



UC XML Format Check 2.0

How it works – Step by step guide

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Introduction

The UC XML Format Check 2.0 testing tool supports corporate clients in validating payment files for ISO 20022, according to the current specifications of the German Committee (**Deutsche Kreditwirtschaft, DK**), **EPC** and **CGI**. This tool helps you identifying errors, correcting them directly within the tool, and simulating feedback messages (pain.002) – all without any installation required. Sample files are available for all relevant message types (pain and camt).

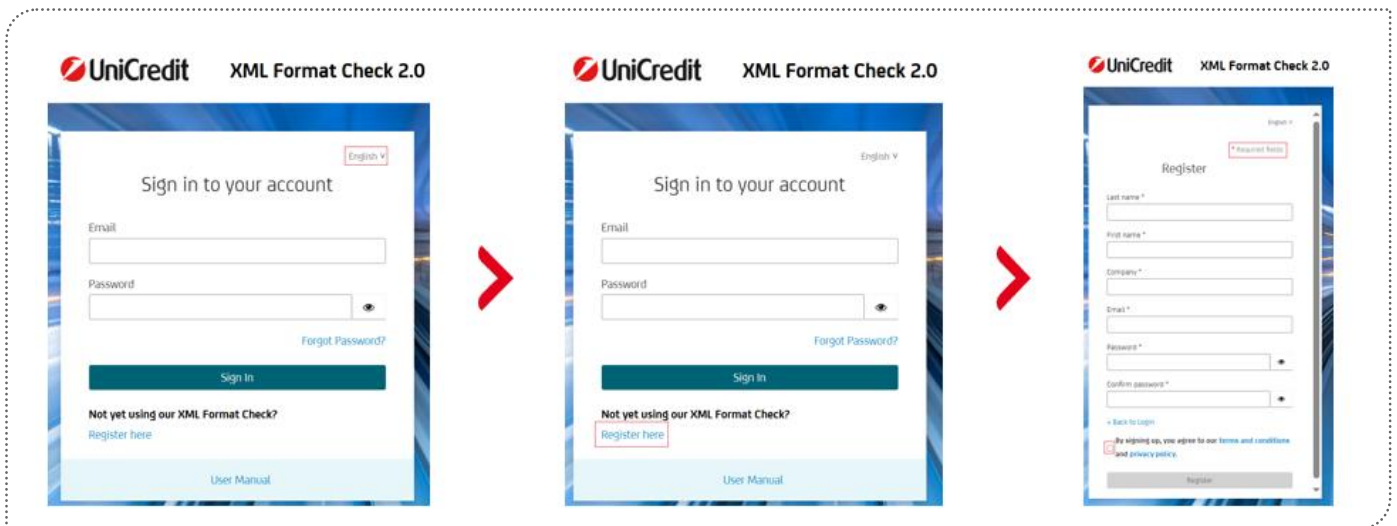
A complete overview of these formats can be found in our official brochure: [Payment Transactions Formats EN](#).

1. Get access

Click [here](#) to access the UC XML Format Check 2.0 tool.

On the login page, you have the option to switch between German and English language:


When you access the tool for the first time, you must perform the registration. To do so, click on **“Register here”** to create a new user account.

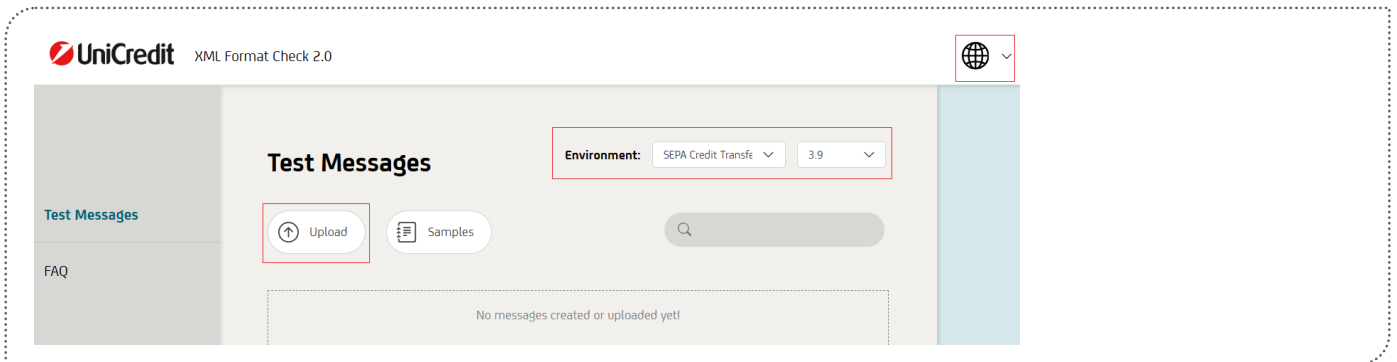


Please complete all required fields and accept the Terms and Conditions as well as the Privacy Policy.

