboards and reports—such as risk profile engine performance and real-time monitoring of risks associated with customs transactions
- Ensured real-time operations with high availability, supporting database deployments across numerous commodity servers and providing hardware failure fault tolerance with Oracle Real Application Clusters
- Safeguarded the trading community and citizens from potentially dangerous transactions while processing legitimate transactions rapidly with a risk management approach based on accurate and permanently available data

#### **Why Oracle**

“We selected Oracle because it was clearly the best solution for our technology stack, based on a comprehensive technical evaluation. Oracle fully satisfied the challenging integration and performance requirements for Dubai Customs’ mission-critical systems,” said Younis Othman, director, IT department, Dubai Customs.

**Oracle Customer:****Greater Amman Municipality**

Amman, Jordan

[www.ammancity.gov.jo](http://www.ammancity.gov.jo)**Industry:**

Public Sector

**Annual Revenue:**

23,000

**Oracle Products & Services:**

- Oracle E-Business Suite Release 12.1.1
- Oracle Enterprise Asset Management
- Oracle Financials
- Oracle Internet Expenses
- Oracle Inventory Management
- Oracle iProcurement
- Oracle Project Collaboration
- Oracle Project Contracts
- Oracle Project Costing
- Oracle Project Management
- Oracle Project Resource Management
- Oracle Property Manager
- Oracle Purchasing
- Oracle Customer Data Hub
- Oracle SOA Suite
- Oracle BPEL Process Manager

**Oracle Partner:****Optimiza**[www.optimizasolutions.com](http://www.optimizasolutions.com)

## Greater Amman Municipality Boosts Management Performance with 360-Degree View of Citizens and Customers Across Enterprise Applications

“With Oracle E-Business Suite Release 12.1.1, we’ve improved financial and logistics operations and gained efficiency through standardization and automation. With Oracle Customer Data Hub, we provide our service agents an up-to-date, 360-degree view of a citizen’s or organization’s interactions with the municipality. Previously, it took days to collect the information from different departments. Thanks to the outstanding expertise and dedication of Oracle partner Optimiza, we achieved a successful major deployment that will benefit both citizens and commercial organizations.”

— **Khaled Abu Koush**, Senior Infrastructure Consultant, Greater Amman Municipality

Amman, the capital of Jordan, has approximately 2.8 million residents—comprising approximately 40% of Jordan’s population. Jordan has a high population of immigrants, with more than 40% of its residents being born in another country—a rate even higher than the United States, according to a 2005 United Nations report. Amman’s population is expected to grow to almost 6.5 million by 2025, due to constant and rapid immigration.

Greater Amman Municipality (GAM) was established in 1987 when the old city united with the surrounding municipalities, forming an administrative area that spans 700 square kilometers. Today, Amman’s 27 administrative districts cover approximately 1,700 square kilometers—surpassing the geographical size of Los Angeles by almost 50%.

**Challenges**

- Strengthen GAM’s fiscal management and economic activities by centralizing all financial information in a modern enterprise resource planning system that enables efficient monitoring and control
- Create a 360-degree view of each citizen, organization, and commercial enterprise in GAM by consolidating information—such as property taxes, construction permits, building licenses, and traffic citations—scattered across 14 home-grown and commercial systems
- Manage information about more than 2 million citizens and 200,000 commercial enterprises and organizations efficiently, ensuring that source systems contain the latest information about each customer, wherever the information has been modified
- Enable citizens, organizations, and commercial enterprises to gain immediate access to their records through specialized municipal agents, for example to obtain a letter of good credit standing, which previously could involve days or weeks of collecting numerous single certificates from municipal departments
- Establish data quality and merger procedures to prevent data duplication, which in the past required significant manual effort to correct

### Solutions

- Achieved tight financial control across departments after centralizing all financial information—including data from home-grown tax, permitting, and license management systems—with Oracle Financials, increasing financial transparency and controls, reducing municipal expenditure, and mitigating the risks of corruption attempts
- Used Oracle Customer Data Hub to provide GAM with a unified and up-to-date, 360-degree view of each citizen, organization, and commercial enterprise, enabling the municipality to serve its citizens and businesses better and faster
- Leveraged Oracle E-Business Suite Release 12.1.1 to automate interdepartmental processes—especially between the finance and procurement, logistics, project management, and asset management departments—increasing operational efficiency and reducing costs across the organization
- Used Oracle SOA Suite and Oracle BPEL Process Manager to orchestrate data flow—written in Cobol and other programming languages—between Oracle Customer Data Hub and 13 source systems to Oracle E-Business Suite, ensuring unique, complete, and up-to-date customer data
- Developed a customized, online function for Oracle Customer Data Hub, which reads transactional data from 13 source systems and drills down instantaneously to each transaction between a citizen or organization and the municipality, saving substantial effort and time for municipal staff when responding to requests
- Used Oracle Customer Data Hub's advanced data cleansing functions to identify and merge duplicate master data records, optimizing customer data management over the entire lifecycle while distributing a single source of trusted data to all vertical applications
- Benefited commercial enterprises and the public by enabling municipal staff to immediately generate a customer's account balance—a prerequisite for municipal reimbursements, which previously required a personal visit to numerous administrations to get a letter of good credit standing from each department
- Optimized effectiveness of GAM's marketing and informational campaigns thanks to accurate, up-to-date citizen information
- Enabled GAM's service center to instantly provide citizens and companies with their municipal account balance report, including detailed transactions—with plans to provide a self-service function in the near future through GAM's Web portal

### Why Oracle

“Oracle is considered the leading solution provider in the Middle East, where many people are familiar with Oracle technology and applications. Thirty years ago, the municipality began using Oracle platforms to develop applications. Oracle also has a strong partner presence in the region and an excellent policy in terms of partnering with its customers,” said Khaled Abu Koush, senior infrastructure consultant, GAM.

### Partner

GAM worked with Oracle specialized partner Optimiza to implement the project over three years, going live with Oracle Financials, Oracle Purchasing, and Oracle Inventory Management on January 1, 2011.

The initiative was complicated, involving numerous modules, business processes, and departments. It also required a phased rollout—with Oracle E-Business Suite’s core modules deployed first to support the municipality’s operations—followed by the gradual deployment of complementary modules.

Optimiza drafted the necessary data quality and data cleansing rules, including those for Oracle Customer Data Hub. It also defined cleansing activities for all source systems—for example identifying duplicate customer records based on criteria, such as customer names in Arabic language, national identification numbers, and customer identification numbers for noncitizens in the absence of a national identification.

Optimiza integrated Oracle Customer Data Hub with 13 source systems via two-way propagation of customer data, including name, address, contact information, relationships with other municipal administrations, and more.

Finally, Optimiza configured access remote systems through straight queries whose results are displayed in a 360-degree view, with database links for Oracle-based source systems and web-based services for source systems that aren’t Oracle-based.

**Oracle Customer:****Madinah Monawarah Development Authority**

Madinah, Saudi Arabia  
www.mmda.gov.sa

**Industry:**

Public Sector

**Annual Revenue:**

140

**Oracle Products & Services:**

- Oracle E-Business Suite Release 12.1
- Oracle Financials
- Oracle Human Resources
- Oracle Inventory Management
- Oracle Payroll
- Oracle Purchasing
- Oracle Self-Service Human Resources
- Oracle Sourcing
- Oracle Event Processing

**Oracle Partner:****Advanced Operations Technology**

www.advancedoperations.com

## Madinah Monawarah Development Authority

### Ensures Compliance with Government Regulations by Optimizing Public Procurement and Service Contract Management

“Madinah Monawarah Development Authority is a Saudi Arabian governmental organization that was established in 2009 to design and apply a comprehensive development plan for Madinah. The plan focuses on all development aspects of the Madinah Central Area, including the expansion of the Holy Prophet’s Mosque, and it ensures the integrity of all projects run in the city. With Oracle E-Business Suite, we optimized service contract management, enabled compliance with complex government regulations, and introduced a completely paperless working environment. The solution also delivers seamless integration and cost-effective scalability, which are important, as we expect to double our workforce and quadruple budgets within two years.”

