

ISO 20022 Test Platform of Zürcher Kantonalbank

User manual

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Notes on the manual

This user manual describes how to use the ZKB ISO 20022 Test Platform.

Target group

This user manual is intended for corporate employees or software partners who use the ZKB ISO 20022 Test Platform to check payment files.

Structure

The manual is divided into the following chapters:

- Chapter 1 describes the functionality of the ZKB ISO 20022 Test Platform.
- Chapter 2 describes the files that can be uploaded and created and how they are processed.
- Chapter 3 describes the use cases you can perform with the application.

The subsequent chapters contain bibliographic references, abbreviation and term glossaries, a list of figures and an index.

Formatting conventions

For clarity, this manual uses the following conventions:

- Directory names, file names and entries in files, script names and field entries are designated in a deviating font, for example: the file `ppi.ini`.
- Names of functions, menu items, display masks, fields etc. are designated in italics, for example: *Select Program settings*.
- Entries made by the user are designated in deviating font and bolded, for example: Enter the IP address **195.222.224.5**.
- Key names are written in capital letters, for example: Press **ENTER**.
- Emphasised text is underlined, for example: If you do not use the preconfigured port, ...
- Placeholders for variables are put in angle brackets, for example: In the configuration file, `<DB>` is a placeholder for the name of the database.

1 System description

Zürcher Kantonalbank (hereinafter referred to as ZKB) is supporting the ISO 20022 standard (pain.001, pain.002, camt.052, camt.053, camt.054). Before the ISO 20022 standard goes into production, you as a business or software partner can ensure that your payment transactions work with the used formats with the help of the ZKB ISO 20022 Test Platform.

To do that, you can upload payment or simulation files to the ZKB ISO 20022 Test Platform. The ZKB ISO 20022 Test Platform checks the submitted data according to the guidelines by ZKB and provides you with the corresponding response messages which you can then test in your financial systems. To use the ZKB ISO 20022 Test Platform, you do not have to be a customer of ZKB.

The user interface of the ZKB ISO 20022 Test Platform can be viewed in two languages (German and English). Except for scheduled maintenance windows, the ZKB ISO 20022 Test Platform is continuously available (24/7).

1.1 Functions and tasks

The ZKB ISO 20022 Test Platform consists of a web application, an EBICS server and a backend component.

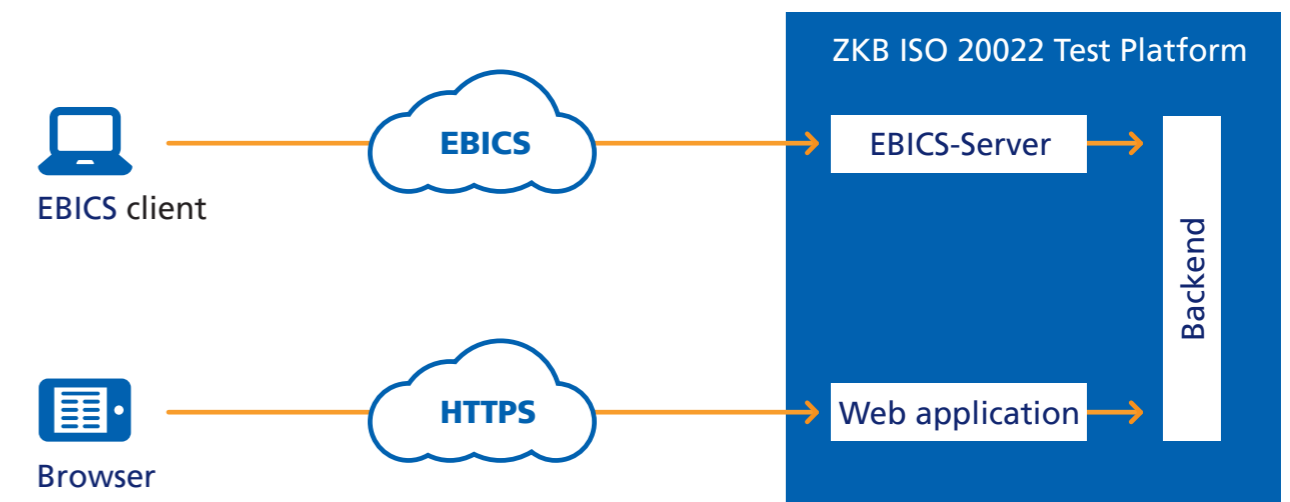


Figure 1: Architecture of the ZKB ISO 20022 Test Platform

You can upload your payment files as follows:

- Via the web application of the ZKB ISO 20022 Test Platform
- Via an EBICS client

The backend of the ZKB ISO 20022 Test Platform checks the payment files and generates the response messages. Subsequently you can download the response messages via the web application. Response messages for payment files that have been uploaded via the EBICS client can additionally be downloaded via the EBICS client.

