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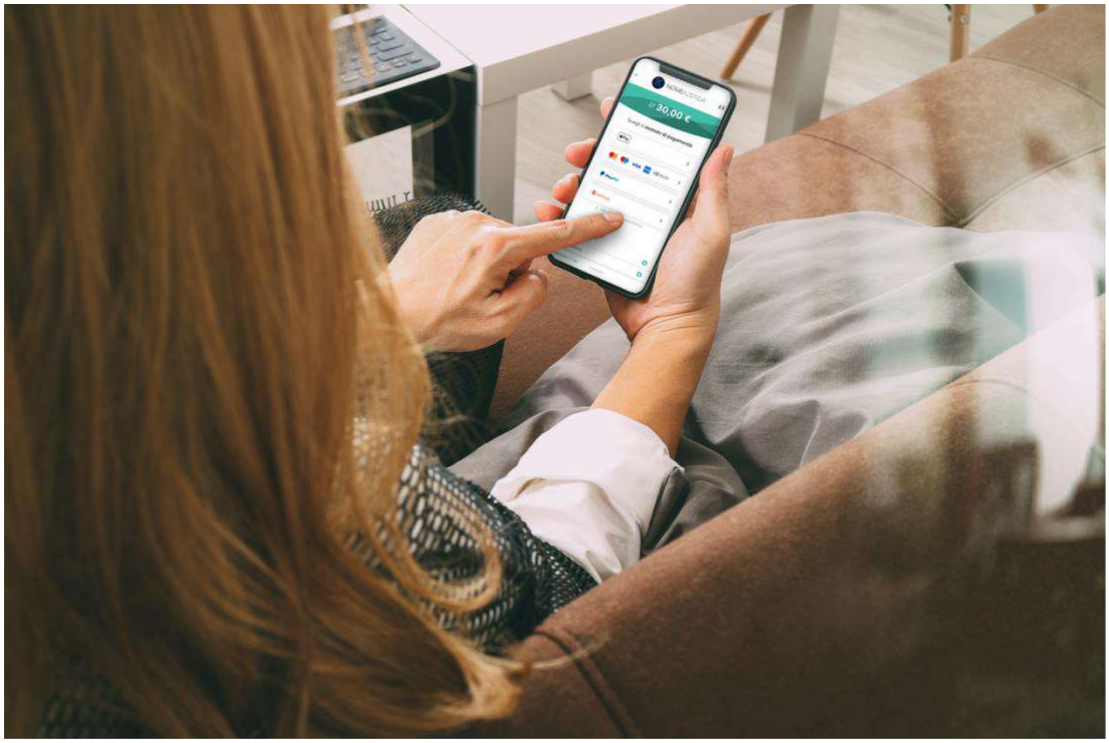
pHey Integration Guide

v. 1.3.4



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1 DOCUMENT VERSIONS

Version	Description of changes
1.0.0	First issue
1.0.1	Document outline revision
1.0.2	IT content revision
1.0.3	Business content revision
1.0.6	IT content revision
1.0.7	Document outline revision
1.0.8	Insertion of references to sections
1.0.9	Graphic revision
1.0.10	IT content revision (strings limited to 2048 bits, supported languages,removed the TID in initPayment)
1.0.11	IT content revision (body and response to server-to-server calls updated)
1.1.0	Added Android SDK and iOS SDK guides Added "Smart layout customization" section Error code revision Formatting revision
1.1.1	Typos in examples
1.1.2	Specified which licenses to use in the various Requests and redacted notification email
1.1.3	Detailed description on merchant-side PCI DSS Fixed typos on host
1.1.4	Typo in Android SDK in the "Implementation in an Activity" section, letter "f". initPayment, removed obligation of the *redirect_successUrl, redirect_failureUrl* and *callback_url* parameters
1.1.5	Smart integration, transaction outcome management
1.1.6	*redirect_successUrl* and *redirect_failureUrl* were changed from POST-typecalls to REDIRECT. Easy integration, transaction outcome management
1.1.7	Fixed test PANs
1.1.8	Specified that the Access Token must be sent in Bearer mode Verifying a Transaction (verify) section inserted
1.1.9	Types corrected in “Smart integration” example
1.2.0	Document outline revision Tokenize function added to various Sections. Complete revision of In-App integrations (iOS and Android) Specification on Access Tokens InitPayment, description of amount when card is verified InitPayment, enumerative added to address type “Making payments with 3DS” section. Example modified Easy integration: compatible browsers, clarifications on Verify Smart integration: compatible browsers, window.postMessage(), clarifications on Verify

	“Information for test environment” section, enrStatus e authStatus “Information for test environment” section, test cases New “Information for release to Production” section
1.2.1	Verify, PaymentID in input section
1.2.2	References to APMs removed Notes added for the special case of the Credit of Confirm Added Par. ”Making one-click payments”
1.3.0	Par. “Support information”, new email transaction_type clarification in initPayment shopID clarification in initPayment logo parameter substituted with image parameter in initPayment Par. “Smart Layout Management”, new layout “buttonless” SDK iOS, added Xcode functional requirements SDK Android, removed amount from ApiService.paymentConfiguration() Par. ”Making one-click payments”, complete review Par. “Deleting a tokenized card”, added paragraph Par. “Information for test environment”, added two test cases Par. “Testing 3DS 2.x”, added paragraph
1.3.1	Par. “Recurring payments”, added paragraph
1.3.2	Par. “Recurring payments”, modified paragraph
1.3.3	Par. “Payment Initialization (initPayment)”, removed payInstrToken and payCardToken in the examples Par. “Credit”, removed payInstrToken and payCardToken in the examples Par. “Void”, removed payInstrToken and payCardToken in the examples Par. “Confirm”, removed payInstrToken and payCardToken in the examples Par. “Payment Initialization (initPayment)”, added type values SPEDIZIONE and FATTURAZIONE Par. “Payment execution (execute)”, card_brand is not mandatory Par. “Direct payment (directPayment)”, card_brand is not conditional Par. “Payment Initialization (initPayment)”, job to cancel payments. Par. “Making one-click payments”, case of payCardToken null Par. “In-App checkout (SDK iOS)”, itemId value must be the PaymentID on the initPayment
1.3.4	Par. “Payment outcomes”, added paragraph Par. “Easy checkout”, payment result moved to new Par. “Payment outcomes” Par. “Smart checkout”, payment result moved to new Par. “Payment outcomes” More paragraphs, callback_url must be in HTTPS More paragraphs, redirect_successUrl must be in HTTPS More paragraphs, redirect_failureUrl must be in HTTPS Par. “In-App checkout (SDK iOS)”, modified functional requirements Par. “In-App checkout (SDK iOS)”, modified SDK configuration Par. “In-App checkout (SDK Android)”, modified SDK configuration Par. “In-App checkout (SDK Android)”, modified example in

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PaymentSelectorActivity Integration
Par. “Confirm with automatic void of the residual”, added paragraph

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CONTENTS

1 Introduction

This document presents useful information for the integration of a website with the Worldline e-commerce platform.

Websites offering e-commerce services usually provide a shopping cart with the summary of the products purchased and a button to complete the purchase through a payment request that can end on your website or through a redirection to a third-party site.

1.1 Checkout solutions

Worldline has several checkout solutions which are useful for optimizing conversions and increasing online sales. They can be easily integrated into your website as following:

- **Easy Checkout** – With the Easy solution your customers can finish their purchase on a personalized and optimized payment page for each device, which can be integrated with your website very quickly, without having to worry about the security of the payment that is guaranteed by Worldline
- **Smart Checkout** – Your customers can pay directly on your site and the transaction data will be handled by Worldline in secure mode thanks to Worldline's default UI components that can be easily integrated into your website with limited data security charges borne by us (details in the Merchant- side PCI data security information section).
- **In-App Checkout** – With the Smart solution, you can integrate our iOS and Android SDKs to have your customer complete their purchase directly in the App with the best mobile User Experience
- **API Checkout** – Worldline APIs can be used to integrate the payment request within your website (card data is managed by the merchant server)

1.2 Payment instruments

Worldline has several payment instruments that can be accepted with a single integration, including the VISA, VISA Electron, VPay, Mastercard, Maestro, American Express and Diners schemes.

1.3 Additional services

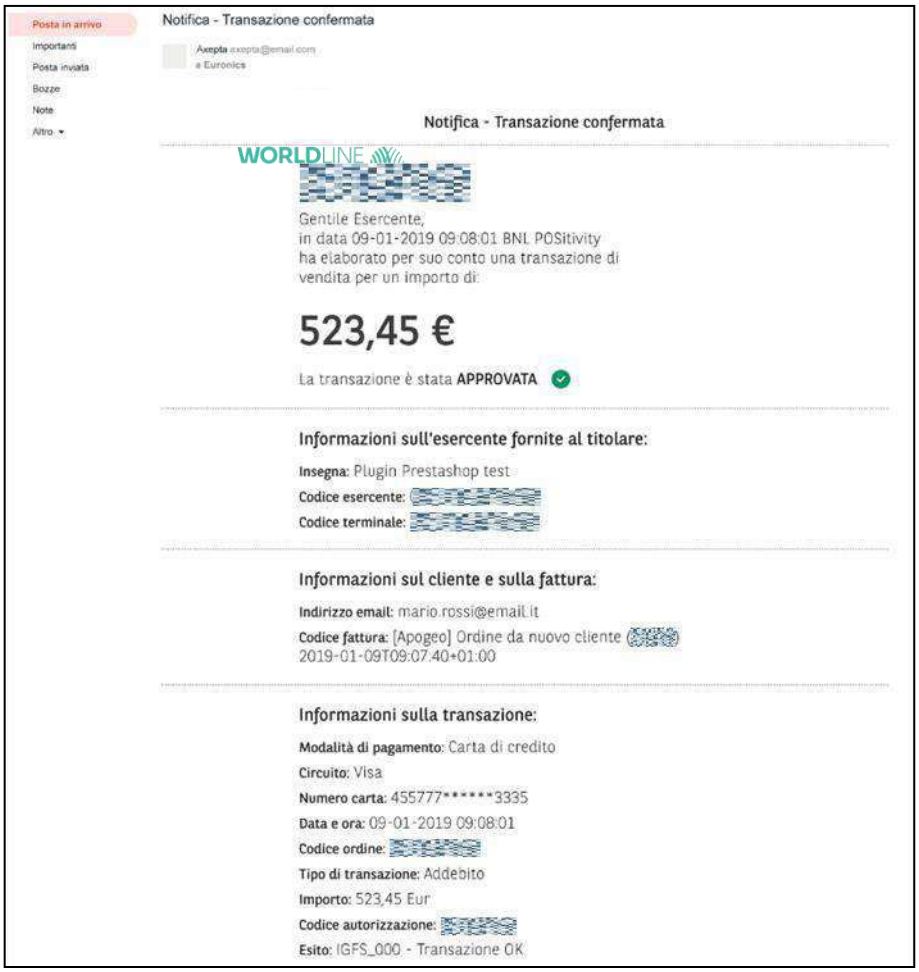
This integration guide has all the necessary information to integrate your website with the Worldline e-commerce platform.

1.3.1 Saving payment data

On request, by activating the “one-click” payments function, you can enable the service that lets you save payment data to facilitate future payments. For details on the calls to be made, see the “Making one-click payments” section.

1.3.2 Payment notifications

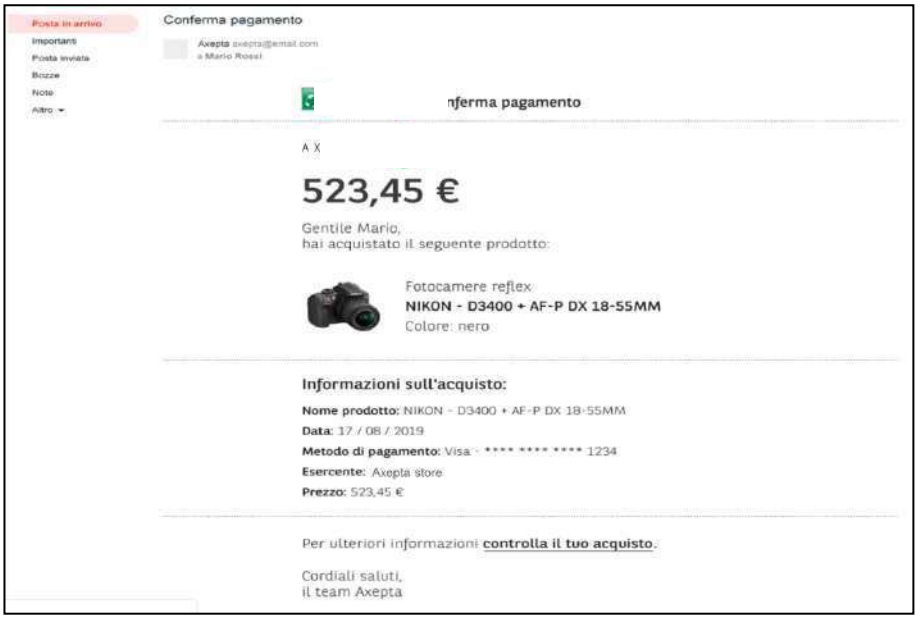
On request, you can enable a notification for each completed payment to receive via email, SMS.



You can ask our support team to modify the communications sent (see Section 1.4).

1.3.3 Customer notifications

On request, you can enable a customer notification for each completed payment to be sent via email or SMS.



You can ask our support team to change communications that have been sent (see section1.4).

1.3.4 Easy Checkout personalization

Your payment page can be personalized with your logo and colors

1.3.5 Easy Checkout optional forms

Using the Easy Checkout solution, you can activate, on request, the following forms on the payment page:

- Cart - The cart summary can be displayed on the payment page, including the logo,quantity, description and unit price of each product purchased

- Addresses - The summary of shipping and billing addresses can be displayed, showing the recipient, address, postcode, city, province and state for each.

1.4 Support information

This integration guide has all the necessary information to integrate your website within the Worldline e-commerce platform.
For any further information, simply write to the email address:

ecommercesupport@axeptamail.com or contact us at (+39) 060 070 selecting option 1 and then 4.

2 Initializing a payment

To make a payment using the Worldline Payment Gateway (pHey), a Merchant must be configured on Worldline side.

You must then be in possession of a valid key (**AccessToken**) for your user name and a user license. This Access Token can be obtained using your credentials at the following address https://pay-test.axepta.it/access. It is recommended that you keep the access token in a safe place and set this access token as a setup parameter on your e-commerce system, so that it can be replaced easily if the need arises. The access token lasts for 10 years but can be revoked at the specific request of the merchant or for Worldline needs.

Finally, you must possess an **API License Key,** which is indispensable for initializing the payment using server to server APIs. The license is of the alphanumeric type (for example: "ce7e4f96-3fa1-4696-a669-80cfe2805411").

2.1 Payment Initialization (initPayment)

The payment initialization call is **required for every transaction that you want to carry out regardless of the integration method** the merchant wishes to use. This is a technicalpayment initialization call that **DOES NOT trigger any type of authorization flow**.

The specifications of the initialization call are below:

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payment/initPayment
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “X-license-key": <-- API License Key -->
(BODY) PARAMETERS	}, "addresses": [{ "type": "SHIPPING", "addresseeName": "Mario Rossi", "streetAddress_1": "Via del Corso 1", "streetAddress_2": "C/O Worldline.", "zip": "00100", "city": "Rome", "provinceState": "RM", "country": "Italy" },

```
 {
  "type": "BILLING",
  "addresseeName": "Michele Bianchi",
  "streetAddress_1": "Via del Corso 1",
  "zip": "00100",
  "city": "Rome",
  "provinceState": "RM",
  "country": "Italy"
 } ],
 "addressesURl": "https://www.merchantSite.com/addressEdit",
 "products": [ {
  "logo": "https://logoRef.com/logo",
  "quantity": 1,
  "description": "Product1",
  "price": "49.75"
 },
 {
  "logo": " https://logoRef.com/logo ",
  "quantity": 1,
  "description": "Product2",
  "price": "34.83"
 } ],
 "redirect_successUrl": "https://www.merchantSite.it/success_redirect",
 "redirect_failureUrl": "https://www.merchantSite.it/failure_redirect",
 "callback_url": "https://www.merchantSite.it/callback",
 "additionals": [ {
    "key": "Test",
    "value": "Value"
 },
 {
    "key": "Test2",
    "value": "Value2"
 } ]
}
```

```
  },
  "addresses": [ {
   "type": "SHIPPING",
   "addresseeName": "Mario Rossi",
   "streetAddress_1": "Via del Corso 1",
   "streetAddress_2": "C/O Worldline.",
   "zip": "00100",
   "city": "Rome",
   "provinceState": "RM",
   "country": "Italy"
  },
  {
   "type": "BILLING",
   "addresseeName": "Michele Bianchi",
   "streetAddress_1": "Via del Corso 1",
   "zip": "00100",
   "city": "Rome",
   "provinceState": "RM",
   "country": "Italy"
  } ],
  "addressesURI": "https://www.merchantSite.com/addressEdit",
  "products": [ {
   "logo": "https://logoRef.com/logo",
   "quantity": 1,
   "description": "Product1",
   "price": "49.75"
  },
  {
   "logo": " https://logoRef.com/logo ",
   "quantity": 1,
   "description": "Product2",
   "price": "34.83"
  } ],
  "redirect_successUrl": "https://www.merchantSite.it/success_redirect",
  "redirect_failureUrl": "https://www.merchantSite.it/failure_redirect",
  "callback_url": "https://www.merchantSite.it/callback",
  "additionals": [ {
     "key": "Test",
     "value": "Value"
  },
  {
     "key": "Test2",
     "value": "Value2"
  } ]
}
```

RESPONSE	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"paymentID": <-- payment ID -->
	}

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

The *callback_url* parameter lets you receive the outcome of the transaction and the relateddata. Please see Par. “Payment outcomes”.

