

# Hosted Payment Page (HPP) - paymentpage.aspx

## Contents

- [Integration](#)
- [How to call the Hosted Payment Page ?](#)
  - [Request parameters](#)
  - [Response](#)
- [Step by step : Create a 20 euros payment](#)
  - [Calculate the HMAC value](#)
  - [Calculate the DATA and Len values](#)
  - [Finalize the request](#)
- [Payment methods available](#)
- [Customize the checkout experience](#)
  - [Language of the payment page](#)
  - [Checkout experiences](#)
    - [Payment page offering cards only](#)
    - [Payment page highlighting cards payment](#)
    - [Payment page offering all payment methods available on the shop \(cards payment and alternative payment methods\)](#)
  - [Other customization available](#)



### Hosted Payment Page

The Hosted Payment Page (HPP) acts like a proxy allowing the customer to choose between the paymethods offered by your shop.

Credit card payments are then forwarded to the Credit Card Payment Form (PaySSL).

Other paymethods (e.g. PayPal) are formwared to other dedicated payment forms.

## Integration

The Hosted Payment Page (HPP) offer the easiest way to integrate AXEPTA :

- Your system just need to request the Payment form from AXEPTA
- the customer enters the payment data into the form which send them to AXEPTA
- the payment is processed by AXEPTA automatically
- and AXEPTA sends a notification to your shop system with the result of that payment process.

You just need to:

- build the API request initiating the payment process
- supply URLs for success, failure, back and notification

AXEPTA handles automatically:

- Validation of customer input data
- Retry of customer input in case of failure
- Handling of 3-D Secure authentication form provided by banks for 3-D Secure 1.x and s-D Secure 2.x
- Automatic handling of soft decline, i.e.: an authorization which requires authentication



You will fin all technical inputs in the section [Platform Integration for developers](#)

## How to call the Hosted Payment Page ?



To make payment requests via the payment methods selection page, the merchant should send a request to the following URL with HTTPS GET or HTTPS POST:

<https://paymentpage.axepta.bnpparibas/paymentPage.aspx>

All details required for payment processing are forwarded as parameters.

## Request parameters

The following parameters are mandatory for all payment methods and have to be submitted Blowfish-encrypted within the Data parameter to the payment methods selection page.

Parameter	Format	CND	Description				
MerchantID	ans..30	M	MerchantID, assigned by Axepta. Additionally this parameter has to be passed in plain language too.				
MsgVer	ans..5	M	<div>Message version.</div> <div>Values accepted</div> <div><ul style="list-style-type: none"><li>2.0</li></ul></div> <table><tr><th>Value</th><th>Description</th></tr><tr><td>2.0</td><td>With 3-D Secure 2.x a lot of additional data were required (e.g. browser-information, billing/shipping-address, account-info, ...) to improve authentication processing. To handle these information the <a href="#">JSON-objects</a> have been put in place to handle such data. To indicate that these data are used the MsgVer has been implemented.</td></tr></table>	Value	Description	2.0	With 3-D Secure 2.x a lot of additional data were required (e.g. browser-information, billing/shipping-address, account-info, ...) to improve authentication processing. To handle these information the <a href="#">JSON-objects</a> have been put in place to handle such data. To indicate that these data are used the MsgVer has been implemented.
Value	Description						
2.0	With 3-D Secure 2.x a lot of additional data were required (e.g. browser-information, billing/shipping-address, account-info, ...) to improve authentication processing. To handle these information the <a href="#">JSON-objects</a> have been put in place to handle such data. To indicate that these data are used the MsgVer has been implemented.						
TransID	ans..64	M	TransactionID which should be unique for each payment				
RefNr	an12	M  recom mended	<div>Merchant's unique reference number, which serves as payout reference in the acquirer EPA file. Please note, without the own shop reference delivery you cannot read out the EPA transaction and regarding the additional BNP settlement file (CTSF) we cannot add the additional payment data.</div> <div>Merchant's unique reference number, which serves as payout reference in the acquirer EPA file. Please note, without the own shop reference delivery you cannot read out the EPA transaction and regarding the additional settlement file we cannot add the additional payment data.</div> <div>Notes:</div> <div><ul style="list-style-type: none"><li><b>Fixed length</b> of 12 characters (only characters (A..Z, a..z) and digits (0..9) are allowed, <b>no special characters</b> like whitespace, underscore...)</li><li>If the number of characters entered is lower than 12, BNP will complete, starting from the left side, with "0" (Example : 000018279568)</li></ul></div> <div><div></div><div><div>The format depends on the available paymethods for your MerchantId and this parameter is used for card payments reconciliation.</div><div>Please choose your format in that way that all paymethods are covered.</div><div>We recommend to use the most restrictive format for this parameter (<b>AN12 - M</b>) and create <b>unique RefNr</b>.</div><div>More details : <a href="#">Data reconciliation</a> : <a href="#">Key Data</a></div></div></div>				
Amount	n..10	M	<div>Amount in the smallest currency unit (e.g. EUR Cent)</div> <div>Please contact the helpdesk, if you want to capture amounts &lt; 100 (smallest currency unit).</div>				
Currency	a3	M	<div>Currency, three digits according to ISO 4217</div> <div>Ex : EUR</div>				
OrderDesc	ans..384	M	<div>Description of purchased goods, unit prices etc.</div> <div><div></div><div><div>The format depends on the available paymethods for your MerchantId. Please choose your format in that way that all paymethods are covered.</div><div>More details : <a href="#">Data reconciliation</a> : <a href="#">Key Data</a></div></div></div>				
ReqId	ans..32	O	To avoid double payments / actions, enter an alphanumeric value which identifies your transaction and may be assigned only once. If the transaction / action is submitted again with the same ReqID, Axepta Platform will not carry out the payment or new action, but will just return the status of the original transaction / action. Please note that the Axepta Platform must have a finalized transaction status for the first initial action. Submissions with identical ReqID for an open status will be processed regularly.				

