

Issued by: Nexi SPA Version: 14.2 Issued on: 24/10/2018

# Technical Specifications for Integration with the XPay Payment Gateway



# **TABLE OF CONTENTS**

Table of Contents	2
Revisions	
XPay payment gateway	7
Easy Payment	9
Codebase	11
One Click Payment	27
Oneclick payment via merchant site	27
Oneclick Payment via checkout page	30
Recurring Payment	44
Multi-Currency Payment (DCC)	
Additional Payment Methods	48
Amazon Pay	
Klarna Pay Now (Sofort)	
Paypal	
Google Pay	
Deposit MethodsConfiguration	
Personalization	
XPay Build	
•	
Card data collection form Payment	
First recurring payment	
Subsequent Payment (Recurring Payment and One Click Payment)	
Gestione 3D-secure	
Server to Server	94
3D-Secure Payments	95
MOTO Payments	
SSL E-commerce Payments	
Payments with External 3D-Secure MPI	
Recurring Payment - One Click Payment	. 110
3D-Secure Card Verification	
SSL Card Verification	
3D-Secure First Payment	
SSL First Payment	



Recurring MOTO Subsequent Payment	131
First Payment	131
Recurring Subsequent Payment	135
DCC	138
Verification	139
Generate Nonce	
Payment	143
Lightbox	147
Payment Management	147
Notification	
Recurring Payment	150
First Payment	150
Recurring Subsequent Payment	151
I-Frame	152
Custom CSS Management	152
Editable Elements	
Parameter List	154
SDK for app	156
IOS SDK	156
Getting Started	156
Easy Payment	159
Easy Payment with Contract Registration	161
ANDROID SDK	162
Getting Started	162
Easy Payment	165
Easy Payment with Contract Registration	168
SERVICES AVAILABLE ON ANDROID AND IOS SDK	169
Server-to-server SSL E-commerce Payments	
Payments with External 3D-Secure MPI	
Management: Recurring - Card on File - OneClickPay	
3D-Secure Card Verification	
Recurring 3D-Secure First Payment	
Recurring SSL Card Varification	
Recurring SSL Card VerificationSubsequent Payment	
Back Office Services - Deposit	184

# nexi

Back Office Services - Return/Refund	. 185
Back Office Services - Order List	. 186
Back Office Services - Order Details Query	. 188
DCC Verification Service	. 191
DCC Service - Payment	. 192
Back Office API	. 195
Deposit	
Reversal/Refund	
Order Details Query	
Order List	
PayMail Link Request	. 207
Additional services	. 209
Loading Contracts from POS Transactions	. 210
Contract Management - Cancellation	. 213
Contract Management - Disabling	. 215
Contract Management - Enabling	
Contract Management - Query	
Contract Management - Contract Details	
Control Management - Adding to Blacklist	
Control Management - Cancellation from Blacklist	
Control Management - Checking Existence in Blacklist	
Control Management - Blacklists	
Control Management - Removing Tax Code/PAN Pairing	
Control Management - List of Associated Tax Codes/PANs	
TABLES AND CODING	
Restful API Error Codes Table	
Coding: languageld	
Coding of DCCcurrency codes for DCC	
Transaction Type Coding	
Coding: message and resultDetails	
Card Type Coding  Coding: resultCode and resultDescription	
ECI, XID and CAVV Coding	
HTTP/XML API	
Server to Server Payments	
Payment	
Codebase	248



Plugin	301
Order Query	296
Deposit/Cancellation/Refund	283
Back Office API	283
Codebase	
Generating PayMail Links2	268
Payment with External 3D-Secure MPI	
Payment on Registered Contracts	
Payment for CardOnFile/Recurring/OneClick Registration	250



# **REVISIONS**

Version	Date	Author	Description
10.8	09/02/2017	Nexi	Drafting
10.9	04/04/2017	Nexi	Addition of PayPal deferred deposit management and PayPal recurring/CardOnFile payments management
11.0	09/05/2017	Nexi	Revision
11.1	01/09/2017	Nexi	Fixed Payment error on S2S/ addition enrolled card on file contract on hosted fields
11.2	18/09/2017	Nexi	Addition link of GitHub example
11.3	24/10/2017	Nexi	Rebranding
11.4	08/03/2018	Nexi	Added Apple Pay Paragraph / Typo
			Error fixed
12.0	24/5/2018	Nexi	Added XPay Build, Klarna, Paypal Paragraph Updated SDK description. Updated disposition description . Further Typo Error fixed.
13.0	24/05/2018	Nexi	Added Amazon Pay section
13.1	30/06/2018	Nexi	Fixed minor errors
13.2	30/06/2018	Nexi	Removed Hosted Fileds section
13.3	11/07/2018	Nexi	Updated Amazon Pay Section
14.0	02/10/2018	Nexi	Added Google Pay section Added Lightbox section Added Personalization section Fixed minor errors
14.2	24/10/2018	Nexi	Added Oneclick new payment method



# XPAY PAYMENT GATEWAY

This section is designed to give you all the information and tools you need for integrating Nexi XPay gateway quickly and easily.

## What will be covered?

- Step-by-step technical guides for implementation
- "Turnkey" solutions (Easy Payment) and additional features (OneClickPay, Recurring Payments)
- Advanced solutions, S2S, XPay Build etc.
- Sample codes, ready to use
- Materials to download: APIs, SDKs, Brand Repository, Information Documents

## Are there any prerequisites?

The integration does not have any specific requirements. XPay is compatible with any programming language and with any type of e-commerce. It is also available for use in all environments (web/mobile and app) and is optimised for all devices.

## Do I need to register?

All technical documentation and sample codes are freely available.

Registration (which does not need personal data - email address and password only) is required to access the Test Area, where you can test your solution and obtain support from the Nexi Technical Support team.

**NB** You do not have to implement your solution from scratch if you already use an e-commerce platform, which makes integration even easier. Just download the related plugin and integrate it with the CMS. Here you can find modules for a wide range of platforms.



















## **Easy Payment**

Integrating the Nexi "Easy Payment" module is the fastest way to begin receiving online payments on your website. The process is quite simple. It manages the transfer of the customer from the merchant's e-commerce site to the secure Nexi environment, and back again.



#### **Additional customisations**

Nexi also makes other types of more structured solutions available to merchants: I-Frame and XPay Build provide for greater customisation of the payment experience, with sensitive data handled by Nexi at all times. Server to Server requires the merchant to achieve PCI DSS certification.

In any case, integrating any of the solutions is simple and straightforward.

## **Back office integration API**

Nexi makes available a control panel for the merchant, where transactions can be viewed and advanced reporting tools managed. Access is available by using web credentials, or by integrating the back office directly into the merchant's management system.

# Further information and support

Whatever your needs may be, Nexi makes additional resources available for your use:

- Test Area
- Technical and commercial FAQs
- Blog at <a href="https://ecommerce.nexi.it">https://ecommerce.nexi.it</a>
- Download Section (documents, specifications and brand repository)

Not to mention that our technical support team is always at your disposal.



# **EASY PAYMENT**

The easiest way to enable an e-commerce site to receive payments, without having to worry about handling sensitive customer data. The customer remains on the merchant's e-commerce site until the point of checkout. The customer is then redirected to the secure Nexi environment to make payment. The merchant does not need to handle any sensitive data.



Github XPay sample code: https://github.com/NexiPayments/XPay/tree/master/web-mobile/pagamento-semplice

At a technical level, the implementation requires three stages:

## 1. Redirecting the user to the Nexi payment environment

## IN PRACTICE

Set up a Get request (redirect - link) or Post request (by sending a form with hidden fields), directing the customer's browser to the following URL. The request must be integrated with the parameters/values specific to the service that you want to implement, as found in the relevant section for each service below.

#### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it/ecomm/ecomm/DispatcherServlet

#### TEST ENVIRONMENT URL

https://int-ecommerce.nexi.it/ecomm/ecomm/DispatcherServlet

All communications to and from services hosted by Nexi must meet MAC security parameters. In this case too, the related calculation is displayed in the relevant section for each service.

# 2. Managing notification of the transaction result

IN PRACTICE



Collect the parameters sent by Nexi in server-to-server mode at the moment when the transaction is completed. In this way, merchants are confident of receiving the transaction result, even if the end customer closes the browser session before returning to the launch site.

# 3. Planning for the user's return to the merchant site

## IN PRACTICE

Manage the customer's return to the merchant site, and display a positive or negative message based on the parameters received from the Nexi check-out page.



# Codebase

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/pagamento-semplice/codice-base">https://github.com/NexiPayments/XPay/tree/master/web-mobile/pagamento-semplice/codice-base</a>

# **Payment Initiation Message: required fields**

This table indicates the mandatory fields to be entered as part of the redirect URL, and their corresponding characteristics.

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents, i.e. 5000 represents € 50.00.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN 3 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR. If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are: +,
url	Return url, directing back to the site upon completion of the transaction and transferring, using the GET method, the response parameters which show the transaction result.	•
url_back	Recall url, in case the user decides to abandon the transaction during the payment phase on the check-out page (result = CANCELLED) or if the call contains formal errors (result = ERROR). For detailed information on the parameters received, please refer to the Cancellation section.	AN MAX 200 CHAR.



mac	AN 40 CHAR.
	Message Authentication Code. Transaction
	signature field. For calculation details, see
	the end of this chapter: MAC Calculation.

# **Payment Initiation Message: optional fields**

This table indicates optional fields which can be used for data-entry at the discretion of the merchant.

Name	Description	Format
urlpost	Url to which XPay sends the result of the transaction, transferring, in server-to-server mode using the POST method, the response parameters which show the transaction result. For detailed information on the parameters received, please refer to the Notification section.	
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
languageld	Language identifier for the language to be displayed on the check-out page. The available languages are shown in the table here. If this field is not specified or is left blank, the text displayed will be in the default language defined during the service configuration process.	AN MAX 7 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	
Note1	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200 CHAR.
Note2	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200 CHAR.
Note3	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	



additional parameters	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values. The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.	
OPTION_CF	Field which the merchant uses to send the user's Tax Code to XPay. This is only required if checks validating the Tax Code against associated PAN number are active (optional security control activated on request). This data will also be included in the report queryable by the back office.	AN 16 CHAR.
selectedcard	If present, the payment page that is shown only allows the user to make payment using the network or payment method indicated. This feature is useful for merchants who wish to enter the choice of payment method on their own check-out page. The possible values are shown in the table here.	
TCONTAB	This field identifies the merchant's chosen deposit method for each transaction.  If set to I (immediate), when the transaction is authorised the payment is deposited without any further intervention on the part of the merchant and without considering the default profile set for the terminal.  If set to D (deferred) or if the field is empty, when the transaction is authorised it will be handled as defined by the terminal profile.	AN 20 CHAR.
infoc		AN MAX 35 CHAR.
infob	• •	AN MAX 20 CHAR.



	be transmitted to the bank on the basis of prior agreement with the same bank.	
shipping	if the payment method manages this function, it provides shipping information in response. Valued with N does not return shipping data in response, if not present or valued with any other value, information is returned	AN
paypalCustom	additional field that remains in the detail of paypal order	AN
paypalInvoiceID	Identifies the invoice of the trader. for paypal is a unique one so the operator can not pass the same value for more than one order	AN

#### Remember

- The values of the "url", "urlpost" and "url back" fields must start with "http://" or https://
- The address indicated in "urlpost" must have a public certificate and must not be protected by authentication
- Standard ports 80 or 443 must be used
- For proper call management, remember to comply with RFC 2396 and RFC 3986 standards
- Parameters related to the working framework must not be sent (eg VIEWSTATE for ASP.NET applications)

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- codTrans
- divisa
- importo
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(codeTrans=<val>divisa=<val>importo=<val><secretKey>)

## Cancellation

If a customer decides to cancel the payment from the Nexi check-out page by using the appropriate cancellation button, or if an error occurs during the payment process, the customer will be redirected to the url indicated in the "url\_back" parameter during the payment initiation process, along with the additional parameters as shown in the following table.



Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
importo	Transaction amount retrieved from the payment initiation message.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed (EUR = Euro).	AN 3 CHAR.
codTrans	Code associated with the payment retrieved from the payment initiation message.	AN MIN 2 - MAX 30 CHAR.
Esito	Possible values: CANCELLED or ERROR	AN MIN 6 - MAX 7 CHAR.

If result = ANNULLO, the merchant may choose to return the user to the payment page with the same transaction code.

## **Payment Notification Message: required fields**

The merchant receives payment notification directly from the Nexi server through a POST call. The notification is sent to the address indicated in the "urlpost" parameter of the Payment Initiation Message.

#### **WARNING:**

To confirm receipt of the notification, the message returned from the call must be a "http 200".

The table below shows the parameters that are returned in the notification message.

Name	Description	Format
alias	Store identification code transferred in the payment initiation message.	AN MAX 30 CHAR.
importo	Transaction amount retrieved from the payment initiation message.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed (EUR = Euro).	AN 3 CHAR.
codTrans	Code associated with the payment retrieved from the payment initiation message.	AN MIN 2 - MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
esito	Operation result	AN MAX 7 CHAR.
data	Transaction date	yyyymmdd
orario	Transaction time	HHmmss



codiceEsito	Transaction result. The possible values are shown in the table here.	
codAut	Authorisation code assigned by the credit card issuer, only present when authorisation is granted.	
pan	Masked credit card number with only the first 6 and the last 4 digits showing.	AN MAX 100 CHAR.
scadenza pan	Credit card expiry date	yyyymm
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
nazionalita	Shows the country of the card used for making payment.	AN 3 CHAR. ISO 3166-1 alpha-3 code
messaggio	Shows a brief description of the payment result. The possible values are shown in the <u>table here</u> .	
descrizione	If this information is provided during INPUT from the merchant, it will also be returned as OUTPUT, otherwise the field will be null.	AN MAX 2000 CHAR.
languageld	Value retrieved from the payment initiation message.	AN MAX 7 CHAR.
TipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
Name	Name of the person who made the payment.	AN MAX 150 CHAR.
cogName	Surname of the person who made the payment.	CHAR.
mail	Email address of the person who made the payment.	AN MAX 150 CHAR.

# **Payment Notification Message: optional fields**

This table indicates optional fields which may be present depending on the merchant configuration.

Name	Description	Form at
additional parameters	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values.	MAX 4000



hash	If expected under the merchant profile, this field will be populated and returned with the hash of the PAN of the card used for payment.				AN 28 CHA R.	
infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.				AN MAX 35 CHA R.	
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.				AN MAX 20 CHA R.	
codiceConvenzion e	Merchant code a	Merchant code assigned by the acquirer. Where required.			AN MAX 15 CHA R.	
dati_gestione_con	Xml containing s	hipping information			MAX	
segna		Field name	Req.	Descripti		
	WalletAddress				CHA	
					R.	
	BillingAdd		\/F0	0''		
		City	YES	City		
		Country	YES	Country		
		CountrySubdivision Line1	YES YES	address		
		Line2	NO	address		
		Line3	NO	address		
		PostalCode	YES	postal cod		
	BillingAdd		0	pootal oot		
	ShippingA					
		City	YES	City		
		Country	YES	Country		
		CountrySubdivision	YES			
		Line1	YES	address		
		Line2	NO	address		
		Line3	NO	address		
		PostalCode PosiniontName	YES YES	postal cod		
		RecipientName RecipientPhoneNumber	YES	Contact Tel. no.		
	ShinningA	•	120	161.110.		
	WalletAddress	ShippingAddress WalletAddress				
	Example:					
<walletaddress></walletaddress>						
	<billingad< td=""><td></td><td></td><td></td><td></td></billingad<>					
<city>Milan</city>						
	<c0< td=""><td>ountry&gt;ITA</td><td></td><td></td><td></td></c0<>	ountry>ITA				



```
<CountrySubdivision>-</CountrySubdivision>
            <Line1>corso sempione 55</Line1>
            <Line2/>
            <Line3/>
            <PostalCode>20100</PostalCode>
      </BillingAddress>
      <ShippingAddress>
            <City>Milan</City>
            <Country>ITA</Country>
            <CountrySubdivision>-</CountrySubdivision>
            <Line1> corso sempione 55</Line1>
            <Line2/>
            <Line3/>
      <PostalCode>20100</PostalCode>
      <RecipientName>Luca Rossi</RecipientName>
      <RecipientPhoneNumber>0234111111</RecipientP
honeNumber>
</ShippingAddress>
</WalletAddress>
```

## Payment Notification Message: additional fields for PayPal

This table indicates the fields provided in response to PayPal payments.

This table indicates the fields provided in response to PayPai payments.					
Name	Description	Format			
PAYERID	Unique identifier of the user's PayPal account.				
PAYMENTINFO_0_TRANSACTIONID	Unique identifier of the payment transaction.				
PAYMENTREQUEST_0_SHIPTONAME	Name and surname attached to the shipping address.	AN 128 CHAR.			
PAYMENTREQUEST_0_SHIPTOSTREET	First shipping address field	AN 100 CHAR.			
PAYMENTREQUEST_0_SHIPTOSTREET2	Second shipping address field. Optional.	AN 100 CHAR.			
PAYMENTREQUEST_0_SHIPTOCITY	Shipping address city	AN 40 CHAR.			
PAYMENTREQUEST_0_SHIPTOSTATE	Shipping address country or province. The PayPal country code list can be found here.	AN 40 CHAR.			



PAYMENTREQUEST_0_SHIPTOZIP	Postal Code	AN 20 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYCODE	Country Code	AN 2 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYNAME	Country	AN 20 CHAR.
BILLINGAGREEMENTACCEPTEDSTATUS	Indicates whether the customer accepts recurring payments (valued with "1" if he accepts otherwise with "0")	N
BILLINGAGREEMENTID	Token that PayPal associates with the Nexi contract number	AN

# Payment Notification Message: additional fields for Amazon Pay

This table indicates the fields provided in response to Amazon Pay payments

Name	Description	Format
amazonpay	Contains the response XML file provided by Amazon through the authorization API. For more information on the XML file see the Amazon technical specifications	XML coded

# Payment Notification Message: additional fields for Klarna

This table indicates the fields provided in response to Klarna payments

Name	Description	Format
klarnaID	ld defined by Klarna for this transaction	AN



## Payment Notification Message: additional fields for Google Pay

The following parameters are included in the result message if you use Google Pay and enhance the shipping parameter in the initiation phase of the payment

Name	Descrizione	Formato
shipping_name	The full name of the adressee	AN
shipping_address1	First line of the address	AN
shipping_address2	Second line of the address	AN
shipping_address3	Third line of the address	AN
shipping_postalCode	Postal code	AN
shipping_countryCode	Country code	AN
shipping_locality	City, town, neighbourhood, or suburb	AN
shipping_administrativeArea	A country subdivision (e.g. state or province)	AN
shipping_sortingCode	The sorting code	AN

## **Payment Result Message**

Once the payment has been completed, the customer is redirected to the merchant site at the address indicated in the payment initiation message ("url" field). The user then returns to the merchant's site, bringing the parameters that attest to the conclusion of the transaction.

The parameters are the same ones which we have already seen in the section regarding notifications, except that in this case they will be received using the GET method rather than the POST method. It is the responsibility of the merchant site to display a positive or negative message, based on the value of the "result" parameter received.

In the activation stage, merchants can also configure up to a maximum of 3 email addresses to receive a detailed message for every single transaction. In addition, they will also receive a daily summary email of all transactions undertaken on their virtual POS.

The merchant will receive the result of the payment in the following ways:

- By mail> The merchant will receive a message with the details of the transactions at the email address communicated during the configuration phase
- Online> Once the payment is completed, the user is redirected directly to the merchant's website, to the address indicated in the payment initiation message (field name "url"). The user then returns to the merchant's site, taking with him the parameters that attest to the conclusion of the transaction



# **Payment Result Message: required fields**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents, i.e. 5000 represents € 50.00.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN 3 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	CHAR. If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> <u>here</u> .	AN MAX 100 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
esito	Operation result	AN MAX 7 CHAR.
data	Transaction date	yyyymmdd
orario	Transaction time	HHmmss
codiceEsito	Transaction result. The possible values are shown in the <u>table here</u> .	N MAX 3 CHAR.



codAut	Authorisation code assigned by the credit card issuer, only present when authorisation is granted.	
pan	Masked credit card number with only the first 6 and the last 4 digits showing.	AN MAX 100 CHAR.
scadenza_pan	Credit card expiry date	yyyymm
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
nazionalita	Shows the country of the card used for making payment.	AN 3 CHAR. ISO 3166-1 alpha-3 code
descrizione	If this information is provided during INPUT from the merchant, it will also be returned as OUTPUT, otherwise the field will be null.	AN MAX 2000 CHAR.
languageld	Language identifier for the language to be displayed on the check-out page. The available languages are shown in the table here. If this field is not specified or is left blank, the text displayed will be in the default language defined during the service configuration process.	AN MAX 7 CHAR.
TipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
Name	Name of the person who made the payment.	AN MAX 150 CHAR.
cogName	Surname of the person who made the payment.	AN MAX 150 CHAR.
mail	Email address of the person who made the payment.	AN MAX 150 CHAR.



messaggio Shows a brief description of the payment result. The possible values are shown in the <u>table here</u> .	AN MAX 300 CHAR.
---	------------------

# **Payment Result Message: optional fields**

This table indicates optional fields which may be present depending on the merchant configuration.

Name	Description				Form at
Parametri aggiuntivi	which will be retulimit to the number of the string must	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values.			
hash	If expected under populated and re	If expected under the merchant profile, this field will be populated and returned with the hash of the PAN of the card used for payment.			AN 28 CHA R.
infoc	information can	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.			AN MAX 35 CHA R.
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.				AN MAX 20 CHA R.
codiceConvenzion e	Merchant code assigned by the acquirer. Where required.			AN MAX 15 CHA R.	
dati_gestione_con	Xml containing s	shipping information			MAX
segna	WalletAddress	Field name	Req.	Descripti	700 CHA R.
	BillingAdo	dress City Country CountrySubdivision	YES YES YES	City Country	
		Line1 Line2 Line3 PostalCode	YES NO NO YES	address address address postal cod	



```
BillingAddress
      ShippingAddress
                City
                                       YES
                                             City
                Country
                                       YES
                                             Country
                CountrySubdivision
                                       YES
                                       YES
                Line1
                                             address
                                             address
                Line2
                                       NO
                Line3
                                       NO
                                              address
                PostalCode
                                       YES
                                             postal cod
                RecipientName
                                       YES
                                             Contact
                RecipientPhoneNumber YES
                                             Tel. no.
      ShippingAddress
WalletAddress
Example:
<WalletAddress>
      <BillingAddress>
           <City>Milan</City>
           <Country>ITA</Country>
           <CountrySubdivision>-</CountrySubdivision>
            <Line1>corso sempione 55</Line1>
            <Line2/>
           <Line3/>
            <PostalCode>20100</PostalCode>
      </BillingAddress>
      <ShippingAddress>
           <City>Milan</City>
           <Country>ITA</Country>
            <CountrySubdivision>-</CountrySubdivision>
            <Line1> corso sempione 55</Line1>
            <Line2/>
            <Line3/>
      <PostalCode>20100</PostalCode>
     <RecipientName>Luca Rossi</RecipientName>
     <RecipientPhoneNumber>0234111111</RecipientP
honeNumber>
</ShippingAddress>
</WalletAddress>
```

# Payment Result Message: additional fields for PayPal

This table indicates the fields provided in response to PayPal payments.

Name Description Format



PAYERID	Unique identifier of the user's PayPal account.	
PAYMENTINFO_0_TRANSACTIONID	Unique identifier of the payment transaction.	
PAYMENTREQUEST_0_SHIPTONAME	Name and surname attached to the shipping address.	
PAYMENTREQUEST_0_SHIPTOSTREET	First shipping address field	AN 100 CHAR.
PAYMENTREQUEST_0_SHIPTOSTREET2	Second shipping address field. Optional.	
PAYMENTREQUEST_0_SHIPTOCITY	Shipping address city	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOSTATE	Shipping address country or province. The PayPal country code list can be found here.	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOZIP	Postal Code	AN 20 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYCODE	Country Code	AN 2 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYNAME	Country	AN 20 CHAR.
BILLINGAGREEMENTACCEPTEDSTATUS	Indicates whether the customer accepts recurring payments (valued with "1" if he accepts otherwise with "0")	AN
BILLINGAGREEMENTID	Token that PayPal associates with the Nexi contract number	AN

# Payment Result Message: additional fields for Klarna

Name	Description	Format
klarnaID	Id defined by Klarna for this transaction	AN

Payment Result Message: additional fields for Amazon Pay



Name	Description	Format
amazonpay	Contains the response XML file provided by Amazon through the authorization API. For more information on the XML file see the Amazon technical specifications	AN

## Payment Result Message: additional fields for Google Pay

The following parameters are included in the result message if you use Google Pay and enhance the shipping parameter in the initiation phase of the payment

Name	Descrizione	Formato
shipping_name	The full name of the adressee	AN
shipping_address1	First line of the address	AN
shipping_address2	Second line of the address	AN
shipping_address3	Third line of the address	AN
shipping_postalCode	Postal code	AN
shipping_countryCode	Country code	AN
shipping_locality	City, town, neighbourhood, or suburb	AN
shipping_administrativeArea	A country subdivision (e.g. state or province)	AN
shipping_sortingCode	The sorting code	AN

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- codTrans
- esito
- importo
- divisa
- data
- orario
- codAut
- secretKey



MAC = HASH SHA1

(codTrans=<val>esito=<val>importo=<val>divisa=<val>data=<val>orario=<val>codAut=<val><SecretKey>)

# One Click Payment

The integration of this solution allows the end customer to store the data of their credit card and use them later to make purchases with a few clicks.