2 Processing

1.2 System requirements

You can use the ZKB ISO 20022 Test Platform with the following browsers:

- Google Chrome (current version)
- Mozilla Firefox (current version)
- Internet Explorer from version 10 onwards
- Safari from version 9 onwards

2.1 Payment files and response messages

You can upload ISO 20022 payment files via the ZKB ISO 20022 Test Platform to test the format of the files and to validate the content against the technical specifications.

The following payment files can be tested:

- Credit transfers (pain.001 files)
Information on the schema can be found in the section Format of the pain.001 file, page 8
- Incoming payments (CSV files)
Information on the CSV file can be found in the section Format of the CSV file for the simulation of incoming payments, page 8.

For the uploaded payment file, you can download the following response messages in a ZIP archive: Which response messages in which version the ZIP archive contains depends on your settings in the menu Settings → Default values.

- Report with the results of the tests performed upon receipt (Protocol.txt)
The report contains all error, warning and information messages that might appear during the tests, and indicates the position of the errors.
- pain.002 messages (only for pain.001 files)
Just as in production, the ZKB ISO 20022 Test Platform can generate different pain.002 files and provide them for you. The version of the pain.002 file depends on which version of the Swiss Payment Standards is to be used for validation (see section Version of the pain.002 file, page 8).

There are two types of pain.002 messages for validation:

- Response message for validation
The pain.002 message is generated after the validation is finished and contains the found errors, warnings and notes for the submitted file.
- Technical pain.002 (only when the channel Datalink EBICS is selected)
The technical pain.002 message contains only the most important IDs, the date and the technical status of the submitted file – it does not contain the errors that were found.
- camt.052 messages
One camt.052 message per account and booking date is generated.
- camt.053 messages
One camt.053 message per account and booking date is generated.
- camt.054 messages
For pain.001 files, one camt.054 message is generated per order. For LSV+/QRR/SCOR/NON, up to three camt.054 messages containing different groupings of payments are generated depending on your settings.

2.2 Credit transfers (outgoing payments)

2.2.1 Format of the pain.001 file

You can submit pain.001 files according to the following schemas:

- CH schema pain.001.001.03.ch.02 or pain.001.001.09.ch.03
 - Structure according to Swiss Payment Standards 2021 or 2022 (Swiss Implementation Guidelines for Customer-to-Bank Messages Credit Transfer (Payment Transactions) [1])
- ISO schema pain.001.001.03 or pain.001.001.09
- DK schema pain.001.003.03
 - Only payment type 5 (SPS 2021) or S (SPS 2022)

The files are always validated against the CH schema, independently of the submitted schema of the pain.001 file. You can configure in the settings whether files shall be validated against the Swiss Payment Standards 2021 (SPS 2021) or against the Swiss Payment Standards 2022 (SPS 2022) (see section 3.7.2 Configuring the response, page 19).

2.2.2 Version of the pain.002 file

Depending on whether validation is to be performed against SPS 2021 or against SPS 2022 (see section 3.7.2 Configuring the response, page 15), the pain.002 message is generated according to the CH schema pain.002.001.03.ch.02 or according to the CH schema pain.002.001.10 (Swiss Implementation Guidelines for Customer-to-Bank Messages for Status Report [3]).

2.3 Incoming payments (ESR/LSV+/QRR/SCOR/NON)

2.3.1 Format of the CSV file for the simulation of incoming payments

The ZKB ISO 20022 Test Platform can simulate credits based on ESR, LSV+ and QRR/SCOR/NON. For this, you must submit a CSV file that determines which payments are to be simulated. The CSV file must at least specify the product, the IBAN, the amount and the reference number (except for NON) of a payment. Additionally, you can provide address data and add the type of fees. For QRR/SCOR/NON, there are additional optional fields.

Note:

The currency of a payment is determined based on the account currency of the IBAN. The ESR user number is determined based on the IBAN.

The CSV file must consist of at least two lines. The following provisions apply:

- In the first line, you enter the column names.
- From the second line on, you enter the respective values.
- The fields must be separated by semicolons.
- Each line must end with a line separator according to Unix or Windows conventions.
- There may be no break within a line.
- You can define up to 100,000 payments.

Column name	Must (M)/ Can (C)	Description/values
Product	M	possible values: – LSV – QRR – SCOR – NON
Charges	C	possible values: – for QRR/SCOR/NON: empty, CDC or PPC – for LSV: empty
IBAN	M	IBAN of the credited account, QR-IBAN also possible for QRR
Amount	M	Maximum amount of 999.999.999,99
Reference	M	possible values: – for LSV: LSV reference number acc. to ESR format – for QRR: QR reference number acc. to ESR format – for SCOR: creditor reference number acc. to ISO 11649 – for NON: must be empty
Name	C	up to 70 characters If the field is empty, a standard value is used.
Street	C	up to 35 characters If the field is empty, a standard value is used.
Number	C	up to 35 characters If the field is empty, a standard value is used.
Postcode	C	up to 35 characters If the field is empty, a standard value is used.
City	C	up to 35 characters If the field is empty, a standard value is used.
Country	C	Country code according to ISO 3166-1 If the field is empty, CH is used.
Additional RemittanceInformation	K	Only for QRR, SCOR, NON, up to 140 characters
UltimateDebtorName	K	Only for QRR, SCOR, NON, up to 70 characters
UltimateDebtorStreet	K	Only for QRR, SCOR, NON, up to 35 characters
UltimateDebtorNumber	K	Only for QRR, SCOR, NON, up to 35 characters
UltimateDebtorPostcode	K	Only for QRR, SCOR, NON, up to 35 characters
UltimateDebtorTownName	K	Only for QRR, SCOR, NON, up to 35 characters
UltimateDebtorCountry	K	Only for QRR, SCOR, NON, country code according to ISO 3166-1