MAC	an64	M	<p>Hash Message Authentication Code (HMAC) with SHA-256 algorithm</p> <p><a href="#">HMAC Authentication (Request)</a></p> <p><a href="#">HMAC Authentication (Notify)</a></p>
UserData	ans..1024	O	If specified at request, Payment platform forwards the parameter with the payment result to the shop
AccVerify	a3	O	<p>Indicator to request an account verification (aka zero value authorization). If an account verification is requested the submitted amount will be optional and ignored for the actual payment transaction (e.g. authorization).</p> <p>Values accepted</p> <ul style="list-style-type: none"> <li>• <b>Yes</b></li> </ul>
threeDSPolicy	JSON	O	Object specifying authentication policies and exemption handling strategies
accountInfo	JSON	O	The account information contains optional information about the customer account with the merchant
billToCustomer	JSON	O	The customer that is getting billed for the goods and / or services. Required for EMV 3DS unless market or regional mandate restricts sending this information.
shipToCustomer	JSON	O	The customer that the goods and / or services are sent to. Required if different from billToCustomer.
billingAddress	JSON	O	Billing address. Required for EMV 3DS (if available) unless market or regional mandate restricts sending this information.
shippingAddress	JSON	O	Shipping address. If different from billingAddress, required for EMV 3DS (if available) unless market or regional mandate restricts sending this information.
credentialOnFile	JSON	C	Object specifying type and series of transactions using payment account credentials (e.g. account number or payment token) that is stored by a merchant to process future purchases for a customer. Required if applicable.
merchantRiskIndicator	JSON	O	<p>The Merchant Risk Indicator contains optional information about the specific purchase by the customer.</p> <p>If no <b>shippingAddress</b> is present it is strongly recommended to populate the <b>shippingAddressIndicator</b> property with an appropriate value such as <b>shipToBillingAddress</b>, <b>digitalGoods</b> or <b>noShipment</b>.</p>
Plain	ans..50	O	A value to be set by the merchant to return some information unencrypted, e.g. the MID
Custom	ans..1024	O	<p>The merchant can submit several values separated by   which are returned unencrypted and separated by &amp;.</p> <p>Custom=session=123 id=456 will change in the answer to Session=123&amp;id=456</p>
URLNotify	ans..256	M	<p>A FQDN URL for redirection of the client in case the payment was processed successfully (HTTP POST).</p> <p>Complete URL which Platform calls up in order to notify the shop about the payment result. The URL may be called up only via port 443. It may not contain parameters: Use the <a href="#">UserData</a> parameter instead.</p> <p><b>i Common notes:</b></p> <ul style="list-style-type: none"> <li>• We recommend to use parameter "response=encrypted" to get an encrypted response by Platform</li> <li>• However, fraudster may just copy the encrypted DATA-element which are sent to URLFailure and send the DATA to URLSuccess/URLNotify. Therefore ensure to check the "code"-value which indicates success/failure of the action. Only a result of "code=00000000" should be considered successful.</li> </ul>
URLSuccess	ans..256	M	<p>A FQDN URL for redirection of the client in case the payment was processed successfully (HTTP POST).</p> <p>Complete URL which calls up Platform if payment has been successful. The URL may be called up only via port 443. This URL may not contain parameters: In order to exchange values between Platform and shop, please use the parameter <a href="#">UserData</a>.</p> <p><b>i Common notes:</b></p> <ul style="list-style-type: none"> <li>• We recommend to use parameter "response=encrypted" to get an encrypted response by Platform</li> <li>• However, fraudster may just copy the encrypted DATA-element which are sent to URLFailure and send the DATA to URLSuccess. Therefore ensure to check the "code"-value which indicates success/failure of the action. Only a result of "code=00000000" should be considered successful.</li> </ul>
URLFailure	ans..256	M	<p>A FQDN URL for redirection of the client in case the payment was processed successfully (HTTP POST).</p> <p>Complete URL which calls up Platform if payment has been unsuccessful. The URL may be called up only via port 443. This URL may not contain parameters: In order to exchange values between Platform and shop, please use the parameter <a href="#">UserData</a>.</p> <p><b>i Common notes:</b></p> <ul style="list-style-type: none"> <li>• We recommend to use parameter "response=encrypted" to get an encrypted response by Platform</li> <li>• However, fraudster may just copy the encrypted DATA-element which are sent to URLFailure and send the DATA to URLSuccess/URLNotify. Therefore ensure to check the "code"-value which indicates success/failure of the action. Only a result of "code=00000000" should be considered successful.</li> </ul>

