

Solution Overview
The Oracle Faster
Payments Gateway

SOLUTION OVERVIEW

The Faster Payments initiative presents banks with a challenging timetable for the introduction of a mandatory new service that is probably revenue neutral. As such, banks need to look for a low-risk, cost-effective solution to meet the business and technical requirements of Faster Payments, and ensure compliance with the testing and implementation timescales.

The Faster Payments Gateway (or the Gateway) meets these requirements. The Gateway is built around a real-time messaging engine that provides banks with access to the Faster Payments Network using the ISO8583 messaging protocol. The construction and validation of messages in line with this messaging protocol is complex and demands features such as accurate timing of responses, automatic initiation of reversals, duplicate detection and guaranteed delivery. The need to respond in real-time, coupled with volumes of up to hundreds of transactions per second, make this an extremely demanding interface for the banks to develop, test and certify.

The Gateway provides this interface out of the box. This helps to speed up the bank's deployment, and reduces the project risk. The Gateway meets all compliance needs for participants in the Faster Payments Scheme and supports step-by-step migration to the Faster Payments Service.

The Gateway offers high availability and performance without requiring expensive or proprietary hardware. The state-of-the-art architecture is future-proof, allowing the system to be extended to meet future requirements at significantly less cost when compared to proprietary, legacy platforms.

BENEFITS

There are a number of benefits brought by the Gateway. As part of the Joint Venture providing the Faster Payments Central Infrastructure (CI), VocaLink can ensure that this and future versions of the Gateway can not only connect to the central network, but also adhere to any compliance requirements, scheme rules & standards that the scheme operator impose.

The technology used within the solution is already widely deployed within banks, and as such no new skills will be required to operate the Faster Payments Gateway. The solution also allows immediate detailed analysis of the payments passing through the Gateway in 'near' real-time. This business intelligence will allow banks to monitor the status of the Faster Payment network and its own exposures and liquidity to the payment network. Full visibility of incoming payment traffic by submitting institution is also visible.

The solution provides an out-of-the-box gateway that is both highly available and scalable using commodity hardware. The latest technology allows the solution to achieve maximum availability and 'near' linear scalability without the dependence on high-end and high-cost hardware platforms.