Example LSV+:

```
Product;Charges;IBAN;Amount;Reference;Name;Street;Number;Postcode;City;Country
LSV;;CH5400700110007900483;1000;44444444444444444444444444444444; Anina Muster; Hardstrasse;17;
8005;Zürich;CH
```

Example QRR/SCOR/NON:

Product;Charges;IBAN;Amount;Reference;Name;Street;Number;Postcode;City;Country; AdditionalRemittance-Information;UltimateDebtorName;UltimateDebtorStreet;UltimateDebtorNumber; UltimateDebtorPostcode; UltimateDebtorTownName;UltimateDebtorCountry
QRR;;CH5400700110007900483;1000;11111111111111111111111111111111111110; Anina Muster; Hardstrasse;17; 8005; Zürich;CH;Eilig;Max Muster;Parkstrasse;5;24118;Kiel;DE

2.3.2 Fees for the simulation of incoming payments

If you submit a CSV file to simulate incoming payments based on QRR/SCOR/NON, you can also simulate fees. The fees depend on the value you enter in the column Charges of the CSV file. The fees are determined in CHF and, if necessary, converted. The fees are always displayed in CHF.

Note:

For LSV+, no fees are simulated.

Value in column Charges	Description	Fees
Empty	–	No fees
CDC	Fees for regular processing	Graded according to the amount of the transaction in CHF (starting with 0,90 CHF)
PPC	Processing fee as with CDC and additional fee for QRR/SCOR/NON	Additionally 0,04 CHF

2.4 Simulation of entry details in camt messages

In addition to pain.001 files and incoming payments from LSV+ and QRR/SCOR/NON, you can test other business transactions and receive notifications by means of predefined examples.

If you select additional business transactions for simulation, they are included with the other entries in the camt.052 and camt.053 message if these messages are generated.

For information on how to activate the simulation of additional business transactions on the test platform and how to configure response messages, see section 3.7.2 **Configuring the response**, page 19.

2.5 Error simulation and reject logic

You can use the web application of the ZKB ISO 20022 Test Platform to activate an error simulation (see section **Activating the error simulation**, page 20). If the error simulation is activated, an error is simulated for every third transaction at B level.

If a transaction contains an error anyway, no error is simulated. If a payment file contains more than 1000 errors, it will be rejected altogether.

Depending on the payment type (except payment type 8) and on the payment recipient, every third B level transaction is rejected with the corresponding reason code and an error message (see pain.002 file).

The following table shows which error is simulated for which payment type.

Payment type	Type	Reason Code	Error message
Payment type 3 (SPS 2021) or D (SPS 2022) Bank/post payment (without receipt) with IBAN and bank clearing number/BIC	Reject	AC01	Invalid IBAN
Payment type 5 (SPS 2021) or S (SPS 2022) Foreign payment SEPA (GI)	Reject	CH21	Element <IBAN> must be used for payment type 5 (SEPA credit transfer).
Payment type 6 (SPS 2021) or X V.2 (SPS 2022) Foreign payment all currencies (GI)	Reject	RC05	Invalid BIC (SWIFT code)

Table 1: Error simulation depending on payment type

2.6 Currencies and exchange rates

The ZKB ISO 20022 Test Platform supports a variety of currencies in the payments. For conversions to the account currencies CHF, EUR, GBP and USD, fixed exchange rates are stored which are not adjusted dynamically.

The following table lists the exchange rates that are permanently stored:

Code	Designation	Rate to the CHF
AED	UAE Dirham	0.25722
AUD	Australian Dollar	0.74882
CAD	Canadian Dollar	0.76404
CHF	Swiss Francs	---
CZK	Czech Koruna	0.03977
CNY	Chinese Renminbi	0.14729
DKK	Danish Krone	0.14456
EUR	Euro	1.075
GBP	British Pound	1.27308
HKD	Hong Kong Dollar	0.13141
HUF	Hungarian Forint	0.00344
ILS	Israeli Shekel	0.26608
INR	Indian Rupee	0.01487
JPY	Japanese Yen	0.00878
KWD	Kuwaiti Dinar	3.13594
MXN	Mexican Peso	0.04973
NOK	Norwegian Krone	0.11911
NZD	New Zealand Dollar	0.71753
PLN	Polish Zloty	0.24235
QAR	Katar Ryal	0.22679
RON	Romanian Leu	0.23802
RUB	Russian Rubel	0.01654
SAR	Saudi Riyal	0.25247
SEK	Swedish Krone	0.11072
SGD	Singapore Dollar	0.71018
THB	Thai Baht	0.02849
TRY	Turkish Lira	0.29119
USD	US Dollar	1.01963
ZAR	South African Rand	0.07356

