

A decorative graphic spanning the width of the page, featuring a blue wave-like shape with a pixelated, mosaic-like texture in shades of blue and white.

Technical Reference EVO Gateway

Reverse

June 28, 2021

Changes in contrast to the previous document version

Chapter no.	Key word	Content of change	Author (initials)	Date
All		New document	CE	06/28/2021

About this document

Document Purpose

The purpose of this document is to describe the Reverse API Operation to enable merchant developers to integrate their webpages with the EVO Gateway. Refer to the **Technical Reference EVO Gateway – API Operations Overview** for how this API Operation is used in the merchant processes.

The EVO Gateway caters for immediate reversal of a purchase, i.e. undoing a purchase, that may have been made in error. The reverse transaction will be for the full amount only.

Reverses can only be performed on transactions with the status of Capture that have not been settled, where the transaction date equal to the current day, the transaction time $\leq 23:59:59$, and there are no associated Refund (partial or full) transactions. Therefore, late applications for reverses may be declined and so a Refund API Call would be necessary.

➔ Reverses are also known as Void of Purchases or Undo() transactions.

Explanation of role-related terms

Three main roles exist in the complex scenario of payment processing. Depending on the perspective and situation at hand, two of these can act as customers, or two of them as service providers. To enable a clear distinction, systematic use will be made of the following terms:

Merchant or Client

Uses, in its capacity as merchant or services provider, the products of EVO Payments to settle payments for the goods or services it offers. Is the contract partner and thus the direct “customer” of EVO Payments.

Customer or end customer

Customers who purchase goods from the merchant or services from the service provider; are contractual partners of the merchant / service partner and not of EVO Payments.

EVO Payments

EVO Payments provides services connected with payment processing and acts as the link between the parties, especially the merchant / service provider and other establishments such as card organizations and other institutions involved in the processing of payments.

Terms in the EVO Payments XML language

All terms belonging to the EVO Payments XML language are displayed in “Consolas” font in this document (e. g. **additionalDetails**). If such XML terms are separated by line breaks, they do not have a hyphen, as this might lead to misunderstandings in the spelling of the programming terms. Thus, if an XML term is separated by a line break in this document, the line break must be ignored when programming.

Example:

Text in this document text in this document text in this document text in **additionalDetails** document text in this document text in this Dokument Text in ...

Text when programming: **additionalDetails**

Note bulleting conventions

Two forms of note bulleting are used in this document:

- > Notes providing useful (but not absolutely vital) information:

➡ Please note ...

- > Notes that must be observed under all circumstances to avoid the risk of functional problems:

! It is imperative that ...

Table of Contents

1.	Session Token API Operation	6
1.1	Session Token Request.....	6
1.2	Session Token Response – Processed	7
1.3	Session Token Response – Not Processed	8
2.	Reverse API Operation	9
2.1	Reverse Request.....	9
2.2	Reverse Response – Processed	9
2.3	Reverse Response – Not Processed	11

All statements made in this document refer to the production date of this document. All statements may be subject to changes and amendments. This document may not be reproduced or distributed without our prior written permission.

Copyright © 2021 EVO Payments International GmbH. All rights reserved.

1. Session Token API Operation

1.1 Session Token Request

Format: POST Request to Session Token Request URL (see section 3 of the **Technical Reference EVO Gateway – API Operations Overview**)

Parameter	Data Type	Field length	Man-datory	Comment
merchantId	Integer	18	Yes	The identifier for the merchant in the EVO Gateway provided at on-boarding
password	String	64	Yes	The merchant's password to the EVO Gateway provided at on-boarding
action	String	(enum)	Yes	Must be REVERSE
timestamp	Integer	18	Yes	Milliseconds since 1970-01-01 00:00:00
allowOriginUrl	String	253	Yes	The merchant's URL that will make the Reverse Request (section 2.1) Cross-Origin Resource Sharing (CORS) headers will allow only this origin.
originalTxId	Integer	18	No	The EVO Gateway transaction ID of the transaction to be reversed This will have been returned in the txId field of the Auth / Purchase Response – Processed (see Technical Reference EVO Gateway – Auth / Purchase / Verify (Direct API Integration) or Technical Reference EVO Gateway – Auth / Purchase / Verify (Hosted Payment Page Integration) , as appropriate to the integration method).
originalMerchantTxId	String	50	Yes	The merchant's original transaction identifier of the transaction to be reversed, that was provided in the merchantTxId field of the Auth / Purchase Session Token Request and Auth / Purchase Request (see Technical Reference EVO Gateway – Auth / Purchase / Verify (Direct API Integration) or Technical Reference EVO Gateway – Auth / Purchase / Verify (Hosted Payment Page Integration) , as appropriate to the integration method)

Parameter	Data Type	Field length	Man-datory	Comment
agentId	String	18	No	Identifier of the merchant's operator or agent on behalf of the end customer, if the operation is not performed by the merchant, and the merchant wants to track the operator who performed the transaction Note: This is not the same as the operatorId or userAgent fields of the Auth / Purchase Session Token Request and Auth / Purchase / Verify Request (Technical Reference EVO Gateway – Auth / Purchase / Verify (Direct API Integration) or Technical Reference EVO Gateway – Auth / Purchase / Verify (Hosted Payment Page Integration), as appropriate to the integration method)
reverseComment	String	500	No	Free text field that allows a comment to be attached to the transaction record in the EVO Gateway

Example

```
action=REVERSE&merchantId=167738&password=WcuQNsptvvd2ftu5MMhU&originalMerchantTxId=84Yf5i028qFr3og8rWTo&timestamp=1555494136820&allowOriginUrl=http://localhost:8083&originalTxId=11622150
```