— Eng. **Mohamed Bin Madani Al-Ali**, Secretary General, Madinah Development Authority

Al Madinah Al-Munawwarah—commonly written as Madinah Monawarah or Medina—is the second-holiest city in Islam, after Makkah (Mecca), and it is the burial place of the Islamic Prophet Muhammad. The city, known as the capital of Islam, houses the Holy Prophet’s Mosque and is one of the most visited places worldwide, receiving millions of pilgrims and tourists annually. Madinah Monawarah Development Authority (MMDA) is a Saudi Arabian governmental organization focused on developing the Madinah Central Area, which has nearly 1.8 million residents. The organization is responsible for implementing the Madinah region’s development plan, which includes expansion of the Holy Prophet’s Mosque.

**Challenges**

- Establish a paperless working environment with automated business processes—from public procurement, to service contract monitoring—to save time, cut costs, and reduce human errors
- Optimize decision-making with centralized, real-time reporting to provide a clear picture of contracts and vendors, budget consumption, workforce, and fixed assets
- Ease compliance with multiple government regulations regarding human resources management, public procurement, service contract management, and periodic financial statements
- Optimize public sector workforce productivity with a state-of-the-art enterprise resource planning (ERP) system

**Solutions**

- Deployed Oracle E-Business Suite Release 12.1.3 to optimize service contract management—public tenders, supplier selection, contract monitoring, and corresponding financial transactions—which account for 80% of the organization’s business activities

- Reduced implementation time by approximately 50%, compared to an ERP system implemented from scratch, thanks to Oracle E-Business Suite's preconfigured public-sector model
- Established standardized rules for public tenders that are mapped in Oracle E-Business Suite to ensure that contracts are executed consistently, transparently, and without delay—while minimizing the risk that supplier selection results may be distorted by human error
- Centralized all information relating to tenders—such as text documents, images, building plans, and financial calculations—in Oracle E-Business Suite, which dramatically shortened vendor selection by enabling staff to find information much faster
- Enabled 25 Oracle E-Business Suite users to ensure strict compliance with government rules regarding human resources management, periodic financial statements, and transparent public tender management with standardized, automated business processes that are transparent and easily auditable
- Introduced system alerts to notify managers of pending approvals and unscheduled events, such as impending budget overages—improving operational efficiency and mitigating the risk of cost overruns and missed deadlines
- Optimized decision-making with automated, real-time reporting to the organization's board of directors—including reports on tender status, pending procurements, payment approvals, employee overtime, and budget consumption
- Used Oracle Self-Service Human Resources to simplify and streamline requests for and approvals of overtime, leaves, vacations, as well as banking data for 120 employees—improving productivity and reducing administrative costs
- Enabled MMDA to better prepare and monitor the Hajj—one of the world's largest annual pilgrimages—when the region receives nearly 3 million visitors within a few days
- Ensured cost-effective, solution scalability to support a rapidly growing organization that expects to double its workforce and quadruple budgets within two years

### Why Oracle

“Modern government organizations need to consolidate, automate, and integrate processes—including the ability to control all activities with multiple alerts—to optimize public resource use,” said Hatem Al-Rehili, IT manager, Madinah Monawarah Development Authority. “It was seeing the success that other public sector organizations in Saudi Arabia have had with Oracle E-Business Suite that triggered our attention. And, Oracle's strong presence in the country—with numerous certified partners, who can assist with the implementation—gives us the security that Oracle will be a strategic partner for years to come.”

**Partner**

“We selected Oracle Platinum Partner Advanced Operations Technology, based on the group’s expertise in Oracle E-Business Suite implementations and its accomplishments in the Saudi Arabian government sector,” said Ahmad A. Al-Raddadi, IT services manager, Madinah Monawarah Development Authority. “Advanced Operations Technology deployed Oracle E-Business Suite Release 12.1.3 in close cooperation with and under the continuous direction of the information technology team of Madinah Development Authority. We benefited from substantial knowledge transfer during the process.

“We would not have had such a successful implementation without the cooperation, as a team, under the noble direction of His Highness the Governor of Madinah, the Head of the Authority, as well as the follow-up of His Eminence the Secretary General of Madinah Development Authority,” Al-Raddadi said.

**Oracle Customer:****Account NI**

Northern Ireland, United Kingdom  
www.mmda.gov.sa

**Industry:**

Public Sector

**Annual Revenue:**

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

- 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

- 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.
- Eliminated manual errors by automatically verifying data in BPM and ADF forms, such 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:****Danish Tax Authority (SKAT)**

Copenhagen, Denmark

www.skat.dk

**Industry:**

Public Sector

**Oracle Products & Services:**

- Oracle SOA Suite for Oracle Middleware
- Oracle WebCenter Portal
- Oracle Business Intelligence Suite, Enterprise Edition Plus
- Oracle WebLogic Server
- Oracle VM
- Oracle Database

**Oracle Partner:****Systematic A/S**

www.systematic.com

## Danish Tax Authority (SKAT) Monitors Newly Deregulated, Online Gambling Market with Help from IT Platform

“With our Oracle-based solution, we can quickly and efficiently validate that gaming providers pay appropriate taxes and winnings based on the country’s tax code. The combination of Oracle WebCenter Portal and Oracle Business Intelligence Enterprise Edition enables us to manage very large data volumes and to easily analyze and understand the information captured about completed games.”

— **Thomas Høineg Larsen**, Chief Project Manager, SKAT

Danish Tax Authority (SKAT) is the Danish tax authority under which the Danish Treasury calculates and collects taxes and levies charges. The agency also manages property valuations and debt settlements.

Beginning January 1, 2012, gambling companies could receive licenses to provide Danish citizens with online games, such as roulette, poker, bingo, and other forms of betting. SKAT needed to create a new department to supervise gambling enterprises to ensure they followed the rules and paid the correct taxes. It used Oracle Fusion Middleware and Oracle Database to effectively monitor these new gaming sites, collecting large data volumes from gambling suppliers, processing the information, and presenting it to tax agents through an easy-to-navigate Web portal.

### Challenges

- Introduce a cost-effective IT platform to manage the newly deregulated, Danish online gambling market and ensure that the gambling suppliers pay the correct taxes
- Choose a portal solution that supports an agile development methodology and that can be used in other areas within SKAT
- Implement a business intelligence solution that can handle large data volumes about completed games, process and present the information in an optimal way, and make automatic controls that ensure correct taxes and correct winnings are paid and legislated laws are properly followed

### Solutions

- Implemented a cost-effective IT platform, based on Oracle Fusion Middleware and Oracle Database to enable SKAT to monitor the online gambling market and also offline games, like slot machines—with controls over gambling suppliers and their rule compliance, and to collect the appropriate amount of taxes from them—while processing and analyzing large data volumes from the suppliers
- Deployed Oracle WebCenter Portal and Oracle WebLogic Server to define, monitor, and deploy Web services and create a Web interface that allows tax agents to download reports, gambling statistics, graphs, and other information
- Relied Oracle WebCenter Portal to support the agile development methodology (known as Scrum practices) that were used in the project, and evaluated Oracle WebCenter’s fit as a portal framework for other areas within SKAT

- Used Oracle Business Intelligence to collect, process, and present information from gambling suppliers, make tax calculations, and set up automatic controls to ensure gambling suppliers follow the rules—such as paying the correct amount of money to the players
- Worked with Oracle partner Systematic to help develop the solution and implement the platform in three months, without any delays

### **Partner**

Oracle partner Systematic was the main contractor on the project and was responsible for development and operations of the solution. The development process was conducted using agile methods (Scrum practices) —to fulfill the customers need for a fast deployment.

