

Payment Gateway Integration Process Guide



E-Prepag.com.br Payment Gateway - Integration Process Guide (version 2.0.3)

Main Features

- ✓ All-in-One: 1 API integrating all sales Channels
- ✓ Online Payment Methods
- ✓ Offline Payment Methods
- ✓ PIN Redeemption
- √ E-Prepag scratch card Redeemption
- √ Risk Control

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I. Introduction

This manual explains how the E-prepag.com.br billing integration process works. The integration process will be presented, followed by its detailed technical explanation. Some examples are included in order to illustrate the main steps.



II. Requirements

Partner web server must use a Digital Certificate installed in their server in order to allow secure communication using the HTTPS protocol



III. System Setup

All the relevant information to complete the setup process is listed in the email that will be sent after starts system setup.

In order to start system setup, E-Prepag will need:

- partner_url;
- partner_email;
- partner_ip;
- notify url;
- return_url;
- sonda_url;
- product values or select free values;
- partner logo.

With this information E-Prepag will be able to create a store_id and product_id.

Receiving store_id and product_id, partner will be able to start the initial tests.



IV. Process Description

In the billing integration process the E-Prepag.com.br (referred to as **billing gateway** in this manual) web site receives a billing requests from Your Company (referred to as **Partner**), completes the billing with your customer (referred to as **End User**) and returns a notification to your company's system.

E-Prepag offers a payment gateway URL to process all partner's requests:

gateway_url

The "gateway_url" parameter identifies the address at E-Prepag's site that processes all the requests from the partner.

When a new Partner is registered to operate with E-Prepag some parameters are defined to allow the operations:

partner_url

The "partner_url" parameter identifies the url that will send requests from partner to gateway_url.

store id

The "store_id" parameter identifies a partner in all transactions.

partner_ip

The "partner_ip" parameter identifies the IP address at partner's web server.

product id

The "product_id" parameter identifies the product offered by E-Prepag to the Partner's customers. It is possible to register more than one product from E-Prepag for the partner to use, each product with its set of allowed values. In those cases the integration request must include the parameter "product_id" to indicate the product to which the request is related. But is possible integration configure enable to use free values too. (Special Configuration)

return_url

The "return_url" parameter must contain the complete URL that will be accessed after the End User completes the purchase.

notify url

The "notify_url" parameter must contain the complete URL that will be accessed by E-Prepag to notify the Partner about the order payment. It is the most important parameter in the payment request since all the information sent to the Partner



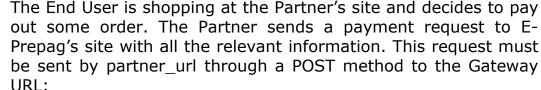
about the order status will be made through this URL. This URL must use **SSL** (so, it must begin with **HTTPS**, i.e., the Partner's web site must have a valid digital certificate)

All the necessary configuration information is described in the "System Setup" section at the end of this document.



V. Sequence Flow Description

1. Initial Form to Gateway URL - Sending a Payment Request





Build an initial page with a "Submit" button to send payment requests to the gateway URL. See also the "Code Example" Section and the "Illustrated Guide to the Integration Process" Section.

(Live)

https://www.e-prepag.com.br/prepag2/commerce/pagamento_int.php

(Sandbox)

https://sandbox.e-prepag.com.br/prepag2/commerce/pagamento_int.php

The following parameters are required:

	TYPE/	
PARAMETER	SIZE	DESCRIPTION
store_id	CHAR(6)	Partner Identification on E-Prepag
currency_code	CHAR(3)	Order currency ISO code
order_id	CHAR(40)	Order Identification on Partner
order_description	CHAR(200)	Small description of the order
amount	CHAR(7)	Order's total without commas or dots. Egs. 9.99 = 999; 10.00 = 1000
product_id	CHAR(10)	Product identification in E-Prepag system (optional when using only one product)
client_id	CHAR(60)	End User identification in Partner's store
client_email	CHAR(60)	End User email

store_id

The "store_id" parameter is the Partner identifier, registered in E-Prepag system.

currency_code

The "currency_code" parameter must contain the order currency ISO code. The system accepts orders in Brazilian Real and this parameter should always be 'BRL'. In the future other currencies will be handled by the system.

order id

The "order_id" parameter must contain the order identifier on the Partner system.

order_description



The "order_description" parameter must contain a brief description of the order. This description will be displayed to the End User.

amount

The "amount" parameter must contain the order total value without any commas or dots. For examples: considering a R\$10,00 order (in Brazilian Reals), the "amount" parameter must contain the value "1000". Other example is a R\$9,99 order, the "amount" parameter must contain the value "999". The last two digits correspond to the decimal part of the value.