2.7 Differences from production

The processing behaviour of the test platform differs in some areas from productive operation:

- No check for duplicates of submitted payment files (multiple submission of the same payment file possible)
- In productive operation, a payment file with the same payment ID is rejected.
- No special processing for express orders
- No check for validity of the BIC
- No test report

3 Use cases

3.1 Get help

Explanation

You have access to the following help sources:

- User manual
- Payments manual (in German)
- Release notes
- FAQs
- Field help as tooltip

Not all fields have a field help. Field helps are displayed with the symbol .

How to use the manuals, release notes and FAQs

1. Click on the menu Help.
2. Click on the link to the manual you wish to read, the release notes, or on the FAQ entry you wish to expand.

3.2 Registration

Explanation

To be able to use the ZKB ISO 20022 Test Platform, you first have to register.




Note:

In case you want to test with several users, you may register several times using different user names and the same e-mail address.


Steps to perform

Registration

User data

User name 	E-mail 
<input type="text" value="User name"/>	<input type="text" value="E-mail"/>
Password 	Repeat new password
<input type="text" value="Password"/>	<input type="text" value="Repeat new password"/>
Salutation <input type="text" value="Mr"/>	Title (optional) <input type="text" value="Please select"/>
First name <input type="text" value="First name"/>	Last name <input type="text" value="Last name"/>

Company data

I am a software manufacturer 






Company 	Company website (optional) 		
<input type="text" value="Company"/>	<input type="text" value="Company website (optional)"/>		
Department (optional) <input type="text" value="Department (optional)"/>	Software used (optional) 		
<input type="text" value="Department (optional)"/>	<input type="text" value="Software used (optional)"/>		
Street <input type="text" value="Street"/>	No. <input type="text" value="No."/>	Postcode <input type="text" value="Postcode"/>	Town <input type="text" value="Town"/>
Amendment to address (optional) <input type="text" value="Amendment to address (optional)"/>		Country <input type="text" value="Switzerland"/>	
Telephone (optional) 		IBAN (optional) 	
<input type="text" value="Telephone (optional)"/>		<input type="text" value="IBAN (optional)"/>	

Figure 2: Registration form

1. Fill out at least all mandatory fields.
Mandatory fields are fields without the addition (optional). Pay attention to the instructions in the field help Password and User name.
2. Optional: Enter the IBAN from the payment files you would like to test.
The IBAN must be formally correct and have a correct check digit.
The ZKB ISO 20022 Test Platform uses this IBAN to automatically create an ordering party account which is used to check the payment files (see section Creating ordering party accounts, page 19).
3. Click on Register now.
→ You are now registered as a user of the ZKB ISO 20022 Test Platform and receive a confirmation e-mail by means of which you can activate your account.
4. Open the confirmation e-mail and read the subscriber conditions. Follow the instructions in the e-mail.
→ Your account is activated. The login mask of the ZKB ISO 20022 Test Platform is displayed in the browser and you may log in.

3.3 Login and Logout

Explanation

To be able to work with the ZKB ISO 20022 Test Platform, you have to log in as a user with your user name and password.

Prerequisite

Your access to the ZKB ISO 20022 Test Platform has been activated.

Steps to perform to log in

1. Enter your user name and your password.
In case you have forgotten your user name or password, follow the instructions in section Requesting a new password, page 16.
2. Click on the Log in button.
If an account has been set up already, the menu Validation/simulation will be displayed. If no account has been set up yet, the menu Settings → Accounts will be displayed (see section Creating ordering party accounts, page 19).

Steps to perform to log out

1. Click on Logout in the top right-hand corner.
The button is visible in every menu.

3.4 Requesting a new password

Explanation

In case you forgot your password, you can request a new one.

Steps to perform

1. In the login mask, in the area Forgot password?, click on the link Request new password on the right-hand side.
2. Enter your user name and your registered e-mail address. The information must match the information you have entered during the registration.
3. Click on Send e-mail.
→ The confirmation of the successful password request is displayed. An e-mail with a new password will be sent to you.

3. Open the e-mail from the ZKB ISO 20022 Test Platform with the subject Password reset and follow the instructions.
→ Your password is reset to the password sent to you in the e-mail.
4. In the login mask, enter your user name and the new password from the e-mail and click on Log in.
5. Change the password to a personal password.
 - a. Select the menu Settings → Password.
 - b. In the mask Password, enter the password sent to you in the e-mail in the field Old password.
In the other fields, enter your new personal password. Pay attention to the instructions in the field help.
 - c. Click on Save.

3.5 Setting up EBICS

3.5.1 Initialising your EBICS access

Explanation

In order to use the EBICS channel of the ZKB ISO 20022 Test Platform, you must first initialise your EBICS access.