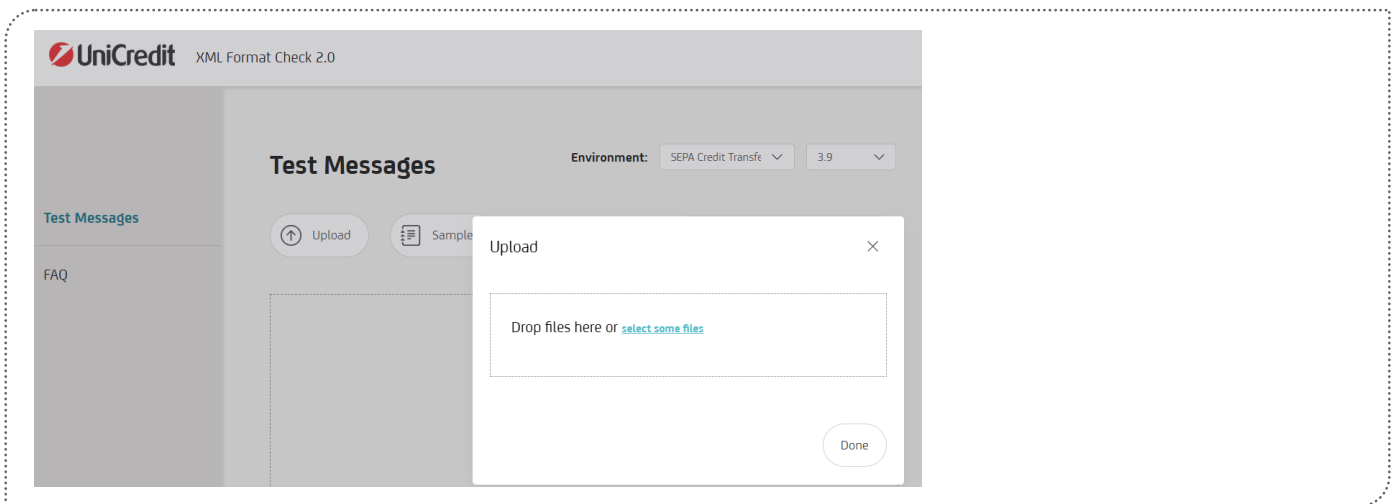
After a successful registration, you will receive an email with the activation link which allows you to quickly and easily activate your access and start using the tool.

2. Testing an XML File

On the start page of the tool, you can set the desired language (German / English) by using the icon  at the top right corner. Then, in the “Environment” section, you must select the type of the file and the corresponding version before uploading the XML file by using the “Upload” button.



Files can either be dragged and dropped into the “Upload” field or manually selected by using the respective button:



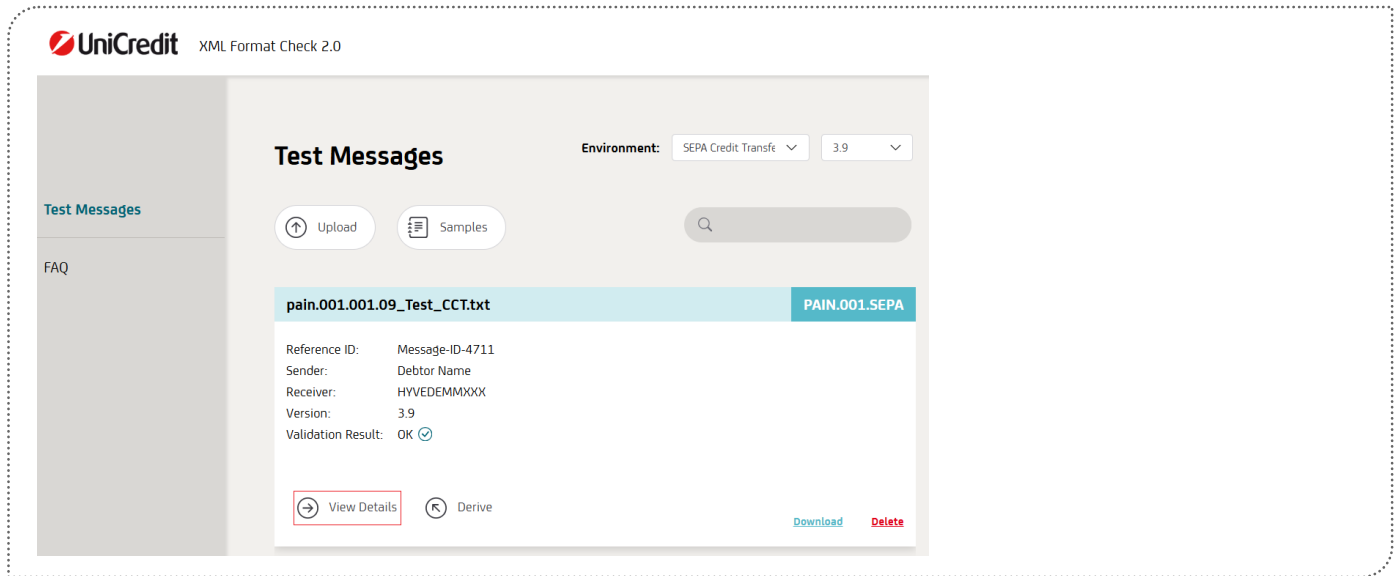
3. Start Validation

Once your file is uploaded, the validation starts **automatically** – no additional step is required.