The formats of the fields requested in **Input** are as follows:

Field Name	Format	Description	
transaction_type	Enumerative: [PURCHASE,AUTH,VERIFY]	Describes the desired type of transaction. PURCHASE means that the cardholder would be charged immediately, AUTH means preauthorization (an amount would be only blocked on the card but not charged), VERIFY means that the card would be only verified if it is valid (note that you must specify an amount greater than zero, even if this amount would not be used).	*[1]
transaction_timeout	Numeric format string	Indicates the maximum waiting time for the transaction, the value is expressed in milliseconds.	
payInstrToken	String	Token identifying the customer’s wallet. For example, the user’s e-mail or ID can be passed to Worldline. See Par. “Making one-click payments”	
payCardToken	String	Token identifying a tokenized card belonging to the wallet corresponding to “payInstrToken”. It is not normally sent in input but is returned in output to the merchant after tokenizing. See from Par. “Making one-click payments”	
txIndicatorType	Enumerative: [UNSCHEDULED, RECURRENT, NOSHOW, DELAYCHARGE]	Indicator of the type of transaction to be used when paying with the wallet. See from Par. “Making one-click payments”	
tokenize	Boolean	Enables card tokenizing. See from Par. “Making one-click payments”	

[1] The fields indicated with an asterisk are mandatory

shopID	String (max 64)	Unique identifier of the transaction on merchant side. This string could be optionally passed in input, if needed for the merchant. Otherwise, a random string would be generated by Worldline. **IMPORTANT**: it is not possible to have two o more successfully transactions with the same shopID. It means that if a transaction fails, then the merchant may use again the same shopID. It means that if a transaction succeeds, then the merchant must NOT use again the same shopID.	
Currency	ISO 4217 format string, e.g. "EUR"	Currency to be used according to ISO 4217 format	*
Language	ISO 639-1 format string, possible values: IT, EN, FR, RU, JP, CN, NL, PL, ES, DE	Language to be used in the client implementation	*
Amount	String[1]	Amount, formatted with two mandatory decimal places, separated by a dot ".". For the "Verify" transaction_type, the amount should be set to at least "0.01" (uninfluential for authorization).	*
Notifications:			
name	String	Name of the Customer making the payment.	
email	e-mail format string	Customer email address for sending notifications via email.	
smartphone	String	Customer Smartphone number for sending notifications via SMS.	
Addresses:			
type	Enumerative: [SHIPPING,BILLING,SPEDIZIONE,FATTURAZIONE]	Describes the address type.	
addresseeName	String	Address name.	
streetAddress_1	String	Street name.	
streetAddress_2	String	Additional field for Street name.	
zip	Postal code format string	Postal Code.	
city	String	City.	
provinceState	ISO 3166 format string, e.g. "RM"	Province.	
country	String	Country.	

[1] All the string fields support a maximum of 2048 characters, unless specified

addressesURI	URL format string	Merchant site URL for modification in shipping fields, if necessary.	
Products:			
image	String	URL of the product image.	
quantity	String	Product quantity.	
description	String	Product description.	
price	String	Product price.	
redirect_successUrl	URL format string	For the Easy integration, when the transaction has successfully concluded, the application performs a REDIRECT to this URL. URL must be in HTTPS. This URL is also used in some alternative payment methods, please see respective documents, if needed.	
redirect_failureUrl	URL format string	For the Easy integration, when the transaction has incorrectly concluded, the application performs a REDIRECT to this URL. URL must be in HTTPS. This URL is also used in some alternative payment methods, please see respective documents, if needed.	
callback_url	URL format string	Merchant callback URL to receive the outcome of the transaction asynchronously. URL must be in HTTPS	
Additionals:		If you would like to add additional information to the transaction, you can specify this section.	
key	String	Additional information key.	
value	String	Additional information value.	

2.1.1 Example of Java Unirest integration

```
HttpResponse<String> response = Unirest.post("https://pay-test.axepta.it/api/v1/payment/initPayment")
  .header("Content-Type", "application/json")
  .header("x-license-key", "XXXXXXX-0ERMYE0-MP683C5-9G0Q976")
  .header("Authorization", "Bearer
eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJkbkJyWVVhRHFGbF9IUFQ4QlZ3bGE3bm8yN2lXaWNXd25
fVkNPdWZTTURjIn0.eyJqdGkiOiI4YTZkZjdlZC0wZWIwLTRjNWMtOWI0MS1lNjRmZjJmNWU5ODYiLCJleHAiOjE4
ODQzMzUzNzMsIm5iZiI6MCwiaWF0IjoxNTY4OTc1NzYxLCJpc3MiOiJodHRwczovL3Nzby10ZXN0LmF4ZXB0YS5p
dC9hdXRoL3JlYWxtcy9BeGVwdGElMjBJbnRlcm5ldCIsInN1YiI6ImI1NDYzN2M3LWQyZTktNDkxNC04YmNkLWE0
Y2MxNjliZDAzOCIsInR5cCI6IkJlYXJlciIsImF6cCI6InBnLXBheW1lbnQtYXBpLWluZXQiLCJhdXRoX3RpbWUiOjE1Njg
5NzUzNzMsInNlc3Npb25fc3RhdGUiOiJlN2E3MTg4MS01MGQ2LTQzN2QtODQyZS00MjAzNDcwYmY3NjliLCJhY3
IiOiIwIiwic2NvcGUiOiJvcGVuaWQifQ.N_4xTX9FjGTMzFsc7fERvciU4RAdXqCgeMoaymjScGCCSabZSApG5a-
ybeYTEA5mC9hUWFwgyzSRLWTJhbnRz4vsc2vSwdR0xY_YImbdC-y1IV-
lQkCLyOOEOwdI65slc2fHAZlrBE3jVo6nV6ee81meEGQeueMQ4L1hWO1u73ZlWKLzd_5YpRFKFD8HsNPKODdJV
6V2o1q2vqkJhfS0D9e3iJn_ehuqEs35m1dyiwUwFXXnMeq1aK1QiVDdKTpZG5_46XJ3ixTfVQ-
3eBPqJCwS3WYPy4wqtfud85oPT6NYuXDh-VKuGg2A13_2TAeFxQqvgGEU-RUGJdFR0xTY0A")
  .header("cache-control", "no-cache")
  .body("{\r\n \"transaction_type\": \"PURCHASE\",\r\n  \"currency\": \"EUR\",\r\n  \"language\": \"IT\",\r\n
\"amount\": \"84.58\",\r\n  \"notifications\": {\r\n  \"name\": \"Paolo Verdi\",\r\n  \"email\":
\"paoloverdi@axepta.it\",\r\n  \"smartphone\": \"\"\r\n  },\r\n  \"addresses\": [\r\n  {\r\n  \"type\":
\"SHIPPING\",\r\n  \"addresseeName\": \"Mario Bianchi\",\r\n  \"streetAddress_1\": \"Via del Corso 1\",\r\n
\"streetAddress_2\": \"C/O Axepta.\",\r\n  \"zip\": \"00100\",\r\n  \"city\": \"Roma\",\r\n
\"provinceState\": \"RM\",\r\n  \"country\": \"Italia\"\r\n  },\r\n  {\r\n  \"type\": \"BILLING\",\r\n
\"addresseeName\": \"Francesco Bianchi\",\r\n  \"streetAddress_1\": \"Via del Corso 1\",\r\n  \"zip\":
\"00100\",\r\n  \"city\": \"Roma\",\r\n  \"provinceState\": \"RM\",\r\n  \"country\": \"Italia\"\r\n  }\r\n
],\r\n  \"addressesURI\": \"https://www.shop.com\",\r\n  \"products\": [\r\n  {\r\n  \"logo\":
\"https://www.shop.com/01.jpg\",\r\n  \"quantity\": 1,\r\n  \"description\": \"Product\",\r\n  \"price\":
\"49.75\"\r\n  },\r\n  {\r\n  \"logo\": \"https://www.shop.com/02.jpg\",\r\n  \"quantity\": 1,\r\n
\"description\": \"Product description\",\r\n  \"price\": \"34.83\"\r\n  }\r\n  ],\r\n  \"redirect_successUrl\":
\"https://www.shop.com\",],\r\n  \"redirect_failureUrl\": \"https://www.shop.com\"\r\n  \"callback_url\":
\"https://www.shop.com\",\r\n \"additionals\": [{\r\n \t\"key\": \"key_1\",\r\n \t\"value\": \"value_1\"\r\n
},\r\n {\r\n \t\"key\": \"key_2\",\r\n \t\"value\": \"value_2\"\r\n }]\r\n}")
  .asString();
```

2.1.2 Example of PHP http Request integration

```
<?php

$request = new HttpRequest();
$request->setUrl('https://pay-test.axepta.it/api/v1/payment/initPayment');
$request->setMethod(HTTP_METH_POST);

$request->setHeaders(array(
 'cache-control' => 'no-cache',
 'Authorization' => 'Bearer
eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJkbkJyWVVhRHFGbF9IUFQ4QlZ3bGE3bm8yN2lXaWNXd25
fVkNPdWZTTURjIn0.eyJqdGkiOiI4YTZkZjdlZC0wZWIwLTRjNWMtOWI0MS1lNjRmZjJmNWU5ODYiLCJleHAiOjE4
ODQzMzUzNzMsIm5iZiI6MCwiaWF0IjoxNTY4OTc1NzYxLCJpc3MiOiJodHRwczovL3Nzby10ZXN0LmF4ZXB0YS5p
dC9hdXRoL3JlYWxtcy9BeGVwdGElMjBJbnRlcm5ldCIsInN1YiI6ImI1NDYzN2M3LWQyZTktNDkxNC04YmNkLWE0
Y2MxNjliZDAzOCIsInR5cCI6IkJlYXJlciIsImF6cCI6InBnLXBheW1lbnQtYXBpLWluZXQiLCJhdXRoX3RpbWUiOjE1Njg
5NzUzNzMsInNlc3Npb25fc3RhdGUiOiJlN2E3MTg4MS01MGQ2LTQzN2QtODQyZS00MjAzNDcwYmY3NjIiLCJhY3
IiOiIwIiwic2NvcGUiOiJvcGVuaWQifQ.N_4xTX9FjGTMzFsc7fERvciU4RAdXqCgeMoaymjScGCCSabZSApG5a-
ybeYTEA5mC9hUWFwgyzSRLWTJhbnRz4vsc2vSwdR0xY_YImbdC-y1IV-
lQkCLyOOEOwdI65slc2fHAZlrBE3jVo6nV6ee81meEGQeueMQ4L1hWO1u73ZlWKLzd_5YpRFKFD8HsNPKODdJV
6V2o1q2vqkJhfS0D9e3iJn_ehuqEs35m1dyiwUwFXXnMeq1aK1QiVDdKTpZG5_46XJ3ixTfVQ-
3eBPqJCwS3WYPy4wqtfud85oPT6NYuXDh-VKuGg2A13_2TAeFxQqvgGEU-RUGJdFxxxxxxx',
 'x-license-key' => 'XXXXXXX-0ERMYE0-MP683C5-9G0Q976',
 'Content-Type' => 'application/json'
));
$request->setBody('{
 "transaction_type": "PURCHASE",
 "currency": "EUR",
 "language": "IT",
 "amount": "84.58",
 "notifications": {
 "name": "Paolo Verdi",
  "email": "paoloverdi@axepta.it",
  "smartphone": ""
 },
 "addresses": [
 {
  "type": "SHIPPING",
  "addresseeName": "Mario Bianchi",
  "streetAddress_1": "Via del Corso 1",
  "streetAddress_2": "C/O Axepta.",
  "zip": "00100",
  "city": "Rome",
  "provinceState": "RM",
  "country": "Italy"
 },
 {
  "type": "BILLING",
  "addresseeName": "Francesco Bianchi",
  "streetAddress_1": "Via del Corso 1",
  "zip": "00100",
```

```
    "city": "Rome",
    "provinceState": "RM",
    "country": "Italy"
  }
  ],
  "addressesURI": "https://www.shop.com",
  "products": [
  {
    "logo": "https://www.shop.com/01.jpg",
    "quantity": 1,
    "description": "Product",
    "price": "49.75"
  },
  {
    "logo": "https://www.shop.com/02.jpg",
    "quantity": 1,
    "description": "Product description",
    "price": "34.83"
  }
  ],
  "redirect_successUrl": "https://www.shop.com",
  "redirect_failureUrl": "https://www.shop.com",
  "callback_url": "https://www.shop.com",
  "additionals": [{
                "key": "key_1",
                "value": "value_1"
  },
  {
                "key": "key_2",
                "value": "value_2"
  }]
}');

try {
  $response = $request->send();

  echo $response->getBody();
} catch (HttpException $ex) {
  echo $ex;
}
```

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2.1.3 Example of Node Request integration

```
var request = require("request");

var options = { method: 'POST',
  url: 'https://pay-test.axepta.it/api/v1/payment/initPayment',
  headers:
   { cache-control': 'no-cache',
     Authorization: 'Bearer
eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJkbkJyWVVhRHFGbF9IUFQ4QlZ3bGE3bm8yN2lXaWNXd25
fVkNPdWZTTURjIn0.eyJqdGkiOiI4YTZkZjdlZC0wZWIwLTRjNWMtOWI0MS1lNjRmZjJmNWU5ODYiLCJleHAiOjE4
ODQzMzUzNzMsIm5iZiI6MCwiaWF0IjoxNTY4OTc1NzYxLCJpc3MiOiJodHRwczovL3Nzby10ZXN0LmF4ZXB0YS5p
dC9hdXRoL3JlYWxtcy9BeGVwdGElMjBJbnRlcm5ldCIsInN1YiI6ImI1NDYzN2M3LWQyZTktNDkxNC04YmNkLWE0
Y2MxNjliZDAzOCIsInR5cCI6IkJlYXJlciIsImF6cCI6InBnLXBheW1lbnQtYXBpLWluZXQiLCJhdXRoX3RpbWUiOjE1Njg
5NzUzNzMsInNlc3Npb25fc3RhdGUiOiJlN2E3MTg4MS01MGQ2LTQzN2QtODQyZS00MjAzNDcwYmY3NjIiLCJhY3
IiOiIwIiwic2NvcGUiOiJvcGVuaWQifQ.N_4xTX9FjGTMzFsc7fERvciU4RAdXqCgeMoaymjScGCCSabZSApG5a-
ybeYTEA5mC9hUWFwgyzSRLWTJhbnRz4vsc2vSwdR0xY_YImbdC-y1IV-
lQkCLyOOEOwdI65slc2fHAZlrBE3jVo6nV6ee81meEGQeueMQ4L1hWO1u73ZlWKLzd_5YpRFKFD8HsNPKODdJV
6V2o1q2vqkJhfS0D9e3iJn_ehuqEs35m1dyiwUwFXXnMeq1aK1QiVDdKTpZG5_46XJ3ixTfVQ-
3eBPqJCwS3WYPy4wqtfud85oPT6NYuXDh-VKuGg2A13_2TAeFxQqvgGEU-RUGJdFRxxxxxx',
     'x-license-key': 'XXXXXXX-0ERMYE0-MP683C5-9G0Q976',
     'Content-Type': 'application/json' },
  body:
   { transaction_type: 'PURCHASE',
     currency: 'EUR',
     language: 'IT',
     amount: '84.58',
     notifications:
      { name: 'Paolo Verdi',
        email: 'paoloverdi@axepta.it',
        smartphone: '' },
     addresses:
      [ { type: 'SHIPPING',
          addresseeName: 'Mario Bianchi',
          streetAddress_1: 'Via del Corso 1',
          streetAddress_2: 'C/O Axepta',
          zip: '00100',
          city: 'Rome',
          provinceState: 'RM',
          country: 'Italy' },
        { type: 'BILLING',
          addresseeName: 'Francesco Bianchi',
          streetAddress_1: 'Via del Corso 1',
          zip: '00100',
          city: 'Rome',
          provinceState: 'RM',
          country: 'Italy' } ],
     addressesURI: 'https://www.shop.com',
     products:
      [ { logo: 'https://www.shop.com/01.jpg',
          quantity: 1,
          description: 'Product',
```

```
        price: '49.75' },
      { logo: 'https://www.shop.com/02.jpg',
        quantity: 1,
        description: 'Product description',
        price: '34.83' } ],
   redirect_successUrl: 'https://www.shop.com',
   redirect_failureUrl: 'https://www.shop.com',
   callback_url: 'https://www.shop.com',
   additionals:
    [ { key: 'key_1', value: 'value_1' },
      { key: 'key_2', value: 'value_2' } ] },
 json: true };

request(options, function (error, response, body) {
 if (error) throw new Error(error);

 console.log(body);
});
```

3 Types of integration

According to Business needs, the merchant can choose one of the following integration methods:

- API checkout
- Easy checkout
- Smart checkout
- In-App checkout (SDK iOS)
- In-App checkout (SDK Android)

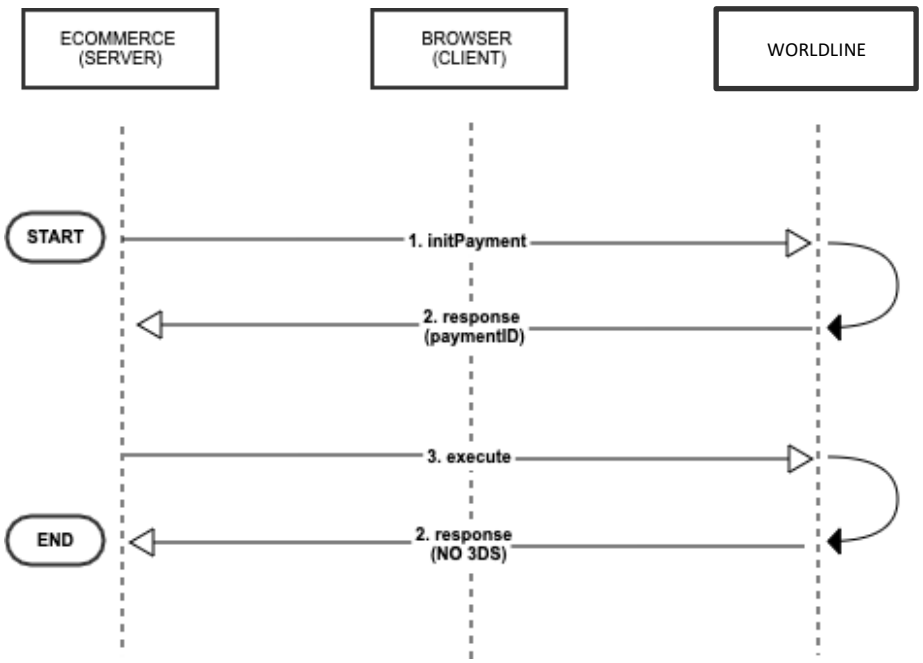
These types of integration are described in the sections that follow.

4 API checkout

Worldline APIs can be used to integrate the payment request within your website (the card data is managed by the merchant's server). This type of integration has the highest level of personalization but also the highest implementation complexity on the merchant side. For this reason, it is only applicable to special needs.

