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Technical Reference

XML Authorisation

For recurring billing and one-click checkout

V 1.11.2

For a proper implementation of the Datatrans Payment Solution read the following documents carefully:

- General Information
- Technical Implementation Guide

Please use only the latest version of these documents. Both are available at:
<https://www.datatrans.ch/showcase/documentations/technical-documentation>

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Revision Control

Version	Date	Changed by	Comments / nature of change
1.0	21.11.2013	Katja Schlegel	New creation of document
1.1	15.08.2014	Christoph Ryser	Several changes
1.11	10.10.14	Christoph Ryser	2.2.1 correct field type aliasCC 2.3.2 correct field type upTransactionId 3.1 correct format of attributes in response
1.11.1	30.03.2015	Dominik Mengelt	Updated company address
1.11.2	26.02.2016	Dominik Mengelt	Raised version of XML API to 3. Adjusted expiry year in sample.

1 Introduction

1.1 About this document

This document describes the XML Authorisation and is an addendum to the [Technical Implementation Guide](#). Please find additional sample scripts on www.datatrans.ch/showcase.

The merchant application directly connects (server to server via standard socket) to the service URL, writes the XML document into this connection and reads the XML response documents from there.

1.2 Handling of the XML Authorisation

This interface is used for processing recurring billing or for one-click checkout.

It is mandatory that the cardholder entered his credit card data (online registration or first purchase) before using either one of the here described interfaces.

With an initial transaction a reference (Alias/Token) to the cardholder data needs to be generated (refer to [Technical Implementation Guide](#)), which afterwards can be used for XML Authorisations. The XML Authorisation option has to be enabled by Datatrans. To generate such an Alias/Token with an initial transaction we recommend to use a Merchant-ID with 3-D Secure and enabled CVV. This way the transaction is protected by 3-D Secure and the liability shift takes effect.

1.2.1 Recurring billing

Recurring billing is used primarily for charging recurring services such as subscriptions for newspapers or membership fees. The cardholder is not involved in the payment process.

Restrictions

A Mail/Phone Order contract with an acquirer and a dedicated Merchant-ID for Mail/Phone order transactions are required.

1.2.2 One-click checkout

If the cardholder has the possibility to identify himself on the merchant's website and register his credit card on his profile, one-click checkout is a userfriendly way to handle recurrent customers. Recurrent customers do not need to enter card details again to make a payment. They can pay with only one click.

Restrictions

An agreement with your acquirer for transactions without 3-D secure and a dedicated Merchant-ID (another Merchant ID as the one for generating the Alias/Token) is required. Please discuss payment process also with your Acquirer to have the appropriate agreement (Mail/Phone Order, Internet).

1.3 General restrictions

Please also note that at no time the merchant is allowed to store, receive, transmit, log or process credit card data on his system. XML Authorisations with credit card numbers do require the appropriate PCI DSS Assessment and will by default not be accepted by our System. The XML Authorisation can only be used with the Alias/Token option. XML authorisations in combination with a Mail/Phone Order contract do not support 3-D Secure and cannot be used for internet transactions where the customer enters his credit card data personally.

All other restrictions and recommendations from the [Technical Implementation Guide](#) also apply for this document.

1.4 Testing

Find the test rules in the Datatrans Technical Implementation Guide, chapter 7.

2 Authorisation

2.1 Process

The authorisation request needs to be sent as an XML formatted message via a https request to Datatrans. After the request is validated, the merchant will receive an XML formatted response message which contains all necessary information about the transaction.

2.2 Authorisation request

Service URL for Test Environment

https://pilot.datatrans.biz/upp/jsp/XML_authorize.jsp

Service URL for Production Environment

https://payment.datatrans.biz/upp/jsp/XML_authorize.jsp

back-up URL: https://payment.datatrans2.biz/upp/jsp/XML_authorize.jsp

2.2.1 Mandatory input parameters

merchantId	N10	Unique Merchant Identifier (allocated by Datatrans at merchant registration process)
amount	N	Transaction amount in the smallest available unit
currency	A3	Transaction currency – ISO character code (CHF, EUR, USD etc.)
refno	AN18	Unique reference number assigned by the merchant
aliasCC	AN20	Alias for credit card, Postfinance or PayPal
expm	MM	Expiration month (for credit card only)
expy	YY	Expiration year (for credit card only)

2.2.2 Optional input parameters

uppCustomerIpAddress		Customer's IP address (source IP used by the cardholder)
sign		This parameter may be used according to the merchant's security level settings. For details please refer to the chapter "Security Option" in Technical Implementation Guide
reqtype		NOA – Authorisation only (default) CAA – Authorisation and settlement

2.3 Authorisation response

All input parameters will be returned. Additionally you will receive these parameters, indicating whether the transaction was successful or not.

