

E-PREPAG

Integration Manual

- **E-Prepag PIN code**
- **Gift Card**

E-prepag.com.br
E-prepag Pin Code – Integration Manual

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I. Summary

This manual describes how to integrate E-Prepag PIN Code System with Partner system. The integration steps are detailed by a technical explanation of all procedures and some source-codes examples are included.

II. Requirements

Your Web Server must have a digital certification installed in server in order to allow a secure communication using HTTPS protocol.

III. Process Description

The integration with E-Prepag PIN Code System enables the URL stated in (EPP_SINGLE) to process a Check or Redeem request of valid PIN Code number from a previously registered IP address (PARTNER_IP) and the return will send a response notification to your server.

E-Prepag provides a gateway to process all verification or utilization from partner.

EPP_SINGLE

This parameter defines E-Prepag's URL address which is accountable for processing all Check and Redeem requests sent from your server.

When a new partner is registered in E-Prepag's system, the following parameters will be defined:

PARTNER_IP

This parameter contains the IP address of Partner's server from where all requests will be originated.

ID

This parameter contains the identification code of the Partner and must be used in all requests.

USE_CHECK

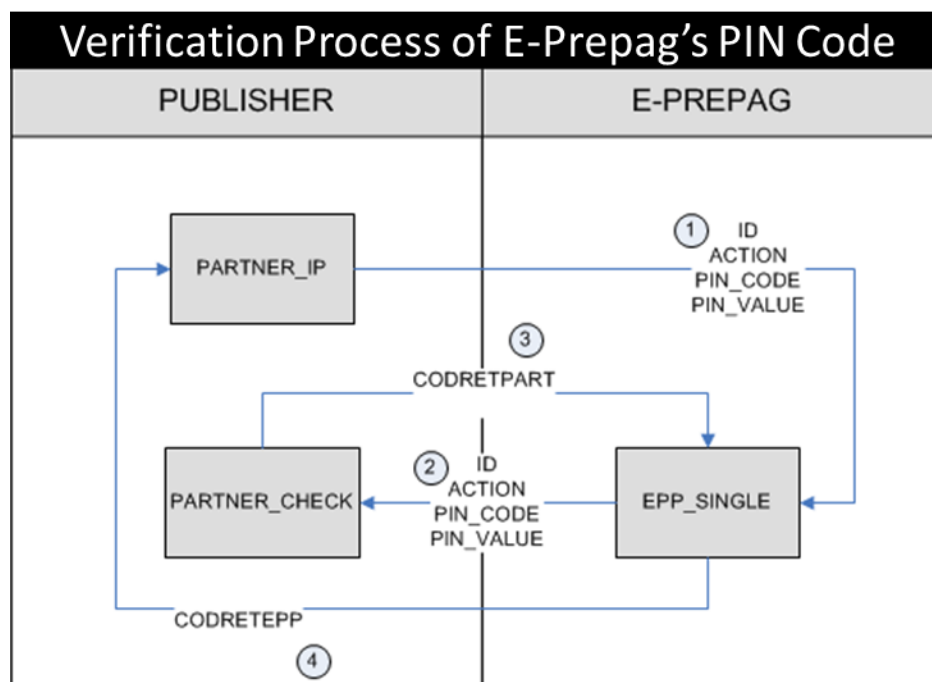
This parameter indicates whether the Partner intends to verify the redemption of PIN Codes for enhanced security during the transaction.

PARTNER_CHECK

This parameter must contain the full URL address that E-Prepag will access in order to confirm a PIN Code Redeem request – it's a mandatory. This parameter shall also use SSL (which means that the PARTNER_CHECK URL address must start with HTTPS and that the Partner's web server must have installed a valid digital certificate).

All setup information required for these parameters are better described at the end of this document, under "System Setup".