You can implement this solution in different ways:

- · Via the merchant site
- Via cash page

The two solutions are distinguished for the management of subsequent payments: in the first case the subsequent payments will have to be managed by the merchant site, while in the second case it will be the gateway XPay to deal with it.

# Oneclick payment via merchant site

Integrating One Click Payment allows end customers to store details of their credit card or PayPal account, and use them to make subsequent purchases with just one click. At a technical level, this service consists of two stages:

- Activation and/or first payment
- Management of subsequent payments

Github XPay sample code: https://github.com/NexiPayments/XPay/tree/master/web-mobile/pagamento-semplice/pagamento-in-un-click

# Activation and/or first payment

During the first transaction, an identifying code must be generated for use in subsequent purchases. This identifying code (parameter: num\_contratto) allows Nexi to save a paired link between the user and the payment card used.

## IN PRACTICE

The "Codebase" module must be integrated and the following specific required parameters added.

# "First Payment" Initiation Message

Name	Description	Format
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.



tipo_richiesta	PP (first payment)	AN 2 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

## "First Payment" Notification Message: required fields

The same information found in the "Codebase" module is received in response, along with the following specific parameters.

Name	Description	Format
num_contratto	Contract number retrieved from the	AN MIN 5 - MAX 30
_	initiation message.	CHAR.
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
gruppo	The "gruppo" value is assigned by Nexi	AN MIN 5 - MAX 30
<b>5</b>	during activation.	CHAR.

## "First Payment" Notification Message: optional fields

The same optional information found in the "Codebase" module can be received in response, along with the following specific parameter.

Name	Description	Format
Check	This is populated if one or more of the controls programmed under the merchant profile fail.  The check to see if a card PAN exists against other contract codes will be set to: "PGP". Depending on the merchant profile, if the check fails the transaction can be blocked or a notification can be sent advising that the pan exists on another n_contract.	AN 3 CHAR.
	If all checks are passed, the field will not be populated.	

# Payment Notification Message: additional fields for PayPal

This table indicates the fields provided in response to PayPal payments.

Name	Description	Format
PAYERID	Unique identifier of the user's PayPal account.	
PAYMENTINFO_0_TRANSACTIONID	Unique identifier of the payment transaction.	



PAYMENTREQUEST_0_SHIPTONAME	Name and surname attached to the shipping address.	AN 128 CHAR.
PAYMENTREQUEST_0_SHIPTOSTREET	First shipping address field	AN 100 CHAR.
PAYMENTREQUEST_0_SHIPTOSTREET2	Second shipping address field. Optional.	
PAYMENTREQUEST_0_SHIPTOCITY	Shipping address city	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOSTATE	Shipping address country or province. The PayPal country code list can be found here.	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOZIP	Postal Code	AN 20 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYCODE	Country Code	AN 2 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYNAME	Country	AN 20 CHAR.
BILLINGAGREEMENTACCEPTEDSTATUS	Indicates whether the customer accepts recurring payments (valued with "1" if he accepts otherwise with "0")	N
BILLINGAGREEMENTID	Token that PayPal associates with the Nexi contract number	AN

# Management of subsequent payments in one click mode

Each time registered users make subsequent purchases, the e-commerce provider must send a call to Nexi with the registered contract details.

## IN PRACTICE

There are two ways to make a charge on a previously registered contract:

- Through a synchronous call in server-to-server mode
- By redirecting the customer to the Nexi payment environment as in the first payment



## Synchronous call

In server-to-server mode, the services displayed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and responses are JSON objects. Alternatively, Non-Rest APIs are available where communication is handled synchronously (using https calls accompanied by a series of parameters and values). The result message is an XML handled on the same connection.

The environment endpoints are as follows:

#### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it

## PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it

## URL

ecomm/api/recurring/pagamentoRicorrente

#### **METHOD**

**POST** 

## **ACCEPT**

application/json

See the <u>Subsequent Payment</u> section for detailed information on the call and the response to handle.

## Redirection

As an alternative to synchronous calls, users can be redirected in the same way as they were for the first payment by integrating the call with the following specific parameters.

Name	Description	Format
num_contratto	Unique code assigned at the time of first payment for pairing with the archive storing sensitive credit card details.	
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
tipo_richiesta	PR (subsequent payment)	AN 2 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

# Oneclick Payment via checkout page

In this mode the call to the gateway will be identical for both the first and subsequent payments: XPay will manage them. In case of first payment, XPay will show the form for



entering the card data, while in the case of subsequent payments, it will show the previously inserted card data or the possibility to enter the data of a new card.

In case of first payment on the XPay checkout page, the cardholder will be given the option to save his card details to make Oneclick payments.

The only data that must be managed by the operator is the "num\_contratto" parameter which will be evaluated with a unique identifier for each customer (for example, the customer id of their site).

To activate this service you need to contact Nexi technical assistance, which will proceed with the creation of a unique alias to be used for the initiation of payments.

# "First Payment" initiation Message: required fields

The table below indicates the fields that must be included in the redirect URL, and their characteristics.

Name	Description	Format
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	AN MIN 5 MAX 30
tipo_servizio	The field must be set to: "paga_multi".	AN
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 MAX 30
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents, i.e. 5000 represents € 50.00.	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters



	with the richiesta con medesimo codTrans per altre 2 volte, in fase di configurazione l'esercente può scegliere di diminuire i 3 tentativi	that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only : +,
url	Return url, directing back to the site upon completion of the transaction and transferring, using the GET method, the response parameters which show the transaction result.	AN MAX 500
url_back	Recall url, in case the user decides to abandon the transaction during the payment phase on the check-out page (result = CANCELLED) or if the call contains formal errors (result = ERROR). For detailed information on the parameters received, please refer to the Cancellation section.	AN MAX 200
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

# "First Payment" initiation Message: optional fields

The table below indicates optional fields that can be used to the discretion of the merchant.

Name	Description	Format
urlpost	Url to which XPay sends the result of the transaction, transferring, in server-to-server mode using the POST method, the response parameters which show the transaction result. For detailed information on the parameters received, please refer to the Notifi	AN MAX 500
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150



languageld	Language identifier for the language to be displayed on the check-out page. The available languages are shown in the table here. If this field is not specified or is left blank, the text displayed will be in the default language defined during the service configuration process.	AN MAX 7
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 for MyBank: AN MAX 140 CRT you can use just these special characters/ - : ().,
Note1	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200
Note2	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200
Note3	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200
OPTION_CF	Field which the merchant uses to send the user's Tax Code to XPay. This is only required if checks validating the Tax Code against associated PAN number are active (optional security control activated on request). This data will also be included in the report queryable by the back office.	AN MAX 16
selectedcard	If present, the payment page that is shown only allows the user to make payment using the network or payment method indicated. This feature is useful for merchants who wish to enter the choice of payment method on their own check-out page. The possible values are shown in the table here.	AN MAX 25



TCONTAB	This field identifies the merchant's chosen deposit method for each transaction. If set to I (immediate), when the transaction is authorised the payment is deposited without any further intervention on the part of the merchant and without considering the default profile set for the terminal. If set to D (deferred) or if the field is empty, when the transaction is authorised it will be handled as defined by the terminal profile.	AN MAX 20
infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.	AN MAX 35
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.	AN MAX 20
shipping	if the payment method manages this function, it provides shipping information in response. Valued with N does not return shipping data in response, if not present or valued with any other value, information is returned	AN
paypalCustom	additional field that remains in the detail of paypal order	AN
paypalInvoiceID	Identifies the invoice of the trader. for paypal is a unique one so the operator can not pass the same value for more than one order	AN

N additional parameters can be specified that will be returned in the result message and notification message. There is no limit to the number of additional parameters but the overall length of the string consisting of the parameter names and their value must not exceed 4000 characters. Avoid the following parameter names because they are already used by XPay: TRANSACTION\_TYPE, return-ok, tid, INFO\_PAGE, RECALL\_PAGE, back\_url, ERROR\_URL, \$EMAIL, \$NAME, \$COGNAME, EMAIL

#### **Mac Calculation**

For the reply message, the string to sign must contain the following fields:

codTrans



- divisa
- importo
- gruppo
- num\_contratto
- chiave segreta

## **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>divisa=<val>importo=<val>gruppo=<val>num contratto=<val><chiaveSegreta>)

## Do not forget

- field values "url", "urlpost" e "url\_back" must start with "http://" o "https://"
- The address indicated in "urlpost" must have a pubblic certificate and it must not be protected by authenticationDevono essere utilizzate le porte standard 80 o 443
- For a correct management of calls you have to comply standard RFC 2396 e RFC 3986
- Parameters related to the working framework must not be sent (es.: i VIEWSTATE for ASP.NET applications)

## Cancellation

In the event that the customer decides to cancel the payment once landed on the Nexi cash page through the appropriate cancel button, or if an error occurs during the payment process, it will be redirected to the URL indicated in the "url\_back" parameter in payment start phase with addition of the parameters indicated in the following table.

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. es.: 5000 is 50,00 €	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if,	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is



	the authorisation request fails, then the merchant may repeat the same request with the richiesta con medesimo codTrans per altre 2 volte, in fase di configurazione l'esercente può scegliere di diminuire i 3 tentativi	activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
esito	Result of the operation (Possible Values OK, KO, ANNULLO, ERRORE)	AN MAX 7

In case of reply=ANNULLO the merchant can decide to send user to checkout page with the same transaction code.

## **Payment Result**

Merchants receives payment result through:

- Via mail > Merchant receives a message via email (the one comunicated in configuration phase) with transaction details.
- Online > User, once payment ends, is sent directly to merchant site, to the url
  indicated in initiation message. User will be redirect to merchant site with all the
  parameters that certify transaction end.

# Payment Result message: required fields

Name	Description	Format
aliasEffettivo	Alias with which the transaction is actually executed.	AN MAX 30
num_contratto	Unique code assigned by the merchant for matching with the archive containing sensitive credit card data	AN MIN 5 MAX 30
messaggio	Shows a brief description of the payment result. The possible values are shown in the table here.	AN
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30
gruppo	The value of the "gruppo" (group) is assigned during activation by Nexi	AN MIN 5 MAX 30



alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. es.: 5000 is 50,00 €	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the richiesta con medesimo codTrans per altre 2 volte, in fase di configurazione l'esercente può scegliere di diminuire i 3 tentativi	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
brand	Credit card network.	AN MAX 100
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR
esito	Result of the operation (Possible Values OK, KO, ANNULLO, ERRORE)	AN MAX 7
data	Transaction date	DATA MAX 8 aaaammgg
orario	Hour of transaction	AN MAX 6 hhmmss
codiceEsito	Transaction result. The possible values are shown in the table here.	N MAX 3
codAut	Authorisation code assigned by the credit card issuer, only present when authorisation is granted.	AN MIN 2 MAX 6



pan	Masked credit card number with only the first 6 and the last 4 digits showing.	N MIN 16 MAX 19
scadenza_pan	Credit card expiry date	DATA aaaamm
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30
nazionalita	Shows the country of the card used for making payment.	AN 3 CHAR. ISO 3166-1 alpha-3 code
timeStamp	Timestamp in milliseconds	N 13 CHAR
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instrucrizione della disposizione SCT ma viene troncato al 140mo carattere	AN MAX 2000 for MyBank: AN MAX 140 CRT you can use just these special characters/ - : ().,
languageld	Language identifier for the language to be displayed on the check-out page. The available languages are shown in the table here. If this field is not specified or is left blank, the text displayed will be in the default language defined during the service configuration process.	AN MAX 7
tipoTransazione	Transaction type, indicates the payment method. See the table here for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200
Nome	Name of the person who made the payment.	AN MAX 150

## Payment result message: optional fields

You can receive the same optional data from the "CodeBase" solution in response with the addition of the specific parameters found below.



Name	Description	Format
Check	This is populated if one or more of the controls programmed under the merchant profile fail.  The check to see if a card PAN exists against other contract codes will be set to: "PGP". Depending on the merchant profile, if the check fails the transaction can be blocked or a notification can be sent advising that the pan exists on another n_contract.  If all checks are passed, the field will not be populated	AN 3 CHAR.
hash	If expected under the merchant profile, this field will be populated and returned with the hash of the PAN of the card used for payment.	AN MAX 28
infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.	AN MAX 35
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.	AN MAX 20
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15

## **Mac Calculation**

For the reply message, the string to sign must contain the following fields:

- codTrans
- esito
- importo
- divisa
- data
- orario
- codAut
- chiave segreta

## **SAMPLE STRING**



MAC = HASH SHA1(codTrans=<val>esito=<val>importo=<val>divisa=<val>data=<val>orario=<val>co dAut=<val><chiaveSegreta>)

#### **Notification**

The merchant receives payment notification directly from the Nexi server through a POST call. The notification contains the same parameters as the result and is performed towards the address indicated in the "urlpost" parameter of the payment initiation message.

ATTENTION: to confirm the receipt of the notification the message returned by the call must be an "http 200"

## Payment notification message: required fields

Name	Description	Format
aliasEffettivo	Alias with which the transaction is actually executed.	AN MAX 30
num_contratto	Unique code assigned by the merchant for matching with the archive containing sensitive credit card data	AN MIN 5 MAX 30
messaggio	Shows a brief description of the payment result. The possible values are shown in the table here.	AN
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30
gruppo	The value of the "gruppo" (group) is assigned during activation by Nexi	AN MIN 5 MAX 30
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. es.: 5000 is 50,00 €	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for	AN MIN 2 MAX 30 (character # is forbitten). If the



	each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the richiesta con medesimo codTrans per altre 2 volte, in fase di configurazione l'esercente può scegliere di diminuire i 3 tentativi	MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
brand	Type of card used by the user to make payment. The possible values are shown in the table here.	AN MAX 100
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR
esito	Result of the operation (Possible Values OK, KO, ANNULLO, ERRORE)	AN MAX 7
data	Transaction date	DATA MAX 8 aaaammgg
orario	Hour of transaction	AN MAX 6 hhmmss
codiceEsito	Transaction result. The possible values are shown in the table here.	N MAX 3
codAut	Authorisation code assigned by the credit card issuer, only present when authorisation is granted.	AN MIN 2 MAX 6
pan	Masked credit card number with only the first 6 and the last 4 digits showing.	N MIN 16 MAX 19
scadenza_pan	Credit card expiry date	DATA aaaamm
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30
nazionalita	Shows the country of the card used for making payment.	AN 3 CHAR. ISO 3166-1 alpha-3 code
timeStamp	Timestamp in milliseconds	N 13 CHAR



descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instrucrizione della disposizione SCT ma viene troncato al 140mo carattere	AN MAX 2000 for MyBank: AN MAX 140 CRT you can use just these special characters/ - : ().,
languageld	Language identifier for the language to be displayed on the check-out page. The available languages are shown in the table here. If this field is not specified or is left blank, the text displayed will be in the default language defined during the service configuration process.	AN MAX 7
tipoTransazione	Transaction type, indicates the payment method. See the table here for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200
Nome	Name of the person who made the payment.	AN MAX 150

Payment notification message: optional fields



Name	Description	Format
Check	This is populated if one or more of the controls programmed under the merchant profile fail.  The check to see if a card PAN exists against other contract codes will be set to: "PGP". Depending on the merchant profile, if the check fails the transaction can be blocked or a notification can be sent advising that the pan exists on another n_contract.  If all checks are passed, the field will not be populated.	AN 3 CHAR.
hash	If expected under the merchant profile, this field will be populated and returned with the hash of the PAN of the card used for payment.	AN MAX 28
infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.	AN MAX 35
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.	AN MAX 20
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15

#### • Mac Calculation

For the notification message, the string to sign must contain the following fields:

- codTrans
- esito
- importo
- divisa
- data
- orario
- codAut
- chiave segreta

## **SAMPLE STRING**



MAC = HASH SHA1(codTrans=<val>esito=<val>importo=<val>divisa=<val>data=<val>orario=<val>co dAut=<val><chiaveSegreta>)

## **Recurring Payment**

Integrating recurring payments allows merchants to store credit card or PayPal account details, and use them to make subsequent payments. This service differs from the One Click Payment service, as it is the merchant who requests the recurring payment, rather than the end customer.

At a technical level, this service consists of two stages:

- Activation and/or first payment
- Management of recurring payments/subsequent payments

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/pagamento-semplice/pagamento-ricorrente">https://github.com/NexiPayments/XPay/tree/master/web-mobile/pagamento-semplice/pagamento-ricorrente</a>

## Activation and/or first payment

During the first transaction, an identifying code must be generated for use in subsequent purchases. This identifying code (parameter: num\_contratto) allows Nexi to save a paired link between the user and the payment card used.

#### IN PRACTICE

The "Codebase" module must be integrated and the following specific parameters added.

### "First Payment" Initiation Message

Name	Description	Format
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
tipo_richiesta	PP (first payment)	AN 2 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

<sup>&</sup>quot;First Payment" Notification Message: required fields



The same information found in the "Codebase" module is received in response, along with the following specific parameters.

Name	Description	Format
num_contratto	Contract number retrieved from the	AN MIN 5 - MAX 30
	initiation message.	CHAR.
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

## "First Payment" Notification Message: optional fields

The same optional information found in the "Codebase" module can be received in response, along with the following specific parameter.

Name	Description	Format
Check	This is populated if one or more of the controls programmed under the merchant profile fail.  The check to see if a card PAN exists against other contract codes will be set to: "PGP". Depending on the merchant profile, if the check fails the transaction can be blocked or a notification can be sent advising that the pan exists on another n_contract.	AN 3 CHAR.
	If all checks are passed, the field will not be populated.	

## Payment Notification Message: additional fields for PayPal

This table indicates the fields provided in response to PayPal payments.

Name	Description	Format
PAYERID	Unique identifier of the user's PayPal account.	
PAYMENTINFO_0_TRANSACTIONID	Unique identifier of the payment transaction.	
PAYMENTREQUEST_0_SHIPTONAME	Name and surname attached to the shipping address.	
PAYMENTREQUEST_0_SHIPTOSTREET	First shipping address field	AN 100 CHAR.
PAYMENTREQUEST_0_SHIPTOSTREET2	Second shipping address field. Optional.	AN 100 CHAR.



PAYMENTREQUEST_0_SHIPTOCITY	Shipping address city	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOSTATE	Shipping address country or province. The PayPal country code list can be found here.	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOZIP	Postal Code	AN 20 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYCODE	Country Code	AN 2 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYNAME	Country	AN 20 CHAR.
BILLINGAGREEMENTACCEPTEDSTATUS	Indicates whether the customer accepts recurring payments (valued with "1" if he accepts otherwise with "0")	N
BILLINGAGREEMENTID	Token that PayPal associates with the Nexi contract number	AN

## Management of Recurring Payments/Subsequent Payments

Each time registered users make subsequent purchases, the e-commerce provider must send a call to Nexi with the registered contract details.

#### IN PRACTICE

There are two ways to make a charge on a previously registered contract:

- Through a synchronous call in server-to-server mode
- Through batch file

### Synchronous call

In server-to-server mode, the services displayed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and responses are JSON objects. Alternatively, Non-Rest APIs are available where communication is handled synchronously (using https calls accompanied by a series of parameters and values). The result message is an XML handled on the same connection.



Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/pagamento-successivo">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/pagamento-successivo</a>

The environment endpoints are as follows:

#### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it

#### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it

#### URI

ecomm/api/recurring/pagamentoRicorrente

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json

See the <u>Subsequent Payment</u> section for detailed information on the call and the response to handle.

#### **Batch file**

The trace for managing recurring payments through batch files can be found here.

Download trace

## Multi-Currency Payment (DCC)

This feature allows customers who have credit cards in currencies other than Euro to make a payment in their reference currency.

See supported currencies.

#### IN PRACTICE

The "<u>Codebase</u>" module must be integrated. The only difference is that the result message is enriched with additional information regarding:

- Whether or not the user accepts the exchange rate
- Exchange rate applied
- Equivalent value in the user's currency

## Payment Result Message: additional fields for DCC

Name Description Format



dccRate	Exchange rate applied on the basis of exchange rates issued by Global Blue. Only present for the DCC service.	AN MAX 15 CHAR.
dccAmount	Shows the value of the amount converted into the currency chosen by the payer for the transaction. The currency used is shown in the dccCurrency field. Blank space characters are added on the left until 20 characters are reached.	AN 20 CHAR.
dccCurrency	Code of the currency in which the dccAmount is expressed (e.g. 840=USD). Only present for the DCC service. For allowed values, see the table here.	AN 3 CHAR.
dccState	Shows if the transaction took place using DCC. The possible values are:  00 No DCC provided for the card used 02 DCC not accepted by cardholder 03 DCC accepted by cardholder	AN 2 CHAR.

## **Additional Payment Methods**

With XPay, merchants have the option of offering their e-commerce customers the ability to pay not only by credit card, but also via any of the following alternative payment methods:

- Masterpass only easy payments
- MyBank only easy payments
- PayPal easy or recurring/OneClick/CardOnFile payments
- Amazon Pay
- Apple Pay
- Klarna

#### IN PRACTICE

Integration of these features is very simple and there are two options. As always, it starts by implementing the "Codebase" module:

- 1. The user chooses an alternative payment method in the Nexi environment after check out from the merchant's e-commerce site.
- 2. The user chooses an alternative payment method from the merchant's e-commerce site. In this case, the "selectedcard" parameter must be sent in order to direct the user to the correct page in relation to the payment method chosen, with the exception of PayPal, which can only be activated on the Nexi page mentioned in point 1.



# **Amazon Pay**

#### **Activation**

To set Amazon Pay service you have to select the "Amazon Pay" option into the backoffice.

Into this section it must be entered your merchant ID, client ID and the MWS token obtained from the registration trough Amazon Pay web portal.

Also you can choose to enable or disable the use of the payment method from the checkout page and choose if immediately record the payment otherwise perform independently the accounting form the backoffice.

To allow the payments, besides the XPay configurations, you have to enter into Amazon Pay portal, generate the MWS token and set:

- Field "URL restituiti consentiti"
   with https://ecommerce.nexi.it/ecomm/cassa/AmazonPayRedirect.jsp
- Field "Istant notification Integrator URL" with https://ecommerce.nexi.it/ecomm/amazonpay/Notification

## **Payment**

The start of payment does not undergo variations compared to the base code. In case of a valid call XPay will show the "Amazon Pay" logo (if is set and enabled) within the page of choice in the section "Wallet".

You will be able to redirect your own customers directly to the Amazon Pay checkout page setting the parameter "selectedcard" with "AMAZONPAY" in the start up payment phase. If the checks described above carried out fails, with the use of the option "selectedcard" will be returned an error.

#### **NOTES:**

 In the case of Amazon Pay transactions, the "codAut" parameter is set to "AMAZON"

## **Recurring Payments**

To manage recurring payments, follow the instructions in the Recurring Payments section

#### **NOTES:**

• It is possible to make subsequent payments only via API.

#### **Operations from backoffice**



From backoffice you will be able to carry out the standard operations carried out for the cards.

## **Integrated Payments**

Merchants can choose to integrate Amazon Pay, leaving the payment phase at XPay. In this case, it has to be created the dispay and management of amazonpay's widgets and at his point must be called XPay, through an api rest, to make the payment.

#### URI

ecomm/api/paga/amazonpay

#### **METODO**

**POST** 

#### **ACCEPT**

application/json

### **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi	AN MAX 30
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 MAX 30
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. es.: 5000 is 50,00 €	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 = Euro	N MAX 3
timeStamp	Timestamp in milliseconds	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR
amazonpay	Object whose structure is shown in the following table	JSON



## **Object amazonpay**

Name	Description	Format
amazonReferenceId	In case of simple payment use the amazonOrderReferenceId field while in case of the first payment indicated with the presence of the field createContratto = 'S' use the amazonBillingAgreementId field	AN
accessToken	Access token obtained by Amazon login	AN
softDecline	To manage payment retry, following an error code 96, it is necessary to enhance this field with 'S', in other cases it is possible not to enhance it or not to include it in the object	AN
creaContratto	In case of creation of a new contract valorise 'S'	AN

#### **Mac Calculation**

For the reply message, the string to sign must contain the following fields:

- apikey
- codiceTransazione
- importo
- divisa
- timeStamp
- chiaveSegreta

## **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>importo=<val>divisa=<val>timeStamp=<val>chiaveSegreta>)

## **Payment Notification Message**

Name	Description	Format
amazonReferenceId	In case of simple payment use the amazonOrderReferenceId field while in case of the first payment indicated with the presence of the field createContratto = 'S' use the amazonBillingAgreementId field	AN



esito	Result of the operation (Possible Values OK, KO)	AN MAX 2
idOperazione	Transaction identifier assigned by Nexi	AN MIN 2 MAX 30
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15
data	Transaction date	DATA dd/mm/yyyy
ora	Operation date	DATA hh:mm:ss
ppo	Payment with wallet (Apple Pay, Masterpass, ecc)	AN MIN 2 MAX 30
nazione	Credit card country	AN ISO 3166-1 alpha-3
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> <u>here</u>	AN MAX 100
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20
amazonpay	Contains the response XML file provided by Amazon through the authorization API. For more information on the XML file see the Amazon technical specifications	XML codificato
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table Restful API Error Codes Table messaggio -> error details	JSON
timeStamp	Timestamp in milliseconds	N 13 CHAR



Message Authentication Code.
Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.