<b>Response</b>	a7	O	Status response sent by Payment platform to URLSuccess and URLFailure, should be encrypted. For this purpose, transmit Response=encrypt parameter.
<b>CustomField [n]</b>	ans..50	O	Field that can be used individually by the merchant. Presently 14 fields from CustomField1 to CustomField14 are supported. Please refers to <a href="#">Customize checkout experience</a>

These parameters are mandatory for all payment means and must be transmitted and Blowfish-encrypted in the “**Data**” parameter.

**Notice:** Please take all further parameters specifically for a payment method from the manual of the respective payment method.

## Response

When the payment is completed Axepta Platform will send a notification to the merchant server (i.e. **URLNotify**) and redirect the browser to the **URLSuccess** respectively to the **URLFailure**.

The blowfish encrypted data elements as listed in the following table are transferred via **HTTP POST** request method to the URLNotify and URLSuccess/URLFailure.

The content of the response depends on the payment method choose by the client.

For credit cards payment, please refers to [Axepta Credit Card Form \(payssl.aspx\)](#).

## Step by step : Create a 20 euros payment

This example is based on the test shop [BNP\\_DEMO\\_AXEPTA](#), only credit card payments are setup on this shop.

### Calculate the HMAC value

The HMAC value is obtained by ciphering the string PayID\*TransID\*MerchantID\*Status\*Code with the HMAC key of your shop.

Example with [BNP\\_DEMO\\_AXEPTA](#)

- PayID\*TransID\*MerchantID\*Amount\*Currency \*1\*BNP\_DEMO\_AXEPTA\*2000\*EUR
- HMAC value 529c65ce765e684d42a29ca255ad99ae40b78715abc8ee958bfdbafd2597d30a



For a Payment request, the PayID (unique ID generated by Axepta) is not know yet, so the first data should be left empty.

So the HMAC will start with \*.

### Calculate the DATA and Len values

The DATA parameter is obtained by ciphering all the parameters required for the payment with the blowfish key of your shop.

All parameters are assembled in a character string and separated by the character &.

At least, a request payment should contain the following parameters :

```
MerchantID=value&MsgVer=value&TransID=value&RefNr&Amount=value&Currency=value&URLNotify=value&URLSuccess=value&URLFailure=v
alue&MAC=value&OrderDesc=value
```

Example with [BNP\\_DEMO\\_AXEPTA](#)

- Required parameters with the values
  - MerchantID=BNP\_DEMO\_AXEPTA&MsgVer=2.0&TransID=1&RefNr=0000000AB123&Amount=2000&Currency=EUR&URLNotify=https://axepta.bnpparibas/&URLSuccess=https://axepta.bnpparibas/&URLFailure=https://group.bnpparibas&MAC=529c65ce765e684d42a29ca255ad99ae40b78715abc8ee958bdfbaf2597d30a&OrderDesc=Test:0000
    - If you use BNP\_DEMO\_AXEPTA you have to use "OrderDesc=Test:0000" but this is not mandatory with your own MID
- Encryption with the BNP\_DEMO\_AXEPTA blowfish key
  - DATA =  
43ad07f58ff6a5f9ebbdd42e361d2c85ce4ad41fcd63c697c9ca59076fb5cb782237a2e862a97bb24d949911bb701d698dfed6901f1bc  
b92404f53b8f5336525167ac5b8a9b89c5fb88d79967366e99e59d95f3f0c37126a52495115e28f938e76748a5dc703f7ccbda6ccb4f  
c253b255c06e0df990fdd94f4313ec2b94142f9978adb9d1079a36a9dbb83e9638e3e58a124d532ece1b7bc175fa340bd0c73c33d4f7  
8374420091e90735bb014a5163d86bfe38795decacf0358075a85c0fbf80c5535046e7f8df64d204c7a4755e07700d4d17c9ef0bdc6e8  
bbd9c377e3ee0493a0ad2d3a9a624d693d04fe0bdfb3ebb2ef5badb63291ab8d7ad29b4f19b2b0f87dbc0bdb38f282816fe694ac2d51  
2ba741d76a830b2083232246763aa006472661aeb2ac126
  - LEN = 291

