



Quick Guide

UC XML Format-Check

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1. BACKGROUND INFORMATION

1.1 – SCOPE OF APPLICATION

UC XML Format Check is a software application that supported your company in the migration from national payment transaction methods to SEPA in the 2009–2015 period and is now providing support in the migration of international payment transaction methods from DTAZV to XML-AZV from 2022 onward.

- UC XML Format Check simulates key elements of the customer/bank interface and specifically serves the purpose of validating files submitted to the bank for further processing.
- PAIN.001 (credit transfer order from the debtor) and PAIN.008 (direct debit submission by the creditor) SEPA XML files and, most recently, also PAIN.001 AZV XML files are uploaded into UC XML Format Check and
 - validated against the XML schema and business/usage rules),
 - validated against the national DK format, and

the corresponding validation results are made available online as original XML with inserted comments and for download as validation report.



Checking/validation options for XML files

“XML schema validation” is the term used for a check process in which a document written in XML (XML file) is checked to determine whether it is

- well-formed, and
- valid.

An XML file is “well-formed” if it fulfills the basic requirements for an XML document, because the basic syntax rules are identical for all XML documents. If an XML document is not “well-formed”, a further detailed validation is usually not possible. The file must first be made “well-formed” in accordance with the basic XML syntax rules. Such errors are frequently also called “FATAL errors”.

An XML file usually contains a reference to an XML Schema Definition (XSD), which defines additional structural attributes of the respective XML documents. This means that an XML file is “valid” if, in addition to the general “well-formed” rules, it also complies with the rules of the referenced XSD. An XML file not conforming with the rules defined in the schema is classified as “invalid”.

Business/usage rule validation

“Business or usage rules” are defined as rules that must be complied with in XML files, but cannot be mapped in the underlying XML Schema Definition (XSD). One example is the IBAN check digit or the check against the BIC Directory; the transactions are checked to ascertain whether they are sent to banks supporting the respective product: SCT, SDD CORE, SDD COR1, SDD B2B, and AXZ.

Conclusion

Professional validation of XML files thus requires two-level checks:

- first, a formal, technologically oriented check against the XML syntax rules, known as “schema validation”, and
- second, an additional business-oriented check against rules laid down in so-called “rulebooks”, known as “business or usage rule validation”.

1.2 - FUNCTIONALITY

- User-friendly operation
 - File upload
 - Generation of a validation result, either as PDF file or as XML file, with error or warning messages being displayed exactly at the corresponding positions in the original XML file
- Validation methods
 - XML schema validation in the national format (DK – DFÜ Annex 3)
 - Usage rule validation – content check of the field content – is included as an add-on for the DK format
- UC XML Format Check can be opened from any PC via the Internet.
- The uploaded files or validation results are not stored. If you wish to perform an additional check, you must upload the respective file once more.
- Encrypted transfer of your data

2. OPERATING INSTRUCTIONS

2.1 – START, REGISTRATION AND LOG IN

You can start UC XML Format Check on the Internet via the following link: <https://payfits.unicredit.eu/payfitsvp/>
When you click on the link, the log-in screen will appear. If you are not yet registered, please click “Register”. Enter the required information into the registration screen and click “Register” again (note: you must choose a password with at least 6 digits). You will automatically receive a message to the e-mail address you have entered. Please confirm the link that is included in this message. In addition, you will get your UserID.

You can now log into UC XML Format Check with your UserID.

The image displays two side-by-side screenshots of the UniCredit UC XML Format-Check web application. The left screenshot, titled 'Authentication / Login', shows a form with 'UserID' and 'Password' input fields, an 'Authenticate ...' button, and links for 'Register' and 'Lost your password'. The right screenshot, titled 'Register User', shows a form with fields for 'Name', 'Company', 'IBAN', 'E-Mail', 'New Password', and 'Password Again', a checkbox for 'I accept the terms of use', and a 'Register' button. A black arrow points from the 'Register' link in the left screenshot to the 'Register' button in the right screenshot.

Note:

Please accept the terms of use after filling in the fields.

2.2 - VALIDATION OF XML FILES (PAIN.001/PAIN.008)

Click the “Browse” or “Durchsuchen” button (the name of this button may differ depending on the browser you use)

and select the XML file you want to have checked. The file extension (.xml, .txt, .zip etc. ...) does not matter here. After selecting the XML file, you start the validation process by clicking the “Validate Message” button.

The screenshot shows the 'Message Validation' section of the UniCredit UC XML Format-Check interface. It includes a 'Report Language' dropdown set to 'German', an 'XML/SEPA Message' field with 'Dateien auswählen' and 'Keine Date...usgewählt', a 'Filename' field, and a 'Validate Message' button highlighted with a green box. Below the form is a table with columns for Severity, Category, Level, XPATH Location, and Message.

2.3 - VALIDATION RESULTS/ONLINE

Display of validation results – online

Once validation is completed, the result is shown in the “Validation Result” tap. This tap displays three columns, with “Location” and “Field” depending on the type of information shown (Info/Fatal/Error/Warning).