1.2 Session Token Response – Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	(enum)	Will always be success
merchantId	Integer	18	The merchantId value received in the Session Token Request (section 1.1)
token	String	40	The Session Token that is a one-time use, hexadecimal string The Session Token that must only be used for the Reverse Request (see section 2.1) Session tokens are valid for 3600 seconds (1 hour) after which they expire. Any requests with expired session tokens will be rejected.
resultId	String	40	Hexadecimal string that is to be used in any support request calls

Parameter	Data Type	Field length	Comment
processingTime	Integer	6	The time in seconds for the process to complete
additionalDetails	Array		Not used – will always be "{}" or not included

Example

```
{
  "result": "success",
  "resultId": "85034083-22dd-49ff-9906-495098c42501",
  "merchantId": "167738",
  "additionalDetails": {},
  "processingTime": 33,
  "token": "72102985-5a92-4cde-a51b-9459d37d97a9"
}
```

1.3 Session Token Response – Not Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	40	Will always be failure
errors	String Array		List of issues
processingTime	Integer	18	The time in seconds for the process to complete
resultId	String	40	Hexadecimal string that is to be used in any support request calls
additionalDetails	Array		Not used – will always be "{}" or not included

Example

```
{
  "result": "failure",
  "resultId": "99392fc1-bcd9-4fb0-8838-7dc37256cb51",
  "additionalDetails": {},
  "errors": [
    { "messageCode": "This field is required in [REQUEST]", "fieldName": "password" }
  ],
  "processingTime": 4
}
```


2. Reverse API Operation

2.1 Reverse Request

Format: POST Request to Action Request URL (see section 3 of the **Technical Reference EVO Gateway – API Operations Overview**)

Parameter	Data Type	Field length	Man-datory	Comment
merchantId	Integer	18	Yes	The identifier for the merchant in the EVO Gateway provided at on-boarding This must be the same as that sent in the Session Token Request (section 1.1)
token	String	40	Yes	Session Token received in the Session Token Response – Processed (section 1.2)

Example

merchantId=167738&token=01f58c37-e3a2-43e2-b0d7-a03da130114e

2.2 Reverse Response – Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	40	Will always be success
merchantId	Integer	18	The merchantId value sent in the Session Token Request (section 1.1)
action	String	(enum)	Will always be REVERSE
originalMerchantTxId	String	50	The merchant transaction identifier of the transaction that was reversed
originalTxId	Integer	18	The EVO Gateway transaction ID of the transaction reversed sent in the Session Token Request (section 1.1)
amount	BigDecimal (15.2 or 15.3)		The transaction amount reversed sent in the Session Token Request (section 1.1)
currency	String	(enum)	The transaction ISO alpha-3 currency code, as defined in the ISO 4217 standard, used in the original and reverse transactions
customerId	String	20	The EVO Gateway customer identifier used in the original and reverse transactions
pan	String	100	The customer account value / number used in the original and the reverse transactions For payment card transactions, this is the EVO Gateway Card Token.

Parameter	Data Type	Field length	Comment						
brandId	Integer	18	The brandId value for the original and the reverse transaction						
paymentSolutionId	Integer	18	The paymentSolutionId value used in the original and reverse transactions						
Status	String	(enum)	<div>The status of the transaction in EVO Gateway:<table><tr><th>Status</th><th>Condition</th></tr><tr><td>REVERSED</td><td>If REVERSE successful</td></tr><tr><td>ERROR</td><td>If an error was returned by the payment process</td></tr></table></div>	Status	Condition	REVERSED	If REVERSE successful	ERROR	If an error was returned by the payment process
Status	Condition								
REVERSED	If REVERSE successful								
ERROR	If an error was returned by the payment process								
errors	String	400	Any errors that occurred during the successful processing of a transaction						
resultId	String	40	Hexadecimal string that is to be used in any support request calls						
processingTime	Integer	6	The time in seconds for the process to complete						
additionalDetails	Array		Not used – will always be “{ }” or not included						
customParameter10r ... customParameter200r	String	50	The original 20 free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation						
customParameter1 ... customParameter20	String	50	20 free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation, with non-Basic Latin characters replaced by a space character These values will have been sent for payment processing.						

Example

```
{
  "amount": "163",
  "resultId": "4fd9f223-bb1a-4879-a6e6-81a10b53bdca",
  "originalMerchantTxId": "Yn5ufTMdNXwe9bYyrNay",
  "additionalDetails": {},
  "processingTime": 948,
  "result": "success",
  "merchantId": "167738",
  "brandId": "1677380000",
  "customerId": "zw72ejcNN10L1Vy2zlwn",
  "action": "REVERSE",
  "paymentSolutionId": "500",
  "currency": "USD",
  "pan": "8746507628231111",
  "originalTxId": "11622153",
  "status": "REVERSED"
}
```

2.3 Reverse Response – Not Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	40	Will always be failure
txId	Integer	18	The unique identifier for the reverse transaction attempt in the EVO Gateway
errors	String Array		List of errors
resultId	String	40	Hexadecimal string that is to be used in any support request calls
processingTime	Integer	6	The time in seconds for the process to complete
customParameter10r ... customParameter200r	String	50	The original 20 free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation
customParameter1 ... customParameter20	String	50	20 free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation, with non-Basic Latin characters replaced by a space character These values will have been sent for payment processing.

Example

```
{
  "result": "failure",
  "resultId": "308802f2-224d-44f5-b256-8d9443a72770",
  "additionalDetails": {},
  "errors": [
    { "messageCode": "This field is required in [TOKEN]", "fieldName": "amount"
  }
  ],
  "processingTime": 173
}
```