The agile process was facilitated by the Oracle products, and it was possible to create very early releases that still contained the necessary functionality.

**Oracle Customer:****The Singapore Land Authority**

Singapore  
www.sla.gov.sg

**Industry:**

Public Sector

**Employees:**

550

**Oracle Products & Services:**

- Oracle BPEL Process Manager
- Oracle WebCenter Content
- Oracle WebLogic Suite
- Oracle CRM On Demand, Enterprise Edition

**Oracle Partner:****Mahindra Satyam**

www.mahindrasatyam.com

## The 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%
- 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

- Encouraged 1,500 agency staff to use the portal by improving data sharing, compared to 363 staff sharing data before the solution was deployed
- 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:**

DVZ Datenverarbeitungszentrum  
Mecklenburg-Vorpommern GmbH

Schwerin, Germany  
www.mmda.gov.sa

**Industry:**

Public Sector

**Annual Revenue:**

Under \$100 Million

**Annual Revenue:**

400

**Oracle Products & Services:**

- Oracle SOA Suite
- Oracle Web Services Manager
- Oracle BPEL Process Manager
- Oracle Enterprise Service Bus

## DVZ Datenverarbeitungszentrum Mecklenburg-Vorpommern GmbH Ensures Government Compliance by Using Service-Oriented Architecture

“According to German law, we are required to retain documents for up to 110 years. Oracle SOA Suite enables us to integrate the necessary components with the flexibility to meet these regulations—independent of vendor. This gives us the necessary, long-term security for our future growth.”

— **Jan Lehmann**, Head of Business Application Technology and Service Management (FAT – Fachapplikation Technologie- und Service-Management), DVZ Datenverarbeitungszentrum Mecklenburg-Vorpommern GmbH

DVZ Datenverarbeitungszentrum Mecklenburg-Vorpommern GmbH (DVZ) is the IT service provider for the state of Mecklenburg-Vorpommern. DVZ has provided a secure IT infrastructure within its own high-availability data processing service center for more than 30 years. As the high-security data processing center for the state, DVZ must ensure the utmost level of data security at all times. Its environment includes modern and reliable data processing operations and a secure communication infrastructure that meets the strict rules and regulations of the Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik or BSI), including its recently implemented TR-ESOR guidelines. Having this secure environment based on Oracle’s SOA Suite has enabled DVZ to implement an electronic personal civil status registry two years ahead of the legal deadline.

**Challenges**

- Establish IT infrastructure for electronically storing personal, civil status certificates, such as birth or death certificates, for 30 to 110 years—as required by the German government, beginning in 2014
- Ensure compliance with the Federal Office for Information Security’s BSI technical guidelines that define requirements for an archiving platform
- Execute the BSI guidelines, beginning with those related to personal, civil status, using a modular architecture comprised of four modules (ArchiSafe, Krypto, ArchSig, and long-term storage) as specified by BSI for an archive system architecture
- Reduce dependency on vendors by dividing up these modules among various providers and technologies to guarantee the maximum level of investment protection and availability of archived documents in the long term
- Reuse existing basic components and infrastructure of Oracle SOA Suite already in place to reduce development costs
- Increase use of electronic files for personal, civil status certificates, such as birth and death certificates, through use of a new archive that optimizes registry offices’ space requirements

**Solutions**

- Used Oracle SOA Suite to implement one of BSI’s required modules, which ensures secure document storage with help of complex service composites, according to the specified BPEL process

- Implemented an electronic, personal, civil status registry for all registry offices in Mecklenburg Implemented an electronic, personal, civil status registry for all registry offices in Mecklenburg-Vorpommern, based on Oracle SOA Suite, two years prior to the legal deadline, which has enabled storing personal civil status certificates electronically since January 1, 2012
- Met all legal requirements in accordance with the BSI Technical Guidelines and guaranteed long-term document storage
- Used Oracle SOA Suite standard functionality, such as Web services, to integrate the key modules (ArchiSafe, Krypto, ArchSig and long-term storage) and to remain independent of the technology platforms in place
- Ensured that DVZ can replace individual modules with minimal effort as standard interfaces are used for integration
- Reduced project length, which lasted 12 months, by three months by using the existing environment and reusing components from Oracle SOA Suite
- Reduced future physical storage capacity requirements by successively introducing the system to all registry offices, having completed 60% of the 104 offices with 300 users and incorporating approximately 140,000 documents into the system within just three months with the goal to finalize rollout in 2012

### Why Oracle

DVZ Datenverarbeitungszentrum Mecklenburg-Vorpommern GmbH evaluated several other solutions that met BSI technical guidelines requiring organizations to implement the systems as monolithic, complete solutions. The organization chose Oracle because no other solution supported the intended modular architecture or vendor independence for the archive to reduce long term risks, or met DVZ's specific needs.

DVZ chose Oracle SOA Suite because of its open user interface and standard components, which proved to be optimal for third-party component integration. DVZ also used Oracle SOA Suite for the implementation of the ArchiSave module that is specified in the BSI Guidelines.

With Oracle SOA Suite and the organization's consequent standardized interface implementations, DVZ can replace components in-house, according to its specific needs and requirements, thus meeting specifications of the BSI technical guidelines.

**Oracle Customer:****INC Research, LLC**

Raleigh, North Carolina

www.incresearch.com

**Industry:**

Life Sciences

**Annual Revenue:**

5,000

**Oracle Products & Services:**

- PeopleSoft Human Resources On Demand
- Oracle Hyperion Planning On Demand
- PeopleSoft Learning Management
- Oracle Project Analytics
- Oracle Financial Analytics
- Oracle WebCenter Portal
- Oracle SOA Suite
- Oracle Business Activity Monitoring
- Oracle E-Business Suite
- Oracle Financials
- Oracle Time and Labor

## INC Research, LLC Ensures 24/7 Enterprise Application Availability and Supports Rapid Expansion in Asia with Managed Cloud Services

“Oracle Managed Cloud Services has provided us with the 24/7 availability and scalability that we require to support our growing contract research organization. And, it avoids the cost and complexity of deploying IT teams around the globe with the ability to quickly expand and integrate acquisitions. We are firm believers that Oracle does Oracle best.”

— **William Hayfer**, Vice President, Business Systems, INC Research, LLC

INC Research is a top-six, global, clinical research organization (CRO) that provides a full range of clinical development services. Pharmaceutical and biotechnology companies rely on INC Research for a full range of customized phase I to phase IV clinical development and trial programs and services.

The company has been expanding rapidly through organic growth and acquisition. In 2011, it acquired Kendle International, Inc., significantly expanding its reach and customer base.