4.1 Payment execution (execute)

The integration flow for performing an **API Checkout** integration (Server to server), in the simplest **NO 3DS** case, is set out below:



- Invoke the *initPayment* service and retrieve the *PaymentID* parameter necessary forthe subsequent calls;
- Invoke the *execute* service using the *PaymentID* obtained from the initPayment call

The execution call has three possible answers in Output:

- The outcome of the transaction
- An HTML string (next section[1])
- A string containing a URL (next section)

The specifications of the payment execution call are below:

[1] This difference is given by the type of card used to make the payment: if the card, or the terminal used, are NOT enabled for 3DSecure, the response will be the outcome of the transaction; otherwise you will receive anHTML string or a string containing a URL. The actions to be taken if the card is enabled for 3DSecure will be explained in the next section.

METHOD	POST
END POINT	{{host server to server}}/api/v1/payment/execute/← PaymentID →
HEADERS	“Content-type”: application/json “Authorization”: Bearer ← ACCESS_TOKEN → “X-license-key": ← API License Key →

Card data in input **without tokenizing enabled**:

(BODY)
PARAMETERS
	{
	"card_number": "4111111111111111",
	"card_cvv": "123",
	"card_expiration": "1023",
	"card_brand": "VISA",
	"name": "Mario",
	"surname": "Rossi",
	"tokenize": true
	}

Previously tokenized card data (**Tokenizing enabled**):

(BODY)
PARAMETERS
	{
	"payInstrToken": "LhyjhaVzC7bqDh7DPkhoxg2ktADWRqzn",
	"payCardToken": "1uPlsusK1LXiD84TStkngiOPIRqUkHkM"
	}

The two possible responses in **Output** are:

RESPONSE NO 3DS	{ "mid": "merchantID", "instrument": "CREDITCARD", "operation_type": "PAYMENT", "isHTML": false, "transactionAt": "2019-11-29T15:17:19.373Z", "tid": "08000001", "shopID": "AfqhuojN7LCJw6UstZMVoPwo2QGNX8N7", "transaction_status": "**PG_000**", "token": "nloS0bPqZq8F27wcH4a5LNoOd2XVM55v", "maskedPan": "411111******1111", "brand": "VISA", "transactionID": "3079905680585024",

	"authCode": "288380", "xid": "MDAzMzMzODI4MzMxMjIzOTU2Nzc=", "transaction_code": "01010", "description_status": "TRANSACTION OK" }

RESPONSE NO 3DS KO	{
	"mid": "merchantID",
	"instrument": "CREDITCARD",
	"operation_type": "PAYMENT",
	"isHTML": false,
	"transactionAt": "2019-11-29T15:17:19.373Z",
	"tid": "08000001",
	"shopID": "AfqhuojN7LCJw6UstZMVoPwo2QGNX8N7",
	"transaction_status": "**PG_001**"
	"transaction_code": "00001",
	"description_status": "Generic error."
	}

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary.",
	}

The formats of the fields requested in **Input without tokenizing** are as follows:

Field Name	Format	Description	
card_number	String	Card number	*1
card_cvv	String	CVV number	**2
card_expiration	MMYY format string	Card expiry date in the indicated Format	*
card_brand	String	Brand of the card used. The string must be all uppercase and without spaces. e.g. MASTERCARD.	
name	String	Cardholder name.	
surname	String	Cardholder surname.	
tokenize	Boolean	Boolean that allows the card to be tokenized, if the feature is enabled.	

The formats of the fields requested in **previously tokenized input** are as follows:

Field Name	Format	Description	
payInstrToken	String	Unique ID of the wallet. For example, the user's e-mail or ID can be passed to	*

[1] The fields marked with an asterisk are mandatory
[2] The fields marked with two asterisks are conditional, e.g. optional for a Mo.To terminal.

		Axepta. See Par. "Making one-click payments"	
payCardToken	String	Unique ID of the tokenized card. See Par. "Making one-click payments"	*

The formats of the fields received in **Output** are as follows:

Field Name	Format	Description
tid	String	Identification of the terminal used.
instrument	String	Payment instrument used (e.g. CREDITCARD, MYBANK, ...).
operation_type	String	Payment type (e.g. PAYMENT)
mid	String	Merchant identifier.
isHTML	Boolean	Identifies whether the response contains an HTML code for the use of 3dSecure.
transactionAt	String	Payment execution date.
shopID	String	Foreign key identifying the payment.
transactionID	String	Order code processed.
transaction_status	Enum: ['PG_000', 'PG_001']	Identification code of the outcome of the transaction.
authCode	String	Authorization code returned by the issuer.
brand	String	Credit card brand (e.g. VISA, MASTERCARD, ...).
maskedPan	String	Masked card number.
token	String	Payment instrument token.
xid	String	Foreign code created by the ACS.
transaction_code	String	Error code identifying the status of the transaction.
description_status	String	Return code description.

4.1.1 Example of Java Unirest integration

```
HttpResponse<String> response = Unirest.post("https://pay-test.axepta.it/api/v1/payment/execute/950fb6770c43c93803f4a84f2750671115a5df75664295ea519a055d75bdb6aa")
  .header("Content-Type", "application/json")
  .header("x-license-key", "XXXXXXX-0ERMYE0-MP683C5-9G0Q976")
  .header("cache-control", "no-cache")
  .body("{\r\n \"card_number\": \"4111111111111111\",\r\n \"card_cvv\":\"111\",\r\n \"card_expiration\":\"1023\",\r\n  \"card_brand \":\"VISA\"\r\n}")
  .asString();
```

4.1.2 Example of PHP Http Request integration

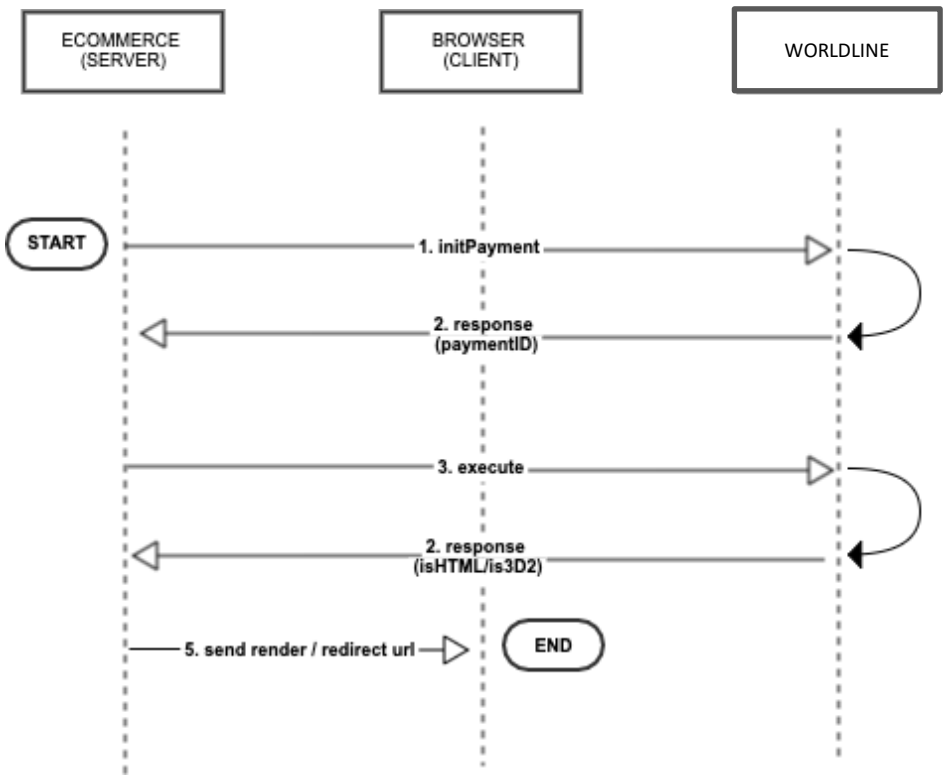
```
<?php

$request = new HttpRequest();
$request->setUrl('https://pay-test.axepta.it/api/v1/payment/execute/950fb6770c43c93803f4a84f2750671115a5df75664295ea519a055d75bdb6aa');
$request->setMethod(HTTP_METH_POST);

$request->setHeaders(array(
  'Postman-Token' => '66b92915-d0d6-4faa-8d04-9ce91d17b730',
  'cache-control' => 'no-cache',
  'x-license-key' => 'XXXXXXX-0ERMYE0-MP683C5-9G0Q976',
  'Content-Type' => 'application/json'
));

$request->setBody('{
    "card_number": "4111111111111111",
    "card_cvv ":"111",
    "card_expiration":"1023",
    "card_brand ":"VISA"
}');

try {
  $response = $request->send();

  echo $response->getBody();
} catch (HttpException $ex) {
  echo $ex;
}
```

4.1.3 Example of Node Request integration

```
var request = require("request");

var options = { method: 'POST',
  url: 'https://pay-test.axepta.it/api/v1/payment/execute/950fb6770c43c93803f4a84f2750671115a5df75664295ea519a055d75bdb6aa',
  headers:
   { 'cache-control': 'no-cache',
     'x-license-key': 'XXXXXXX-0ERMYE0-MP683C5-9G0Q976',
     'Content-Type': 'application/json' },
  body:
   { card_number: '4111111111111111',
     card_cvv: '111',
     card_expiration: '1023',
     card_brand: 'VISA' },
  json: true };

request(options, function (error, response, body) {
  if (error) throw new Error(error);

  console.log(body);
});
```

4.2 Payment execution with 3DS

The previous section described the API Checkout flow for the simplest case without 3DS. This section describes the integration flow for executing an **API Checkout** (Server to server)integration with **3DS** (version 1 and version 2):



- Invoke the *initPayment* service and retrieve the *PaymentID* parameter necessary for the subsequent calls;
- Invoke the *execute* service using the *PaymentID* obtained from the *initPayment* call
- Render the HTML returned by the *execute* in the case of *isHTML* or redirect the URL obtained in the case of *is3D2*

As mentioned in the previous section, the execution call has three possible answers inOutput:

- The outcome of the transaction (previous section)
- An HTML strings
- A string containing a URL

The possible responses for the latter two cases are indicated below:

RESPONSE 3DS OK	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"isHTML": true,
	"response": <-- HTML string -->
	}

RESPONSE 3DS KO	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"isHTML": true,
	"response": “”
	}

RESPONSE 3DS 2.0 OK	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"is3D2": true,
	"response": <-- URL ACS 3DSecure2.0 -->
	}

RESPONSE 3DS 2.0 KO	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"is3D2": true,
	"response": “”
	}

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary.",
	}

The actions to be taken for payments with a 3DS or 3DS 2.0-enabled card are shown below (the parameters to be checked are "is HTML" and "is3D2" in response to execute) are indicated below:

- **3DS**: There will be an HTML string in response to the payment execution call; it mustbe inserted into an <iframe> using the "srcDoc" attribute, or it can be inserted as a Blob in the "src" attribute.

- **3DS 2.0**: There will be a string containing a "URL" in response to the execution call; this must be inserted into an <iframe> via the "src" attribute.

The 3DS page relating to the scheme used by the card will then be automatically displayed.

Within the iframe, the user will perform the challenges necessary to complete the authentication requested by the payment provider.

Once the authentication is complete, the rendering will take place within the iframe of a pagewith the outcome of the transaction.

With the rendering of the outcome, an event will be triggered on the web page where theiframe resides, which indicates the end of the transaction.

The event is triggered with a script that invokes the *window.postMessage()* method.

window.top.postMessage('axepta_ SUCCESS _message', '*');

If the transaction is concluded successfully, an "*axepta_SUCCESS_message*" will be displayed. If the transaction fails, the message will be "*axepta_FAILURE_message*".

This event can be intercepted via a listener on the web page. When the event is intercepted,the transaction is concluded.

Additionally, the callback is sent to the merchant backend. Please see Par. "Paymentoutcomes".

4.3 Direct Payment (directPayment)

A direct payment can be made via a Server-To-Server call, that is, without having to invoke an *initPayment*. This type of call is necessary in special cases, for example, for Mo. To transactions.
The data of the credit card or the token that identifies the payment instrument must be entered in the request. A terminal of those configured in the Merchant can also be specified.

The specifications of the payment call are below:

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payments/directPayment
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “x-license-key": <-- API License Key -->

Card data in input **without tokenizing:**

(BODY) PARAMETERS	{
	"tid": "08000001",
	"transaction_type": "PURCHASE",
	"currency": "EUR",
	"language": "IT",
	"amount": "84.58",
	"card_number": "4557773333333335",
	"card_expiration": "1122",
	"card_brand": "VISA",
	"notifications": {
	"name": "Mario Rossi",
	"email": "test@test.it",
	"smartphone": "3332233220"
	},
	"callback_url": "https://www.merchantSite.it/callback",
	"additionals": [{
	"key": "Test",
	"value": "Value"
	},
	{
	"key": "Prova2",
	"value": "Valore2"
	}]
	}

Card data tokenized previously (**Tokenizing enabled**):

(BODY)
PARAMETE
RS
	{
	"tid": "08000001",
	"transaction_type": "PURCHASE",
	"currency": "EUR",
	"language": "IT",
	"amount": "84.58",
	"payInstrToken": "**test@test.it**",
	"payCardToken": "1uPlsusK1LXiD84TStkngiOPIRqUkHkM",
	"txIndicatorType": "UNSCHEDULED",
	"notifications": {
	"name": "Mario Rossi", "email":
	"test@test.it", "smartphone":
	"3332233220"
	},
	"callback_url": "https://www.merchantSite.it/callback",
	"additionals": [{
	"key": "Test",
	"value": "Value"
	},
	{
	"key": "Test2",
	"value": "Value2"
	}]
	}

The two possible responses in **Output** are:

RESPONSE OK	{
	"mid": "merchantID",
	"paymentId": "<--PAYMENTID-->",
	"instrument": "CREDITCARD",
	"amount": "5.67",
	"currency": "EUR",
	"language": "IT",
	"transaction_type": "PURCHASE",
	"operation_type": "PAYMENT",
	"addresses": [],
	"products": [],
	"notification": {
	"name": "Marizio Moriconi",
	"email": "test@test.it",
	"smartphone": ""
	},
	"additionals": [
	{
	"key": "Test",
	"value": "Value"
	},
	{
	"key": "Test2",
	"value": "Value2"
	}
	],
	"callback_url": "https://www.shop.com",
	"transactionAt": "2019-11-29T15:38:58.223Z",
	"shopID": "rItCFPnM7sv3uazR4CiC3ilrTXai08SH",
	"tid": "08000001",
	"transaction_status": "**PG_000**",
	"token": "9qGHUSU3OSYzvn0umztHdmBuPbi5o9JG",
	"maskedPan": "411111******1111",
	"brand": "VISA",
	"transactionID": "3079905820823791",
	"transaction_code": "01010",
	"description_status": "TRANSACTION OK"
	}

	{
	"mid": "merchantID",
	"paymentId": “<--PAYMENTID-->“,
	"instrument": "CREDITCARD",
	"amount": "5.67",
	"currency": "EUR",
	"language": "IT",
	"transaction_type": "PURCHASE",
	"operation_type": "PAYMENT",
	"addresses": [],
	"products": [],
	"notification": {
	"name": "Marizio Moriconi",
	"email": "test@test.it",
	"smartphone": ""
	},
	"additionals": [
	{
	"key": "Test",
	"value": "Value"
	},
	{
	"key": "Test2",
	"value": "Value2"
	}
	],
	"callback_url": "https://www.shop.com", "transactionAt":
	"2019-11-29T15:38:58.223Z",
	"shopID": "rItCFPnM7sv3uazR4CiC3ilrTXai08SH",
	"tid": "08000001",
	"transaction_status": "**PG_001**",
	"transaction_code": "00001",
	"description_status": "Generic error."
	}

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

The formats of the fields requested in **Input** are indicated below:

Field Name	Format	Description	
tid	Numerical string	Numeric identifier of the terminal to be used.	
transaction_type	Enumerative: [PURCHASE,AUTH,VERIFY]	Describes the type of transaction desired.	*1
currency	ISO 4217 format string, e.g. "EUR"	Currency to use.	*
language	ISO 639-1 format string, e.g. "IT"	Language to be used in the client implementation.	*
amount	String	Amount, formatted with two mandatory decimal places, separated by a dot "."	*
Notifications:			
name	String	Name of the Customer making the payment.	
email	Email format string	Customer email address for sending notifications via email.	
smartphone	String	Customer Smartphone number for sending notifications via SMS.	
card_number	String	Card number.	**2
card_expiration	MMYY format string	Card expiry in the indicated format.	**
card_brand	String	Brand of the card used. The string must be all uppercase.	
payInstrToken	String	Token identifying the customer's wallet. For example, it can be used to pass the user's email or the user's ID to e-commerce. See Par. "Making one-click payments"	**
payCardToken	String	Unique token identifying a tokenized card. See Par. "Making one-click payments"	**
card_cvv	String	Cvv number. It is not needed if it is a Mo.To. transaction	**
txIndicatorType	Enumerative:[UNSCHEDULED, RECURRENT, NOSHOW, DELAYCHARGE]	Indicator of the type of transaction to be used for a wallet payment. See Par. "Making one-click payments"	
tokenize	Boolean	Boolean that enables the card to be tokenized, if the feature is enabled. See Par. "Making one-click payments"	

[1] The fields indicated with an asterisk are mandatory
[2] The fields indicated with two asterisks are conditional.

callback_url	URL format string	Merchant callback URL to receive the outcome of the transaction. URL must be in HTTPS	*
Additionals:			
key	String	Additional information key.	
value	String	Additional information value.	

The card data is required if and only if **payInstrToken** and **payCardToken** are **not** entered.See Par. “Making one-click payments”.

