

# CinetPay

## *How to successfully integrate CinetPay*

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*Version 1.6.1*



## Tracking, History

### Writing, Verification, Approval

Writing		Verification		Approval	
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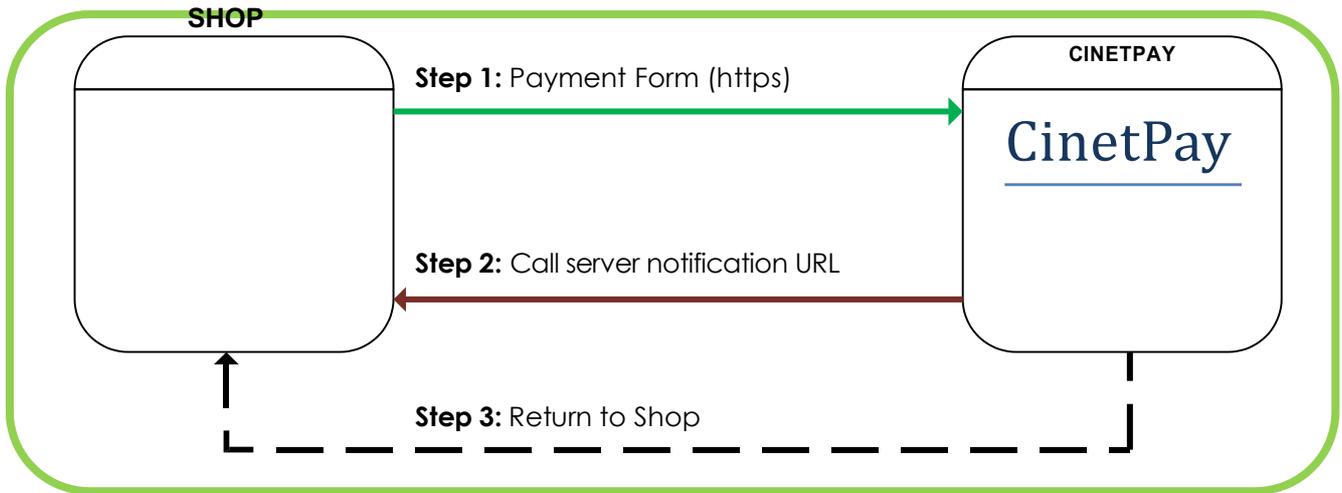
#### Disclaimer

All information contained in this document is considered confidential. The use of these outside the scope of this consultation or the disclosure to outside persons is subject to the prior approval of CinetPay SAS.

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# 1. GENERAL PRINCIPLE



The technical implementation consists of 3 steps:

Reading and understanding them is essential to implement the payment.

## 2. STEP 1: SEND A POST PAYMENT FORM

### 2.1 PREREQUISITES

You must have a valid account and service at <https://www.cinetpay.com> Otherwise, please create your account and your first merchant service. Once done, you need to get your site APIKEY and your ID in your interface before continuing integration [<https://www.cinetpay.com/marchand/integration/>].

Make sure you have some cash on your Mobile Money (Orange Money, MTN Mobile Money or Moov Money) because you will need it throughout integration.

NB: At this moment, only Côte d'Ivoire's Mobile Money account is accepted

### 2.2 ARE YOU READY ? LET'S GO !

The call of the payment platform is made by sending a form posted in https. This form contains at least the mandatory parameters listed below as well as a unique signature variable per form attesting to its authenticity.

#### ➤ Signature:

To calculate signature, it's necessary to post (Send the data in POST) exactly the information below in the table to this page <https://api.cinetpay.com/v1/?method=getSignatureByPost> You would get back a signature string of your current payment that you must store in the "signature" variable for the following or a JSON in case of error.

