



Clareti Payments Gateway

An integrated, real-time, multi-currency payments gateway enabling straight through processing and reducing operational costs

A scalable, flexible and cost-effective approach to consolidating multiple payments architecture silos into one

For banks to capture the new opportunities in payments and manage liquidity and risk in real-time, a new brand of payments architecture is essential

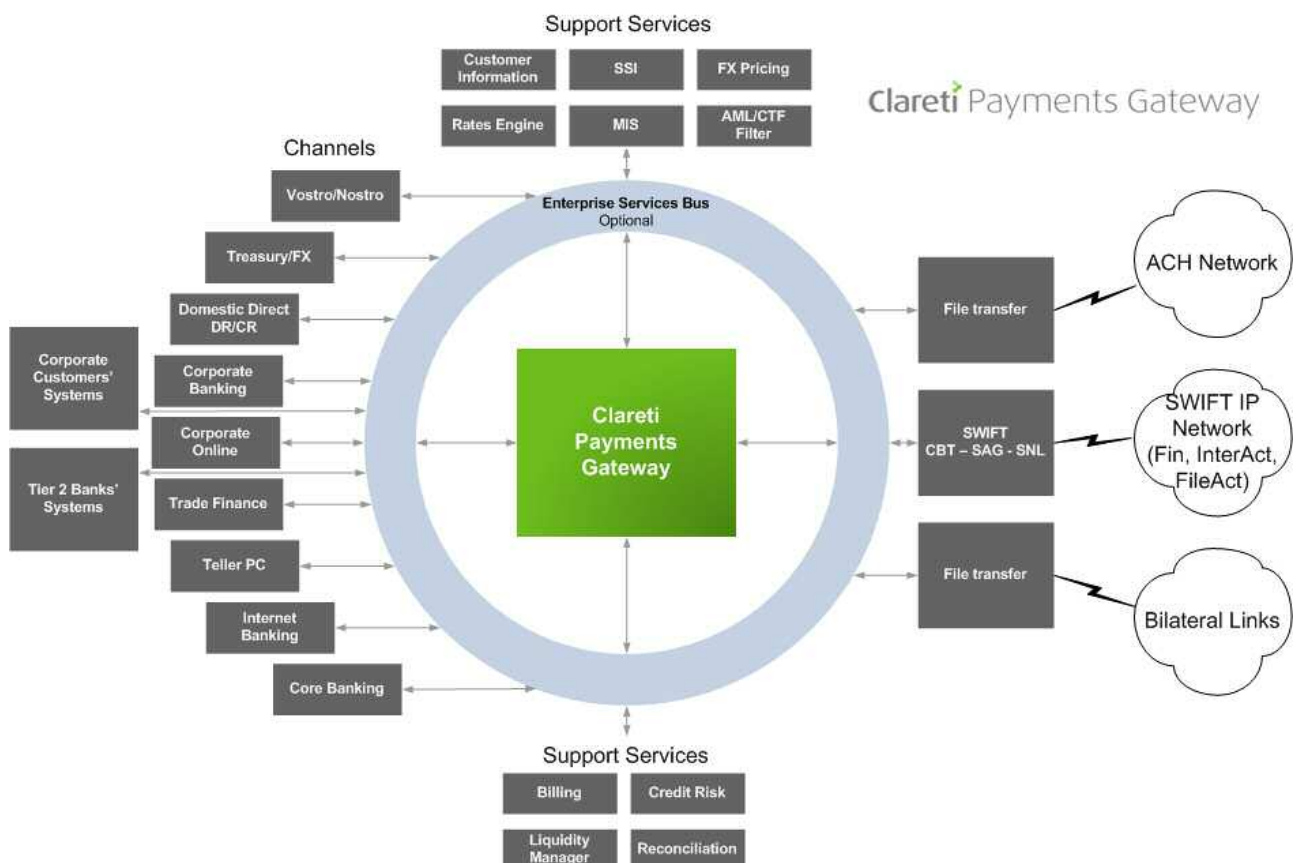
Transaction banking is booming. It is proving to be the most successful engine of banks in difficult times. However, the pressures associated with maintaining and sustaining this powerhouse have never been greater. Volumes are increasing, regulation is demanding constant change and commercial pressures are resulting in thinner margins. Better control of risk and intra-day liquidity also dictates the need for greater clarity and visibility across the whole payments architecture.

There is no doubt that if you were setting up a new bank today, your design would not be a cut and paste