#### **Mac Calculation**

For the reply message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- chiaveSegreta

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><chiaveSegreta>)

#### **NOTES:**

The error code 96 indicates that the payment to Amazon has failed due to a soft declined, so the merchant will have to re-propose the wallet widget as indicated by Amazon in the documentation. In this case the message field will contain the name of the error obtained: InvalidPaymentMethod or PaymentMethodNotAllowed.

Do not show the widgets again with the JS "OnOrderReferenceCreate" method, otherwise a new Amazon side order will be created. The OnOrderReferenceCreate method should be replaced with the explicit assignment of the Amazon Order ID, as follows: amazonOrderReferenceId: 'YOUR AMAZON ORDER REFERENCE ID'.

## Management change amount based on shipping address

The management of the modification of the amount based on the shipping address selected by the user, is handled only if the merchant has configured the shipping url on the Nexi back office configuration page for Amazon Pay and is asked to show the widget for the collection of shipping data (shipping parameter to Y in the request phase). With these conditions, every time the user changes the shipping address, in the Amazon address widget, the address that has just been selected is notified to the operator. The response expected by the merchant is a POST with the content-type plain / text and in the body the amount, modified or not, and other parameters must appear.

## **Payment Notification Message**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30



importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. es.: 5000 is 50,00 €	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 = Euro	AN MAX 3
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 MAX 30 Escluso carattere #. In caso di attivazione del servizio MyBank, i soli caratteri speciali utilizzabili sono: / -: ().,+
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation	AN 40 CHAR
address1	Address	AN
address2	First address detail	AN
address3	Second address detail	AN
city	City	AN
countryCode	Country code	AN
postalCode	Postal code	AN
stateRegion	State	AN

#### **Mac Calculation**

For the reply message, the string to sign must contain the following fields:

- codTransaddress1
- address2
- address3
- city
- countryCodepostalCodestateRegion



chiave segreta

## **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>address1=<val>address2=<val>address3=<val>city=<val>countryCode=<val>postalCode=<val>stateRegion=<val><chiaveSegreta>)>)

In response, the merchant must send the new amount calculated based on the shipping address selected by the customer. In the response parameters you must use the same codTrans used to send the customer to the cash page.

## **Payment Result Message**

Name	Description	Format
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. es.: 5000 is 50,00 €	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 = Euro	AN MAX 3
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts	AN MIN 2 MAX 30 Escluso carattere #. In caso di attivazione del servizio MyBank, i soli caratteri speciali utilizzabili sono: / -: ().,+
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

#### **Mac Calculation**

For the reply message, the string to sign must contain the following fields codTrans

- divisa
- importo
- chiave segreta



## **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>divisa=<val>importo=<val><chiaveSegreta>)



# Klarna Pay Now (Sofort)

Klarna is one of the main european payment suppliers. Klarna Pay Now (Sofort) is a solution that allows you to receive swiftly and safely credit transfers. It offers a quick shopping experience without the classical complications of the standard credit transfers.

#### **Activation Set up**

The merchant can configure his profile to use Klarna Pay Now (Sofort) through the "Sofort" backoffice section. In this section you will enter the project id, the customer number, the api key and the buyer protection obtained from registration done on the **Sofort portal**. You can also choose whether to receive notifications of order status changes sent from Sofort to Xpay sw and enable / disable the use of the payment method from the cash page

#### **Payment**

The process of requesting a payment does not change with respect to the base code. In the case of a valid call, XPay will display the "Klarna Pay Now" logo, if configured and enabled, within the selection page in the "Other payments" section. XPay will not display the logo, even if correctly configured, if:

- the request has the field "service\_type" filled with "pay\_multi", "paga\_oc3d". this is done to avoid the creation of a contract with the possibility of recurring transaction
- the amount of the request is less than 10 cents, this is done to avoid the negative response from Klarna for too low amount

The merchant will be able to redirect directly its customers to the Klarna cash page by filling the "selectedcard" parameter with "KLARNA" value in the payment initiation phase.

NB: With the use of the "selectedcard" option, if the previous describe checks made by XPay fail, an error will be returned.

#### Warning:

• In the case of Klarna transactions, the "codTrans" parameter can have a maximum length of 27 characters and the special characters accepted are:,. + -

• The cancellation of the payments in the event of a failed urlpost notification is NOT managed, in other word if the notification fails the Klarna order is NOT canceled.



## **Back office operation**

The merchant can not perform reversal or refund transactions from the back office. The merchant has the opportunity to flag in Xpay back office if a transaction not tracked by Klarna has been correctly accounted or has failed, in this way the merchant can verify the updated status at subsequent access without having to login in the merchant's bank portal the portal

## Notifiche

In the event that the merchant has an agreement with klarna he can receive notifications regarding any changes in the status of payments.

In order to enable this option in the back office the merchant must activate the receipt of the notifications and in every request of new payment it must indicate in the "urlpost" parameter, the value of the link to which the notifications will be made..

## **Pending status**

This notification is forwarded when a payment is generated. The "status" parameter is changed to "pending".

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi	AN MAX 30
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
klarnaID	Id defined by Klarna for this transaction	AN
status	The status of the transaction	AN



data	Transaction date		DATA dd/mm/yyyy
orario	Hour of transaction		AN hh:mm:ss
sender_holder			AN
sender_account			AN
sender_bank_code			AN
sender_bank_name			AN
sender_bic			AN
sender_iban			AN
mac	Message Authentication Transaction signature field. For calc details, see the end of this chapter Calculation.	culation	AN 40 CHAR

#### **MAC Calculation**

For the reply message, the string to sign must contain the following fields:

- codTrans
- klarnaID
- status
- data
- orario
- chiaveSegreta <secret key>

#### **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>klarnaID=<val>status=<val>data=<val>orario=<val><chiaveSegreta>

#### Loss

This notification is forwarded when a payment is rejected. The "status" parameter is changed to "loss".



Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi	AN MAX 30
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
klarnaID	Id defined by Klarna for this transaction	AN
status	The status of the transaction	AN
data	Transaction date	DATA dd/mm/yyyy
orario	Hour of transaction	AN hh:mm:ss
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

#### **MAC Calculation**

For the reply message, the string to sign must contain the following fields::

- codTrans
- klarnaID
- status
- data
- orario
- chiaveSegreta< secret key>

## **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>klarnaID=<val>status=<val>data=<val>orario=<val><chiaveSegreta>



## Receive

This notification is forwarded when a payment is authorized and complete. The "status" parameter is changed to "receive".

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi	AN MAX 30
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
klarnaID	Id defined by Klarna for this transaction	AN
status	The status of the transaction	AN
data	Transaction date	DATA dd/mm/yyyy
orario	Hour of transaction	AN hh:mm:ss
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

#### **MAC Calculation**

For the reply message, the string to sign must contain the following fields::

- codTrans
- klarnaID
- status
- data
- orario



• chiaveSegreta< secret key>

## **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>klarnaID=<val>status=<val>data=<val>orario=<val><chiaveSegreta>

## **Untraceable**

This notification is forwarded when a payment is not done on the Klarna bank . The "status" parameter is changed to "Untreaceable".

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi	AN MAX 30
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters that can be used are: / -: (). , + With Klarna you must not exceed 27 characters and the special characters accepted are only: +,
klarnaID	Id defined by Klarna for this transaction	AN
status	The status of the transaction	AN
data	Transaction date	DATA dd/mm/yyyy
orario	Hour of transaction	AN hh:mm:ss
sender_holder		AN
sender_account		AN
sender_bank_code		AN



sender_bank_name			AN
sender_bic			AN
sender_iban			AN
mac	Authentication ignature field. For cale he end of this chapte	culation	AN 40 CHAR

#### **MAC Calculation**

For the reply message, the string to sign must contain the following fields::

- codTrans
- klarnaID
- status
- data
- orario
- chiaveSegreta< secret key>

## **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>klarnaID=<val>status=<val>data=<val>orario=<val><chiaveSegreta>

#### Refunded

The "status" parameter is changed to "refunded".

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi	AN MAX 30
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may	AN MIN 2 MAX 30 (character # is forbitten). If the MyBank service is activated, the only special characters that can be used are: / -: (). , +



	choose to decrease this to less than 3 attempts.	With Klarna you must not exceed 27 characters and the special characters accepted are only : +,
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 = Euro	AN MAX 3
klarnaID	Id defined by Klarna for this transaction	AN
status	The status of the transaction	AN
data	Transaction date	DATA dd/mm/yyyy
orario	Hour of transaction	AN hh:mm:ss
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

#### **MAC Calculation**

For the reply message, the string to sign must contain the following fields::

- codTrans
- importo
- divisa
- klarnaID
- status
- data
- orario
- chiaveSegreta

## **SAMPLE STRING**



MAC = HASH SHA1(codTrans=<val>importo=<val>divisa=<val>klarnaID=<val>status=<val>data=<val>orario=<val><chiaveSegreta>)

## **Paypal**

In order to enable this payment method you should go in the backoffice Nexi in the "PayPal" Tab where you should insert your PayPal business account and enabling this payment flagging the "abilita" box present in the Tab

For the correct setup of the payment method you must apply some changes in your profile of the PayPal account: **how to change your profile**.

You should register in the **sandbox area of PayPal**, in order to perform some test to verify these changes and receive your business account and buyer test account. These information should be added in the test area of the Nexi backoffice

#### **NOTES:**

If you want to enable "recurring" transactions you must contact the customer service of Paypal



# Google Pay

Google Pay is wallet by Google to memorize your own credit cards in a smart and safe way.

#### **Activation**

To make this payment method available on the cash page, you must activate it in the Nexi backoffice. No registration is required for Google.

## **Payment**

Payment initiation does not change with respect to BaseCode.

It is possible to redirect users directly to GooglePay using the parameter "selectedcard" enhanced "GOOGLEPAY" during initiation payment phase.

### **Shipment**

You can request the shipping data, provided by the Google Pay wallet, valuing the "shipping" parameter during the start of the payment process.



# **Apple Pay**

Apple Pay is a mobile payments service that allows users to make payments in person, in iOS apps, and on the web. It digitizes and can replace a credit or debit card chip and PIN or magnetic stripe transaction at a contactless-capable point-of-sale terminal. It is very similar to contactless payments already used in many countries, with the addition of twofactor authentication via Touch ID, Face ID, PIN or passcode. The service lets Apple devices wirelessly communicate with point of sale systems by using a near field communication (NFC) antenna, a "dedicated chip that stores encrypted payment information" (known as the Secure Element), and Apple's Touch ID and Wallet.[ For the complete list of device support check https://support.apple.com/it-it/KM207105

Nexi provide two different kind of integration with Apple Pay:

- Button on the cash page: you can accept payments via Apple Pay by activating the payment method from the Nexi back office. No registration is required for Apple.
- Authorization via API: Nexi will manage only the authorization of the payment,
  Apple Pay revelevant and needed data will be retrieved by the web site or by the
  App of Merchant, these parameters will be sent with JSON received by Apple
  towards Nexi using the API described below

For this second solution there is a specific guide available for developer that explan ApplePayJS at this link: https://developer.apple.com/apple-pay/.

Once receive the JSON from Apple, you should sent it to Nexi API following these instruction in order to make the payment.

# URI ecomm/api/paga/applePay METHOD POST ACCEPT application/json

## **Initiation Message**

Name	Descprition	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR
codiceTransazione	Transaction identifier assigned by the merchant.	
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents. It must be equal to the amount that was sent to Apple for the token generation	AN MIN 2 - MAX 30 CHAR



divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 = Euro	AN 3 CHAR
applePay	JSON receive from the Apple call	JSON
timeStamp	Timestamp in milliseconds	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- importo
- divisa
- timeStamp
- chiaveSegreta (secretKey that was received by Nexi)

## **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>importo=<val>divisa=<val>timeStamp=<val><chiaveSegreta>)

## **Payment Notification Message**

Name	Description	Format
esito	Result of the operation (Possible Values OK, KO, ANNULLO e ERRORE)	AN MAX 7 CHAR
idOperazione	Transaction identifier assigned by Nexi	AN MIN 2 MAX 30
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR
data	Transaction date	aaaa/mm/gg
ora	Operation date	hh:mm:ss
nazione	Credit card country	AN ISO 3166-1 alpha-3
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR
ppo	Payment with wallet (Apple Pay, Masterpass, ecc)	AN MIN 2 - MAX 30 CHAR
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table here</u> .	



tipoProdotto	Method by which the payment was made, if the e-commerce used 3D-Secure, SSL, or MOTO.	
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR
shippingContact	JSON with info received about Shipping ( received by Apple)	JSON
billingContact	JSON with info received about Billing ( received by Apple)	JSON
timestamp	Timestamp in milliseconds	
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

#### **Mac Calculation**

For the reply message, the string to sign must contain the following fields:

- results
- idOperazione
- timeStamp
- chiaveSegreta ( secretkey received by Nexi)

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><chiaveSegreta>)

#### **NOTES:**

When you execute a payment authorization through Apple Pay the results is a JSON object that contains all the answer parameters.

If you do not want to add optional parameter you can:

- do not add the element "parametriAggiuntivi" in the JSON
- or add "parametriAggiuntivi" and leave empty /"null"

You can use this 'API only if the merchant has been enable to use Apple Pay: the PCCS12 has been correctly loaded in the back office of Nexi.



## **Deposit Methods**

Nexi provides two ways to manage your deposits:

- Using the profile specifications set during configuration
- Using the TCONTAB parameter within the Payment Initiation call

When managing receipts through the use of profiles, the default time for posting the transaction is set to midnight on the day in which the transaction takes place. There is, however, the option of extending the number of days (MAX 5), and deferring a decision on which operation to carry out when the deadline is reached: either processing or cancelling the transaction.

Using the TCONTAB parameter, the merchant can manage each transaction deposit dynamically by setting the parameter to "I" for immediate deposit, even if the profile has been set to deferred accounting.

If this parameter is set to "D" or is not populated, the merchant can manage the transaction through the Nexi back office or the back office APIs. If this doesn't occur, then the authorised payment is managed according to whatever is shown in the profile.

## Configuration

Nexi offers merchants the ability to customise the Easy Payment service according to a range of features, depending on their individual needs.



#### **Description**

You may choose either immediate or deferred deposit. It is typically set for immediate deposit.

If you elect to defer deposits, the maximum guarantee period is 5 days (3 for PayPal).

Once the number of deferral days has elapsed, you can set it so that the deposit is executed or the order is cancelled automatically.

Send your logo to technical support so that it can be displayed on the check-out page. MAXimum measurement: 180 X 80 pixel. Format: jpg, gif or png.

XPay carries out the transaction and sends the result to the merchant at the url indicated in the "urlpost" field. If sending fails:

- XPay can consider the transaction successful in any case, and the merchant will be responsible for recovering the result via the Back office, email or API
- XPay cancels the authorisation without charging anything to the customer

It is therefore necessary to advise technical support whether the transaction should be cancelled or not if the POST notification fails.

Advise the support team which email address you wish to use for receiving communications about payment results.

For recurring or OneClick payments, there is an option to prevent previously registered credit cards from being used to activate additional registrations. If activated, this restriction returns the pan hash used for the payment to the merchant.

Activating payment session duration: if active, the merchant may set a validity period for the session so as to have certainty over the maximum amount of time a user may take to complete a payment.

Setting additional fields: merchants can request one or more additional fields that they would like to occur on the check-out page. These can be viewed, or just saved to the detail of the transaction and made available for back office and reporting.

Viewing additional data: if merchants request the activation of additional fields, they can choose whether these will be visible on the check-out page and in notification emails. Otherwise, they are only available via the back office and reporting.

Viewing the result page: at the end of the transaction, the user is automatically directed to the merchant site and will be shown the payment result. However, it is also possible to activate viewing of the result page via Nexi.

## Personalization

Merchants can modify the syle of cash page sending additional parameters that define page properties.



These parameters must be added to the address used to redirect their customers during the initiation phase of the payment.

The parameters that manage the cash page style can also be sent only once, Nexi will keep the configuration sent until it is overwritten with a more recent one or returned to the default one.

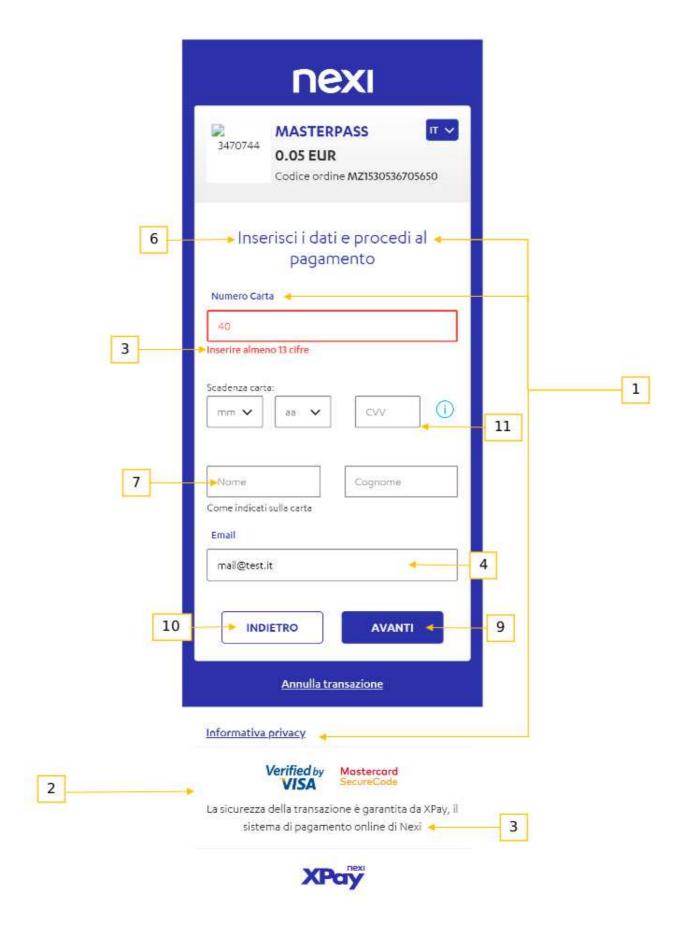
Below is the table containing the modifiable properties.

Name	Description	Format
primary-color	Change the color of the texts Item 1	Format Hexadecimal format color MAX 7
sfondo-footer	Change the color of footer background Item 2	Format Hexadecimal format color MAX 7
color-footer-text	Change the color of footer background Item 3	Format Hexadecimal format color MAX 7
sfondo-input	Change the color of input background Item 4	Format Hexadecimal format color MAX 7
color-error-msg	Change the color of errore message and of input Item 5	Format Hexadecimal format color MAX 7
font-Title-Heigth	Change height of page title Item 6	Format 10px o 10%
color-input-text	Change the color of text entered by users (input fields of form) Item 7	Format Hexadecimal format color MAX 7
font-Heigth	Change height of text except Item 8	Format 10px o 10%
font	Change font of the page	Existing font
button-color	Change botton color Item 9	Format Hexadecimal format color MAX 7
input-radius	Defines the radius of the input angles Item 10	Value in px



button-radius	Define the radius of the corners of the button Item 11	Value in px
back-To-Default	If it is enhanced, it restores the default configuration	







## XPAY BUILD

Xpay Build is a Nexi solution that allows you to include XPay in your Ecommerce in a complete customizable way with a low impact on PCI – DSS standards.

### What's XPay Build?

XPay Build is an approach that allows the merchant to host the payment form within their portal, without redirecting the customer to the XPay checkout page, avoiding having to manage the card data.

In fact, the fields where the cardholder enters this information are contained in an iFrame connected to the XPay server, ensuring the security of the card data and at the same time making the shopping experience better.

Xpay Build makes available HTLM interface components ready to be used as input fields and bottons to receive cardholder's informations. They are configurable through a Javascript library downloadable from XPay server.

The forms concerns both card data and the choise of alternative payment methods qualified on your profile as ApplePay, Masterpass, Paypal, Klarna PayNow Sofort, etc. At a technical level, the entered card data is managed by the Javascript library which communicates them to the XPay server.

A token is generated and the library returns it to merchant's server to be used to precess the payment through API.

### XPay Build includes:

Automatic formatting of card information

Translation of the indications of the form in the customer's preferred language Customizable style to match the appearance of the payment form with the look & feel of your portal.

## Are pre-requisites necessary?

The integration in this mode requires that the merchant page is hosted on a "secure url" (https), because the card data while never passing on the merchant's server, are collected by the Nexi iframes hosted on the pages of the merchant itself, and therefore accessible from scripts for the front end.

The PCI certification level required is SAQ A (the one with questionnaire), not SAQ- D (as for server to server integration, much more expensive)

## **Description**

The architecture and payment process are described in the web version of XPay Build, which uses a Javascript SDK client.

## The XPay Build solution consists of the following elements:

 Custom cash page hosted on the merchant domain with certificate (https) containing DIV html specific for the inclusion of iFrame by Javascript Nexi



- Non-intrusive XPay Javascript library hosted on the cash page that, after appropriate configuration, is able to build iFrame containing the form for card data or the list of alternative payment methods such as ApplePay, Masterpass, Paypal (etc)
- Merchant's Backend receives the nonce (random code valid for the single transaction) and uses it for server-to-server payment through API PayNonce

### Do not forget

- The nonce can only be used once and has a 10-minute deadline: if these two
  conditions are not met, the payment will return an error
- Management of payment retry is delegated to the merchant: this means that, if
  there is an error in the first payment attempt but the merchant is authorized to use n
  attempts for each order number, it will be merchant's responsibility to reissue the
  form data acquisition and request the generation of a second nonce, re-engaging in
  fact a new payment
- The SDK executes javascript calls in CORS (Cross Origin Resource Sharing) mode; it is necessary to verify that the merchant's network infrastructure does not prevent it in any way

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/build">https://github.com/NexiPayments/XPay/tree/master/build</a>

## Card data collection form

To implement the XPay Build solution, some steps are required:

## **SDK Xpay inclusion**

In order to start, include the XPay javascript SDK in the header of your page:

#### **TEST ENVIRONMENT URL**

<script

src="https://int-ecommerce.nexi.it/ecomm/XPayBuild/js?alias=ALIAS\_MERCHANT">
</script>

#### PRODUCTION ENVIRONMENT URL

<script

src="https://ecommerce.nexi.it/ecomm/XPayBuild/js?alias=ALIAS\_MERCHANT">
</script>

The alias parameter must be evaluated with the apiKey (or alias) of the merchant



## Create the payment form

To allow the SDK to create an item hosted on XPay, for the secure collection of card data, enter an empty div with a unique id within the form.

Within your page you can provide a component where you will enter the validation messages of the card data, XPay will take care to validate and provide any error messages to your cash page, while the visualization and graphic personalization of the message will be by the merchant page. In the example the div xpay-card-errors will be used to show the errors. The payment call must be from the merchant's server and not be done client-side. For this reason the form has as its action a merchant endpoint, to which the form post will be executed and from which the call will be made to the 'payNonce' to make the payment with the nonce provided by the SDK.