IV. Process Flow Description



1. Initial request sent to EPP_SINGLE (Check or Redeem request of PIN Code). The Partner sends a Check or Redeem request to E-Prepag's URL address, containing all required information. This request shall be sent from PARTNER_IP using POST method to the following address:

EPP_SINGLE:

Environments	
SANDBOX	https://sandbox.e-prepag.com.br/check-redeem/
LIVE	https://www2.e-prepag.com.br/check-redeem/

List of mandatory fields:

PARAMETER	TYPE/SIZE	DESCRIPTION
ID	CHAR(6)	Unique Partner ID registered with E-Prepag
ACTION	CHAR(1)	Action Identification Parameter
PIN_CODE	CHAR(SIZE)**	PIN Code number
PIN_VALUE *	INT	PIN Code Value

* Mandatory Field in Redeem

** Size: may vary according to partner integration definition.

ID

This parameter is used to identify the Partner. It's a unique number generated by E-Prepag's system. It's a mandatory parameter and shall be used in either PIN Check or Redeem requests.

ACTION

"ACTION" is the parameter that indicates the type of Action that EPP_SINGLE must perform, where:

'1' : Indicates a PIN Check. When "1" is used EPP_SINGLE will treat the informed parameters as a Check request, verifying if submitted PIN Code is valid and also available to be redeemed.

'2' : indicates a Redeem request. After executing all consistency checks of informed parameters, EPP_SINGLE will change PIN Code status to redeemed.

PIN_CODE

This parameter is the string itself that forms the PIN Code number.

PIN_VALUE

The "PIN_VALUE" corresponds to the PIN Code total amount value. It shall be represented as a whole number (example: a R\$ 10,00 PIN Code must be submitted as 1000). PIN_VALUE is only used in a Redeem request – its value will be returned after a successful Check request.

2. E-Prepag processes all informed parameters and will return with a plain text line without any HTML tags. The response contains the parameter "CODRETEPP" followed by a code that identifies the executed process (example: "CODRETEPP = 2" identifies a successful redemption transaction).

In case of a successful Check request (CODRETEPP = 1) there will also be a second parameter "PIN_VALUE" with the corresponding PIN Code value separated by a ";" (example: "CODRETEPP = 1; PIN_VALUE = 1000").

The "CODRETEPP" values may be:

CODRETEPP	DESCRIPTION	ACTION
1	Check Success	PIN Code is suitable for redemption
2	Redeem Success	PIN Code has been successfully redeemed
3	Missing Parameters	One or more parameters are missing
4	Different PIN Code Value	PIN Code value identified is different from PIN_VALUE informed
5	Used PIN Code	PIN code has been previously redeemed.
6	Status PIN Unavailable	PIN Code status doesn't allow for its redemption.
7	Wrong Partner ID	Partner ID has not been found in E-Prepag system.
8	Wrong PIN Number	PIN Code not found
9	Redeem Error	An error occurred during the PIN Code redemption process
A	Unidentified Error	An unspecified error occurred in the system
B	Unavailable System	System is off-line at this moment

3. Partner receives and processes the return response contained in the parameters:
 - Only “CODRETEPP = 1” or “CODRETEPP = 2” means a successful Check and Redeem requests, respectively
 - All other responses mean that PIN Code is not suitable for redemption, redemption was not successful or an error occurred in E-Prepag’s system.
4. For every Redeem request delivered to “EPP_SINGLE”, the “USE_CHECK” parameter will be verified.

If it is enabled, you’ll receive a Redeem request confirmation at “PARTNER_CHECK” to confirm the transaction, which in return shall deliver a response notice as a plain text (with no HTML tags) back to EPP_SINGLE containing the parameter “CODRETPART” (example “CODRETPART = 1” to confirm the redemption process).

The following table demonstrates all possible values for “CODRETPART”:

CODRETEPP	DESCRIPTION	ACION
1	Confirmed	Partner confirms the Redeem request
2	Not confirmed	Partner does not confirm the Redeem request

Enabling conditions for Redeem request of PIN Codes sent from Partner to EPP_SINGLE:

- E-Prepag EPP_SINGLE is online and running.
- The request is originated from a previously registered PARTNER_IP and parameters must be sent by POST. Partner website must have a digital certificate installed. The PARTNER_IP from request must use HTTPS protocol and be registered in E-Prepag system.
- Required POST parameters are present and valid:
 - 1 – Required values are present: ID, ACTION, PIN_CODE e PIN_VALUE*.
 - 2 - Specified ID is a valid Partner identification number registered in E-Prepag’s system;
 - 3 - Parameters have the correct Type and Size as detailed in section IV, subsection 1.
- PIN Code has been found in E-Prepag’s system, belongs to Partner and has the right value.

