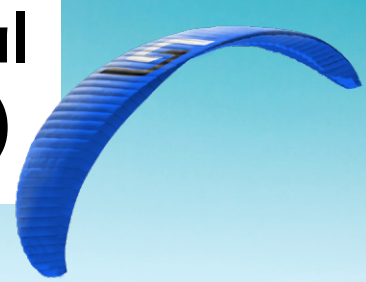


Test Automation for Financial Market Infrastructures (FMIs)



FMIs face the challenges of the brave new digital world

As digital innovations rapidly transform the financial landscape, operators of FMIs are facing unprecedented operational and technical challenges. These are caused, among other things, by global harmonization based on ISO 20022 and dealing with new trends such as CBDC (Central Bank Digital Currency) and DLT (Distributed Ledger Technology).

We don't solve all challenges, but we do solve one better than anyone else: Testing for FMIs

Unifits has made it its mission to let software handle complex, tedious, and frequently recurring testing tasks to ensure interoperability and operational resilience within FMIs.

Benefits of automated testing for FMIs

- ✔ Significant **reduction of effort** and duration
- ✔ **Relief of key personnel**
- ✔ **Transparency about the progress** of industry testing
- ✔ **Reduction of operational risks**
- ✔ **Greatly simplified technical onboarding**

Three Unifits solutions that build on each other

BOP - VIP - TEST ENGINE

CHALLENGES FOR FMIs

- Legacy systems to be migrated or replaced.
- Higher level of automation and cost efficiency.
- Maintaining or increasing the operational resilience.
- High degree of parallelism of complex projects.

CAUSE

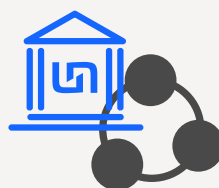
- Global harmonization based on ISO 20022.
- Increasing international competition, shortage of key personnel.
- Growing risks and IT dependencies as well as a variety of new technologies.
- Migration of existing and implementation of new infrastructures, projects around CBDC and DLT.

Our experience from numerous projects show that, depending on the progress of the project, there are different requirements for how testing can best be supported within a financial market infrastructure. To meet these requirements, Unifits has developed three complementary solutions that build on each other.



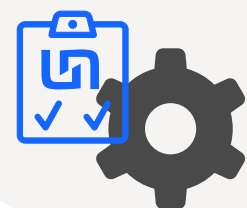
BANK ONBOARDING PLATFORM (BOP)

Easily accessible and user-friendly portal for unattended Participant testing with a focus on **MESSAGE FORMATS**.



VIRTUAL PARTICIPANT (VIP)

Automated and autonomous integration testing for Participants with a focus on **INTER-OPERABILITY AND MESSAGE FLOWS**.



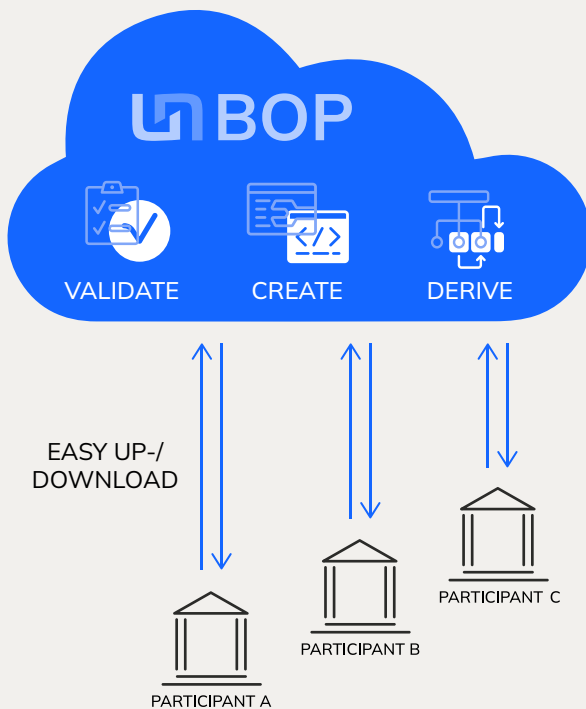
TEST ENGINE

Automated and independent testing for the clearing and settlement system itself.



