

# INCENTAGE

PIP ■ PAYMENT INNOVATION PLATFORM

PROCESS TEST ENGINE



ENSURE PROPER FUNCTION: KNOW INSTEAD OF HOPE

## END-TO-END TESTING IS HARD



End-to-end testing is hard, especially when it comes to the exchange of transactions that are travelling via SWIFT, APIs or other channels.

The challenge is not only to emulate a business behavior of the counterparty, repeatedly trigger transactions that will be booked in the back-end system, play with the various exception handling processes, use valid reference data but also to be able to replay single tests, test sets and volume tests.

In the past tests have been prefabricated use cases that were relatively easy to be kept up-to-date.

Testing was focusing on the exchange of valid SWIFT FIN messages. New standards releases have been tested with selected new business partners. With the globally synchronized adoption of ISO 20022 in specific business areas banks are lacking capable test partners.

With the increasing adoption of ISO 20022 and co-existence as well as multiple independent standards release cycles, end-to-end testing becomes very expensive, unless there is a smart platform used for test configuration.

These challenges are essential as financial institutions and corporates are currently modernizing their payments infrastructure to cope with the ISO 20022 message formats (CBPR+, T2 etc.). This requires comprehensive testing capabilities at the start of the project. Specific test cases have to be repeated, different counterparty behavior has to be emulated and process compliance has to be tested.

Such testing capabilities are not only essential for the bank itself but also for technical onboarding of business partners and clients.

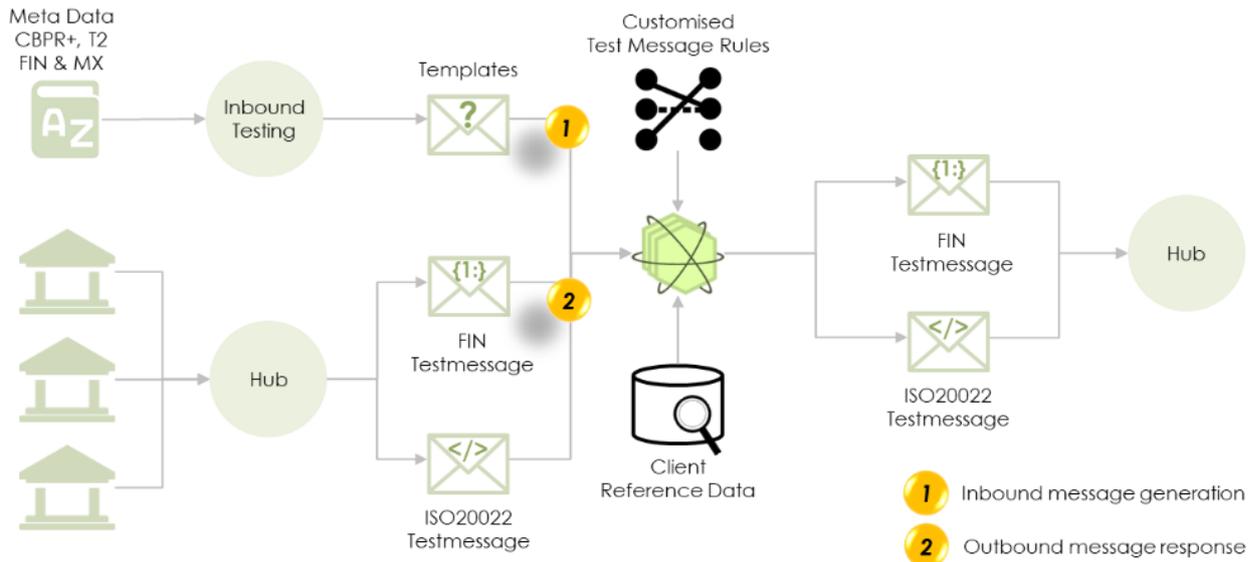
PUT QUALITY INTO FOCUS



Now is the time to enhance testing capabilities!

Incentage's proven middleware functionality helps financial institutions and corporates to generate inbound test messages that are using bank specific reference data and receive a response to outbound messages, without an actual connection to a financial network. It provides full FIN, ISO 20022 T2 and ISO 20022 CBPR+ standards support.

The Test Message Engine is capable to adapt to application-level requirements. This includes headers, reference data, market practices and more. It supports the automated message generation with configurable frequencies. Beyond that it is capable to reply to outbound payments with configurable rules. It can easily generate an ACK, NAK or pacs.002, pacs.004 etc. immediately or with a delay.



## ADAPTABLE TO STANDARD'S VERSIONS

The Test Engine contains financial messaging standards awareness.

With its capabilities it can leverage test cases across multiple standards versions.

As an example, it enables to re-use a test case for a new ISO 20022 version or for another market practice.

Rules can be re-used across multiple message versions while the same logic for using reference data is inherited.

Sharing of rules does not stop here. While it is possible to specify organisation specific rules for specific test cases, the Test Engine offers to share rules across multiple organisations. This saves time, increases efficiency and ensures consistency in the testing.

## ISO 20022

ISO 20022 based XML messages can offer some challenges and unexpected specialties. The Incentage Test Engine can not only deal with those but also provoke them for testing the back-end applications. An example is awkward XML based on a market practice or EPC SEPA definitions in which only one single fields survives in a selection or choice. Other examples are namespaces, document types, versions and non-ISO 20022 registered messages.

## STANDARDS CO-EXISTENCE

Despite the short remaining lifetime of the FIN payment messages the Test Engine supports them in all details and enables the testing of co-existence phases as planned for CBPR+.

## BENEFITS

- 1 Multi-tenant support.
- 2 FIN, ISO 20022 standards compliance.
- 3 Manages specifics of a multitude of back-office applications and regional requirements.
- 4 Integrates RTGS directories.
- 5 Can grow over time with template based message generation based on your rules and reference data.
- 6 Automatic response generator to outbound messages facilitates process testing.
- 7 Rules controlled scheduled generation of inbound messages.
- 8 Provides I/O switches to enable testing between banks of a group, bypassing the SWIFT network.
- 9 Can use production BICs for testing.
- 10 Filter incoming messages to shield from unwanted data and keep the back-end systems stable and healthy.

## CONTACT

[info@incentage.com](mailto:info@incentage.com)

<https://www.incentage.com/>



## ABOUT INCENTAGE

Incentage is a global software product factory dedicated to the financial services industry. Our professionals combine innovative thinking with unrivalled technology and industry knowledge to offer our clients software that moves their organisations forward.

Through our collaborative and efficient approach, we help our clients successfully innovate, increase revenue, manage risk and regulatory change and reduce costs.

We serve our clients across the Americas, Europe, and Africa.

To learn more, visit our web site at [www.incentage.com](http://www.incentage.com), or follow us on Twitter or LinkedIn.