

Behpardakht Mellat Co

Mellat Bank Payment Gateway

User Guide: How to integrate with Mellat Bank Payment Gateway

Revision: 1.0

Index

1.1 Scope 2. Method description in payment flow 2.1 Prerequisites 2.2 How to use Web Service 2.3 Methods Parameter 2.4 Methods Description 2.4.1 bpPayRequest method 2.4.2 bpVerifyRequest method 2.4.3 bpSettleRequest method 2.4.4 bpInquiryRequest method 2.4.5 bpReversalRequest method 2.4.6 bpRefundRequest method 2.4.7 bpRefundVerifyRequest method 2.4.8 bpRefundInquiryRequest method 2.4.8 bpRefundInquiryRequest method 2.5 Return Parameter 2.6 Response code descriptions	1.	Introduction	2
2. Method description in payment flow 2.1 Prerequisites 2.2 How to use Web Service 2.3 Methods Parameter 2.4 Methods Description 2.4.1 bpPayRequest method 2.4.2 bpVerifyRequest method 2.4.3 bpSettleRequest method 2.4.4 bpInquiryRequest method 2.4.5 bpReversalRequest method 2.4.6 bpRefundRequest method 2.4.7 bpRefundVerifyRequest method 2.4.8 bpRefundInquiryRequest method 2.4.8 bpRefundInquiryRequest method 2.5 Return Parameter	1.1	Scope	2
2.1Prerequisites2.2How to use Web Service2.3Methods Parameter2.4Methods Description2.4.1bpPayRequest method2.4.2bpVerifyRequest method2.4.3bpSettleRequest method2.4.4bpInquiryRequest method2.4.5bpReversalRequest method2.4.6bpRefundRequest method2.4.7bpRefundVerifyRequest method2.4.8bpRefundInquiryRequest method2.5Return Parameter	2.		
2.2 How to use Web Service 2.3 Methods Parameter 2.4 Methods Description 2.4.1 bpPayRequest method 2.4.2 bpVerifyRequest method 2.4.3 bpSettleRequest method 2.4.4 bpInquiryRequest method 2.4.5 bpReversalRequest method 2.4.6 bpRefundRequest method 2.4.7 bpRefundVerifyRequest method 2.4.8 bpRefundInquiryRequest method 2.4.8 bpRefundInquiryRequest method 2.5 Return Parameter	2.1	Prerequisites	2
2.4Methods Description2.4.1bpPayRequest method2.4.2bpVerifyRequest method2.4.3bpSettleRequest method2.4.4bpInquiryRequest method2.4.5bpReversalRequest method2.4.6bpRefundRequest method2.4.7bpRefundVerifyRequest method2.4.8bpRefundInquiryRequest method2.5Return Parameter	2.2		
2.4Methods Description2.4.1bpPayRequest method2.4.2bpVerifyRequest method2.4.3bpSettleRequest method2.4.4bpInquiryRequest method2.4.5bpReversalRequest method2.4.6bpRefundRequest method2.4.7bpRefundVerifyRequest method2.4.8bpRefundInquiryRequest method2.5Return Parameter	2.3	Methods Parameter	3
2.4.2 bpVerifyRequest method 2.4.3 bpSettleRequest method 2.4.4 bpInquiryRequest method 2.4.5 bpReversalRequest method 2.4.6 bpRefundRequest method 2.4.7 bpRefundVerifyRequest method 2.4.8 bpRefundInquiryRequest method 2.5 Return Parameter	2.4		
2.4.3 bpSettleRequest method 2.4.4 bpInquiryRequest method 2.4.5 bpReversalRequest method 2.4.6 bpRefundRequest method 2.4.7 bpRefundVerifyRequest method 2.4.8 bpRefundInquiryRequest method 2.5 Return Parameter	2.4.1	bpPayRequest method	4
2.4.4 bpInquiryRequest method	2.4.2	bpVerifyRequest method	6
2.4.5 bpReversalRequest method	2.4.3	bpSettleRequest method	6
2.4.6 bpRefundRequest method	2.4.4	bpInquiryRequest method	7
2.4.7 bpRefundVerifyRequest method	2.4.5	bpReversalRequest method	8
2.4.8 bpRefundInquiryRequest method	2.4.6	bpRefundRequest method	9
2.5 Return Parameter	2.4.7	bpRefundVerifyRequest method	10
	2.4.8	bpRefundInquiryRequest method	10
2.6 Response code descriptions	2.5	Return Parameter	11
	2.6	Response code descriptions	11

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

1. Introduction

Mellat Bank Payment Gateway enables internet merchants to accept online payments via cards accepted by Shetab network. Mellat Bank 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.

Mellat Bank 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.

Page 2 © Behpardakht Mellat Co	
--------------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	5
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

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://pgws.bpm.bankmellat.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. terminalld: Merchant terminal number
- 2. **userName**: Merchant terminal username
- 3. userPassword: Merchant terminal password
- 4. amount: Transaction amount
- localDate: Merchant local date
- 6. localTime: Merchant local time
- 7. **additionalData**: Some Additional data to keep for this transaction
- callBackUrl: Callback URL of merchant which the customer will be redirected back after payment accomplished.
- 9. payerId: Merchant Payer ID
- 10. orderld: 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.