SOLUTIONS FOR FINANCIAL MARKET INFRASTRUCTURES

Bank Onboarding Platform (BOP) Message testing in the cloud – turning complexity into simplicity

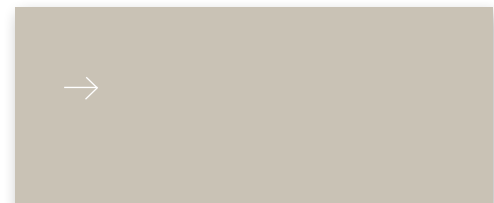
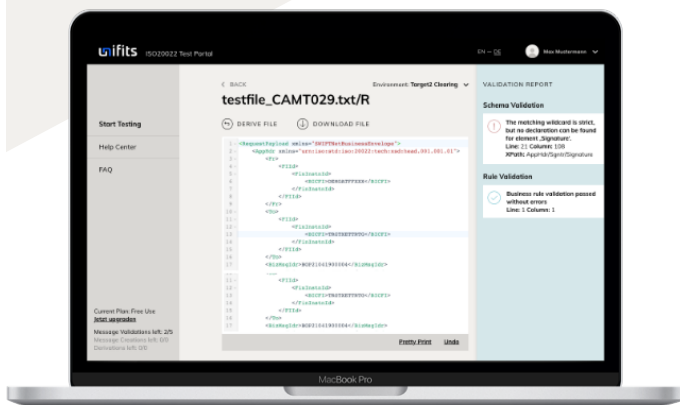


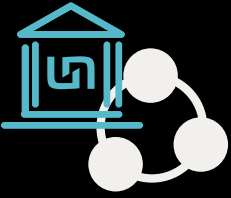
The Unifits Bank Onboarding Platform (BOP) significantly simplifies the testing of financial transactions and covers the validation and creation of messages according to the specific Scheme Guidelines.

The solution is cloud-based, available 24/7 and can be deployed within a few days.

BOP Key-Benefits

- ✓ **Easy to use**, no training required
- ✓ **Smooth access**, self-registration possible
- ✓ **Simple to operate**, cloud-native architecture
- ✓ Great added value with **minimum effort**
- ✓ **All relevant use cases covered** in one solution
- ✓ **Quickly up and running**
- ✓ **Proven by thousands of users**

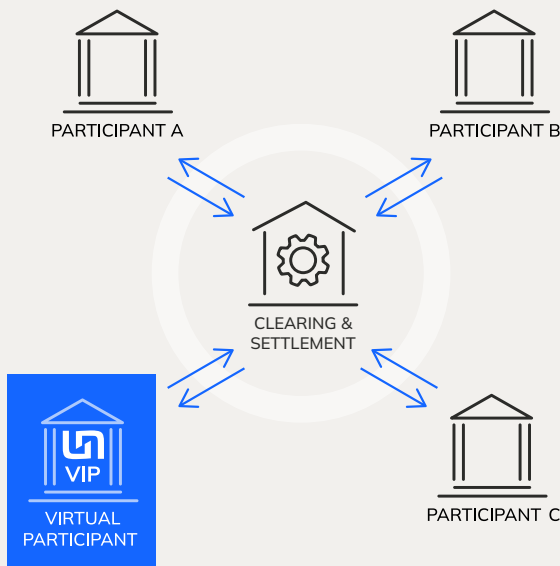




SOLUTIONS FOR FINANCIAL MARKET INFRASTRUCTURES

Virtual Participant (VIP)

Add the 24/7 available test counterpart to your ecosystem

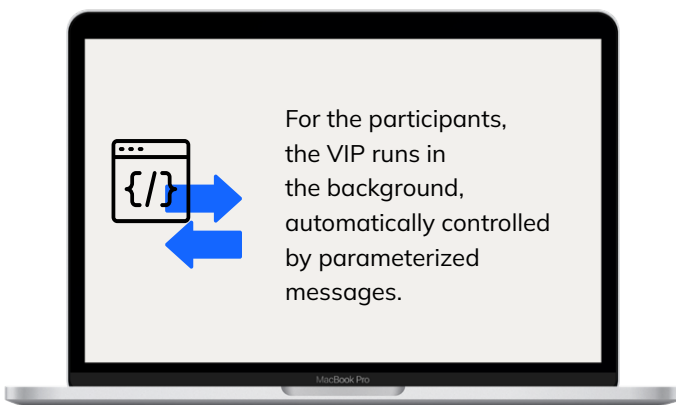


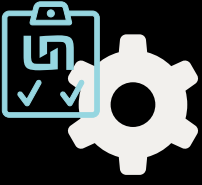
The Unifits VIP is available around the clock for any real participant of a given market infrastructure and acts as its test partner. Based on parameterized messages, the VIP can create and send any message required by a testing participant without manual intervention.

The VIP greatly simplifies and accelerates the integration testing phase and ensures complete coverage of all message flows.

