


Behpardakht Mellat Co

Behpardakht Payment Gateway


User Guide: How to integrate with Behpardakht Payment Gateway

Revision: 1.8

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1. Introduction

Behpardakht Payment Gateway enables internet merchants to accept online payments via cards accepted by Shetab network. Behpardakht Payment Gateway provides secure and simple means of authorizing Shetab card transactions and takes complete responsibility for the online transaction, including the collection of card details.

Behpardakht Payment Gateway uses web service technology over SSL secure link to expose payment services to merchants. This use the basic web services platform for transferring data in XML + HTTPS.

The advantage of using Web Services for publishing payment services is that Web Services are found and used through the web and merchants can use an ecommerce engine with any programming language to integrate with it. Behpardakht has provided sample clients for main programming language to make it easy for merchants to have online payment in their websites.


1.1 Scope

This document explains how your website should communicate Mellat Bank Payment Gateway, goes on to explain how to integrate with our live environments, and contains the complete Payment Protocol.

2. Method description in payment flow

2.1 Prerequisites

- IP addresses of Merchant host should be officially informed to Mellat Bank to give privilege to access payment gateway services.
- Merchants should make sure to have port 443 and 80 open in their host.

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2.2 How to use Web Service

WSDL (Web Services Description Language) is an XML-based language for describing Web services and how to access them. Mellat Bank Payment Gateway WSDL is accessible with the following links.


Operational Server:

<https://bpm.shaparak.ir/pgwchannel/services/pgw?wsdl>

2.3 Methods Parameter

Parameters which merchant should pass in calling methods or getting them back in return are as following:

1. **terminalId**: Merchant terminal number
2. **userName**: Merchant terminal username
3. **userPassword**: Merchant terminal password
4. **amount**: Transaction amount
5. **localDate**: Merchant local date
6. **localTime**: Merchant local time
7. **additionalData**: Some Additional data to keep for this transaction
8. **callbackUrl**: Callback URL of merchant which the customer will be redirected back after payment accomplished.
9. **payerId**: Merchant Payer ID
10. **orderId**: Merchant should provide a number for each new payment transaction too keep track of final payment status. This number must be unique in calling bpPayRequest and bpRefundRequest.

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11. **saleOrderId**: To distinguish between method calls, merchant can send a unique orderId in consequence method calls after bpPayRequest or bpRefundRequest.

12. **saleReferenceId**: This is a unique number generated for successful sales by Mellat Bank Payment Gateway and must be used as main transaction identifier in consequence method calls.

☑ Note: All parameter names are case-sensitive

2.4 Methods Description

Mellat Bank Payment Gateway publishes 8 methods, which the first 3 ones are building the core elements of online payment flow and the remained 5 methods will be handy in special cases.


2.4.1 bpPayRequest method

This method is called by merchant to initial a payment transaction. In this step, terminal and transaction validity will be controlled and if terminal is authorize by the Mellat Bank Payment Gateway, a unique encrypted hash reference number will be generated and sent back in return which Merchant site should use it to redirect customer to Mellat Bank Payment Gateway site.

This method will return a string as a result which in case of an error, it will include relevant response code, otherwise it will include a zero as approved response code plus a second part which will be the encrypted hash reference number.

Example: 0, AF82041a2Bf6989c7fF9

- The two values are comma separated.
- The first part is the response code (for more information, see table 10)
- The second part is an encrypted hash reference number which should be post to Mellat Bank Payment Gateway when redirecting customer to.

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The URL which the encrypted hash reference number should be posted to is as following:

Persian PGW:

<https://bpm.shaparak.ir/pgwchannel/startpay.mellat>


English PGW:

<https://bpm.shaparak.ir/pgwchannel/enstartpay.mellat>

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderId	10	Order Identifier	long
5	amount	1	Order Amount	long
6	localDate	"20101008"	Merchant Local Date	string
7	localTime	"102003"	Merchant Local Time	string
8	additionalData	"Have 3 items in basket"	Any text with 1000 characters limit	string
9	callbackUrl	"http://www.mysite.com/myfolder/callbackmellat.aspx"	The Merchant URL which customer will be redirected to at the end.	string
10	payerId	0	Payer Identifier	long

Table1: bpPayRequest Input parameters description

- ☑ Note: Order Id should be unique in each pay request call.
- ☑ Note: Use your site domain address instead of IP address in callbackUrl. The callback URL MUST be in your website domain.
- ☑ Note: encrypted hash reference number value is case-sensitive.
- ☑ Note: Merchants who have payer Id in theirs bank account, can pass the correct value in pay request call, otherwise, you must pass "0" as default value.

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☑ Note: Merchants, who want to show additional data in payment gateway such as description of the item being sold, can send a parameter named “**CartItem**” in their POST body.

