

UBS PaymentStandards test platform

Are you looking for a solution for automatically testing ISO 20022 messages?

Background

Swiss payments will be standardized and harmonized in four different areas: transfers, direct debits, notifications / reporting and payment slips.

Software providers who offer payment functions, and bank clients who program their own payments interface, must align parts of their software with the new ISO 20022 payments standard in accordance with "Swiss Payment Standards".

Validation and simulation

To assist during this changeover, the [UBS PaymentStandards Test Platform](#) simulates the behavior of the client-bank interface in detail and provides crucial migration support.

It checks the conformity of generated client-to-bank messages (validation) and creates bank-to-client messages (simulation) according to the Swiss Business Rules and Swiss and UBS Implementation Guidelines.

The UBS test platform supports two test options:

- Manual testing by message upload and download
- Automated testing via EBICS

Interaction between the test platform and EBICS for automated testing

Automated testing enables software providers to perform highly automated integration and regression tests. For this, the EBICS communication protocol is used for transmission purposes. This has the following advantages:

- One-off and secure setup with EBICS
- Validation and simulation of ISO 20022 messages via the EBICS interface
- Support of EBICS order types according to the UBS offer

Features at a glance

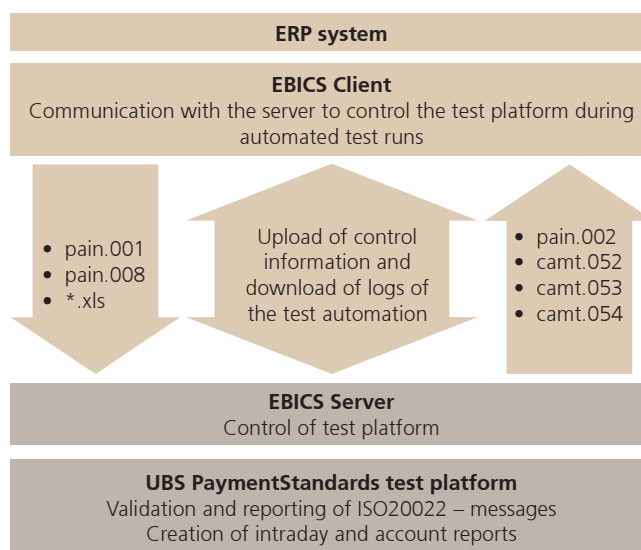
Automated testing via EBICS and the UBS PaymentStandards test platform involves the following functions:

- Setting up the test environment
- Payment upload pain.001 and pain.008
- Download intraday statements camt.052
- Download end-of-day report cam.053
- Upload Excel file to simulate incoming payments

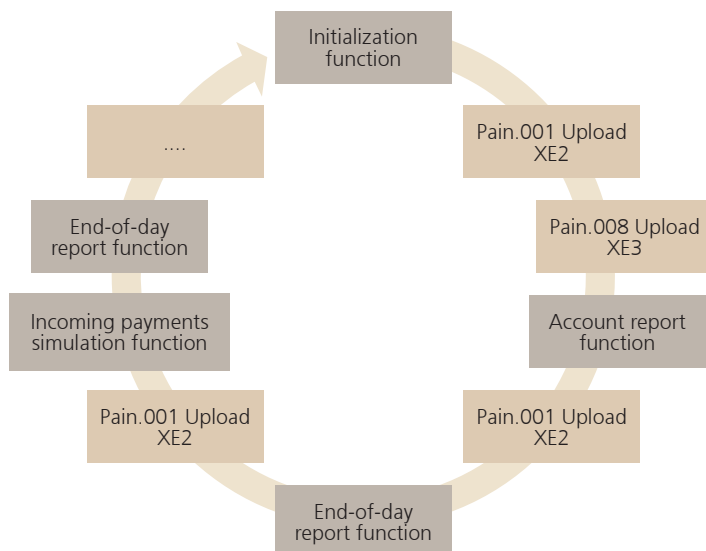
Special features of EBICS initialization / usage

- EBICS interface exclusively for secure and automated communication in the course of the tests
- NO replacement for the EBICS initialization of the productive system (such as connectivity test, account permissions, etc.)
- Registration process:
 - Unlike the productive EBICS environment, activation takes place without transmission and checking of the hash values
- No account or plausibility check of the order types, since there is no bank interface
- Distributed Signature (DS) not supported

EBICS connection overview for automated testing



A possible test cycle in automated testing



In order to optimize automated testing, additional **XML control functions** were defined, which serve to:

- Delete the data of the previous test runs;
- Set the booking date to the desired day;
- Set the account definitions needed for the booking simulation;
- Generate an account report and make it available for EBICS download;
- Simulate the booking process and provide the corresponding account statements for the EBICS download based on the data you uploaded.