SOLUTION ARCHITECTURE

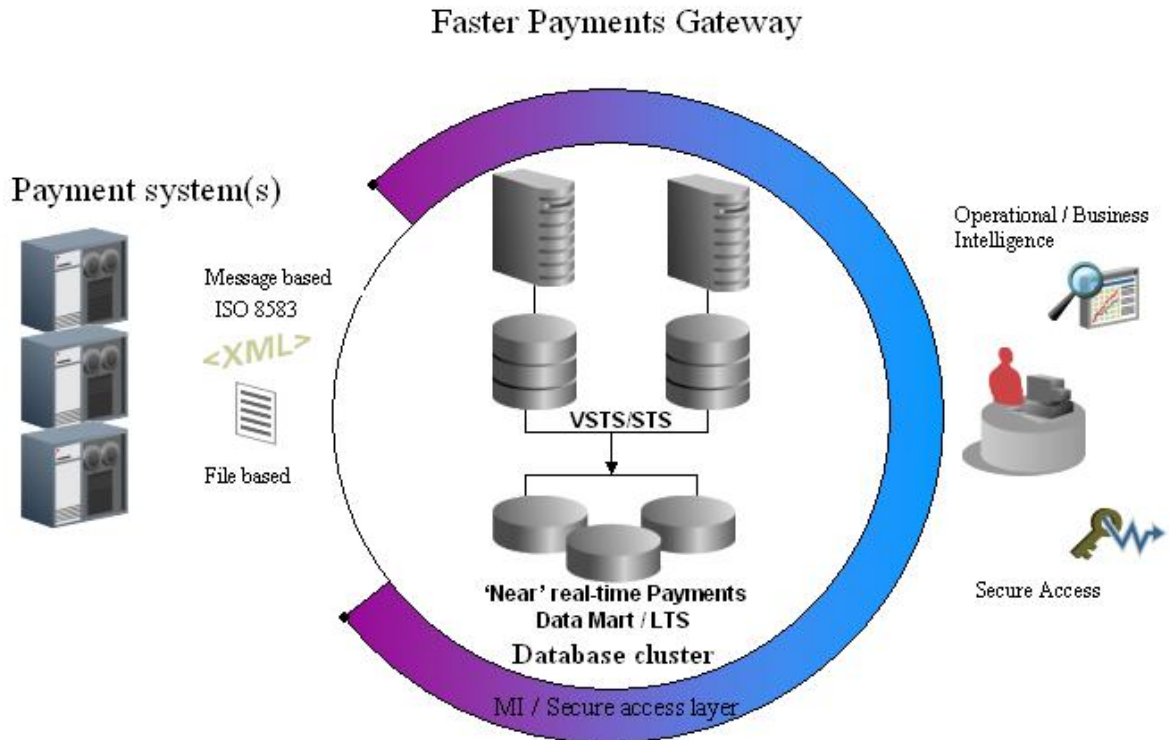


Figure 1 - The Gateway Solution Architecture

The same technology platform (i.e., Oracle Database 10g and Oracle Application Server 10g) can be used for other payment gateway applications that the bank may need to support. For example additional solutions that could reside on the same technology platform could be a replacement for the current HST connectivity to VocaLink (ETS) and Swift gateways. These solutions would use the same technology stack and benefit from the same user security and BI tools that underpin the Faster Payments Gateway.

The benefits to the banks of this approach include the following:

- The costs of supporting and maintaining the “gateway platform” are reduced;
- The gateways are pre-integrated and certified on this technology platform; and
- It means that the integration of these multiple payment systems is a one-time project for these gateways and any additional gateways that are supported on this technology platform.

Payments Gateway Platform

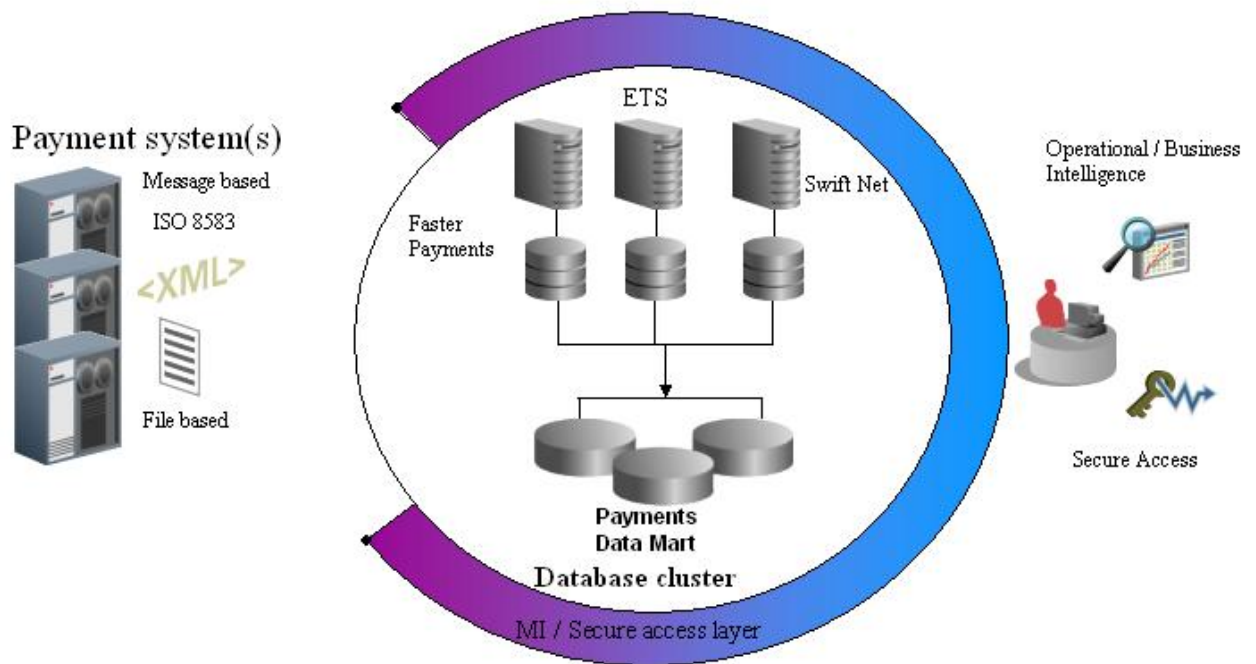


Figure 2 - Re-use of the Technology Platform

BUSINESS AND TECHNICAL OBJECTIVES

The overall business objectives for the Faster Payments Gateway are to:

- Provide banks with a cost-effective way of reaching full compliance with the Faster Payments Scheme in the required timeframe;
- Allow banks to offer Faster Payments access to their agency and corporate customers; and
- Provide a platform for future payment Scheme connectivity (e.g. SEPA).
- Allow banks to analyze 'near' real-time payment information for any purpose, including marketing, liquidity management and sales information

The overall technical objectives for the Gateway are to:

- Provide equivalent levels of resilience and availability to traditional non-stop architectures;
- Ensure scalability and support growing volumes in line with throughput and SLA requirements of Faster Payments;
- Enable straightforward integration with back office systems;
- Facilitate the cost-effective implementation of business enhancements and bespoke additions; and
- Maximise configurability for ease of installation and maintenance.