Please note that there are basically two levels of XML file validation:

- **XML schema validation (technological XML check)**

The terms “XML validation” or “schema validation” are used to describe a validation process in which a document written in XML (XML file) is checked for its compliance with the XML rules.

When an error is detected during schema validation, the line and column of the checked XML file where the error was detected are indicated in the “Location” column.

- **USAGE Rules (additional business-rules-based check)**

The terms “business rules” or “usage rules” are used to describe rules that must be applied to XML files, but cannot be mapped in the underlying XML Schema Definition (XSD) (e.g. IBAN check digit). When an error is detected during usage rule validation, the affected payment information block* and the affected transaction*) are displayed in the “Location” column. A note in the “Field” column indicates the field where the rule violation was detected.

*For explanations of the general structure of an XML file and special terms such as payment information block, transaction, etc., please see the Internet under www.hvb.de/sepa_4 DOWNLOAD-CENTER 4 International Payment Transactions including SEPA 4 formats and reporting.

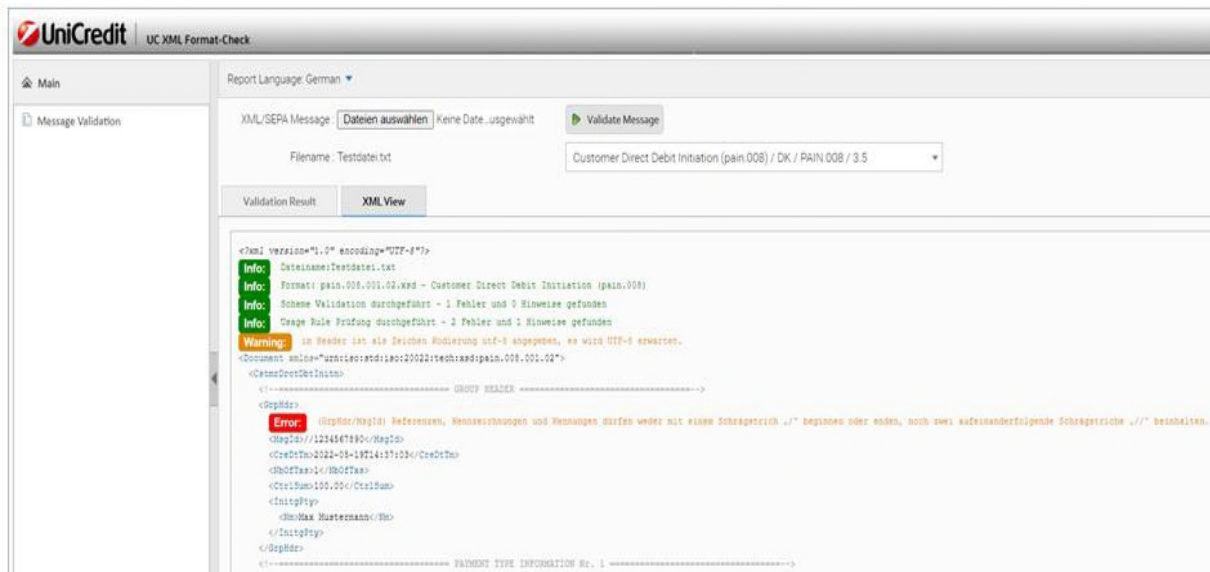
The screenshot shows the UniCredit UC XML Format-Check web application. The interface includes a navigation menu on the left with options like 'Main', 'Message Validation', 'Administration and Master Data', and 'Instructions'. The main content area displays the validation results for a file named 'Testdatei.txt'. The results are organized into a table with columns for Severity, Category, Level, XPATH Location, and Message. The table shows several entries, including Info messages for general messages and scheme validation, and Error messages for schema validation and usage rule validation. A Warning message is also present for usage rule validation. The interface also includes a 'Validate Message' button and a 'Report Language' dropdown set to German.

Severity	Category	Level	XPATH Location	Message
Info	General Messages			Dateiname:Testdatei.txt
Info	General Messages			Format: pain.008.001.02.xsd - Customer Direct Debit Initiation (pain.008)
Info	Scheme Validation			Scheme Validation durchgeführt - 1 Fehler und 0 Hinweise gefunden
Info	Usage Rule Validation			Usage Rule Prüfung durchgeführt - 2 Fehler und 1 Hinweise gefunden
Error	Scheme Validation	Transaction	//Pmtinf[1]/DrctDbtTxinf[1]/DrctDbtF...	Inhalt des Elements 'MndtRtdInr' ist nicht vollständig. '[DrctRgnr]' wird erwartet.
Error	Usage Rule Validation	Group Header	//GrpHdr[1]/MsgId[1]	Referenzen, Kennzeichnungen und Kennungen dürfen weder mit einem Schrägstrich „/“ beginnen oder enden, noch zwei aufeinanderfolgende Schrägstriche „//“ beinhalten.
Error	Usage Rule Validation	Payment Information	//Pmtinf[1]/CdtrSchmeId[1]/Id[1]/Pr...	Ungültige CreditorId.
Warning	General Messages			Im Header ist als Zeichen Kodierung utf-8 angegeben, es wird UTF-8 erwartet.
Warning	Usage Rule Validation	Payment Information	//Pmtinf[1]/ReqdColltnDt[1]	Bei SEPA Lastschriften (CORE, B2B) muss das Fälligkeitsdatum zumindest 1 TARGET Tag in der Zukunft liegen.