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

- 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.

Page 4	© Behpardakht Mellat Co	
--------	-------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	5
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

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

Operational Server:

https://pgw.bpm.bankmellat.ir/pgwchannel/startpay.mellat

Row	Parameter Name	Example	Description	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"******"	Merchant Password	string
4	orderld	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	payerld	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.

✓ 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.

Page 5 © Behpardakht Mellat Co	
--------------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

2.4.2 bpVerifyRequest method

When card holder made payment transaction in Mellat Bank Payment Gateway site, some information including ResCode and SaleReferenceId will be posted back to merchant and then merchant should confirm payment transaction by calling bpVerifyRequest method and passing the following parameters to:

Row	Parameter Name	Example	Description	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****	Merchant Password	string
4	orderld	11	Order Identifier	long
5	saleOrderId	10	orderld 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 15 minutes, the payment transaction will be reversed automatically by Mellat Bank Payment Gateway and the money will be charged back to card holder.

2.4.3 bpSettleRequest method

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

Page 6 © Behpardakht Mellat Co	
--------------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	5
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

Row	Parameter Name	Example	Description	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"**** ¹	Merchant Password	string
4	orderld	12	Order Identifier	long
5	saleOrderId	10	orderld 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.

2.4.4 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	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****"	Merchant Password	string
4	orderld	13	Order Identifier	long
5	saleOrderId	10	orderld of pay request (Original Order identifier)	long

Page 7	© Behpardakht Mellat Co	
--------	-------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

6	saleReferenceId	5142510	saleReferenceId returned in pay request	long	
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Table4: bplnquiryRequest Input parameters description

- ✓ 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.

2.4.5 bpReversalRequest method

If Merchants decided to not 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	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****	Merchant Password	string
4	orderld	14	Order Identifier	long
5	saleOrderId	10	orderld 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.

Page 8	© Behpardakht Mellat Co	
--------	-------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

2.4.6 bpRefundRequest method

Merchant can fully or partially refund a payment transaction and transfer the money back to card holder by calling bpRefundRequest method and passing the following parameters:

Row	Parameter Name	Example	Description	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"******"	Merchant Password	string
4	orderld	16	Order Identifier	long
5	saleOrderId	10	orderld of pay request (Original Order identifier)	long
6	saleReferenceId	5142510	saleReferenceId returned in pay request	long
7	refundAmount	500	Amount to be refunded from original sale amount	long

Table6: bpRefundRequest Input parameters description

Note: 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 refund reference number.

Example: 0, 45111111

- The two values are comma separated.
- The first part is the response code (for more information, see table 10)
- The second part is the refund reference number.
- ✓ Note: Merchants can just refund settled payment transaction at any time after the payment transaction.
- ✓ Note: According to Shetab Network limitations, Mellat Bank Payment Gateway merchants can just refund card holders with Mellat Bank cards and not for card holders of other banks.

Page 9	© Behpardakht Mellat Co

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

2.4.7 bpRefundVerifyRequest method

Merchant must verify refund request to finalize the refund transaction by calling bpRefundVerifyRequest method and passing the following parameters:

Row	Parameter Name	Example	Description	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"***** ["]	Merchant Password	string
4	orderld	17	Order Identifier	long
5	refundOrderId	16	Refund order identifier	long
6	refundReferenceId	5142511	Refund reference Identifer	long

Table7: bpRefundVerifyRequest Input parameters description

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

2.4.8 bpRefundInquiryRequest method

Merchant can get a verify request status at any time by calling bpRefundInquiryRequest method and passing the following parameters to:

Row	Parameter Name	Example	Description	Туре
1	terminalld	1234	Merchant Terminal Identifier	long
2	userName	"User"	Merchant Username	string
3	userPassword	"*****	Merchant Password	string
4	orderld	18	Order Identifier	long
5	refundOrderId	16	Refund order identifier	long
6	refundReferenceId	5142511	Refund reference Identifer	long

Table8: bpRefundInquiryRequest Input parameters description

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

Page 10	© Behpardakht Mellat Co	
---------	-------------------------	--

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

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

Table9: Return parameters posted to merchant callback URL

2.6 Response code descriptions

Response Code	Description
0	Transaction Approved
11	Invalid Card Number
12	No Sufficient Funds
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
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
23	Security Violation

Page 11

Revision: 1.0	Mellat Bank Payment Gateway	2
Date: August 2010	User Guide: How to integrate with Mellat Bank Payment Gateway	000

24	Invalid User Or Password
25	Invalid Amount
31	Invalid Response
32	Format Error
33	No Investment Account
34	System Internal Error
35	Invalid Business Date
41	Duplicate Order Id
42	Sale Transaction Not Found
43	Duplicate Verify
44	Verify Transaction Not Found
45	Transaction Has Been Settled
46	Transaction Has Not Been Settled
47	Settle Transaction Not Found
48	Transaction Has Been Reversed
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
51	Duplicate Transmission
54	Original Transaction Not Found
55	Invalid Transaction
61	Error In Settle

Table 10: Response code description