Prerequisite

You have registered with the ZKB ISO 20022 Test Platform and activated your access. An EBICS user is automatically created for you.

You have logged in to the ZKB ISO 20022 Test Platform.

Steps to perform

1. Configure your EBICS client with the EBICS data of the ZKB ISO 20022 Test Platform.
The EBICS data can be found in the web application of the ZKB ISO 20022 Test Platform in the menu Settings → EBICS data.
2. Use your EBICS client to send the INI and HIA orders to the EBICS server of the ZKB ISO 20022 Test Platform.
3. In the web application of the ZKB ISO 20022 Test Platform in the menu Settings → EBICS data, click on Activate EBICS user.
4. Use your EBICS client to download the bank keys from the EBICS server of the ZKB ISO 20022 Test Platform and accept the keys.
→ Your EBICS access has been initialised. You can now configure your EBICS client in the next step.

3.5.2 Configuring your EBICS client

Explanation

You must configure the order types and/or BTF parameters (as of EBICS V3.0) you wish to use in your EBICS client. For tests according to SPS 2022, you can only use BTF parameters.

You can use the following order types and/or BTF parameters to upload files:

Order type	Description	Service Name	Service Scope	Service Option	Message Name	Message Version	Container
XE2	pain.001 (version 03) – CH payment submission	MCT	CH		pain.001	03	
	pain.001 (version 09) – CH payment submission	MCT	CH		pain.001	09	
XCT	pain.001 (version 03) – CGI payment submission CH schema	MCT	CGI	XCH	pain.001	03	
	pain.001 (version 09) – CGI payment submission CH schema	MCT	CGI	XCH	pain.001	09	
CCT	pain.001 (version 03) – SEPA payment submission	SCT	GLB		pain.001	03	
	pain.001 (version 09) – SEPA payment submission	SCT	GLB		pain.001	09	
XTC	CSV file – input file for simulation of camt messages	OTH	BIL	CH004TPS	csv		

Table 3: Order types/BTF parameters (upload)

Note:

Your settings in the mask Default values determine how the files will be processed (see section 3.7.2 Configuring the response, page 19).

You can use the following order types and/or BTF parameters to download files:

Order type	Description	Service Name	Service Scope	Service Option	Message Name	Message Version	Container
Z01	pain.002 (version 03) – CH status report	PSR	CH		pain.002	03	ZIP
	pain.002 (version 10) – CH status report	PSR	CH		pain.002	10	ZIP
Z52	camt.052 ZIP (version 04) – CH intraday account statement	STM	CH		camt.052	04	ZIP
	camt.052 ZIP (version 08) – CH intraday account statement	STM	CH		camt.052	08	ZIP
Z53	camt.053 ZIP (version 04) – CH account statement	EOP	CH		camt.053	04	ZIP
	camt.053 ZIP (version 08) – CH account statement	EOP	CH		camt.053	08	ZIP
Z54	camt.054 ZIP (version 04) – CH additional info on batch bookings	REP	CH		camt.054	04	ZIP

	camt.054 ZIP (version 08) – CH additional info on batch bookings	REP	CH		camt.054	08	ZIP
Z52	camt.054 ZIP (version 04) – CH booking information	REP	CH	XDCI	camt.054	04	ZIP
	camt.054 ZIP (version 08) – CH booking information	REP	CH	XDCI	camt.054	08	ZIP
Z53	camt.054 ZIP (version 04) – CH additional info on batch bookings - DDD	REP	CH	XDDD	camt.054	04	ZIP
	camt.054 ZIP (version 08) – CH additional info on batch bookings - DDD	REP	CH	XDDD	camt.054	08	ZIP
Z54	camt.054 ZIP (version 04) – CH additional info on batch bookings, only debit	REP	CH	XABK	camt.054	04	ZIP
	camt.054 ZIP (version 08) – CH additional info on batch bookings, only debit	REP	CH	XABK	camt.054	08	ZIP
ZQR	camt.054 ZIP (version 04) – CH additional info on batch bookings - QRR	REP	CH	XQRR	camt.054	04	ZIP
	camt.054 ZIP (version 08) – CH additional info on batch bookings - QRR	REP	CH	XQRR	camt.054	08	ZIP
ZRF	camt.054 ZIP (version 04) – CH additional info on batch bookings - SCOR	REP	CH	XSCR	camt.054	04	ZIP
	camt.054 ZIP (version 08) – CH additional info on batch bookings - SCOR	REP	CH	XSCR	camt.054	08	ZIP
XTD	ZIP archive with all result files	OTH	BIL	CH004TPE	msc		ZIP

Table 4: Order types/BTF parameters (download)

Note:

Your submitted files and your settings in the mask Default values determine whether data for an order type and/or BTF parameters is available for download (see section 3.7.2 Configuring the response, page 19).

Prerequisite

Your EBICS access is initialised and you have already created a bank access.

Steps to perform


1. Open your EBICS client.
2. Create the order types and/or BTF parameters according to your requirements.
3. Save your input.