All payment requests must use some value.

If the Partner request so, it can be registered to send orders with values up to a predefined maximum value.

product_id

The "product_id" parameter contains the product identifier in E-prepag's system, as informed to the Partner during the setup. When the Partner uses more than one product this parameter is necessary otherwise it is optional.

client id

The "client_id" parameter must contain the End User's identifier in the game environment. It is used by E-Prepag to notify the Partner that a payment was completed and the requested amount can be credited to the End User.

client email

The "client_email" parameter must contain the e-mail address of the End User. The communication between E-Prepag and the End User will be made by this e-mail, so a valid e-mail is required. At each transaction request a set of payment risk analysis evaluations is applied to each client before offering the payment options available at E-Prepag's web site. Also, a customized help on payment options is offered to each customer according to his/her historic of payment transaction and bank preferences.

The following parameters are optional:

	TYPE/	
PARAMETER	SIZE	DESCRIPTION
client_name	CHAR(60)	End User name
client_zip_cod	CHAR(8)	End User Postal code
е	CHAR(6)	(numbers only)
client_street	CHAR(60)	End User Address
client_suburb	CHAR(60)	End User Suburb
client_number	CHAR(10)	End User Address Number
client_city	CHAR(60)	End User City



client_state	CHAR(30)	End User State
client_country	CHAR(20)	End User Country
client_telepho ne language	CHAR(20)	End User Phone Number Default Language
	CHAR(2)	Possible Values: - "PT" for Portuguese - "ES" for Spanish - "EN" for English

- 2. The End User prepares the payment in E-Prepag's site:
 - reviews the order and goes to the bank site;
 - selects a payment method;

If the End User decides to complete the payment he is transferred to the bank's site to enter bank account information and complete the payment.

- 3. The End User completes the requested payment in the bank's site. After a short delay E-Prepag is informed by the bank.
- 4. E-Prepag calls "notify_url" to notify the Partner about a completed payment by the End User according to the initial request. This notification contains the original data sent to E-Prepag. The notification is sent through a POST method to the "notify_url" registered for the Partner.

The parameters sent in the notification are:

PARAMETER	TYPE/ SIZE	DESCRIPTION
store_id	CHAR(20)	Partner Identification on E-Prepag
transaction_i d	CHAR(20)	Order Identification on E-Prepag
order_id	CHAR(40)	Order Identification on Partner
amount	CHAR(10)	Order total without any commas or dots
client_id	CHAR(20)	End User identification in Partner's store
client_email	CHAR(100)	Client Email (customer)
currency_cod e	CHAR(3)	Order currency ISO code

5. The Partner receives and processes the notification by building a postback that will be sent to E-Prepag to confirm the order information. The postback must be sent through a POST method to the Notify URL:





(Live)

https://www.e-prepag.com.br/prepag2/commerce/epp_notify.php

(Sandbox)

https://sandbox.e-prepag.com.br/prepag2/commerce/epp_notify.php

The postback must contain all the parameters and values received in the notification plus the "**cmd**" parameter, that should be added with the value "processed".

The parameters to be sent in the postback are:

PARAMETER	TYPE/SIZE	DESCRIPTION
store_id	CHAR(20)	Partner ID in E-Prepag
transaction_id	CHAR(20)	Order ID in E-Prepag
order_id	CHAR(40)	Order ID in the Partner
amount	CHAR(10)	Order total without commas or dots
product_id	CHAR(10)	Product identification in E-Prepag system (optional when using only one product)
client_email	CHAR(100)	Client Email (customer)
currency_code	CHAR(3)	Order currency ISO code
cmd	CHAR(9)	Must contain the value "processed"

The traffic of this data must not happen through the End User browser or with his interference. The Partner webserver have to communicate directly with E-Prepag. This procedure is used to guarantee the security of the data transferred between E-Prepag and the Partner.