**Challenges**

- Support the CRO’s expansion in Asia and around the globe to meet clinical-trial sponsor needs and requirements
- Ensure 24/7 availability and support for the company’s enterprise resource planning (ERP) environment to meet the needs of the global organization that has grown exponentially in the last decade
- Ensure consistent business processes across the company’s operations in more than 100 countries
- Onboard acquired companies and their employees rapidly to jumpstart return on investment
- Expand insight into enterprise performance and accelerate and standardize financial planning processes following acquisitions and expansion initiatives

**Solutions**

- Relied on Oracle Hyperion Planning On Demand and Oracle’s PeopleSoft Human Resources On Demand, delivered through Oracle Managed Cloud Services to ensure consistent business processes and provide a highly scalable ERP infrastructure that supports international growth as clinical trial markets expand in Asia and Eastern Europe
- Avoided the cost and complexity of deploying IT teams and systems at locations around the globe-gaining a competitive advantage
- Gained the ability to quickly integrate new acquisitions in emerging clinical trial markets and add offices to the network with a cloud-based IT model
- Moved 10 years of data effectively and efficiently to jumpstart return on investment
- Standardized and accelerated a disparate, spreadsheet-based, budget-planning process, saving weeks or months with Oracle Hyperion Planning On Demand

- Deployed PeopleSoft Learning Management to effectively train employees, including clinical trial managers, on procedures and policies-reducing the need for traditional classroom training around the globe, standardizing the experience, and saving more than US\$1 million annually with online training
- Gained reliable, consistent, and timely financial information from global operations and enabled analysts to conduct variance analysis for greater insight-improving confidence in forecasts and planning
- Extended ability to track and analyze clinical program budgets, performance, and profitability with Oracle Project Analytics, gaining insight that drives continuous improvement for clients
- Leveraged PeopleSoft Resource Management and provided extended WorkForce management through extension of project analytics schema
- Improved visibility into financial performance worldwide with Oracle Financial Analytics
- Used Oracle Fusion Middleware, including Oracle SOA Suite and Oracle Business Activity Monitoring, to create seamless integration between various applications, including the company's investigator database and its clinical trial management system-gaining more effective and accurate clinical trial information and avoiding the time and cost associated with rekeying data

### Why Oracle

As INC Research continued to expand globally, it required an IT infrastructure that was available 24/7 and could support rapid integration of new organizations and offices. Achieving this goal would require significant investment in terms of technology and human resources, in an area that was outside of the company's core competency. As such, it looked to a managed cloud services approach. INC Research had been running Oracle applications in its legacy environment and looked to expand its footprint with industry-leading Oracle Fusion Middleware.

"We are focused on ensuring high availability while reducing our IT complexity," said William Hayfer, vice president, Business Systems, INC Research. "Oracle provides leading solutions across the application, middleware, and technology layers, and Oracle Managed Cloud Services enables us to put the full resources of the company that developed the solutions behind our implementation. It is a logical approach that allows us to get the most from our investment."

### Implementation Process

INC Research successfully used the method to integrate Kendle's PeopleSoft HR platform with INC Research's Financial platform, cutting months from the integration process.

INC Research's cloud strategy is an ongoing effort.

The company is currently running several of its PeopleSoft Human Resources applications and Oracle Hyperion Planning through Oracle Managed Cloud Services. It is preparing to run its Oracle Fusion Middleware environment, including Oracle WebCenter Portal, using the Oracle Cloud and will migrate its Oracle E-Business Suite applications when it upgrades to Release 12 in late 2013. Moving forward, INC Research also plans to migrate PeopleSoft Learning Management to Oracle Managed Cloud Services.

**Oracle Customer:****Teva North America**

North Wales, Pennsylvania  
www.tevapharm-na.com

**Industry:**

Life Sciences

**Annual Revenue:**

Over \$5 Billion

**Employees:**

9,000

**Oracle Products & Services:**

- Oracle SOA Suite
- Oracle Service Bus
- Oracle SOA Management Pack  
Enterprise Edition
- Oracle E-Business Suite

## Teva North America Tracks Millions of Products Across the Entire Supply Chain for Improved Safety and Business Insight

“Oracle Fusion Middleware and Oracle E-Business Suite are critical components of our e-pedigree solution—enabling us to optimize our existing technology investment. We’ve created a robust and highly scalable solution that will enable us to track our products across the entire pharmaceutical supply chain—improving safety and giving business insight into inventory, costs, and quality assurance.”  
— **Jagadish Shivaramaiah**, Manager, Applications Development, Teva North America

Teva Pharmaceutical Industries Ltd., headquartered in Israel, is a leading global pharmaceutical company, committed to providing consumers with access to high-quality healthcare by developing, producing, and marketing affordable generic, innovative, and specialty products, as well as active pharmaceutical ingredients. The world’s largest maker of generic pharmaceutical products, Teva has a global product portfolio of more than 1,300 molecules and a direct presence in approximately 60 countries. The company’s branded businesses focus on products for the central nervous system, oncology, pain, respiratory, women’s health, and biologics.

Teva North America is comprised of subsidiaries of Teva Pharmaceutical Industries Ltd. The North American group has locations in 13 states, the District of Columbia, Canada, and Puerto Rico, and more than 9,000 employees.

**Challenges**

- Comply with State of California and other emerging e-pedigree anti counterfeiting initiatives that require pharmaceutical manufacturers to apply unique serial numbers to track products at the unit, case, and pallet levels, tracing serial number movement across trading partners and through the entire pharmaceutical supply chain
- Create an e-pedigree solution that scales and can introduce a standardized serialization process across a global organization that has grown significantly through mergers
- Leverage the compliance infrastructure to advance broader business objectives, such as greater supply chain agility, tighter inventory control, and more efficient distribution
- Ensure that the e-pedigree solution integrates with existing infrastructure and key trading partners to optimize current IT investment

**Solutions**

- Used Oracle Fusion Middleware components, Oracle E-Business Suite, and a third-party traceability server, warehouse management system, and packaging execution system to create a scalable and robust e-pedigree solution that satisfies immediate regulatory requirements and positions the company for future business benefits
- Laid a foundation to enable consumers in the future to know the exact path and chain of custody that their pharmaceutical products have taken, from point of production, to the pharmacy, guarding against counterfeiting and ensuring safety

- Built a platform that will enable Teva to integrate serialized information with additional business transactions and processes—such as inventory control, quality assurance, returns, pricing, and contracts—for greater insight into operations
- Positioned the organization to obtain a real-time picture of where more than 1.5 million pharmaceutical products are at any point in the supply chain, which enables tighter inventory control, especially in short-supply situations, and drives better understanding of the impact of disruptions or process changes—ultimately supporting better decision-making
- Gained the ability to determine the exact cost of each unit, from manufacture through consumption, and monitor market manipulation, improving competitive position
- Used Oracle SOA Suite to integrate the flow of information between manufacturing resource planning, enterprise resource planning, serialization, and warehouse management systems to ensure complete documentation and full traceability
- Enabled the new serialization and legacy enterprise systems to co-exist, thanks to Oracle SOA Suite, which supports a loosely coupled approach to integration
- Allowed business processes to operate across a multinode network, thanks to Oracle SOA Suite, which makes the integration process more fault-tolerant and protects existing investments against potential business and technological disruption
- Optimized existing technology investments as part of the e-pedigree initiative, speeding development, reducing investment costs, and minimizing business risk
- Created a highly scalable solution that is capable of supporting massive data volumes and real-time data exchange between systems, including processing and printing billions of serial numbers and then storing the history of each unit

### Why Oracle

Teva North America evaluated several middleware solutions, including IBM WebSphere, when it launched its e-pedigree initiative. “We conducted a thorough evaluation of solutions, and Oracle led the pack in terms of its roadmap, following the acquisition of WebLogic. It also provided strong benchmarks, and we had resources in house that were experienced with Oracle’s solution set, including Oracle E-Business Suite,” said Jagadish Shivaramaiah, manager, applications development, Teva North America.