## Configurazione ambiente

Once the page is loaded, to initialize the SDK, call the function: *XPay.init();* 

After that configure the SDK with the function: XPay.setConfig(config);

Passing as parameter the object containing the payment configuration. The tables below show the structure

Name	Description	Format
baseConfig	Object whose structure is shown in the tables below	JSON
paymentParams	Object whose structure is shown in the tables below	JSON
customParams	Object whose structure is shown in the tables below	JSON
language	Language identifier	AN Possible values: XPay.LANGUAGE.ITA, XPay.LANGUAGE.JPN, XPay.LANGUAGE.SPA, XPay.LANGUAGE.RUS, XPay.LANGUAGE.FRA, XPay.LANGUAGE.ARA, XPay.LANGUAGE.ENG, XPay.LANGUAGE.GER, XPay.LANGUAGE.CHI, XPay.LANGUAGE.POR
serviceType		AN



requestType	AN
-------------	----

## Object baseConfig

Name	Description	Format
apiKey	Alias assigned by Nexi to merchant	AN MAX 30
enviroment	Implementation environment	AN

### Object paymentParams

Name	Description	Format
amount	Amount to be authorized in hundredths of euro without separator, the first 2 numbers on the right represent the euro cents, eg .: 5000 corresponds to € 50.00	N MAX 8
transactionId	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorization request.	AN MIN 2 MAX 30
currency	The code of the currency with which the amount is expressed	AN MIN 3 MAX 3 admitted only EUR
timeStamp	Timestamp in millisecond format.	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	

## Creating and displaying paper data element

To create the element that will handle the card data you must use the function:

var card = XPay.create(XPay.OPERATION\_TYPES.CARD, style);

passing the object containing the style configuration of this element as a second parameter. The tables below show the structure

Name	Description	Format	
------	-------------	--------	--



common	Object that describes the standard style with which the form will be shown. Its structure is described in the table below.	JSON
error	Object that describes the style of the form in case of errors. Its structure is described in the table below.	JSON
correct	Object that describes the style of the form in case of NO errors. Its structure is described in the table below	JSON

Name	Description	Format
color	Coincide with property 'color' of CSS.	hexadecimal
fontFamily	Coincide with property ' font-family ' of CSS.	Use valid 'font- family'
fontSize	Coincide with property ' font-size ' of CSS.	Accepted format: -17px -1.3em - 10%
fontStyle	Coincide with property ' font-style' of CSS.	Possible: -normal -italic - oblique
fontVariant	Coincide with property ' font-variant' of CSS.	Use valid 'font- variant'
letterSpacing	Coincide with property 'letter-spacing' of CSS.	Accepted format: -17px -1.3em - 10%
textDecoration	Coincide with property 'text-decoration' of CSS.	Use valid 'text- decoration'
textShadow	Coincide with property 'text-shadow' of CSS.	Use valid 'text- shadow'

You can also customize the pseudo classes by including the specific configuration for each of them in the correct, error and common objects. Each object that describes the style of a pseudo-class may contain the fields described in the table above. Exaple:



```
var style = {
    common: {
        color: '#FF0033',
        ':hover': {
            color: '#FF3300'
        }
    }
};
```

You can custom the following pseudo classed:

- ::placeholder
- ::selection
- :focus
- :hover
- :focus::placeholder
- :hover::placeholder
- :focus::selection
- :hover::selection

To show the inputs of cards use the function: card.mount("xpay-card");

passing as parameter div id in which they will be shown.

## **Creating buttons for alternative payment methods**

Through SDK you can create buttons that allow the customer to use other payment methods. To do this, use the function:

```
var buttons = XPay.create(XPay.OPERATION TYPES.PAYMENT BUTTON, []);
```

passing as second parameter an empty array to display all the payment methods available for your profile or an array containing only the desired methods (always considering those active on your profile). You can choose from the following payment methods:

- XPay.PaymentMethods.APPLEPAY
- XPay.PaymentMethods.MASTERPASS
- XPay.PaymentMethods.PAYPAL
- XPay.PaymentMethods.MYBANK

To display these bottons use the function:

```
buttons.mount("xpay-btn");
```

passing as parameter div id in which they will be shown.



### Management of events triggered by SDK

The events to be managed when the data collection element has been created are:

- 'XPay\_Card\_Error' which communicates any validation errors of the inputs present in the form
- 'XPay\_Nonce' which communicates the nonce, generated with the card data entered by the cardholder, to be sent to the merchant's server to continue with the payment via the 'payNonce' API

The script of the merchant page will have to worry about listening to the two events following their own implementation choices.

The only event to be managed if you implement the part of buttons that manages alternative payment methods is:

• 'XPay\_Payment\_Result' which communicates the outcome of the PayPal and ApplePay payment

The management of the event is the task of the merchant's script.

#### NOTES:

Similarly, it is not possible to manage the other payment methods (MasterPass, MyBank, etc.) for security limitations of the different types of payment, in these cases the current management of the cash pages with url, urlBack and possibly urlPost remains valid.

#### Create nonce

To generate nonce, that will be used by the merchant server to make the payment, you have to use the function:

XPay.createNonce("payment-form", card);

passing as the first parameter the id of the form used to contain the card data and as a second parameter the card object generated previously through the SDK.

## **Payment**

The merchant backend receives the nonce along with all other fields in the form and, upon optional validation of the output mac, initiates a payment with the RESTful payNonce API described below. Note that the order data to be used for payment (amount, currency, order number) are those sent by the merchant at this stage; all data sent by the merchant in the nonce generation step are stored by XPay (together with the nonce itself), but used only for a consistency check between the two phases (to make sure that the request for a new nonce and its use for a payment are generated by the same entity and for the same purpose). However, it is essential that the backend merchant, in the server to server phase, supply the correct data to XPay.

The management of the outcome (through the parsing of the pay payNonce response) is entrusted to the merchant, as per the practice of payments via RESTful API.



### ecomm/api/hostedPayments/pagaNonce

## METODO

**POST** 

### **ACCEPT**

application/json

## **Messaggio Avvio Pagamento**

Name	Description	Format
apiKey	Alias assigned by Nexi to merchant	AN MAX 30
codiceTransazione	Transaction identifier assigned by the merchant	AN MIN 2 MAX 30
importo	Amount to be authorized in hundredths of euro without separator, the first 2 numbers on the right represent the euro cents, eg .: 5000 corresponds to € 50.00	N MAX 8
divisa	Transaction identifier assigned by the merchant. Only admitted 978 (Euro)	N MAX 3
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35
timeStamp	Timestamp in millisecond format	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR

MAC Calculation For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- importo
- divisa
- xpayNonce
- timeStamp
- chiaveSegreta



## **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>importo=<val>divisa=<val>xpayNonce=<val>timeStamp=<val><chiaveSegreta>)

## **Payment Result Message: required fields**

Name	Description	Format
esito	Result of the request (Possible values OK, KO)	AN MAX 2
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 MAX 30
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6
codiceConvenzione	Merchant code assigned by the acquirer (where expected)	AN MAX 15
data	Transaction date	DATA MAX 8 aaaammgg
ora	Transaction time	DATA hh:mm:ss
nazione	Credit card country	AN ISO 3166-1 alpha-3
regione	Credit card global region of origin if qualified (eg.: Europa)	AN MAX 30
tipoProdotto	Credit card type if qualified (eg.: consumer)	AN MAX 200
tipoTransazione	Indicates the payment method. See the table Transaction Type Coding for possible values. In case of payment with negative result an empty string will be sent	AN MAX 20
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table Restful API Error Codes Table messaggio -> error details	JSON
timeStamp	Timestamp in millisecond format	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR



### Payment Result Message: optional fields

Name	Description	Format
ppo	Payment with Masterpass wallet	AN MIN 2 MAX 30 only MasterPass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- chiaveSegreta

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><chiaveSegreta>)

#### NOTES:

This makes a payment using a valid nonce. The transactionCode, importo, currency, and apiKey must be the same as the Nonce request, otherwise an invalid data error will be received. This error can also occur if more than 10 minutes have passed since the nonce was generated.

## First recurring payment

Create a contract through a valid nonce. The xpayNonce field is the generated nonce with the creaNonce API. The transactionCode, importo, currency, and apiKey must be the same as the Nonce request, otherwise an invalid data error will be received. This error can also occur if more than 10 minutes have passed since the nonce was generated. In the case where the codiceGruppo field is present, the contract will be created for the group, otherwise only for the terminal associated with the alias.

#### URI

ecomm/api/hostedPayments/pagaNonceCreazioneContratto

#### **METODO**

**POST** 



## ACCEPT

application/json

## **Payment Initiation Message: required fileds**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30
codiceTransazione	Transaction identifier assigned by the merchant	AN MIN 2 MAX 30
importo	Amount to be authorized in hundredths of euro without separator, the first 2 numbers on the right represent the euro cents, eg .: 5000 corresponds to € 50.00	N MAX 8
divisa	Transaction identifier assigned by the merchant. Only admitted 978 (Euro)	N MAX 3
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35
timeStamp	Timestamp in millisecond format.	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used	AN MIN 2 MAX 30
codiceGruppo	Group assigned by Nexi	AN MIN 2 MAX 30

## **Payment Initiation Message: optional fields**

Name	Description	Format
scadenzaContratto	For recurring payments, indicates when the expiry date for the contract occurs.	DATA gg/mm/aaaa



parametriAggiuntivi In this object, you can enter n parameters that will be returned in the result message. In the following table an example of parameters	do not use these name,
---	------------------------

Name	Description	Format
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150
Name	Name of the person who made the payment.	AN MAX 150
cogName	Surname of the person who made the payment.	AN MAX 150
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	for MyBank: AN MAX 140 CHAR anche you can use just these special
Note1	Field in which the merchant can report information about the order. This data will also be reported in the report that can be queried from the back office	AN MAX 200

### **MAC Calculation**

For this message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- importo
- divisa
- xpayNonce
- timeStamp
- chiaveSegreta

## **SAMPLE STRING**



MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>importo=<val>divisa=<val>xpayNonce=<val>timeStamp=<val><chiaveSegreta>)

## **Payment Result Message: required fields**

Name	Description	Format	
esito	Result of the request (Possible values OK, KO)	AN MAX 2	
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 MAX 30	
codiceAutorizzazione	Confirmation code issued by the card issuer	AN MAX 6	
codiceConvenzione	Merchant code assigned by the acquirer where expected	AN MAX 15	
data	Transaction date	DATA MAX 8 aaaammgg	
ora	Transaction time	DATA hh:mm:ss	
nazione	Credit card country	AN ISO 3166-1 alpha-3	
regione	Credit card global region of origin if qualified (eg.: Europa)	AN MAX 30	
tipoProdotto	Credit card type if qualified (eg.: consumer)	AN MAX 200	
tipoTransazione	Indicates the payment method. See the table Transaction Type Coding for possible values. In case of payment with negative result an empty string will be sent	AN MAX 20	
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table Restful API Error Codes Table messaggio -> error details	JSON	
timeStamp	Timestamp in millisecond format	N 13 CHAR	
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR	



#### Payment Result Message: optional fields

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 MAX 30 solo MasterPass

#### **MAC Calculation**

For this message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- chiaveSegreta

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><chiaveSegreta>)

# Subsequent Payment (Recurring Payment and One Click Payment)

Every time the registered user makes a subsequent purchase, the e-commerce must send, to Nexi, a call with the data of the contract previously registered in the first payment stage.

For server-to-server mode, the services exposed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and the responses are a JSON formatted object. Alternatively, non-Rest APIs are available where communication is managed synchronously (with https + a series of parameters and values). The result message is an xml managed on the same connection.

The endpoints of the environments are as follows:

#### **URL AMBIENTE DI TEST**

https://int-ecommerce.nexi.it

#### **URL AMBIENTE DI PRODUZIONE**

https://ecommerce.nexi.it

**URI** 



### ecomm/api/recurring/pagamentoRicorrente

## **METODO**

**POST** 

## **ACCEPT**

application/json

## Messaggio avvio "Pagamento successivo": campi obbligatori

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 MAX 30
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 MAX 30
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8
divisa	Only accepted 978 for Euro	N MAX 3
scadenza	Credit card expiry date	DATA aaaamm
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 MAX 30
timeStamp	Timestamp in millisecond format.	N 13 CHAR
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation	AN 40 CHAR

**Payment Initiation Message: optional fields** 



Name	Description	Format
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message. In the following table an example of parameters:	AN MAX 4000 The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.

Name	Description	Format		
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150		
Name	Name of the person who made the payment.	AN MAX 150		
cogName	Surname of the person who made the payment.	AN MAX 150		
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	for MyBank: AN MAX 140 CHAR anche you can use just these special		
Note1	Field in which the merchant can report information about the order. This data will also be reported in the report that can be queried from the back office	AN MAX 200		
TCONTAB	The field identifies the collection method that the merchant wants to apply to the single transaction, if valued with:  - I (immediata) the transaction if authorized is also collected without further intervention by the operator and without considering the default profile set on the terminal.	AN MAX 20		



- D (differita) or the field is not entered the transaction if authorized is managed according to what is defined by the terminal profile

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceTransazione
- importo
- divisa
- scadenza
- timeStamp
- chiaveSegreta

### **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>numeroContratto=<val>codiceTransazione= <val>importo=<val> divisa=<val>scadenza=<val>timeStamp=<val><chiaveSegreta>)

## Payment Result Message: required fields

Name	Description	Format	
esito	Operation result (Possible values OK, KO)	AN MAX 2	
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 MAX 30	
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6	
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15	
data	Transaction date	DATA MAX 8 aaaammgg	
ora	Transaction time	DATA hh:mm:ss	
nazione	Credit card countr	AN ISO 3166-1 alpha-3	
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30	



brand	Type of card used by the user to AN MAX 100 make payment. The possible values are shown in the table Card Type Coding				
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200			
tipoTransazione	Indicates the payment method. See the table Transaction Type Coding for possible values. In case of payment with negative result an empty string will be sent	AN MAX 20			
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table Restful API Error Codes Table messaggio -> error details	JSON			
timeStamp	Timestamp in millisecond format.	N 13 CHAR			
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation	AN 40 CHAR			

## ayment Result Message: optional fields

Name	Description	Format
рро	Payment with Masterpass wallet	AN MIN 2 MAX 30 only MasterPass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields

- esito
- idOperazione
- timeStamp
- chiaveSegreta

## **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><chiaveSegreta>)



#### NOTES:

If you do not wish to append additional parameters, you can:

- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. " parametriAggiuntivi ": {}

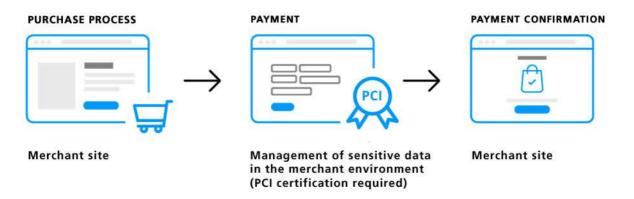
## Gestione 3D-secure

If 3D-Secure payment is enabled for the transaction, during creation of the nonce the user will automatically be redirected, using the JavaScript SDK, to a modal popup to complete the process. In that popup the user will be able to enter 3D-Secure credentials as usual. At the end of the authentication stage, the popup will automatically close and this will engage the process described above. From the point of view of hosted payments integration on the page for collecting card details, the presence of 3D-Secure is completely transparent. The nonce will be made available only upon completion of the credential capture process, which will be initiated automatically by the SDK in any case



## SERVER TO SERVER

Nexi also makes other types of more structured solutions available to merchants, where sensitive data relating to the transaction are handled directly by the merchant's server. This allows complete customisation of the payment experience, but requires PCI DSS security certification to be achieved, with the exception of recurring payments where the card details are not transmitted by the merchant.



The services displayed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and responses are formatted JSON objects.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server</a>

The environment endpoints are as follows:

#### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it

#### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it

The individual URIs and messages for each of the available services will be described below.



## 3D-Secure Payments

This service carries out 3D-Secure payment transactions and provides duplicate APIs: one for 3D-Secure verification and one for payment.

In the first step, the API responds with a JSON containing the html code provided by the MPI, which is to be included with the details being used by 3D-Secure. It is the receiver's responsibility to print the html received onto the user's browser. After authentication by the user, the API communicates the result to the response address specified in the request. Once the Nonce has been received in response, the next step is to recall the second API for carrying out the actual payment.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-3d-secure">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-3d-secure</a>

#### **3D-Secure Control**

1	п	_	т

ecomm/api/paga/autenticazione3DS

#### METHOD

Post

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
pan	Credit card number	AN MAX 19 CHAR.
scadenza	Credit card expiry date	yyyymm
CVV	Three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	AN MAX 4 CHAR.
importo	Amount to be collected, expressed in euro cents with no separators.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
urlRisposta	Url to which XPay will return the result using the following parameters: esito idOperazione xpayNonce	AN MAX 500 CHAR.



	timeStamp mac and, in the case of error, also codice and messaggio.	
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- divisa
- timeStamp
- secretKey

### **SAMPLE STRING**

MAC=

HASH SHA1

(apiKey=<val>codiceTransazione=<val>divisa=<val>importo=<val>timeStamp=<val><S ecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MIN 2 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
html	HTML code to be printed on the user's browser for 3D-Secure authentication.	
errore	Only present when the result is ko. It is an object containing: codice -> codice errore, see table messaggio -> dettaglio errore	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:



- esito
- operationId
- timeStamp
- secretKey

#### SAMPLE STRING

MAC= HASH SHA1(esito=<val>operationId=<val>timeStamp=<val><secretKey>)

#### **NOTES:**

This allows a nonce to be created for use in making a payment with 3D-Secure.

If a call requires the use of 3D-Secure (due to a 3D-Secure card and a merchant with the function enabled), a JSON will be returned containing the html code for carrying out 3D-Secure. The subsequent nonce will only be returned if the authentication is successful. The nonce will be returned to the urlResponse address.

Otherwise, the API will return the error code described above.

## **Payment**

#### URI

ecomm/api/paga/paga3DS

### METHOD

Post

#### **ACCEPT**

application/json

## **Payment Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
Importo	Amount to be authorised, expressed in euro cents with no separator.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.



## **Payment Initiation Message: optional fields**

Name	Description	Format
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- importo
- divisa
- xpayNonce
- timeStamp
- secretKey

### **SAMPLE STRING**

MAC= HASH

SHA1(apiKey=<val>codiceTransazione=<val>importo=<val>divisa=<val>xpayNonce=<val>timeStamp=<val><SecretKey>)

## Payment Result Message: required fields

Name	Description	Format
esito	Operation result	AN MAX 2 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	DATE MAX 8 yyyymmdd



nazione	Credit card country	AN ISO 3166-1 alpha-3
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message -> error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## **Payment Result Message: optional fields**

Description	Format
Payment with Masterpass wallet.	AN MIN 2 - MAX 30 CHAR. only Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC= HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This carries out a payment transaction with 3D-SECURE.

The xpayNonce is the nonce obtained from the authentication3DS API, which takes care of saving card details and carrying out the 3D-Secure process.



## **MOTO Payments**

This service carries out server-to-server MOTO payment transactions. It is designed for merchants who wish to integrate with their own system the function to request credit card payment authorisations, where details are communicated by the cardholder to the merchant via email, telephone, etc. This allows merchants to both request credit card details and communicate the payment result through their own management system.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-moto">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-moto</a>

URI
ecomm/api/paga/pagaMOTO

### METHOD

Post

#### **ACCEPT**

application/json

## Payment Initiation Message: required fields

Nieuse	Describation	Example 4
Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo		N MAX 8 CHAR.
·	Amount to be authorised, expressed in euro cents with no separator.	
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3 CHAR.
pan	Credit card number	AN MAX 100 CHAR.
scadenza	Credit card expiry date	DATE yyyymm
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## Payment Initiation Message: optional fields

Name	Description	Format
mail	Buyer's email address to which the	AN MAX 150 CHAR.
	payment result will be sent.	



Name	Name of the person who made the payment.	AN MAX 150 CHAR.
cogName	Surname of the person who made the payment.	AN MAX 150 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- pan
- scadenza
- CVV
- importo
- divisa
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC= HASH

 $SHA1(apiKey=<\!\!val>\!\!codiceTransazione=<\!\!val>\!\!pan=<\!\!val>\!\!scadenza=<\!\!val>\!\!cvv=<\!\!val>\!\!importo=<\!\!val>\!\!divisa=<\!\!val>timeStamp=<\!\!val><\!\!SecretKey>)$ 

## Payment Result Message: required fields

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.



codiceAutorizzazione	Confirmation code issued by the card	AN MAX 6 CHAR.
codiceConvenzione	issuer.  Merchant code assigned by the acquirer.  Where required.	AN MAX 15 CHAR.
data	Transaction date	DATE MAX 8 yyyymmdd
ora	Transaction time	DATE hh:mm:ss
nazione	Credit card country	AN ISO 3166-1 alpha-3
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table here</u> .	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message -> error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## **Payment Result Message: optional fields**

Name	Description	Format
рро	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
		CHAR. only
		Masterpass

### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

## SAMPLE STRING



MAC= HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### NOTES:

Asynchronous POST notifications are not performed. The result is a JSON object containing the response parameters.

If you do not wish to append additional parameters, you can:

- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. " parametriAggiuntivi ": {}

## SSL E-commerce Payments

This service carries out server-to-server SSL e-commerce payment transactions. It is designed for merchants who wish to integrate on their own site the function to request credit card payment authorisations without using 3D-Secure, where details are collected directly from the pages of the merchant's own site.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ssl">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ssl</a>

#### URI

ecomm/api/paga/pagaSSL

#### **METHOD**

Post

#### **ACCEPT**

application/json

## Payment Initiation Message: required fields

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator.	N MAX 8 CHAR.



divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3 CHAR.
pan	Credit card number	AN MAX 100 CHAR.
scadenza	Credit card expiry date	DATE yyyymm
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## Payment Initiation Message: optional fields

Name	Description	Format
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
Name	Name of the person who made the payment.	AN MAX 150 CHAR.
cogName	Surname of the person who made the payment.	AN MAX 150 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message	

## **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- pan
- scadenza
- CVV
- importo
- divisa



- timeStamp
- secretKey

### **SAMPLE STRING**

MAC= HASH

SHA1(apiKey=<val>codiceTransazione=<val>pan=<val>scadenza=<val>cvv=<val>importo=<val>divisa=<val>timeStamp=<val><SecretKey>)

## Payment Result Message: required fields

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	DATE MAX 8 yyyymmdd
ora	Transaction time	DATE hh:mm:ss
nazione	Credit card country	AN ISO 3166-1 alpha-3
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table here</u> .	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## **Payment Result Message: optional fields**

Name Description Format	tion Format	me Description	Name
-------------------------	-------------	----------------	------



ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
	·	CHAR. only
		Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### MAC CALCULATION RESULT MESSAGE

MAC= HASH SHA(esito=<val>idOperazione=<val>timeStamp=<val>SecretKey)

#### NOTES:

This carries out an SSL payment transaction, and asynchronous POST notifications are not performed. The result is a JSON object containing the response parameters. If you do not wish to append additional parameters, you can:

- · Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. "parametriAggiuntivi": {}



## Payments with External 3D-Secure MPI

This service carries out server-to-server 3D-Secure e-commerce transactions. It is designed for merchants who have their own MPI (Merchant Plug In) for handling the cardholder authentication stage using 3D-Secure protocols. XPay is therefore used to forward the authorisation requests, and to transfer the data previously obtained in the 3D-Secure process.

This service requires the merchant to achieve PCI DSS certification.

URI

ecomm/api/paga/pagaMPI

METHOD

Post

ACCEPT

application/json

### **Payment Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
pan	Credit card number	AN MAX 100 CHAR.
scadenza	Credit card expiry date	DATE yyyymm
CVV	CVV2/CVC2, three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. 4DBC, four-digit code found on the front of AMERICAN EXPRESS cards. Whether it is mandatory or not depends on the rules in application for each individual acquirer.	AN MAX 4 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3 CHAR.
eci	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
xid	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
cavv	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.



mac	Message Authentication Code. Transaction AN 40 CHAR.
	signature field. For calculation details, see
	the end of this chapter: MAC Calculation.

## **Payment Initiation Message: optional fields**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
		CHAR. only
		Masterpass

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- pan
- scadenza
- CVV
- importo
- divisa
- eci
- xid
- cavv
- ppo
- timeStamp
- secretKey

### **SAMPLE STRING**

MAC=

HASH SHA1

(apiKey=<val>codiceTransazione=<val>pan=<val>scadenza=<val>cvv=<val>importo=<val>

divisa=<val>eci=<val>xid=<val>cavv=<val>ppo=<val>timeStamp=<val><SecretKey>)

## Payment Result Message: required fields

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	e AN MIN 2 - MAX 30 CHAR.



codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN MAX 3 CHAR.
data	Transaction date	DATE MAX 8 yyyymmdd
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
eci	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
xid	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
cavv	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message > error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

# **Payment Result Message: optional fields**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
		CHAR. only
		Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey



#### **SAMPLE STRING**

MAC= HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

As this is a synchronous payment, POST notifications are not performed.

# Recurring Payment - One Click Payment

Integrating Recurring and OneClickPay services allows end customers to store their credit card details on the Nexi systems and use them to make subsequent purchases with just one click, or for merchants to send recurring payments (for example, in subscription or invoicing services). At a technical level, management of these services is divided into 2 main stages:

- Activation and/or first payment
- Management of recurring payments/subsequent payments

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click</a>

## Activation and/or first payment

During the first transaction, a contract code must be generated for use in subsequent purchases. This contract code allows Nexi to save a paired link between the user and the payment card used. The first transaction can be an actual payment, or just a card verification with no charge to the user.

If the first transaction is an actual payment, the API sequence used is as follows:

- To manage 3D-Secure authentication -> <u>creaNonce</u>
- To manage the payment -> primoPagamento3DS

If the first transaction is registration with card verification only, the API sequence used is as follows:

- To manage 3D-Secure authentication -> <u>creaNonceVerificaCarta</u>
- To manage verification of card validity -> verificaCarta3DS

## Management of subsequent payments

Management of subsequent OneClick and recurring payments is similar at the technical level. In practice, the merchant application/site must use the API:

recurringPayment



## 3D-Secure Card Verification

This service carries out card verification transactions, with no charge to the customer, using the 3D-Secure method. This service provides duplicate APIs: one for 3D-Secure verification and one for payment.