6. E-Prepag receives the Partner's postback and responds with a single text row, without any HTML TAG. The response contains the parameter "CODRETEPP" with the confirmation return code. E,g.: "CODRETEPP=0". The possible values of "CODRETEPP" are:

CODRETEP P	DESCRIPTION	ACTION
0	Payment successfully confirmed	Deliver credits paid to user account. No new notify posts needed for this order.
1	Payment already confirmed	If user account has already received credits bought, cancel new notify posts to this order. If not, deliver credits paid to user account.
2	Incorrect parameters	Post Revision needed, developers



	values	team should be warned
3	Order not found	Cancel new notify posts to this order
4	Postback has missing data	Post Revision needed, developers team should be warned
5	Order not payed yet	Keep sending notify posts about this order or wait for information regarding payment or order from E-prepag
6	Order not processed yet	Keep sending notify posts about this order or wait for information regarding payment or order from E-prepag
7	Order canceled	Cancel new notify posts to this order. Orders remain waiting for payment for no more than 12 days. It depends on which payment method client has chosen.
8	System not available	Keep sending notify posts about this order

If there is any communication problem when E-prepag calls notify_url to inform about a completed payment, E-prepag would not receive the post from Partner (step 5) and, when the communication is on again, will call notify_url later about that completed payment.

Nevertheless, Partner can consult notify_url to receive information about payment and order status at anytime.

- 7. The Partner reads and interprets the parameter in the response:
 - Only if the response is "CODRETEPP=0" or "CODRETEPP=1", the order can be delivered to the Customer and the purchased amount credited in the Customer's account, if it hasn't been previously delivered.
 - In case of any other response, no action about delivering the order should be taken.

Before delivering the products, the Partner should make some verification like checking the order total and currency informed on E-Prepag.com.br POST against their own information.

E-Prepag calls "**notify_url**" to notify the Partner about a completed payment only once, but Partner can consult notify to receive information about payment and order status at anytime.

Conditions to accept the payment request received at the E-Prepag's gateway from the Partner:





After finishing the process the user can be sent back to the game's site or the payment confirmation window can be just closed. If the first option is chosen, your page return_url should be built acording to your needs.

- the E-Prepag's Gateway is active,
- the request is coming from the registered IP address and URL as found in the REMOTE_ADDR and HTTP_REFERER POST fields. The Partner's site must have a valid digital certificate installed, the URL that makes the request must use HTTPS and be registered in E-Prepag's system.
- the required POST parameters are present and contain valid values:
 - i. all the required values are present: store_id, currency_code, order_id, order_description, amount, client_email;
 - ii. the partners ID specified in **store_id** is valid and registered in the E-Prepag's system;
 - iii. the requested value in **amount** is a numeric string;
 - iv. the currency_code is 'BRL';
 - v. the **order_id** is a numeric string.
- a product is found in E-Prepag's system that matches the requested Partner and value as specified in **store_id** and amount.
- a registered user is found or a new one is successfully registered in E-Prepag's system, according to client_email.

After step 4 the payment is completed at E-Prepag's system, however, the Partner should complete all the 7 steps before proceeding to activate any credit in the customer's game account.



VI. Source Code Example

Initial Form to Gateway URL

Below is a source code sample in HTML that the Partner can use to send the request to E-Prepag. Some tips and comments:

- remember to replace the value of STORE_ID in the code by your own store_id value, described in the companion Setup document;
- you will choose any value supplied by you at the setup process.

```
<body>
 <form method="POST" name="billing" target=" blank"</pre>
  action="https://sandbox.e-prepag.com.br/prepag2/commerce/pagamento_int.php" >
  <input type="hidden" name="store_id" id="store_id" value="STORE_ID">
  <input type="hidden" name="currency_code" id="currency_code" value="BRL">
  <input type="hidden" name="transaction_id" id="transaction_id" value="843221">
  <input type="hidden" name="order_id" id="order_id" value="43234">
  <input type="hidden" name="order_description"</pre>
                  value="Premium Account 3 months">
  <input type="hidden" name="amount" id="amount" value="1000">
  <input type="hidden" name="client_id" id="client_id" value="1234">
  <input type="hidden" name="client_email" id="client_email"
                  value="user_epp@mail.com">
  <input type="hidden" name="client_name" id="client_name"
                  value="User E-Prepag">
  <input type="hidden" name="client_zip_code" id="client_zip_code"
                  value="05541030">
  <input type="hidden" name="client_street" id="client_street"</pre>
                  value="R. Dep. Lacerda Franco, 300, 20 andar">
  <input type="hidden" name="client_suburb" id="client_suburb"</pre>
                  value="Pinheiros">
  <input type="hidden" name="client_number" id="client_number"</pre>
                  value="278">
  <input type="hidden" name="client_city" id="client_city"
                  value="São Paulo">
  <input type="hidden" name="client_state" id="client_state"
                  value="SP">
  <input type="hidden" name="client_country" id="client_country"</pre>
                  value="Brasil">
  <input type="hidden" name="client_telephone" id="client_telephone"
                  value="32233223">
  <input type="hidden" name="language" id="language" value="PT">
  <input type="submit" name="btSubmit" value="Send Request">
 </form>
</body>
```