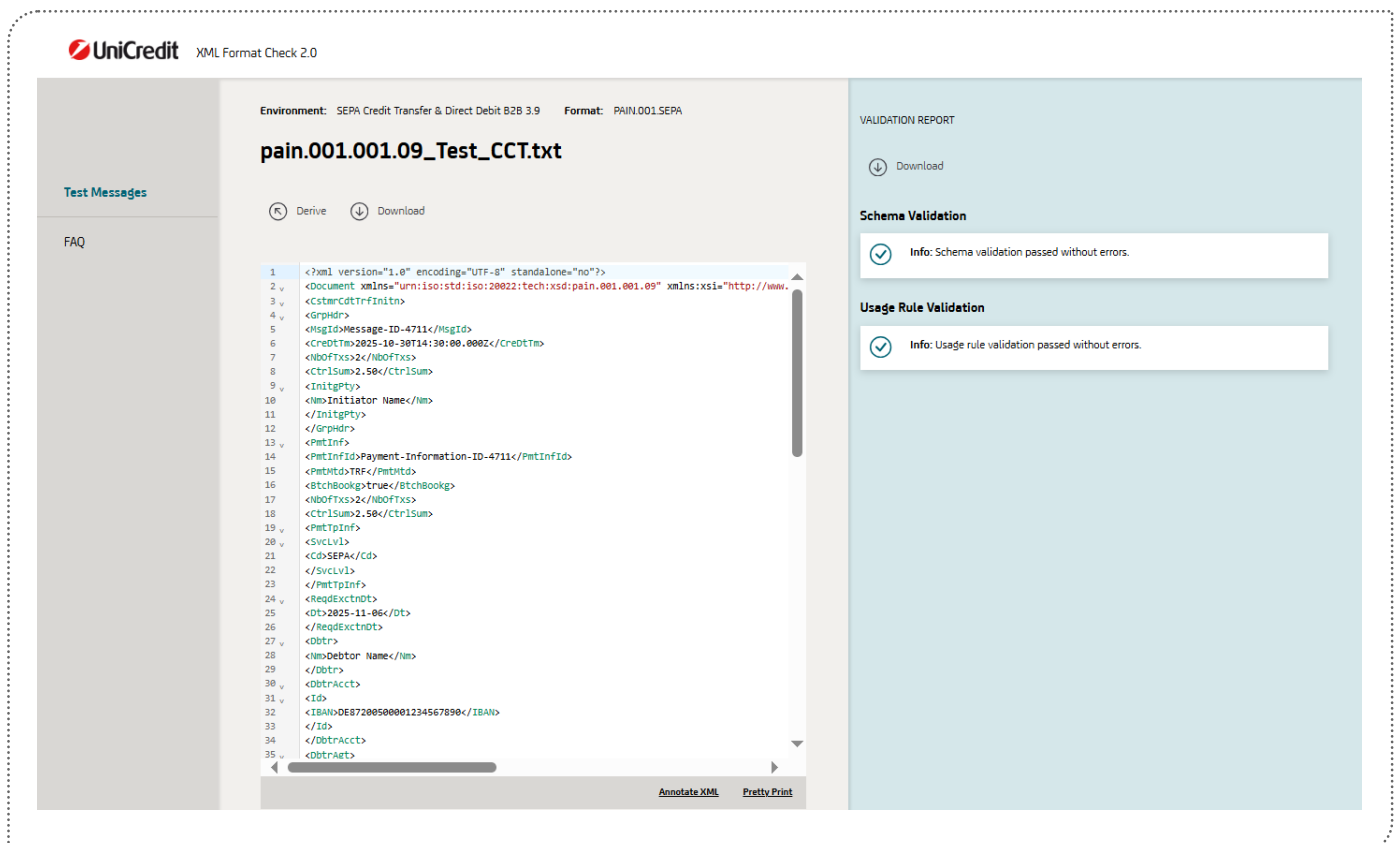
4. Results evaluation

After the automatic validation of the XML file, you will be taken to the results overview. This central view provides a quick summary of the following:

- File name
- Reference ID
- Sender
- Receiver
- Version used (e.g., DK SEPA 3.9)
- Validation Result (e.g., OK, Warning, Error)



By clicking the 'View Details' button, the payment file in its XML structure will be displayed and the full validation report will be shown on the right-hand side of the screen:



This validation report includes:

- **Schema Validation** – Checks based on the basic requirements of the XML structure (e.g. incorrect elements or order)
- **Validation according to the usage rules** – Checks for correct content according to the rules that must be followed for XML files (e.g., IBAN-check digit or valid BIC according to the BIC directory)

This view helps you identifying and fixing errors precisely.

If your payment file is displayed in a single line, you can click on **“Pretty Print”** to add line breaks and format it into a readable layout, making individual entries easier to read:

The screenshot shows the UniCredit XML Format Check 2.0 interface. The main area displays a single-line XML file named `pain.001.001.09_Test_CCT_PP.txt`. The XML content is: `<?xml version="1.0" encoding="UTF-8" standalone="no"?><Document xmlns="urn:iso:std:iso:2002:tech:xsd:pain.001.001.09" xmlns:xsi="http://www.ietf.org/rfc/rfc3986-01.txt" xsi:schemaLocation="urn:iso:std:iso:2002:tech:xsd:pain.001.001.09:urn:iso:std:iso:2002:tech:xsd:pain.001.001.09" />`. The interface includes a left sidebar with 'Test Messages' and 'FAQ', and a right sidebar with a 'VALIDATION REPORT' section. The report shows 'Schema Validation' and 'Usage Rule Validation' both passing without errors. A 'Pretty Print' button is visible at the bottom right of the XML editor.

