FUJITSU

42 Real Life Examples of Fusion Middleware with Applications

Debra Lilley, Fujitsu

Introduction

My area of interest is Fusion Applications and I have tried over the last few years to show that the applications are all about the technology. My previous white paper – 'Thinking of Supporting or Extending Fusion Applications' http://www.fujitsu.com/uk/whitepapers/fs_oracle-fusion.html, talks in detail about that technology and how it is available today.

Objective

In this paper I want to show that the use of the technology, Fusion Middleware, does not have to be an enormous, enterprise project, it can simply be a more modest approach to improve your existing IT estate. Actually this isn't really a white paper as much as a listing of some of these projects to illustrate my point. At the time of writing 11g has been available for just over a year with the exception of BI which is only just available; therefore most examples are 10g or before. However the version or features is not as important to me as demonstrating the use.

Understanding Fusion Middleware

Oracle's Strategy is Complete, Open and Integrated. The most important part is *integrated;* Fusion is all about the integration of data, but to have integration you need standards across all your data sources - the *open,* and as everything you need is available from Oracle (or they will buy it) Oracle is *complete.*

Let's start with the Oracle definition of Fusion Architecture and Middleware

Oracle Fusion Architecture is a standards-based technology blueprint that details the linkage between enterprise applications, middleware, and grid infrastructure technologies. Focusing on architectural integrity and openness for business applications and business information, it defines the technology components required for Oracle Fusion Applications.

Oracle Fusion Middleware is a family of middleware products that enables your organization to run, secure, adapt, and expand its business. It is the world's fastest-growing family of middleware solutions, spanning everything from service-oriented architecture (SOA), portals, and process management to application infrastructure, identity management, content management, and business intelligence.

CASE STUDIES

Andrew Sutherland, SVP Middleware EMEA, in a recent Oracle Partner Network Video discussed FMW opportunities for partners and gives these examples: http://channelsun.sun.com/media/show/15368

- Standardization of Mid Tier Architectures
- Rationalization of Integration
- Extending value of packaged Applications

I have therefore divided my paper into these 3 broad categories.

Contributors

I am presenting as Fujitsu and I could have just given 42 examples of our customers, but my paper is on real life and that is wider than one vendor, so I reached out to friends in the Oracle ACE Program or in Users groups, and they all stepped up to the challenge.

Standardisation of Mid Tier Architectures

1. Customer Name - Department of Treasury and Finance – Western Australia Industry: State Government

Business Need:

2 systems so far: a) See: www.oracle.com/technology/products/jdev/customers/fhog_uin.pdf

b) Newer system: Pensioner Rebate Exchange (PRX) – an ADF online secure file interchange application that allows Western Australian Local Government Authorities to upload pensioner rebate claim files to DTF and process them at point of submit.

FMW solution:

One of the key focuses for the case study above is that JDev/ADF/WLS can be used for building (what Oracle would perceive to be) small enterprise scale systems along with large ones. By this we mean we're not using SOA, web services, service buses, we're really building just a web application out of JDev/ADF/WLS. A lot of customers are scared off by the FMW stack because they think they need all these other components (including the behemoth SOA). ADF by itself provides an appropriate development environment for smaller scale systems too.

All Oracle components involved with version numbers:

Oracle JDeveloper 11g / Oracle Application Development Framework Including: - ADF Faces Rich Client - ADF Task Flows - ADF Business Components + Oracle Weblogic Server 11g + Oracle RDBMS Enterprise Edition 11g

Attributable to:

SAGE Computing Services, Australia contact chris.muir@sagecomputing.com.au

2. Customer Name - CERN

Business Need:

Back Office Function: Web Application Document Handling

FMW solution:

Movement of documents around the organisation, this is a global process. The routing and authorization of these documents is a custom built solution. Every member / employee of CERN is a user of this system.

All Oracle components involved with version numbers:

All systems have Oracle databases

Use Oracle iAS 10.1.3 for their SOA implementation, planning move to WebLogic

Attributable to:

CERN – contact artur.wiecek@cern.ch

3. Customer Name - CERN

Business Need:

Web Application HR Toolkit - Light touch front end to HR, similar to self service but at less cost

All Oracle components involved with version numbers:

Oracle EBS 11.5.10 for HR

All systems have Oracle databases

Use Oracle iAS 10.1.3 for their SOA implementation, planning move to WebLogic

Attributable to:

CERN – contact artur.wiecek@cern.ch

4. Customer Industry - Services Industry

Business Need:

Expose functionality and data currently only available to internal staff through a Web Forms application and other internal systems also to temp workers and customers through an internet application. At the same time: achieve higher levels of customer intimacy and do it all based on a service oriented architecture.

FMW solution:

ADF 11g Web Application based on SOA Suite 11g services infrastructure, using WebCenter Services with UCM for document management/publication and WebCenter Spaces for customer intimacy.

All Oracle components involved with version numbers:

SOA Suite 11gR1 PS2 OSB 11gR1 ADF 11gR1 PS1 WebCenter 11g R1 PS1 (Services & Spaces) Universal Content Manager 11gR1

Oracle RDBMS 11gR1 also in use: Oracle Financials, Cognos, 3rd party identity management solution (integrating with the identity management, both technically as well as logically is a challenge, one of the biggest). Another big challenge: changing the work processes on the workfloor to accept/adopt/embrace the capabilities of the new application.