VIP Key-Benefits

- ✓ Participants can **independently test all message flows**
- ✓ **No need for manual intervention**
- ✓ **No alignment with any third party required**
- ✓ **No additional effort**, as the existing test infrastructure is used
- ✓ **Easy to use**, no training required
- ✓ **Full transparency** about the industry testing progress
- ✓ **Availability 24/7**



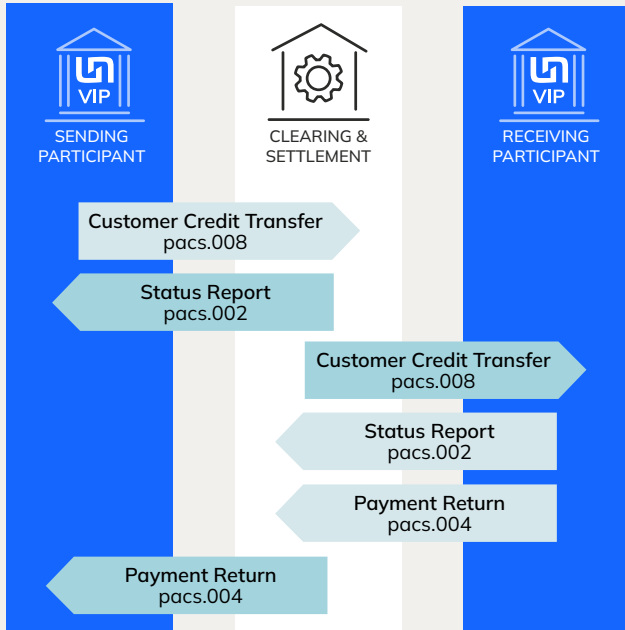


SOLUTIONS FOR FINANCIAL MARKET INFRASTRUCTURES

Unifits Test Engine

Automated and repeatable tests for clearing and settlement systems

AUTOMATED TESTING:
shown with the example of a payment return process



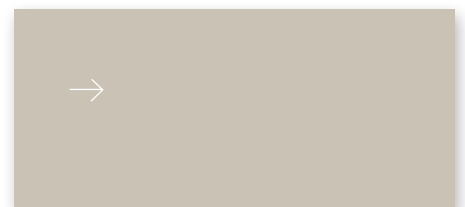
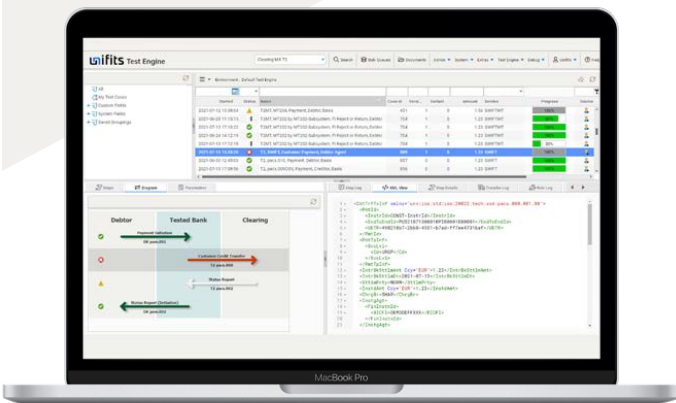
Messages are automatically **created** by Unifits Test Engine

Messages are automatically **verified** by Unifits Test Engine

The Unifits Test Engine is used to test the central clearing and settlement system of a financial market infrastructure. Sending and receiving participants are simulated and thus all message flows can be run automatically and independently of real test partners.

Test Engine **Key-Benefits**

- ✓ All transaction flows of a central clearing and settlement system can be **tested independently**
- ✓ **Automated** and scheduled **execution**
- ✓ Tests can be **repeated effortlessly** as often as required
- ✓ Includes comprehensive and **detailed reporting**
- ✓ **No manual updating** of transaction data **required** despite reuse (e.g. timestamps, references, etc.)
- ✓ **Easy to use** with only a view hours of training

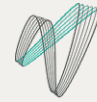


TRUSTED BY THE INDUSTRY

We are proud and grateful to work with many renowned international players in the financial industry and are happy to let them speak for themselves.



Rob Magee
Program Director
ISO 20022 Industry Migration



Australian
Payments Network
Connect Inspire Thrive

We needed a cost-effective and feature-rich way for all our participants to consistently test to the test plans and cases provided by the Australian ISO 20022 Industry Migration Program. The Unifits solution meets these requirements very well and we are impressed with the knowledge and professionalism of the Unifits team.



Jane Larimer
Nacha President and CEO



Nacha
Preferred Partner

We are pleased to welcome Unifits as a Nacha' Preferred Partner for ISO 20022 Payment Testing Automation. The suite of unique and comprehensive automated testing solutions offered by Unifits allow enterprises and financial institutions to better manage payment testing related to ISO 20022 messages and processes.

TRUSTED BY THE INDUSTRY | CUSTOMER EXAMPLES



START NOW

Let's get started today to ensure the quality and reliability of your market infrastructure with ease.

Benefit from a unique range of solutions that have been proven many times in practice.



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