Field Name	Format	Description
mid	String	Merchant identifier.
paymentId	String	Axepta payment identifier.
instrument	String	Payment instrument used (e.g. CREDITCARD, MYBANK, ...).
operation_type	String	Payment type (e.g. PAYMENT)

transaction_type	Enumerative: [PURCHASE,AUTH,VERIFY]	Describes the type of transaction desired.
currency	ISO 4217 format string, e.g. "EUR"	Currency to be used according to ISO 4217 format
language	ISO 639-1 format string, possible values: IT, EN, FR, RU, JP, CN, NL, PL, ES, DE	Language to be used in the client implementation
amount	String[1]	Amount, formatted with two mandatory decimal places, separated by a dot "."
Notifications:		
name	String	Name of the Customer making the payment.
email	E-mail format string	Customer email address for sending notifications via email.
smartphone	String	Customer Smartphone number for sending notifications via SMS.
Addresses:		
type	Enumerative: [SHIPPING,BILLING]	Describes the address type.
addresseeName	String	Address name.
streetAddress_1	String	Street name.
streetAddress_2	String	Additional field for Street name.
zip	Postal Code format string	Postal Code.
city	String	City.

The formats of the fields received in **Output** are as follows:

provinceState	ISO 3166 format string, e.g. "RM"	Province.
country	String	Country.
addressesURI	URL format string	Merchant site URL for modification to shipping fields, if necessary.
Products:		
logo	String	Reference to the product image.
quantity	String	Product quantity.
description	String	Product description.
price	String	Product price.
Additionals:		If you would like to add additional information to the transaction, you can specify this section.
key	String	Additional information key.
value	String	Additional information value.
callback_url	URL format string	Merchant callback URL to receive the outcome of the transaction. URL must be in HTTPS
tid	String	Identifier of the terminal used.
transactionAt	String	Payment execution date.
shopID	String	Foreign key identifying the payment.
transactionID	String	Order code processed.
transaction_status	Enum: ['PG_000', 'PG_001']	Identification code of the outcome of the transaction.
authCode	String	Authorization code returned by the issuer.
brand	String	Credit card brand (e.g. VISA, MASTERCARD, …).
maskedPan	String	Masked card number.
xid	String	Foreign code created by the ACS.
transaction_code	String	Error code identifying the status of the transaction.
description_status	String	Return code description.
payInstrToken	String	Unique token identifying a wallet. For example, the user's e-mail or ID can be passed to e-commerce. See Par. "Making one-click payments"
payCardToken	String	Unique token identifying a tokenized card. See Par. "Making one-click payments"

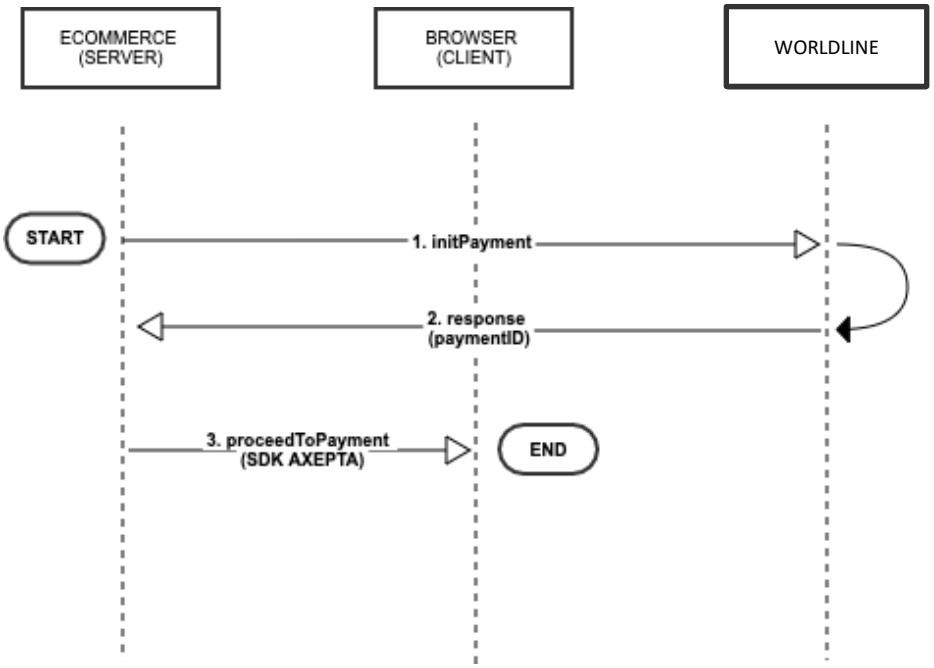
5 Easy checkout

Once configured, this integration, upon checkout, performs a redirect to the payment page provided by Worldline.

The compatible versions of the browsers are as follows:

- Chrome 51 May 2016
- Firefox 54 Jun 2017
- Edge 14 Aug 2016
- Safari 10 Sep 2016
- Opera 38 Jun 2016
- IE 11

The integration flow for performing an **Easy** integration is shown below:



- Invoke the initPayment service and retrieve the *PaymentID* parameter necessary for the subsequent calls;
- Initialize the *clientAxepta* with the *Easy license key* and the *PaymentID* (returned by *initPayment*) to invoke the *proceedToPayment* javascript function.

An example of the **Easy** integration is shown below:

```
<!DOCTYPE html>
<html>
<head>
  <title>SDK Redirect Integration Example</title>
  <meta name="viewport" content="initial-scale=1.0">
  <meta charset="utf-8">
</head>

<body>
  <button type="button" onClick="axeptaClient.proceedToPayment('← PaymentId →')">Checkout</button>

  <script src="https://pay-test.axepta.it/sdk/axepta-pg-redirect.js"></script>
  <script type="text/javascript">
    let axeptaClient = new AxeptaSDKClient("https://pay-test.axepta.it","← Easy type LICENSE Key →");
  </script>
</body>
</html>
```

Please see Par. “Payment outcomes” for explanations on how to get transaction results.

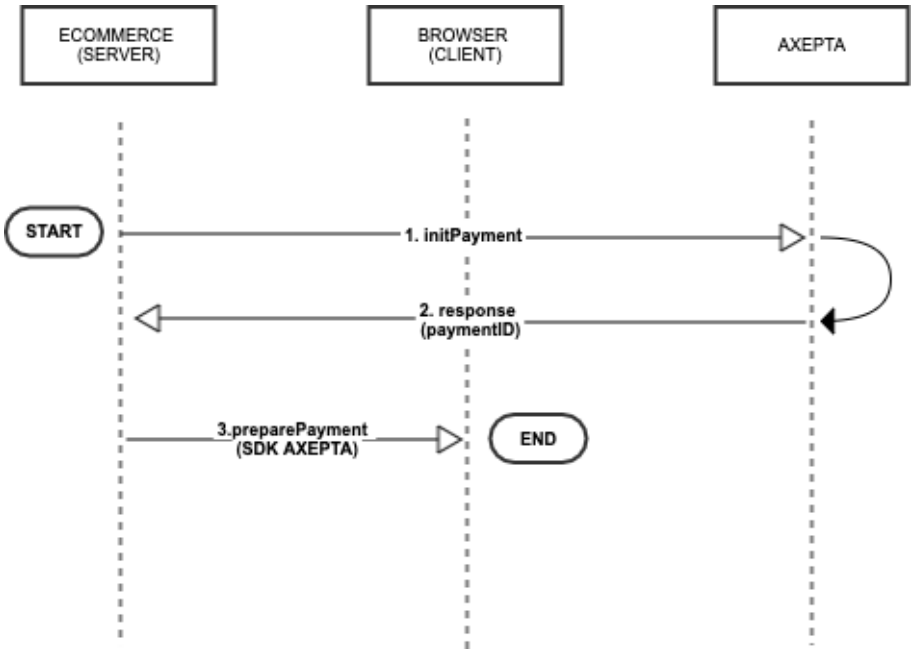
6 Smart checkout

This type of integration is a simple implementation of the card fields that can be integrated within your site. Unlike the Easy integration, the Smart integration requires that a div is created within your e-commerce site. In this case the fields of interest (for example, those ofthe card for the payment) will be displayed inside the div itself.

The compatible versions of the browsers are listed below:

- Chrome 51 May 2016
- Firefox 54 Jun 2017
- Edge 14 Aug 2016
- Safari 10 Sep 2016
- Opera 38 Jun 2016
- IE 11

The integration flow for performing a **Smart** integration is shown below:



- Invoke the *initPayment* service and retrieve the *PaymentID* parameter necessary forthe subsequent calls;
- Initialize the *clientAxepta* with the *Smart license key* and the *PaymentID* (returned by *initPayment*) to invoke the preparePayment javascript functionAn

example of **Smart integration** is shown below:

```
<!DOCTYPE html>
<html>
<head>
  <title>SDK JS Integration Example</title>
  <meta name="viewport" content="initial-scale=1.0">
```

```
  <meta charset="utf-8">
</head>
<body>
  <!—EXAMPLE OF CHECKOUT BUTTON -->
  <button type="button"
onClick="axeptaClient.preparePayment('← paymentID →','inline')">Checkout</button>
  <!-- THE TAG WHERE THE HOSTED FORM WILL BE DISPLAYED -->
  <div id="my-axepta-sdk-pg"></div>
  <!-- THE SCRIPT TO BE RETRIEVED BY CDN -->
  <script src="https://pay.axepta.it/sdk/axepta-pg-sdk.js"></script>
  <!—INITIALIZATION OF CLIENT AND USE -->
  <script type="text/javascript">
    let axeptaClient = new AxeptaSDKClient("https://pay-test.axepta.it","← Smart LICENSE →");
  </script>
</body>
</html>
```

Please see Par. “Payment outcomes” for explanations on how to get transaction results.

6.1 Smart layout management

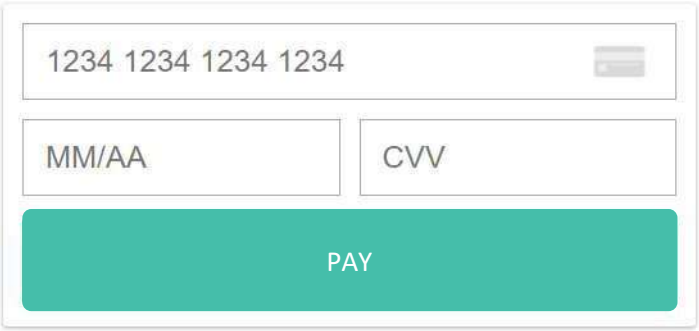
In this integration, you can define three different layouts using an optional parameter withinthe feature described above:

axeptaClient.preparePayment('←-PaymentID-→, '←- Layout -→');

If you do not enter the Layout parameter, the default layout will be displayed:

To obtain a layout with no name and surname, the **preparePayment**() call must contain a second parameter that is 'compact':

axeptaClient.preparePayment('←- PaymentID -->', 'compact');



If you would like an inline layout without the PAY button, the ***preparePayment()*** call must contain a second parameter that is *'inline'*:

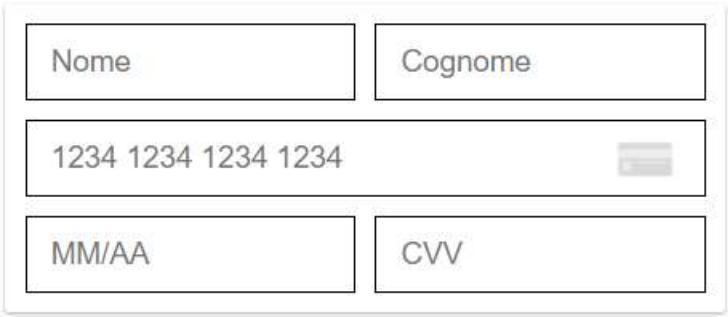
axeptaClient.preparePayment('<- PaymentID -->', 'inline');

and in the script, the form can be posted with the method ***axeptaClient.submit();***

```
<!-- ESEMPIO DI PULSANTE SUBMIT -->
<button id="submit" type="button" onClick="axeptaClient.submit()">Submit</button>
```

If you would like to control the button for proceed with payment, then the ***preparePayment()*** call must contain a second *'buttonless'* parameter:

axeptaClient.preparePayment('<- PaymentID -->', 'buttonless');



and in the script, the form can be posted with the method ***axeptaClient.submit();***

```
<!-- ESEMPIO DI PULSANTE SUBMIT -->
<button id="submit" type="button" onClick="axeptaClient.submit()">Submit</button>
```

6.2 Smart layout personalization

A number of **style classes** which you can modify to personalize the **Smart** layout are listed below:

Class	Description
axepta-sdk-textfield-outlined	Class that defines the text input style with Outline layout.
axepta-sdk-textfield-outlined:focus:invalid	Class that defines the text input style when in the focus state and the valueentered is invalid.
axepta-sdk-textfield-outlined:focus:valid	Class that defines the text input style when in the focus state and the valueentered is valid.
axepta-sdk-textfield-outlined:valid:not(:focus):not(:placeholder-shown)	Class that defines the text input style when not in the focus state, the valueentered is valid and the PlaceHolder of the ield is not displayed.
axepta-sdk-button-contained	Class that defines the style of the button that executes the payment.
axepta-sdk-button-contained:disabled	Class that defines the style of the button that executes the payment, when it is in the disabled state. In particular, it is in this state if the values in the fields are invalid or the fields are empty.
axepta-sdk-button-contained:not(:disabled)	Class that defines the style of the buttonthat executes the payment, when it is not in the disabled state.

The table of the classes for personalizing the "**inline**" layout is shown below:

Class	Description
axepta-sdk-textfield-outlined-inline	Class that defines the container of theentire Widget
axepta-sdk-flex-row-inline	Defines the style of the line.
axepta-sdk-textfield-outlined-noBorder-Pan	Defines the borderless style of the Paninput.
axepta-sdk-input-add-on-inline	Manages the position of the Pan input for the parent.
axepta-sdk-flex-col-inline	Sets the Pan input as a column.
axepta-sdk-pan-icon-inline	Container of the pan icon.
axepta-sdk-input-add-on-item-inline	Manages the position of the Pan icon, for the parent.
axepta-sdk-flex-row-inline-cvv	Container for the expiry and cvv inputs.
axepta-sdk-flex-col-left-inline	Manages the position to the left of the expiry input, for the parent.
axepta-sdk-textfield-outlined-noBorder	Defines the borderless style of the expiry input.
axepta-sdk-pan-icon-inline-cvv	Container for the cvv input and its icon.
axepta-sdk-flex-col-right-inline	Manages the position to the right of the cvv input, for the parent.
axepta-sdk-textfield-outlined-noBorder-cvv	Defines the borderless style of the cvv input.
axepta-sdk-input-add-on-item-inline-cvv	Defines the position of the cvv icon for the parent.

7 In-App checkout (SDK iOS)

7.1 Functional Requirements

iOS version supported: from 11.0 to 14.2Xcode 12

7.2 Introduction

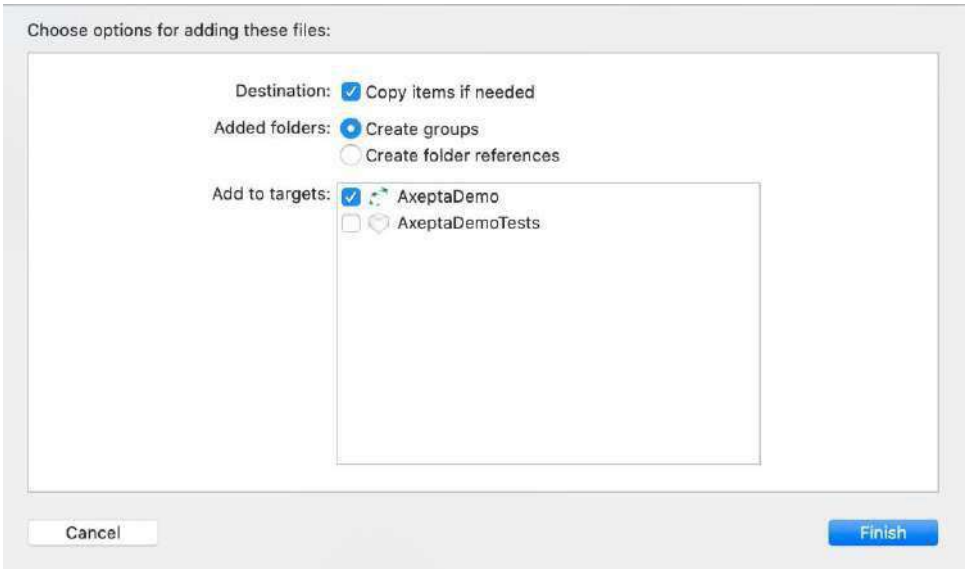
The WorldlineSDKClient framework allows payments to be made on the enabled schemes by:

- enabling a payment context managed completely by SDK
- integrating a graphic widget
- direct calls to make a payment on a determinate scheme

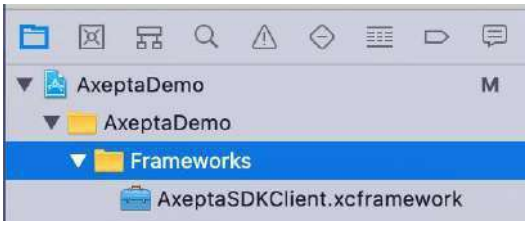
7.3 Adding SDK to the project

Follow the steps below to add SDK:

1. Open the project with Xcode and drag the WorldlineSDKClient.xcframework file onto the “project navigator”, checking that the "copy items if needed" and "Add to targets" items are enabled:

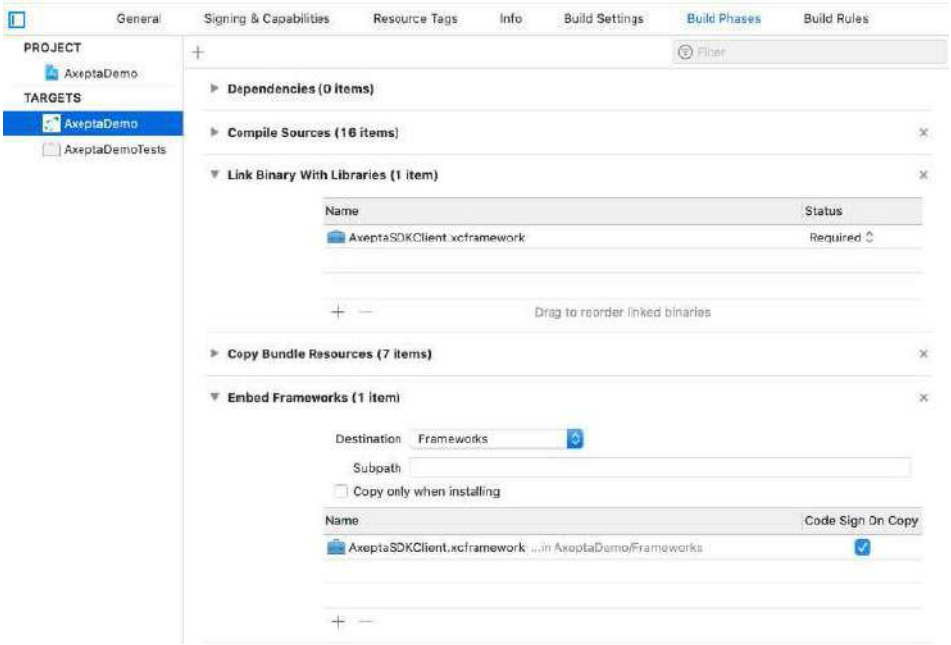


2. At this point the "project navigator" should display the framework:

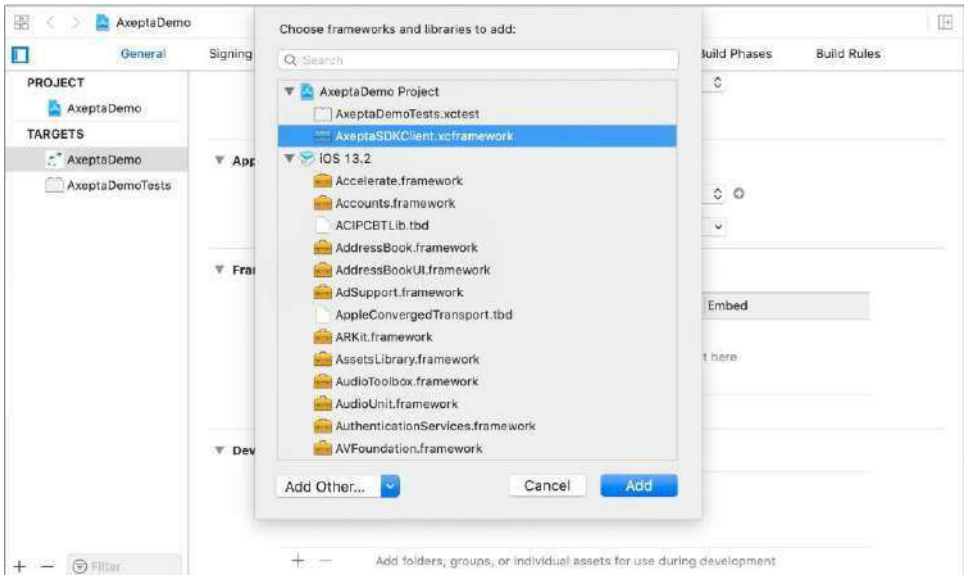


3. Check that the framework is present on the “General” tab of the Target in the “Frameworks, Libraries and Embedded contents” section (with the “Embed & Sign” option enabled):

4. Check that the framework is present in the Build Phases, in the “Link Binary with Libraries” and “Embed Frameworks” sections:



5. If it is not present, select the + sign at the bottom of the “Frameworks, Libraries and Embedded contents” section and add it by hand, activating the “Embed & Sign” option if not enabled:



6. Check that the framework is present in the Build Phases as described in section 4.

7.4 SDK Configuration

Once the SDK has been added, an initial configuration is required.

1. In the AppDelegate file of the project, initialize the configuration by passing the endPoint for payments and the licenseKey to the SDK.

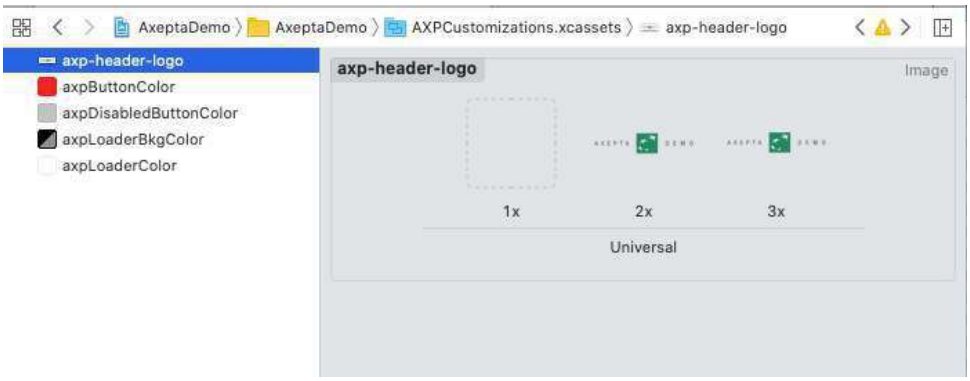
Optionally, it is possible to enable logs and print debug messages in console setting the "enableDebug" parameter to "true" (it defaults to false):

```
    func application(_ application: UIApplication, didFinishLaunchingWithOptions
launchOptions: [UIApplication.LaunchOptionsKey: Any]?) -> Bool {

 Axepta.shared.configure(endPointUrl:    "https://...",    licenseKey:    "XXXXXXX-
XXXXXXX-XXXXXX-XXXXXXX", enableDebug: true)
        return true
}
```

2. For debug purposes, it is possible to print in console the current installedSDK version number using

```
Import AxeptaSDKClient


. . .


Axepta.shared.showVersionNumber()
```

3. Drag the **AXPCustomizations.xcassets** folder into the project, always selecting the "Copy items if needed" and "Create groups" options. The Asset Catalog contains some Color Sets, used by the SDK for the graphic customizations and a logo, which will be used as the logo of the navigation bar on the screens managed by the SDK:



- **axpButtonColor**: is used to customize the color of the payment and back buttons on the payment Widgets
- **axpDisabledButtonColor**: is used to customize the color of the payment button where it is not enabled
- **axpLoaderBkgColor**: is used to customize the background color of theloader shown by the SDK during the operations
- **axpLoaderColor**: is used to customize the color of the loader shown by the SDK during the operations
- **axp-header-logo**: is used to customize the logo loaded by the navigation bar managed by the SDK. The image provided can be used as a template for formatting a custom image. If the logo is removed from the asset there will be no logo on the navigation bar. **N.B. The navigation bar only shows this logo using the integration methods by Payment Context or a direct call,**

setting the "present" parameter to true (as described in the next section). If the "present" parameter is set to false, and the payment functions are loaded from a UIViewController inside a UINavigationController, the navigation bar used will be that of the application (and thus freely customizable).

7.5 SDK implementation

As mentioned in the introductory section, there are three different integration methods:

- Integration through the Payment Context: with this type of integration, the SDK will provide a selector to choose the payment method for every product, and will managethe subsequent payment phases autonomously;
- Integration through a Widget: some types of payment have a Widget embedded as anormal view to which an external payment button can be linked, or the default buttoncan be used.
- Integration through a direct call: payments can be managed directly through a publicinterface that starts the payment on a specific scheme.

7.5.1 Payment Context Integration

This type of integration is used to display the list of payment methods enabled for everyproduct, thus allowing the payment to be managed directly by SDK.

The Payment Context managed by the SDK can be linked to the tag on the object using the createPaymentContext function of the **Worldline** class by means of a Singleton.

Example of the code:

```
import AxeptaSDKClient
...

Axepta.shared.createPaymentContext("productId", countryCode: "IT", present: false)
```

The function accepts the following parameters in input:

- **itemId**: the ID of the payment, i.e. the output of the *initPayment* (see Par. Payment

Initialization)

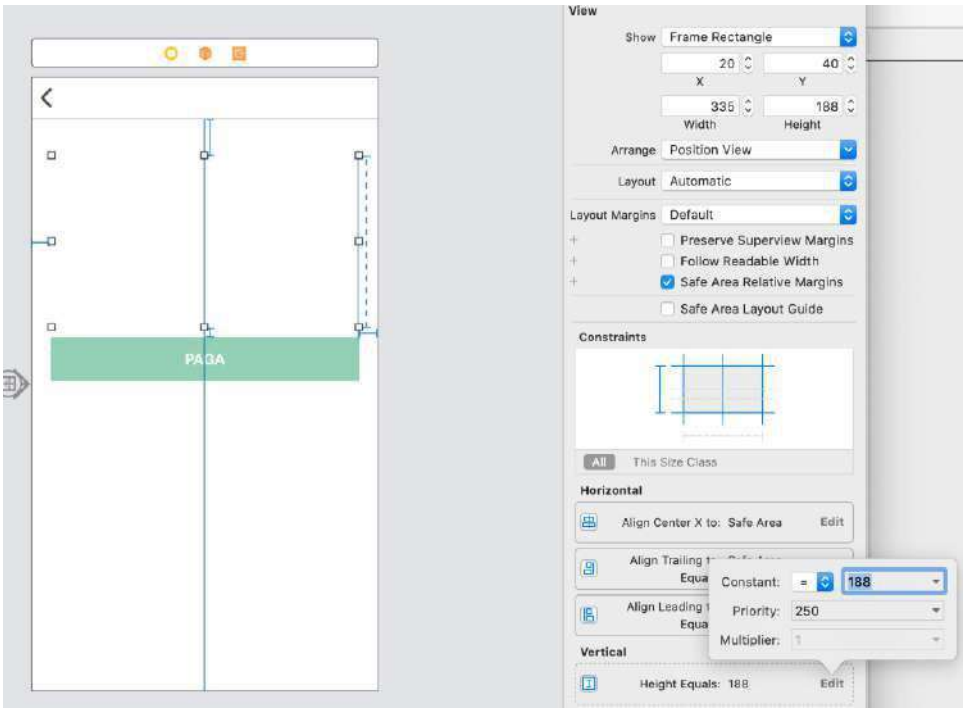
- **countryCode**: the ISO of the countryCode for the payment
- **present**: a Boolean that enables the payment methods selector to be shown as modal(if set to true) or through a show on UINavigationController (if supported by the application, and setting this parameter to false).

7.5.2 Widget integration

There are three types of widget, all of the UIView type, which can be instantiated andembedded in any container UIView:

`AXPPhoneNumberWidget, AXPBankSelectorWidget, AXPCreditCardWidget`

A description of the characteristics and initialization methods of each of these widgets is provided below. Using, for example, a "widgetContainer" UIView in which to embed the widgets, a maximum height of 185px can be set on the container view with a low priority: inthis way, the widget will automatically readapt according to the Mode set at the time of initialization (as will be described later on):



The *PaymentDelegate* protocol, common to all widgets, shows three functions that can be used to intercept the outcome of the transactions (any errors including "title" and "message"information, or conclusion of the process), and requires the declaration of the paymentID variable, which will be used by the widgets to make the payment:

```
public protocol PaymentDelegate {

    var paymentID: String! { get set }

    func onPaymentFinished()

    func onPaymentError(title:String?, message:String?)
    func onPaymentCanceled()

    }
```

Before any Widget can be initialized, the SDK must be imported:

```
import AxeptaSDKClient
```

AXPCreditCardWidget

Can be used for payments made using a Credit Card. This Widget in particular can be configured in 3 different versions, according to the mode with which it is initialized:

Mode: .default

Mode: .compact

Mode: .inline

For this widget, the SDK offers three types of view; "**default**", "**compact**" and "**inline**", so as to satisfy the layout needs of the developer:

- "**default**" mode uses a height of 185px;
- "**compact**" mode uses a height of 142px;
- "**inline**" mode uses a height of 84px.

Initialization:

```
var paymentWidget = AXPCreditCardWidget(viewMode: .defaultMode,
                                        lang: "it",
                                borderRadiusButton: 2,
                            borderRadiusTextFields: 3,
                                          delegate: self)
```

- **viewMode:** is of the Modality type, an enum shown by the SDK, which can be set to the following values:
- .defaultMode
- .compactMode
- .inlineMode
- **lang:** defines the language (according to the ISO639-1 standards): IT, EN, FR. If the parameter passed does not correspond to one of the languages managed by the widget, English will be used as the default language;
- **borderRadiusButton:** rounds the borders of the payment button;
- **borderRadiusTextField:** rounds the input fields;
- **delegate**: the object compliant with the *PaymentDelegate* protocol.

Using the **inline** layout (which has no payment button embedded in the component), the **payNow(itemId: String)** function can be activated directly, to manage the payment by customized interaction:

```
func payNow(itemId: String)
...
```

The itemId is the ID of the payment, i.e. the output of the *initPayment* (see Par. Payment Initialization), a required variable of the **PaymentDelegate** protocol.

Example of the code:

```
import UIKit
import AxeptaSDKClient



class PaymentViewController: UIViewController {

    @IBOutlet weak var widgetContainer:UIView!
    @IBOutlet weak var payButton: UIButton!

    var paymentWidget : AXPPaymentWidget?
    var itemToPay: Item?
    var paymentID: String!

    override func viewDidLoad() {
        super.viewDidLoad()

        payButton.addTarget(self,   action:   #selector(payBtnTapped(_:)),   for:
.touchUpInside)
        payButton.clipsToBounds = true
        payButton.layer.cornerRadius = 4.0
        payButton.isHidden = SDKSettingsManager.shared.sdkModality != .inlineMode

        guard let itemToPay = itemToPay else { return }
```

```
        paymentID = itemToPay.itemId

        /** SDK Widget Initialization **/
        paymentWidget = AXPCreditCardWidget(
                    viewMode                : .defaultMode,
                    lang                    : itemToPay.language.lowercased(),
                    borderRadiusButton      : 2,
                    borderRadiusTextFields  : 3,
                    delegate                : self)

        paymentWidget!.attachTo(widgetContainer)
        /************/
    }

    @IBAction func payBtnTapped(_ sender: Any) {
        // Action associated with the external payment button in .inline mode
        guard let itemToPay = itemToPay else { return }
        self.paymentWidget!.payNow(itemId: itemToPay.itemId)
    }

}

extension PaymentViewController: PaymentDelegate {

    // MARK: Payment Delegate
    func onPaymentFinished() {
        print(#function)
        self.navigationController?.popViewController(animated: true)
    }

    func onPaymentError(title: String?, message: String?) {

        print("\(#function) error:\(String(describing: message)")
        DispatchQueue.main.async { [weak self] in
            guard let self = self else { return }

            if let message = messaggio, let title = titolo {
                let alert = UIAlertController.init(title: title, message: message,
preferredStyle: .alert)
                alert.addAction(UIAlertAction.init(title: "OK", style: .default,
handler: { [weak self](action) in
                    self?.navigationController?.popViewController(animated: true)
                }))
                self.present(alert, animated: true, completion: nil)
            }
        }
    }

    func onPaymentCanceled() {
        print(#function)
        self.navigationController?.popViewController(animated: true)
    }

}
```

7.5.3 Integration by direct call on a specific payment method

The last integration mode is the one that enables the use of the direct payment method fromthe AXPPaymentManager class:

```
public func executeDirectPaymentWith(itemId: String,
                                      circuit: Circuit,
                                     language: String,
                                  countryCode: String?,
                                      present: Bool = true)
```

- **itemId:** the ID of the payment, i.e. the output of the *initPayment* (see Par. Payment Initialization);
- **circuit:** an enum of the Circuit type, which can be set to: .**creditCard, .bancomatPay, .satispay, .aliPay, .weChat, .myBank;1**
- **language:** defines the language (according to the ISO639-1 standards): IT, EN, FR. Ifthe parameter passed does not correspond to any of the languages managed by the widget, English will be used as the default language;
- **countryCode**: the country code of the product to be paid (mandatory in paymentson the Ali Pay, We Chat, Apple Pay)[2] payment method. The default setting is "IT";
- **present**: a Boolean, set by default to true, to determine whether the screen that includes the graphic widgets is to appear as modal (if set to true) or as a show on UINavigationController (if present in the application integrating the SDK, and if thevalue is set to false).

Using this method, the payment can be triggered directly by interaction with a button or from a gesture.

Example of the code:

```
AXPPaymentManager.shared.executeDirectPaymentWith(itemId: paymentId,
                                                  circuit: .creditCard,
                                                 language: "IT",
                                              countryCode: "IT")
```

7.5.4 Setting the Credit Card view in direct payments

If you decide to use the credit card payment without initializing the graphic widget (that is, through the Payment Context or a direct call), the widget viewing method can be decided upon by passing the parameter directly to the singleton in the Worldline class.

Example of a code:

```
Axepta.shared.creditCardMode = .inlineMode
```

[1] If alternative payment methods have to be implemented, contact Axepta for support.
[2] If alternative payment methods have to be implemented, contact Axepta for support.

8 In-App checkout (SDK Android)

This SDK installation guide allows easy payment execution and a series of pre-set screens tomeet different graphic needs, with the possibility of creating custom elements and the directuse of payment methods. The SDK naturally provides implementing developers the ability tocapture **SUCCESS** and **FAILURE** events.

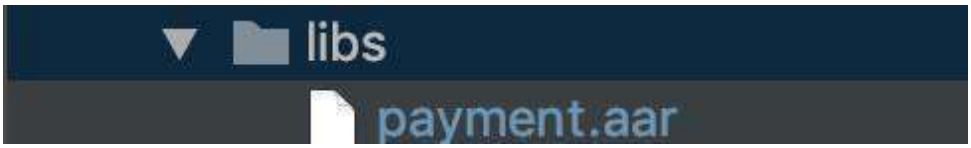
8.1 Minimum Requirements

To be able to integrate the SDK correctly, Android 6.0 (API 23) or a later version is required. The SDK has been made compatible with androidX, so the versions supported are API 23 andlater.