2.3.1 Successful authorisation

responseCode	N2	01 or 02 for a successful transaction
responseMessage		Authorisation response message text
uppTransactionId	N18	Unique transaction identifier assigned by Datatrans
authorizationCode	N9	Outdated; internal reference ID assigned by Datatrans; please ignore and use uppTransactionId instead
acqAuthorizationCode	AN7	Authorisation code returned by the acquirer
maskedCC		Masked credit card number, which can be stored in your system.

2.3.2 Failed / unsuccessful authorisation

errorCode	N7	Error code, please refer to the Technical Implementation Guide for the response code list
errorMessage		Error text
errorDetail		Description of error detail
uppTransactionId	N18	Unique transaction identifier assigned by Datatrans
acqErrorCode	AN7	Error code returned by the acquirer

3 XML sample messages

Please find additional samples scripts on www.datatrans.ch/showcase.

3.1 Authorisation request

```
<?xml version="1.0" encoding="UTF-8" ?>
<authorizationService version="3">
  <body merchantId="1000011011">
    <transaction refno="1234987">
      <request>
        <amount>1000</amount>
        <currency>CHF</currency>
        <aliasCC>70323122544331174</aliasCC>
        <expm>12</expm>
        <expy>18</expy>
        <uppCustomerDetails>
          <uppCustomerIpAddress>192.168.100.13</uppCustomerIpAddress>
        </uppCustomerDetails>
        <sign>30916165706580013</sign>
      </request>
    </transaction>
  </body>
</authorizationService>
```


3.1.1 Response successful Authorisation

```
<?xml version="1.0" encoding="UTF-8"?>
<authorizationService version="2">
  <body merchantId="1000011011" status="accepted">
    <transaction refno="1234987" trxStatus="response">
      <request>
        <amount>1000</amount>
        <currency>CHF</currency>
        <aliasCC>70323122544331174</aliasCC>
        <expm>12</expm>
        <expy>15</expy>
        <uppCustomerDetails>
          <uppCustomerIpAddress>192.168.100.13</uppCustomerIpAddress>
        </uppCustomerDetails>
        <sign>30916165706580013</sign>
        <reqtype>NOA</reqtype>
      </request>
      <response>
        <responseCode>01</responseCode>
        <responseMessage>Authorized</responseMessage>
        <uppTransactionId>140813153050582536</uppTransactionId>
        <authorizationCode>950672542</authorizationCode>
        <acqAuthorizationCode>153050</acqAuthorizationCode>
        <maskedCC>375811xxxx1115</maskedCC>
      </response>
    </transaction>
  </body>
</authorizationService>
```

3.1.2 Response failed / Unsuccessful Authorization

```
<?xml version="1.0" encoding="UTF-8"?>
<authorizationService version="2">
  <body merchantId="1000011011" status="accepted">
    <transaction refno="1234987" trxStatus="error">
      <request>
        <amount>9500</amount>
        <currency>CHF</currency>
        <aliasCC>70323122544331174</aliasCC>
        <expm>12</expm>
        <expy>15</expy>
        <uppCustomerDetails>
          <uppCustomerIpAddress>192.168.100.13</uppCustomerIpAddress>
        </uppCustomerDetails>
        <sign>30916165706580013</sign>
        <reqtype>NOA</reqtype>
      </request>
      <error>
        <errorCode>1403</errorCode>
        <errorMessage>declined</errorMessage>
        <errorDetail>Declined</errorDetail>
        <uppTransactionId>140813155837703945</uppTransactionId>
        <acqErrorCode>50</acqErrorCode>
      </error>
    </transaction>
  </body>
</authorizationService>
```