Now, the payment file appears in a readable format, as follows:

The screenshot shows the UniCredit XML Format Check 2.0 interface with the XML file `pain.001.001.09_Test_CCT_PP.txt` formatted into a readable structure. The XML content is:

```
1 <Document xmlns="urn:iso:std:iso:2002:tech:xsd:pain.001.001.09" xmlns:xsi="http://www.ietf.org/rfc/rfc3986-01.txt" xsi:schemaLocation="urn:iso:std:iso:2002:tech:xsd:pain.001.001.09:urn:iso:std:iso:2002:tech:xsd:pain.001.001.09" />
2   <CstmCdtTrfInit>
3     <GrpHdr>
4       <MsgId>Message-ID-4711</MsgId>
5       <CreDtTm>2025-10-30T14:30:00.000Z</CreDtTm>
6       <NbOfTxs>2</NbOfTxs>
7       <CtrlSum>2.50</CtrlSum>
8       <InitgPty>
9         <Nm>Initiator Name</Nm>
10      </InitgPty>
11     </GrpHdr>
12     <PmtInf>
13       <PmtInfId>Payment-Information-ID-4711</PmtInfId>
14       <PmtMtd>TRF</PmtMtd>
15       <BtchBookg>true</BtchBookg>
16       <NbOfTxs>2</NbOfTxs>
17       <CtrlSum>2.50</CtrlSum>
18       <PmtTpInf>
19         <SvcLvl>
20           <Cd>SEPA</Cd>
21         </SvcLvl>
22       </PmtTpInf>
23       <ReqdExctnDt>
24         <Dt>2025-11-06</Dt>
25       </ReqdExctnDt>
26       <Dbtr>
27         <Nm>Debtor Name</Nm>
28       </Dbtr>
```

 The interface includes a left sidebar with 'Test Messages' and 'FAQ', and a right sidebar with a 'VALIDATION REPORT' section. The report shows 'Schema Validation' and 'Usage Rule Validation' both passing without errors. A 'Pretty Print' button is visible at the bottom right of the XML editor.

An example of validating a correct XML file:

The screenshot shows the UniCredit XML Format Check 2.0 interface. The environment is set to "SEPA Credit Transfer & Direct Debit B2B 3.9" and the format is "PAIN.001.SEPA". The file being checked is "pain.001.001.09_Test_CCT.txt". The XML content is displayed in a text area, and the validation report on the right shows "Schema Validation" and "Usage Rule Validation" both passing without errors. A "Download" button is visible in the validation report section.

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.09" xmlns:xsi="http://www.
<CstmrCdtTrfInitn>
  <GrpHdr>
    <MsgId>Message-ID-4711</MsgId>
    <CreDtM>2025-10-30T14:30:00.000Z</CreDtM>
    <NbOfTxs>2</NbOfTxs>
    <CtrlSum>2.50</CtrlSum>
    <InitgPty>
      <Nm>Initiator Name</Nm>
    </InitgPty>
  </GrpHdr>
  <PmtInf>
    <PmtInfId>Payment-Information-ID-4711</PmtInfId>
    <PmtHtd>TRF</PmtHtd>
    <BtchBookg>true</BtchBookg>
    <NbOfTxs>2</NbOfTxs>
    <CtrlSum>2.50</CtrlSum>
    <PmtTpInf>
      <Svclvl>
        <Cd>SEPA</Cd>
      </Svclvl>
    </PmtTpInf>
    <ReqdExctnDt>
      <Dt>2025-11-06</Dt>
```

You can open and save the validation report directly as a PDF by clicking on the “Download” button:

This screenshot is identical to the previous one, but the "Download" button in the "VALIDATION REPORT" section is highlighted with a red box, indicating that it can be used to download the report as a PDF.

An example of a successful validation report:

The screenshot shows a UniCredit Validation Report. At the top left is the UniCredit logo. The title is 'VALIDATION REPORT'. Below this, there is a table with the following information:

CREATED ON:	2025-11-12 08:05
FILE NAME:	pain.001.001.09_Test_CCT.txt
MESSAGE TYPE:	PAIN.001
FORMAT:	DK 3.9

Below the table, there are two sections, each with a green checkmark icon and a light blue background:

- SCHEMA VALIDATION**: Schema validation passed without errors.
- USAGE RULE VALIDATION**: Usage rule validation passed without errors.

No further action is required in case of an error-free validation.

5. Correcting and retesting an XML file

If the validation report shows errors, these must be corrected to ensure that the XML file can be processed successfully.

An example of an incorrect XML file:

The screenshot shows the UniCredit XML Format Check 2.0 interface. The top left has the UniCredit logo and 'XML Format Check 2.0'. The main area is titled 'pain.001.001.09_Test_Error.txt' and shows an XML file with line numbers 1 through 28. The XML content is as follows:

```
1 <Document xmlns="urn:iso:std:iso:2002:tech:xsd:pain.001.001.09" xmlns:xsi="http://www.
2 <CctmCctfInitn>
3 <GrpHdr>
4 <MsgId>Message-ID-4711</MsgId>
5 <CreDtTm>2025-10-07T09:30:47.000Z</CreDtTm>
6 <NbOfTx>2</NbOfTx>
7 <Ctr1Sum>6655.86</Ctr1Sum>
8 <InitgPty>
9 <Nm>Initiator Name</Nm>
10 </InitgPty>
11 </GrpHdr>
12 <PmtInf>
13 <PmtInfId>Payment-Information-ID-4711</PmtInfId>
14 <PmtMtd>TRF</PmtMtd>
15 <BtchBookg>true</BtchBookg>
16 <NbOfTx>2</NbOfTx>
17 <Ctr1Sum>6655.86</Ctr1Sum>
18 <PmtTpInf>
19 <SvctLv1>
20 <Cd>SEPA</Cd>
21 </SvctLv1>
22 </PmtTpInf>
23 <ReqdExctnDt>
24 <Dt>2025-11-06</Dt>
25 </ReqdExctnDt>
26 <Dbtr>
27 <Nm>Debtor Name</Nm>
28 </Dbtr>
```

On the right side, there is a 'VALIDATION REPORT' panel with a 'Download' button. It contains three error messages:

- Schema Validation**: Error: Value 'D21500500009876543210' is not facet-valid with respect to pattern '[A-Z]{2}[0-9]{2}[a-zA-Z0-9]{1,30}' for type 'IBAN2007Identifier'. Line: 57 Column: 35. XPath: CdrAcct/Id/IBAN
- Schema Validation**: Error: The value 'D21500500009876543210' of element 'IBAN' is not valid. Line: 57 Column: 35. XPath: CdrAcct/Id/IBAN
- Usage Rule Validation**: Error: Must be a valid IBAN. Line: 57 Column: 7. XPath: CdrAcct/Id/IBAN
- Usage Rule Validation**: Error: Participant is not a SEPA Participant. Line: 57 Column: 7. XPath: CdrAcct/Id/IBAN

Based on the hints provided in the validation report, you can adjust your file accordingly. Typical corrections include:

- Structural errors (e.g., incorrect elements or order)
- Invalid values (e.g., codes or formats that are not allowed)
- Recommended adjustments based on the usage rules.

The validation errors are divided into 3 components:

- Description of the issue
- Position in the XML file (line, column)
- XPath to the affected location.

Additionally, there are notes on the use of fields according to the usage rules, such as the recommendations to avoid certain fields. The validation report of an incorrect XML file includes exactly these hints:

UniCredit VALIDATION REPORT

CREATED ON: 2025-11-12 | 08:02
 FILE NAME: pain.001.001.09_Test_Fehler.txt
 MESSAGE TYPE: PAIN.001
 FORMAT: DK 3.9

SCHEMA VALIDATION

- Value 'D21500500009876543210' is not facet-valid with respect to pattern '[A-Z][2,2][0-9][2,2][a-zA-Z0-9][1,30]' for type 'IBAN2007Identifier'.
- The value 'D21500500009876543210' of element 'IBAN' is not valid.

USAGE RULE VALIDATION

- Must be a valid IBAN.
- Participant is not a SEPA Participant.

You can also download the payment file with the errors highlighted at the corresponding position: Therefore click on “Annotate XML” below the file to see the error message displayed at the relevant position within the XML file.

UniCredit XML Format Check 2.0

Environment: SEPA Credit Transfer & Direct Debit B2B 3.9 Format: PAIN.001.SEPA

pain.001.001.09_Test_Error.txt

Test Messages: Derive Download

FAQ

