Case Study

RWE, Europe's largest energy trading organisation centralise all master data across the UK business into a single storage solution via a sophisticated event-driven message bus infrastructure, built by Digiterre.

RWE's Energy and commodities trading business is the largest in Europe. Digiterre architected and implemented the "Nexus" Master Data Management system over a four and a half year programme span, with the aims of reducing the cost, time and risk of making changes to vendors details across the entire RWE trading business. As a result of the project, RWE currently now have over one hundred integration points across multiple front, middle and back office systems, including for example, trade booking. Furthermore the business is more nimble because it can now switch to new vendors a fraction of the time that was previously possible.

The problem

There were 5 main goals for the programme:

- Reduce the cost and timescales associated with changing Integrated Systems and Business Infrastructure vendors and thereby promote increased choice and competition of suppliers (e.g. message bus providers)

- Reduce the risks involved in decommissioning ADC and Tibco systems

- Simplify the business architecture to promote better understanding (e.g. Trades, Settlement Orders, data flow and life cycle)

- Reduce the cost of creating change across the organization and of ongoing data maintenance.

- To use this new approach along-side the multi-million pound migration of the main energy trading and booking platform with all the information entering and leaving the new Endur trading system implementation flowed over Nexus.

Architectural Approach

The fundamental principles of the architecture included:

- The sending and receiving of business data messages (e.g. Trades, Settlements, Power Station forecasts etc.) between different systems such as Trade Booking, Power, Gas Nomination and Risk in a common versioned format including xml

- Re-use of the technology to initiate or receive integration messages, the minimization of vendor-specific code.

- Loosely coupled system components which reduces inter-dependence between systems.

- Strict versioning and governance over the common format to enable the chosen architecture to work effectively.

Key Benefits to RWE

The key benefits of this architecture are as follows:

- The number of integration points are reduced to a maximum of two per system (i.e. send and receive only) for each particular type. Previously if trades were sent to 3 systems there would be 3 independently developed connections. Now there is a single output from the source regardless of the number of systems receiving the information.

- The de-coupled nature of the system means that adding or removing a new input or consuming system does not require changes to other systems.

- Operational risk is reduced because the system is well known and standard practices (e.g. versioning) ensure that a change or enhancement to one flow does not break other integration flows.

- Switching a provider only requires a small specific implementation which can be shared and distributed to existing installations with minimum risk and effort,

- Bugs are fixed just once, after which they can be distributed and used by all integration points.

- Maintenance and vendor lock-in are reduced, to the extent that the providing of the underlying data transport layer has been successfully replaced, significantly reducing licensing and maintenance costs.

- Technical staff can move more freely within the enterprise and leavers carry less risk, because of the standardization of the architectural approach.

- Send and Receive processes are multi-threaded and allow scaling to accommodate business growth over time.

- Flexible applications – the architecture and framework were used to implement and meet new compliance standards (e.g. the regular reporting of Trades to The Depository Trust & Clearing Corporation (DTCC).

Looking Ahead

- There are fifty or so systems which are in the process of being integrated with Nexus, which when complete will provide further operational benefits and cost-savings to RWE.

- Due to the standardized approach and knowledge-transfer from Digiterre, RWE staff are no able to build these connections themselves so Digiterre has directly transferred the necessary knowledge.

- The Nexus platform is being further leveraged by the delivery of common services and user interfaces for administrative functions such as monitoring, correcting and re-processing functions such as error handling.

Why it worked

- Digiterre's outcome-focused delivery teams have a proven history of getting extremely high-quality results, very rapidly working with and for our clients.

- Our Consultants use agile methodologies and cutting-edge technology to deliver innovative solutions on time and within budget.

- We push boundaries. Our solutions save our clients time and money because they deliver precisely what is needed by our clients and what is valuable to their respective businesses.