Credit Suisse achieves a technical renewal with Alliance Messaging Hub.

New messaging hub combines flexibility, scalability and resilience to align technology with business strategy.

With expanding transaction volumes and a system that was nearing the end of its life, Credit Suisse decided to replace its financial messaging platform. After careful consideration the bank chose Alliance Messaging Hub (AMH). By deploying multiple instances of the same software, Credit Suisse can meet its entire complex messaging needs and has the potential to scale the platform in line with its growing business.

### Meeting multiple business needs and diverse message standards

With messaging volumes growing at around 10% annually, Credit Suisse needed a system with sufficient flexibility to accommodate growth.

### Business requirements for a new financial messaging hub

<table>
<thead>
<tr>
<th>Business line requirements</th>
<th>Market and client requirements</th>
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<tbody>
<tr>
<td>- A flexible user-friendly solution to manage traffic and exceptions</td>
<td>- Cater for ISO 20022 standards and meet growing message volumes</td>
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<td>- Advanced search capabilities to improve messaging prioritisation</td>
<td>- Meet increasing customer demands for FileAct</td>
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<td>- Ability to add new networks and channels</td>
<td>- Facilitate coexistence and interoperability of message standards and providers</td>
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<th>Non-functional requirements and systems infrastructure</th>
<th>Regulatory and compliance requirements</th>
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<tbody>
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<td>- Solution to be implemented within a given timeframe</td>
<td>- Continue ensuring effective and fully compliant sanction screening and hit handling</td>
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<td>- Removal of processing limits of existing systems</td>
<td>- Provide state-of-the-art data security for processing across multiple cross-border entities</td>
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<td>- Scalability and throughput must improve to meet increasing performance requirements</td>
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Finding the right solution was a challenge from both a technical and business point of view: the platform had to integrate multiple client networks and must conform to many diverse market standards and practices. The bank categorised its business requirements along the following four dimensions:

Credit Suisse is a multinational financial services company headquartered in Zurich. The bank operates a centralised financial messaging hub that serves all of its global messaging needs. With over 90 branches in 30 locations, Credit Suisse transacts regularly in 200 countries. Each year, it processes over 550 million SWIFT messages and more than 200 million domestic, non-SWIFT messages. Traffic includes large value payments, stock exchange transactions and other critical business.

After careful consideration, Credit Suisse decided that its existing financial messaging solution had reached the end of its life and should be replaced rather than overhauled. Beginning with a blank sheet of paper, the bank’s IT team drew a detailed blueprint of what an ideal solution would look like.
An open, flexible architecture with the potential to scale

As part of the selection process, key characteristics of each system were benchmarked against each of the bank’s requirements. A fundamental requirement was to decouple the straight-through processing of messages from the end-user interaction in order to cater separately for the respective non-functional requirements, for example in the area of performance, resilience and recovery time. To achieve this, it was deemed to be necessary to physically separate certain functionalities to make sure they could be run and maintained independently. In practice, the target system had to have four components:

- An STP engine, handling automated message processing - currently up to 5 million messages per day
- A workbench for interactive message handling, implementing simple, message-centric workflows for exception handling and message construction and message search for approximately 2,500 users
- A technical connector layer to integrate with the bank’s applications
- A technical connector layer for integration with external networks

After considering its options, Credit Suisse decided to proceed with AMH. With its open architecture, the solution could be tailored to provide an optimal fit with key requirements.

How AMH solves the bank’s challenges

The power of AMH emanates from its high degree of configurability. The system’s unique, flexible architecture enabled Credit Suisse to meet its entire diverse requirements with a single vendor solution. The bank found that each instance of AMH could be tailored to meet specific business needs at a reasonable cost, offering a good return on investment.

To meet both its complex processing and non-functional requirements, Credit Suisse decided to deploy several instances of AMH. Each was configured in a unique way to match the bank’s target functionality:

**For the STP engine – no direct business user access**

- 2 AMH instances for message processing
- 2 AMH instances for network connectivity handling

Both of the above instances are independent and can be decoupled. In practice these run on two sites and each can be taken down on one site when necessary for maintenance with no interruption to message processing on the other site.

**For exception handling – access by business users**

- 1 instance for end-users

Only one instance of AMH is deployed for end users so all information about message processing can be accessed through a single interface. This streamlines access and offers a consistent user experience.

A flexible solution that meets evolving needs

The replacement of Credit Suisse messaging platform was a significant strategic project and had highest executive attention. Its success demonstrates that AMH is a financial messaging toolbox that provides the ‘DNA’ to build flexible financial messaging solutions for a wide range of requirements.

By choosing AMH the bank has an open, network-agnostic architecture that enables the integration of additional networks and custom services to message processing.

The flexibility of AMH also meets several critical non-functional requirements including:

- Resilience – seamless failover and message processing across multiple sites
- Horizontal scalability – the ability to increase capacity by adding additional servers rather than replacing existing
- Performance – the system can accommodate significant increases in processing volume with no performance impairment

With an adaptable deployment footprint, AMH can be fine-tuned to individual client requirements, including centralized or distributed, single-or multi-instance, and active/standby or active/active setups. In practice Credit Suisse can cater for the most complex client requirements. AMH can be adapted to suit a wide range of specific business requirements. With its inherent flexibility, it helps the bank insulate itself from change.

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Alliance Messaging Hub offers us a powerful financial messaging toolkit. It provides the technical DNA to build high-availability messaging solutions for a wide range of scenarios.

Win Bausch,
IT Director, Credit Suisse