The API responds with a JSON containing the html code provided by XPay, which is to be included with the details being used by 3D-Secure. It is the receiver's responsibility to print the html received onto the user's browser. After authentication by the user, the API communicates the result.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/verifica-carta-3d-secure">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/verifica-carta-3d-secure</a>

#### **3D-Secure Authentication**

#### URI

ecomm/api/recurring/creaNonceVerificaCarta

#### **METHOD**

Post

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
pan	Credit card number	AN MAX 100 CHAR.
scadenza	Credit card expiry date	DATE yyyymm
CVV	CVV2/CVC2, three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. 4DBC, four-digit code found on the front of AMERICAN EXPRESS cards. Whether it is mandatory or not depends on the rules in application for each individual acquirer.	AN MAX 4 CHAR.
urlRisposta	Url to which XPay will return the result using the following parameters: esito idOperazione xpayNonce timeStamp mac	AN MAX 500 CHAR.



	and, in the case of error, also code and message.	
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- pan
- scadenza
- CVV
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC=

**HASH** 

SHA1(apiKey=<val>pan=<val>scadenza=<val>cvv=<val>timeStamp=<val><SecretKey>

# **Result Message**

Name	Description	Format
esito	Payment result (OK or KO)	AN MAX 2 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35 CHAR.
html	HTML code to be printed on the user's browser for 3D-Secure authentication.	
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message > error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:



- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC= HASH SHA(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This allows a nonce to be created for use in calling a cardVerification3DS. If a call requires the use of 3D-Secure (due to a 3D-Secure card and a merchant with the function enabled), a JSON will be returned containing the html code for carrying out 3D-Secure. The subsequent nonce will only be returned if the 3D-Secure authentication is successful. The nonce will be returned to the urlResponse address.

An error message is returned if the card is not 3D-Secure or the merchant has not enabled the function.

#### Verification of card authorisation

#### URI

ecomm/api/recurring/verificaCarta3DS

#### **METHOD**

Post

#### **ACCEPT**

application/json

# **Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35 CHAR.
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.



# **Initiation Message: optional fields**

Name	Description	Format
scadenzaContratto	For recurring payments, indicates when the expiry date for the option contract occurs.	DATE dd/mm/yyyy
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. For MyBank: AN MAX 140 CHAR.
codiceFiscale	User Tax Code. Optional.	AN MAX 16 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	AN MAX 4000 The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- xpayNonce
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC= HASH SHA1(apiKey=<val>xpayNonce=<val>timeStamp=<val><SecretKey>)

# **Result Message**

Name	Description	Format
esito	Payment result (OK or KO)	AN MAX 2 CHAR.



idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC= HASH SHA(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

# SSL Card Verification

This service carries out a card verification transaction, with no charge to the customer, using the server-to-server SSL method, at the same time as the contract is registered for use in subsequent recurring or OneClickPay payments.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/verifica-carta-ssl">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/verifica-carta-ssl</a>

#### URI

ecomm/api/recurring/verificaCartaSSL

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json



# **Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MIN 2 - MAX 30 CHAR.
pan	Credit card number	AN MAX 19 CHAR.
scadenza	Credit card expiry date	yyyymm
CVV	Three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	AN MAX 4 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Transaction signature field	AN 40 CHAR.

# **Initiation Message: optional fields**

Name	Description	Format
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
descrizione	Description assigned to the contract.	AN MAX 2000 CHAR. For MyBank: AN MAX 140 CHAR.
codiceFiscale	User Tax Code	AN 16 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	AN MAX 4000 The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- pan



- scadenza
- CVV
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH

SHA1(apiKey=<val>pan=<val>scadenza=<val>cvv=<val>timeStamp=<val><SecretKey>

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

If you do not wish to append additional parameters, you can:

- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. "parametriAggiuntivi": {}



# 3D-Secure First Payment

This service carries out a 3D-Secure payment transaction at the same time as the contract is registered for use in subsequent recurring or OneClickPay/Card on File payments. This service provides duplicate APIs: one for 3D-Secure verification and one for payment. The API responds with a JSON containing the html code provided by XPay, which is to be

included with the details being used by 3D-Secure. It is the receiver's responsibility to print the html received onto the user's browser. After authentication by the user, the API communicates the result.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/primo-pagamento-3d-secure">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/primo-pagamento-3d-secure</a>

#### **3D-Secure Authentication**

ecomm/api/recurring/creaNoncePrimo3DS

#### METHOD

Post

#### **ACCEPT**

application/json

# **Initiation Message**

Name apikey pan	Description Alias assigned to the merchant by Nexi. Credit card number	Format AN MAX 30 CHAR. AN MAX 100
scadenza	Credit card expiry date  CVV2/CVC2, three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. 4DBC, four-digit code found on the front of AMERICAN EXPRESS cards. Whether it is mandatory or not depends on the rules in	CHAR. DATE yyyymm AN MAX 4 CHAR.
importo	application for each individual acquirer.  Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	



divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
urlRisposta	Url to which XPay will return the result using the following parameters: esito idOperazione xpayNonce timeStamp mac and, in the case of error, also code and message.	AN MAX 500 CHAR.
timeStamp mac	Timestamp in millisecond format.  Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	N 13 CHAR. AN 40 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- divisa
- importo
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>divisa=<val>importo=<val>timeStamp=<val><SecretKey>)

# **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35 CHAR.
html	HTML code to be printed on the user's browser for 3D-Secure authentication.	
errore	Only present when the result is ko. It is an object containing:	AN



	codice -> error code, <u>see table</u> messaggio > error details	
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### MAC calculation if a nonce is received

For the result message if a nonce is received, the string to sign must contain the following fields:

- esito
- idOperazione
- xpayNonce
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>xpayNonce=<val>timeStamp=<val><SecretKey>)

#### MAC calculation if html or errors are received

For the result message if html or errors are received, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### NOTES:

This allows a nonce to be created for use in making a payment.

If a call requires the use of 3D-Secure (due to a 3D-Secure card and a merchant with the function enabled), a JSON will be returned containing the html code for carrying out 3D-Secure. The subsequent nonce will only be returned if the authentication is successful. The nonce will be returned to the urlResponse address.

Otherwise, the API will return the nonce directly for use in making subsequent payments.

# **Payment**

#### URI

ecomm/api/recurring/primoPagamento3DS

#### **METHOD**

Post



# ACCEPT

application/json

# **Payment Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

# **Payment Initiation Message: optional fields**

Name	Description	Format
scadenzaContratto	For recurring payments, indicates when the expiry date for the contract occurs.	dd/mm/yyyy
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	For MyBank AN MAX
codiceFiscale	User Tax Code. Optional.	AN 16 CHAR.
	Oser rax Code. Optional.	



by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.	parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME,
--	---------------------	---	--

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceTransazione
- importo
- divisa
- xpayNonce
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC = HASH

 $SHA1(apiKey=<\!\!val>\!\!numeroContratto=<\!\!val>\!\!codiceTransazione=<\!\!val>\!\!importo=<\!\!val>\!\!divisa=<\!\!val>\!\!xpayNonce=<\!\!val>\!\!timeStamp=<\!\!val><\!\!SecretKey>)$ 

# **Transaction Result Message: required fields**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	yyyy/mm/dd
ora	Transaction time	hh:mm:ss
nazione	Credit card country	AN MAX 30 CHAR.
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.



brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## **Transaction Result Message: optional fields**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
		CHAR. only
		Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This carries out a 3D-Secure payment and registers a contract code at the same time. The API receives in the input the parameters relating to the transaction and the nonce generated with the creaNoncePrimo3DS API.



# SSL First Payment

This service carries out a server-to-server SSL e-commerce payment transaction at the same time as the contract is registered for use in subsequent recurring or Card on File/OneClickPay payments.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/primo-pagamento-ssl">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/primo-pagamento-ssl</a>

#### URI

ecomm/api/recurring/primoPagamentoSSL

#### **METHOD**

Post

#### **ACCEPT**

application/json

## **Payment Initiation Message: required fields**

•	<b>5</b> 1	
Name	Description	Format
apikey numeroContratto	Alias assigned to the merchant by Nexi. Code allowing Nexi to save a paired link between the user and the payment card used.	
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
pan	Credit card number	AN MAX 19 CHAR.
scadenza	Credit card expiry date	yyyymm
CVV	Three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	N MAX 4 CHAR.



timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction	AN 40 CHAR.
	signature field. For calculation details, see	
	the end of this chapter: MAC Calculation.	

# **Payment Initiation Message: optional fields**

Name	Description	Format
scadenzaContratto	For recurring payments, indicates when the expiry date for the contract occurs.	dd/mm/yyyy
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	For MyBank AN MAX
codiceFiscale	User Tax Code. Optional.	AN 16 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceTransazione
- importo
- divisa
- pan
- CVV



- scadenza
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>numeroContratto=<val>codiceTransazione=<val>importo=<val>divisa=<val>pan=<val>cval>cval>scadenza=<val>timeStamp=<val><SecretKey>)

# **Transaction Result Message: required fields**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	yyyy/mm/dd
ora	Transaction time	hh:mm:ss
nazione	Credit card country	AN MAX 30 CHAR.
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

# **Transaction Result Message: optional fields**

Name	Description	Format



ppo Payment with Masterpass wallet. AN MIN 2 - MAX 30 CHAR. only Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

If you do not wish to append additional parameters, you can:

- · Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. "parametriAggiuntivi": {}



# Subsequent Payment (Recurring Payment and One Click Payment)

When you need to make a charge on a previously registered contract, your system must send a call which contains the details of the previously registered contract, integrated with the recording of the first payment or 3D Secure/SSL card verification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/pagamento-successivo">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-pagamento-in-un-click/pagamento-successivo</a>

#### URI

ecomm/api/recurring/pagamentoRicorrente

#### **METHOD**

Post

#### **ACCEPT**

application/json

## **Payment Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
scadenza	Credit card expiry date	yyyymm
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

**Payment Initiation Message: optional fields** 



Name	Description	Format
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceTransazione
- importo
- divisa
- scadenza
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH

 $SHA1(apiKey=<\!\!val>\!\!numeroContratto=<\!\!val>\!\!codiceTransazione=<\!\!val>\!\!importo=<\!\!val>\!\!divisa=<\!\!val>\!\!scadenz$   $a=<\!\!val>\!\!timeStamp=<\!\!val><\!\!SecretKey>\!\!)$ 

# Payment Result Message: required fields

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	yyyy/mm/dd
ora	Transaction time	hh:mm:ss



nazione	Credit card country	AN MAX 30 CHAR.
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

# **Payment Result Message: optional fields**

ppo Payment with Masterpass wallet. AN MIN 2	
CHAR. or Masterpa	,

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

If you do not wish to append additional parameters, you can:



- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. "parametriAggiuntivi": {}

# Recurring MOTO Subsequent Payment First Payment

This service carries out a server-to-server MOTO payment transaction at the same time as the contract is registered for use in subsequent recurring or Card on File payments.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-moto">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-moto</a>

#### **URI**

ecomm/api/recurring/primoPagamentoMOTO

#### **METHOD**

Post

#### ACCEPT

application/json

# **Payment Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
pan	Credit card number	AN MAX 19 CHAR.



scadenza	Credit card expiry date	yyyymm
CVV	Three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	N MAX 4 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

# **Payment Initiation Message: optional fields**

•	• .	
Name	Description	Format
scadenzaContratto	For recurring payments, indicates when the expiry date for the contract occurs.	dd/mm/yyyy
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	For MyBank AN MAX
codiceFiscale	User Tax Code. Optional.	AN 16 CHAR.
parametriAggiuntivi	In this object, you can enter n parameters that will be returned in the result message.	

## **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:



- apiKey
- numeroContratto
- codiceTransazione
- importo
- divisa
- pan
- CVV
- scadenza
- timeStamp
- secretKey

## **SAMPLE STRING**

 $\label{eq:mac} \begin{tabular}{ll} MAC = HASH SHA1(apiKey=<val>numeroContratto=<val>codiceTransazione=<val>importo=<val>divisa=<val>pan=<val>codiceTransazione=<val>importo=<val>divisa=<val>codiceTransazione=<val>importo=<val>codiceTransazione=<val>importo=<val>codiceTransazione=<val>importo=<val>codiceTransazione=<val>codiceTransazione=<val>importo=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTransazione=<val>codiceTra$ 

# **Transaction Result Message: required fields**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	yyyy/mm/dd
ora	Transaction time	hh:mm:ss
nazione	Credit card country	AN MAX 30 CHAR.
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, see table message > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation	AN 40 CHAR.



details, see the end of this chapter: MAC Calculation.

## **Transaction Result Message: optional fields**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30 CHAR. only
		Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

If you do not wish to append additional parameters, you can:

- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. "parametriAggiuntivi": {}



# **Recurring Subsequent Payment**

When you need to make a charge on a previously registered contract using a MOTO type transaction, your system must send a call which contains the details of the previously registered contract, integrated with the recording of the first payment.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-moto#2-pagamenti-successivi">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-ricorrente-moto#2-pagamenti-successivi</a>

URI
ecomm/api/recurring/pagamentoRicorrenteMOTO

METHOD Post

ACCEPT

ACCEPT

application/json

## **Payment Initiation Message: required fields**

N.I.		
Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	
codiceTransazione	Transaction identifier assigned by the	AN MIN 2 - MAX 30 CHAR.
	merchant.	
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
scadenza	Credit card expiry date	yyyymm
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	

# Payment Initiation Message: optional fields

Name	Description Format	
mail	Buyer's email address to which the	AN MAX 150 CHAR.
	payment result will be sent.	



parametriAggiuntivi

In this object, you can enter n parameters that will be returned in the

result message.

AN MAX 4000
The following parameter names should be avoided as they are already in use by XPay: TRANSACTION\_TYPE, return-ok, tid, INFO\_PAGE, RECALL\_PAGE, back\_url, ERROR\_URL, \$EMAIL, \$NAME, \$SURNAME,

EMAIL.

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceTransazione
- importo
- divisa
- scadenza
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH

SHA1(apiKey=<val>numeroContratto=<val>codiceTransazione=<val>importo=<val>divisa=<val>scadenz a=<val>timeStamp=<val><SecretKey>)



# **Payment Result Message: required fields**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	yyyy/mm/dd
ora	Transaction time	hh:mm:ss
nazione	Credit card country	AN MAX 30 CHAR.
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

# **Payment Result Message: optional fields**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30 CHAR. only Masterpass

## **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione



- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### NOTES:

If you do not wish to append additional parameters, you can:

- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. "parametriAggiuntivi": {}

## DCC

Currency Choice is a service born from the collaboration between Nexi and Global Blue. It allows international Visa and MasterCard credit card holders to make purchases in their own currency, with an exchange rate guaranteed at the time of payment.

The Currency Choice service is currently available in 38 currencies.

This service allows to verify whether the currency of the payment card used is one of the 38 available. If it is, the service will provide the exchange rate to the user, who may choose to either accept the offered rate and proceed with own currency, or remain in Euro.

At a technical level, management of these services is divided into 3 main stages, which recall the following APIs:

- 1. Obtain the XPay exchange rate and ask the customer for acceptance to proceed with own currency or in Euro, using the <u>verificaDCC</u> API described below.
- 2. Carry out the nonce request and any 3D-Secure authentication, using the <a href="mailto:creaNonce">creaNonce</a> API
- 3. Make the payment request with the nonce and exchange rate ticket obtained, using the pagaDCC API.

This service requires the merchant to achieve PCI DSS certification.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-dcc">https://github.com/NexiPayments/XPay/tree/master/web-mobile/server-to-server/pagamento-dcc</a>



# Verification

#### URI

ecomm/api/etc/verificaDCC

## **METHOD**

Post

## ACCEPT

application/json

# **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
pan	Credit card number	AN MAX 19 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- pan
- importo
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(apiKey=<val>pan=<val>importo=<val>timeStamp=<val><secretKey>)

# **Result Message**

Name	Description	Format
ticket	Exchange rate request	identifier AN MAX 25
	provided by Global Blue.	CHAR.
divisaDCC	DCC <u>currency code</u>	AN 3 CHAR.



importoDCC	Amount expressed in the currency indicated in DCCCurrency.	N MAX 9 CHAR.
importoDCCdecimali	Indicates how many decimal places are in the DCCAmount field.	N MAX 2 CHAR.
tassoDiCambio	Indicates the exchange rate applied by Global Blue.	N 8.4
scadenzaTassoDiCambio	Indicates the date and time the exchange rate will expire.	yyyymmddhhss
MarkUp	Indicates the mark-up provided by Global Blue.	N 8.4
decimalMarkUp	Indicates how many decimal places are in the MarkUp field.	N MAX 2 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This returns the exchange information which will be shown to the cardholder for acceptance at the time of purchase, and which will subsequently be used in the pagaDCC API.

The "importoDCCdecimali" field shows the number of decimal places used in the importo.



## Generate Nonce

After verification and once the customer has been allowed to choose whether to transact in own currency or in Euro, this API allows a nonce to be created for use in making the payment.

Where 3D-Secure is expected, a JSON will be returned containing the html code for carrying out 3D-Secure. The subsequent nonce will only be returned if the authentication is successful. The nonce will be returned to the urlRisposta address.

Otherwise, the API will return the nonce directly for use with the payment.

The details for the Nonce request are as follows:

#### URI

ecomm/api/hostedPayments/creaNonce

#### **METHOD**

Post

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
pan	Credit card number	AN MAX 19 CHAR.
scadenza	Credit card expiry date	DATE yyyymm
CVV	CVV2/CVC2, three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. 4DBC, four-digit code found on the front of AMERICAN EXPRESS cards. Whether it is mandatory or not depends on the rules in application for each individual acquirer.	AN MAX 4 CHAR.
importo		
·	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	
divisa		
	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	
codiceTransazione	,	AN MIN 2 - MAX 30
	Transaction identifier assigned by the merchant.	CHAR.
urlRisposta	Url to which XPay will return the result using	
	the following parameters:	CHAR.



	esito idOperazione xpayNonce timeStamp mac and, in the case of error, also code and message.	
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- divisa
- importo
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC = HASH

SHA1(apiKey=<val>codiceTransazione=<val>divisa=<val>importo=<val>timeStamp=<val><SecretKey>)

# **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN MAX 35 CHAR.
html	HTML code to be printed on the user's browser for 3D-Secure authentication.	
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## MAC calculation if a nonce is received



For the result message if a nonce is received, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

## MAC calculation if html or errors are received

For the result message if html or errors are received, the string to sign must contain the following fields:

- result
- operationId
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

# **Payment**

This service makes a payment in a currency other than Euro if the cardholder has accepted the proposed exchange rate through the verificaDCC service.

#### URI

ecomm/api/etc/pagaDCC

#### **METHOD**

Post

#### **ACCEPT**

application/json

# Payment Initiation Message: required fields

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
ticket	Exchange rate request identifier provided by Global Blue.	AN 25 CHAR.



Code assigned by XPay for use in the payment request.	AN 35 CHAR.
Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	
Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	
Amount expressed in the currency indicated in DCCCurrency.	N MAX 9 CHAR.
DCC currency code	N MAX 9 CHAR.
Set to YES if the customer has accepted the transaction in the card currency, set to NO if the customer has declined and the transaction will continue to be processed in Euro.	AN YES/NO
Timestamp in millisecond format.	N 13 CHAR.
Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.  Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).  Amount expressed in the currency indicated in DCCCurrency.  DCC currency code  Set to YES if the customer has accepted the transaction in the card currency, set to NO if the customer has declined and the transaction will continue to be processed in Euro.  Timestamp in millisecond format.  Message Authentication Code.  Transaction signature field. For calculation details, see the end of this

# **Payment Initiation Message: optional fields**

Name	Description	Format
pan	Credit card number	AN MAX 19 CHAR.
CVV	Three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	N MAX 4 CHAR.
scadenza parametriAggiuntivi	credit card expiry date In this object, you can enter n parameters that will be returned in the result message. In the following table an example of parameters	The following



ERROR\_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- ticket
- tassoDiCambioAccettato
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>ticket=<val>tassoDiCambioAccettato=<val>timeStamp=<val><SecretKey>)

### **Transaction Result Message: required fields**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.
data	Transaction date	yyyy/mm/dd
ora	Transaction time	hh:mm:ss
nazione	Credit card country	AN MAX 30 CHAR.
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> <u>here</u> .	AN MAX 100 CHAR.
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.



mac	Message	Authentication	Code.	AN 40 CHAR.
	Transaction si	ignature field. For ca	alculation	
	details, see th	ne end of this chapt	ter: MAC	
	Calculation.			

### **Transaction Result Message: optional fields**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
		CHAR. only
		Masterpass

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

The xpagaNonce field is only requested if 3D-Secure has been used. In this case, the transactionCode, importo and currency fields must be the same ones as used in the create nonce.



# LIGHTBOX

Lightbox is the solution that Nexi makes available to integrate the XPay payment gateway with its Ecommerce portal, allowing its customers to make payments without being redirected to external pages

#### How it works?

The lightbox solution uses a javascript SDK provided by Nexi that once configured, with the parameters related to the payment, shows an iframe that covers the entire browser window. In this window you will see the Nexi cash page where the customer will make the payment. Once the payment is finished, a javascript event will be returned to the merchant page that will manage the transaction outcome.

#### **Notes**

This solution is compatible only with payment cards.

### Payment Management

To implement the XPay Lightbox solution, some steps are required:

### InclusionSDK XPay

In order to start, include the script with the XPay javascript SDK in the header of your page:

#### **TEST**

<script

src="https://int-ecommerce.nexi.it/ecomm/XPayBuild/js?alias=ALIAS\_MERCHANT">
</script>

#### **PRODUZIONE**

<script

src="https://ecommerce.nexi.it/ecomm/XPayBuild/js?alias=ALIAS\_MERCHANT">
</script>

Alias parameter has to be value as merchant apiKey (or alias).

### **Environment configuration**

Once loaded, to initialized SDK, cal the function:



XPay.init();

After that configure SDK through the function:

XPay.initLightbox(config);

passing the object containing the payment configuration as a parameter. The tables below show the structure:

Name	Description	Format
baseConfig	Object whose structure is shown in the tables below	JSON
paymentParams	Object whose structure is shown in the tables below	JSON
customParams	N parameters can be specified that will be returned in the result messages	JSON
language	Language identifier	AN Possibili valori: XPay.LANGUAGE.ITA, XPay.LANGUAGE.JPN, XPay.LANGUAGE.SPA, XPay.LANGUAGE.RUS, XPay.LANGUAGE.FRA, XPay.LANGUAGE.ARA, XPay.LANGUAGE.ENG, XPay.LANGUAGE.CHI, XPay.LANGUAGE.CHI, XPay.LANGUAGE.POR

### Object baseConfig

Name	Description	Format
apiKey	Alias assigned by Nexi to the merchant	AN MAX 30
enviroment	Implementation environment	AN possible values: XPay.Environments.INTEG, XPay.Environments.PROD

### Object paymentParams required fields

Name	Description	Format	
------	-------------	--------	--



amount	Amount to be authorized in hundredths of euro without separator, the first 2 numbers on the right represent the euro cents, eg .: 5000 corresponds to € 50.00	N MAX 8
transactionId	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorization request.	AN MIN 2 MAX 30
currency	The code of the currency with which the amount is expressed	AN MIN 3 MAX 3 admitted only EUR
timeStamp	Timestamp in milliseconds format	N 13 CHAR
mac	Message Code Authentication Transaction signature field. For the calculation, see the instructions at the end of this chapter: Calculation MAC	AN 40 CHAR

#### Oggetto paymentParams optional fields

Name	Description	Format
urlPost	URL to which XPay sends the transaction result passing, in server-to-server mode with POST method, the response parameters with the outcome of the transaction.	AN MAX 500

### **Payment initiation**

To start the payment it is necessary to call up the function: XPay.openLightbox();

### Management of events triggered by the SDK

The only event to be managed for the integration of the lightbox solution is 'XPay\_Payment\_Result' which, at the end of the transaction, communicates the outcome of the payment and other details.

#### **NOTES**

XPay\_Payment\_Result 'which is the only event to be managed for the integration of the lightbox solution, which communicates the outcome of the payment and other details.

<u>Card Type Coding</u>



### **Notification**

With the Lightbox solution you can manage the outcome of transactions through a serverto-server call. For details of the call refer to the notification section of the Codebase

### **Recurring Payment**

The integration of this solution allows the merchant to tokenise the customer's card data, so that he can make recurrences for subscriptions or other services.

At the technical level, the management of this solution is divided into 2 phases:

- First payment
- Recurring Subsequent payments

#### First payment

A first transaction must be generated, assigning a token that allows Nexi to save the pairing between the user and the used payment card.

#### Management of recurring subsequent payments

For subsequent payments, an API provided by Nexi must be used. This API requires as parameters the token generated with the first payment and other parameters related to the transaction to be performed.

### First Payment

To make the first payment, follow the instructions in the Payment Management section, adding the following parameters to the customParams object:

Name	Description	Format
num_contratto	Unique code assigned by the merchant for matching with the archive containing sensitive credit card data	AN MIN 5 MAX 30
tipo_servizio	The field must be enhanced with: "paga_multi"	AN MAX 30
tipo_richiesta	PP (Primo Pagamento, first payment)	AN MAX 2
gruppo	Unique code assigned by the merchant for matching with the archive containing sensitive credit card data	AN MIN 5 MAX 30



# Recurring Subsequent Payment

To make subsequent payments follow the instructions in the section Subsequent Payment (Recurring Payment and One Click Payment)



# I-FRAME

## Customising the layout of the check-out page

This section is designed to give you all the information you need to customise the check-out page by configuring the CSS and optimising it so that it can be selected within an iframe/lightbox.