## Finalize the request

A correct parameter character string for Platform contains three basic parameters: **MerchantID**, **Len** and **Data**.

The parameters **MerchantID** and **Len** are unencrypted. Only the **Data** parameter is Blowfish-encrypted such as :

```
MerchantID=YourMerchantID&Len=67&Data=0A67FE96a65d384350F50FF1
```

They are added to the Hosted Payment Page endpoint to create the GET request

```
https://paymentpage.axepta.bnpparibas/paymentpage.aspx?MerchantID=YourMerchantID&Len=67&Data=0A67FE96a65d384350F50FF1
```

The **Data** parameter contains the sensitive payment details such as amount and currency. The encrypted bytes are Hex-encoded and completed to two characters from the left with a zero. Encryption is via Blowfish ECB and is available to you as source-code and components.

The **Len** parameter is very important for encryption because it contains the length of the **unencrypted(!)** character string in the **Data** parameter. Since the data quantity to be encrypted is increased by a multiple of 8 in the case of the Blowfish encryption, the correct length of the character string must be known for decryption. Otherwise accidental characters emerge at the end of the character string.

The parameters are transmitted via HTTPS POST or HTTPS GET. The recommended transmit method is HTTPS POST because the parameter character string in the case of GET is attached to the URL, which is limited to 2048 bytes depending on the browser.

**Notice:** Please note that the maximum length of a payment request is limited to 5120 characters. If you require longer strings please contact [Axepta Helpdesk](#).

Example with [BNP\\_DEMO\\_AXEPTA](#)

```
https://paymentpage.axepta.bnpparibas/paymentpage.aspx?
MerchantID=BNP_DEMO_AXEPTA&Len=291&DATA=43ad07f58ff6a5f9ebbdd42e361d2c85ce4ad41fcd63c697c9ca59076fb5cb782237a2e862a97bb
24d949911bb701d698dfed6901f1bcb92404f53b8f5336525167ac5b8a9b89c5fb88d79967366e99e59d95f3f0c37126a52495115e28f938e76748a5dc
703f7ccbda6ccb4fc253b255c06e0df990fdd94f4313ec2b94142f9978adb9d1079a36a9dbb83e9638e3e58a124d532ece1b7bc175fa340bd0c73c33d4f7
8374420091e90735bb014a5163d86bfe38795decacf0358075a85c0fbf80c5535046e7f8df64d204c7a4755e07700d4d17c9ef0bdc6e8bbd9c377e3ee04
93a0ad2d3a9a624d693d04fe0bdfb3ebb2ef5badb63291ab8d7ad29b4f19b2b0f87dbc0bdb38f282816fe694ac2d512ba741d76a830b2083232246763aa
006472661aeb2ac126
```



For additional technical information, please refers to [Programming basics : Technical implementation](#) and [Create an API call and samples to play](#)

## Payment methods available

Payment method

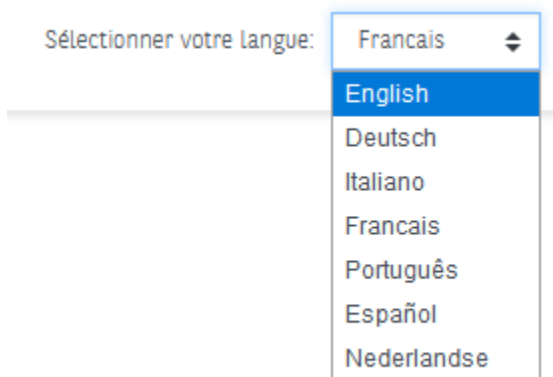
Cards (CB, Visa, MasterCard, Maestro, JCB, Diners, CUP)
Direct Debit
PayPal
iDEAL (PPRO)
Instanea
Sofort
giropay
Boleto
paydirekt
Alipay
Bancontact
eNETS
Finland Online Bank Transfer
Multibanco
My Bank
MyClear FPX
Przelewy 24
POLi
PostFinance
paysafecard
RHB Bank
TrustPay
WeChat

## Customize the checkout experience

### Language of the payment page

The standard BNP Paribas payment page is available in 7 languages : french, english, german, spanish, portuguese, italian and dutch.