☑ Note: Merchants are able to pass “**mobileNo**” parameter while they are redirecting cardholders to IPG and let them save their PANs associated with their mobile number if they have any willing.

2.4.2 bpDynamicPayRequest method

This method is called by merchant to perform a dynamic sale which allows him/her to identify the account wishes to be settled with. The details are similar with bpPayRequest method plus an additional field to identify the specific account set to be settled with. The response would be also same as the bpPayRequest response and cardholder should be redirected to the same URL address in case the response is approved.

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	“User”	Merchant Username	string
3	userPassword	“*****”	Merchant Password	string
4	orderId	10	Order Identifier	long
5	amount	1	Order Amount	long
6	localDate	“20101008”	Merchant Local Date	string
7	localTime	“102003”	Merchant Local Time	string
8	additionalData	“Have 3 items in basket”	Any text with 1000 characters limit	string
9	callbackUrl	“http://www.mysite.com/myfolder/callbackmellat.aspx”	The Merchant URL which customer will be redirected to at the end.	string
10	payerId	0	Payer Identifier	long
11	subServiceId	5588	Account set Id to be settled with	long

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2.4.3 bpCumulativeDynamicPayRequest method

This method is called by merchant to identify the detail of payment in terms of the amount and the accounts the merchant wishes to be settled with. The details are similar with bpPayRequest method plus an additional field to identify the accounts and the corresponded amount to be settled with. The response would be also same as the bpPayRequest response and cardholder should be redirected to the same URL address in case the response is approved.

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
1	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderId	10	Order Identifier	long
5	amount	1	Order Amount	long
6	localDate	"20101008"	Merchant Local Date	string
7	localTime	"102003"	Merchant Local Time	string
8	additionalData	"88,140000,108;74,12000,;"	A string includes 10 account_Id and correspond amount and payer_Id in maximum which are separated with ";". The detail of each set are separated with ",".	string
9	callbackUrl	"http://www.mysite.com/myfolder/callbackmellat.aspx"	The Merchant URL which customer will be redirected to at the end.	string

2.4.4 bpVerifyRequest method

When card holder made payment transaction in Mellat Bank Payment Gateway site, some information including ResCode and SaleReferenceld will be posted back to

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merchant and then merchant should confirm payment transaction by calling bpVerifyRequest method and passing the following parameters to:

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderId	11	Order Identifier	long
5	saleOrderId	10	orderId of pay request (Original Order identifier)	long
6	saleReferenceId	5142510	saleReferenceId returned in pay request	long

Table2: bpVerifyRequest Input parameters description


☑ Note: The Return Value of this method call will be a string which shows the verify request result (See table 10 for the list of response codes).

☑ Note: Merchants should display the right message in their site according to returned *ResCode*.

☑ Note: If Merchant doesn't verify payment transaction after 20 minutes, the payment transaction will be reversed automatically by Mellat Bank Payment Gateway and the money will be charged back to card holder.

2.4.5 bpSettleRequest method

Merchant can settle payment transactions which already were verified successfully at any time by calling bpSettleRequest an passing the following parameters:

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Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderId	12	Order Identifier	long
5	saleOrderId	10	orderId of pay request (Original Order identifier)	long
6	saleReferenceId	5142510	saleReferenceId returned in pay request	long

Table3: bpSettleRequest Input parameters description

☑ Note: The Return Value of this method call will be a string which shows the settle request result (See table 10 for the list of response codes).


☑ Note: Merchants should call settle request method to release the payment transaction and transfer payment amount to their bank account.

2.4.6 bpInquiryRequest method

Merchant can get status of verify request (sale and it's verify) at any time by calling bpInquiryRequest method and passing the following parameters to:

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderId	13	Order Identifier	long
5	saleOrderId	10	orderId of pay request (Original Order identifier)	long
6	saleReferenceId	5142510	saleReferenceId returned in pay request	long

Table4: bpInquiryRequest Input parameters description

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☑ Note: The Return Value of this method call will be a string which shows the inquiry request result (See table 10 for the list of response codes).

☑ Note: Merchants should just call this method when it is not aware of verify request for any reason.

2.4.7 bpReversalRequest method


If Merchants decided not to deliver products or services to card holders till current working day, they can cancel the payment transaction and charge back the cardholder with the order amount by calling bpReversalRequest method and passing the following parameters:

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	*****	Merchant Password	string
4	orderId	14	Order Identifier	long
5	saleOrderId	10	orderId of pay request (Original Order identifier)	long
6	saleReferenceId	5142510	saleReferenceId returned in pay request	long

Table5: bpReversalRequest Input parameters description

☑ Note: The Return Value of this method call will be a string which shows the reversal request result (See table 10 for the list of response codes).

☑ Note: Merchants can just reverse not settled payment transaction till 2 hours after the pay transaction by calling reversal request method.