3.6 Using best-practice files

Explanation

You can download the best-practice files via the web application of the ZKB ISO 20022 Test Platform. For each test case, the ZKB ISO 20022 Test Platform provides exemplary payment files in XML or CSV format and/or a ZIP archive with one or multiple camt messages. You can download the ZIP archive for viewing purposes. The payment files can be used to perform best-practice tests.

Steps to perform

1. In the upper area of the window, click on the link Best-practice files
A new tab displaying the best-practice files opens.
2. Depending on whether you want to use best-practice files according to SPS 2021 or according to SPS 2022, open the mask area Best-practice files - SPS 2021 or Best-practice files - SPS 2022.
2. In the column Download, click on the symbol 
3. Create a payment file in your financial systems using the example payment file as reference.

Note:

When creating your own payment file, please take special note that the unique test case ID is specified in the first payment of the first B level, in the element `<Cdttr><Nm></Nm></Cdttr>`. In order for the ZKB ISO 20022 Test Platform to be able to recognize your own payment file as best-practice file, make sure that the test case ID corresponds with the IDs defined in the example files.

5. Configure the ZKB ISO 20022 Test Platform according to your requirements and upload your payment file.

For help on how to use the ZKB ISO 20022 Test Platform, see section Checking payment files and response messages, page 18.

3.7 Checking payment files and response messages

The following describes how you can configure the ZKB ISO 20022 Test Platform in order to upload payment files and the respective response messages.

3.7.1 Creating ordering party accounts

Explanation

To enable the ZKB ISO 20022 Test Platform to technically check the submitted payment file and to simulate the bank processing, you have to create the ordering party accounts from the payment file by entering the IBAN. If the IBAN of the ordering party account of an order is unknown, the ZKB ISO 20022 Test Platform rejects the order completely. In pain.001 files, the IBANs of the ordering party accounts are specified in the elements DbtrAcct.

If you have entered an IBAN during registration, an account with this IBAN and the currency CHF has already been created. You can edit the account if your test case requires it.

Prerequisite

The IBANs of the ordering party accounts must be formally correct and have a correct check digit. They do not have to be real IBANs. The example IBAN number for tests with the best-practice files can be found in the mask Best-practice files.

Steps to perform

1. Select the menu Settings → Accounts.
2. Click on Add account.
3. Enter the IBAN of the ordering party account for which you want to submit orders.
It is not possible to create several accounts with the same IBAN.
4. Select an account currency.
5. Click on Save.
If you have created an account with a ZKB IBAN, a QR IBAN is automatically generated and displayed in the mask.

3.7.2 Configuring the response

Explanation

The ZKB ISO 20022 Test Platform allows you to upload pain.001 files and CSV files for LSV+ and QRR/SCOR/NON. For pain.001 files, you can configure in the settings whether the files shall be validated according to SPS 2021 or according to SPS 2022 (you can still change this setting in the web application when you are uploading a file)

As a response to the uploaded files, you are provided with camt messages. In case of pain.001 files, you will additionally receive pain.002 messages. The version of the pain.002 files depends on whether the payment files are to be checked according to SPS 2021 or SPS 2022. You can also define which camt messages you wish to receive. You can configure in the settings whether the camt messages shall be simulated according to SPS 2021 or according to SPS 2022 (Swiss Implementation Guidelines for Customer-Bank Messages (Reports) [2]). You can still change this setting in the web application when you are uploading a file. Furthermore, you specify which camt messages you wish to receive and whether they shall contain additional details. For QRR, you can influence how the incoming payments are grouped.

Depending on which channel you choose (eBanking or Datalink EBICS), the uploaded payment files are processed differently. The channel eBanking is preselected as default.

Note:

If you submit a pain.001 file via EBICS, a technical pain.002 message is generated in addition to the pain.002 validation message on execution.

Steps to perform

1. Select the menu Settings → Default values.
2. In the mask area Channel, select the access channel you wish to use for testing.
3. In the mask area Version pain.001/camt.05x, select the schema version against which the files shall be validated and which version of the camt files shall be simulated.
4. If, in addition to pain.001 file and incoming payments from LSV+ and QRR, you wish to test other business transactions and receive notifications, activate the checkbox next to the set of examples you wish to use in the mask area Simulation of entry details in camt messages.

- In the mask area Notifications (Reporting), select your desired statement and display types in the respective camt formats.
- If you have activated the checkbox Intraday account statement (camt.052) and/or End of day statement (camt.053): Select whether and which types of batch entries shall be displayed with transaction details.
- To group incoming payments from QR invoices based on the first six places of the QR reference number, activate the checkbox Grouping based on the first six places of the QS reference number in the mask area QR invoice.
- Click on Save.

3.7.3 Activating the error simulation

Explanation

The ZKB ISO 20022 Test Platform can simulate error scenarios (e.g. invalid beneficiary account number) and supply the corresponding response messages. Section Error simulation and reject logic, page 11, describes according to which logic the errors are simulated.