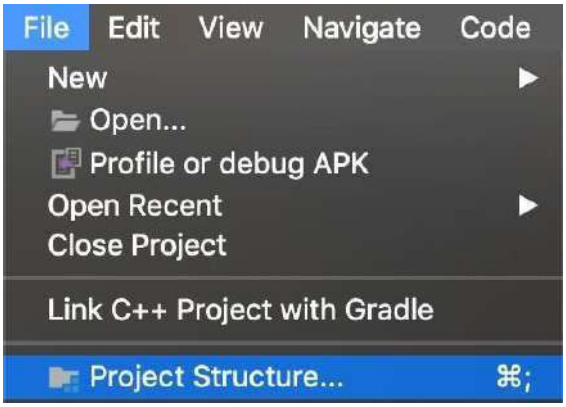
8.2 Adding dependency for SDK

Follow the steps below to add dependencies for the SDK:

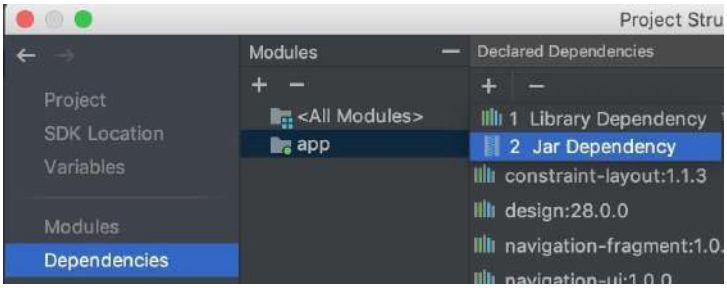
1. Take the ***file.arr*** of the SDK:



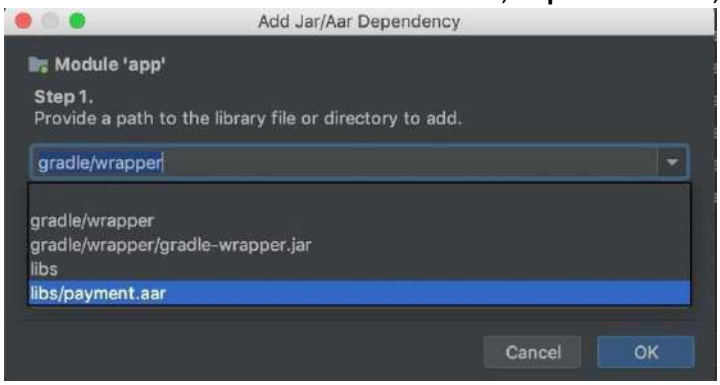
2. On the open project, enter ***Project*** view mode in **Android Studio*:***
3. Locate the ***libs*** folder (within the app) and copy the file from the previous step into it:
4. It differs from one operating system to another, in the case of Mac OS X, open the **Project Structure** panel using the **File** button**:**



5. Select **Dependency**, under **Modules** select app, then press the + button and select **Jar Dependency:**



6. Select the item with the name of the SDK from the first drop-down menu. The second drop-down menu should be left with the default item, **implementation**, then press the **OK** button:



7. A new item for the library has now appeared, as can be seen from the image below. To finish correctly adding the dependency, press the **APPLY** button below and then press **OK**:

8. To verify that you have entered the dependency successfully, enter the **build.gradle(Module: App)** file and check that the implementation has been added correctly.

8.3 SDK configuration

Having added the dependency to the SDK, an initial configuration is necessary:

- Invoke the **ApiService.setEndPointAndLicence()** method, which requires two parameters:
  - **endpoint**, the endpoint to be contacted to make the executive call to makethe payment. Parameter type → **String**
  - **licence**, the x-licence-api provided (of the In-App SDK Android) type. Parameter type → **String**
  - **enableDebug,** enable logs and print debug messages in console (default isfalse)

- Invoke the **ApiService.paymentConfiguration()** method, this method requires input:
  - **paymentId**, the ID of the payment received from the init call made previously. Parameter type → **String**
  - **countryCode**, ISO code of the countryCode of the payment → **String**

- For debug purposes, it is possible to print in console the current installed SDK versionnumber using the showVersionSdk function Utils.showVersionSDK()

8.4 Graphic personalization

The colors of buttons, backgrounds and radii of buttons or text fields can be personalized. To be able to customize these parameters, you will have to enter the same keys used in the SDK containing the desired value in the color.xml file (for the colours), dimen.xml (for the size), drawable folder (for the images) of your project:

- Colours:
  - **background_color**: used to change the background colour of widgets
  - **button_background_default_color**: used to personalize the background colour of the buttons
  - **btn_color_enable**: background colour of the button when it is enabled
  - **btn_color_disable**: background colour of the button disabled
  - **background_loader**: background colour of the screen of the loader
  - **input_field_strokes_color**: colour of the borders of the editable fields
  - **input_field_background_color**: background colour of the EditText
  - **button_pay_text_color**: colour of the payment button text
  - **loader_color**: colour of the progress bar of the loader screen

- **item_selector_color**: background colour of the selector item

- Size
  - **default_edit_text_radius**: radius of editable field borders
  - default_button_border_radius: radius of button borders

- Drawable:

- **logo**: logo loaded from the toolbar managed by the SDK. The logo will only be visible in the PaymetSelectorActivity integration mode. If no logo is set, the navigation bar will appear blank

8.5 SDK Integration

There are three types of SDK integration:

- Integration by **PaymentSelectorActivity**: in this case, the SELECTOR mode will be displayed, enabling the user to choose the type of payment and the subsequent phases of the payment will be managed automatically by the SDK.

- Integration by **FragmentPayment**: when the type of circuit to be used to make the payment is passed, the View for the selected mode to which an external button can be linked for the payment will be displayed or the default view can be used.

- Integration by direct calls: methods for starting payments directly on a specific scheme have been shown

8.6 PaymentSelectorActivity Integration

This type of integration enables the list of enabled payment methods for every product to be viewed. Once the payment method has been selected, the subsequent phases of the payment will be managed directly by SDK.

To be able to integrate this mode, an intent will have to be executed in **PaymentSelectorActivity**

```
Java
Intent intent=new Intent(context,PaymentSelectorActivity.class)
startActivity(intent)

Kotlin
val intent = Intent(context, PaymentSelectorActivity::class.java)
startActivity(intent)
```

8.7 FragmentPayment Integration

8.7.1 Implementation in an Activity

The implementation of the elements for the effective use of this SDK requires a few stepsboth on the Java side and on the xml resources (layout) side).

Here are the steps necessary for the correct implementation within an Activity:

1. Instantiate a **ResultExecutePaymentCallback** object, which will be our callback.

```
private FragmentPayment.ResultExecutePaymentCallback resultExecutePaymentCallback;
...
```

2. Create a method, such as *initCallBackSdkPayment.* Then override the methods needed to capture the **SUCCESS** and **FAILURE** outcomes that will be generated by theSDK.

```
Java
private void initCallBackSdkPayment() {
        resultExecutePaymentCallback = new FragmentPayment.ResultExecutePaymentCallback() {
        @Override
        public void onExecuteSuccess() {
        Toast.makeText(getApplicationContext(), "Success", Toast.LENGTH_LONG).show();
}
        @Override
        public void onExecuteFailure() {
        Toast.makeText(getApplicationContext(), "Failure", Toast.LENGTH_LONG).show();
        }
        };
    }
...

Kotlin
val resultExecutePaymentCallback = object : ResultExecutePaymentCallback {
   override fun onExecuteSuccess() {
   }
   override fun onExecuteFailure(reason: String?) {
   }
}
```

3. Invoke the *initCallBackSdkPayment* method immediately after **setContentView** within the onCreate activity.

```
@Override
protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        initCallBackSdkPayment();
...
```

4. Create a **FragmentPayment** (a **Fragment**) object instance, which will process all the information entered into it by the user and if positive, proceed with the payment, otherwise it will return an error signal. Below are the elements that make up the **FragmentPayment** object constructor.

a. paymentType: accepted values [CREDIT_CARD - SATISPAY - BANCOMATPAY **- MY_BANK - WECHAT - ALIPAY**][1]. The payment method indicated will be shown according to the value shown. Parameter type -> **PaymentType**

b. viewType, accepted values [**DEFAULT - COMPACT - INLINE**]. This will generate a different view according to the value indicated. The **INLINE** view allows useof the direct call integration mode, thus giving the possibility of using customcomponents. Parameter type -> **ViewType**.

c. **resultExecutePaymentCallback** returns the callback of the executeCall() method (defined in the Custom button – Payment section)

```
Java

final FragmentPayment = new FragmentPayment(

FragmentPayment.PaymentType.CREDIT_CARD,

ViewType.COMPACT,

resultExecutePaymentCallback);
```

[1] If alternative payments method have to be implemented, contact Axepta for support.

```
...

Kotlin

val fragmentPayment = FragmentPayment(

   FragmentPayment.PaymentType.CREDIT_CARD,

   ViewType.COMPACT,

   resultExecutePaymentCallback, buttonStateCallback

)
```

5. **Add the Fragment:** The following image shows a sequence of standard commands for adding a **Fragment** within a layout

```
FragmentManager = getSupportFragmentManager();

FragmentTransaction = fragmentManager.beginTransaction();

fragmentTransaction.add(R.id.container,fragmentPayment).addToBackStack(null).commit();

...
```

6. in this case a **FrameLayout**

```
<FrameLayout android:id="@+id/container"

android:layout_width="match_parent"

android:layout_height="wrap_content"

android:layout_gravity="center_vertical|center_horizontal">

</FrameLayout>
```

8.7.2 Implementation in a Fragment

For implementation within a Fragment, all the explanations above are valid. It is best to implement this by overriding the onViewCreated method and entering all of the instructionsindicated within the latter. The only change to be made is on point “5” of section 2.12.7.1. The code you need to create a childFragment to integrate Fragment (FragmentPayment) within your Fragment is indicated below:

```
FragmentTransaction transaction = getChildFragmentManager().beginTransaction();
transaction.replace(R.id.container, fragmentPayment).commit();
```

8.8 Direct call integration

The possibility of including additional graphic elements, for example, a button that respectsall the UI and UX lines that are being followed in your project, has been left.
The appropriate method will have to be invoked according to the payment method:

- **CREDIT_CARD**: the **executeCall()** method will have to be invoked; it is a public methodthat can be invoked using the **FragmentPayment** object. Below is an example image showing how to implement an **Actvity** side button and how to create the respective **onClickListener** to allow the method indicated above to be invoked. On the XML layout side, there will be a personalized button below the **FrameLayout** created previously:

```
Button customPayButton = findViewById(R.id.custom_pay_button);
customPayButton.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
                fragmentPayment.executeCall();
        }
});
…
```

8.9 Examples of the code

FragmentPayment integration

```
public class MainActivity extends AppCompatActivity {
        private FragmentPayment.ResultExecutePaymentCallback resultExecutePaymentCallback;

        @Override
        protected void onCreate(Bundle savedInstanceState) {

                super.onCreate(savedInstanceState);
                setContentView(R.layout.activity_main);
                initCallBackSdkPayment();

                final FragmentPayment fragmentPayment = new FragmentPayment(
                FragmentPayment.PaymentType.CREDIT_CARD,
                ViewType.COMPACT,
                 resultExecutePaymentCallback
                );

                FragmentManager fragmentManager = getSupportFragmentManager();
                FragmentTransaction fragmentTransaction = fragmentManager.beginTransaction();
                fragmentTransaction.add(R.id.container,fragmentPayment).addToBackStack(null).commit()
                ;
                ApiService.setEndPointAndLicence("endpoint","x-licence-key");
                ApiService.paymentConfiguration("paymentID","countryCode","amount");


                Button customPayButton = findViewById(R.id.custom_pay_button);
                customPayButton.setOnClickListener(new View.OnClickListener() {
                        @Override
                        public void onClick(View v) {
                                fragmentPayment.executeCall();
                        }
                });
        }
        private void initCallBackSdkPayment() {
                resultExecutePaymentCallback = new FragmentPayment.ResultExecutePaymentCallback() {
                        @Override
                        public void onExecuteSuccess() {
                                Toast.makeText(getApplicationContext(), "Success",
                        Toast.LENGTH_LONG).show();
                        }
```

```
                    @Override
                    public void onExecuteFailure() {
                        Toast.makeText(getApplicationContext(), "Failure",
                    Toast.LENGTH_LONG).show();
                }
                };
        }
}
```

PaymentSelectorActivity integration

```
public class MainActivity extends

        AppCompatActivity {@Override
        protected void onCreate(Bundle savedInstanceState) {

                super.onCreate(savedInstanceState);
                setContentView(R.layout.activity_main);

                ApiService.setEndPointAndLicence("endpoint","x-licence-key");
                ApiService.paymentConfiguration("paymentID","countryCode","amount");

               Intent intent=new
               Intent(context,PaymentSelectorActivity.class)
               startActivity(intent)

    }
}
```

8.10 Examples of Layouts

CreditCard

Default

Compact

Inline

9 Payment outcomes

After payment execution, as indicated in the *InitPayment* call, the outcome of the transaction is returned with two methods:

- **Frontend**: frontend outcome depends of the integration type
    - **Easy checkout:** after processing the payment, Worldline performs a REDIRECT tothe url specified by the merchant in *redirect_successUrl (*or in *redirect_failureUrl* if the transaction has failed).
    - **Smart checkout and API checkout**: the render of the outcome will trigger an event on the web page with the iframe, which indicates the end of the transaction. The event is triggered with a script that invokes the window.postMessage()method.

That is:

```
window.top.postMessage('axepta_SUCCESS_message', '*');
```

if the transaction is concluded successfully,

or `window.top.postMessage('axepta_FAILURE_message', '*');`

if the transaction fails.

This event can be intercepted by a listener on the web page. In any case, thedetails on the transaction will only be on the backend.

- In-App checkout (Android) and In-App checkout (iOS): please see respective paragraphs.

- **Backend**: Worldline makes a server to server call to the url specified by the merchant in *callback_url* parameter of the *initPayment* call

An example of the parameters returned is shown below (format JSON):


```
{
  "integration_type": "WIZARD",
  "integration_name": "Easy",
  "mid": "BNLP TEST ALIAS",
  "paymentId":
"76b5806696f823837a030cbb2c708c6108ce79961bf0d123519a055d75bdb6a1",
  "instrument": "CREDITCARD",
  "operation_type": "PAYMENT",
  "amount": "0.01",
  "currency": "EUR",
  "language": "IT",
  "transaction_type": "PURCHASE",
  "addresses": [],
  "products": [],
  "notification": {
    "area_code": "+39",
    "name": "",
    "email": "",
    "smartphone": "+39 "
  },
```

```
  "additionals": [],
  "callback_url": "https://webhook.site/45cf1cbd-0885-4845-980c-
9e750e104b01",
  "transactionAt": "2020-11-10T12:03:09.409Z",
  "card_brand_desc": "Visa",
  "service_type_desc": "Debit Card",
  "product_priority_code": "",
  "shopID": "jSf9ppMWy7ZNvw943iBVRcXcHKsQFVwq",
  "tid": "08000001",
  "transaction_status": "PG_000",
  "payInstrToken": null,
  "payCardToken": null,
  "maskedPan": "411111******1111",
  "brand": "VISA",
  "transactionID": "3087001610827263",
  "card_expiration": "1023",
  "authCode": "125996",
  "xid": "MDAzMTU2NzQ5MzYxMjkzNzY3OTA=",
  "transaction_code": "PG_01010",
  "description_status": "TRANSAZIONE OK"
}
```


IMPORTANT:

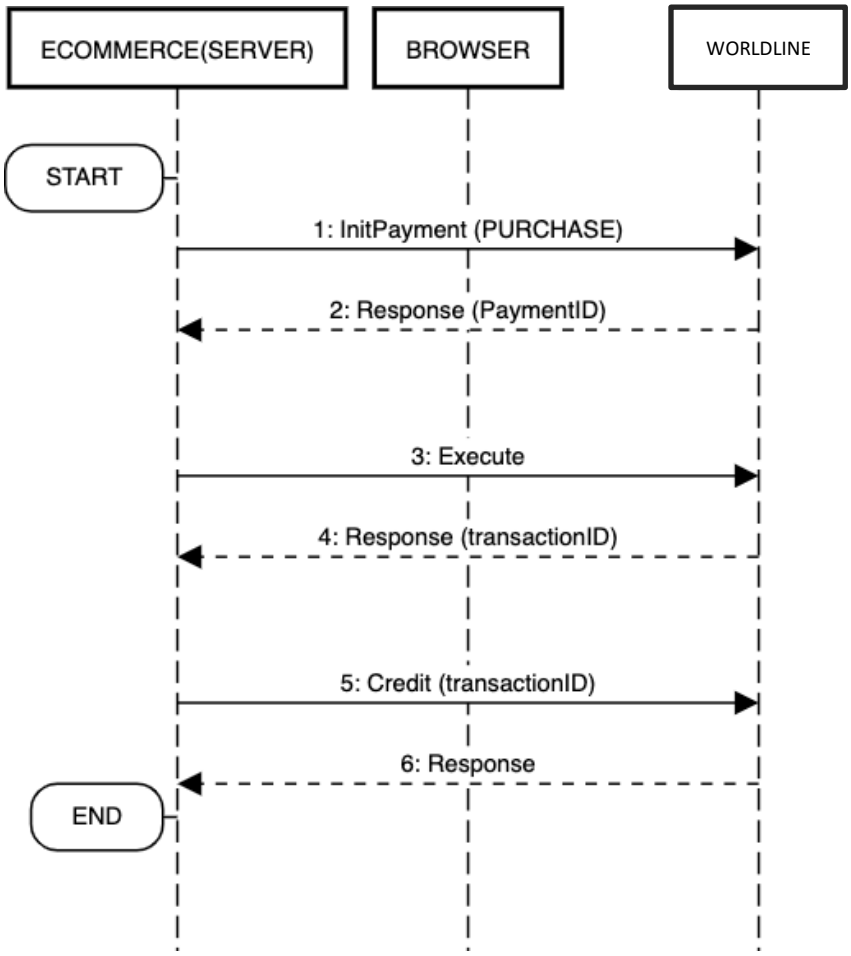
- *Verify* is a server to server call that can be used ONLY AFTER the callback, as an additional check of the status of the transaction.
- If the callback is not received, this means that the customer has decided not to pay or has not managed to pay or, though less likely, that an error has occurred in processing the payment and that, AT THE SAME TIME, this error has not been received on the callback. These two cases can be managed with the merchant-side *Verify*, but it should be after a long period of time (for example, an hour), in which, for example, the operation can be closed and the purchase indicated as “failed”.
- it is available a feature that, by default, if callback is not acknowledged (i.e. 200 OK by the merchant), then callback is resended again after 1 hour for a maximum of 24 times if a 200 OK is not received by Worldline. “1 hour” can be modified and “24 times” can be modified, if needed, contacting ecommerce support.
- The system has a recurring job. This job analyses any payment in pending status andmanage to cancel it, if needed. In this case, a callback is sent to the merchant endpointdefined for that payment in order to notify that the payment is canceled. By default,the job is scheduled each 30 minutes and it takes payment older than 30 minutes, butthose values can be modified if needed, contacting ecommerce support.

10 After the payment

This section describes the possible server to server calls that may be useful to the merchantafter making the payment.

10.1 Credit

For a successful **PURCHASE** transaction, you can return an amount in order to return partor the entire amount paid into your wallet.
The payment ID to be included in input is that of the transaction already performed and onwhich the return is to be made.



