

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

Tokenize

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 Tokenize 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 Tokenize API Operation provides a hexadecimal string to the merchant, that represents the customer's payment card in the EVO Gateway. The card details are stored in a PCI Level 1 compliant environment, in which the card details are encrypted. The Card Token is used in all operations, except the Tokenize API Operation.

The Card Token is the only card identifier accepted as an input when a payment operation takes place.

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 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 ...

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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 TOKENIZE
timestamp	Integer	13	Yes	Milliseconds since 1970-01-01 00:00:00
allowOriginUrl	String	253	Yes	The merchant's URL that will make the Tokenize Request (section 2.1) Cross-Origin Resource Sharing (CORS) headers will allow only this origin.
customerId	String	20	No	Customer identifier in merchant system. If the parameter is omitted or no value is provided, the EVO Gateway will generate a value, which will be returned in the Session Token Response – Processed (see section 1.2). The received or generated value is stored against the card token.
cardDescription	String	50	No	Free form text field for the merchant's use that is used for reconciliation, e.g. merchant's internal card's sequence ID

Example

```
merchantId=111111&password=klw74U6yt40mNo&action=TO-  
KENIZE&timestamp=1459767453376&allowOriginUrl=www.merchantsite.com&custom-  
erId=CUST1234&cardDescription=Customer ID 123456
```

1.2 Session Token Response – Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	40	Will always be success
merchantId	Integer	18	The merchantId value received in the Session Token Request (see section 1.1)

Parameter	Data Type	Field length	Comment
token	String	40	The Session Token that is a one-time use, hexadecimal string The Session Token that must only be used for the Tokenize Request (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
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": "f52cc38a-7815-4f8c-8687-662cc63d56e9",
  "merchantId": "890490",
  "additionalDetails": {},
  "processingTime": 0,
  "token": "96b7d82e-349f-4880-9b8a-928636437c75"
}
```

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
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

Example

```
{
  "result": "failure",
  "resultId": "bb248d1d-d657-4dbe-9f04-a279b384872c",
  "additionalDetails": {},
  "errors": [
    {
      "messageCode": "This field is required in [REQUEST]",
      "fieldName": "password"
    }
  ]
}
```

```
],  
"processingTime": 2  
}
```


2. Tokenize API operation

2.1 Tokenize 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)
number	String	100	Yes	The payment card number, primary account number (PAN), or simply a card number for the payment card being tokenized The card number must be a single string of numbers, with no spaces, dashes or other characters.
nameOnCard	String	150	Yes	Cardholder name as written on the payment card
expiryMonth	String	2	Yes	Card expiration month as a number, e.g. 04
expiryYear	String	4	Yes	Card expiration year as a number, e.g. 2020
cardDescription	String	50	No	Free form text field for the merchant's use that is used for reconciliation, e.g. merchant's internal card's sequence ID
startMonth	String	2	C	Card issued month as a number, e.g. 04 Condition: Only used for some card types Required for: Maestro; Optional for all other cards
startYear	String	4	C	Card issued year as a number, e.g. 2014 Condition: Only used for some card types Required for: Maestro; Optional for all other cards

Parameter	Data Type	Field length	Man-datory	Comment
issueNumber	String	2	C	Card issue number Condition: Only used for some card types Required for: Maestro; Optional for all other cards

Example

```
merchantId=111111&token=abcde12345abcde12345&number=4111111111111111&nameOn-Card=NAME+OF+CARD+OWNER&expiryMonth=04&expiryYear=2020&cardDescription=Cus-tomer ID 123456
```

2.2 Tokenize Response – Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	40	Will always be success
merchantId	Integer	18	The merchantId value received in the Session Token Request (section 1.1)
cardToken	String	100	The Payment Card Token – hexadecimal string
customerId	String	20	The customerId value from Session Token Request (section 1.1)
cardType	Integer	(enum)	A code defining the payment card type, see Appendix A: Tokenize Response – Processed cardType values
cardIssuer	String	100	The name of the card issuer, determined from the Issuer Identification Number (IIN)
country	String	(enum)	The country in which the payment card was issued, determined from the Issuer Identification Number (IIN) The value is the alpha-2 code from the ISO 3166 standard.
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

Example

```
{
  "result": "success",
  "country": "GB",
  "resultId": "e086f9ad-6a78-4c56-b4e7-059764246811",
  "merchantId": "890490",
```

```
"cardType": "400",
"customerId": "testTokenize",
"additionalDetails": {},
"cardToken": "5512732598811111",
"processingTime": 1000,
"cardIssuer": null
}
```

2.3 Tokenize Response – Not Processed

Format: JSON

Parameter	Data Type	Field length	Comment
result	String	40	Will always be failure
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
additionalDetails	Array		Not used – will always be {} or not included

Example

```
{
  "result": "failure",
  "resultId": "4e879e03-9ff1-481e-9611-b5155328a53f",
  "additionalDetails": {},
  "errors": [
    {
      "messageCode": "This field is required in [REQUEST]",
      "fieldName": "number"
    }
  ],
  "processingTime": 8
}
```

Appendix A: Tokenize Response – Processed cardType values

Value	Card Type Description
100	Maestro
200	MasterCard Credit
300	MasterCard Debit
400	Visa Credit
500	Visa Debit
600	Visa Electron
700	American Express
6100	EntroPay
900	Diners
8100	JCB
4100	Solo
4200	Laser
1000	NCP B2B
1100	NCP SEASON