Steps to perform

- Select the menu Settings → Default values.
- In the mask area Simulation settings, activate the checkbox Generate a reject for every third transaction.
- Click on Save.

3.7.4 Uploading a payment file

Explanation

For the ZKB ISO 20022 Test Platform to be able to check your payment files, you have to upload these files to the server of the ZKB ISO 20022 Test Platform via the web application of the or via an EBICS client.

Note:

Save your payment file in a format containing line breaks. Otherwise the payment file consists of one line only and you will not be able to sensibly evaluate the line specification by which the test report identifies the position of an error.

Prerequisite for using the EBICS client

You have initialised your access (see section Setting up EBICS, page 17).

Upload payment file/simulation file

File type: Transfer (pain.001) | Validation against: pain.001.001.03.ch.02 - SPS 2021 | Simulation based on: camt.05x.001.04 - SPS 2021

Buttons: Select file, Select file, Upload file

Uploaded payment files

Display: 25 entries | Search: []

File	Type	Processing date	Upload	Download	Delete file
pain.001.001.09_Testfile_2_X_RmtInf.xml...	Transfer (pain.001)	11.04.2022 10:30:05	✓	⬇	🗑

1 to 1 of 1 entries

Buttons: Refresh data, Delete all files

Figure 3: Uploading payment file

Steps to perform via the web application

- Select the menu Validation/simulation.
- From the dropdown list File type, select whether you wish to upload a pain.001 file or a CSV file.
- Only for pain.001 files: if you wish to validate the file against a schema version that is different from the default setting, select the version from the dropdown list Validation against. The dropdown list is preset with the value from the mask Default values (see section 3.72. Configuring the response, page 19.)
- If you wish to simulate a version of the camt files that is different from the default setting, select the version from the dropdown list Simulation based on. The dropdown list is preset with the value from the mask Default values (see section 3.72. Configuring the response, page 19.)
- Click on Select file.
- Select the payment file.
- Click on Upload file.
 - The payment file is checked and processed. The response messages are generated.

Note:

If you use the web application, you can also upload your payment file as XML file or in a winzip or gzip ZIP archive. The ZIP archive may contain only one file.

Steps to perform (via EBICS client)

- Open your EBICS client.
- For a transfer (pain.001 file), select one of the following order types depending on the schema:
 - XE2 (CH schema)
 - XCT (ISO schema)
 - CCT (DK schema)

- For the simulation of incoming payments (CSV file), select the order type XTC or use the corresponding BTF parameters according to *Table 3: Order types/BTF parameters (upload)*.
- Submit your payment file.
- Enter the additional data on the execution date and time required by the EBICS client.

Note:

The files can be uploaded without signatures.


- Save your input.
 - The processing lasts from 10 to 30 seconds.

3.7.5 Downloading response messages

Explanation

To view the protocol with the check results and to check the outgoing messages, you have to download the response messages via the web application of the ZKB ISO 20022 Test Platform or via an EBICS client.

Steps to perform via the web application

- Select the menu Validation/simulation.
- Click on the symbol  next to the payment file in mask area Uploaded payment files.
- Open the ZIP archive.
 - You can now view all response messages.

Steps to perform (via EBICS client)

- Open your EBICS client.
- Select the order type Z01 or use the corresponding BTF parameters according to *Table 4: Order types/BTF parameters (download)* to download a pain.002 message. Select the order type XTD or use the corresponding BTF parameters to download a ZIP archive containing all result files.

Note:

The ZIP archive is also available for download via the GUI of the web application.

- Save your input.
 - For the order type XTD or the corresponding BTF parameters, the downloaded file is a ZIP archive, however, without the extension .zip.
- If you download a ZIP archive, open it either directly with a ZIP program or add the extension .zip to the file name and open it with a standard program.

3.7.6 Evaluating the test report

Explanation

In the test report, which you can download as a response message, you will be able to view all errors, information and warnings that occurred during the tests. The reported errors are particularly relevant, as ZKB will only accept payment files that do not contain any of those errors in production. Payment files for which only warnings and information were notified in the test report, will be accepted during production. Warnings indicate that ZKB will change the order in this respect before executing it. In the information messages, you will find recommendations as to how to increase the quality of your payment files.

The following describes how to remedy the errors in a payment file notified of by means of the test report.

Steps to perform

- Open the file Protocol.txt from the ZIP file with the response messages.

```
01/09/2016 12.03.57 Protocol
-----
File:      BPOS.xml
Type:      Credit transfer
Schema:    pain.001.001.03.ch.02
-----
Result:
  Invalid file format.
  Errors:    1
  Warnings:  0
  Notes:     0
-----
Error
-----
The structure of the XML element
/Document/CstmrCdtTrfInitn/FmtInf[2]/CdtTrfTxInf[1]/Amt/InstdAmt
is not valid
Error message:
  Invalid currency code 'ABC'
Error code:
  CURR (IncorrectCurrency)
File position:
  Line:    28
  Column: 200
```

Figure 4: Exemplary image of a test report

- In section Result, check whether any errors have been found in your payment file.
- Only if errors have been found:
 - Use the test report to remedy the errors in your payment file:
 - Read the first error message in section Errors.
 - On the basis of the error message and the position of the file, remedy the error in your payment file.