Nexi provides the merchant with a customisable payment interface. During the transaction, the customer stays on the merchant's e-commerce site, while the sensitive data continues to be handled in the secure Nexi environment. This limits the impact on PCI certification, and SAQ A type questionnaires are suitable.



### **Custom CSS Management**

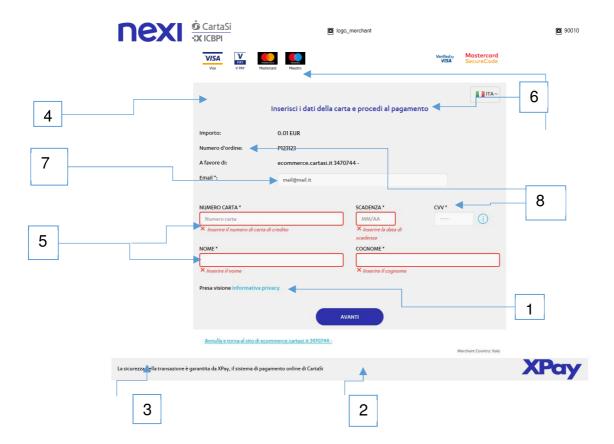
To customise the check-out page, the configuration parameters must be sent in the payment initiation message.

If the check-out page receives customisation parameters, it saves them to the page configuration and loads the page with the specified layout. The page stores the most recent configuration received in memory, so you only need to send customisation parameters the first time, and the page will continue to show the custom layout for subsequent requests. If no configuration information is present, the standard Nexi layout will be used.

A message has also been programmed for restoring initial settings.

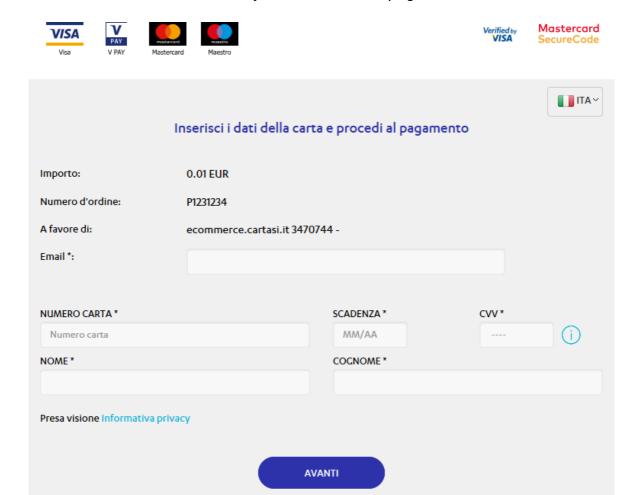


### **Editable Elements**





In addition to CSS customisation, you can delete the page header and footer:



Annulla e torna al sito di ecommerce.cartasi.it 3470744 -

Merchant Country: Italy

### Parameter List

Variable Name	Accepted Values	Description	Element ID
primary-color	Colour in RGB format (#FF6E28)	Changes the background colour of the central part of the header (when shown), the top border of the box containing the form, the colour of the buttons, the colour of the help links, and the title colour.	1
sfondo-footer	Colour in RGB format (#FF6E28)	Changes the background colour of the footer.	2
color-footer- text	Colour in RGB format (#FF6E28)	Changes the colour of footer text.	3
box- background	Colour in RGB format (#FF6E28)	Changes the background colour of the box containing the payment data entry form.	4



color-error- msg	Colour in RGB format (#FF6E28)	Change the colour of error messages.	5
font-Title- Heigth	In 10px or 10% format	Changes title size on the page.	6
color-input-text	Colour in RGB format (#FF6E28)	Changes the colour of text entered by the user (form input fields).	7
color-label	Colour in RGB format (#FF6E28)	Changes label colour.	8
font-Heigth	In 10px or 10% format	Changes label height.	8
font	Existing font	Changes label font.	
back-To- Default	YES	If populated, resets the configuration to default settings.	

**NB:** Special parameters transferred using the GET method are url-encoded.



# SDK FOR APP Integrate Nexi in your APP

SDK is available for iOS and Android environments in order to easily integrate Nexi gateway services within your APP.

APIs are divided into functional areas:

- BackOffice
- SecurityControls
- FrontOffice
- ContractManagement
- SynchronousPayments
- FirstPaymentsRecurring
- RecurringPayments

#### IOS SDK

### **Getting Started**

To install the framework in a merchant app, follow the steps below:

- Open XCode (requires Xcode 9.3) in the app project
- Select solution settings
- Navigate to General -> "Embedded Binaries" and choose "+", selecting the XpaySDK.framework file, accepting the default settings when merging:
  - Copy items if needed -> yes
  - Create groups -> yes

To use creaNonce, derivatives and FrontOffice, a NavigationController will need to be used within your Storyboard to allow the insertion of the UIWebView in the same stack

If you are using **Objective-C**: In the project's BuildSettings, choose "Always Embed Swift Standard Libraries" -> YES

In order to be able to use an Endpoint with a Self-Signed Certificate, the following node will need to be added to the Info.plist file in the merchant app:

```
<key>NSAppTransportSecurity</key>
<dict>
    <key>NSAllowsArbitraryLoads</key>
    <true/>
</dict>
```



### XPay initialisation

In order to be able to use the SDK in your app, you need to first initialise XPay main class as follows:

let xPay = XPay(secretKey: "SECRET KEY")

secretKey: the secret key issued to the merchant

**NOTES**: We advise not to include the secret key within your app, but to have it available via a back end runtime request.

#### Change domain

If you want to change the domain of all HTTP calls, within a certain scope, you need to set it using the following method:

xPay.\_FrontOffice.setDomain("https://nuovodominio.it")

#### **MAC** configuration

Below is a list of methods for customising the MAC Calculation configuration:

XPay.\_MacConfig.IsOnlyValues = false // false if the MAC expects both keys and values, or true if it only expects values

XPay.\_MacConfig.ExternalSeparator = "" // Defines the separator between key-value pair

XPay.\_MacConfig.InternalSeparator = "=" // Defines the separator between key and value

XPay.\_MacConfig.Algorithm = .SHA1 // Defines the algorithm for MAC hashing

XPay.\_MacConfig.IsUppercase = false // false if the MAC uses lowercase characters, or true if it uses uppercase characters

XPay.\_MacConfig.IsUrlEncode = false // false if the MAC does not use Url encoding, or true if it does

XPay.\_MacConfig.IsBase64Encode = false // false if the MAC does not use Base64 encoding, or true if it does

**NOTES**: Any changes to MAC settings can be agreed with Nexi.

### **Practical Example**

Before each API is actually invoked, it is possible to define the current execution environment. The possible values are:

- EnvironmentUtils.Environment.TEST: Test environment
- EnvironmentUtils.Environment.INTEG: Demo environment
- EnvironmentUtils.Environment.PROD: Production environment (default)



Usage example:

```
xPay._SynchronousPayments.SelectedEnvironmen = .INTEG
```

Below is an example of how to use the APIs:

The example API accepts an incoming request which has been built using the following parameters:

- Merchant's alias
- Order number
- Amount to be reversed
- Currency used for the reversal

Before each API is actually invoked, it is possible to set call timeouts. The value is in milliseconds and is set to 30 seconds by default.

When calling the corresponding API method (in this case ".reverse"), the relevant request and callback will be given in input, and these will communicate the outcome and any result. If the request is successful, the error object will be nil. If it is unsuccessful, the error object will be populated with the error messages and their relative codes. If successful, you need to verify the IsSuccess variable to ensure that the response is valid. If the variable is set to true, the response is valid. Alternatively, all you need to do is invoke the response! Error. Message variable to get the error message. In the case of a valid response, you will find values relating to the specific response within the "response" variable.

Details for each API (area, request and response) are documented in the "API List" paragraph.



#### NOTES:

Each request can be coupled with additional parameters, where this has previously been agreed between the merchant and Nexi. Example:

apiReverseRequest.ExtraParameters["ParameterName"] = "ParameterValue"

Exceptions triggered by APIs are always intercepted and returned as part of the Error variable. This is true for both the error object and the response object (in the case of an invalid response).

The standard error codes that can be used are as follows:

- ResponseCodes.MAC ERROR -> THIS INDICATES A SECURITY ERROR
- ResponseCodes.SERVER\_ERROR

### **Easy Payment**

For a payment request, a request object must be prepared in the following manner:

```
let apiFrontOfficeQPRequest = ApiFrontOfficeRequestQP(alias: "ALIAS_MERCHANT", transCode: "NUMBER_ORDER", currency: CurrencyUtilsQP.EUR, amount: 1000)
```

Below is an example of how to use the XPay payment page, with the previously created request:

```
xPay._FrontOffice.pagaQP(apiFrontOfficeQPRequest, parentController: self) {
    (response) in
    if response.IsValid {
        if response.IsCanceled {
            print("II pagamento è stato annullato dall'utente")
        }
        else {
            print("II pagamento si è concluso correttamente, codice transazione: " + response.CodTrans)
        }
    }
    else {
        print("La risposta non è valida ") THIS INDICATES A SECURITY ERROR
}
```

If the response is valid, the IsValid property in the response will be true. Alternatively, if it is false, the response is not valid, and it will contain error messages with their corresponding codes. In order to confirm that the payment was cancelled by the user, it will be necessary to check whether the IsCanceled variable is in the true state. If it is set to true, then the user cancelled the payment, otherwise it would have been brought to completion correctly.



The specifications for this methodology are as follows:

XPay's callback allows 2 "return" methods. The first - onConfirm - is invoked if the user makes a payment, regardless of whether the payment is successful or not. This can be verified using the "isValid ()" method. The second - onCancel - is invoked if the user cancels the payment.

The specifications for this methodology are as follows:

#### **REQUEST**

#### CLASS

ApiFrontOfficeQPRequest

#### METHOD

Pay

		_
Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN 3 CHAR.

#### **RESPONSE**

#### **CLASS**

ApiFrontOfficeQPResponse



### **Required Parameters**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN 3 CHAR.
brand	Credit card network	AN MAX 100 CHAR.
date	Transaction date	DATE dd/mm/yyyy
time	Transaction time	AN hh:mm:ss
isValid()	If this is true, the response is valid. If it is not true, the error parameter will be populated.	True/false
error	Element containing the error code and description: code -> error code, see table message -> error details	OBJ

### **Optional parameters**

Name	Description	Format
extraParameters	Additional optional parameters	AN

#### **NOTES:**

All 3D-Secure and payment procedures are entrusted to the Front Office WebView.

### Easy Payment with Contract Registration

To manage an initial payment from the FrontOffice WebView, you need to pass the following additional parameters using the addExtraKeys() method:



Name	Description	Format
tipo_servizio	The field must be set to: "paga_multi".	AN MIN 2 - MAX 30 CHAR.
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	
tipo_richiesta	PP (first payment)	AN 2 CHAR.

#### IN PRACTICE

apiFrontOfficeQPRequest.addExtraKey("tipo\_servizio", "paga\_multi"); apiFrontOfficeQPRequest.addExtraKey("num\_contratto", ""); // contract number to be associated with the card that the user will use for payment. apiFrontOfficeQPRequest.addExtraKey("tipo\_richiesta", "PP"); apiFrontOfficeQPRequest.addExtraKey("gruppo", "")// The "gruppo" value is assigned by Nexi during activation.

#### ANDROID SDK

### **Getting Started**

Begin by importing the AAR library into the app project, following the steps listed below:

- Open Android Studio on the project corresponding to the merchant's app (which should already have been done).
- Navigate to File -> New -> New Module -> Select 'Import .jar / .aar package', and select the file to import as a library. This will create a new module within the project, with the name of the imported library.
- Right-click the module where you want to use the library, and navigate to 'Open Module Settings' -> Modules (app) -> Navigate to the 'Dependencies' tab, and press '+' -> Module Dependency, and select the library module. At this point, you should be able to access the library from the project where it was imported.
- In the app's .gradle file, add dependencies to GSON and Volley in the following manner:

```
dependencies {
   compile 'com.android.volley:volley:1.1.0'
   compile 'com.google.code.gson:gson:2.8.2'
}
```

### XPay initialisation

In order to be able to use the SDK in your app, you need to first initialise XPay main class as follows:



XPay xPay = new XPay(application context, secret key);

application\_context: this is the internal context for the merchant's app secret\_key: the secret key issued to the merchant

#### NOTES:

We advise not to include the secret key within your app, but to have it available via a back end runtime request.

#### Change domain

If you want to change the domain of all HTTP calls, within a certain scope, you need to set it using the following method:

xPay. FrontOffice.setDomain("https://nuovodominio.it")

#### **MAC** configuration

Below is a list of methods for customising the MAC Calculation configuration:

XPay.macConfig.setOnlyValues(false); // false if the MAC expects both keys and values, or true if it only expects values

XPay.macConfig.setExternalSeparator(""); // Defines the separator between key-value pair XPay.macConfig.setInternalSeparator("="); // Defines the separator between key and value

XPay.macConfig.setAlgorithm("SHA1"); // Defines the algorithm for MAC hashing XPay.macConfig.setUppercase(false); // false if the MAC only uses lowercase characters, or true if it uses uppercase characters

XPay.macConfig.setUrlEncode(false); // Set to false if the MAC does not use Url encoding, or true if it does

XPay.macConfig.setBase64Encode(false); // false if the MAC does not use Base64 encoding, or true if it does

#### NOTES:

Any changes to MAC settings can be agreed with Nexi.

### **Practical Example**

Before each API is actually invoked, it is possible to define the current execution environment. The possible values are:

- EnvironmentUtils.Environment.TEST: Test environment
- EnvironmentUtils.Environment.INTEG: Demo environment



• EnvironmentUtils.Environment.PROD: Production environment (default)

Below is an example of how to use the APIs:

```
private void doEnableContract() {
            ApiEnableContractRequest apiEnableContractRequest = new
ApiEnableContractRequest (
                   "ALIAS MERCHANT",
                   "NUMBER CONTRACT"
            );
      xPay.ContractManagement.setEnvironment(EnvironmentUtils.Environment.TEST);
            xPay.ContractManagement.setTimeout(20000);
            xPay.ContractManagement.enableContract(apiEnableContractRequest,
            new ApiResponseCallback<ApiEnableContractResponse>() {
                  @Override
                  public void onSuccess(ApiEnableContractResponse response) {
                              Log.i("EnableContract", response.getOperationId());
                  }
                  @Override
                  public void onError(ApiErrorResponse error) {
                              Log.i ("EnableContract", "Message: " +
error.getError().getMessage());
            });
      }
```

The example API accepts an incoming request which has been built using the following parameters:

- Merchant's alias
- Number of the contract to enable

Before each API is actually invoked, it is possible to set call timeouts. The value is in milliseconds and is set to 30 seconds by default.

When calling the corresponding API method (in this case ".enableContract"), the relevant request and callback will be given in input, and these will communicate the outcome and any result.

If successfully executed, the onSuccess method will be invoked for the callback supplied, and this will receive the specified API response in the input.

Details for each API (area, request and response) are documented in the "API List" paragraph.

#### NOTES:

Each request can be coupled with additional parameters, where this has previously been agreed between the merchant and Nexi. Example:



apiAbilitaContrattoRequest.addExtraKey("ParameterName", "ParameterValue");

Exceptions triggered by APIs are always intercepted and returned using the callback's **onError** method, within the **ApiErrorResponse** object type:

```
@Override
public void onError(ApiErrorResponse error) {
    /***the error variable contains the errors generated***/
}
```

The getError() method is within this object; it returns the corresponding API simplified error and will contain both an error code and an error message.

The standard error codes that can be used are as follows:

- ResponseCodes.MAC ERROR -> THIS INDICATES A SECURITY ERROR
- ResponseCodes.SERVER ERROR

### **Easy Payment**

For a payment request, a request object must be prepared in the following manner:

In this case, you will need to capture the triggered exceptions.

 MacException: Exception generated if a MAC control error or calculation error occurs.

Below is an example of how to use the XPay payment page, with the previously created request:

```
xPay.FrontOffice.pay(
apiFrontOfficeQPRequest,
new FrontOfficeQPCallback() {
```



```
@Override
       public
                         void
                                          onConfirm(ApiFrontOfficeQPResponse
apiFrontOfficeQPResponse) {
          if(apiFrontOfficeQPResponse.isValid()) {
            Log.i(TAG, "Valid response, operation confirmed by user");
          else {
            Log.i(TAG, "Invalid response");
                  THIS INDICATES A SECURITY ERROR
         }
       }
       @Override
       public
                                           onCancel(ApiFrontOfficeQPResponse
                          void
apiFrontOfficeQPResponse) {
          Log.i(TAG, "Operation cancelled by user");
     }
);
```

XPay's callback allows 2 "return" methods. The first - onConfirm - is invoked if the user makes a payment, regardless of whether the payment is successful or not. This can be verified using the "isValid ()" method. The second - onCancel - is invoked if the user cancels the payment.

The specifications for this methodology are as follows:

#### **REQUEST**

#### **CLASS**

**ApiFrontOfficeQPRequest** 

#### METHOD

Pay

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may	



	choose to decrease this to less than 3 attempts.	
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN 3 CHAR.

#### **RESPONSE**

CLASS
ApiFrontOfficeQPResponse

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN 3 CHAR.
brand	Credit card network	AN MAX 100 CHAR.
date	Transaction date	DATE dd/mm/yyyy
time	Transaction time	AN hh:mm:ss
isValid()	If this is true, the response is valid. If it is not true, the error parameter will be populated.	True/false
error	Element containing the error code and description: code -> error code, see table message -> error details	OBJ



#### **NOTES:**

All 3D-Secure and payment procedures are entrusted to the Front Office WebView.

### Easy Payment with Contract Registration

To manage an initial payment from the FrontOffice WebView, you need to pass the following additional parameters using the addExtraKeys() method:

Name	Description	Format
tipo_servizio	The field must be set to: "paga_multi".	AN MIN 2 - MAX 30 CHAR.
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	
tipo richiesta	PP (first payment)	AN 2 CHAR.

#### IN PRACTICE

apiFrontOfficeQPRequest.addExtraKey("tipo\_servizio","paga\_multi"); apiFrontOfficeQPRequest.addExtraKey("num\_contratto",""); // contract number to be associated with the card that the user will use for payment. apiFrontOfficeQPRequest.addExtraKey("tipo\_richiesta","PP"); apiFrontOfficeQPRequest.addExtraKey("gruppo","")// The "gruppo" value is assigned by Nexi during activation.



#### SERVICES AVAILABLE ON ANDROID AND IOS SDK

### Server-to-server SSL E-commerce Payments

This service carries out server-to-server SSL e-commerce payment transactions. It is designed for merchants who wish to integrate with their own APP the function to request credit card payment authorisations without using 3D-Secure, where details are collected directly from the form of the merchant's site/APP.

This service requires the merchant to achieve PCI DSS certification.

#### **REQUEST**

#### CLASS

ApiPagaSSLRequest

#### METHOD

pagaSSL

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
card	Element containing payment card details:  pan – credit card number  month – credit card expiry month  year – credit card expiry year  cvc – three-digit code found on the  back of VISA, MASTERCARD,  MAESTRO, DINERS, and JCB  branded credit cards. For AMEX  cards only, it is a four-digit code and  is found on the front of cards.	OBJ
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.



currency	Code of the currency in which the amount is expressed, with the only acceptable	AN 3 CHAR.
	value being: 978 (Euro).	

#### **RESPONSE**

#### CLASS

ApiPagaSSLResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
convCode	Merchant code assigned by the acquirer.	AN MIN 2 - MAX 30 CHAR.
date	Transaction date	DATE dd/mm/yyyy
time	Transaction time	hh:mm:ss
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
region	Credit card global region of origin	AN MIN 2 - MAX 30 CHAR.
productType	Credit card type	AN MIN 2 - MAX 30 CHAR.
transactionType	Indicates the payment method. See the <u>table here</u> for possible values.	AN MIN 2 - MAX 30 CHAR.

### Payments with External 3D-Secure MPI

This service carries out server-to-server 3D-Secure e-commerce transactions. It is designed for merchants who have their own MPI (Merchant Plug In) for handling the cardholder authentication stage using 3D-Secure protocols. XPay is therefore used to forward the authorisation requests, and to transfer the data previously obtained in the 3D-Secure process.

This service requires the merchant to achieve PCI DSS certification.

#### **REQUEST**

#### CLASS

ApiPagaMPIRequest

#### **METHOD**

pagaMPI



Namo	Description	Format
Name alias	Description  Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
card	Element containing payment card details:  pan – credit card number  month – credit card expiry month  year – credit card expiry year  cvc – three-digit code found on the back of VISA, MASTERCARD,  MAESTRO, DINERS, and JCB  branded credit cards. For AMEX  cards only, it is a four-digit code and is found on the front of cards.	OBJ
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN 3 CHAR.
eci	3D-Secure data. See table	AN MIN 2 - MAX 30 CHAR.
xid	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.
cavv	3D-Secure data. <u>See table</u>	AN MIN 2 - MAX 30 CHAR.

### **RESPONSE**

CLASS ApiPagaMPIResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.



codTrans	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
amount	Amount expressed in euro cents with no separators.	N MAX 6 CHAR.
currency	978 for Euro	N 3 CHAR.
date	Transaction date	DATE dd/mm/yyyy
transactionType	Indicates the payment method. See the	AN MIN 2 - MAX 30
a anodonom y po	table here for possible values.	CHAR.
eci		
21	table here for possible values.	CHAR. AN MIN 2 - MAX 30
eci	table here for possible values. 3D-Secure data. See table	CHAR. AN MIN 2 - MAX 30 CHAR. AN MIN 2 - MAX 30

### Management: Recurring - Card on File - OneClickPay

Integrating Recurring, OneClickPay or Card on File services allows end customers to store their credit card details on the Nexi systems and use them to make subsequent purchases with just one click, or for merchants to send recurring payments (for example, in subscription or invoicing services). At a technical level, management of these services is divided into 2 main stages:

- Activation and/or first payment
- Management of recurring payments/subsequent payments

### Activation and/or first payment

During the first transaction, a contract code must be generated for use in subsequent purchases. This contract code allows Nexi to save a paired link between the user and the payment card used. The first transaction can be an actual payment, or just a card verification with no charge to the user.

If the first transaction is an actual payment, the sequence of services used is as follows:

#### With 3D-Secure:

- To manage 3D-Secure authentication -> creaNoncePrimoPagamento3DS
- To manage payment and contract registration -> primoPagamento3DS

#### Without 3D-Secure:



To manage payment and contract registration -> primoPagamentoSSL

If the first transaction is registration with card verification only, the API sequence used is as follows:

#### With 3D-Secure:

- To manage 3D-Secure authentication -> creaNonceVerificaCarta
- To manage verification of card validity and register the contract -> verificaCarta3DS

#### Without 3D-Secure:

To manage verification of card validity and register the contract -> verifcaCartaSSL

#### Management of subsequent payments

Management of subsequent OneClick and recurring payments is similar at the technical level. In practice, the merchant application/site must use the API:

recurringPayment



### 3D-Secure Card Verification

Use of this service occurs in 2 stages. In the first step, card details are sent and the SDK takes care of managing the 3D-Secure and returning the nonce. With the Nonce received in response, the APP proceeds to recall the second 3DS card verification service.

This service requires the merchant to achieve PCI DSS certification.

#### **Create nonce**

#### **REQUEST**

#### CLASS

ApiCreaNonceVerificaCartaRequest

#### METHOD

creaNonceVerificaCarta

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
card	Element containing payment card details:  pan – credit card number  month – credit card expiry month  year – credit card expiry year  cvc – three-digit code found on the  back of VISA, MASTERCARD,  MAESTRO, DINERS, and JCB  branded credit cards. For AMEX  cards only, it is a four-digit code and  is found on the front of cards.	OBJ

#### **RESPONSE**

#### CLASS

ApiCreaNonceVerificaCartaResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
nonce	Code assigned by XPay for use in the payment request.	AN 35 CHAR.



#### **NOTES:**

This allows a nonce to be created for use in calling a verificaCarta3DS. If the card needs to be authenticated using 3D-Secure, a WebView will open in order to complete the procedure. The response ApiCreaNonceVerificaCartaResponse will be returned after this has been completed.

#### Verification of card authorisation

#### **REQUEST**

#### CLASS

ApiVerificaCarta3DSRequest

#### METHOD

verificaCarta3DS

#### **Required Parameters**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
nonce	Code assigned by XPay for use in the payment request.	AN 35 CHAR.
nContract	Code allowing to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
groupCode	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
contractExpires	For recurring payments, indicates when the expiry date for the option contract occurs.	DATE dd/mm/yyyy

### **Optional parameters**

Name	Description	Format
email	Customer email	AN MAX 150 CHAR.
description	Description assigned to the contract.	AN
taxCode	User Tax Code	AN 16 CHAR.