POST <a href="https://api.cinetpay.com/v1/?method=getSignatureByPost">https://api.cinetpay.com/v1/?method=getSignatureByPost</a>	
cpm_amount	Amount of transaction (in integer, minimum 5)
cpm_currency	Must be: <b>CFA</b> for XOF
cpm_site_id	Shop ID (SITE_ID) [ <a href="https://www.cinetpay.com/marchand/integration/">https://www.cinetpay.com/marchand/integration/</a> ]
cpm_trans_id	Transaction ID: unique for each of your transactions
cpm_trans_date	Transaction's Date: UTC (ex 2017-04-09 15:45:22)
cpm_payment_config	<b>SINGLE</b>
cpm_page_action	<b>PAYMENT</b>
cpm_version	V1
cpm_language	fr
cpm_designation	Purchase description
cpm_custom	Here you can store personal information that will serve you afterwards. This field is optional.
apikey	Information available in your merchant interface once connected. On "Integration" tab

You can force user to use a phone number to make payment, you must just add these two elements to board above:

cel_phone_num	Phone number (ex : 01020304)
cpm_phone_prefix	Prefix (ex : 225)

**NB:** These champs are optional except for merchants those received a letter from CinetPay.

Example of a good answer:

**"95db7a68358e8cb8831db947d8abcfe002af755"**

Example of a JSON response in case of error:

```
{
  "status": {
    "code": "609",
    "message": "AUTH_NOT_FOUND"
  }
}
```

**NB :** Whatever the response, it must be decoded because it's considered a JSON.

➤ **Creation of the Payment Form:**

The URL of the payment page is: <https://secure.cinetpay.com>.

Settings (minimum)	
cpm_amount	Same information used to have signature
cpm_currency	Same information used to have signature
cpm_site_id	Same information used to have signature
cpm_trans_id	Same information used to have signature
cpm_trans_date	Same information used to have signature
cpm_payment_config	Same information used to have signature
cpm_page_action	Same information used to have signature
cpm_version	Same information used to have signature
cpm_language	Same information used to have signature
cpm_designation	Same information used to have signature
cpm_custom	Same information used to have signature
apikey	Same information used to have signature
signature	Same information used to have signature
notify_url	Define here your notification URL ( <b>Optional</b> )
return_url	Define here your return URL ( <b>Optional</b> )
cancel_url	Define here your cancel URL ( <b>Optional</b> )

If you get signature by adding optional champs (cel\_phone\_num & cpm\_phone\_prefixe), then you must add them to form :

cel_phone_num	Buyer phone (ex : 01020304)
cpm_phone_prefixe	Prefix (ex : 225)

**Remarque : Utilisation des balises html <iframe> et <frame>**

Une iframe (inline frame) est utilisée pour afficher une page web dans une autre page web.

**L'utilisation des iframes pour afficher la page de paiement est interdite pour des raisons de sécurité**

Exemples de codes interdits :

```
<FRAMESET>
  <FRAME SRC="https://secure.cinetpay.com/">
</FRAMESET>

<iframe src="https://secure.cinetpay.com/"></iframe>
```

Exemple :

```
<form action="https://secure.cinetpay.com" method="post">
  <input type="hidden" name="apikey" value="__YOUR_API_HERE__">
  <input type="hidden" name="cpm_site_id" value="__YOUR_SITE_ID_HERE__">
  <input type="hidden" name="cpm_currency" value="CFA">
  <input type="hidden" name="cpm_page_action" value="PAYMENT">
  <input type="hidden" name="cpm_payment_config" value="SINGLE">
  <input type="hidden" name="cpm_version" value="V2">
  <input type="hidden" name="cpm_language" value="fr">
  <input type="hidden" name="cpm_trans_date" value="20170906124338">
  <input type="hidden" name="cpm_trans_id" value="20170906124338">
  <input type="hidden" name="cpm_designation" value="Mon produit de ref: 20170906124338">
  <input type="hidden" name="cpm_amount" value="5">
  <input type="hidden" name="signature" value="__CORRECT_SIGNATURE_HERE__">
  <input type="hidden" name="cpm_custom" value="client 20170906124338 22447">
  <input type="hidden" name="notify_url" value="https://www.yourdomain.ci/notify">
  <input type="hidden" name="return_url" value="https://www.yourdomain.ci/return">
  <input type="hidden" name="cancel_url" value="https://www.yourdomain.ci">
  <input type="hidden" name="debug" value="0">
  <button class="cinetpay-button large">Buy</button>
</form>
```

## 3. STEP 2: ANALYZE URL SERVER IN POST

### 3.1: Url server concept (Notification URL): IPN URL.



**The server notification URL is the only mechanism to implement for automatically synchronize payment from CinetPay to your merchant site.**

At the end of a payment, the payment platform systematically calls the server notification url entered in the merchant back-office.