### Implementation Process

Teva’s e-pedigree solution—which required four years to build and test—was a ground-breaking initiative involving the integration of numerous systems as well as the deployment of new technologies. For the North American initiative, Teva used Oracle SOA Suite to integrate the company’s Northwest US Distribution Center, packaging lines throughout North America, and downstream trading partners.

After piloting in the United States, Teva will roll out its e-pedigree solution at its manufacturing facilities across the globe over the next 18-to-24 months.

**Oracle Customer:****Life Technologies Corporation**

Carlsbad, California

www.lifetechnologies.com

**Industry:**

Life Sciences

**Annual Revenue:**

\$1 to \$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
- 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

- Enable the company to rapidly integrate acquired companies to jumpstart return on investment
- 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:**

**Australian Hearing**  
 Sydney, Australia  
[www.hearing.com.au](http://www.hearing.com.au)

**Industry:**

Healthcare

**Annual Revenue:**

Under \$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](http://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.

“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**

- Minimize IT costs by reducing inefficient maintenance tasks and the number of IT and service desk staff required

- 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

### 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:****MOH Holdings**

Singapore  
www.mohh.com.sg

**Industry:**

Healthcare

**Employees:**

2,513

**Oracle Products & Services:**

- Oracle Healthcare Transaction Base
- Oracle SOA Suite 11g
- Oracle Database 11g
- Oracle Real Application Clusters
- Oracle Advanced Security
- Oracle Database Vault
- Oracle Identity Management 11g
- Oracle Enterprise Manager 11g
- Oracle Consulting

**Oracle Partner:****Accenture**

www.accenture.com

## MOH Holdings Enhances Healthcare Services for Singapore Residents with National Electronic Health Record System

“MOHH’s goal is to provide Singapore’s healthcare organizations with real-time clinical information to help their clinicians more effectively diagnose and treat patients. The Oracle-based NEHR system takes MOHH one step closer to achieving Singapore’s vision of One Singaporean, One Health Record.”

— **Sari McKinnon**, Director, Solutions and Architecture, Information Systems Division, MOH Holdings

MOH Holdings is the holding company for Singapore’s public healthcare entities. It undertakes several strategic initiatives for Singapore’s Ministry of Health (MOH) and public healthcare institutions, including the common employment of junior doctors and the joint recruitment of healthcare professionals for all public healthcare institutions. MOHH also develops and deploys talent management, human resources, and national IT frameworks for Singapore’s public healthcare sector.

MOH has created a national electronic health record (NEHR) system for Singapore’s public health sector. The NEHR system is available to all public healthcare institutions (comprising eight restructured hospitals, eight specialist centers, and 18 polyclinics), five community hospitals, two nursing homes, a hospice, selected general practitioners (GPs), and users from the Agency for Integrated Care (AIC).

The NEHR system aims to help clinicians improve the quality of healthcare for more than five million Singapore residents by providing them with more timely, harmonized, and accurate patient health information from a central repository of aggregated data from source systems.

The adoption of the NEHR system will allow MOHH to take a major step towards objectively measurable consistency and efficiency in the care-delivery process, across the healthcare continuum.

### Better Care for Singapore Residents

MOHH wanted to help clinicians improve the quality of healthcare for Singapore’s 5.18 million residents (as of 2011), by providing them with more timely, coordinated, and accurate patient health information from a central repository of consolidated data.

It also wanted to help clinicians to more accurately diagnose and treat diseases and chronic illnesses and ensure patient information was secure and available only to authorized healthcare practitioners.

In 2008, MOHH engaged Oracle Diamond Partner Accenture to help develop a blueprint for the NEHR system, which would be accessed by healthcare providers across Singapore’s public health sector. The following year, the Singapore Government announced that it was setting aside US\$139 million (SGD\$176 million) for the first phase of NEHR. In June 2010, an Accenture-led consortium was awarded the project to rollout the first phase, and work started in July 2010.

Under the arrangement, Oracle provided a central repository for healthcare data, and the middleware and identity management pieces of the NEHR system.

MOHH purchased Oracle Healthcare Transaction Base, Oracle SOA Suite 11g, Oracle Database 11g, Oracle Database options Oracle Real Application Clusters, Oracle Advanced Security, and Oracle Database Vault, Oracle Identity Management 11g, and Oracle Enterprise Manager 11g.

These components work alongside a patient index, which maintains patients' demographic data and matches their details from multiple source applications, and a clinical portal, which provides the front-end interface for clinicians to access medical data stored in the underlying Oracle infrastructure.

The NEHR system aims to help clinicians improve the quality of healthcare for citizens by capturing key information from multiple healthcare providers, and providing a summary of this information electronically to authorized healthcare providers in Singapore. The captured information includes medication histories, allergies, laboratory results, radiology results, and hospital inpatient discharge summaries.

Since June 2011, numerous public healthcare institutions have been progressively accessing NEHR, including acute and community hospitals, as well as an initial group of step-down care and primary-care providers, such as general practitioners, two nursing homes, and a hospice.

“MOHHs' goal is to provide Singapore's healthcare organizations with real-time, clinical information to help their clinicians more effectively diagnose and treat patients,” said Sari McKinnon, director, solutions and architecture, information systems division, MOH Holdings. “The NEHR system takes MOHH one step closer to achieving Singapore's vision of One Singaporean, One Health Record.”

### **Secure and Meaningful Use of Health Information**

Oracle Healthcare Transaction Base is a clinical repository that securely aggregates clinical data, such as discharge and event summaries, and existing and previous medications, from source systems. The data is consolidated and presented as an aggregated summary for healthcare practitioners to view in the NEHR system and online. These records are stored in Oracle Database 11g.

MOHH is currently working with Oracle to try and achieve its target of presenting this data in less than two seconds.

### **Superior Performance with Centralized System**

MOHH deployed Oracle SOA Suite 11g to help it design, deploy, and integrate various reusable services and workflows that keep the NEHR system running smoothly. It also manages the exchange of data between existing clinical information applications and the NEHR system.

“Oracle SOA Suite is the exchange mechanism that is delivering patient data to healthcare practitioners using the NEHR system,” said McKinnon. “The main aim is to help them provide more informed care to patients by using a longitudinal, aggregated view of critical clinical-data summaries.”

Oracle SOA Suite also provides the flexibility to create new services. In addition, the application can easily be extended across the broader healthcare system in Singapore over the next few years, which would support the government’s vision to provide more timely and efficient healthcare to all Singapore residents.

### **Tight Security Protects Patient Information**

Ensuring patient privacy is extremely important for hospitals and health clinics across Singapore. MOHH uses several Oracle solutions, alongside other components, to ensure patient information in the NEHR system is secure while providing healthcare professionals access to this data.

MOHH deployed Oracle Identity Management 11g to ensure each patient’s personal health information is not compromised. The application is used to authorize clinicians’ access when they log into the NEHR system to view medical information of patients under their care, such as medication histories and lab reports. The information is provided on a need-to-know basis.

“The aim is to legitimize the use of the system, so clinicians can provide the best clinical care and MOHH can promote confidence that patient information is being used in the right way,” said McKinnon.

