



Aquila

Product Overview

YOUR ULTIMATE BANKING SOLUTION

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Aqua Global

Company Overview

Aqua Global 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 messages for payments, treasury, securities, trade finance and 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 has the capability to process all of your Swift (FIN and ISO 20022), local clearing, internal services such as internet and mobile banking as well as bespoke customer specific formats via simple configuration.

STRAIGHT THROUGH PROCESSING FOR

Payments

Treasury

Securities

Trade Finance

Statement Reporting

Aquila consists of the following modules

01 Message Management

03 Outward Payments Settlement

05 Manual Transaction Entry

07 Securities Reconciliations

09 Securities Message Matching

11 Incident Management

13 Swift LAU

02 Inward Payments Processing

04 Swift gpi and Universal Confirmations

06 Account Reconciliations

08 Treasury Message Matching

10 Cash and Liquidity Management

12 Analytics Studio

14 ISO 20022 Modules

These modules can be deployed independently, several at once, or as and when it suits your bank. Aquila is a fully modular solution.

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 institution's IT architecture.

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.

TYPICAL INTERNAL SYSTEMS

- Core banking
- Trading
- AML and KYC
- E-banking

TYPICAL EXTERNAL SERVICES

- Swift
- RTGS
- Local clearing
- Remittance networks
- Bespoke formats

WITH AQUILA, THE BANK CAN AUTOMATE AND CONTROL

- Receiving both inward and outward Swift MT and MX messages
- Managing user profiles and authorities to departments, messages and processing
- Message routing to different departments
- Configuring automated processing, such as payments STP
- Managing exceptions
- Swift Standards and Swift gpi payments and Universal Confirmations compliance
- Comprehensive audit information and control
- Automatic and manual creation of messages
- Swift message templates
- Duplicate message detection
- Message transformation, for example 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 Global at least three months prior to the go live date. Using Aquila will allow greater flexibility, audit and control of message standards and requirements.

FIN to ISO 20022 Transition

ISO 20022 MX is now the standard for cross-border payment messaging, following the end of coexistence in November 2025. The industry continues to transition remaining message types from legacy MT formats to their ISO 20022 equivalents. Aquila supports this evolving landscape by enabling organisations to control their MX messaging adoption through either native MX message creation or transformation between MX and MT formats.

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 required when message standards change. The data definition layer allows file types such as XLS, XML and CSV with differing information formats to be imported and processed, enabling third parties to submit payment information for automated booking.

Inward Payments Processing

Inward Payments Processing controls the inbound STP of payments into the core banking system using the core supplier's existing APIs. Status codes from the API programs indicating the success or failure of the booking process are monitored and will automatically alert users 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 on whether the payment was processed automatically or manually.

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.

Any Type of Instruction

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

- Reduced manual processes, cost and risk
- Improved accuracy
- Improved time cycles
- Improved audit and control
- Improved compliance including Swift gpi and Universal Confirmations

Outward Payments

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 systems such as EBA or TARGET2 if required. Trade details can be augmented using Standard Settlement Instructions 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, and 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 are automatic, including validation of bank codes, whether BIC or local clearing, and IBAN numbers. The system also has highly configurable transaction fees based on the type of transaction and customer.

Incident Management

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

Swift Case Management

Swift Case Management becomes mandatory in November 2027, moving exceptions and investigations away from the free format messages banks have relied on for years and onto structured ISO 20022 exchanges, and Aquila is ready for it today. Through its Incident Management capability, Aquila captures, investigates, resolves and audits each case within a single controlled workflow, automating the camt.110 investigation requests and camt.111 responses that the mandate introduces, so that queries are raised, answered and closed in a consistent and fully traceable way. Because Aquila sits alongside the existing core banking system rather than replacing it, a bank can meet the Case Management requirement well ahead of the deadline without disrupting the platforms it already runs.

ISO 20022 Solutions

Adapting internal systems to process the ISO 20022 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 20022 initiative, Aqua Global can offer either an ISO 20022 Messaging Hub or an MT to MX message Transformation Tool.

WHAT THIS GIVES YOU

- No changes required to existing systems
- Easily adopted
- Minimal training required
- Over 40 years of financial message processing
- Swift CBPR+ ready vendor
- Annual Swift Message Standards updates provided as part of the annual subscription

Account Reconciliations

Aquila Account Reconciliations (AR) provides automatic reconciliation of cash, ATM, card, payment service provider data, commodities as well as general financial data. AR allows users to manage exceptions via the manual and automatic routing of issues to the responsible business areas, which can update the issue and, if authorised, propose matches.

