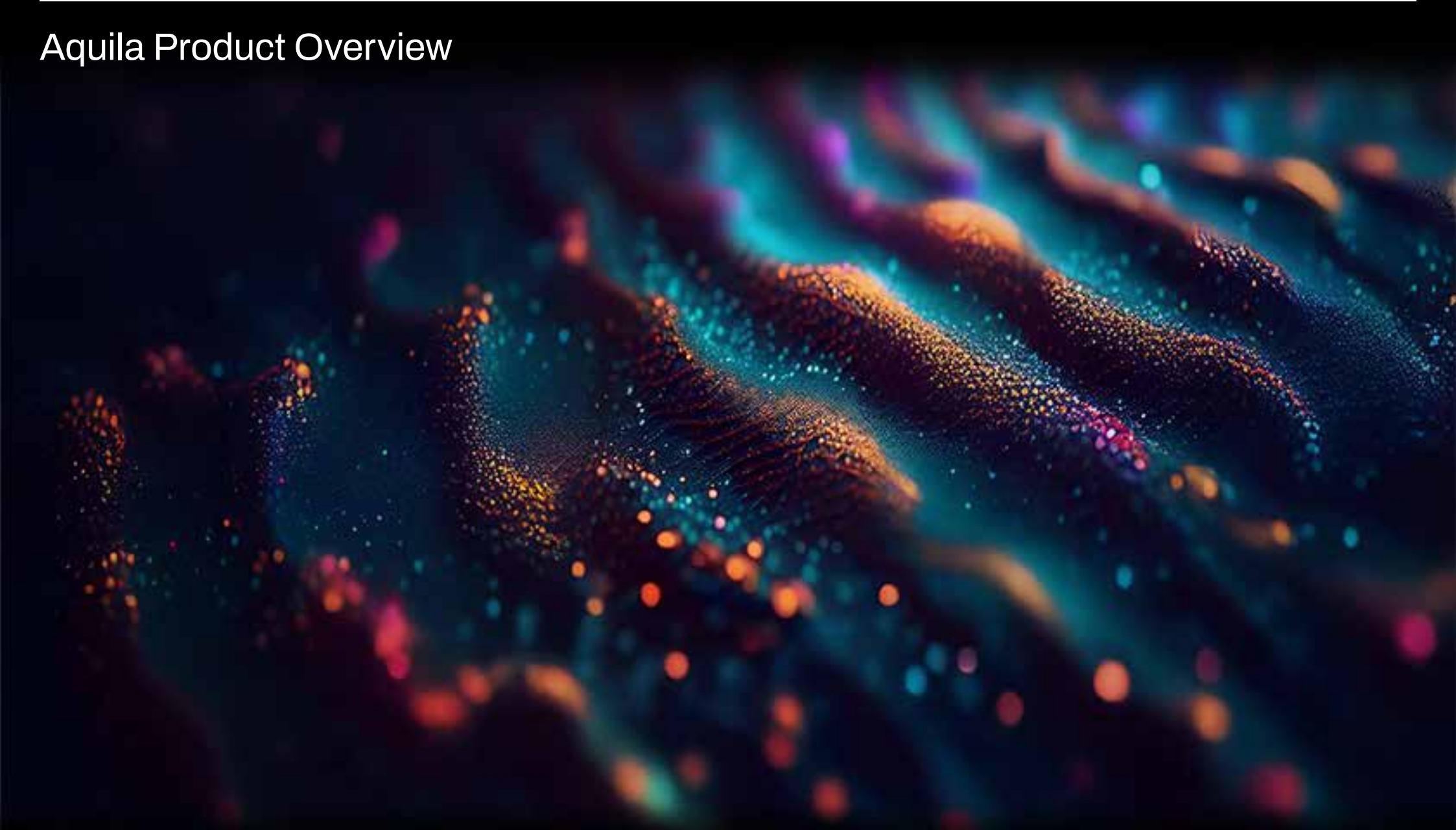

Aquila Product Overview



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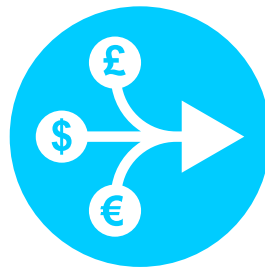
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Aqua Global Solutions Company Overview

Aqua Global Solutions was established in September 1983. It is headquartered in London and has a regional office in Poland. Aqua Global is a leader in financial message management to the world's top financial institutions including retail and wholesale banks, wealth and asset management firms as well as fund administration institutions.