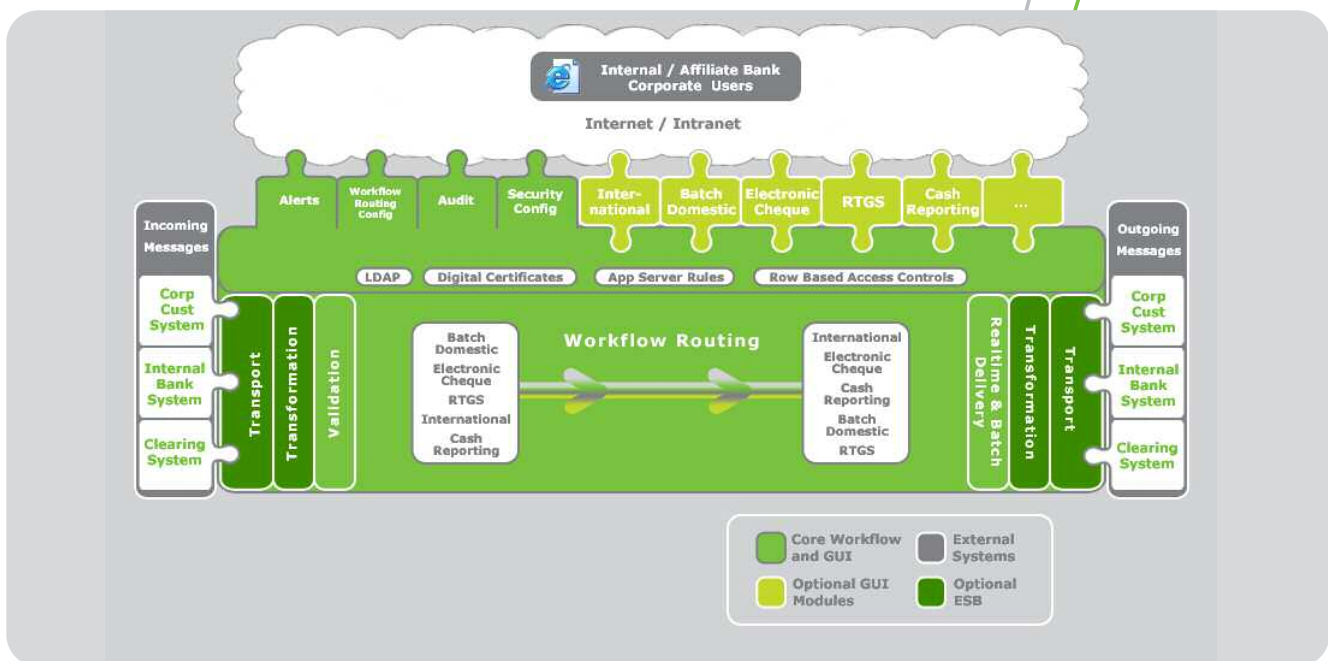
of a typical bank's current payments architecture. Most banks have built or bought multiple payment systems over time to address the changing needs in the market. The result is independent payment silos rather than one over-arching payments architecture. Naturally, there were good reasons for each change along the way however, in retrospect it is obvious that the current set up is costly, complex and lacks flexibility. The inherent duplication of processes such as AML, KYC with the additional hardware, software, security systems and infrastructure required to operate multiple silos and lack of visibility

arising creates a burning platform for change.

Clareti Payments Gateway is an integrated payments hub that creates clarity across your whole payments architecture. It removes complexity and puts you in complete control in real-time. Our architecture allows you to rapidly respond to your businesses needs whether that be the creation of new payment solutions, improved risk management or regulatory change, all with the certainty that you can maintain the integrity of your core payment processes. By creating a single view of your payments architecture, it lowers overall



Clareti Payments Gateway Architecture



technology and enables delivery of a lower cost, simplified global payments process.

Our modular approach enables Clareti Payments Gateway to be implemented in phases, which minimises the risks and enables you to manage change and budgets at your preferred pace. It is designed to integrate with your existing systems, allowing you to preserve your current best-of-breed solutions, e.g. AML, rates engine and billing. Keeping it simple on the inside gives you the flexibility to innovate when dealing with new delivery channels and payment solutions, enabling rapid deployment of new solutions or changes to regulatory controls and

procedure. Flexibility in a modern payments hub delivers lasting competitive advantage.

A 21st Century View

The browser-based user interface provides a flexible and hierarchical view in a multi-window environment. Configurable queues allow operational users or customer's users to view and manipulate payments either individually or in batches. Users may define alerts that monitor workflow and system events.

Clareti Payments Gateway allows visibility across multiple payment streams. For example, limit rules can be applied to the aggregate total of a

customer's payment activity for real-time, batch and international payments. This visibility also allows the payment originators (e.g. customers) to view the state of their payments in real-time and even act on them. This removes the need for manual faxing and approvals for "repair" payments.

Message Handling

Any other message type can be supported using SDA architecture and J2EE standards, including of course SWIFT message types.

Messages are routed to internal applications or external system



interfaces as determined by the Clareti Payments Gateway workflow engine. A full audit trail of changed states is recorded and backed up within the system

Transformation Services

A powerful feature of Clareti Payments Gateway is the message transformation service which permits easy integration with legacy systems and customer messaging requirements. It has comprehensive message validation and error handling routines built-in. This service can, optionally, be replaced by an Enterprise Services Bus if required.

Technical Architecture

Core and Modules

As depicted in the architecture diagram, the system is made up of core and plug-in components. The core system contains the generic payment store and flexible workflow routing for all payment streams. The plug-in modules allow the users to interact and configure data for each payment stream in the manner most suitable to that stream.

The users only license and implement the modules and functions required. The core system contains alerts, row based security and audit functionality.

Security

All users interact securely with a browser over the internet or intranet, protected by 128 bit SSL encryption.

Any piece of functionality or data can be securely assigned to the appropriate person or organisation; e.g. a customer bank being alerted to, viewing and then correcting an error for a payment that fails validation.

Plug-In Interfaces

The message transport mechanism is abstracted using SOA to enable ease of integration to the payments gateway. The message transformation is also modularised so that new formats can be easily added. All messages, including those manually entered via the plug-in modules, go through a validation layer to ensure the integrity of the message and the system.

Technology Base

In order to future-proof Clareti Payments Gateway and provide maximum reliability and flexibility, industry standard software and communications are deployed. These include: Oracle databases, IBM WebSphere Application Server, J2EE code and SWIFTNet messaging standards. Outbound messaging can be event driven or scheduled.

About Gresham

Gresham Computing plc (LSE:GHT) specialises in the provision of real-time financial solutions to banks and corporates, and has a well-deserved reputation for technical excellence, reliability and a strong service culture. Our storage division helps the largest data users to better manage the unrelenting growth of data.

Further information

For more information on how Clareti Payments Gateway can help your company visit

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