Attributable to:

AMIS supporting internationally operating professional services company contact lucas.jellema@amis.nl

5. Customer Industry – Defense

Business Need:

Front line operatives in increasingly complex environments, need assured, up-to-date and accurate electronic data.

FMW solution:

As part of the solution we used BPEL, Human Workflow and Business Rules to develop a process that would mimic front line forces sending EOB requests. The logic developed via Business Rules would route the request to personal based on severity and the location the request was sent from. This information would be added to the BPM task list ready to be approved, rejected or escalated. BAM was also used to monitor these request and give intelligence on the EOB's including specific areas, level of severity and the time taken to action these requests. A WebCenter portal was developed as a collaboration site for personal and a simple interface for front line forces to interact with back end operations. This portal was also used to allow classified documents to be uploaded with a similar business process to the EOB approval.

All Oracle components involved with version numbers:

WebLogic Server 11gR1 SOA Suite 11gR1 WebCenter 11gR1 Oracle DBMS 11.1.0.7.0

WebLogic domain was spread across multiple machines using pack and unpack commands, and node manager was installed to manage the servers from the Admin Console. Expecting to include UCM in next phase.

Attributable to: Fujitsu – contact debra.lilley@uk.fujitsu.com

6. Customer - Arval, part of BNP Paribas, Public Transportation

Business Need:

More Flexible IT solution, cost savings in operations. They are moving to a SOA environment and started with the payment process. This resulted in considerable cost savings (drop in IT cost per car). They were also able to act as a shared service center for Arval Belgium and Arval Switzerland and Austria in a very short time period.

FMW solution:

First release: Oracle Application Server10g, Oracle SOA Suite10g, Oracle WebCenter 10g, Oracle Collaboration Suite, Oracle Internet Directory (OID) 10g.
Now migrating everything to 11g: WebLogic Server Suite11g, Oracle SOA Suite11g, Oracle WebCenter 11g, Oracle Identity Management Suite 11g, Beehive.

All Oracle components involved with version numbers:

Infrastructure, EJB's and Web Services first OC4J to WebLogic Server except OID and Content DB JDeveloper 10g to JDeveloper 11g WebLogic Suite 11g ADF 11g SOA Suite 11g (SCA, with BPEL, mediator components, human tasks) EJB 3.x components (JEE)

Future plans: WebCenter 11g OID 10g to Identity Management 11g

Attributable to:

Approach NL **-** lonneke.dikmans@approach.nl

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7. Customer Name - Ministry of Finances, Government: Taxes, Accounting and Public Investment, Colombia

Business Need:

Project: Consultant Architect for the SOA Integration of the Tax Collection Systems and Accounting Systems Mauricio Naranjo was the consultant Architect for this project. He described the reference architecture and design patterns defined for the integration of a government's accounting and tax collection systems of a Central-American country using Oracle SOA Suite. To produce this architecture, the current tax collection and accounting registration processes were analyzed, as well as the information exchanged between the systems. The main strategic and technical needs were identified, having as the major service improvement opportunities:

♠ Higher quality and reliability of the tax collection information to reduce financial risks

♠ An efficient and accurate communication process between the tax collection and accounting departments

FMW solution

The reference architecture is distributed in application services, business event services, messaging services, integration services and auditing services. Application services react to business events, such as daily tax payments collected from multiple organizations, producing canonical XML messages that are stored in persistence, secure queues in the Database. The messages are retrieved from the integration services in Oracle SOA Suite, forwarding tax collection messages to the Accounting system services. In addition, this SOA Integration architecture was re-used to integrate the Government's Accounting Systems with the Investment and Public Debt from El Salvador Government. This project was implemented in half time of the first one because of the artifacts and methodology re-used, with close to zero defects.

All Oracle components involved with version numbers:

Oracle Database 10g, Oracle SOA Suite 10g, Oracle Enterprise Service Bus, Oracle BPEL 10g

The SOA Integration Services have worked for more than a year for the Government's Ministry of Finances, integrating the systems with zero defects, that means transporting 100% of the integration messages without downtimes even when there are system maintenances, system failures (DB, ESB, BPEL and WS) or new release and deployments achieving great availability and reliability of the Oracle-based SOA Integration Architecture.

Attributable to:

One IT World   contact mnaranjo@oneitworld.com

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8. Customer Industry - Very Large Government Department UK

Over 150,000 end users supported

Business Need:

1. To have an enterprise wide reporting, warehousing and planning solution.

2. To prove the new reporting & warehousing tool can replace discoverer reporting, FSG's and beyond.

3. To prove OFA can be replaced by Hyperion Planning.

4. To enable aggregations and forecasting across all departments.

FMW solution:

1. Proved OBIEE/OBIA with minimum customizations will provide a secure, highly available reporting and warehousing solution.

2. Proved OBIEE can be a decision-making and analysis tool across all departments.

3. Proved Hyperion Planning can replace OFA, and will be a better fit leveraging the power of Essbase. 4. Build custom Essbase cubes to cater for Payroll, calculating sicknesses, replacement of FSG's and custom calculations across the organization.