The solution is a single, modular proposition called Aquila that provides straight through processing of message for:



Payments



Treasury



Securities



Trade Finance



Statement Reporting

Unlike other solutions in the market, all of the modules are incorporated into one integrated solution that eradicates the need for multiple applications. These modules all co-exist within a single shared database and are delivered as a complete solution. This allows customers to deploy additional modules quickly and at a pace that suits their business requirements.

Aquila has off the shelf adapters for many leading core-banking systems. It can also be integrated into many other systems and external services, including those that are in-house as well as proprietary ones.

Aquila also has the capability to meet all of your SWIFT (FIN and ISO 20022), local clearing and internal services such as internet and mobile banking requirements.

Aquila consists of the following modules:

- **Message Management**
- **Inward Payments Processing**
- **Outward Payments Settlement**
- **SWIFT gpi and Universal Confirmations Module**
- **Manual Transaction Entry**
- **Account Reconciliations**
- **Treasury Message Matching**
- **SWIFT LAU**
- **ISO 20022 Modules**



Aquila Message Management

Message Management (MM) is an integrated framework for controlling all electronic messaging from a variety of services. MM integrates internal systems with third party applications and external messaging services in order to simplify your institutions IT architecture. The solution can enable integration with the following services:

Internal Systems:

- Core banking
- Trading
- AML/KYC
- E-banking

External Services:

- SWIFT
- RTGS
- Local Clearing
- Remittance networks
- Bespoke formats

MM is a multi-entity, multi-currency solution offering 24 x 7 transaction processing and automation capabilities in harmony with core systems. Queue Management (QM) is the main dashboard and point of control for all incoming and outgoing messages.

With Aquila, the bank will be able to automate and control the following:

- **Receiving both inward and outward SWIFT MT/MX messages**
- **Managing user profiles and authorities to departments, messages and processing**
- **Message routing to different departments**
- **Configure automated processing (such as payments STP)**
- **Managing exceptions**
- **Provide SWIFT Standards & SWIFT gpi payments and universal Confirmations compliance**
- **Provide comprehensive audit information and control**
- **Automatic and manual creation of messages**
- **SWIFT message templates**
- **Duplicate message detection**
- **Message transformation (e.g between MT and MX)**

Message Standards

All SWIFT FIN message standards within Aquila have an effective date that allows changes in message structure (introduced by service standards updates) to be catered for without a need to upgrade software. Annual SWIFT message standards updates are soft-coded and typically released by Aqua at least three months prior to the go-live date. Using Aquila will allow greater flexibility, audit and control of messages standards and requirements. Aquila can provide a solution to the following SWIFT initiatives.

FIN to ISO 20022 Transition

The ISO 20022 MX standard is gathering significant momentum and SWIFT have confirmed their plans to phase out certain MT1xx, MT2xx and MT9xx messages by SWIFT Standards Release in November 2025 in favour of their ISO20022 equivalents. Aquila can control MX messaging adoption through either native message creation or transformation between MX and MT.

Inward Payments Processing

The Inward Payments Processing controls the inbound STP of payments into the core banking system using the core supplier's existing API's. Status codes from the API programs indicating the success or failure of the booking process are monitored and will automatically alert users in to take the appropriate action where required. A manual repair function is also available to enable re-booking of payments.

Aquila can automatically take fees for specific payments based on a customer profile and even whether the payment was processed automatically or manually.





An institution wishing to maximise their rates of Straight Through Processing (STP) for any type of payment instruction can benefit in the following ways:



Reduced manual processes / cost / risk



Improved accuracy



Improved time cycles



Improved audit and control



Improved compliance including SWIFT gpi/Universal Confirmations

Aquila provides an enterprise wide, universal methodology for automating inward payments and is easily adapted for evolving requirements. Any problems or exceptions such as failed bookings are monitored and may be automatically reported to relevant personnel via user alerts if required.

Data Definition Layer

Aquila's Data Definition Layer is used to define the structure of specific messages whether they are industry standard such as SWIFT or specific to a customer such as e-banking. The message standards are version dated, supplied and held in database tables. This gives the customer the advantage that no software updates are necessarily required when message standards change. The data definition layer allows file types (e.g. XLS, XML, CSV etc.) with differing information formats to be imported and processed enabling third parties to submit payment information for automated booking.

Outward Payments

The Outward Payment processing can automatically produce outward settlement messages for the bank in the appropriate format. This feature produces fully formatted confirmation and payment messages for transmission to the appropriate service such as SWIFT, SEPA, local clearing or faster payments. The settlement messages can cater for Real Time Gross Settlement (RTGS) systems such as EBA or TARGET2 if required. Trade details can be augmented using Standard Settlement Instructions (SSI's) and to the exact requirements of individual counterparties. Full trade cancellation processing is included.