** Mandatory parameter, only for redeem request.*

V. Source-code Sample

Initial form for EPP_SINGLE

Below is the source-code in HTML that partner can use in order to send Check request to E-Prepag system.

Some tips and advice before moving on:

- Remember to replace ID value in the bellow code for your own ID Value; described in setup document.
- Use the whole number format for PIN_VALUE (example: R\$ 10,00 corresponds to **PIN_VALUE = "1000"**).

```
<body>
  <form method="POST" name="verifica" target="_blank"
    action="https://sandbox.e-prepag.com.br/check-redeem/" >
    <input type="hidden" name="id" id="id" value="ID">
    <input type="hidden" name="action" id="action" value="2">
    <input type="hidden" name="pin_code" id="pin_code"
value="0123456789123456">
    <input type="hidden" name="pin_value" id="pin_value" value="1000">
    <input type="submit" name="btSubmit" value="Send Request">
  </form>
</body>
```

The above request will return a response as detailed under section IV, subsection 2.

An example program for PARTNER_CHECK

The following PHP code contains an example of how you can confirm a Redeem request when using PARTNER_CHECK:

```
<?php
//Capturando as variaveis
$ID = isset($_POST['ID']) ? $_POST['ID'] : null;
$PIN_CODE = isset($_POST['PIN_CODE']) ? $_POST['PIN_CODE'] : null;
$PIN_VALUE = isset($_POST['PIN_VALUE']) ? $_POST['PIN_VALUE'] : null;
//inicializando com o código de retorno para solicitação de utilização como NÃO
confirmada
$CODRETPART = 2;
//validar se o ID informado é o mesmo cadastrado junto ao sistema E-PREPAG
if (!empty($ID) && $ID == ID) {
    //Montar a consulta utilizando o $PIN_CODE e $PIN_VALUE
    $sql = "select .....";
    //Executar a query
    $ret = execute($sql);
    //Teste se obteve sucesso
    if ($row = fetch_array($ret)) {
        //Alterando o valor do código de retorno para solicitação de utilização confirmada
        $CODRETPART = 1;
    }
}
//gerando o output sem TAG HTML contendo o CODRETPART
echo "CODRETPART=".$CODRETPART;
?>
```

VI. Support

E-Prepag has a technical support team for developers during the systems integration process.

During tests, it's recommended that testers inform an e-mail address to allow for easier communication of tests results.

We also recommend that Partner forces errors by submitting wrong values for parameters such as "ID", "ACTION", etc.

Before contacting our team, please make sure you have read carefully through the whole document.

Questions and comments can be sent to: suporte@e-prepag.com.br and wagner@e-prepag.com.br

VII. System Setup

Before starting, the following information must be provided in order to E-Prepag generate an ID for the Partner:

- a) PARTNER_IP: IP address from Partner's server which will originate all Check and Redeem requests;
- b) USE_CHECK: Must be informed whether Partner wants to enable this feature;
- c) PARTNER_CHECK: In case USE_CHECK is enabled, Partner must inform the URL address to which Redeem requests will be sent for confirmation;
- d) Partner must supply an e-mail address of the assigned developer, which will receive information about tests performed in the system.

Once the partner receives an ID number, it can begin the integration development process.

VIII. System Homologation

The system's homologation process consists of a sequence of highly recommended tests in order to verify the behavior of response codes.