```

41 <PmtId>
42 <EndToEndId>OriginatorID1234</EndToEndId>
43 </PmtId>
44 <Amt>
45 <InstdAmt Ccy="EUR">6543.14</InstdAmt>
46 </Amt>
47 <CdtrAgt>
48 <FinInstnId>
49 <BICFI>SPUEDE20XXX</BICFI>
50 </FinInstnId>
51 </CdtrAgt>
52 <Cdtr>
53 <Firma>Musterland GmbH</Firma>
54 </Cdtr>
55 <CdtrAcct>
56 <Id>
57 <!-- Schema Error: Value "D21500500009876543210" is not facet-
58 <!-- Schema Error: The value "D21500500009876543210" of element
59 <!-- Usage Rule Error: Must be a valid IBAN. -->
60 <!-- Usage Rule Error: Participant is not a SEPA Participant. -->
61 <IBAN>D21500500009876543210</IBAN>
62 </Id>
63 </CdtrAcct>
64 <RmtInf>
65 <Cdtnd>Unstructured Remittance Information</Cdtnd>
66 </RmtInf>
67 </Cdtr<FfxInf>
68 <Cdtr<FfxInf>
69 <PmtId>
70 <EndToEndId>OriginatorID1235</EndToEndId>
71 </PmtId>
72 <Amt>
73 <InstdAmt Ccy="EUR">112.72</InstdAmt>
74 </Amt>
75 <CdtrAgt>
  
```

Annotations: 1 (bottom), 2 (middle), 3 (top)

Buttons: Annotate XML, Pretty Print

VALIDATION REPORT

Download

Schema Validation

- Error: Value 'D21500500009876543210' is not facet-valid with respect to pattern '[A-Z][2,2][0-9][2,2][a-zA-Z0-9][1,30]' for type 'IBAN2007Identifier'.
Line: 61 Column: 59
XPath: CdtrAcct/Id/IBAN
- Error: The value 'D21500500009876543210' of element 'IBAN' is not valid.
Line: 61 Column: 59
XPath: CdtrAcct/Id/IBAN

Usage Rule Validation

- Error: Must be a valid IBAN.
Line: 61 Column: 31
XPath: CdtrAcct/Id/IBAN
- Error: Participant is not a SEPA Participant.
Line: 61 Column: 31
XPath: CdtrAcct/Id/IBAN

You can then download the XML file with the error message by using the “Download” button above the file. To correct the error, click directly on the respective error line on the right-hand side of the screen. This position will be then highlighted at the bottom of the XML file on the left-hand side of the screen:

The screenshot shows the UniCredit XML Format Check 2.0 interface. The environment is set to "SEPA Credit Transfer & Direct Debit B2B 3.9" and the format is "PAIN.001.SEPA". The file being checked is "pain.001.001.09_Test_Error.txt".

The XML content is displayed in a text area, with line numbers 23 to 57. The error on line 57 is highlighted with a red box: `<IBAN>D21500500009876543210</IBAN>`.

The Validation Report on the right side shows the following errors:

- Schema Validation:**
 - Error: Value 'D21500500009876543210' is not facet-valid with respect to pattern '[A-Z][2,2][0-9][2,2][a-zA-Z0-9][1,30]' for type 'IBAN2007/identifier'. Line: 57 Column: 35. XPath: CdrAcct/Id/IBAN
 - Error: The value 'D21500500009876543210' of element 'IBAN' is not valid. Line: 57 Column: 35. XPath: CdrAcct/Id/IBAN
- Usage Rule Validation:**
 - Error: Must be a valid IBAN. Line: 57 Column: 7. XPath: CdrAcct/Id/IBAN
 - Error: Participant is not a SEPA Participant. Line: 57 Column: 7. XPath: CdrAcct/Id/IBAN