Manual Transaction Entry

Manual Transaction Entry (MTE) provides a managed input mechanism that allows all types of non-electronic payments to be processed. MTE can still be used if the core system is "offline". When the core system is available all transactions will automatically be processed. Entries are keyed by staff in either Head Office or regional branches, which may be optionally routed to Head Office for checking. The appropriate settlement channel, accounting entries, exchange rates and standard settlement instructions is automatic, including validation of bank codes (BIC or local clearing) and IBAN numbers.. The system also has highly configurable transaction fees based on the type of transaction and customer.

Aquila Account Reconciliation

The Aquila Account Reconciliations (AR) module provides real time reconciliation that can dramatically improve your operational efficiency and reduce your exposure to risk. AR provides automatic reconciliation of items with information held within an institution's internal systems.

- **SWIFT Securities**
- **SWIFT Cash**
- **Internal system formats**
- **Bespoke formats**
- **Card formats**
- **Precious metals**



Treasury Matching

The Aquila Treasury Message Matching (TMM) module provides real time matching of all treasury confirmations. The TMM module effectively allows an institution to define matching relationships between inbound and outbound treasury trade confirmations in order to automatically detect trade anomalies in a timely manner. The matching rules can be defined for messages for any service that the institution requires (e.g. SWIFT). TMM allows for the clear investigation of matched, unmatched and possible match relationships. TMM automatically highlights exceptions ensuring the timely resolution of issues with the ability to add notes to a transaction to aid future investigations if required.

Incident Management

Aquila has in built incident reporting that will not only tracks events but also works towards improving issue resolution. The flexible incident management process immediately capture incident details and assigns it to the appropriate people. It's reporting dashboard allows for investigation and analysis, corrective action, and incident closure with full audit.

ISO 2022 Solutions

Adapting internal systems to process the ISO 2022 messages will be challenging for most institutions, leading to costly and time-consuming projects, however, this does not need to be the case.

To meet the requirements of the ISO 2022 initiative, Aqua Global can offer either an ISO 2022 Messaging Hub or an MT to MX message Transformation Tool.

- **No changes required to existing systems**
- **Easily adopted**
- **Minimal training required**
- **40+ years of financial message processing**
- **SWIFT CBPR+ ready Vendor**
- **Annual SWIFT Message Standards updates inclusive of the Annual Subscription**

Aquila and the SWIFT Customer Security Programme (CSP)

Aqua can provide solutions to many of the vulnerabilities detailed in the “SWIFT Customer Security Controls Framework Detailed Description” that improve security and reduce the risk of fraudulent activity.

Security Areas:

1. Internal Data Flow Security

Ensure the confidentiality, integrity, and authenticity of data flows between local SWIFT-related applications and their link to the operator PC.

2. Operator Session Confidentiality and Integrity

Protect the confidentiality and integrity of interactive operator sessions connecting to the local SWIFT infrastructure.

3. Database Integrity

Ensure the integrity of the database records for the SWIFT messaging interface PC.

4. Back Office Data Flow Security

Ensure the confidentiality, integrity, and mutual authenticity of data flows between back-office (or middleware) applications and connecting SWIFT infrastructure components.

5. External Transmission Data Protection

Protect the confidentiality of SWIFT-related data transmitted and residing outside of the secure zone.

6. Intrusion Detection

Detect and prevent anomalous network activity into and within the local SWIFT environment.

Aquila SWIFT Local Authentication (LAU)

As part of the SWIFT Customer Security Program (CSP), SWIFT is recommending that message authentication is implemented when exchanging messages between the back office and the SWIFT gateway. This is possible using the SWIFT Local Authentication (LAU) module where Aquila will exchange messages with a Local Authentication signature in the trailer for each SWIFT message. The LAU value depends on 2 16-digit keys that are concatenated to provide a key for the encryption algorithm that uses Hash-Based Message Authentication Code (HMAC) Secure Hash Algorithm (SHA-256) signatures. The symmetric key is shared by both Aquila and Alliance Access. For any Incoming SWIFT with an LAU in the header Aquila will verify that the LAU is correct. Similarly, Aquila will create an LAU on outward messages for the SWIFT device to verify prior to submitting to the SWIFT network. This will prevent tampering with SWIFT exchange files.



INTELLIGENT AUTOMATION

Re-engineer and simplify
your processing



About AquaGlobal

Aqua Global is a leading provider of financial message management solutions and has been for over 40 years. We provides solutions to the world's top financial institutions producing high levels of Straight Through Processing (STP) and operational efficiency, whilst minimising risks and costs. Headquartered in London, Aqua Global also has a support and development hub in Poland, as well as several global business partners.

For more information, visit
Web: www.aquaglobal.co.uk
LinkedIn: [@aquaglobal](https://www.linkedin.com/company/aquaglobal)

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