4. Architected a solution which is easily accessible from a portal based environment, and can be made available to a very large volume of users

All Oracle components involved with version numbers:

EBS 11.5.10 OBIEE 10.1.3.4 OBIA 7.9.6 Informatica, Hyperion Planning

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

9. Customer Name / Industry - Government Department UK

Business Need:

The customer required detailed decision making reports to be designed and modeled on their absence reporting and overtime reporting. The absence reporting was uniquely bespoke and did not use the out of the box standard reporting of absence. In addition to this the customer developed a methodology to determine a monetary cost of the absence. The current situation meant gaining an extract from their source system and developing a number of different Excel macros to determine a cost value. This required manual intervention of a monthly basis to develop this information.

FMW solution:

The solution was to extract this information and perform the routine procedures that were carried manually with Excel procedures within the ETL of the OBIA application. The information produced was at the lowest granularity for reporting purposes. This produced the information in a fraction of the time and is available for analysis once the ETL is complete. The information is displayed in a hierarchical context so managers can drill down to analyse information to its lowest granularity.

All Oracle components involved with version numbers:

EBS 11.5.10 OBIEE 10.1.3.4.1 OBIA 7.9.6 Informatica 8.6

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

10. Customer Industry - UK Public Sector Organisation

Business Need:

New organisation set up to provide shared services for many agencies. An opportunity to implement best of breed applications.

FMW solution:

The design and implementation of both the physical and logical architecture to implement the Shared service.

The implementation of all SOA architecture and Oracle eBusiness services and reporting. functionality using the Oracle product set

The SOA challenge was to design, develop and implement an SOA architecture to enable integration between legacy systems, Oracle eBusiness suite and Siebel CRM.

From a SOA perspective, Fujitsu also developed and successfully deployed in excess of 300 web services to meet this business requirement.

All Oracle components involved with version numbers:

EBS 12.0 SOS suite 10g

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

11. Customer - Motability Operations, Not for Profit Car Scheme

Business Need:

Implementation of an E-Commerce site integrated with multiple legacy systems, with agile and monitored business processes.

FMW solution:

Using SOA Suite to automate the business process which manages the publishing and visibility of stock on the E-Commerce site, using BAM to monitor volumes and sales performance

Article published as part of Middleware Solutions Patterns
http://www.oracle.com/technology/architect/enterprise_solution_cookbook/building_intelligent_processes.html

All Oracle components involved with version numbers:

SOA Suite 11.1.1.3 BAM 11.1.1.3 Weblogic 10.3.3

Attributable to:

Griffiths Waite – contact marks@griffiths-waite.co.uk

12. Customer Name - Wesleyan Insurance

Business Need:

Provide Customers with Single View of Policies and Documents sourced from multiple systems. Streamline Business Processes accessed by this single view.

FMW solution:

The solution now gives customers access to the data and business processes that previously was embedded in back end systems. A .Net portal was implemented that used Oracle SOA Suite to interact with 2 legacy document management systems and a new implementation of Oracle UCM. OWSM was used to authenticate customers and encrypt sensitive information.

Initially, the solution is being rolled out to 10,000 plus policy holder so that feedback, usage etc. can be monitored. Ultimately the solution will be extended across the many thousands of policy holders group wide. By adopting and developing a series of web services the integration to other systems and areas of the business has been dramatically simplified. Requests for blended information drawing on data from multiple systems are now the rule not the exception.

All Oracle components involved with version numbers:

SOA Suite 11.1.1.2 OWSM 11.1.1.2 UCM 10.1.3 ADF 11.1.1.2

Attributable to:

Griffiths Waite – contact marks@griffiths-waite.co.uk

13. Customer Name - VicUrban, Property Development – Australian Government Agency

Business Need:

Formed in 2003 as a result of a merger between Victoria's Urban Regional Land Corporation and the Docklands Authority, VicUrban is the state government's sustainable land assembly and urban infill agency. The agency works in partnership with the public and private sectors to build sustainable communities and create opportunities for industry development.

VicUrban has a long history of stimulating housing supply and developing successful communities across the state.

As the Victorian Government's land development agency VicUrban has been successful in developing sustainable, affordable communities in Melbourne and regional Victoria.

VicUrban is refocusing on supporting more housing in established areas, particularly along major public transport routes, in activity centres in metropolitan Melbourne and in large regional centres.

These new residential developments will demonstrate high quality, affordable and sustainable housing.

VicUrban has been given a mandate to:

- Assemble, consolidate and prepare land in existing urban areas for higher density housing development.

- Encourage a diverse range of housing types, including smaller dwellings.

- Supply competitively priced lots to the housing construction industry.

- Work in partnership with housing providers to develop more inclusive residential estates.

- Encourage the delivery of affordable, accessible and sustainable high density housing.

- VicUrban's mandate is outlined in the Victorian Integrated Housing Strategy.

The VicUrban merger sought to bring together the best of the Urban Regional Land Corporation and Docklands Authority. Planning for the merger spanned information technology and its role within the combined entity.

FMW solution:

VicUrban developed a five-year strategic plan in collaboration with Oracle Platinum Partner ASG Group, outlining a program to standardize all systems on Oracle Database, Oracle Application Server, and Oracle E-Business Suite applications.

The agency also implemented Oracle BPEL Process Manager to manage and control some of its core business processes. The technology enabled VicUrban's Web site to easily integrate with Oracle Financials and Oracle CRM on Demand as well as present real-time information about land availability to prospective customers.

VicUrban uses Oracle Business Intelligence Enterprise Edition to gather data from its Oracle Database and present it in an easy-to-use dashboard. Managers can easily view current customer service level agreement (SLA) information, which is connected with each staff member's key performance indicators (KPIs).