You can now click directly on that spot in the XML file and correct the wrong entry there. As soon as you make a change, the file is automatically revalidated. If the XML file contains multiple errors, correct them one by one until no more errors are shown in the validation report.

After a successful correction, your validation report looks as follows:

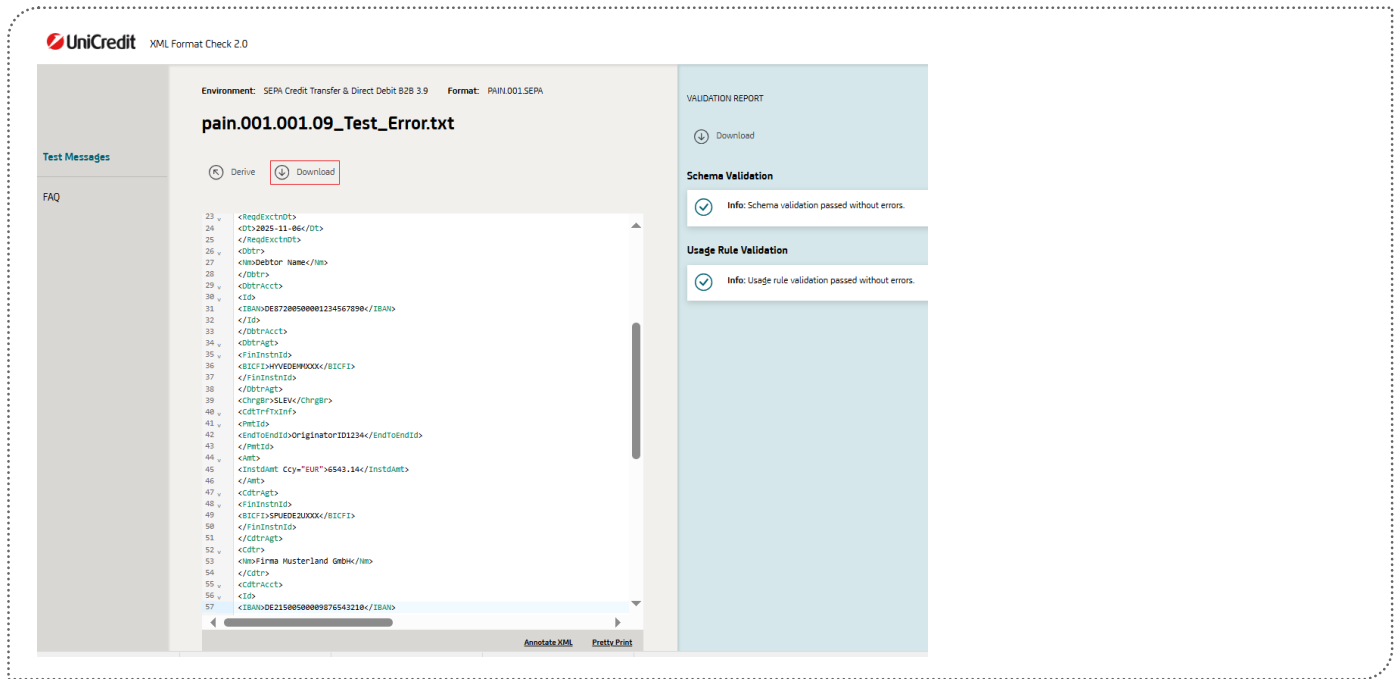
The screenshot shows the UniCredit XML Format Check 2.0 interface after a successful correction. The environment and format remain the same. The file is still "pain.001.001.09_Test_Error.txt".

The XML content is displayed in a text area, with line numbers 23 to 57. The error on line 57 has been corrected: `<IBAN>DE21500500009876543210</IBAN>`.

The Validation Report on the right side shows the following status:

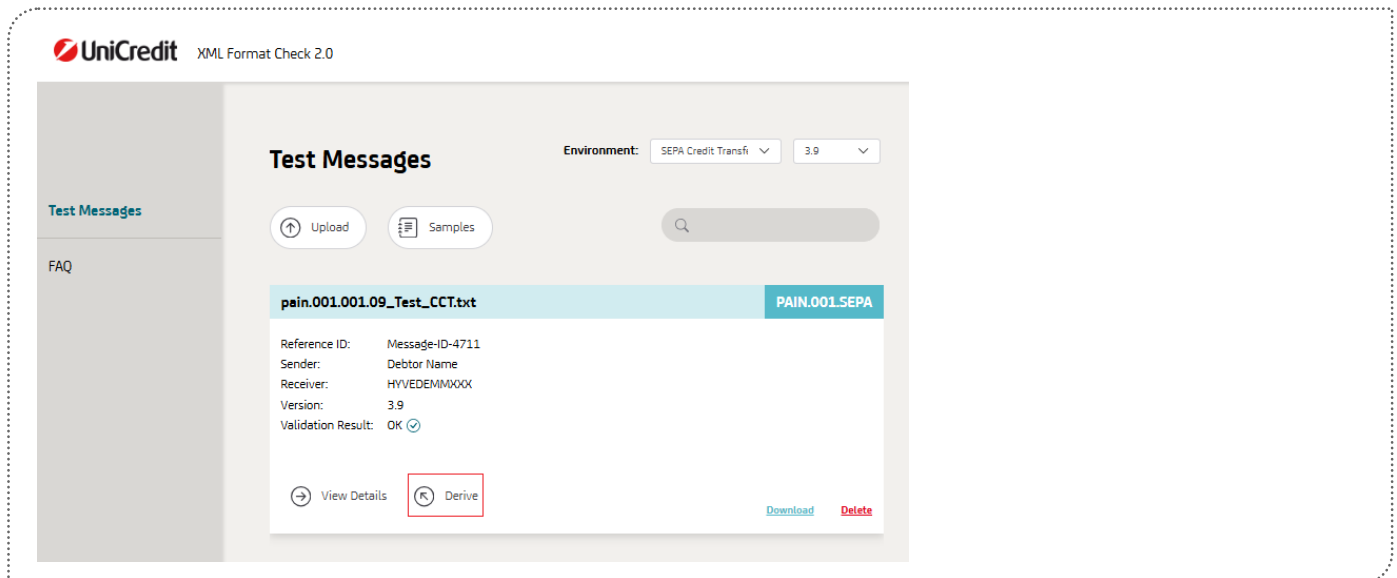
- Schema Validation:** Info: Schema validation passed without errors.
- Usage Rule Validation:** Info: Usage rule validation passed without errors.

You can now download your corrected payment file directly from the Format Check Tool and import it into your software. To do so, click on the “Download” button located directly above your XML file.



6. Feedback message (Pain.002)

With the “Derive” function, you can create the bank’s feedback message (in the form of a Pain.002 file) from a submitted file (e.g., Pain.001).



You can choose between two main scenarios:

- **Positive feedback:**
 - Technical acceptance of the file
 - Complete processing and booking of the file
- **Negative feedback:**
 - Rejection of the file with error code (e.g., RC01 – Invalid bank identifier).

You can select these scenarios by directly clicking on the row with the desired feedback.

UniCredit XML Format Check 2.0

Environment: SEPA Credit Transfer & Direct Debit B2B 3.9

Choose Derive

Test Messages

FAQ

INCOMING PAIN.002

Source: Outgoing PAIN.001
Creates: Incoming PAIN.002
Description: (01) Positive Status Report: For the technical acceptance of the file including all transactions (ACCP)

INCOMING PAIN.002

Source: Outgoing PAIN.001
Creates: Incoming PAIN.002
Description: (02) Positive Status Report: For a processing confirmation of the file including all transactions.

INCOMING PAIN.002

Source: Outgoing PAIN.001
Creates: Incoming PAIN.002
Description: (03) Negative Status Report: At file level with Reason Code RC01 (invalid BIC) (RUCT)

INCOMING PAIN.002

Source: Outgoing PAIN.001
Creates: Incoming PAIN.002
Description: (04) Negative Status Report: At transaction level with configurable reason code.

The simulated response file in the form of Pain.002 is then displayed as follows:

UniCredit XML Format Check 2.0

Environment: SEPA Credit Transfer & Direct Debit B2B 3.9 Format: PAIN.002

DK_3.9_PAIN.002_251106_142040_0001.xml

Download