This call is intended to inform the merchant site payment status (even if the customer doesn't return to the site).

The merchant will be able to validate order if the payment is verified and accepted.

- The call is an **HTTPS** request containing a **POST** in which are valued parameters allowing analysis of the payment (accepted or rejected...).
- The server notification url must be entered in the merchant back office or sent with a transaction on CinetPay.

To enter it, please log in with your CinetPay Merchant ID, then click on the "Preferences" tab and go to the "Instant Payment Notification" section. You should see a picture like the one shown below:

**[Notifications instantanées de paiements]**

**Nom du service \***

Choisissez un service svp

**Url de notification \***

<http://www.mondomaine.ci/cinetpay/notify.php>

**Url de retour**

<http://www.mondomaine.ci/cinetpay/return.php>

**Url d'annulation**

<http://www.mondomaine.ci/cinetpay/cancel.php>

 Sauvegarder

- This notification URL is always called via an HTTP POST request, regardless of the value of the **cpm\_return\_mode** parameter.
- The server notification url is the only mechanism that should allow the launch of payment-dependent tasks. (Updating the status of the order in your back office shop, sending enamel, destocking product etc ...)
- If the server notification url fails, the payment platform sends an email to the store administrator with the reason for the failure (http error etc ...) url server from the back office of the payment solution.
- **Warning:** the server notification URL can be called multiple times, so your implementation needs to take this into consideration.

### 3.2: Extracts of the parameters returned on your Url notification in POST

Settings	
cpm_trans_id	Valued identically to the value received in the payment form
cpm_amount	Valued identically to the value received in the payment form
cpm_currency	Valued identically to the value received in the payment form
cpm_site_id	Valued identically to the value received in the payment form
cpm_language	Valued identically to the value received in the payment form
cpm_version	Valued identically to the value received in the payment form
cpm_payment_config	Valued identically to the value received in the payment form
cpm_page_action	Valued identically to the value received in the payment form
cpm_custom	Valued identically to the value received in the payment form
payment_method	Payment's method with which the payment was made (Mobile Money or Orange Money or Moov Money)
signature	Signature returned and calculated by the payment platform
cel_phone_num	Valued identically to the value entered by the buyer
cpm_phone_prefixe	Valued identically to the value entered by the buyer

Once these parameters are received by "POST" on your notification Url, you must send a POST HTTP request with the following variables "apikey", "cpm\_site\_id" and "cpm\_trans\_id" to this Url <https://api.cinetpay.com/v1/?method=checkPayStatus> in order to obtain the true status of your payment.

An example answer received below:

```
{
  "transaction": {
    "cpm_site_id": "296911",
    "signature": "4dfbf5b8f40818abffe754b8a8aa04e4d29af25f",
    "cpm_amount": "11",
    "cpm_trans_date": "04092017140045",
    "cpm_trans_id": "50445985950",
    "cpm_custom": "08373459U",
    "cpm_currency": "CFA",
    "cpm_payid": "MP170904.1401.A91088",
    "cpm_payment_date": "2017-09-04",
    "cpm_payment_time": "14:01:35",
    "cpm_error_message": "SUCCES",
    "payment_method": "OM",
    "cpm_phone_prefixe": "225",
    "cel_phone_num": "79557788",
    "cpm_ipn_ack": "Y",
    "created_at": "2017-09-04 14:00:54",
    "updated_at": "2017-09-04 14:01:06",
    "cpm_result": "00",
    "cpm_trans_status": "ACCEPTED",
    "cpm_designation": "Test",
    "buyer_name": ""
  }
}
```

After decoding the JSON, if the value of "cpm\_result" equals "00" and the value of "cpm\_amount" is equal to the value of the amount stored in your database et finally the value of "signature" is the same as the value that you previously stored in database when buying or paying, then your payment is good. You can deliver the service to your customer.