AR provides a leading automated reconciliation solution that improves the efficiency and effectiveness of the entire reconciliations process, allowing you to control costs, improve exception management, enhance compliance and mitigate risk.

Flexible, Rapid And Efficient

AR is quick to install and configure, with institutions typically going live and benefiting from the results of automation within a few days. AR can be complemented with other Aquila modules that control messaging, enable trade matching, and control reporting and referral or exceptions management in a single solution.

Functionality

AR provides real time reconciliation that can dramatically improve your operational efficiency and reduce your exposure to risk. The solution is flexible and can work with any Swift FIN or ISO 20022 format messages as well as bespoke formats. Additionally, back office system ledger items for ATM, credit card, payment service providers and many other types of transaction can also be managed. AR facilitates the reconciliation of internal ledger accounts from multiple back office systems using extracts created by those systems.

Its flexibility means that AR can also accept data in any structured electronic format. To assist in the reconciliations process, unmatched transactions can be grouped into a single item.

Exception Processing

AR can automatically alert users to any exceptions that need to be managed, including non balancing statements, missing statements, and differences between the closing balance of a statement and the opening balance of the next.

Matching Rules

Flexible matching rules are configurable by the users, or can be created automatically as part of the matching process, saving time and effort.

Referral Management

AR provides users with the ability to electronically refer an item to a specific individual or department. This is combined with optional notes and an overdue date by which the query should be answered. Users assigned to answer referrals can view them electronically, add additional notes, set the query to answered, or refer items to another department.

Additionally, AR can automatically refer specific unmatched transactions based on rules that scan the statement or ledger items for specific strings. This ensures that all supporting referral users can action their allocated entries efficiently.

Proposed Matching

This feature reduces the need for paper copies and phone calls of proposed matched items for the reconciliations department. Proposed matching enables a user to electronically suggest a matching scenario with other outstanding items for review and acceptance by another user. It can also perform the actual matching automatically if required.

Comprehensive Reporting

AR has a comprehensive number of reports that can be requested on demand or produced automatically as part of a normal daily cycle.

RECONCILES

Swift

Card

Point of Sale

ATM

Internal Accounts

FORMATS ACCEPTED

Swift

XML

CSV

PDF

MS Word

Local clearing formats

Securities Reconciliations

Aquila's Automated Securities Reconciliation (SR) module allows the reconciling of securities holdings or trades in a timely and accurate manner. It has been designed to be volume sensitive to enable institutions to respond to the organic growth of their institution as well as market demands.

SR provides a high performance, resilient and fully scalable processing solution. Apart from integrating to proprietary systems, off the shelf adapters are also provided for many popular back office solutions, and Aquila is also available as a managed cloud solution.

SR is typically configured for matching Swift securities positional and trade statements against the details held in the back office system. Information can be received in Swift FIN format (MT535, MT536 and MT537), the new XML standards for funds, or any other proprietary format.

Compliance, Security And Audit

User profile and static data changes are managed under dual control, and users can be allocated to, or prevented from performing, specific functions and processes. All data changes are date and time stamped, and all processing events, whether system or user, are logged on the audit trails and attached to each message.

Positional And Transactional Reconciliation

SR starts automatic matching on receipt of new statements for a specific depository account and date, triggering the appropriate data extract from the back office system. MT536 statements of transactions are linked to individual trades in the back office, providing a granular reconciliation at the trade level, and balance proofing compares the sum of unmatched trades or match differences against the outstanding position on the last chronological MT535 positional statement.

BENEFITS INCLUDE

- Reduced manual processes
- Improved time cycles
- Reduced cost
- Reduced risk
- Improved audit and control
- Improved compliance
- Improved accuracy
- Fully scalable

KEY FEATURES

- Positional reconciliation using MT535 and MT537
- Transactional reconciliation using MT536
- Balance proofing
- Matching rules
- Referral management
- Compliance, user security and audit
- Exception processing
- Notifications

Matching Rules And Referrals

Matching rules are configurable by the users and are automatically applied at either a global or account level, covering ISIN matching, ISIN and narrative details, and alternate details. Users can electronically refer an item to a specific individual or department with notes, and external queries can be formatted automatically to the counterparty that sent the original statement, with answers linked back to the original query.