#### **RESPONSE**

#### CLASS

ApiVerificaCarta3DSResponse



Name	Description	Format
result	Result of the request.	AN OK / KO
operationId	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

### Recurring 3D-Secure First Payment

This service carries out a 3D-Secure payment transaction at the same time as the contract is registered for use in subsequent recurring or OneClickPay/Card on File payments. Use of this service occurs in 2 stages. In the first step, card details are sent and the SDK takes care of managing the 3D-Secure and returning the nonce. With the Nonce received in response, the APP proceeds to recall the second payment service.

This service requires the merchant to achieve PCI DSS certification.

#### Create nonce

#### **REQUEST**

#### CLASS

ApiCreaNoncePrimoPagamento3DSRequest

#### **METHOD**

creaNoncePrimoPagamento3DS

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
card	Element containing payment card details: pan – credit card number month – credit card expiry month year – credit card expiry year cvc – three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	OBJ



Name	Description	Format
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.

#### **RESPONSE**

#### CLASS

ApiCreaNoncePrimoPagamento3DSResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
xpayNonce	Code assigned by XPay for use in the payment request.	AN 35 CHAR.

#### NOTES:

This allows a nonce to be created for use in calling the firstPayment3DS service. If the card needs to be authenticated using 3D-Secure, a WebView will open in order to complete the procedure. The response ApiCreaNoncePrimoPagamento3DSResponse will be returned after this has been completed.

### Payment and contract registration

#### **REQUEST**

#### CLASS

ApiPrimoPagamento3DSRequest

#### METHOD

primoPagamento3DS

#### **Required Parameters**

Name Description	Format
------------------	--------



alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
xpayNonce	Code assigned by XPay for use in the payment request.	AN 35 CHAR.
nContract	Code allowing to save a paired link between the user and the payment card used.	
groupCode	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
contractExpires	For recurring payments, indicates when the expiry date for the option contract occurs.	DATE dd/mm/yyyy

### **Optional parameters**

Name	Description	Format
email	Customer email	AN MAX 150 CHAR.
description	Description assigned to the contract.	AN
TaxCode	User Tax Code	AN 16 CHAR.

### **RESPONSE**

CLASS
ApiPrimoPagamento3DSResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
convCode	Merchant code assigned by the acquirer.	AN MIN 2 - MAX 30 CHAR.
date	Transaction date	DATE dd/mm/yyyy



time	Transaction time	hh:mm:ss
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
region	Credit card global region of origin	AN MIN 2 - MAX 30 CHAR.
productType	Credit card type	AN MIN 2 - MAX 30 CHAR.
transactionType	Indicates the payment method. See the table here for possible values.	AN MIN 2 - MAX 30 CHAR.

### Recurring SSL First Payment

This service carries out a server-to-server SSL e-commerce payment transaction at the same time as the contract is registered for use in subsequent recurring or Card on File/OneClickPay payments.

This service requires the merchant to achieve PCI DSS certification.

#### **REQUEST**

#### CLASS

ApiPrimoPagamentoSSLRequest

#### METHOD

primoPagamentoSSL

### **Required Parameters**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
nContract	Code allowing to save a paired link between the user and the payment card used.	
groupCode	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the	



	configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
card	Element containing payment card details: pan – credit card number month – credit card expiry month year – credit card expiry year cvc – three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	
contractExpires	For recurring payments, indicates when the expiry date for the option contract occurs.	DATE dd/mm/yyyy

### **Optional parameters**

Name	Description	Format
email	Customer email	AN MAX 150 CHAR.
description	Description assigned to the contract.	AN
TaxCode	User Tax Code	AN 16 CHAR.

### **RESPONSE**

CLASS
ApiPrimoPagamentoSSLResponse

### **Required Parameters**

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
convCode	Merchant code assigned by the acquirer.	AN MIN 2 - MAX 30 CHAR.
date	Transaction date	DATE dd/mm/yyyy
time	Transaction time	hh:mm:ss
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
region	Credit card global region of origin	AN MIN 2 - MAX 30 CHAR.



productType	Credit card type	AN MIN 2 - MAX 30 CHAR.
transactionType	Indicates the payment method. See the table here for possible values.	AN MIN 2 - MAX 30 CHAR.

## **Optional parameters**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30 CHAR.

## Recurring SSL Card Verification

This service carries out a verification of card authorisation without server-to-server 3D-Secure to register the contract for use in subsequent recurring or Card on File/OneClickPay payments.

This service requires the merchant to achieve PCI DSS certification.

#### **REQUEST**

	-	$\overline{}$	$\overline{}$
	Λ		c
NO.	Δ١		-

ApiVerificaCartaSSLRequest

#### METHOD

verificaCartaSSL

## **Required Parameters**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
card	Element containing payment card details: pan – credit card number month – credit card expiry month year – credit card expiry year cvc – three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. For AMEX cards only, it is a four-digit code and is found on the front of cards.	
nContract	Code allowing to save a paired link between the user and the payment card used.	



groupCode	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
contractExpires	For recurring payments, indicates when the expiry date for the option contract occurs.	DATE dd/mm/yyyy

## **Optional parameters**

Name	Description	Format
email	Customer email	AN MAX 150 CHAR.
description	Description assigned to the contract.	AN
TaxCode	User Tax Code	AN 16 CHAR.

#### **RESPONSE**

#### CLASS

ApiVerificaCartaSSLResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

## Subsequent Payment

When you need to make a charge on a previously registered contract, your system must send a call which contains the details of the previously registered contract, integrated with the recording of the first payment.

#### **REQUEST**

## CLASS

ApiPagamentoRicorrenteRequest

#### METHOD

pagamentoRicorrente

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.



nContract	Code allowing to save a paired link between the user and the payment card used.	
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
month	Credit card expiry month	mm
year	Credit card expiry year	уууу
groupCode	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.

## **RESPONSE**

CLASS
ApiPagamentoRicorrenteResponse

## **Required Parameters**

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
convCode	Merchant code assigned by the acquirer.	AN MIN 2 - MAX 30 CHAR.
date	Transaction date	DATE dd/mm/yyyy
time	Transaction time	hh:mm:ss
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
region	Credit card global region of origin	AN MIN 2 - MAX 30 CHAR.
productType	Credit card type	AN MIN 2 - MAX 30 CHAR.
transactionType	Indicates the payment method. See the table here for possible values.	AN MIN 2 - MAX 30 CHAR.



## **Optional parameters**

Name	Description	Format
рро	Payment with Masterpass wallet.	AN MIN 2 - MAX 30
	·	CHAR.

## Back Office Services - Deposit

This service performs a journal processing operation. Partial amounts and multiple operations may be allowed, depending on the characteristics of the terminal.

#### **REQUEST**

#### **CLASS**

ApiContabilizzaRequest

## **METHOD**

contabilizza

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Transaction signature field	AN 40 CHAR.

#### **RESPONSE**

### CLASS

ApiContabilizzaResponse



Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

## Back Office Services - Return/Refund

This service carries out a cancellation or refund depending on the status of the transaction. Partial amounts and multiple transactions may be allowed, depending on the merchant's configuration.

#### **REQUEST**

### CLASS

ApiStornaRequest

### **METHOD**

Storna

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Transaction signature field	AN 40 CHAR.

#### **RESPONSE**

#### CLASS

**ApiStornaResponse** 



Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

#### NOTES:

Once the order has been authorised, only a total transaction cancellation is possible.

## Back Office Services - Order List

This service carries out a cancellation or refund depending on the status of the transaction. Partial amounts and multiple transactions may be allowed, depending on the merchant's configuration.

#### **REQUEST**

#### CLASS

ApiReportOrdiniRequest

### **METHOD**

reportOrdini

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
from	Filter by date from	dd/mm/yyyy
to	Filter by date to	dd/mm/yyyy
channel	Filter by payment method used for the order, with multiple channels able to be queued. Possible values:  - All - MyBank - CreditCard - PayPal	
statuses	Filter by order status, with multiple statuses able to be queued.	AN
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may	AN MIN 2 - MAX 30 CHAR.



choose to decrease this to less than 3 attempts.

#### **RESPONSE**

## CLASS

ApiReportOrdiniResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
reports	Orders element whose structure is shown in the following table.	

## Reports element

Name	Description	Format
nMerchant	Terminal assigned to the merchant by Nexi.	AN MIN 2 - MAX 30 CHAR.
transCode	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
amount	Transaction amount expressed in euro cents with no separator.	N MAX 9 CHAR.
currency	978 for Euro	
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
brand	Credit card network	AN
paymentType	Type of payment made.	AN
operationType	Type of operation carried out.	AN
transactionTypeExtended	Indicates the payment method. See the <u>table here</u> for possible values.	AN MIN 2 - MAX 30 CHAR.
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
productType	Credit card type	AN MIN 2 - MAX 30 CHAR.
pan	Credit card number	N MAX 19 CHAR.
parameters	Additional parameters	AN
status	Order status	AN
transactionDate	Transaction date	dd/mm/yyyy



operationDate	Operation date	dd/mm/yyyy
serviceType	Type of service used for the transaction.	AN
name	Customer name	AN MIN 2 - MAX 30 CHAR.
surname	Customer surname	AN MIN 2 - MAX 30 CHAR.
email	Customer email	AN MAX 150 CHAR.

#### NOTES:

This allows to query XPay in order to obtain a list of transactions, by applying different filter conditions. Amongst other things, this makes available those details needed to invoke the orderDetails API.

#### Possible values for statuses:

- Autorizzato
- Negato
- Annullato
- Incassato
- Rimborsato
- NonCreato
- IncParziale
- RimbParziale

## Back Office Services - Order Details Query

This service carries out a cancellation or refund depending on the status of the transaction. Partial amounts and multiple transactions may be allowed, depending on the merchant's configuration.

#### **REQUEST**

#### CLASS

**ApiSituazioneOrdineRequest** 

#### **METHOD**

situazioneOrdine

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.



nOrder	Search by order	AN
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.

### **RESPONSE**

CLASS
ApiSituazioneOrdineResponse

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
reports	Orders element whose structure is shown in the following table.	n

## Reports element

Name	Description	Format
nMerchant	Terminal assigned to the merchant by Nexi.	AN MIN 2 - MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	
amount	Transaction amount expressed in euro cents with no separator.	N MAX 9 CHAR.
currency	978 for Euro	
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
brand	Credit card network	AN
paymentType	Type of payment made.	AN
operationType	Type of operation carried out.	AN



transactionTypeExtended	Indicates the payment method. See the <u>table here</u> for possible values.	AN MIN 2 - MAX 30 CHAR.
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
productType	Credit card type	AN MIN 2 - MAX 30 CHAR.
pan	Credit card number	N MAX 19 CHAR.
parameters	Additional parameters	AN
status	Order status	AN
transactionDate	Transaction date	dd/mm/yyyy
operationDate	Operation date	dd/mm/yyyy
serviceType	Type of service used for the transaction.	AN
name	Customer name	AN MIN 2 - MAX 30 CHAR.
surname	Customer surname	AN MIN 2 - MAX 30 CHAR.
email	Customer email	AN MAX 150 CHAR.
details	Reports element whose structure is as defined in the following table.	

## **Details element**

Name	Description	Format
name	Customer name	AN MIN 2 - MAX 30 CHAR.
surname	Customer surname	AN MIN 2 - MAX 30 CHAR.
email	Customer email	AN MAX 150 CHAR.
unapprovedAmount	Unapproved amount	N MAX 9 CHAR.
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
status	Order status	AN
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
operations	Details element whose structure is shown in the following table.	



### **Operations element**

Name	Description	Format
operationType	Operation type	AN
amount	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
status	Order status	AN
creationDate	Creation date	DATE
user	Merchant operator requesting the operation.	AN

## **DCC Verification Service**

Currency Choice is a service born from the collaboration between Nexi and Global Blue. It allows international Visa and MasterCard credit card holders to make purchases in their own currency, with an exchange rate guaranteed at the time of payment.

The Currency Choice service is currently available in the currencies that can be found here.

This service allows to verify whether the currency of the payment card used is one of the 38 available. If it is, the service will provide the exchange rate to the user, who may choose to either accept the offered rate and proceed with own currency, or remain in euro.

This service requires the merchant to achieve PCI DSS certification.

#### **REQUEST**

#### CLASS

ApiVerificaDCCRequest

# METHOD verificaDCC

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
pan	Credit card number	N MAX 19 CHAR.
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.



#### **RESPONSE**

#### CLASS

ApiVerificaDCCResponse

		_
Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
ticket	Exchange rate request identifier provided by Global Blue.	AN 25 CHAR.
DCCcurrency	Code of the currency in which the dccAmount is expressed (e.g. 840=USD). Only present for the DCC service. For allowed values, see the <u>table here</u> .	AN 3 CHAR.
DCCamount	Shows the value of the amount converted into the currency chosen by the payer for the transaction. The currency used is shown in the dccCurrency field. Blank space characters are added on the left until 20 characters are reached.	AN 20 CHAR.
DCCdecimalAmount	Shows the value of the amount converted into the currency chosen by the payer for the transaction. The currency used is shown in the dccCurrency field. Blank space characters are added on the left until 20 characters are reached.	AN 20 CHAR.
exchangeRate	Exchange rate	N
MarkUp	Indicates the mark-up provided by Global Blue.	N 8.4
decimalMarkUp	Indicates how many decimal places are in the MarkUp field.	N MAX 2 CHAR.

## DCC Service - Payment

This service makes a payment in a currency other than Euro if the cardholder has accepted the proposed exchange rate through the DCCVerification service.

This service requires the merchant to achieve PCI DSS certification.



## **REQUEST**

## CLASS

ApiPagaDCCRequest

# METHOD pagaDCC

## **Required Parameters**

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
ticket	Exchange rate request identifier provided by Global Blue.	AN 25 CHAR.
amount	Amount expressed in euro cents with no separators.	N MAX 9 CHAR.
currency	978 for Euro	N 3 CHAR.
DCCcurrency	Code of the currency in which the dccAmount is expressed (e.g. 840=USD). Only present for the DCC service. For allowed values, see the <u>table here</u> .	AN 3 CHAR.
DCCamount	Shows the value of the amount converted into the currency chosen by the payer for the transaction. The currency used is shown in the dccCurrency field. Blank space characters are added on the left until 20 characters are reached.	AN 20 CHAR.
exchangeRateAccepted	Exchange rate accepted.	N
xpayNonce	Code assigned by XPay for use in the payment request.	AN 35 CHAR.

## **Optional parameters**

Name	Description	Format
pan	Credit card number	N MAX 19 CHAR.
month	Credit card expiry month	mm
year	Credit card expiry year	уууу
CVC	CVV2/CVC2, three-digit code found on the	N MAX 4 CHAR.
	back of VISA, MASTERCARD,	



MAESTRO, DINERS, and JCB branded credit cards. 4DBC, four-digit code found on the front of AMERICAN EXPRESS cards. Whether it is mandatory or not depends on the rules in application for each individual acquirer.

#### **RESPONSE**

### CLASS

ApiPagaDCCResponse

## **Required Parameters**

Name	Description	Format
result	Result of the request.	AN MAX 30 CHAR.
operationId	Transaction identifier assigned by Nexi.	ENUM ok/ko
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
authCode	Confirmation code issued by the card issuer.	AN 6 CHAR.
convCode	Merchant code assigned by the acquirer.	AN MIN 2 - MAX 30 CHAR.
date	Transaction date	DATE dd/mm/yyyy
time	Transaction time	hh:mm:ss
country	Credit card country	AN MIN 2 - MAX 30 CHAR.
region	Credit card global region of origin	AN MIN 2 - MAX 30 CHAR.
brand	Credit card network	AN
productType	Credit card type	AN MIN 2 - MAX 30 CHAR.

## **Optional parameters**

Name	Description	Format
ppo	Payment with Masterpass wallet.	AN MIN 2 - MAX 30 CHAR.



## **BACK OFFICE API**



Nexi XPay makes a back-office environment available for merchants to use in managing the transactions received. Merchants who have their own management system can benefit from typically post-sale features (operational and reporting), by using API integration.

#### IN PRACTICE

The services can be used regardless of the way in which the payment request is forwarded by the merchant.

The services displayed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and responses are formatted JSON objects.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/api-backoffice">https://github.com/NexiPayments/XPay/tree/master/api-backoffice</a>

The environment endpoints are as follows:

#### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it

### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it

The individual URIs and messages for each of the available services are described below.

**NB** Merchants can also access the back office via the web, simply by entering their credentials.



## **Deposit**

This service performs a journal processing operation. Partial amounts and multiple operations may be allowed, depending on the characteristics of the terminal.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/api-backoffice/incasso">https://github.com/NexiPayments/XPay/tree/master/api-backoffice/incasso</a>

URI

ecomm/api/bo/contabilizza

METHOD

Post

**ACCEPT** 

application/json

## **Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN MAX 3 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## **Initiation Message: optional fields**

Name	Description	Format
idContabParzialePayPal	The field is only present when depositing	
	a PayPal transaction and is required for	
	managing reversals.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione



- divisa
- importo
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH

SHA1(apiKey<val>codiceTransazione=<val>divisa=<val>importo=<val>timeStamp=<val>SecretKey>)

### **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio -> error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

## Reversal/Refund

This service carries out a cancellation or refund depending on the status of the transaction. Partial amounts and multiple transactions may be allowed, depending on the merchant's configuration.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/api-backoffice/storno-rimborso">https://github.com/NexiPayments/XPay/tree/master/api-backoffice/storno-rimborso</a>



#### URI

ecomm/api/bo/storna

#### **METHOD**

Post

### ACCEPT

application/json

## **Initiation Message: required fields**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
importo		N MAX 8 CHAR.
·	Amount to be authorised, expressed in euro cents with no separator.	
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN MAX 3 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## **Initiation Message: optional fields**

Name	Description	Format
idContabParzialePayPal	The field is only present when depositing	
	a PayPal transaction and is required for	
	managing reversals.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- divisa
- importo
- timeStamp
- secretKey

### SAMPLE STRING

MAC = HASH

SHA1(apiKey<val>codiceTransazione=<val>divisa=<val>importo=<val>timeStamp=<val>SecretKey>)



### **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### NOTES:

The type of reversal depends on the processing status of the order:

- If it has been authorised-> Online Reversal only for the total amount authorized (cancellation with card availability updated)
- If it has not yet been processed -> Accounting Reversal (cancellation of deposit request with card availability updated)
- If it has already been processed -> Refund (previously collected sum is credited back to the cardholder)

The idContabParzialePayPal field is the id for the partial processing provided by PayPal when an order is processed. This field is only mandatory if you are reversing a PayPal partial processing. In all other cases (non-PayPal orders, reversal of fully processed PayPal transactions), the field may be omitted (for merchants who have not enabled PayPal) or left blank.



## **Order Details Query**

This service returns the details of an order and all associated operations.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/api-backoffice/interrogazione-dettaglio-ordine">https://github.com/NexiPayments/XPay/tree/master/api-backoffice/interrogazione-dettaglio-ordine</a>

#### URI

ecomm/api/bo/situazioneOrdine

#### **METHOD**

**Post** 

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(apikey=<val>codiceTransazione=<val>timeStamp=<val><SecretKey>)

#### **Result Message: required fields**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.



idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
ordini	Contains one or more objects whose structure is shown in the following table.	AN

## **Orders element**

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi.	AN MIN 2 - MAX 30 CHAR.
codiceTransazione	Identifier of the transaction to be cancelled or refunded.	AN MIN 2 - MAX 30 CHAR.
importo	Transaction amount expressed in euro cents with no separator.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN 6 CHAR.
brand	Credit card network	AN
TipoPagamento	Method by which the payment was made, if the e-commerce used 3D-Secure, SSL, or MOTO, with Klarna PayNow(Sofort) Bonifico diretto	AN
tipoTransazione	Indicates the transaction type. See the <u>table here</u> for possible values.	AN MIN 2 - MAX 30 CHAR.
nazione	Credit card country	AN MIN 2 - MAX 30 CHAR.
tipoProdotto	Credit card type	AN MIN 2 - MAX 200 CHAR.
pan	Credit card number	AN MAX 19 CHAR.
parametri	Additional parameters	AN
stato	Order status	AN
dataTransazione	Transaction date	dd/mm/yyyy
dataOperazione	Operation date	dd/mm/yyyy
tipoServizio	Type of service used for the transaction.	AN
Name	Customer name	AN MIN 2 - MAX 30 CHAR.
cogName	Customer surname	AN MIN 2 - MAX 30 CHAR.
mail	Customer email	AN MAX 150 CHAR.
dettaglio	Contains an object whose structure is shown in the following table.	AN

## **Details element**



Name	Description	Format
Name	Customer name	AN MIN 2 - MAX 30 CHAR.
cogName	Customer surname	AN MIN 2 - MAX 30 CHAR.
mail	Customer email	AN MAX 150 CHAR.
importo	Transaction amount expressed in euro cents with no separator.	N MAX 8 CHAR.
divisa	978 for Euro	N 3 CHAR.
stato	Order status	AN
codiceTransazione	Identifier of the transaction to be cancelled or refunded.	AN MIN 2 - MAX 30 CHAR.
operazioni	Contains one or more objects whose structure is shown in the following table.	AN

## **Operations element**

Name	Description	Format
tipoOperazione	Operation carried out: authorisation,	
	processing, cancellation, refund.	CHAR.
importo	Transaction amount expressed in euro	N MAX 8 CHAR.
	cents with no separator.	
divisa	978 for Euro	N 3 CHAR.
stato	Order status	AN
dataOperazione	Operation date	dd/mm/yyyy
utente	User who carried out the operation.	AN
idContabParzialePayPal	The idContabParzialePayPal field is returned only if the transaction was processed using PayPal.	AN

#### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This returns an object which describes the transaction (details relating to order, payment, and any other operation - processing/reversal).



The idContabParzialePayPal field is returned only if the transaction was processed using PayPal. If the operation type is "CONTAB.", this shows the PayPal ID to transfer to the reversal API for reversing the partial processing. Alternatively, if the operation type is "STORNO", it indicates which partial processing is being referred to.

If idContabParzialePayPal = "", this indicates that the reversal relates to a Sale type payment which was not partially processed. This is only possible for "STORNO" operations. In this case, it is possible to just send the transaction code for a reversal.

#### Possible values for status:

- Autorizzato
- Negato
- Annullato
- Incassato
- rimborsato
- nonCreato
- incParziale
- rimbParziale

### **Order List**

This allows to get a list of orders that meet the chosen filters in a request.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/api-backoffice/elenco-ordini">https://github.com/NexiPayments/XPay/tree/master/api-backoffice/elenco-ordini</a>

#### URI

ecomm/api/bo/reportOrdini

#### **METHOD**

**POST** 

#### ACCEPT

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
periodo	Period to be searched.	DATE
	Possible values for channel:	AN



	All MyBank CreditCard PayPal Sofort	
stato	Order status	AN

### **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- apiKey
- codiceTransazione
- periodo
- canale
- timeStamp
- secretKey

### **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>codiceTransazione=<val>periodo=<val>canale=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
errore	Only present when the result is ko. It is an object containing: codice -> error code, see table messaggio > error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
report	Orders object whose structure is shown in the following table.	AN

## Report element

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.



importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: 978 (Euro).	AN MAX 3 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the table here.	AN MAX 100 CHAR.
tipoPagamento	Method by which the payment was made, if the e-commerce used 3D-Secure, SSL, or MOTO, with Klarna Pay Now (Sofort): bonifico diretto	AN
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
nazione	Credit card country	AN ISO 3166-1 alpha-3
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
pan	Masked credit card number with only the first 6 and the last 4 digits showing.	AN MAX 19 CHAR.
parametri	Additional parameters	AN
stato	Order status	AN
dataTransazione	Transaction date	DATE dd/mm/yyyy
dataOperazione	Operation date	DATE dd/mm/yyyy
tipoServizio	Type of service used for the transaction.	AN
Name	Name of the person who made the payment.	AN MAX 150 CHAR.
cogName	Surname of the person who made the payment.	AN MAX 150 CHAR.
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.

### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey



#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This allows to query XPay in order to obtain a list of transactions, by applying different filter conditions. Amongst other things, this makes available those details needed to invoke the orderDetails API.

#### Possible values for status:

- Autorizzato
- Negato
- Annullato
- Incassato
- rimborsato
- nonCreato
- incParziale
- rimbParziale

#### Possible values per channel:

- All
- MyBank
- CartaCredito
- PayPal
- Sofort



## PayMail Link Request

This service allows to obtain a payment link which can be sent to customers for example by email, enabling them to be redirected to the XPay payment pages to complete their transaction securely.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/api-backoffice/richiesta-link-paymail">https://github.com/NexiPayments/XPay/tree/master/api-backoffice/richiesta-link-paymail</a>

U	RI

ecomm/api/bo/richiestaPayMail

#### **METHOD**

**POST** 

#### ACCEPT

application/json

## **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents.	N MAX 8 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
timeout	Number of hours the generated payment link will remain valid.	N MAX 4 CHAR.
url	Merchant url where the Virtual POS will direct the user upon completion of the transaction, transferring, using the GET method, the response parameters which show the transaction result.	