Notify

Below is a PHP source code example that includes the steps 4 to 6, receives the notification sent by E-Prepag, builds and send the postback and then reads the postback response.



```
<?php
 // Receive a payment completed notification from E-Prepag
 extract($_POST);
 // Build a postback string
 $post_parameters = ";
 foreach ($_POST as $key => $val) {
   $post_ parameters .= $key . '=' . $val . '&';
 $post_ parameters .= "cmd=processed";
 // open the connection with E-Prepag
 $url = "https://sandbox.e-prepag.com.br/prepag2/commerce/epp_notify.php";
 $buffer = "";
 $curl_handle = curl_init();
 curl_setopt($curl_handle, CURLOPT_URL, $url);
 // verify the digital certificate
 curl_setopt($curl_handle, CURLOPT_SSL_VERIFYPEER, 1);
 curl_setopt($curl_handle, CURLOPT_SSL_VERIFYHOST, 1);
 curl_setopt($curl_handle, CURLOPT_HEADER, 1);
 curl_setopt($curl_handle, CURLOPT_USERAGENT,
        "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.0)");
 curl_setopt($curl_handle, CURLOPT_POST, 1);
 curl_setopt($curl_handle, CURLOPT_POSTFIELDS, $post_parameters);
 // The number of seconds to wait while trying to connect.
 // Use 0 to wait indefinitely.
 curl_setopt($curl_handle, CURLOPT_CONNECTTIMEOUT, 10);
 // The maximum number of seconds to allow cURL functions to execute.
 curl_setopt($curl_handle, CURLOPT_TIMEOUT, 10);
 curl_setopt($curl_handle, CURLOPT_RETURNTRANSFER, 1);
 // send the request and get the response
 $buffer = curl_exec($curl_handle);
 curl_close($curl_handle);
 list($name, $value) = <a href="mailto:explode">explode('=', $buffer);</a>
 ne = trim(ne);
 $$name = $value;
 if (($CODRETEPP == "0") || ($CODRETEPP == "1")) {
      -> check the information and credit customer's account
      if it was not made before
?>
```

Below is an ASP source code example that includes the steps 4 to 6, receives the notification sent by E-Prepag, builds and send the postback and then reads the postback response.

```
    Dim objHttp, strQuery, strField, strPost, strURL, strBuffer, aFields

' Get Form fields
    strPost = ""
    For Each strField in Request.Form
```



```
strPost = strPost & strField & "=" & Request.Form(strField) & "&"
     Next
     strPost = strPost & "cmd=processed"
     Response.Write "strPost: " & strPost & "<br>"
    ' open the connection with E-Prepag
     strURL = "https://sandbox.e-prepag.com.br/prepag2/commerce/epp_notify.php"
     strBuffer = ""
     'Turn on page buffering
     Response.Buffer = True
     On Error Resume Next
     Err.Clear
     'http://msdn.microsoft.com/en-us/library/ms757828(v=VS.85).aspx
     set objHttp = Server.CreateObject("Msxml2.ServerXMLHTTP")
     objHttp.open "POST", strURL, true
     objHttp.SetRequestHeader "Content-type", "application/x-www-form-urlencoded"
     objHttp.send strPost
     If Err.Number <> 0 Then
           'Clear response buffer
           Response.Clear
           'Display Error Message to user
           Response.Write "ERROR < br > "
          Response.Write "Err.Number: " & Err.Number & "<br/>Response.Write "Err.Source: " & Err.Source & "<br/>br>"
           Response.Write "Err.Description: " & Err.Description & "<br/>br>"
     Else
          ' wait for response
          If objHttp.ReadyState <> 4 Then
               waitForResponse(timeoutInSeconds);
              objHttp.waitForResponse 20
          End If
           ' check result
          If objHttp.Status >= 400 And objHttp.Status <= 599 Then
              Response. Write "ERROR: objHttp.Status=" & objHttp.Status & "<br/>br>"
           Else
              strBuffer = objHttp.ResponseText
              ' Response.Write strBuffer
              If(InStr(strBuffer, "CODRETEPP")>0) Then
                 aFields = Split(strBuffer, "=")
                 If(aFields(1)="0" Or aFields(1)="1") Then
                    -> check the information and credit customer's account
                   ' if it was not made before
                      some error reported
                 End If
              End If
           End If
     End If
     Set objHttp = Nothing
     On Error GoTo 0
%>
</body>
```