Treasury Message 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 (for example Swift FIN and ISO 20022). 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. On a manual or automatic match, Aquila can be configured to release any associated settlement messages as well as update the trade status on the core banking application. If a trade is reversed then Aquila can perform cancellation processing.

Securities Message Matching

Aqua Global's Securities Message Matching module matches securities orders and confirmations from every party involved in the securities settlement chain, helping institutions mitigate the operational risk that growing regulatory demands place on the business. It proactively surfaces exceptions and mismatched trades, is highly flexible and scalable, and copes with any electronic message format, supporting two and three way matching between the institution, its custodians and its brokers, and matching outward and inward messages automatically as appropriate.

Confirmations are categorised automatically once they have been through the matching process, whether as matched, possible match, unmatched, superseded, cancelled, deleted, duplicate or partial match. System wide rules can be applied across all confirmations while counterparty specific rules handle individual requirements, and where a mismatch would otherwise prevent an automatic match, such as a bank name that needs matching against a BIC or clearing code, alternate details learning lets a user define the rule once and have the system suggest it on future manual matches, which lifts automatic match rates over time without amending static data in the host systems.

A full audit trail records every action under dual control, and the module can integrate further with the back office by automatically authorising the associated trade once its confirmation has been matched.

BENEFITS INCLUDE

- Two and three way matching between the institution, custodians and brokers
- Automatic matching of outward and inward messages
- Flexible system wide and counterparty specific matching rules
- Automatic exception highlighting with transaction level notes
- Alternate details learning that lifts automatic match rates over time
- Query and answer facilities for resolving unmatched items
- Processing of any MT5XX message
- Full audit trail under dual control

Cash and Liquidity Management

Real time treasury and payments control, built for banks

Aquila brings liquidity monitoring and cash management together on a single platform, so that treasury and payment teams can see their true position instantly, automate their compliance reporting, and move funds with confidence.

Liquidity Management

Basel Committee rules require banks to prove their intraday and end of day liquidity position on demand, and the cost of falling short is real. Aquila takes the manual work out of that obligation by monitoring positions continuously, so that treasury always has an accurate and live view.

It sets the day's opening position from the prior day's MT940, MT950 or camt.053 closing balance and then tracks every credit and debit in real time through MT900, MT910 and camt.054 advices or MT942 and camt.052 intraday statements. Working alongside Message Management, it flags payments that have been sent but not yet confirmed and factors in queued payments to project the true real time position, releasing payments by priority only where correspondent funding is available. It can sweep funds in and out of correspondent accounts to cover positions with the resulting entries posted into the core banking application. Statutory output, including Bank of England PRA submissions, is available.

WHY IT MATTERS

- Full visibility of liquidity in any currency, in real time
- Lower compliance cost and manual effort through automation
- Fast to deploy into existing infrastructure
- One centralised liquidity balance across the bank
- Consistent, audit ready compliance monitoring
- Materially lower liquidity risk exposure

Liquidity Stress Testing

Regulators expect banks to show not only a live liquidity position but also how that position holds up under pressure, with the BCBS Principles for Sound Liquidity Risk Management and the PRA expectations set out through the ILAAP calling for regular stress testing across a range of scenarios.

Aquila extends the same live position data it already holds for Liquidity Management into the stress testing process, rather than asking treasury to rebuild it in a spreadsheet, and it supports idiosyncratic, market wide and combined scenarios. Users apply stress parameters, such as increases in business volumes or reductions in all or specific agent payments, directly to the live intraday and end of day positions that Aquila already calculates, which removes the lag and reconciliation risk of exporting positions into a separate tool and allows results to be compared directly and graphically.

WHY IT MATTERS

- Stress results grounded in the same live data as day to day reporting
- Faster and more defensible ILAAP and supervisory submissions
- Configurable scenarios without vendor lock in on assumptions
- A clear escalation path from early warning through to contingency action
- Less reliance on manual, spreadsheet based stress runs
- One audit trail spanning business as usual and stress reporting

Cash Management

Forecasting a cash position by hand is slow, prone to error, and holds back reinvestment decisions. Aquila's Cash Management projects positions automatically and produces settlement messages for balance sweeping in seconds, freeing capacity for volume growth and giving treasury an accurate basis for reinvestment at a fraction of the manual cost and risk.

An account view shows how each position is calculated and lets users request, authorise or cancel transfers, set a protected minimum balance per account, and run cut off transfers automatically or by hand, while a currency view rolls individual accounts up into a single currency position and projects it up to ten days ahead.