Note:

If the test report indicates line 1 as error position in the file, this means that the uploaded payment file was saved without line breaks.

- Repeat this procedure for all other error messages if applicable.
- Save the corrected payment file.
- Upload the payment file again.
- Open the test report and ensure no more errors have occurred.

3.7.7 Deleting payment files


Explanation

You can manually delete the uploaded payment files (individually or all files at once).
The ZKB ISO 20022 Test Platform automatically deletes all payment files when you log out.

Note:

In EBICS, the payment files are automatically deleted after one day.

Steps to perform: manual deletion


1. Select the menu Validation/simulation.
2. To delete a single payment file, click on the symbol  next to the respective payment file in mask area
Uploaded payment files.
3. To delete all payment files, click on Delete all files.
4. Confirm the deletion process with Delete.

3.7.8 Deleting ordering party accounts

Explanation

You can delete accounts that are no longer needed.

Steps to perform

1. Select the menu Settings → Accounts.
2. Click on the symbol  next to the respective account.
The account is marked for deletion.

Note:

If you do not want to delete the account, you can reverse the mark for deletion via the symbol .

3. Click on Save.

3.8 Changing personal data

3.8.1 Changing master data

Explanation

You can change your master data.

Steps to perform

1. Select the menu Settings → Master data.
2. Change the data.
3. Click on Save.

3.8.2 Changing password

Explanation

You can change your password for accessing the ZKB ISO 20022 Test Platform.

Steps to perform

1. Select the menu Settings → Password.
2. Fill out the fields. Pay attention to the instructions in the field help.
3. Click on Save.

3.8.3 Reset EBICS user

Explanation

If you are having problems with your bank access, you can reset your EBICS user via the web application of the ZKB ISO 20022 Test Platform.

Steps to perform

1. Select the menu Setting → EBICS data.
2. Click on Reset EBICS user.
3. Confirm the deletion process with Reset.
4. Perform the initialisation again as described in the section Setting up EBICS, page 17.

3.8.4 Deleting your own access

Explanation

You can delete your own access to the ZKB ISO 20022 Test Platform. As soon as you have deleted the access, you are automatically logged out and will not be able to log in again. If you delete your access, your EBICS user is deleted at the same time.

Note:

If you delete your access, all payment files that you have uploaded and the corresponding response messages are deleted as well. Your files cannot be restored.

Steps to perform

1. Select the menu Settings → User data.
2. Click on Delete user.
3. Confirm the deletion process with Delete.

Bibliographical references

- [1] Swiss Implementation Guidelines for Customer-to-Bank Messages Credit Transfer (Payment Transactions)
Version 1.11 from 2021-02-26
Version 2.0.1 from 2022-02-28
Six Interbank Clearing AG
- [2] Swiss Implementation Guidelines for Customer-Bank Messages (Reports)
Version 1.7.2 from 2021-02-26
Version 2.0.1 from 2022-02-28
Six Interbank Clearing AG
- [3] Swiss Implementation Guidelines for Customer-Bank Messages for Status Report
Version 1.1.2 from 2021-02-26
Version 2.0.1 from 2022-02-28
Six Interbank Clearing AG

Abbreviations

EBICS	Electronic Banking Internet Communication Standard
IBAN	International Bank Account Number
ISO	International Organization for Standardization
pain	Payment Initiation
SEPA	Single Euro Payments Area
QRR	QR invoice
XML	Extensible Markup Language

Terms

EBICS	EBICS is an international standard in secure data exchange of payment transaction data via the internet between customers and financial institutions.
IBAN	The IBAN is an international, standardised version of the account number. In Switzerland (CH), the IBAN consists of 21 places. Aside from the specific account number, it contains a country code and data on the account-holding financial institution as well as a two-digit checksum and check digit as a security element to prevent error entries.
ISO 20022	The objective of this International Organization for Standardization standard is to accomplish a global harmonisation of existing and new message standards across various areas of the financial industry. ISO 20022 not only includes payment transaction and account reporting messages, but also covers other areas, including securities trading, foreign trade and treasury.
pain message	pain is an XML-based format in the ISO 20022 standard. pain messages belong to the category SEPA payment transactions and include messages between customers and financial institutions as well as corresponding messages.
pain.001	Transfer orders sent by the customer to the bank
pain.002	Error/status reports sent by the bank to the customer
SEPA	The Single Euro Payments Area is the area of the EU/EEA Member States plus Switzerland, where citizens, companies and other economic operators are able to make and receive payments in euros, whether across or within national boundaries under the same basic conditions, rights and obligations, regardless of their location.
XML	XML is a language for the display of hierarchically structured data in text files. Within the scope of ISO 20022, XML will replace the previous data/file formats. XML will thus be the new standard for transmitting data.
Payment	Also transaction
Payment order	Several single payments merged into one order
Payment file	The digital file used to process payment orders

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