Oracle Database Vault (an database option) is used to prevent MOHH’s IT administrators—who conduct regular maintenance of the NEHR system—from accessing patient records and other personal information by giving them only access to the information they need to do their jobs.

Oracle Advanced Security also provides an additional layer of security by encrypting Oracle Database files, which prevents files from being copied and opened at another location.

### **Challenges**

- Create a flexible and scalable NEHR system to improve the quality of healthcare for Singapore residents
- Help clinicians to more accurately diagnose and treat diseases and chronic illnesses
- Secure patient information and make it available only to authorized healthcare practitioners

### Solutions

- Deployed a centralized NEHR system that provides clinicians across Singapore with access to patient data summaries to enhance healthcare delivery to 5.18 million residents (as of 2011)
- Expected to soon deliver patient data—such as discharge and event summaries and records of existing and previous medications—to clinicians throughout Singapore in less than two seconds
- Enabled aggregated clinical information to be easily viewed by healthcare practitioners
- Ensured the NEHR system runs smoothly by designing, deploying, and integrating various reusable services and workflows
- Helped healthcare practitioners provide more informed care to patients by using a longitudinal, aggregated view of critical clinical data summaries
- Supported the government’s vision of providing more timely and efficient healthcare to all Singapore residents by providing the flexibility to create new services, which can be extended across the broader healthcare system
- Protected the privacy of patients by ensuring their health data can only be accessed by authorized healthcare practitioners
- Prevented IT administrators—who conduct regular maintenance of the NEHR system—from accessing patient records and other personal information
- Maintained the integrity of medical information by ensuring the format of data sent from clinical applications to the central NEHR system is not altered

### Why Oracle

MOHH needed a solution that was already being used by other healthcare agencies with complex requirements. Oracle and Accenture provided reference sites, confirming that Oracle Identity Management 11g, Oracle SOA Suite 11g, Oracle Healthcare Transaction Base, and Oracle Database 11g worked well in large-scale public healthcare deployments.

“While the project received a lot of interest from technology providers, MOHH felt that the Oracle and Accenture consortium provided a suitable solution for its needs,” said McKinnon.

### Implementation Process

In 2008, MOHH engaged Oracle Diamond Partner Accenture to help develop a blueprint for the NEHR system. In June 2010, an Accenture-led consortium was awarded the project to roll out the first phase of the NEHR system.

Work on the NEHR project started in July 2010. The system went live in April 2011, and MOHH began rolling it out across numerous healthcare institutions in Singapore in June 2011.

**Partner**

Accenture was engaged to develop a blueprint that detailed the business, application, and technology architectures behind the NEHR system. From July 2010, Accenture worked with MOHH to map out the system requirements, design and build the NEHR system, and migrate historical patient data from the source systems.

Technical staff within the Accenture consortium used Accenture's project methodologies and program management tools to deploy and test the system in 10 months.

"Accenture's knowledge and resources were crucial to ensuring that this national project was completed within a tight timeframe," said McKinnon.

Oracle Consulting, as part of the consortium, also provided healthcare and Oracle technology experts to assist with the implementation. This provided MOHH with additional assurance that any issues during the implementation would be addressed promptly, helping to reduce risk and ensure timely delivery of the project.

**Oracle Customer:****Intermountain Healthcare**

Salt Lake City, Utah

www.intermountainhealthcare.org

**Industry:**

Healthcare

**Annual Revenue:**

Over \$5 Billion

**Employees:**

33,000

**Oracle Products & Services:**

- PeopleSoft Financials 9.1 On Demand
- PeopleSoft eSupplier Connection 9.1 On Demand
- PeopleSoft Inventory 9.1 On Demand
- PeopleSoft eProcurement 9.1 On Demand
- PeopleSoft Supplier Contract Management 9.1 On Demand
- PeopleSoft Maintenance Management 9.1 On Demand
- PeopleSoft Strategic Sourcing 9.1 On Demand
- Oracle Business Intelligence Enterprise Edition On Demand
- Oracle Financial Analytics
- Oracle Supply Chain Analytics
- Oracle Human Resources Analytics
- Oracle SOA Suite

**Oracle Partner:****PriceWaterhouseCoopers LLP**

www.pwc.com

## Intermountain Healthcare Selects Cloud Services to Ensure High Performance, Scalability, and Predictable Costs for Enterprise Resource Planning

“Oracle Managed Cloud Services was an easy choice for us. Who better to host and manage our PeopleSoft applications than the company that created them. We will also benefit from high availability, dedicated, world-class IT management and support, as well as predictable costs. It is a winning proposition.”

— **Joe Finlinson**, Enterprise Resource Planning IT Manager

Intermountain Healthcare, based in Salt Lake City, Utah, is an internationally recognized, nonprofit, health system that includes 22 hospitals, a Medical Group with more than 185 physician clinics, and an affiliated health insurance company. It serves patients and plan members in Utah and southeastern Idaho, offering a full range of services, from urgent care, to home care, to the region’s most advanced trauma centers.

Providing high-quality care at an affordable cost is at the heart of Intermountain’s mission, and the organization has received national attention for its achievements on this front. IT plays an important part in the health system’s ability to deliver quality and affordable care, with Intermountain’s chief information officer, serving on President Obama’s Council on Healthcare Information Technology.

Looking to continually improve operational effectiveness, Intermountain began to focus on its legacy enterprise resource planning (ERP) environment, which included in-house developed applications for financial and supply chain management, as well as Oracle E-Business Suite applications for human resources and payroll. In assessing its proprietary applications, Intermountain saw room for improvement in functionality, visibility, data quality, system performance, and scalability, as well as reporting and analysis.

The health system began a competitive search for an integrated commercial-off-the-shelf (COTS) solution, ultimately selecting Oracle’s PeopleSoft Financials 9.1 and PeopleSoft Supply Chain Management 9.1 applications for their robust functionality, as well as Oracle’s continued investment in the application suite. To extend reporting and analytical capabilities, Intermountain chose Oracle Business Intelligence Enterprise Edition and Oracle Business Intelligence Applications for financials, supply chain, and human resources.

As it began to deploy the applications, Intermountain Healthcare began to consider a hosted model and Oracle Managed Cloud Services.

“Oracle has a strong reputation in the market, and we were purchasing Oracle applications, so who better to host and manage them than the company that developed them? This approach removes segregated support issues that can slow problem resolution. We needed to be live in two years, with a big bang approach. This is a big job, and we needed a cloud services partner and systems integration partner—in our case, PriceWaterhouseCoopers—that could help get us there,” said Joe Finlinson, enterprise resource planning IT manager, Intermountain Healthcare.

Intermountain is working with Oracle Managed Cloud Services on a unique identity management solution, deploying a federated, single-sign-on solution that will allow it to authenticate users seamlessly, without sharing credentials with Oracle. In addition, the company will use Oracle SOA Suite to achieve integration between the PeopleSoft environment and Intermountain's other systems. This approach will enable loose coupling, reducing the need for custom integrations and building a path to future migration to Oracle Fusion applications that will not require the health system to upgrade its interfaces—reducing complexity and saving significant time and costs.

### Why Oracle

Intermountain Healthcare selected Oracle Managed Cloud Services to host its PeopleSoft Enterprise and Oracle Business Intelligence environments for the benefits it can deliver. The company, which seeks to maintain high performance and availability of its business-critical applications, knows that significant internal human and technical resources are required to support a large-scale ERP implementation.