All Oracle components involved with version numbers:

Oracle E Business Suite 11i 11.5.10

Oracle CRM on Demand, Release 17

Oracle Database 9i, 10g and 11g

Oracle BPEL Process Manager 10.1.3

Oracle BI Enterprise Edition 10.1.3.3.2

Attributable to:

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 www.vicurban,com

14. Customer Industry – Property Services EMEA

Business Need:

- make retirement fund data available to the Dutch national register of retirement details that is currently being implemented as instructed by recent legislation. Every fund is obliged to make web services available to a central agency that gathers information from all funds on individuals who want a consolidated overview of all their retirement policies and their current values.

FMW solution:

Implement Service Bus with Database Adapter to communicate with central agency

All Oracle components involved with version numbers:

OSB 11gR1, WLS 11g - organization also uses ADF 11g, WebCenter 11g and Forms

Attributable to:

AMIS, The Netherlands – contact lucas.jellema@amis.nl

15. Customer Industry – Software Industry

Business Need:

The customers using the Oracle (Web)Forms application provided by this ISV also demanded a programmatic interface for direct interaction for their applications. This is a long time user of Oracle technology - and looking at Oracle's offerings is quite natural to them.

FMW solution:

OSB 10.3 running on WLS 10.3 publishing (proxy) services to external consumers and internally communicating to 20+ databases. Note: content based dynamic selection of the database to access was implemented.

The services were demanded and dictated by the primary customer of this organization; retaining this customer is paramount; additional ROI is not predicted and not measured. However, they like their initial findings. And they are preparing for a future platform (replacing part of the Forms application) - that will very probably involve more services and SOA. They are contemplating a future platform to replace their current Forms application. .Net is an option as a platform. An enterprise service bus for internally exposed services that link this .Net application to the Forms -database is very much an option. Instead, an ADF application could be developed - possibly using a similar architecture. Also, when the number of B2B partners will grow, security will become a more urgent topic.

All Oracle components involved with version numbers:

WLS 10.3.1 & OSB 10.3 (additionally Forms 10g, OC4J 10.1.3, Oracle RDBMS 10g

Attributable to:

AMIS, The Netherlands – contact lucas.jellema@amis.nl

16. Customer Industry – Recruitment EMEA

Business Need:

B2B interaction with large customers that before had to FTP files with data * having the new (customer facing) Web Portal interact with the database previously only used for the (internal) Forms application * having multiple applications use a new document management system, identity management system and other 'services' without creating one-on-one mappings between every combination of systems

FMW solution:

Expose database tables/data and operations through PL/SQL Packages (API) that is then exposed through the JCA Database Adapter that is integrated with both OC4J and WLS and used within SOA Suite 10g (OESB and BPEL), OSB 11g and SOA Suite 11g. The O(E)SB services and BPEL processes primarily perform transformation of the request and response messages - no additional logic is required of them.

The next step for the customer: Implement OSB 11g (when we have proven it is at least equal to OESB 10g): migrate the ESB services from OESB to OSB 11g. Adopt UCM - probably offering document services through the ESB). Then probably more focus on more complex services and business process that require human interaction. Also: implement security on the B2B services; the customer used OWSM 10g in the past and is now studying WSM 11g in combination with some of the OSB security features. They are also looking at creating a custom monitoring and operational management console for application managers (not administrators) (ADF will be the technology to create this monitor in).

All Oracle components involved with version numbers:

- SOA Suite 10g, now replaced by SOA Suite 11g (primarily Mediator and BPEL); OSB 11g; WLS 10.3.x (clustered) (additionally: ADF 11g, WebCenter Spaces 11g, UCM 11g)

Attributable to:

AMIS, The Netherlands – contact lucas.jellema@amis.nl

17. Customer Industry -   Pension Fund Administrator - EMEA

Business Need:

Renewal of an outdated and no longer supported proprietary workflow solution that used Oracle Forms. The current solution limits the organization in further expanding their customer base. As a pension administrator to survive in the current pensions market, you need to have agile and expandable administrative systems so when you acquire a competitor you can easily merge your systems with theirs.

FMW solution:

Rebuilding the workflows (business flows/processes) in BPEL. The forms 6i application is migrated to webforms. The 8i database is migrated to 11g. The interaction with the Forms application is done using AQ Adapters to trigger the processes. Database adapters are used to read and write data to the database.
The first step consists of doing some tests whether all workflow functionality can be ported to BPEL and all the functionality currently in the forms will still work in webforms. When this is successful a project will be started to do the actual migration.

All Oracle components involved with version numbers:

SOA Suite 11gR1P2 (11.1.1.3.0) Oracle DB 11G (11.1.0.7.0)

Attributable to:

AMIS, The Netherlands – izaak@amis.nl

Rationalisation of Integration

18. Customer Name - Environment Agency UK

Business Need:

Five million people, in over two million properties, now live in flood risk areas in England and Wales and the challenge is to predict and warn people of the risk of flooding from rivers and seas

FMW solution:

Designed, developed and implemented the flood warning direct (FWD) application to disseminate flood warning and other sever weather information, on time and to budget

Java solution, with joint client and supplier testing team

Provide a fully hosted service at dual data centres for resilience

A service oriented architecture (SOA) that uses 'standard' platforms has been used to develop the FWD application which enables the seamless exchange of data between applications