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VII. Test Environment

A test environment is available to facilitate the Billing System integration.

You can test with real transactions at the "gateway_url" (see "System Setup" for more detail).

After filling the form fields (Sequence Flow Description, item 1) you can send it using the button "**Send to https://...**". If the Partner's ID is valid then the request will be accepted and the customer is presented with the product it intended to pay and the payment options available. A special payment option was created to test the whole process, it is called "**E-Prepag CASH**":



If you select E-prepag Cash option, the gateway will show this interface below:



E-Prepag - https://www.e-prepag.com.br



For you complete this payment you need to insert PINs E-Prepag Cash.

At the moment of testing full payment process please ask E-Prepag to give PIN codes E-Prepag Cash. It will allow to use E-Prepag Cash payment option to complete transactions.

More information about E-Prepag Cash you can access: http://www.e-prepag.com.br/prepag2/newhome/eppcash.php

When this option is used to make the payment the requested and you can see all the steps involved.

The integration system use a return page, the "**return_url**" (see "System Setup" for more detail). After each transaction at this simulated page you can see the complete list of transactions that you created and the status of each.



VIII. Support

E-Prepag has a technical team to support Partner's developers during the payment gateway integration process.

When in test development it is suggested to supply a working email address to receive live integration information. On each integration request the system sends a message to the registered emails addresses for several stages of the integration process: request source validation, list of supplied parameters, content validation for parameters, etc. This way the developer has an immediate response with all the information we process during the integration request validation.

Before contact the support, please make sure to read all the manuals that refers to system integration and administration.

Doubts and suggestions can be sent to atendimento1@e-prepag.com.br



IX. Additional functionality: Sonda

It would be useful, even if not necessary, to include an additional service, this time in the Partner's side, to return information about a particular Partner's order. It is called "Sonda" and it works this way: the E-Prepag's system sends a post query to the Partner's system with the order ID as the only parameter (named "order_id" and corresponding to the ID of the payment order in the Partner's system) and the Partner's system answers with some information about the payment order as a form field string containing the next fields:

retcod: return code with values according to the list:

retco d	Description
-1	Order not found
1	Order processed and the requested amount credited in the user account
2	Order not processed yet (the transaction was found in the Partner's system but the requested amount was not credited yet in the customer's account)

Only when retcod=1 the answer contains additional information:

credit_date: the date/time (format: "YYYY-MM-DD HH:II:SS")
of the credit processing at the Partner's system,

amount: the amount credited to the user in your system, it corresponds to the initial parameter "amount" that you sent when the payment request was started (i.e. the request real value is multiplied by 100, so that a request of R\$10,00 will result in a parameter "amount=1000"),

client_email: the email of the user that received the credit, it corresponds to the initial parameter "client_email" that you sent when the payment request was started.

Some answer examples:

retcod=-1

no register was found in Partner's system with the order_id value.

retcod=1&credit_date=2011-07-28 12:14:15&amount=1000&client_email=gamer@mail.com



a register with the order_id value was found in the Partner's system, it was processed and the amount R\$10,00 was credited to the user 'gamer@mail.com' at '2011-07-28 12:14:15'

retcod=2

a register with the order_id value was found in the system but it was not processed yet at Partner's system, the user should wait.