**NB :** Pay attention to duplicate payments on your site. You must verify that the transaction you are processing has not been processed and validated beforehand in order to avoid issuing two or n times the same service to the same client.

### 3.3: How get a list of transactions related to your store with HTTP POST

Settings	
cpm_site_id	SITE_ID
date_debut	Start date in format jj-mm-aaaa ( <b>Optional</b> )

date_fin	End date in format jj-mm-aaaa ( <b>Optional</b> )
cpm_payid	Payment identifier sent to buyer. ( <b>Optional</b> )
cel_phone_num	Buyer 's mobile number ( <b>Optional</b> )
cpm_trans_id	Transaction's ID ( <b>Optional</b> )
apikey	Your apikey ( <b>Obligatory</b> )

You must send at least a HTTP POST with following two variables "apikey", "cpm\_site\_id" to this Url <https://api.cinetpay.com/v1/?method=getTransHistory> in order to obtain the status of your JSON payment. An example answer received below:

```
{
  "Transactions": {
    "transaction": [{
      "cpm_site_id": "997744",
      "signature": "d2a3ce8f4e4b58d12ff42810a2391b7c014782f9",
      "cpm_amount": "250",
      "cpm_trans_id": "52422",
      "cpm_custom": "63#42#mpl",
      "cpm_currency": "CFA",
      "cpm_payid": "",
      "cpm_payment_date": "2015-07-05",
      "cpm_payment_time": "10:39:57",
      "cpm_error_message": "OTP_CODE_ERROR",
      "payment_method": "MOMO",
      "cpm_phone_prefix": "225",
      "cel_phone_num": "06477877",
      "cpm_ipn_ack": "N",
      "created_at": "2015-07-05 10:39:57",
      "updated_at": "2015-07-05 10:39:57",
      "cpm_result": "604",
      "cpm_trans_status": "REFUSED",
      "cpm_designation": "",
      "buyer_name": ""
    },
    {
      "cpm_site_id": "997744",
      "signature": "aef5f497aeeb4f6ff07367649792634938960241",
      "cpm_amount": "25000",
      "cpm_trans_id": "5255225555",
      "cpm_custom": "522#633#mpl",
      "cpm_currency": "CFA",
      "cpm_payid": "",
      "cpm_payment_date": "2015-07-04",
      "cpm_payment_time": "17:47:49",
      "cpm_error_message": "OTP_CODE_ERROR",
      "payment_method": "MOMO",
      "cpm_phone_prefix": "225",
      "cel_phone_num": "06477877",
      "cpm_ipn_ack": "N",
      "created_at": "2015-07-04 17:47:49",
      "updated_at": "2015-07-04 17:47:49",
      "cpm_result": "604",
      "cpm_trans_status": "REFUSED",
      "cpm_designation": "",
      "buyer_name": ""
    }
  ]
}
```

### 3.4: How get the balance of your shop and the merchant's total balance with HTTP POST

Settings	
cpm_site_id	SITE_ID
apikey	Your Apikey

You must send a HTTP POST with the following two variables "apikey", "cpm\_site\_id" to this Url

<https://api.cinetpay.com/v1/?method=getCompteStatus> in order to obtain the status of your payment in JSON.

An example answer received below:

```
{
  "user": {
    "compte": {
      "solde": "865.4",
      "credit": "900",
      "debit": "34.6"
    },
    "service": {
      "solde": "33.6",
      "credit": "35",
      "debit": "1.4"
    }
  }
}
```

### 3.5: Non-synchronization of payments on the merchant site

#### Common mistakes:

- Server notification URL is not specified in back office Preferences tab once logged in,
- Server notification URL doesn't perform any processing,
- Server notification URL can't be called because it is blocked by a .htaccess file
- Server notification URL blocked by your firewall,
- Redirection that results loss of posted values. The server url always contains the posted parameters. Do not find them is always an implementation error on the side of the merchant site,
- Parameters posted in the server URL can be changed by **adding** new fields.

## 4. STEP 3: RETURN TO THE SHOP (OPTIONAL)

It allows user to return to the shop after a click on the button « Retour boutique » present on the payment page.