By default, the language of the payment page will match the language used previously by the user, on the merchant's website. However, the user will have the possibility to change the language once he arrives on the payment page thanks to a scrolling menu, on the top right of the page (see below) :



## Checkout experiences

There are 3 different options to display the payment methods on the Axepta Online payment page:

- Payment page offering cards only - HPP will call paySSL.aspx
- Payment page highlighting cards payment - HPP will call paySSL.aspx
- Payment page offering all payment methods available on the shop (cards payment and alternative payment methods)

### Payment page offering cards only

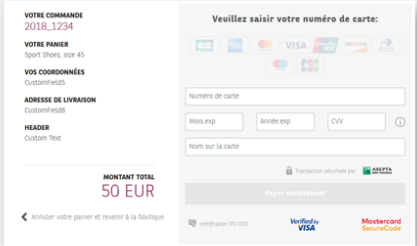
If the merchants wants to offer payment by cards only (CB, Visa, MasterCard, Amex...), the credit card form (payssl.aspx) can be called directly.

In deed, this page shows card payment checkout only.

To make card payments via the payment platform form, please use the following URL:

<https://paymentpage.axepta.bnpparibas/payssl.aspx>

The general parameters of a payment request by card are available at [Axepta Credit Card Form \(payssl.aspx\)](#)



The screenshot shows the Axepta payment interface. On the left, there's a sidebar with order details: 'VOTRE COMMANDE 2018\_1234', 'VOTRE PANIER Sport Shorts, size 40', 'VOS COORDONNÉES', 'ADRESSE DE LIVRAISON', and 'HEADER'. The main area is titled 'Veuillez saisir votre numéro de carte:' and contains a form with fields for 'Numéro de carte', 'Mois exp', 'Année exp', and 'CVV'. Below these fields is a 'Nom sur la carte' field. At the bottom, there are logos for 'VISA' and 'Mastercard SecureCode'. The total amount 'MONTANT TOTAL 50 EUR' is displayed at the bottom left.

Customization capabilities are described in the following page : [Customize checkout experience - old - to keep](#)



#### Details for this page

- ✓ provides automatic card type detection via card number
- ✓ your logo can be shown
- ✓ detailed order and customer information is displayed

How to:

- Your logo: CustomField3=<Logo-URL>
- Order and customer details: CustomField1..9

### Payment page highlighting cards payment

This page is enriched with a drop-down menu showing alternative payment methods (PayPal, iDEAL, Sofort, Wechat...) for a merchant who wants to highlight card payments but also offers other payment methods.

As this page offers many payment methods at the same time, proceeding to payment should be done using the following URL:

<https://paymentpage.axepta.bnpparibas/paymentPage.aspx>

#### Customer experience / flow

- When the user chooses to pay by card, he will be automatically redirected to the specific URL for [Axepta Credit Card Form \(payssl.aspx\)](#)
- When the user chooses to pay with another payment method from the drop-down list, he will be redirected to the specific URL (Please refer to the manual of each available payment method).

#### Details for this page

- ✓ provides automatic card type detection via card number
- ✓ allows selection of other payment methods
- ✓ your logo can be shown
- ✓ detailed order and customer information is displayed

How to:

- Your logo: CustomField3=<Logo-URL>
- Order and customer details: CustomField1..9

To activate this display, the merchant must contact the BNP Paribas Helpdesk:

- Phone : 0 800 25 62 25
- Mail : [bnpparibas@computop.com](mailto:bnpparibas@computop.com)

Customization capabilities are described in the following page : [Customize checkout experience](#)

## Payment page offering all payment methods available on the shop (cards payment and alternative payment methods)

This page shows all the logos of the available payment methods, so the merchant is not highlighting any payment method.

As this page offers many payment methods at the same time, proceeding to payment should be done using the following URL :

<https://paymentpage.axepta.bnpparibas/paymentPage.aspx>

The user will be automatically redirected to the specific URL of the chosen payment method (please refer to each payment method guide).

This page is displayed to the merchant **by default**. If the merchant wants to reorganize the payment methods' order, he must configure the payment methods in the "PayTypes" parameter according to his preferred order. (More information about this parameter in the [Definition of parameters values](#) section)

## Other customization available

Please refer to [Customize checkout experience](#) in order to review the several implementations offered by Axepta.