The script should be used with HTPPS, it could be something like this

https://www.partner.com/check_transaction

Of course, the Partner should do any validation that finds relevant before accepting the request from E-Prepag (ensure that the form field "transaction_id" has up to a predefined length, that includes only numeric characters, etc).

It is a simple function but it can help a lot the routine operation of the integration process, when any inconsistency is found in the system we will be able to compare our processing information with the Partner's data and automatically show any problem.



X. Additional functionality: Automatic Re-notify

When the Sonda functionality is implemented by the Partner, the automatic renotify is available too. It works in a simple way: every integration request that has a completed payment and that was notified will be tested with the Sonda, at least once, until the answer is "retcod=1". If the answer is "retcod=2" a new notification to the Partner will be activated and next time the Sonda is executed the answer should be "retcod=1".

When the answer is "retcod=1" the payment request is declared at E-Prepag as "verified with the Partner" and no more automatic actions will be executed on it.



XI. Illustrated guide to the integration process

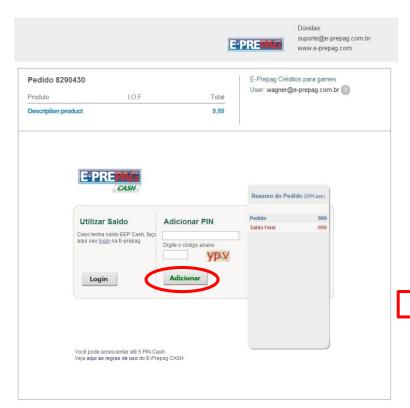
When user comes from **partner_url**, which is sent by the IP registered at our system, sending the information requested (initial form) to **gateway_url**, user gets to this page (image below). If user doesn't gets there, there is a problem with one or more items. Possible errors are:

- the URL/IP from where the form was sent is different from the one registered at E-Prepag;
- **gateway_url** is not : https://sandbox.e-prepag.com.br/prepag2/commerce/pagamento_int.php
- the request form is missing some required parameter or its content has some invalid value;
- read the e-mail sent to the e-mail registered to receive integration information.





After clicking at "E-Prepag Cash", user type PIN coccaptcha, then click in "Adicionar", ("Add", in Portuguese)



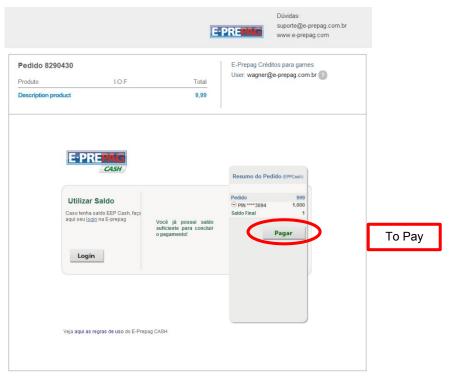
User doesn't have to register at E-prepag to buy when coming from your website. An account is automatically created at the first time he starts a payment process, using his e-mail. This time and next times he comes to E-Prepag from the Partner registered web server/IP, he will be always automatically logged .The email will be used to send purchase Add related communication

Click here for payment.

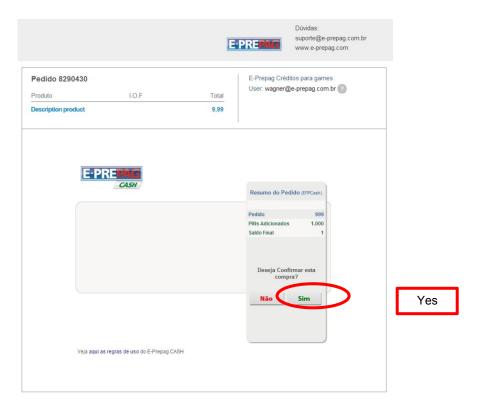
In this case, only 1(one) PIN code is enough, but user can use until 5(five) PIN codes in the same transaction.

Next step is: click in "Pagar", ("to Pay", in Portuguese)





Then, confirm clicking in "Sim", ("Yes", in Portuguese)



After payment done by using "E-Prepag Cash", user gets payment successful message. At this moment, an e-mail with order confirmation is sent, the credit bought is processed in his game



account and he will see a link to return to the game page. This link goes to **return_url**.

If payment is not completed user won't get the message, order confirmation e-mail or the link to **return_url**. In case of difficulties, user can contact support by e-mail shown above and right side of the page.



XII. Version

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