“We immediately realized there were benefits to be gained by having Oracle manage Oracle hardware and software,” Finlinson said. “It has more than 1,500 dedicated resources with deep PeopleSoft expertise. Oracle has seen it all, and we have a single point of contact to manage.”

In addition, speed to deployment was critical as the company targeted an early 2014 go live. “Oracle was very fast to assign people and provision the hardware and software. Oracle had our environments provisioned and delivered just 28 days after signing the contract,” Finlinson said.

Intermountain Healthcare looks forward to proactive monitoring and rapid resolution of any problems that will arise and the flexibility to scale as needed. It also will benefit from predictable annual costs to smooth out bumps in the budget, as well as regular hardware refreshes.

As a healthcare organization, Intermountain manages sensitive data and must abide by various industry standards and regulatory requirements, such as the Health Insurance Portability and Accountability Act (HIPAA), International Organization for Standardization (ISO) standards, as well as payment card industry data security standards. Oracle On Demand provides high levels of security as well as validated systems that support compliance. In addition, Intermountain is an Information Technology Infrastructure Library (ITIL) shop, and Oracle Managed Cloud Services has an ITIL process, so it complements the company's local governance.

### Implementation Process

Intermountain plans to go live in January 2014 with a “big bang” approach. During the development phase, Intermountain meets weekly with Oracle Managed Cloud Services' delivery and implementation managers.

“There has not been a time when Oracle has not met or exceeded our expectations. They want to succeed with us,” Finlinson said.

### **Partner**

Oracle partner PwC is the systems integration and implementation partner for Intermountain’s PeopleSoft initiative. It is leveraging the consulting organization’s transformation methodology.

“PwC guides us daily in our implementation, with 60% of project resources coming from our team and 40% from PwC. An important factor in our selection process was that PwC has done most of the PeopleSoft 9.1 implementations in healthcare to date, and they’re a strong Oracle partner.”

**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

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:****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
- 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 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
- 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
- Established an SOA foundation to ensure application scalability to support the company's 10-year roadmap for business and IT

### 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:****Japan Petroleum Exploration Co. Ltd.**

Tokyo, Japan  
www.japex.co.jp

**Industry:**

Oil and Gas

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

1,700

**Oracle Products & Services:**

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

**Oracle Partner:****USE**

www.use-ebisu.co.jp

## Japan Petroleum Exploration Co. Ltd. Exploration Saves Operating Costs with Automated Business Processes that Improve Data Accuracy

“We selected Oracle Business Process Management Suite and Oracle SOA Suite as they are secure, reliable, quick to implement, and contain the latest, cutting-edge technology. We were very impressed with the functionality and speed in delivering new capabilities to our systems, which enabled us to improve efficiency and cut operating costs.”

— **Kenichi Watanabe**, General Manager, IT Department, Japan Petroleum Exploration Co. Ltd.

Japan Petroleum Exploration Co. Ltd. (JAPEX) is engaged in global oil and natural gas exploration and production to secure sustainable, long-term energy supplies. It operates at four key Japanese locations—Hokkaido, Akita, Yamagata, and Niigata—and overseas activities include Canada, Indonesia, and Iraq.

JAPEX wanted to implement a service-oriented architecture (SOA) platform for greater departmental cooperation and to eliminate information silos. The company worked closely with Oracle Consulting to develop a personnel management system—using Oracle Unified Business Process Management Suite—that enables the human resources (HR) department to automatically link staff positions, roles, and levels to other departments’ systems. Previously, various departments’ manual collation of personnel information resulted in duplication of tasks. The automatic linking of user accounts between HR and other departments has improved data accuracy and enabled the HR department to provide faster responses to personnel queries.

From December 2011 to March 2012, JAPEX’s IT department began a pilot project for evaluating and testing Oracle Unified Business Process Management Suite within the HR and finance departments. The pilot project successfully automated business processes so that, for example, the HR department can now seamlessly transfer personnel cost details to the finance department for accounting that meets International Financial Reporting Standards requirements. JAPEX later extended the Oracle Unified Business Process Management Suite deployment to other departments.

JAPEX also developed a process portal using Oracle Applications Development Framework to ensure that employees can easily and quickly update and enter information, such as staff employment details, through a single screen rather than multiple interfaces. In May 2012, JAPEX deployed Oracle SOA Suite to enhance the user interface and ensure employees can easily adopt the new system organizationwide.

“By implementing Oracle Unified Business Process Management Suite and Oracle SOA Suite, we developed a user account management system that links HR information with various departments’ systems, but requires no supervision,” said Kenichi Watanabe, general manager, IT department, Japan Petroleum Exploration Co. Ltd. “The functionality, and its speed in delivering new capabilities to the portal saves operating costs.”

With assistance from Oracle Consulting, JAPEX realized during the pilot project the ease in developing process-based applications using Oracle Unified Business Process Management Suite and Oracle SOA Suite, and it decided to extend this technology to other systems to improve business efficiency.

For example, the company plans to link the automated personnel management system with the staff remuneration system by using Lightweight Directory Access Protocol. It will enable automatically connecting staff information with the account management system through single sign-on.

“We were very impressed with Oracle Unified Business Process Management Suite’s superior performance in auto-generating SOA applications and user interfaces,” said Masaki Yabune, manager, information technology department, business support group, and project leader of BPM and SOA implementation, Japan Petroleum Exploration Co. Ltd. “With Oracle Unified Business Process Management Suite, we can complete the process in as few as five minutes, while it took one hour for other companies to complete the same processes.”

### **Why Oracle**

JAPEX selected Oracle Unified Business Process Management Suite and Oracle SOA Suite for its swift and technologically advanced implementation processes.

“We selected Oracle Unified Business Process Management Suite because it contains the latest, cutting-edge technology. It enabled us to implement SOA quickly, so we felt comfortable and secure that we could continuously run our system,” Yabune said. “We are also very impressed with Oracle Consulting, which provided expertise in SOA and enabled us to improve business efficiency and reduce operating costs.”

### **Implementation Process**

In January 2011, JAPEX began a feasibility study on implementing Oracle Unified Business Process Management Suite and Oracle SOA Suite for automating business processes between departments. The project team listed five main requirements in the request for proposals: business process model and notation support; development environment standardization; linkage of process tools; database integrity, and potential for continuous use; and response to global development.

JAPEX worked closely with Oracle Consulting and launched the pilot project in December 2011. It began to deploy the Oracle solutions in May 2012 and completed the project in November 2012. The new system went live in March 2013.

### **Partner**

JAPEX engaged Oracle Partner USE for the implementation of its new HR business processes and service-oriented architecture.

“We were very satisfied with USE’s system integration capability and the results it achieved using Oracle’s advanced products,” Watanabe said.

**Oracle Customer:****Bord Gáis Networks**

Cork, Ireland

www.bordgaisnetworks.ie

**Industry:**

Oil and Gas

**Annual Revenue:**

\$500 Million to \$1 Billion

**Employees:**

600

**Oracle Products & Services:**

- Oracle SOA Suite 11g
- Oracle Service Bus 10g
- Oracle JRockit

## Bord Gáis Networks Cuts Gas Transportation and Distribution Interface Development Costs by 40%, Deploys New Functionality 25% Faster

“Oracle SOA Suite, Service Bus, and JRockit have exceeded our cost and performance key-performance-indicator targets. We will use them for all future integration projects, as we build the next generation of middleware solutions.”

