Solution Delivery Reference

Oracle Fusion Middleware
for client Albert Czech Republic
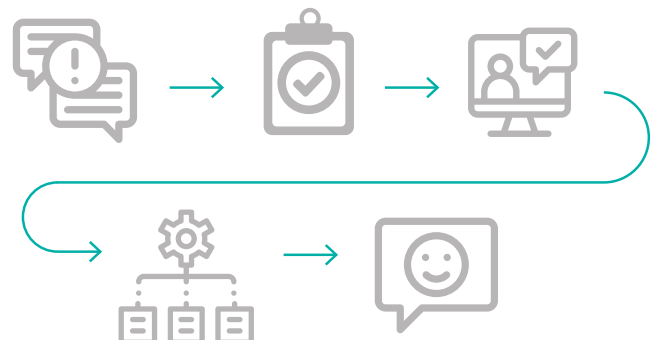
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ORACLE = GEM System

> *The aim of the project was to build a robust integration platform in the client environment of the retail chain Albert Czech Republic, based on Oracle Fusion Middleware products. The delivered solution was designed in high availability, it simultaneously connects and fully integrates the client's key systems including e.g. interconnection to the used data centres in the Czech Republic and the Netherlands.*

Solution Delivery Overview and client's expectations

- Integration of dozens of services, data transfer among large systems and integration with existing integration platform and Oracle Fusion Middleware platform among key integration systems of client Albert Czech Republic.

- A large-scale implementation in a retail company and integration between key integration systems using Oracle ESB was implemented. Key in terms of the client's business environment and daily operations, but also for the transfer of payroll for 17,500 employees (to accounts or in the form of online distribution of postal orders to post offices), payment orders including transfers to multinational company structures such as SAP or banks.

- The solution includes file transfer primarily between the SAP system and its environment. Using the solutions supplied by GEM System, the data is distributed to other solutions of the client Albert Czech Republic throughout the Czech Republic.

- In practice, some data is transformed, files are split and distributed to other solutions.

Implementation of the First Stage

- Project implementation – implementation of services on Oracle integration platform.

- Integration with 329 branches across the country (as of April 2018).

- Communication among the central cash register system and surrounding applications such as the data warehouse, ordering system or online distribution of prices on scales in stores. Examples of integrations are:

  - Daily morning price updates online without operator intervention at the scales in all stores according to the current offer of the chain.

  - Receipt solution – transfer receipts among all stores. The client generates and transfers up to 1,200,000 receipts per day and typically up to 120,000 receipts per hour at peak times.

Implementation of the Second Stage

- Based on ensuring compatibility with the retail group managed from the Netherlands, the goal was to move fully to the Oracle SB Integration Platform.

- At the same time, the goal was to replace other ESB solutions used so far and to convert and integrate them into Oracle Enterprise Service Bus simultaneously with more than twenty other services.

- The specifics of the project included the use of a number of variants of keys and certificates for encryption and decryption of data as well as the implementation of signing of message content and verification of message signatures.

Know-how used, Overall Performance and Availability

- Oracle Fusion Middleware is a digital enterprise integration platform designed for large enterprises and cloud solutions. It enables enterprises to build and deploy powerful and intelligent business applications, making the most of their information technology and tapping into the maximum potential of today's modern hardware and software architecture.

- Oracle introduces the Oracle Database Management System (DBMS), a modern multi-platform database system with highly advanced data processing capabilities, high performance and easy scalability.

- The client uses a database clustered solution and the entire application part and all integration of data communication to the surrounding environment was implemented.

- It uses Oracle's powerful Integration Platform along with an advanced implementation approach and high stability is the backbone of the client's information system with the highest possible availability of the entire infrastructure (in 24/7 mode and 99.99% availability).

- GEM System has been operating on the market since 2004 and offers complex system and integration solutions, specializing mainly in Business Intelligence, Identity Management, B2B communication systems, data warehouses, including the development of large-scale custom-made IT solutions.