- Initialize a PURCHASE type payment
- Perform an *execute*[1] to make the payment and a *transactionID* field will be returnedin the response

[1] It is intended in general that the payment be made using one of the integration methods provided by Worldline: API, Easy, Smart, In-App.

- Perform a *Credit* using the *transactionID*, to return a credit of a certain amount on apayment[1]

The specifications of the Return call for **PURCHASE** type transactions are shown below:

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payments/credit
HEADERS	"Content-type": application/json "Authorization": Bearer <-- AccessToken --> "x-license-key": <-- API License Key -->

(BODY) PARAMETERS	{
	"paymentId": "< – payment ID -->",
	"transactionID": "3079887950480832",
	"amount": "2.36"
	}

RESPONSE	{
	"maskedPan": "411111******1111",
	"brand": "VISA",
	"authCode": "113973",
	"card_expiration": "1023",
	"mid": "a",
	"amount": "10.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": "<--PAYMENTID-->",
	"transactionAt": "2019-11-29T15:56:22.561Z",
	"operation_type": "CREDIT",
	"shopID": "hUiCdUtkvpNeI9nM16v7NhtMXKfA4zx6",
	"transaction_status": "**PG_000**",
	"transaction_code": "01010",
	"description_status": "TRANSACTION OK",
	"transactionID": "3079905910425225",
	"pendingAmount": "5455"
	}

RESPONSE KO	{ "mid": "a", "amount": "10.01",

[1] A return (Credit) of a transaction charged previously (Confirm) can also be performed. For further details, see the relevant section. Note that the amount to be returned must be consistent with the amount of the Purchaseor Confirm performed previously.

	"currency": "EUR", "tid": "08000001", "paymentId": “<--PAYMENTID-->“, "transactionAt": "2019-11-29T15:56:22.561Z", "operation_type": "CREDIT", "shopID": "hUiCdUtkvpNeI9nM16v7NhtMXKfA4zx6", "transaction_status": "**PG_001**", "transaction_code": "00001", "description_status": "Generic error." }

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

10.1.1 Example of Java Unirest

```
HttpResponse<String> response = Unirest.post("https://pay-test.axepta.it/api/v1/payments/credit")
  .header("Content-Type", "application/json")
  .header("x-license-key", "XXXXXXX-0ERMYE0-MP683C5-9G0Q976")
  .header("cache-control", "no-cache")
  .body("{\n\t\"paymentId\":
\"c5121109fd86460de50c33526ab7cc07:20454330610d34d156698b12b070cef7be4b948219ffbf1a15cff30ab
32a94f93\",\n \"transactionID\": \"3079887950480832\" ,\n \"amount\": \"1.00\"\n}")
  .asString();
```

10.1.2 Example of PHP Http Request

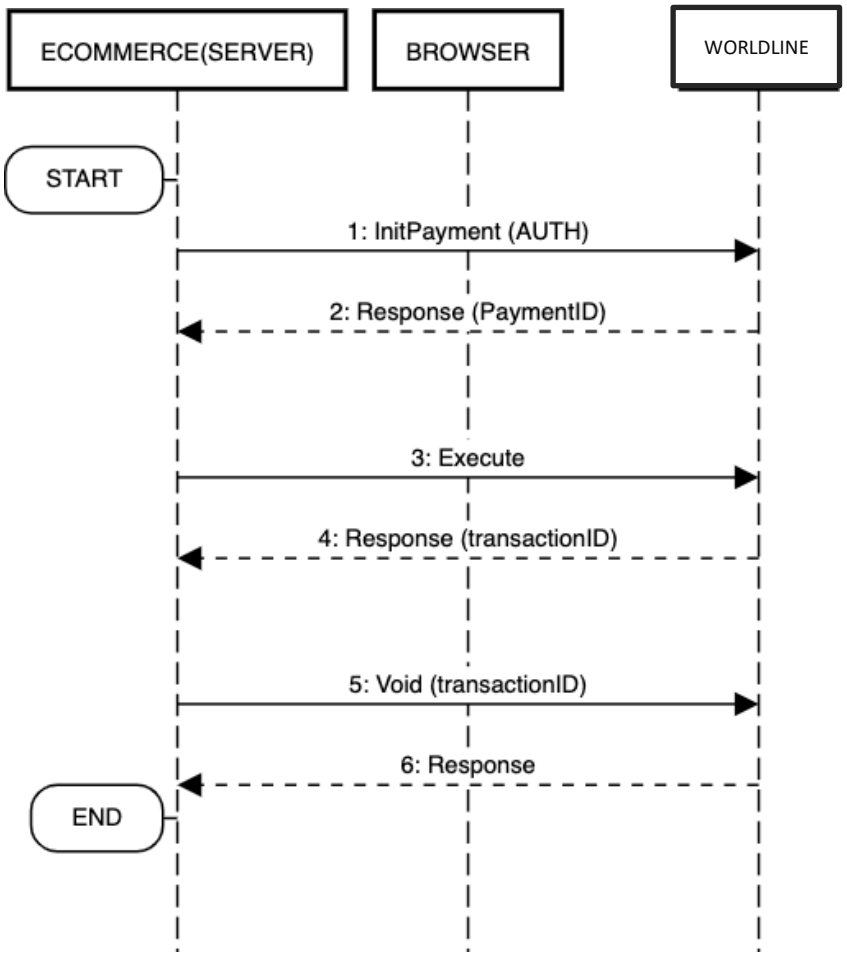
```
<?php

$request = new HttpRequest();
$request->setUrl('https://pay-test.axepta.it/api/v1/payments/credit');
$request->setMethod(HTTP_METH_POST);

$request->setHeaders(array(
  'cache-control' => 'no-cache',
  'x-license-key' => 'XXXXXXX-0ERMYE0-MP683C5-9G0Q976',
  'Content-Type' => 'application/json'
));

$request->setBody('{
                "paymentId":
"c5121109fd86460de50c33526ab7cc07:20454330610d34d156698b12b070cef7be4b948219ffbf1a15cff30ab3
2a94f93",
"transactionID": "3079887950480832",
    "amount": "1.00"
}');

try {
  $response = $request->send();

  echo $response->getBody();
} catch (HttpException $ex) {
  echo $ex;
```

10.1.3 Example of Node Request

```
var request = require("request");

var options = { method: 'POST',
  url: 'https://pay-test.axepta.it/api/v1/payments/credit',
  headers:
   { 'cache-control': 'no-cache',
     'x-license-key': 'XXXXXXX-0ERMYE0-MP683C5-9G0Q976',
     'Content-Type': 'application/json' },
  body:
   {                                                                                                    paymentId:
'c5121109fd86460de50c33526ab7cc07:20454330610d34d156698b12b070cef7be4b948219ffbf1a15cff30ab32
a94f99',
transactionID: ‘3079887950480832’,
     amount: '1.00' },
  json: true };

request(options, function (error, response, body) {
  if (error) throw new Error(error);

  console.log(body);
});
```

10.2Void

For a successful **AUTH** transaction, you can return an amount in order to return part or the entire amount paid into your wallet.
The payment ID to be entered in input is that of the transaction already performed and on which the return is to be made.



- Initialize an AUTH payment
- Perform an *execute*[1] to make the authorization and a *transactionID* field will bereturned in the response
- Perform a *Void* using the *transactionID*, to return a credit of a certain amount on analready authorized payment[2]

[1] It is intended in general that the payment be made using one of the integration methods provided by Worldline: API, Easy, Smart, In-App.
[2] Note that the amount to be returned must be consistent with the remaining preauthorized amount, forexample, if a partial Confirm has been performed previously

The specifications of the Return call for an **AUTH** transaction are shown below:

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payments/void
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “x-license-key": <-- API License Key -->

(BODY) PARAMETERS	{
	"paymentId": "< – Payment ID -->",
	"transactionID": "3079887950480832",
	"amount": "2.36"
	}

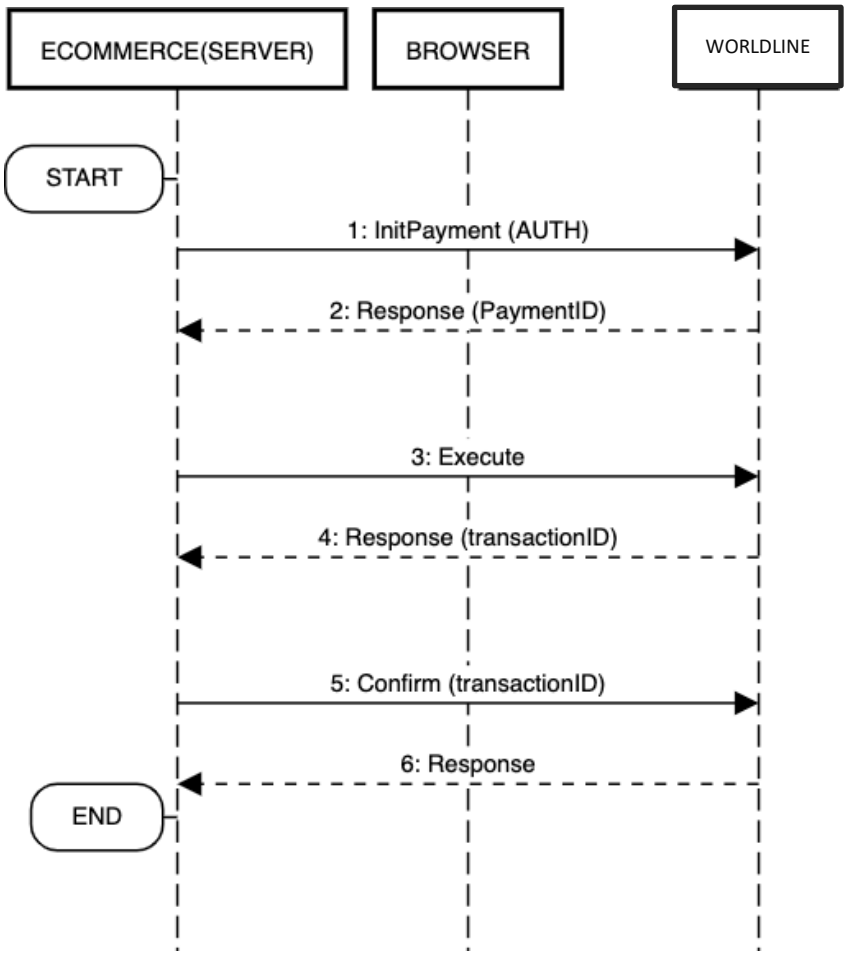
RESPONSE	{
	"maskedPan": "411111******1111",
	"brand": "VISA",
	"authCode": "727958",
	"card_expiration": "1023",
	"mid": "a",
	"amount": "0.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": “<--PAYMENTID-->“,
	"transactionAt": "2019-11-29T16:01:45.686Z",
	"operation_type": "VOID",
	"shopID": "dQUoilwIBi3LRs4nrnbGeIWjwfj4Zuhd",
	"transaction_status": "PG_000",
	"transaction_code": "01010",
	"description_status": "TRANSACTION OK"
	}

RESPONSE KO	{
	"mid": "a",
	"amount": "10.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": "<-PAYMENTID->",
	"transactionAt": "2019-11-29T16:01:45.686Z ",
	"operation_type": "VOID",
	"shopID": " dQUoilwIBi3LRs4nrnbGeIWjwfj4Zuhd ",
	"transaction_status": "**PG_001**",
	"transaction_code": "00001",
	"description_status": "Generic error."
	}

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

10.3 Confirm

For an **AUTH** transaction, you can confirm a specific amount in order to make the payment for a part or the entire amount.
The payment ID to be entered in input is that of the transaction already performed and on which the confirmation is to be made.



- Initialize an AUTH payment
- Perform an *execute*[1] to make the authorization and a *transactionID* field will be returned in the response
- Perform a *Confirm* using the *transactionID*, to perform the credit of a certain amount on an already authorized payment[2]

[1] It is intended in general that the payment be made using one of the integration methods provided by Worldline: API, Easy, Smart, In-App.
[2] Note that the amount to be confirmed must be consistent with the remaining preauthorized amount, forexample, if a partial Void has been performed previously.

The specifications of the Confirm call for an **AUTH** transaction are shown below:

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payments/confirm
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “x-license-key": <-- API License Key -->

(BODY) PARAMETERS	{
	"paymentId": "< – payment ID -->",
	"transactionID": "3079887950480832",
	"amount": "2.36"
	}

RESPONSE	{
	"maskedPan": "411111******1111",
	"brand": "VISA",
	"authCode": "727958",
	"card_expiration": "1023",
	"mid": "a",
	"amount": "1.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": “<--PAYMENTID-->“,
	"transactionAt": "2019-11-29T16:03:36.279Z",
	"operation_type": "CONFIRM",
	"shopID": "dQUoilwIBi3LRs4nrnbGeIWjwfj4Zuhd",
	"transaction_status": "**PG_000**",
	"transaction_code": "01010",
	"description_status": "TRANSACTION OK",
	"transactionID": "3079905990598769",
	"pendingAmount": "8357"
	}

RESPONSE KO	{ "mid": "a", "amount": "10.01", "currency": "EUR", "tid": "08000001", "paymentId": "<-PAYMENTID->", "transactionAt": "2019-11-29T16:03:36.279Z", "operation_type": " CONFIRM ", "shopID": " dQUoilwIBi3LRs4nrnbGeIWjwfj4Zuhd", "transaction_status": "**PG_001**",

	"transaction_code": "00001", "description_status": "Generic error." }

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

IMPORTANT: a return (*Credit*) of a previously charged transaction (*Confirm*) can also be made, in fact, the latter is as though it has become a *Purchase*. In this case, note must be taken of the *transactionID* returned by the *Confirm* and used for the *Credit*. Example:

First transaction (*Auth*):

- output
  - TransactionID=aaa

Confirm of the *Auth*:

- Input
  - TransactionID=aaa
- Output
  - TransactionID=bbb

Credit of the *Confirm*:

- Input
  - TransactionID=bbb

10.4 Confirm with automatic void of the residual

It is possible to partly confirm amount, and void the residual, using “voidEnabled” attribute set to true.

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payments/confirm
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “x-license-key": <-- API License Key -->
(BODY)	{

PARAMETERS VOID	"paymentId": "< – payment ID -->", "transactionID": "3079887950480832", "amount": "2.36", **"voidEnabled": true** }

RESPONSE
VOID
	{
	"maskedPan": "411111******1111",
	"brand": "VISA",
	"authCode": "727958",
	"card_expiration": "1023",
	"mid": "a",
	"amount": "1.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": "<--PAYMENTID-->",
	"transactionAt": "2019-11-29T16:03:36.279Z",
	"operation_type": "CONFIRM",
	"shopID": "dQUoilwIBi3LRs4nrnbGeIWjwfj4Zuhd",
	"transaction_status": "**PG_000**",
	"transaction_code": "PG_01010",
	"description_status": "TRANSACTION OK",
	"transactionID": "3079905990598769",
	"voidedAmount ": "8357"
	}

RESPONSE KO	{
	"mid": "a",
	"amount": "10.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": "<-PAYMENTID->",
	"transactionAt": "2019-11-29T16:03:36.279Z",
	"operation_type": "CONFIRM",
	"shopID": " dQUoilwIBi3LRs4nrnbGeIWjwfj4Zuhd",
	"transaction_status": "**PG_001**",
	"transaction_code": "PG_00001",
	"description_status": "Generic error."
	}

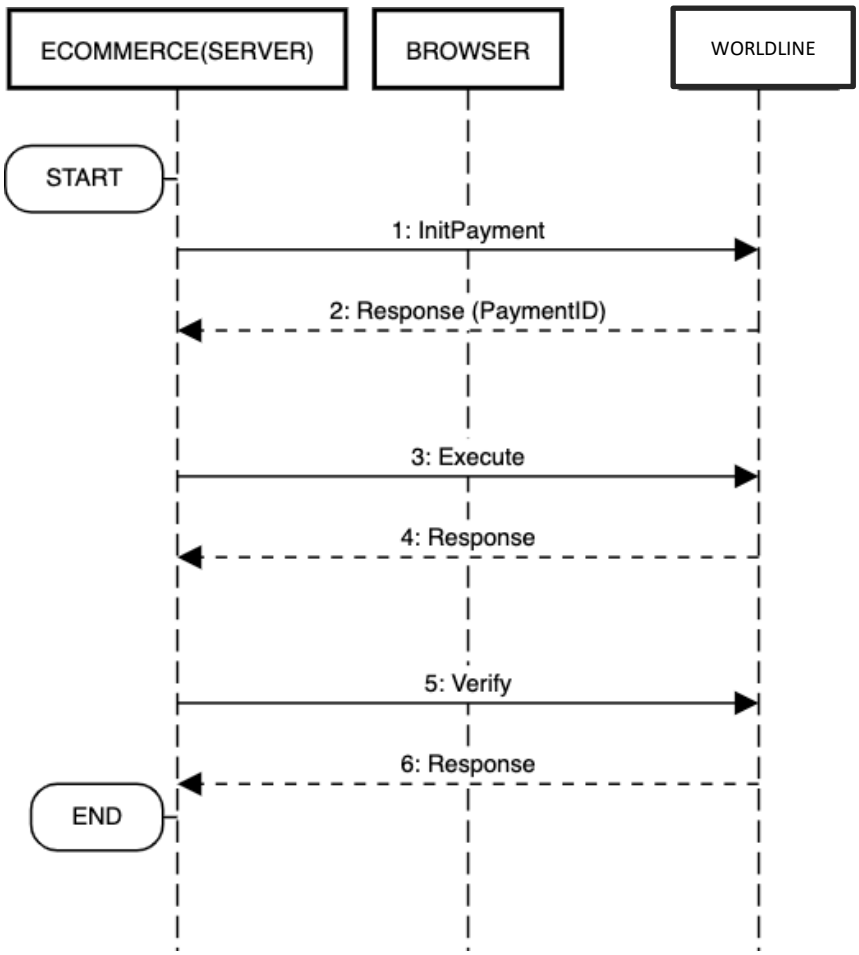
ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

Where *voidedAmount* is the amount of the void operation, expressed in decimal.

10.5 Verifying a Transaction (verify)

In Server-To-Server mode, this method is used to verify the status of a payment. **The outcome of the transaction is indicated in the callback** (as explained in previous sections), **Verify is only to be used in some very special cases.**

The Verify function requires the payment ID (i.e. *PaymentID*) to be included in the parameters of the endpoint.