Funds sweep automatically once an account crosses a set threshold, with support for multiple transfer layers and four eyes approval configurable throughout, and outward settlement messages such as Swift pacs.009 or credit and debit advices fire automatically once the sweep completes.

Every transfer posts to the back office in real time through the API, with return codes monitored so that any failure surfaces immediately and can be repaired, giving one complete and auditable transaction history.

WHY IT MATTERS

- Less manual effort and lower operational risk
- Lower processing costs
- A stronger audit trail and compliance posture
- Sharper accuracy across the board
- Faster resolution when issues arise
- Clean scaling as volumes grow

Analytics Studio

Self service analytics, built into Aquila

Analytics Studio is Aquila's built in business intelligence and reporting platform, giving teams interactive dashboards, custom reports and shared insight without ever leaving Aquila.

Because every widget reads live data directly from the Aquila shared database, the numbers on screen are always current rather than a snapshot from an overnight extract, and operational teams can build the views they need for themselves, monitoring reconciliation volumes, tracking unmatched items or producing a daily snapshot, all without specialist technical knowledge or external software.

WHY IT MATTERS

Managers get an immediate and trustworthy picture of reconciliation volumes, unmatched items and transaction trends, and operational teams build the views they need themselves rather than waiting on a central reporting function or external software.

KEY CAPABILITIES

- Interactive dashboards that refresh live and can refresh automatically at set intervals
- Custom widgets driven from a visual builder, or written directly in SQL when full control is needed
- Reports that export to Excel and schedule automatically to a nightly archive
- Up to four pinned KPIs on the Aquila home screen, visible the moment you log in
- Sharing and permissions from private through to organisation wide
- A full dark mode that keeps status colours meaningful in either theme
- Export to PDF, Excel and Doc, so insight travels into the formats teams already use

Aquila Fort

Intelligent Data Security

Aquila Fort adds a layer of intelligent data security across the platform. Through policy driven data protection, banks can apply fine grained encryption, dynamic masking and access controls directly to sensitive data throughout the transaction lifecycle, which strengthens the protection of customer information and simplifies regulatory compliance while maintaining the speed and performance that mission critical banking operations demand.

KEY CAPABILITIES

Intelligent data protection

Sensitive financial and personal information is protected at the individual field level, so only the information that needs securing is secured and the rest of the data stays usable.

Dynamic data visibility

The information presented to each user automatically reflects their permissions and responsibilities, so customer service, operations, compliance and administrators each see only what is appropriate for their role.

Complete control over what you protect

Protection is never limited to a handful of fields, because any column that can be encrypted can be protected. As new regulation arrives, the bank simply switches on protection for the relevant columns, and the system secures both newly ingested data and the historical data already in place.

Aquila Fort supports regulatory frameworks including NIST, GDPR, PCI and FATF, and it lets institutions operating across multiple countries apply different protection policies where required, all designed specifically for highly regulated banking environments.

BENEFITS INCLUDE

- Fine grained encryption of sensitive financial data
- Role based data masking
- Strong protection against insider threats
- Reduced exposure of sensitive customer information
- Support for data sovereignty strategies
- Consistent protection across the Aquila platform
- High performance processing with minimal operational impact

Aquila and the Swift

Customer Security Programme

Aqua Global 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.

01

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.

02

Operator Session Confidentiality and Integrity

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

03

Database Integrity

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

04

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.

05

External Transmission Data Protection

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

06

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 Programme, 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 two 16 digit keys that are concatenated to provide a key for the encryption algorithm, which 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 message 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.

About Aqua Global

Aqua Global was founded in 1983. For over 43 years Aqua Global have been assisting financial institutions to fully automate their transaction lifecycle by providing seamless, secure and robust message automation.

Headquartered in London with support hubs in Poland and global business partners, Aqua Global have supported clients in over 30 countries around the world.

Our solutions support real time operations, regulatory compliance, and scalable automation. We focus on building long term partnerships, tackling complex operational challenges, and providing reliable, high performance systems that assist our clients every day.

CENTRALISED ORCHESTRATION

- Message Management
- ISO 20022 Processing
- Payments
- Treasury
- Securities
- Reconciliations
- Matching
- Incident Management
- Cash and Liquidity Management

FOR MORE INFORMATION, VISIT

Web: www.aquaglobal.co.uk

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