```
1 <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.002.001.10">
2 <CstmrPmtStsRpt>
3 <GrpHdr>
4 <MsgId>LCF20251106T142040</MsgId>
5 <CreDtTm>2025-11-06T14:20:40.948</CreDtTm>
6 <Dbtr>Agt>
7 <FinInstnId>
8 <BICFI>HYVEDE33XXX</BICFI>
9 </FinInstnId>
10 </Dbtr>Agt>
11 </GrpHdr>
12 <OrgnlGrpInfAndSts>
13 <OrgnlMsgId>Message-ID-4711</OrgnlMsgId>
14 <OrgnlMsgId>pain.001.001.09</OrgnlMsgId>
15 <OrgnlMsgOfcs>2</OrgnlMsgOfcs>
16 <OrgnlCtrISum>2.58</OrgnlCtrISum>
17 </OrgnlGrpInfAndSts>
18 <OrgnlPmtInfAndSts>
19 <OrgnlPmtInfId>Payment-Information-ID-4711</OrgnlPmtInfId>
20 <OrgnlPmtOfcs>2</OrgnlPmtOfcs>
21 <OrgnlCtrISum>2.58</OrgnlCtrISum>
22 <PmtInfSts>ACCP</PmtInfSts>
23 </OrgnlPmtInfAndSts>
24 </CstmrPmtStsRpt>
25 </Document>
26
```

Annotations: Annotate XML Prstty Print

VALIDATION REPORT

Download

Schema Validation

Info: Schema validation passed without errors.

Usage Rule Validation

Info: Usage rule validation passed without errors.

This function is especially suitable for testing and simulations in payment processing.

7. Tipps and Tricks

FILE SIZE

The UC XML Format Check 2.0 can validate files up to a maximum size of 5 MB. Please note that ZIP files cannot be uploaded. Larger files can therefore not be checked. If necessary, clearing your browser cache may improve performance.

INVALID SCHEMA DETAILS AND SPECIAL CHARACTERS / LINE BREAKS

In some cases, no clear error message is displayed if the file cannot be properly recognised due to incorrect schema information. Please check your file again. Special characters are only permitted to a limited extent in the DK format.

For more information, please refer to the following online resources:

- [PaymentTransactions_Formats_EN](#)
- [Payment Transactions Reporting_EN](#)

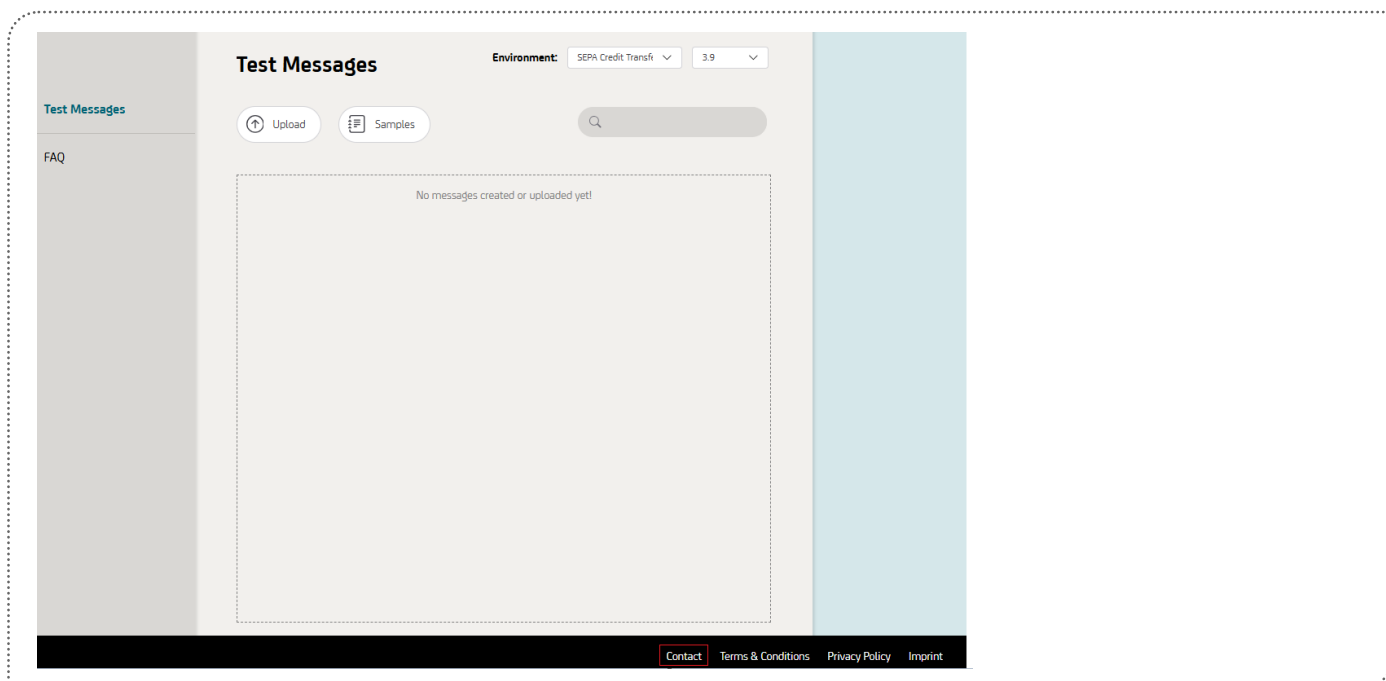
HANDLING ERROR MESSAGES

Error messages must be resolved.

Warning messages may lead to rejection by other banks. Generally, HypoVereinsbank can still process them.

8. Questions

If you have further questions about using the UC XML Format Check 2.0, you can reach us directly via the “Contact” form:



PRICING

The use of the UC XML Format Check 2.0 is generally subject to a fee. The Cash Management Specialist will get in contact with you to align upon the conditions.

SUPPORT & HELP

If you have any questions or technical issues, please contact our support team directly at: gtb-center@unicredit.de



UniCredit Bank GmbH
Client Solutions



Address
Street
ZIP code and city



Contact
Product Line
Telephone



Online
unicreditgroup.eu/clientsolutions