TARGET ARCHITECTURE

Oracle has been a key technology partner to the Financial Services Industry for many years, with Oracle technology being deployed to underpin some of the Industries most critical systems. Oracle’s understanding of a bank’s architecture and landscape, both existing and future, enables us to clearly show how the Gateway can be deployed within a bank.

In the diagram below, the possible deployment of the Faster Payment Gateway solution within potential target architectures is highlighted.

High Level Payments Architecture

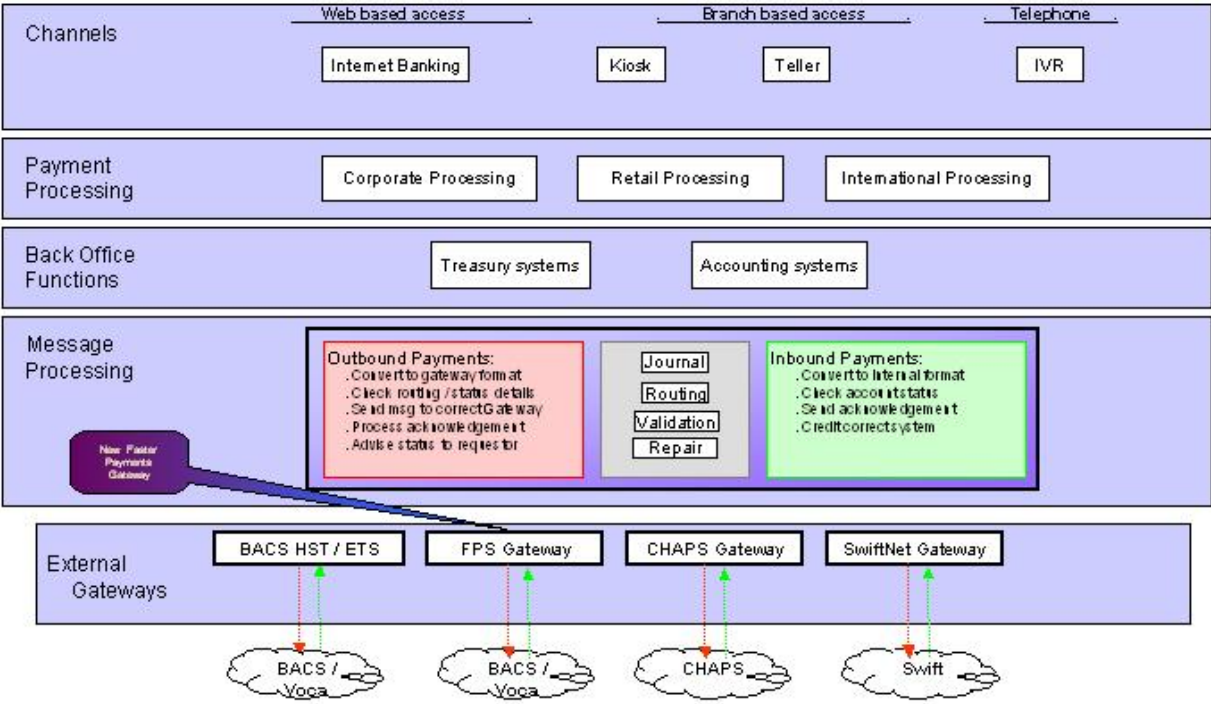


Figure 3 - Target Architecture

SUMMARY OF KEY FEATURES

The Gateway offers the following key features:

- Access to the Faster Payments Network using the ISO8583 interface to send and receive payments;
- Access to the Faster Payments Network for agency banks and corporate customers;
- Logging of all messages sent and received;
- Validation against Faster Payments Scheme rules;
- Routing of inbound messages to relevant accounts system;
- Transmission of payment files (Standing Orders) as single payments;
- Automatic reconciliation with the Faster Payments Network;
- Stand in processing for Agency Banks;
- Stand in authorisation for receiving faster payments when account systems are offline;
- Integration with existing back office systems, such as:
 - Cash Management Systems;
 - Transaction Management and Exception Handling Systems;
 - AML and Fraud Control Systems;
 - Management Information and Reporting Systems;
 - Enterprise Monitoring Systems;
- Minimisation of changes to the bank's existing systems;
- Near 'real-time' business intelligence & analytics;
- Security that meets the requirements of the Faster Payments Scheme;
- User management and access control;
- Scalability and extensibility; High availability and performance on commodity hardware.



CONTACT DETAILS

For Further Information on Oracle Financial Services see

http://www.oracle.com/industries/financial_services/index.html

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