It is recommended in the case of return to the shop to analyze the contents of the data posted depending on the back context you want to display to your customer:

For example:

- Back to homepage
- Return on a non-completed payment where you can offer an alternative payment method
- Return on a "thank you message" or "order summary" if payment accepted.

## 5. TECHNICAL ASSISTANCE

If you have any technical questions, you can contact us by phone at +(225) 22 423 777 or by e-mail to [support@cinetpay.com](mailto:support@cinetpay.com)

Accessible on **working days** from Monday to Friday from 09:00 to 18:00 (Ivorian legal time).

**Pricing of this number: Cost of a local call from a fixed line**

### ANNEX I (LIST OF ANSWER CODES)

<b>CODES</b>	<b>MESSAGES</b>
00	SUCCESS
600	PAYMENT_FAILED
601	MERCHANT_NOT_FOUND
602	INSUFFICIENT_BALANCE
603	SERVICE_UNAVAILABLE
604	OTP_CODE_ERROR
605	TRANSACTION_CLOSED
606	INCORRECT_SETTINGS
607	PENDING
608	MINIMUM_REQUIRED_FIELDS
609	AUTH_NOT_FOUND
610	ERROR_PAYMETHOD_NOTFOUND
611	ERROR_AMOUNT_TYPE
612	ERROR_CURRENCY_NOTVALID
613	ERROR_SITE_ID_NOTVALID
614	ERROR_FORMAT_TRANSACTION_DATE
615	ERROR_LANGUAGE_NOTVALID
616	ERROR_PAGE_ACTION_NOTVALID
617	ERROR_PAYMENT_CONFIG_NOTVALID
618	ERROR_API_VERSION_NOTVALID
619	ERROR_SIGNATURE_DONT_MATCHED
620	ERROR_DOUBLE_PAYEMNT
621	ERROR_OMPAY_UNAVAILABLE
622	ERROR_MOMOPAY_UNAVAILABLE
623	WAITING_CUSTOMER_TO_VALIDATE
624	UNKNOWN_ERROR
625	ABONNEMENT_OR_TRANSACTIONS_EXPIRED

## ANNEX II (USEFUL FUNCTIONS IN PHP)

1°) Function to communicate with the Api of CinetPay in order to obtain the signature, balance of the service, history of transactions, status of payment, etc. ...

```
function postData($params, $url)
{
    try {
        $curl = curl_init();

        $postfield = "";
        foreach ($params as $index => $value) {
            $postfield .= $index . '=' . $value . "&";
        }
        $postfield = substr($postfield, 0, -1);
        curl_setopt_array($curl, array(
            CURLOPT_URL => $url,
            CURLOPT_RETURNTRANSFER => true,
            CURLOPT_ENCODING => "",
            CURLOPT_MAXREDIRS => 10,
            CURLOPT_TIMEOUT => 45,
            CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
            CURLOPT_CUSTOMREQUEST => "POST",
            CURLOPT_POSTFIELDS => $postfield,
            CURLOPT_HTTPHEADER => array(
                "cache-control: no-cache",
                "content-type: application/x-www-form-urlencoded",
            ),
        ));
        $response = curl_exec($curl);
        $err = curl_error($curl);
        curl_close($curl);
        if ($err) {
            throw new Exception("cURL Error #: " . $err);
        } else {
            return $response;
        }
    } catch (Exception $e) {
        throw new Exception($e);
    }
}
```

### Example of use in PHP :

```
<?php
$params["apikey"] = "21585943f75164bbc2.38014630";
$params["cpm_site_id"] = "296911";
$url = "https://api.cinetpay.com/v1/?method=getCompteStatus";
//Appel de fonction postData()
$resultat = postData($params, $url);
$resultat_json = json_decode($resultat, true);
echo $resultat_json;
```

This example should display this:

```
{
  "user": {
    "compte": {
      "solde": "865.4",
      "credit": "900",
      "debit": "34.6"
    },
    "service": {
      "solde": "33.6",
      "credit": "35",
      "debit": "1.4"
    }
  }
}
```