2.4 - VALIDATION RESULTS/XML AND REPORT

The checked XML file is displayed in the “XML View” tab, with error and warning messages already being inserted in the file after the respective position as a comment.

Category “INF” messages are always placed at the beginning of the file. By entering UC XML Format Check into the search function of your browser (usually Ctrl+F), you can browse the XML file for error and warning messages.



The validation results are usually compiled in a report that is structured as follows:

- Information on the checked XML customer file
 - File name,
 - Validation status (OK/error found),
 - Information on the identified message type,
 - Information on the key data of the file (reference, submitter, total amount, number of transactions).

Note

Remediation of error messages is mandatory. Warning messages may lead to rejections by other banks. HypoVereinsbank can usually process them.

Summary

- Result of schema validation and usage rule validation
- Remediation of error messages is mandatory.

Detailed results of schema validation

- Line/column information refers to the position in the checked file.
- Detailed results of the usage rule validation
- Pi/Tx information refers to the payment information (Pi) and transaction (Tx) affected by the respective error/warning.
- If no Pi is indicated, the error was identified at the GroupHeader level.
- If no Tx is indicated, the error/warning was identified at the Pi level.

Dateiname:

Ergebnis: Fehler gefunden

Angaben zum Nachrichten-Typ

Schema:	DK
Nachrichten-Typ:	PAIN.008
RuleBook Version:	3.5

Eckdaten der Nachricht

Message ID:	//1234567890	
Initiating Party:	Max Mustermann	
Dateisumme / Anzahl	100	1

Zusammenfassung

Schema Validierung durchgeführt:

- Anzahl der gefundenen Schema Fehler: 1

Usage Rule Prüfung durchgeführt:

- Anzahl der gefundenen Usage Rule Fehler: 2

- Anzahl der gefundenen Usage Rule Warnungen: 1

Schema Validierung

Typ	Zeile	Spalte
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Error

Inhalt des Elements 'MndtrItdInfr' ist nicht vollständig. '{DtOfSgntr}' wird erwartet.

Usage Rule Prüfung

Typ	Bulk	Tx	Feldbezeichnung	Feldinhalt
Folgende Fehler / Hinweise betreffen die logische Datei Nr.1 :				
Error	1		CdtrSchmeld/Id/PrvtId/Othr/Id	DE00ZZZ00000012345
			<i>Ungültige CreditorId.</i>	
Error	1		GrpHdr/MsgId	//1234567890
			<i>Referenzen, Kennzeichnungen und Kennungen dürfen weder mit einem Schrägstrich „/“ beginnen oder enden, noch zwei aufeinanderfolgende Schrägstriche „//“ beinhalten.</i>	
Warning	1		ReqdColltnDt	2022-05-19
			<i>Bei SEPA Lastschriften (CORE, B2B) muss das Fälligkeitsdatum zumindest 1 TARGET Tag in der Zukunft liegen.</i>	

2.5 - TIPS AND TRICKS

Error check

Both schema and usage rule errors are limited to 100 error messages in order to ensure a practical report size. A PDF XML report is generated only for up to 500 transactions.

Optimize validation time by emptying the browser cache in your InternetExplorer.

- Click on “Internet Options” in the “Extras” menu.
- Select the “General” tab.
- Look for the “Browser History” section. Select the option “Delete” there.
- A new window will open. Deactivate “Preserve Favorites website data” and activate “Temporary Internet Files” and “Cookies”.
- Finish by clicking “Delete”.

File size

UC XML Format Check can check a maximum file size of 5MB. If you have a file exceeding 5MB, you have to upload it as a Zip file and then start the validation process. This very much speeds up the upload to UC XML Format Check.

Incorrect schema information

No clear error message may be issued in such cases, because the incorrect schema information makes proper file recognition as such impossible. In some cases, UC XML Format Check makes a suggestion how to enter the header correctly. Alternatively, the “Technical Specifications and Formats” document is helpful (see the information on the Internet at www.hvb.de/sepa - DOWNLOAD CENTER – International Payment Transactions incl. SEPA – formats and reporting).

Special characters/line breaks

Special characters can be used only to a limited extent in the DK format. See the information thereon on the Internet at www.hvb.de/sepa - DOWNLOAD CENTER – International Payment Transactions incl. SEPA – formats and reporting

How to handle error messages

Remediation of error messages is mandatory. Warning messages may lead to rejections by other banks. HypoVereinsbank can usually process them.

Please contact your Cash Management Relationship Manager if you have any further questions on how to operate UC XML Format Check.