Bellow, you'll find a list of requests with the purpose of verifying and testing the most relevant response codes:

- 1) Check if PIN Code is available in E-Prepag's systems database;
- 2) Redeem an available PIN Code in E-Prepag's systems database;
- 3) Perform a Check request without PIN_CODE mandatory field;
- 4) Perform a Redeem request without PIN_VALUE mandatory field;
- 5) Perform a Check request without ACTION mandatory field;
- 6) Perform a Check request without ID mandatory field;
- 7) Perform a Check request without all four mandatory fields (PIN_CODE, PIN_VALUE, ACTION and ID);
- 8) Perform a Redeem request with a different value for PIN_CODE than its original;
- 9) Perform a Check request from a different IP from yours previously registered one;
- 10) Perform a Redeem request with a PIN Code that has already been used;
- 11) Perform a Check request using a PIN Code that is available in our database, but has a different status than Available/Sold;
- 12) Perform a Check request submitting a wrong ID number;
- 13) Perform a Check request with a random PIN Code (not available in our database);
- 14) Perform a Redeem request with a random PIN Code (not available in our database).



IX. Version

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Appendix A – GiftCard Integration

E-Prepag has 2 different models of Gift Card: the E-Prepag own gift card and Gift Card developed for Merchant exclusively.

Each GiftCard has its own size code position, depending on each integration to be adopted:

	<p>Gift Card: E-Prepag 15 or 17 positions</p>
	<p>Gift Card: exclusive for Merchant: 18 positions</p>

For both Gift Cards, the additional parameters CPF and DATA_NASCIMENTO are mandatory during Redeem. (For PIN check request this parameters are not used)

PARAMETER	KIND/SIZE	DESCRIPTION
CPF*	CHAR(11)	CPF Parameter from gift card user
DATA_NASCIMENTO	DATE (DD/MM/YYYY)	CPF user birthday information

*What is CPF? "Individual Tax Payer Registration

These additional parameters are checked by E-Prepag with Brazilian Federal Revenue Service Agency" in order to have a valid value informed. So, it's added the following possibilities for "CODRETEPP" (Returned code described in item IV):

CODRETEPP	DESCRIÇÃO	AÇÃO
C	Invalid CPF	Invalid CPF with Brazilian Federal Revenue Service Agency.
D	CPF checking system is inactive	CPF query system temporary inactive
E	CPF parameter missing	CPF parameter missing
F	GifCard blocked	GifCard blocked by security reason
G	GifCard not Activated	GifCard not activated by Point of Sale
H	Birthday Parameter Missing	DATA_NASCIMENTO parameter missing
I	Birthday doesn't correspond to CPF informed	Birthday data doesn't correspond to CPF registered in Federal Revenue Service Agency
J	CPF temporary disabled	This CPF is temporary disabled for purchase
K	Invalid birthday date	Birthday information above minimum age

CPF field source-code sample

Here below is a javascript source-code for checking CPF field in order to avoid unnecessary requisitions, which would return “C” (Invalid CPF), by CPF field structure be wrong.

This script can be easily transcribed for any other programming language.

```
<script language="javascript" >
//Função de validação de CPF
function validate_cpf(cpf){
    cpf = cpf.replace(/[\^d]+/g, '');
    if(cpf == '') return false;

    // Elimina CPFs invalidos conhecidos
    if (cpf.length != 11 ||
        cpf == '00000000000' ||
        cpf == '11111111111' ||
        cpf == '22222222222' ||
        cpf == '33333333333' ||
        cpf == '44444444444' ||
        cpf == '55555555555' ||
        cpf == '66666666666' ||
        cpf == '77777777777' ||
        cpf == '88888888888' ||
        cpf == '99999999999')
        return false;

    // Valida 1o digito
    add = 0;
    for (i=0; i < 9; i ++){
        add += parseInt(cpf.charAt(i)) * (10 - i);
    }
    rev = 11 - (add % 11);
    if (rev == 10 || rev == 11)
        rev = 0;
    if (rev != parseInt(cpf.charAt(9)))
        return false;

    // Valida 2o digito
    add = 0;
    for (i = 0; i < 10; i ++){
        add += parseInt(cpf.charAt(i)) * (11 - i);
    }
    rev = 11 - (add % 11);
    if (rev == 10 || rev == 11)
        rev = 0;
    if (rev != parseInt(cpf.charAt(10)))
        return false;

    return true;
}
</script>
```