IPG Gateway

REFUND v 4.0 April 10, 2020

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Document Purpose

The purpose of this document is to describe the REFUND API Operation to enable merchant developers to integrate their webpages with the BOIPA Gateway. Refer to the *BOIPA Gateway – 0 – Overview* document for how this API Operation is used in the merchant processes.

The IPG Gateway caters for full or partial refunds. More than one refund can be performed on a single transaction. However, the refund amounts cannot exceed the original transaction amount.

Refunds can only be performed on transactions with the status of CAPTURED.

1   Session Token API Operation

1.1 Session Token Request

1.1.1   Format

POST Request to Session Token Request URL (see Section 3 of the *BOIPA Gateway – 0 – Overview* document)

1.1.2   Definition

Parameter	Data Type	Mandatory	Description
merchantId	Integer (18)	Y	The identifier for the merchant in the IPG Gateway provided at on-boarding
password	String (64)	Y	The merchant's password to the IPG Gateway provided at on-boarding
action	String (enum)	Y	Must be "REFUND"
timestamp	Integer (18)	Y	Milliseconds since 1970-01-01 00:00:00
allowOriginUrl	String (253)	Y	The merchant's URL that will make the Refund Request (section 2.1) Cross-Origin Resource Sharing (CORS) headers will allow only this origin.
originalTxId	Integer (18)	N	The IPG Gateway transaction Id of the transaction to be refunded This will have been returned in the *txId* field of the Auth/Purchase Response – Processed (see *BOIPA Gateway – 2 – AUTH-PURCHASE-VERIFY – Direct API* or *BOIPA Gateway – 2 – AUTH-PURCHASE-VERIFY – Hosted Payment Page*, as appropriate to the integration method)
originalMerchantTxId	String (50)	Y	The merchant's original transaction identifier of the transaction to be refunded, that was provided in the *merchantTxId* field of the Auth/Purchase Session Token Request and Auth/Purchase Request (see *BOIPA Gateway – 2 – AUTH-PURCHASE-VERIFY – Direct API* or *BOIPA Gateway – 2 – AUTH-PURCHASE-VERIFY – Hosted Payment Page*, as appropriate to the integration method)
agentId	String (18)	N	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 (see *BOIPA Gateway – 2 – AUTH-PURCHASE-VERIFY – Direct API* or *BOIPA Gateway – 2 – AUTH-PURCHASE-VERIFY – Hosted Payment Page*, as appropriate to the integration method)
amount	BigDecimal (10.2 or 10.3) BigDecimal (15.2 or 15.3)	Y	The amount to refund Can be less than or equal to the original transaction amount Cannot be more than the original transaction amount
partialRefundComment	String (500)	N	Free text field that allows a comments to be attached to the transaction record in the IPG Gateway

1.1.3   Example

action=REFUND&merchantId=167738&password=WcuQNsptvvd2ftu5MMhU&originalMerchantTxId=84Yf5iO28qFr3
og8rWTo&amount=20&timestamp=1555494136820&allowOriginUrl=http://localhost:8083&originalTxId=11622150

1.2 Session Token Response - Processed

1.2.1 Format

JSON

1.2.2 Definition

Parameter	Data Type	Description
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 Refund Request (see Section 2.1) Session tokens are valid for 3600 second (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

1.2.3 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

1.3.1 Format

JSON

1.3.2 Definition

Parameter	Data Type	Description
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
additionalDetails	Array	Not used – will always be "{}" or not included

1.3.3 Example

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

2   REFUND API Operation

2.1 Refund Request

2.1.1   Format

POST Request to Action Request URL (see Section 3 of the *BOIPA Gateway – 0 – Overview* document)

2.1.2   Definition

Parameter	Data Type	Mandatory	Description
merchantId	Integer (18)	Y	The identifier for the merchant in the IPG Gateway provided at on-boarding This must be the same as that sent in the Session Token Request (section 1.1)
token	String (40)	Y	Session Token received in the Session Token Response - Processed (section 1.2)

2.1.3   Example

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

2.2 Refund Response – Processed

2.2.1   Format

JSON

2.2.2   Definition

Parameter/Label	Data Type	Description
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 "REFUND"
merchantTxId	String (50)	Transaction identifier or Order ID in merchant system. Generated by the IPG Gateway, if not received in the Session Token Request (section 1.1)
originalMerchantTxId	String (50)	The merchant transaction identifier of the transaction that was refunded
originalTxId	Integer (18)	The IPG Gateway transaction Id of the transaction refunded sent in the Session Token Request (section 1.1)
txId	Integer (18)	The unique identifier for the refund transaction in the IPG Gateway
amount	BigDecimal (15.2 or 15.3)	The transaction amount refunded 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 refund transactions
customerId	String (20)	The IPG Gateway customer identifier used in the original and refund transactions
pan	String (100)	The customer account value/number used in the original and the refund transactions. For payment card transactions this is the IPG Gateway Card Token.
brandId	Integer (18)	The *brandId* value for the original and the refund transaction
paymentSolutionId	Integer (18)	The *paymentSolutionId* value used in the original and refund transactions
Status	String (enum)	The status of the transaction in IPG Gateway: <table><tr><td>Status</td><td>Condition</td></tr><tr><td>SET_FOR_REFUND</td><td>If "REFUND" successful</td></tr><tr><td>ERROR</td><td>If an error was returned by the payment process</td></tr></table>

Parameter/Label	Data Type	Description
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
processingTime	Integer (6)	The time in seconds for the process to complete
customParameter1Or … customParameter20Or	String (50)	The original 20x (50 character) free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation
customParameter1 … customParameter20	String (50)	The 20x (50 character) free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation with the non-Basic Latin characters replaced by a space character. These values will have been sent for payment processing.

2.2.3 Example

```
{
        "amount": "163",
        "resultId": "4fd9f223-bb1a-4879-a6e6-81a10b53bdca",
        "originalMerchantTxId": "Yn5ufTMdNXwe9bYyrNay",
        "txId": "11622786",
        "additionalDetails": {},
        "processingTime": 948,
        "result": "success",
        "merchantId": "167738",
        "brandId": "1677380000",
        "merchantTxId": "lCLe3ImCEPKObYFMdD35",
        "customerId": "zw72ejcNN1OL1Vy2zlnw",
        "action": "REFUND",
        "paymentSolutionId": "500",
        "currency": "USD",
        "pan": "8746507628231111",
        "originalTxId": "11622153",
        "status": "SET_FOR_REFUND"
}
```

2.3 Refund Response – Not Processed

2.3.1 Format

JSON

2.3.2 Definition

Parameter	Data Type	Description
result	String (40)	Will always be "failure"
txId	Integer (18)	The unique identifier for the refund transaction attempt in the IPG 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
customParameter1Or … customParameter20Or	String (50)	The original 20x (50 character) free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation
customParameter1 … customParameter20	String (50)	The 20x (50 character) free text fields provided by the merchant in the Session Token Request of the Auth/Purchase/Verify API Operation with the non-Basic Latin characters replaced by a space character. These values will have been sent for payment processing.

2.3.3 Example

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