



Client

Calor Gas Limited was formed in 1935. From humble beginnings, it has grown to become the UKs leading supplier of Liquid Petroleum Gas.





The Challenge

As part of a major JDE E1 upgrade, Calor took the opportunity to reassess their incumbent systems and redesign the interfaces between E1 and their Enterprise Services Bus.



Delivery

Calor worked with DWS to develop native standards-based web services in EnterpriseOne and create a suite of business services, integrating E1 with other internal systems.



Result

Calor capitalized on the benefits of a new integration strategy; realizing significant process efficiencies and creating greater flexibility and scalability within the organization.

About the Client

JD Edwards EnterpriseOne (JDE E1) has been an integral part of the enterprise management system at Calor for over a decade.

When Calor made the decision to upgrade JDE E1, it also took the opportunity to re-invent the way JDE E1 integrated with its Enterprise Service Bus; the centralized platform that orchestrates all the company's business-critical systems.

Many of these systems integrate with the mobile devices used by delivery drivers and service engineers, so Calor was invested in making the most of recent enhancements to JDE mobile integration and web-based services.

Further integration was required with CRM, address management software and legacy systems running on an IBM platform; all of which needed to access data from JDE E1.



Ringing the Changes

Any major systems upgrade has the potential to cause business disruption. With the decision made to upgrade the base code of JDE E1, Calor was keen to leverage the current commitment to digital transformation and explore opportunities to improve the way in which its critical business systems communicated with each other

In particular, Calor was looking to improve the real-time communications in and out of its Enterprise Service Bus.

Calor investigated several interoperability options supported by JDE E1, before deciding on Business Services as the preferred solution.

With businesses around the world moving towards Service-Oriented Architecture (SOA) JD Edwards introduced Business Services as a gateway to provide native web services.

Originally introduce in release 8.11 Business Services (aka Web Services) has seen an increase in adoption amongst JDE E1 users, as organizations continue to exploit the benefits of mobility, IoT and SaaS applications.

"With our Enterprise Services Bus capable of supporting web services, we saw this as an obvious way to help future-proof our business-critical systems."

Business Services Integration

Business Services are developed in Java and require the use of Oracle's JDeveloper Java development tool. This is different to the standard EnterpriseOne development tools, and was one of the reasons Calor chose DWS as its partner for the upgrade and development project.

As established JDE E1 development specialists, DWS was ideally placed to help Calor make the most of the advantages of developing native standards based web services in JDE E1.

Interoperability sits at the heart of JDE E1 Business Services. A series of stateless business functions, performing discrete tasks within a well-defined, standards-based interface, Business Services provide organizations with the ability to develop, publish and administer web services directly from JDE E1 tools.

What are Web Services?

Web Services are a system architecture and methodology for providing distributed software services across a network. They typically use standards-based technologies such as XML, SOAP and WSDL to support interoperable, application-to-application interactions.

Their popularity has risen in recent years, as organizations realise that proprietary point-to-point based integrations are inflexible and expensive to maintain, as systems constantly evolve and change around them. Moving to a standardized and scalable architecture provides greater flexibility within their IT infrastructure by allowing these changes to occur more easily.

Real-Time Benefits

The newly-developed suite of Business Services provides real-time access to JDE E1 functionality and data from a range of other critical systems.

Calor field engineers use mobile devices to update details of work orders. A discrete Business Service was developed to allow engineers to send status updates and notes directly to JDE E1.

These notes would be written to the media object attachment text for the work order in question; time-stamped and appended to the existing text, so an event history could be maintained.

"The upgrade project provided us with an ideal opportunity to reassess how our critical systems communicate with each other and make some changes for the better."

Geo-location data for every customer was also recorded within EnterpriseOne's address book. This data was then used to support route planning and deliver further process efficiencies. Integration with legacy systems running on Calor's IBM server allowed real-time retrieval of sales pricing and data from EnterpriseOne. This included the development of an ILE RPG program, written using IBMs Web Services Client for ILE.



The Bottom Line

Business services are an integral component of Oracle's Application Integration Architecture. Adoption of this technology enables Calor to capitalize on the benefits of a Service Oriented Architecture (SOA).

Being fully integrated within the EnterpriseOne lifecycle management process allows Calor to utilize existing development and CNC resources for management of the Business Service objects.

Oracle's JDeveloper IDE, coupled with new EnterpriseOne specific wizards, provide developers with a standardized method for building Business Services and calling other EnterpriseOne objects, such as business functions and table I/O operations.

"Making use of a standards-based solution provides Calor with more flexibility; facilitating faster, smarter, more efficient changes in the future."

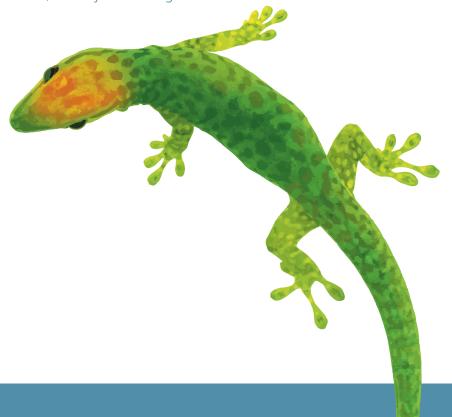
By leveraging DWS's expertise and experience in developing Business Services, Calor have been able to not only develop a suite of services to support their business today, but train their own analysts and IT staff to create Business Services and support the company long into the future.





"Business Services are a great method of integrating EnterpriseOne with other business applications. Support for the publication and consumption of web services direct from the EnterpriseOne Development Toolset is one of the best features of the JDE technical architecture."





About DWS

Since 1998, we have been providing development and technical services to organizations looking to customize, integrate, extend, upgrade or support implementations of EnterpriseOne. We also sell EnterpriseOne testing products that leverage our deep domain expertise and help customers run smaller, faster and smarter projects.

DWS serves a global client base using proven methodologies and proprietary DWS Dimension™ tools. Our best-practice approach and eye for detail help us deliver products and services that save time and money and continually drive down your TCO for ID Edwards.

For further information please visit our website, or contact us:

sales@dws-global.com

US: +1 888 769 3248 ANZ: +64 9427 9956 www.dws-global.com