- Initialize a payment
- Perform an *execute*[1] to make the payment
- Perform a *Verify*, which will respond with the status of the payment.

[1] It is intended in general that the payment be made using one of the integration methods provided by Worldline:API, Easy, Smart, In-App.

The specifications of the payment verification call are shown below:

METHOD	GET
ENDPOINT	{{host}}/api/v1/payments/verify/{{PaymentID}}
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “x-license-key": <-- API License Key -->

RESPONSE	{
	"maskedPan": "455777******3335",
	"brand": "VISA",
	"authCode": "317676",
	"card_expiration": "1023",
	"mid": "012",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId":
	"a27ca5d4ee424e2086c57d647fef12429af2f57c0943a082519a055d75bdb6a1",
	"transactionAt": "2020-02-13T12:44:16.315Z",
	"operation_type": "VERIFY",
	"shopID": "1jEyAMdH9hdj2jiAMCHxYysNOoATuW0l",
	"transaction_status": "**PG_000**",
	"transaction_code": "01010",
	"description_status": "TRANSACTION OK",
	"transactionID": "3077722880769169"
	}

RESPONSE KO	{
	"mid": "a",
	"amount": "10.01",
	"currency": "EUR",
	"tid": "08000001",
	"paymentId": "<-PAYMENTID->",
	"transactionAt": "2020-02-13T12:44:16.315Z",
	"operation_type": " VERIFY",
	"shopID": " 1jEyAMdH9hdj2jiAMCHxYysNOoATuW0l",
	"transaction_status": "**PG_001**",
	"transaction_code": "00001",
	"description_status": "Generic error."
	}

ERROR RESPONSE	{
	"code": 1118,
	"message": "The data are necessary."
	}

10.6 Making one-click payments

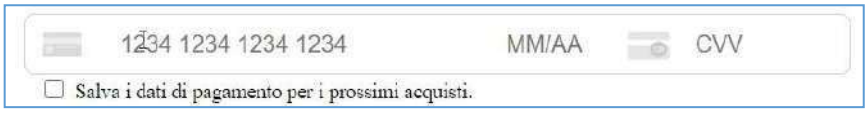
One-click payments is an optional service that it could be activated on request. This service allows to store card data and use them for successive payments (without insert them again in the form).
The service consists of three phases:

1. Configuration
2. Card tokenization
3. Payment using token

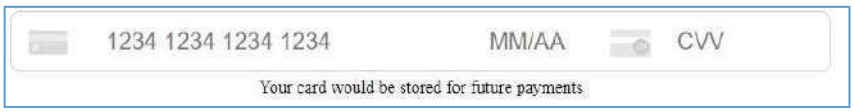
10.6.1 Phase 1 - Configuration

Worldline will activate the tokenization feature on merchant request. Merchant has to decide if wants:

- **Explicit** tokenization (only for Easy, Smart, In-app checkouts): in this scenario, it is thecard holder that explicitly checks the corresponding checkbox in order to get the cardtokenized for future payments.



- **Implicit** tokenization: in this scenario, the card tokenization it is totally choice by the merchant. The card holder could be advised by a message of the merchant in the ecommerce page or by a message in Axepta payment form (this message is configured by Axepta following merchant requirement). Implicit tokenization is also the only possible case for API Checkout.



10.6.2 Phase 2 - Card tokenization

There are some parameters of the *initPayment* method, needed necessary to understand regarding tokenization:

- "***tokenize***" is a boolen (true/false) parameter. It is the "consensus" from card holderin order to tokenize the card. The usage of this parameter is the following:
    - *tokenize=true* in input of input of the *initPayment* if you are configured as **implicit** tokenization (this is valid for all types of checkouts)
    - No need to use *tokenize* parameter in case of **explicit** tokenization, because Phey will take the card holder's consensus from the flag in the from (this is valid Easy, Smart or In-app checkouts, in fact for the API checkout the explicittokenization does not have sense, because card holder gives the consensus always on the merchant website)

- "***payInstrToken***" is the name of the user wallet and it is also the ID connecting successive transactions. For example, it could be the customer ID on merchant side or customer email. It is in input of the *initPayment* and in output of the payment (i.e.execute and/or callback). It could be used in input for the first transaction, otherwise it would be randomly generated by Worldline. For successive transactions, it must beused in input on *initPayment*, otherwise first and successive transactions would not be connected each other's. In successive transactions, it allows to show stored cards of the card holder/user.

- "***payCardToken***" is the card token. It is in input of the *initPayment* and in output of the payment (i.e. execute and/or callback). If the transaction is a "first transaction", then *payCardToken* would be an output parameter generated by Axepta. If you are submitting a successive transaction in the "one-click payments", then you can optionally use *payCardToken* as an input parameter. If you do, you are forcing the system to pay with that tokenized card instead of let the cardholder to choose.

- "***txIndicatorType***" is the type of tokenized transaction. It is an input of initPayment.

In the case of a first transaction txIndicatorType would not be specified. In the case of a successive transaction of type "one-click payments", then txIndicatorType=UNSCHEDULED.

Following, there is an example of the *initPayment* of a first transaction (implicit tokenizationcase):

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payment/initPayment
HEADERS	"Content-type": application/json "Authorization": Bearer <-- AccessToken --> "X-license-key": <-- API License Key -->

(BODY) PARAMETERS	{
	"transaction_type":
	"PURCHASE",
	"transaction_timeout": "30000",
	"tokenize": true,
	"payInstrToken": "test@test.it",
	"shopID": "shopIDprova12345",
	"currency": "EUR",
	"language": "IT",
	"amount": "84.58",
	}

RESPONSE	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"paymentID": <-- Payment ID -->
	}

Then, the card holder would execute the payment. This action could be done in different ways, it depends on which type of checkout is used by the merchant (Easy, Smart, etc)[1].

In addition, if implicit tokenization is disabled, it is up to the card holder the choice totokenize the card or not.

If the transaction:

- is successfully, then the card is tokenized and VERIFIED. In this case, the user couldmake one-click payments without insert card data again.

[1] If you are using API Checkout, then you must specify “tokenize=true” in the *execute* method.

- is failed, then the card would be temporary tokenized as PENDING. In this case, merchant would receive *payInstrToken* but the user needs to insert again card data for future payments. In this case merchant will not receive *payCardToken*.

Following, there is an example of success transaction (tokenized card), where *payCardToken* is randomly generated:

RESPONSE	{
	"mid": "merchantID",
	"instrument": "CREDITCARD",
	"operation_type": "PAYMENT",
	"isHTML": false,
	"transactionAt": "2019-11-29T15:17:19.373Z",
	"tid": "08000001",
	"shopID": "AfqhuojN7LCJw6UstZMVoPwo2QGNX8N7",
	"transaction_status": "PG_000",
	"token": "nloS0bPqZq8F27wcH4a5LNoOd2XVM55v",
	"maskedPan": "411111******1111",
	"brand": "VISA",
	"transactionID": "3079905680585024",
	"payInstrToken": "test@test.it", "payCardToken": "6UstZMVo6UstZPwo2QGNX","authCode":
	"288380",
	"xid": "MDAzMzMzODI4MzMxMjIzOTU2Nzc=",
	"transaction_code": "01010", "description_status":
	"TRANSAZIONE OK"
	}

In case of explicit tokenization, if the end user did not accept to save card data, then the output of the callback would contain **"payCardToken": null**

10.6.3 Phase 3 - Payment using token

Assuming the first payment and tokenizing are successfully, then the merchant could initiate a "one-click" payment. In order to do that, merchant has to call *initPayment* method with:

- payInstrToken of the user
- *payCardToken*, optionally if you want to force the payment with a tokenized card of the user instead to let the user choose which card on Axepta form
- txIndicatorType=UNSCHEDULED

METHOD	POS
ENDPOINT	{{host server to server}}/api/v1/payment/initPayment
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “X-license-key”: <-- API License Key -->

(BODY) PARAMETERS	{
	"transaction_type": "PURCHASE",
	"transaction_timeout": "30000",
	"payInstrToken": "test@test.it",
	"payCardToken": "6UstZMVo6UstZPwo2QGNX",
	"txIndicatorType": "UNSCHEDULED",
	"shopID": "shopIDprova12345",
	"currency": "EUR",
	"language": "IT",
	"amount": "84.58",
	}

RESPONSE	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"paymentID": <-- Payment ID -->
	}

Then, the card holder would execute the payment. This action could be done in differentways, it depends on which type of checkout is used by the merchant (Easy, Smart, etc)[1].

1 If you are using API Checkout, then you must specify payInstrToken and payCardToken in the execute method. See Cap. API checkout

10.7 Recurring payments (scheduled by the merchant)

Recurring payments is an optional service that it could be activated on request. This service allows to store card data and use them for successive payments initiated by the merchant in certain period of times (for example a membership subscription each month).

In particular, here we describe the case in which the merchant wants to schedule the transactions.

Before to read this paragraph, you need to read carefully the Par. “Making one-click payments” in order to understand the tokenization topic.

The service consists of three phases:

1. Configuration
2. Card tokenization
3. Payment using token

10.7.1 Phase 1 - Configuration

Please read respective paragraph of Par. “Making one-click payments”.

10.7.2 Phase 2 - Card tokenization

Please read respective paragraph of Par. “Making one-click payments”. There is not anydifference.

10.7.3 Phase 3 - Payment using token

Assuming the first payment and tokenizing are successfully, then the merchant could initiate a “recurring payment”. In order to do that, merchant has to call *initPayment* method with:

- payInstrToken of the user
- *payCardToken*, optionally if you want to force the payment with a tokenized card of the user instead to let the user choose which card on Axepta form
- txIndicatorType=RECURRENT

METHOD	POST
ENDPOINT	{{host server to server}}/api/v1/payment/initPayment
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “X-license-key": <-- API License Key -->

(BODY) PARAMETERS	{
	"transaction_type": "PURCHASE",
	"transaction_timeout": "30000",
	"payInstrToken": "test@test.it",
	"payCardToken": "6UstZMVo6UstZPwo2QGNX",
	"txIndicatorType": "RECURRENT",
	"shopID": "shopIDprova12345",
	"currency": "EUR",
	"language": "IT",
	"amount": "84.58",
	}

RESPONSE	{
	"code": 200,
	"message": "SUCCESSFULLY",
	"paymentID": <-- Payment ID -->
	}

Then, the merchant would execute the payment. This action must be done with the API callcalled *execute.*

10.8 Deleting a tokenized card

There are different ways to delete a tokenized card:

1. By the card holder. Merchant makes an *initPayment* specifying *payInstrToken* parameter. Then, merchant calls a payment form (either Easy, Smart or In-appcheckout) and shows it to the cardholder. If cardholder has previously tokenized one or more cards, then he will view a form like this

In this case, cardholder can delete the tokenized card(s) using the corresponding button (X)

2. By the merchant. Merchant can use a server to server method in order to delete a tokenized card on behalf of the cardholder. Then, Merchant is responsible of deletinga tokenized card. The specifications of the call are shown below:

METHOD	DELETE
ENDPOINT	{{host}}/api/v1/payments/card/←payInstrToken→/←payCardToken→
HEADERS	“Content-type”: application/json “Authorization”: Bearer <-- AccessToken --> “x-license-key": <-- licenza d’uso -->

RESPONSE	{
	"code": "200"
	}

11 Error codes

Call responses for status 200, i.e. those which were successful, were described previously.For error codes, see the document:
“*WORLDLINE_ListaCodiciEsitoTransazione”*.

WORLDLINE

12 Testing environment information

General information for the test environment is provided below. Specific information for the test merchant is communicated separately by Worldline.

Reference HOST:

Checkout	Testing
API	https://pay-test.axepta.it
Easy	https://pay-test.axepta.it/sdk
Smart	https://pay-test.axepta.it/sdk
In-App (SDK iOS)	https://pay-test.axepta.it
In-App (SDK Android)	https://pay-test.axepta.it

The cards used for the tests are indicated below.
N.B. Where specified, the correct expiry date and/or CVV code must be indicated otherwisethe transaction will fail.

PAN	Scheme	Expiry	Cvv	Enrstatus	Authstatus	Authorization outcome
4557773333333335	Visa	-	-	Y	Y	OK
4557772222222229	Visa	-	-	Y	A	OK
4111111111111111	Visa	10/2023	-	N	-	OK
4555000000000001	Visa	-	-	N	-	OK
4111111112225555	Visa	-	-	N	-	OK
4011514444441116	VisaElectron	-	-	N	-	OK
4011519992222222	VisaElectron	-	-	N	-	OK
4005000000000007	VisaDebit	10/2023	-	N	-	OK
4005004455555556	VisaDebit	-	-	N	-	OK
5430132222222226	Mastercard	-	-	N	-	OK
5893535544444429	Mastercard	-	-	N	-	OK
5790640100000005	Mastercard	-	-	N	-	OK
5430131234567891	Mastercard	-	-	Y	N	KO
5548535889622125	Mastercard	-	-	N	-	OK
5401172222222227	Mastercard	-	-	Y	Y	OK
5430132222222226	Mastercard	-	-	N	-	OK
5548536000000126	Mastercard	-	-	Y	Y	OK
5264921111111115	MastercardDebit	-	555	N	-	OK
5545910000000019	MastercardDebit	-	-	Y	N	KO
5020639451965933	Maestro	-	-	Y	Y	OK
5893535596092423	Maestro	-	-	Y	A	KO

where:

- *enrStatus* represents the status of registration of the card to the 3D Secure service
  - Y – Authentication available;
  - N – Holder not registered with the service;
  - U – Authentication not possible;
  - E – Error.

- *AuthStatus* represents the authorization outcome of the card with the 3D Secureservice
  - Y – Authenticated;
  - A – Attempted authentication;
  - N – Holder not authenticated;
  - U – Authentication not possible.

The testing environment includes some test cases through which the behaviour of the solution can be simulated when some conditions that would invalidate the transaction occur.They respond to the following Pan / Amount combinations:

PAN	Amount	Expiry	Outcome	Description
4557773333333335 5401172222222227 4557772222222229 5548536000000126 5020639451965933	101,00	any	PG_01045	Authorization denied
	102,00	any	PG_01058	Incorrect merchant code
	103,00	any	PG_01057	Invalid card
	104,00	any	PG_01086	Holder not enabled for this operation
	105,00	any	PG_01089	Frequency limit exceeded
	106,00	any	PG_01180	Stolen card
	107,00	any	PG_01038	Format error
	108,00	any	PG_01080	Contact issuer
	109,00	any	PG_01078	Suspected fraud
5430132222222226 4111111111111111 4011519992222222 4005000000000007 5264921111111115	103,00	any	PG_01060	Insufficient funds
	104,00	any	PG_01086	Holder not enabled for this operation
	105,00	any	PG_01089	Frequency limit exceeded
5401172222222227 5264921111111115	> 200	any	PG_01060	Insufficient funds
4111111111111111 4005000000000007	Any different from above	Any different from 10/23	PG_01018	Card expired

12.1 Testing 3DS 2.x

If merchant is enabled to 3DS 2.x, then it needed to make some specific tests. In particular you can follow the below table in order to test some 3DS 2.x scenarios.

PAN	Scheme	Expiry	cvv	transStatus	Authorization outcome
4012001036275556	VISA	10/23	any	U	UNABLE
5255999999999992	MC	10/23	any	U	UNABLE
4012001038443335	VISA	10/23	any	Y	RISK BASED AUTHENTICATION (FRICTIONLESS)
5453010000073866	MC	10/23	any	Y	RISK BASED AUTHENTICATION (FRICTIONLESS)
5256103270096532	MC	10/23	any	Y	RISK BASED AUTHENTICATION (FRICTIONLESS)
4824983270096509	VISA	10/23	any	Y	RISK BASED AUTHENTICATION (FRICTIONLESS)
4012001036853337	VISA	10/23	any	N	REFUSED BY THE PAYMENT GATEWAY
5453010000073684	MC	10/23	any	N	REFUSED BY THE PAYMENT GATEWAY
4012001037141112	VISA	10/23	any	C	FULL 3DSecure (CHALLENGE) Fill with 111111
5453010000073205	MC	10/23	any	C	FULL 3DSecure (CHALLENGE) Fill with 111111

13 How to move to Production environment

The following activities must be carried out starting from the time at which Worldline and the merchant agreed on the release to Production:

- Change all the endpoints from https://pay-test.axepta.it to https://pay.axepta.it, i.e.follow the information given in the table below

Checkout	Testing	Production
API	https://pay-test.axepta.it	https://pay.axepta.it
Easy	https://pay-test.axepta.it/sdk	https://pay.axepta.it/sdk
Smart	https://pay-test.axepta.it/sdk	https://pay.axepta.it/sdk
In-App (SDK iOS)	https://pay-test.axepta.it	https://pay.axepta.it
In-App (SDK Android)	https://pay-test.axepta.it	https://pay.axepta.it

- Generate another Access Token, to be used in the Production environment
    - By accessing the URL https://pay.axepta.it/access from a browser session in "incognito mode"
    - Using the Username and Password provided by Worldline
    - Use this new Access Token for the Production environment

- Replace all the License Keys (i.e. the Server to Server key and each of the special keysfor the single integration method chosen).

14 Merchant-side PCI data security information

The PCI DSS standard defines the compliance requirements that merchants must fulfil. The table below lists these requirements (Self-Assessment Questionnaire SAQ and Report on Compliance RoC) for each type of technical integration solution that the merchant decides to implement.

Product	Technical solution	Description	Compliance (≤6,000,000 transactions/year)	Compliance (> 6,000,000 transactions/year)
Easy Checkout	Redirect SDK	The user is redirected to the AXEPTA payment page and the card data can be entered on the same page	SAQ A	RoC^{A}
Smart Checkout	JS SDK	The card data entry form is presented by the merchant and the data is transmitted directly to the payment gateway without interaction with the merchant's server	SAQ A-EP	RoC$^{A\text{-}EP}$
In-App Checkout	Mobile SDK	SDK for the integration of payment services on mobile applications	SAQ A	RoC^{A}
API Checkout	Server to server	Card data is entered on the merchant page and the card data is managed by the merchant's server	SAQ D	RoC

Where, in principle, the criteria are as follows:

- SAQ A / RoC^{A} = the entire payment page is managed by Worldline
- SAQ A-EP / RoC$^{A\text{-}EP}$ = The merchant's site does not historicize, process or transmit card data, but controls how the data is collected
- SAQ D / RoC = the merchant's site historicizes, processes or transmits card data