Finalist in the 'Most Innovative Project of the Year' award at the Computing Awards for Excellence 2005

Improved customer experience - faster and more consistent service

Reduced costs - has replaced inefficient systems and labour intensive activities

Optimise resource usage - freed up staff from admin and IT support tasks

Increase operational agility – provides a secure and highly scalable platform to cope with massive peaks in demand

http://www.fujitsu.com/uk/casestudies/fs_environment-agency-innovative-service.html

All Oracle components involved with version numbers:

Oracle Service Bus 10.3 Oracle WebLogic Server 10.3 Oracle database 10g

Attributable to:

Fujitsu - contact debra.lilley@uk.fujitsu.com

19. Customer Industry - Public Transportation

Business Need:

This organisation sits above many operation companies and pulls together a national offering to customers. For many years they had run an information service written and managed by Fujitsu. The time had come for an updated system and hardware that would also mange a change in customer habits, Ticket on departure, internet sales etc

FMW solution:

Extensive use of SOA to enable customers to check multiple options of routes and fares for any required journey.

This enables planning 80,000 journeys and responding to 820,000 enquiry requests each day. It now stores up to 140 million fares, the timetable for 19,000 options and details for 2,500 locations across the UK. It also processes 1 million transactions daily, manages over 300 million possible fare combinations, and supports around 4,500+ terminals and 1,600 ticket vending machines

All Oracle components involved with version numbers:

Oracle Service Bus 10.3 Oracle WebLogic Server 10.3 Oracle database 10g

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

20. Customer Industry - UK University

Business Need:

The university required integration of their many disparate systems. These included student management, ERP, library and leisure management applications.

FMW solution:

Using BPEL in SOA Suite to orchestrate integration processes between legacy systems, auditing all information flows

All Oracle components involved with version numbers:

Oracle SOA Suite 10.1.3.4

Attributable to:

Griffiths Waite – contact marks@griffiths-waite.co.uk

21. Customer Industry - Heavy Manufacturing US

Business Need:

As the business grew it need a lot of systems and had deployed

Planning and Forecasting: Advance Supply Chain Planning, Demantra.

Distribution: Order Management, Inventory, Warehouse management, MSCA, Procurement Suite.

Manufacturing: Oracle Process Manufacturing, Formulator, OPM Quality, OPM Costing

Oracle Financial Suite – All modules

CRM Modules – Services

They needed integration of both data and processes in this critical Manufacturing & Engineering Systems MES

FMW solution:

Oracle SOA

A tightly integrated system in place with all the functions available where the users can perform with ease.

Supply Chain productivity increased both from a transactional as well as material flow perspective .Improvement in sending production schedules to the shop floor.

Accurate order forecasting with increased accuracy of invoicing shipment to a customer.

Increased delivery reliability to customer.

Improved cash flow

All Oracle components involved with version numbers:

SOA Suite 10g

Attributable to:

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22. Customer Name - Stanford University US

Business Need:

Stanford was using custom end-to-end integrations, which were very hard to manage. This made the whole integration process quite challenging, and the integration was not real-time. Stanford was looking for a complete integration solution with the following features:

- Standard based (EAI or SOA)
- Real-time integration
- Support for Hub & Spoke architecture.
- Rich set of adapters to connect to various applications and technology
- Support for Human Workflow
- Reusable components
- Reduce development effort
- Simplified Management tools

Stanford evaluated many integration solutions and decided to choose an Oracle Fusion Middleware solution.

FMW solution:

Fujitsu deployed an Oracle solution integrating multiple in house and third party applications.

The system utilized Oracle's SOA solution, Oracle® BPEL Process Manager, and Oracle InterConnect to provide real-time integration between the different applications.

The solution included the use of the following Oracle products: Oracle InterConnect, HTTP Server, OC4J, HTTP adapter and DB adapter, all of which have been subsumed into Oracle Fusion Middleware R10.1.2.0.2.

Fujitsu received Oracle Titan Award 2008 in the Integration and SOA category for this solution.

http://www.oracle.com/technology/products/ias/bpel/documents/solutionbriefrapidigm-stanford.pdf

http://www.fujitsu.com/ca/en/news/pr/fc_20061109-01.html

All Oracle components involved with version numbers:

The solution included the use of the following Oracle products: Oracle InterConnect, HTTP Server, OC4J, HTTP adapter and DB adapter, all of which have been subsumed into Oracle Fusion Middleware R10.1.2.0.2.

Attributable to:

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23. Customer Industry – Retail EMEA

Business Need:

Re-Implementation of monolithic mainframe sales system, because business flexibility needs can't be delivered anymore. Additionally, new developers for old mainframe can't be found, so from a risk perspective necessary.

FMW solution:

SOA Suite 11g, new UIs, process-oriented, massive use of rules engine

All Oracle components involved with version numbers:

SOA Suite 11g PS2, OSB, BPEL, Rules

Attributable to:

OPITZ CONSULTING GmbH contact torsten.winterberg@opitz-consulting.com

24. Customer Industry – Retail

Business Need:

To extended further our own mobile retail solutions for an improved customer experience.

FMW solution:

Solution centred around Oracle Weblogic Server and Oracle SOA Suite which used BPEL and Business Rules to develop business processes for complete end-to-end transactions, from customers placing an order through their iPhone to store employees selecting, picking and taking payment of orders through Fujitsu's mobile computer device.