The UBS PaymentStandard test platform via EBICS supports the following order types according to Swiss Payment Standards:

Uploading pain.001 and pain.008 messages

Order type	Message type	Definition / description
XE2	pain.001.001.03.ch.02	Mixed submission, all payment types
YE5	pain.001.001.03.ch.02	SEPA transfer

Order type	Message type	Definition / description
XL3	pain.008.001.02.ch.03	Direct Debit for the Swiss direct debit procedure LSV+
XL4	pain.008.001.02.ch.03	Direct Debit for the Swiss direct debit procedure BDD
XE3	pain.008.001.02.chsdd.02	SEPA Direct Debit CORE (basic direct debit)
XE4	pain.008.001.02.chsdd.02	SEPA Direct Debit B2B (business-to-business direct debit)

Uploading an Excel file to simulate incoming payments

Order type	Message type	Definition / description
XT2	MS Excel	Data for simulation of incoming payments

Downloading Status Messages pain.002

Order type	Message type	Definition / description
Z01	pain.002.001.03.ch.02	Mixed Status Report (payment, debit CHTA / SDD)
Z02	pain.002.001.03.ch.02	Status transfers (response to CH pain.001)
Z03	pain.002.001.03.ch.02	Status CH direct debits (response to CH pain.008)
Z04	pain.002.001.03.ch.02	Status SEPA direct debit instructions (response to CH pain.008 SDD)

Downloading Reporting Messages camt.052, camt.053, camt.054

Order type	Message type	Definition / description
Z52	camt.052.001.04	Account / balance report, intraday account activities
Z53	camt.053.001.04	Account statement, End of Day Report
ZS3	camt.054.001.04	C53F: Batch booking details for account report (FI collects)
ZS4	camt.054.001.04	C53C: Batch booking details for account report (customer collects)
ZS5	camt.054.001.04	C52F: Batch booking details for balance report (FI collects)
ZS7	camt.054.001.04	C52C: Batch booking details for balance report (customer collects)
Z54	camt.054.001.04	C53F: Batch booking details for account report (FI collects)

Account report creation / statement simulation – (camt.052, camt.053, camt.054)

Order type	Message type	Definition / description
XT1	unifitsSimControlV1	XML control file / here: Generating an account report

Downloading Validation Result (XML with comments)

Order type	Message type	Definition / description
ZT1	pain.001.001.03.ch.02 pain.008.001.02.ch.03	Download of previously uploaded messages updated with comments of the test platform (e.g., information, recommendations and errors)

Downloading the processing log

Order type	Message type	Definition / description
ZT2	Log im CSV Format	Processing log

Scope of the testing process

Automated testing covers the validation and simulation of the ISO 20022 messages offered and planned by UBS. In addition, end-of-day processing can be simulated and account reports (intraday, end-of-day, etc.) can be downloaded.

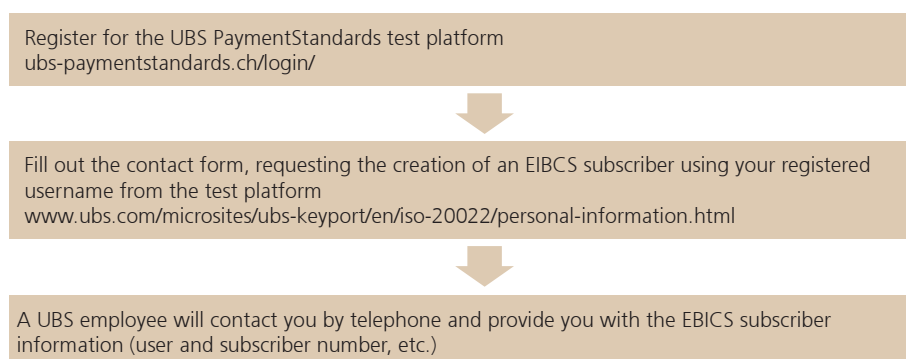
After completing the tests on the UBS PaymentStandard test platform, we recommend also performing so-called penny tests in the productive environment.

Log in to the PaymentStandard test platform via EBICS

ubs-paymentstandards.ch

In order to be able to use the functions of the test platform via the EBICS interface, a user must first register with the UBS PaymentStandards Test Platform. The user account created during this registration process will be activated for EBICS transmission by UBS in a second step.

Registration process:



UBS Switzerland AG
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8098 Zurich
ubs.com/iso