— **Danjoe Corkery**, Middleware Specialist, Bord Gáis Networks

Bord Gáis Networks, a leading Irish energy provider, builds, operates, and maintains transmission and distribution networks that deliver gas to more than 600,000 industrial, commercial, and residential customers. It manages and maintains 13,400 kilometers of gas pipelines and two subsea interconnectors. It also carries out new gas connections and work on service pipes and meters on behalf of all gas suppliers in Ireland. In addition, Bord Gáis Networks manages a full, 24-hour emergency response service, handling almost 20,000 call-outs each year.

Bord Gáis outsources many of the activities associated with the maintenance and repair of its pipeline network. To ensure that work is completed on time, the company needed to update its workforce management software. Bord Gáis Networks used Oracle Fusion Middleware to ensure seamless transfer of messages between the heterogeneous systems that it uses to manage and maintain its gas network infrastructure. It now completes transactions 15% faster than using legacy file transfer protocol (FTP) connections, can build enhancements and features 25% faster, and it has lowered IT development costs by 40%.

### Challenges

- Integrate the asset management software that the company uses with its workforce management and job scheduling solutions to ensure seamless connectivity
- Exchange data and integrate systems seamlessly to make business-critical information—such as about the performance of the gas transportation infrastructure, job repair status, and installation upgrade costs—available in near real time to engineers and planners
- Avoid delays during peak activity periods when more than 74,000 daily messages are relayed between systems while hundreds of users actively process transactions
- Adapt interfaces and workflows to rapidly onboard new subcontractors, make changes to billing cycles, and capture additional data to comply with regulatory requirements
- Deploy new functionality as needed to enhance and streamline asset management and monitoring, while cutting development costs

### Solutions

- Cut message transfer time between asset management, service optimization, and workforce management applications from 20 seconds to 5 seconds by replacing FTP data connections with a corporate middleware platform built on Oracle SOA Suite, Oracle Service Bus, and Oracle JRockit
- Cut the portion of the IT budget devoted to ongoing maintenance and development by 40%, with the ability to provide the same quality of service with reduced manpower

- Handled a 25% increase in messages between applications, due to business growth, without eroding system performance, reliability, or availability for 500 engineers, network planners, meter readers, operations managers, and job schedulers, using real-time, Oracle JRockit zero-latency capabilities
- Completed end-to-end transactions 15% faster, using Oracle's event-driven integration architecture to transmit messages between internal asset management, workforce, and job scheduling applications
- Greatly improved recovery time from transmission errors, using Oracle Fusion Middleware's end-to-end instance tracking to detect and resolve problems before they impact users
- Reduced by 25% the time for amending workflows or designing and launching new functionality, hence speeding the time to market by that rate, using Oracle Fusion Middleware to build flexible, repeatable connections between disparate asset, resource management, and job scheduling solutions
- Benefited from reusable code in Oracle Service Bus to increase the number of interfaces built and managed from 41 to 50 in 12 months, which enabled the company to replace point-to-point connected heterogeneous asset management and maintenance and repair scheduling solutions with robust, end-to-end, automated business flows
- Began expanding use of Oracle middleware to ensure secure, efficient delivery of messages between Bord Gáis Networks' supervisory control and data acquisition systems and the gas transportation management system that governs the shipment of gas to wholesalers and consumers

### **Implementation Process**

Bord Gáis Networks designed, tested, and deployed its corporate middleware platform in 12 months and rolled out the solution in a single, controlled release to 500 end users to achieve maximum benefit.

**Oracle Customer:****Türk Telekom Group**

Istanbul, Turkey

www.turktelekom.com.tr

**Industry:**

Communications

**Annual Revenue:**

\$1 to \$5 Billion

**Employees:**

29,000

**Oracle Products & Services:**

- Oracle Enterprise Repository 11g
- Oracle SOA Suite 11g
- Oracle BPEL Process Manager 11g
- Oracle Business Rules 11g
- Oracle Business Activity Monitoring 11g
- Oracle Consulting

## Türk Telekom Group Gets New Services to Market 25% to 70% Faster with Comprehensive, Service-Lifecycle Management

“With emerging technologies creating a heavy demand on legacy systems, we needed to optimize product lifecycle management for several hundred SOA initiatives to mitigate negative effects on customer loyalty. Oracle Enterprise Repository 11g enabled us to achieve our goals. The solution met all of our primary business drivers and helped us to realize technological transformation and gain new customer-facing business capabilities.”

— **Turan Ozen**, Manager of Integration Architecture Department, 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 for the last three years, according to Brand Finance—is Europe’s 5th largest and the world’s 11th largest fixed-line communications operator, with nine group companies and more than 10 million customers. The group 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).

### Challenges

- Adapt services and processes to meet rapidly changing telecommunications market requirements—such as consumer demand for triple-play offerings and mobile payment systems—with role-based visibility into numerous service-oriented architecture (SOA) assets
- Aggregate data on service-oriented architecture (SOA) asset lifecycle status to obtain, at all times, a clear picture of which SOA services exist and what the status of each service is—in production, in development, or retired—to better align these services with business demands
- Optimize the development of several hundred SOA services by identifying the dependencies among numerous kinds of middleware and enterprise services deployed within the organization, and determining the impact of change
- Monitor the value of SOA initiatives to enable fast responses to situations that might affect the wellbeing of the enterprise and its stakeholders

### Solutions

- Provided comprehensive insight into the impact of several hundred SOA initiatives with Oracle Enterprise Repository 11g to increase customer-facing business capabilities, such as offering new communications products to consumers, based on trend data and market analytics
- Minimized business risks—such as unfulfilled service level agreements and poor product performance—by ensuring that all services and assets promoted to customers meet corporate standards

- Established complete-service, lifecycle management by governing process, service, and asset lifecycles—from design to deployment and consumption—in production environments to meet consumer needs, such as by bundling mobile and landline services in converged communications products
- Realized a significant decrease in time to market for new services and other SOA assets—an improvement of between 25% and 70%—thanks to streamlined data flows, improved business rules, and optimized human interactions, which increased customer loyalty and the company's ability to rapidly respond to marketplace requirements
- Used Oracle SOA Suite 11g's real-time decision component, coupled with Oracle Business Activity Monitoring 11g to improve anticipating future demands and responding effectively to customer needs by analyzing statistics and identifying trends through dashboards
- Enabled developers to spend more time on modeling business processes and less on coding proprietary application programs by establishing platform-independent services, especially important for product offerings that require shared product and customer data
- Realized a short-term return on investment of 42%, mainly by saving on development costs
- Used Oracle Enterprise Repository 11g's workflow automation capabilities to streamline the migration from Excel-based legacy service repositories to SOA-based asset types
- Leveraged the migration to review all data to improve data quality
- Adopted best practices for service governance defined by Oracle's Global Enterprise Architecture Program (GEAP) and Oracle Unified Methodology (OUM) to enable fast setup of new services, substantially increasing business agility
- Achieved high performance across disparate systems, enabling seamless deployment of 250 services across 30 applications that handle 5,000,000 daily transactions, on average

### Implementation Process

Türk Telekom Group relied on the expertise of Oracle Consulting to realize the deployment. Adopting Oracle Enterprise Repository's and SOA Governance's best practices defined by GEAP and OUM, Oracle Consulting customized its Oracle Enterprise Repository with required asset-type definitions and customized workflows to support service lifecycle requirements. Oracle Consulting used Oracle Enterprise Repository's workflow capabilities to support the migration from the legacy service repository in Excel to new asset types in Oracle Enterprise Repository. In this migration process, application owners were able to review and approve the automatically-converted information.







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**Hardware and Software, Engineered to Work Together**

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