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2.4.8 bpRefundRequest method

In some cases, the merchant needs to pay back the whole or some part of the transaction money to the card holder after completing the transaction. In this situation, bpReversalRequest method could not be called because the transaction has been already settled. In such cases, bpRefundRequest method should be called by merchant.

☑ Note: Before trying this method, please make sure the transaction has been settled properly.


☑ Note: In case, you are facing a timeout situation or receiving a not-approved response code, please inquiry the refund transaction status before retry the refund request.

☑ Note: You may call bpRefundRequest for one sale transaction more than once as long as the total amount of all refund requests does not exceeding the amount of original sale.

The input parameters for this method are as following:

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderId	14	Order Identifier	long
5	saleOrderId	10	orderId of pay request (Original Order identifier)	long
6	saleReferenceId	5142510	The ReferenceId of original sale transaction	long
7	RefundAmount	10000	The amount should be refunded (could be equal or below of the original transaction amount)	long

2.4.9 bpPOSRefundRequest method

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In some cases, the merchant needs to pay back the whole or some part of the transaction money from POS devices to the card holder after completing the transaction. In this situation, bpReversalRequest method could not be called because the transaction has been already settled. In such cases, bpPOSRefundRequest method should be called by merchant.

☑ Note: Before trying this method, please make sure the transaction has been settled properly.

☑ Note: In case, you are facing a timeout situation or receiving a not-approved response code, please inquiry the refund transaction status before retry the refund request.

☑ Note: You may call bpPOSRefundRequest for one sale transaction more than once as long as the total amount of all refund requests does not exceeding the amount of original sale.


The input parameters for this method are as following:

Row	Parameter Name	Example	Description	Type
1	terminalId	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	saleReferenceId	5142510	The ReferenceId of original sale transaction	long
5	RefundAmount	10000	The amount should be refunded (could be equal or below of the original transaction amount)	long

2.5 Return Parameter

The following parameters posted back to merchant call back URL after payment transaction by Mellat Bank Payment Gateway:

Row	Parameter Name	Example	Description	Type
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1	RefId	AF82041a2Bf689c7fF9	Merchant Terminal Identifier	string
2	ResCode	0	Merchant Username	string
3	SaleOrderId	<u>10</u>	orderId of pay request (Original Order identifier)	string
4	SaleReferenceId	<u>5142510</u>	Sale reference Id	long
5	CardHolderInfo	C9086F2AACF739F7D 50ACC9FDC60C53E81 0FB9135723D256732C E4D1E2E409F7	Encrypted information of card holder (One way encrypted PAN)	string

Table9: Return parameters posted to merchant callback URL

2.6 Response code descriptions

Response Code	Description	Action Po
0	Transaction Approved	
11	Invalid Card Number	
12	No Sufficient Funds	In Refund transaction, it may causes by merchant's insufficient credit. To top up your credit please contact BPM.
13	Incorrect Pin	
14	Allowable Number Of Pin Tries Exceeded	
15	Card Not Effective	
16	Exceeds Withdrawal Frequency Limit	
17	Customer Cancellation	
18	Expired Card	
19	Exceeds Withdrawal Amount Limit	In Refund transaction, it may causes by exceeding the requested refunds amounts from the original amount.
111	No Such Issuer	
112	Card Switch Internal Error	
113	Issuer Or Switch Is Inoperative	
114	Transaction Not Permitted To Card Holder	
21	Invalid Merchant	This service is probably inactive for you. Please contact BPM.
23	Security Violation	
24	Invalid User Or Password	
25	Invalid Amount	
31	Invalid Response	
32	Format Error	

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33	No Investment Account	
34	System Internal Error	
35	Invalid Business Date	
41	Duplicate Order Id	
42	Sale Transaction Not Found	In Refund transaction, it means there is no associated successful sale transaction for the input RRN.
43	Duplicate Verify	
44	Verify Transaction Not Found	
45	Transaction Has Been Settled	The settlement process has already been done. Consider the transaction successful.
46	Transaction Has Not Been Settled	
47	Settle Transaction Not Found	
48	Transaction Has Been Reversed	This transaction has already been reversed by merchant's request or automatically (refer to Auto Reversal Policies).
49	Refund Transaction Not Found	
412	Bill Digit Incorrect	
413	Payment Digit Incorrect	
414	Bill Organization Not Valid	
415	Session Timeout	
416	Data Access Exception	
417	Payer Id Is Invalid	
418	Customer Not Found	
419	Try Count Exceeded	
421	Invalid IP	The IP of merchant's server has not been announced to BPM in advance. Please contact BPM.
51	Duplicate Transmission	
54	Original Transaction Not Found	
55	Invalid Transaction	
61	Error In Settle	

Table 10: Response code description