Oracle BAM was also used to monitor key KPIs in real-time which would allow store management to immediately make decisions based on the information on the dashboard.

All Oracle components involved with version numbers:

Oracle SOA Suite 11g Weblogic Server 11g Oracle Database 11g Oracle VM

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

Extending Value to Packaged Applications

25. Customer Industry -   Technology Services Company UK

Business Need:

Roll out scheduling functionality from multiple legacy systems to a mobile workforce with multiple devices.

FMW solution:

To build a layer of services orchestrated by business processes that will provide job information to engineers via a mobile device.

All Oracle components involved with version numbers:

SOA Suite 11.1.1.2 ADF Mobile 11.1.1.2 Oracle Resource Scheduler

Attributable to:

Griffiths Waite – contact marks@griffiths-waite.co.uk

26. Customer Industry - Government Shared Services

Business Need:

The organisation was hampered by the fact that its existing business systems consisted of over 30 fragmented databases and hundreds of manual and paper-based processes.

FMW solution:

The bespoke application developed by Fujitsu provides comprehensive case lifecycle management from initiation through to disposal and appeal, including access to a full case history and the integrated creation and control of all documents.

Utilising Fusion Middleware SOA to integrate the disparate systems along with Oracle Database Technology, with a bespoke application built on top in java and .net technologies.

All Oracle components involved with version numbers:

Fusion Middleware SOA suite 10g

Attributable to:

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27. Customer Industry - Telecommunications

Business Need:

Our business unit supports a wide range of customers utilizing Oracle EBusiness Suite for back office functionality (manufacturing, finance, inventory), PeopleSoft for Person data (HR & customer contacts) and WebSphere Commerce for an on-line ecommerce and order management system. These systems at a minimum need to share the following EBOs: • Inventory items • Sales orders • People and organizations The business needed a standardized architecture for integration projects spanning these multiple packaged software solutions and provide a reusable "building block" components to integrate multiple systems (current & future) that utilizes standards & web services.

FMW solution:

Leveraged Oracle AIA Foundation Pack to provide common business object definitions and utilized SOA Suite as a centralized web service management platform across the various packaged software products and business service offerings. Utilizing the prebuilt components in AIA and the integration wizards in FWM, we created a proof of concept for employee/user integration between WebSphere Commerce and PeopleSoft in 2-3 weeks. A further benefit we found from our implementation strategy was that we could reuse our integration to support mobile applications deployed to managers and service personnel with little rework.

All Oracle components involved with version numbers:

Oracle AIA Foundation Pack FMW 10gR2 EBS 12.1 PSFT 9.1

Attributable to:

AT&T – contact Michael.Rulf@att.com

28. Customer Industry - Engineering

Business Need:

Integration between third party application and Siebel CRM

FMW solution:

Set up Enterprise Service Bus w/ Siebel Adapter to a) push initial legacy data to Siebel from an XML file b) accept changes from Siebel and transform and route information back to third party application.

All Oracle components involved with version numbers:

Oracle Application Server 10.1.3.3 w/ ESB JDeveloper 10.1.3.3.0

Attributable to:

Miracle A/S Denmark contact Morten Tangaa-Andersen mta@miracleas.dk

29. Customer Industry - Oil and Gas

Business Need:

Integration between legacy Oracle Forms based application and SAP

FMW solution:

Set up the Oracle Service Bus to transfer data (mediate) between a legacy system (Oracle 10g / Forms) and SAP (both directions). JMS queues and XA Transactions were used to improve uptime and prevent data loss.

All Oracle components involved with version numbers:

Oracle Service Bus 10.3 Oracle WebLogic Server 10.3 Oracle database 10g

Attributable to:

Miracle A/S Denmark contact Morten Tangaa-Andersen mta@miracleas.dk

30. Customer Industry - High volume Distributor

Business Need:

The client provides customized Marketing and Distribution Solutions to national, regional and local *Specialty Foods* retailers across the nation with a supply over 55,000 SKUs comprised of perishable and non-perishable food items including Gourmet, Specialty, Natural/Organic and Ethnic products from five continents. Their AS/400 based legacy system provided limited ability to serve their needs, which rendered finding qualified consultants increasingly difficult. In addition, the system was implemented separately and differently in each of the 5 locations.

The client was going through significant business process change to streamline operations and reduce the order processing cycle time. A majority of orders were placed by the field sales team. There was a complex mix of applications that was being implemented to support the business functions.

FMW solution:

The solution involved implementation of Oracle E-Business Suite R12 to consolidate five disparate ERP systems into one system, and a combination of technologies, including Oracle SOA Suite, Oracle AIA and Process Integration Packs (PIP) were leveraged for integration.

A diverse mix of integration methodologies were used including

(1) Direct Integration using SOA/BPEL/ESB,

(2) Common Integration using AIA

(3) PIP with extensions and deployed over a highly available active-active SOA infrastructure.

All Oracle components involved with version numbers:

- Demantra and ASCP with EBS and Siebel

- Unique integration of Financials with OTM for Freight Settlement

- Custom PIP between Siebel and EBS (Siebel 8.0.6 and EBS R12)

- WMS Integration with OTM

- Heavy Duty Landed Costing and Distribution Costing

Attributable to:

Fujitsu – contact jere.weliver@us.fujitsu.com

31. Customer Name – Fujitsu Subsidiary

Business Need:

HR system and scheduling system each holding half their data, needed to combine the data to understand their true operating efficiency.

