







Faster, Cheaper, Better

Implementing Fusion Middleware at Capital & Coast District Health Board







Introduction

- C&CDHB needed to integrate the eBusiness Suite with legacy applications
- Project timeframes demanded a faster solution than the original approach allowed
- C&CDHB required the solution to be robust and easy to administer
- Any tool required to help with the integration had to be approved for purchase by the CFO







Objectives of the Session

- Explain the decision process that resulted in the selection of BPEL
- Explain the details of the solution
- Present the outcome for C&CDHB







Quiz Time

The National Icon of New Zealand is: A) or B)











Quiz Time: Where in the World is New Zealand?

A) in South America?

B) In Australasia?

C) In North Europe?







Answer









New Zealand







Capital & Coast District Health Board

- Publicly funded hospital and healthcare service
- Serves 250,000 residents in the immediate Wellington region, and 900,000 in the wider central region
- 4500 full time staff
- Annual operating expenditures of US\$550 million+







Project Background

By 2006, C&CDHB needed a new integrated FMIS suite to replace 3 legacy systems:









Forces for Change

The existing systems:

- did not scale
- featured predominantly manual processes
- were difficult and expensive to maintain
- lacked adequate reporting
- lacked internet based procurement
- lacked contract management







C&CDHB Selects Oracle and HP:

- Fully integrated suite to replace all 3 target systems
- Met the requirements for iProcurement, Business Intelligence and Procurement Contracts
- HP to provide a one stop shop: architecture, hardware, and implementation services.









Automation... with Control

C&CDHB required integration processes to:

- Be fully automated where possible
- Include interaction with users for authorisation or notification where the business rules demand it
- Allow simple administration
- Be reliable





The Project Timeframe

- SIX month implementation for all modules including an extensive data conversion exercise
- Just prior to project initiation, we needed to replan to finish in FIVE months.
- Integration was one of the areas re-examined to look for time savings







The Future State









Original Design

- No existing middleware
- Re-use technology of prior DHB implementations
- Estimations based on the 'traditional' approach









Traditional Integration









Traditional Drawbacks

- Multiple technologies
- Multiple development tools
- Manual intervention
- Designed specifically for the 'Source' and 'Target'
- If one of the applications changes: Rewrite!
- Difficult to diagnose problems







The Case for OFM & BPEL

- SOA standards based
- Automate complex business rules via workflow capabilities
- Flexible
- Improved administration
- Ease of development: save TIME!
- Projected cost savings to offset against the purchase of licenses







Architecture Overview









Oracle eBusiness Suite Oracle Internet Directory Microsoft Active Directory **Oracle BPEL Process Monitor** Firewall **External Third Internal Third Party Party Products Applications**

High Level Design







BPEL Process Design









Types of Integration

- 1. Inbound transactions to use file adapters and database adapters
- 2. Outbound transactions to be initiated by web services and distributed to the target system
- 3. Inbound transactions using workflow







WinDose

- WinDose is a pharmacy application
- Includes functionality for:
 - dispensing
 - ward imprest
 - compounding
 - repackaging
 - supply management
 - stock control
- 3 points of integration







WinDose Invoice Process









WinDose Suppliers Process









Leader

- Leader is specifically designed for the health sector in New Zealand
- Includes functionality for:
 - rostering
 - contract and award interpretation
 - payroll
 - HR









WinDose & Leader GL Process







Faster?

- BPEL development environment well loved by the HP team
- Data transformations/mappings completed in minutes rather than hours
- Still need to build views and stored procedures
- Half the development time of the traditional approach





Cheaper?

- Decision to purchase was vindicated
- Time savings = cost savings
- Cost savings covered the cost of the licenses
- Ongoing support costs much lower
- Automation frees up users to focus on 'value add' activities





Better?

- Solution is robust and reliable
- Administration via the BPEL console is effective and simple
- Good balance between automation and control
- Users like using email
- Ongoing support costs much lower
- Automation frees up users to focus on 'value add' activities







Better? (continued)

- 'Insurance' for future system changes
- Flexibility for future integration projects









Summary

- C&CDHB has been live for 16 months
- BPEL lived up to expectations and delivered
- BPEL is good for CIO's based on features and functionality
- BPEL is good for CFO's on the basis that it 'pays for itself'
- BPEL is good for administrators and users as it gives them the tools to make their lives easier





Questions?