FMW solution:

OBISE1 installed to combine data from two systems, this quickly paid for itself by identifying inefficiencies and highlighting a simple change in process required.

All Oracle components involved with version numbers:

Oracle EBS (HCM) 11.5.10, OBISE1 10g

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

32. Customer Industry – Higher Education

Business Need:

The Higher Education school system including 2 major institutions and three state colleges had a need to streamline the admissions application process and offer applicants the option of applying online, a capability not available in the current technology. The admissions departments of the member schools were working completely independently of one another, with diverse data collection requirements loaded to multiple student information systems, varying levels of automation and unique processing deadlines and procedures. Several of the institutions processed all applications manually through hard-copy submissions, routing paper copies through the various departments for assessment and approval. An institution-wide software solution would require substantial flexibility to satisfy the requirements of all constituent schools, while allowing the application of individual school branding.

FMW solution:

All five institutions went live with the Online Admissions Offering on their scheduled dates. To date, over 15,000 applications have been successfully submitted; prior to the implementation of the Online Admissions Offering the majority of these would have been hand-typed into the student information system by a team of staff members. In contrast the majority of this year's applications loaded in seconds to PeopleSoft, with more complete information than was collected on the prior paper applications. Many programs took advantage of the Online Recommendation functionality as well, with a turnaround time to receive recommendations within hours in many cases, rather than the days to weeks required to distribute, collect and enter the paper recommendation forms previously used.

All Oracle components involved with version numbers:

PeopleSoft Campus solutions 9.0

Oracle BPEL Process Manager 10.1.3.4

Oracle Business Rules 10.1.3.4

Weblogic Server 9.2

Attributable to:

Cedarcrestone - contact chris.judson@cedarcrestone.com

33. Customer Name - Apollo Group – Higher Education

Business Need:

Apollo Group recognized the need to improve the incoming E-Business Suite financial transactions process. They realized their previous integration strategy was inefficient, out dated, and it was critical to move to standards based, loosely coupled, real-time, event-driven integration architecture. Implementing new integration architecture would allow them to provide up-to-date information on student facing portals, improve information technology and business operations, improve data quality as well as financial forecasting, and reduce the complexity of integrating newly acquired institutions to their corporate E-Business Suite financial system.

FMW solution:

Apollo Group developed a loosely coupled, event driven architecture utilizing the Oracle SOA Suite to retired over 60 E-Business Suite concurrent manager jobs freeing up several hours during the daily Concurrent Manager schedule. The integration architecture process over 20,000 student invoices per day without manual intervention which equates to over 3 Million BPEL instantiations daily. This allowed them to improved financial regulatory compliance by providing business visibility into the invoice creation process and having a mechanism to find and resolve data issues. The real-time invoice creation also reduced the call center volume by providing students with up-to-date student ledger information

All Oracle components involved with version numbers:

Oracle E-Business Suite Financials 11.5.10
Oracle PeopleSoft Campus Solutions 9.0
Oracle BPEL Process Manager 10.1.3.4
Oracle Rules Engine 10.1.3.4
Attributable to:

Cedarcrestone - contact chris.judson@cedarcrestone.com

34. Customer Industry - UK Financial Services

Business Need:

Business Efficiency Program industrializing business processes to reduce costs and reduce customer complaints

FMW solution:

BPM 10g used to model, manage and improve business processes, SOA Suite used to integrate the processes with the core mortgage, savings and financial applications

All Oracle components involved with version numbers:

SOA Suite 10.3.4 BPM 10.3.2 Weblogic 10.3.2 Oracle Business Rules 10.3.4 Oracle Forms 10.1.2 Oracle E-Business Suite 11i (HR and Financials)

Attributable to:

Griffiths Waite – contact marks@griffiths-waite.co.uk

35. Customer Industry – Retail EMEA

Business Need:

Integration of supply chain systems and additional integration of several different web shopping systems, providing fulfillment of orders.

FMW solution:

Enterprise application integration scenario using Mediator, more complex integration logic using BPEL

All Oracle components involved with version numbers:

Mediator 11g, BPEL 11g, PS2

Integrated systems: Microsoft Dynamics AX, IBM Webshops, several JEE systems.

Attributable to:

OPITZ CONSULTING GmbH contact torsten.winterberg@opitz-consulting.com

36. Customer - University of Colorado, USA

The University of Colorado is a public research university with multiple campuses serving Colorado, the nation, and the world through leadership in high-quality education and professional training, public service, advancing research and knowledge, and state-of-the-art health care.

Business Need:

Prospective Students interact with CU in myriad ways. The first contact is arguably the most important one. CU uses a BPEL process to capture that information, feed it to Campus Solutions in a synchronous manner, feed errors to the worklist, and submit emails to the prospective student. This process also manages the submission of the on-line application for admission to both degree programs as well as those for extended studies.

FMW solution:

Cedar Crestone, Inc built the application for CU, using the FMW framework.

All Oracle components involved with version numbers:

BPEL 10.1.3.4, WEBLOGIC 9.2.3, Oracle Database 10g, Campus Solutions 9.0 on PeopleTools 8.49

Attributable to:

University of Colorado – contact kari.branjord@cusys.edu

37. Customer Industry – Financial Services

Business Need:

Financial Services' risks assessments need to be check complex applications against identified rules and processed centrally. This manual process needed automation, to ensure accuracy and to increase scope.

FMW solution:

The BPEL system was installed to trawl all data sources and select risks identified when checked against the industry Rules engine and wrote the risk indicators to a data warehouse.

All Oracle components involved with version numbers:

- BPEL version – 10.1.3.3

- Application Server – 10.1.3.3

- BPLE was installed on Application server cluster.

- Database - 4 nodes RAC with ASM

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

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38. Customer – Almac Clinical Services – Life Sciences

Business Need:

Almac needed integration into EBS from other systems key to our business such as AutoShip, Site and Patient Management and DCRI (Duke Clinical Research Institute).

FMW solution:

The AutoShip and SPM projects deal with data sent in from various (customer) sources in a range of different formats. In SPM we have individual BPEL processes to handle specific steps of the process and/or different files that we receive. This allows us to extend our solution relatively easy to include functionality for new file types, data sources and many more possibilities. AutoShip uses a similar architecture, but it addition also uses BPEL to assist in the construction and ftp data files.

Some processes originally carried out using pure BPEL have now been rewritten to include reusable web services.

All Oracle components involved with version numbers:

Oracle RAC 10g , OAS 10g , BPEL 10g

Attributable to:

Almac contact andrew.hillis@almacgroup.com

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39. Customer Name - Nordic Ferries - Transportation

Business Need:

Nordic Ferry Services operates eight ferry routes each year 4.8 million passengers.

The company is legally organized as three separate companies, which in its old ERP system was difficult to handle. It was an older version of Navision. At the same time wanted to also get procurement management put into the system. They needed a new ERP system for back office functions but also wanted integration with others.

FMW solution:

Nordic Ferries opted for an Oracle Business Accelerators implementation of EBS which saved enough money to use FMW to properly integrate their two business critical systems for bookings and on board sales, giving them end to end ERP.

All Oracle components involved with version numbers:

EBS 12.0 SOA suite 10g BPEL

Attributable to:

Miracle A/S Denmark contact rhm@miracleas.dk

40. Customer Industry – Party Gaming

Business Need:

Organization had a Microsoft Active Directory policy for enterprise security and needed their Oracle EBS to be included

FMW solution:

Link Oracle EBS system with Microsoft Active Directory for user authentication using Oracle SSO and OID

All Oracle components involved with version numbers:

Oracle Application Server 9iAS Oracle EBS 11.5.10.2

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

41. Customer Name – Reading Borough Council – Local Government

Business Need:

Reading Borough Council provides local government services to 144,000 people in an area of 40 square kilometres in southeast England.

Effective financial planning is essential to achieving the Council's aim of continually improving the quality of its services, while also minimising council tax increases. It also needed to deliver three and five-year budget forecasts to meet its own internal budgeting needs, which also brought the Council in line with government requirements to monitor its progress against the 2.5% year on year efficiency savings required by the Gershon Review.

The Council had been preparing its annual budgets using E Business Suite, Oracle Financial Statement Generator and Excel. This met requirements for annual general ledger-based budgets, however, the introduction of longer-term plans meant they needed advanced cross-directorate, multi-dimensional modeling and the ability to assimilate continual adjustment sat cost centre level.

FMW solution:

Implement Oracle Hyperion Planning Plus recently acquired by Oracle

First post acquisition case study http://www.oracle.com/customers/snapshots/reading-borough-council-hyperion-case-study.pdf

All Oracle components involved with version numbers:

EBS 11.5.10 Hyperion Planning System 9

Attributable to:

Fujitsu – contact debra.lilley@uk.fujitsu.com

42. Customer Industry - Grocery and variety retail

Business Need:

Integrate Oracle Retail to Oracle Financials for master data and transactional financial data around sales/stock and supply chain

FMW solution:

Oracle supplied Applications Integration Architecture Direct interface, delivered with FMW underpinning

In use for one subsidiary, removed development effort to allow delivery to time

All Oracle components involved with version numbers:

Oracle Retail 12.1, eBusiness suite 11i.10, FMW (BPEL: pre AIA foundation pack)

Plans to use FMW for security of all Oracle Apps

Attributable to:

Verified Customer

Summary

These examples are tiny snapshots of how people have successfully used Oracle Fusion Middleware in their IT estate. To solve business requirements that required real business cases for investment.

I believe the availability of Fusion Applications will give a real shop window for this technology and we will see an even bigger spurt in FMW adoption.

Acknowledgements

- Lisa Dobson, who came up with name of this paper, Mogens Nørgaard the approach of the presentation and Marco Gralike who helped me recruit contributors.

- All the contributors of the examples

- Fujitsu for allowing me the support and freedom to follow my dream

- Nadia Bendjedou, Director of Applications Technology, Oracle Corporation.

- Markus Zirn, VP Product Development, Oracle Fusion Middleware and his team who have worked to help Applications people understand the technology, especially Nishit Rao who has helped me to use and demonstrate these tools.

- Duncan Mills, Senior Director of product management for Oracle's Application Development Tools - including the JDeveloper IDE, and the Oracle Application Development Framework, and his team especially Grant Ronald.

- The OTN ACE team for their support and the opportunities they have given me through the ACE Program to share this knowledge.

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Debra is Oracle Alliances Director with Fujitsu, and their Fusion Champion. She is also Oracle OCP (Applications) and Oracle Master (IT Professional), ACE Director (Applications), and **Chartered Director** with the **IOD**.

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