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code.  Transaction signature field. For calculation	AN 40 CHAR.



	details, see the end of this chapter: MAC Calculation.	
errore	Only present when the result is ko. It is an object containing: codice -> error code, the possible values are shown in the <u>table here</u> messaggio -> error details	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR
payMailUrl	Contains the link to be used to make the payment	payMailUrl

### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This calculates and returns a URL for invoking a payment on XPay check-out pages.

If you do not wish to append additional parameters, you can:

- Leave the field out of the JSON
- Leave the contents of the JOSN object empty

E.g. " parametriAggiuntivi ": {}

The "timeout" field is expressed in hours.



## **ADDITIONAL SERVICES**

The following RESTful APIs are available for merchants to manage the additional services available on XPay, in particular:

- a) Creation of a Recurring Contract
- b) Cancellation of Recurring/OneClickPay contracts
- c) Cancellation of Tax Code/PAN pairing
- d) Contract read-out
- e) Blacklist management

The services displayed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and responses are formatted JSON objects.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi">https://github.com/NexiPayments/XPay/tree/master/altri-servizi</a>

The environment endpoints are as follows:

#### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it

#### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it

The individual URIs and messages for each of the available services are described below.



## Loading Contracts from POS Transactions

This service allows contracts to be loaded for recurring or Card on File payments, beginning with a card payment transaction made using a POS.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/caricamento-contratto-da-transazione-pos">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/caricamento-contratto-da-transazione-pos</a>

U	RI
$\mathbf{r}$	-

ecomm/api/contratti/creazioneDaPosFisico

#### METHOD

**POST** 

#### **ACCEPT**

application/json

### **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
contratto	Contract object whose structure is shown in the following table.	AN

## **Contract element: required fields**

Name	Description	Format
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
idPOSFisico	Identifier of the terminal where the transaction was made.	N MAX 8 CHAR.
codiceAutorizzazione	Confirmation code issued by the card issuer.	AN MAX 6 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents, i.e. 5000 represents € 50.00.	N MAX 8 CHAR.
dataTransazione	Transaction date. If you don't have second, enter "00"	DATA dd/MM/yyyy HH:mm:ss

**Contract element: optional fields** 



Name	Description	Format
stan	Optional code received from the physical POS.	AN MAX 6 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. For MyBank: AN MAX 140 CHAR.
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- idPOSFisico
- codiceAutorizzazione
- stan
- importo
- descrizione
- mail
- timeStamp
- secretKey

#### **SAMPLE STRING**

$$\label{eq:mac} \begin{split} \text{MAC} &= \text{HASH SHA1} (\text{apiKey} = < \text{val} > \text{numeroContratto} = < \text{val} > \text{idPOSFisico} = < \text{val} > \text{codiceAutorizzazione} = < \text{val} > \text{stan} = < \text{val} > \text{descrizione} = < \text{val} > \text{descrizione}$$

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN
mac	Message Authentication Code.  Transaction signature field. For calculation	AN 40 CHAR.



	details, see the end of this chapter: MA Calculation.	С
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

## **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)



## **Contract Management - Cancellation**

This service allows merchants who have enabled recurring, OneClickPay/Card on File payment management to delete the contract codes that are linked to user's cards.

Github XPay sample code: https://github.com/NexiPayments/XPay/tree/master/altriservizi/gestione-contratti/cancellazione-contratto

#### URI

ecomm/api/contratti/cancellaContratto

#### METHOD

**POST** 

#### **ACCEPT**

application/json

### **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(apikey=<val>numeroContratto=<val>timeStamp=<val><SecretKey>)

#### **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.



mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp errore	Timestamp in millisecond format. Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	N 13 CHAR. AN

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)



## Contract Management - Disabling

This service allows merchants who have enabled recurring, OneClickPay/Card on File payment management to disable the contracts linked to user's cards. A contract in disabled status can be restored - it only suspends the ability to make transactions.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/disabilita-contratto">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/disabilita-contratto</a>

	п	_
ш	ш	
		_

ecomm/api/contratti/disabilitaContratto

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json

### **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(apiKey=<val>numeroContratto=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.



idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

## SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)



## Contract Management - Enabling

This service allows merchants who have enabled recurring, OneClickPay/Card on File payment management to enable contracts which were previously disabled.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/abilita-contratto">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/abilita-contratto</a>

ecomm/api/contratti/abilitaContratto

#### METHOD

**POST** 

#### **ACCEPT**

application/json

#### **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(apiKey=<val>numeroContratto=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.



idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

## SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)



## Contract Management - Query

This service allows contracts registered for Recurring, OneClickPay/Card on File services to be queried by using filter criteria.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/elenco-contratti">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/elenco-contratti</a>

#### URI

ecomm/api/contratti/queryContratti

#### METHOD

**POST** 

#### ACCEPT

application/json

## **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
codiceFiscale	User Tax Code. Optional.	AN MAX 16 CHAR.
dataRegistrazioneDa	Search by date from	AN dd/mm/yyyy hh:mm:ss
dataRegistrazioneA	Search by date to	AN dd/mm/yyyy hh:mm:ss



For the initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceFiscale
- dataRegistrazioneDa
- dataRegistrazioenA
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH

SHA1(apiKey=<val>numeroContratto=<val>codiceFiscale=<val>dataRegistrazioneDa=<val>dataRegistrazioneA=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN
contratti	Contracts object whose structure is shown in the following table.	AN



#### **Contracts element**

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### NOTES:

Searches are made using the parameters " numeroContratto ", " codiceFiscale ", " dataRegistrazioneDa ", and " dataRegistrazioneA ". At least one of these parameters needs to be populated in order to run a search. In the case of the nContract, the wildcard % can be used to represent one or more characters.



## Contract Management - Contract Details

This service allows to run queries in a timely fashion for contracts registered for Recurring, OneClickPay/Card on File services, and to obtain detailed information about them.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/dettagli-contratto">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-contratti/dettagli-contratto</a>

ecomm/api/contratti/dettagliContratto

#### METHOD

**POST** 

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
codiceFiscale	User Tax Code. Optional.	AN MAX 16 CHAR.
dataRegistrazioneDa	Search by date from	AN dd/mm/yyyy hh:mm:ss
dataRegistrazioneA	Search by date to	AN dd/mm/yyyy hh:mm:ss



For the initiation message, the string to sign must contain the following fields:

- apiKey
- numeroContratto
- codiceFiscale
- dataRegistrazioneDa
- dataRegistrazioenA
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH

SHA1(apiKey=<val>numeroContratto=<val>codiceFiscale=<val>dataRegistrazioneDa=<val>dataRegistrazioneA=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN
contratti	Contracts object whose structure is as defined in the following table.	AN



#### **Contracts element**

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi.	AN MAX 30 CHAR.
numeroContratto	Code allowing Nexi to save a paired link between the user and the payment card used.	AN MIN 2 - MAX 30 CHAR.
codiceGruppo	Code assigned by Nexi during activation.	AN MIN 2 - MAX 30 CHAR.
dataAttivazione	Contract activation date	AN dd/mm/yyyy hh:mm:ss
codiceTransazione	Transaction identifier assigned by the merchant.	AN MIN 2 - MAX 30 CHAR.
codiceFiscale	User Tax Code. Optional.	AN MAX 16 CHAR.
hashPan	hashPan to be verified for association.	AN
tipoCarta	Type of card used	AN
statoPrimoPag	First payment status	AN

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES**:

Searches are made using the parameters "numeroContratto", "codiceFiscale", "dataRegistrazioneDa", and "dataRegistrazioneA". At least one of these parameters needs to be populated in order to run a search. In the case of the nContract, the wildcard % can be used to represent one or more characters.



## Control Management - Adding to Blacklist

This service adds Tax Codes or contract codes to the blacklist.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/inserimento-in-blacklist">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/inserimento-in-blacklist</a>

#### URI

ecomm/api/blacklist/aggiungi

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json

## **Initiation Message: required fields**

Name	Description	Format
apiKey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipo	Type of search - either by Tax Code or contract code.	AN MIN 2 - MAX 30 CHAR.
valore	Depending on the type of search, enter either the Tax Code or the contract code.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.

## **Initiation Message: optional fields**

Name	Description	Format
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. For MyBank: AN MAX 140 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- tipo



- valore
- descrizione
- timeStamp
- secretKey

# SAMPLE STRING MAC = HASH

SHA1(apiKey=<valore>tipo=<val>valore=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN



For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

## Control Management - Cancellation from Blacklist

This service removes a previously entered Tax Code or contract code from the blacklist.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/cancellazione-da-blacklist">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/cancellazione-da-blacklist</a>

#### URI

ecomm/api/blacklist/rimuovi

#### **METHOD**

POST

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipo	Search by Tax Code or hashPan	AN 16 CHAR.
valore	Value	
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code.	
	Transaction signature field. For calculation	
	details, see the end of this chapter: MAC	
	Calculation.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:



- apiKey
- tipo
- valore
- timeStamp
- secretKey

MAC=HASH SHA1

(apiKey=<val>tipo=<val>valore=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	



For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC=HASH SHA1 (esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

## Control Management - Checking Existence in Blacklist

This service checks the blacklist to see if a given Tax Code or contract code is present in the blacklist. If it exists, the details are returned.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/controlla-se-in-blacklist">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/controlla-se-in-blacklist</a>

#### URI

ecomm/api/blacklist/controlla

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipo	Search by Tax Code or hashPan.	AN 16 CHAR.
valore	Value	
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- tipo
- valore



- timeStamp
- secretKey

MAC=HASH SHA1

(apiKey=<val>tipo=<val>valore=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	
blacklist	Blacklist object whose structure is as defined in the following table.	AN

## **Blacklist element**

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipoDato		
valoreListato		
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. For MyBank: AN MAX 140 CHAR.
dataCreazione	Contract creation date	DATE

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:



- esito
- idOperazione
- timeStamp
- secretKey

MAC=HASH SHA1 (esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

## Control Management - Blacklists

This service allows any blacklist associated with the terminal to be queried, and it returns a list of existing contract codes/Tax Codes.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/elenco-blacklist">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/elenco-blacklist</a>

#### URI

ecomm/api/blacklist/reportBlackList

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipo	Search by Tax Code or hashPan	AN 16 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code.	
	Transaction signature field. For calculation	
	details, see the end of this chapter: MAC	
	Calculation.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- tipo
- timeStamp
- secretKey



MAC=HASH SHA1 (apiKey=<val>tipo=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
blacklist	Blacklist object whose structure is shown in the following table.	AN

## **Blacklist element**

Name	Description	Format
numeroMerchant	Terminal assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipoDato		
valoreListato		
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. For MyBank: AN MAX 140 CHAR.
dataCreazione	Contract creation date	AN

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp



secretKey

#### SAMPLE STRING

MAC=HASH SHA1 (esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

## Control Management - Verification of Tax Code/PAN Pairing

This service checks a particular Tax Code against a card's PAN hash to confirm the association status.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/verifica-abbinamento-cf-pan">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/verifica-abbinamento-cf-pan</a>

#### URI

ecomm/api/cfpan/controllaEsistenza

#### METHOD

Post

#### **ACCEPT**

application/json

## **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceFiscale	Tax Code to be disassociated from the PAN.	AN 16 CHAR.
hashPan	hashPan to be disassociated.	AN
codiceGruppo	Group assigned by Nexi.	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceFiscale
- hashPan
- timeStamp
- secretKey



MAC=HASH SHA1

(apiKey=<val>codiceFiscale=<val>hashPan=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	
cfpan	cfpan object whose structure is as defined in the following table.	AN

## **Tcpan element**

Name	Description	Format
merchant	merchant	AN
cf	Tax Code	N
scadenza	Card expiry date	DATE
stato	Payment status	AN
dataRegistrazione	Registration date	DATE
hashPan	hashPan	AN

#### **MAC Calculation**

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC=HASH SHA1 (esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)



## Control Management - Removing Tax Code/PAN Pairing

This service removes any association between a Tax Code and card PAN by running the card's hash.

It allows a CF/PAN association to be removed.

If the group field is not specified ("group": ""), the API will provide data related to the alias only. Alternatively, if the group field is specified, then the API will return all data linked to the entire group.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/eliminazione-cf-pan">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/eliminazione-cf-pan</a>

#### URI

ecomm/api/cfpan/rimuovi

#### **METHOD**

Post

#### **ACCEPT**

application/json

#### **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
codiceFiscale	Tax Code to be disassociated from the PAN.	AN 16 CHAR.
hashPan	hashPan to be disassociated.	AN
codiceGruppo	Group assigned by Nexi.	AN
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	

#### **MAC Calculation**

For the initiation message, the string to sign must contain the following fields:

- apiKey
- codiceFiscale
- hashPan
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC=HASH SHA1

(apiKey=<val>codiceFiscale=<val>hashPan=<val>timeStamp=<val><SecretKey>)



## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.



For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC=HASH SHA1 (esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### NOTES:

It allows a CF/PAN association to be removed.

If the group field is not specified ("gruppo": ""), the API will provide data related to the alias only. Alternatively, if the group field is specified, then the API will return all data linked to the entire group.

## Control Management - List of Associated Tax Codes/PANs

This service returns any associated pairings between Tax Code and hash of the card's PAN existing for a merchant profile or on a profile group.

This allows to query the collection of CF/PAN pairings which are configured for the terminal.

If the group field is not specified ("gruppo": ""), the API will provide data related to the alias only. Alternatively, if the group field is specified, then the API will return all data linked to the entire group.

Github XPay sample code: <a href="https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/elenco-associazioni-cf-pan">https://github.com/NexiPayments/XPay/tree/master/altri-servizi/gestione-controlli/elenco-associazioni-cf-pan</a>

#### URI

ecomm/api/cfpan/reportAssociazioni

#### **METHOD**

**POST** 

#### **ACCEPT**

application/json

#### **Initiation Message**

Name	Description	Format
apikey	Alias assigned to the merchant by Nexi.	AN MAX 30 CHAR.
tipo	Search by Tax Code or hashPan	AN MIN 2 - MAX 30 CHAR.
valore	Tax code or hashPan value	AN
codiceGruppo	Group assigned by Nexi.	AN



timeStamp	Timestamp in millisecond format.	N 13 CHAR.
mac	Message Authentication Code.	AN 40 CHAR.
	Transaction signature field. For calculation	
	details, see the end of this chapter: MAC	
	Calculation.	

For the initiation message, the string to sign must contain the following fields:

- apiKey
- tipo
- valore
- gruppo
- timeStamp
- secretKey

#### **SAMPLE STRING**

MAC=HASH SHA1

(apiKey=<val>tipo=<val>valore=<val>gruppo=<val>timeStamp=<val><SecretKey>)

## **Result Message**

Name	Description	Format
esito	Operation result	AN MAX 7 CHAR.
idOperazione	Transaction identifier assigned by Nexi.	AN MIN 2 - MAX 30 CHAR.
timeStamp	Timestamp in millisecond format.	N 13 CHAR.
errore	Only present when the result is ko. It is an object containing: code -> error code, the possible values are shown in the "RESTful API Error Codes" table in the TABLES AND CODINGS section message -> error details	AN
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
cfpan	Tcpan object whose structure is as defined in the following table.	AN

## **CFpan element**

Name	Description	Format
merchant	merchant	AN
cf	Tax Code	AN



scadenza	Card expiry date	DATE
stato	Payment status	AN
dataRegistrazione	Registration date	AN
hashPan	hashPan	AN

For the result message, the string to sign must contain the following fields:

- esito
- idOperazione
- timeStamp
- secretKey

#### SAMPLE STRING

MAC=HASH SHA1 (esito=<val>idOperazione=<val>timeStamp=<val><SecretKey>)

#### **NOTES:**

This allows to query the collection of CF/PAN pairings which are configured for the terminal.

If the group field is not specified ("gruppo": ""), the API will provide data related to the alias only. Alternatively, if the group field is specified, then the API will return all data linked to the entire group.



# TABLES AND CODING

## Restful API Error Codes Table

Code	Description	
1	The value for one of the input JSON parameters is incorrect	
2	Requested information cannot be found	
3	Incorrect MAC	
4	MAC not present in the JSON request	
5	More than 5 minutes have passed since the timeStamp was generated	
7	apiKey does not contain a valid alias	
8	Invalid contract	
9	Transaction already present	
12	Invalid group	
13	Transaction not found	
14	The card has expired	
15	Card brand not allowed	
16	Invalid value for current status	
17	Transaction amount too high	
19	Payment rejected	
20	3DS authentication canceled	
21	3DS authentication failed	
50	Unable to calculate the MAC. Either the alias is invalid, or the incoming JSON does not comply with requirements	
97	Generic error	
98	Method not yet implemented	
99	Operation not allowed. The merchant does not meet requirements for performing the requested operation	
100	Internal error	

## Coding: languageId

LanguageId field coding for displaying check-out pages in one of the various languages available:

languageld	Description
ITA	Italian
ENG	English
SPA	Spanish
FRA	French
GER	German
JPN	Japanese
CHI	Chinese
ARA	Arabic
RUS	Russian
POR	Potuguese



# Coding of DCCcurrency codes for DCC

Name	A last la constant de	December
Numeric currency	Alphanumeric currency	Description
code	code	FUDO
978	EUR	EURO
036	AUD	Australian dollar
124	CAD	Canadian dollar
344	HKD	Hong Kong dollar
392	JPY	Japanese yen
756	CHF	Swiss franc
826	GBP	Pound sterling
840	USD	US dollar
986	BRL	Brazilian real (1994-)
702	SGD	Singapore dollar
784	AED	United Arab Emirates dirham
901	TWD	New Taiwan dollar
682	SAR	Saudi riyal
360	IDR	Indonesian rupiah
764	THB	Thai baht
414	KWD	Kuwait dinar
458	MYR	Malaysian ringgit
634	QAR	Qatari riyal
484	MXN	Mexican peso
710	ZAR	South Africa rand
410	KRW	South Korean won
985	PLN	Polish zloty
356	INR	Indian rupee
608	PHP	Philippine peso
203	CZK	Czechoslovak koruna
554	NZD	New Zealand dollar
152	CLP	Chilean peso
946	RON	Romanian leu
348	HUF	Hungarian forint
170	COP	Colombian peso
048	BHD	Bahraini dinar
818	EGP	Egyptian pound
191	HRK	Croatian kuna
428	LVL	Latvian lats
862	VEF	Venezuelan bolívar
400	JOD	Jordanian dinar
032	ARS	Argentine peso (1991-)
446	MOP	Macanese pataca
208	DKK	Danish krone
200	DIM	שמוואון אוטווכ

# **Transaction Type Coding**

transactionType	Description
NO_3DSECURE (*NO_3DSECURE _MASTERPASS)	The merchant is not enabled to use the Verified by Visa and Secure Code security protocols, or the protocols could not be used.



VBV_FULL (*VBV_FULL _MASTERPASS)	The merchant is enabled to use the Verified by Visa protocol, and the cardholder is registered for the service and has been properly authenticated.
SC_FULL (*SC_FULL _MASTERPASS)	The merchant is enabled to use the Secure Code protocol, and the cardholder is registered for the service and has been properly authenticated.
VBV_MERCHANT (*VBV_MERCHANT _MASTERPASS)	The merchant is enabled to use the Verified by Visa protocol, but the cardholder or credit card issuer do not use this service.
SC_MERCHANT (*SC_MERCHANT _MASTERPASS)	The merchant is enabled to use the Secure Code protocol, but the cardholder or credit card issuer do not use this service.
M.O.T.O.	This value is used when it is not an e-commerce transaction (which involves buyers making purchases by using their own browsers). Instead, it is a Mail Order Telephone Order transaction, where credit card details are provided from the buyer to the merchant.
AMEX_FULL	The merchant is enabled to use the AMEX SafeKey protocol, and the cardholder is registered for the service and has been properly authenticated.
AMEX_MERCHANT	The merchant is enabled to use the AMEX SafeKey protocol, but the cardholder is not registered for the service.
EXPRESSCO	The transaction was made using a PayPal account.
Paga Ora *Transaction made using Masternass N	The transaction has been processed by Klarna

<sup>\*</sup>Transaction made using Masterpass Wallet.



# Coding: message and resultDetails

Message/resultDetails	Description
Message OK	Transaction authorised
Controllo CF	The card's PAN is already associated with
	another Tax Code.
Controllo PAN	The Tax Code indicated is already associated
Controlle 1 Aix	with the maximum number of cards (number
	agreed with Nexi).
Controllo BLACKLIST	Transaction blocked due to application of
Controlle DEMOREIO	blacklist rules as defined in the merchant profile.
Controllo CF/PAN	Error found when checking the Tax Code and
Controlle Of /1 /Alt	PAN combination, for example the check exists
	and the merchant has not provided the Tax
	Code.
Auth. Denied	Transaction not authorized
Impossibile eseguire la Post di	Transaction blocked if the merchant profile
Notifica	expects a transaction to be cancelled when a
	server-to-server notification sent to the urlpost
	fails.
3D Secure annullato da utente	3D-Secure authentication was not completed
	correctly, or was cancelled by the user.
Carta non autorizzata causa	Transaction blocked if the BIN table is enabled
applicazione regole BIN table	on the merchant profile and the check control
	fails.
Problema 3DSecure	Unable to complete the transaction due to
	problems with 3D-Secure, for example the user
	did not return from the authentication stage or
	there were problems activating the merchant
	profile for the service.
Expired card	Expired card or incorrect expiry date
Invalid merchant	Acquirer Merchant Code not correctly enabled
Tuesda a tiene wat was well and	or revoked.
Transaction not permitted	Transaction not allowed
Not sufficient funds	Transaction denied due to a lack of funds on the
Technical problem	card for the amount requested.  Technical problem with the authorisation
recinical problem	systems.
Host not found	Issuer authorisation system not available.
Transazione chiusa per time-out	The transaction ended after the set timeout
ranouzione emueu per ume eur	period for the merchant's profile.
Controllo PAN/CONTRATTO	Transaction blocked due to application of the
	rule for checking if the PAN is present on
	another n contract as defined in the merchant
	profile.
Numero di tentativi di retry	The maximum number of ko attempts for the
esaurito	same transCode has been reached (the number
	is defined at the merchant profile level as being
	between 1 and 3).



# Card Type Coding

brand/cardType/selectedcard
VISA
MasterCard
Amex
Diners
Jcb
Maestro
MYBANK (only for brand)
SCT (only for selectedcard, allows payment by MyBank transfer only)
SDD (only for selectedcard)
CC (only for selectedcard, allows payment by credit cards only)
Masterpass (only for selectedcard, allows payment by Masterpass wallet only)
BANCOMAT
SOFORT (for brand and selectedcard)
PAYPAL (only for brand)
AMAZONPAY (for brand and selectedcard)
GOOGLEPAY (for brand and selectedcard)

# Coding: resultCode and resultDescription

resultCode	resultDescription
0	Authorization granted
20	Order not present
101	incorrect or missing parameters
102	Incorrect PAN
103	Authorisation denied by card issuer
104	Generic error
108	Order already registered
109	Technical error
110	Contract number already present
111	Incorrect Mac
112	Transaction denied due to VBV/SC authentication failure or authentication was not possible
113	Contract number not present in the archive
114	Merchant not enabled for multiple group payments
115	Group Code not present
116	3D-Secure cancelled by user
117	Card not authorized due to application of BIN Table rules
118	Check BLACKLIST (or check PAN, or check TC, or check TC/PAN combination) -> result only occurs when filters are being used
119	Merchant not enabled to operate in this mode
120	Network not accepted. The request message indicated payment was being made with one network, but the card's PAN is associated with a different network.
121	Transaction expired due to timeout
122	MAXimum number of retry attempts using the same transCode reached
400	Auth. Denied



401	Expired card
402	Restricted card
403	Invalid merchant
404	Transaction not permitted
405	Not sufficient funds
406	Technical problem
407	Host not found

# ECI, XID and CAVV Coding

VISA	Status	Eci	Cavv	Xid	
VERes	N	30	NO	NO	
VERes	U	20	NO	NO	
PARes	Υ	11	YES	YES	
PARes	Α	31	YES	YES	
PARes	N	00	NO	NO	
PARes	U	20	NO	NO	

Status	Eci	Cavv	Xid
N	30	NO	NO
U	20	NO	NO
Υ	11	YES	YES
Α	30	YES	YES
N	00	NO	NO
U	20	NO	NO
	U Y A	N 30 U 20 Y 11 A 30 N 00	N         30         NO           U         20         NO           Y         11         YES           A         30         YES           N         00         NO



SSL Transactions	Eci	Cavv	Xid
	20	NO	NO

## **VERes/PARes result description:**

3D Secure Mess.	VERes	Transaction
	N	Card not enrolled
	U	Unable to supply status / no
		response

3D Secure Mess.	VERes	Transaction
	Υ	CH passed authentication
	Α	Attempt
	N	CH Failed authentication
	U	Unable to authenticate CH/ no
		response
	N	Card not enrolled
	U	Unable to supply status / no
		response



# HTTP/XML API Server to Server Payments Payment

Merchants collect the card details on their systems, and carry out payment transactions with or without 3D-Secure, depending on the type of configuration of the merchant's XPay profile. The transaction is completed in synchronous mode for transactions without 3D Secure, or in asynchronous mode for transactions with 3D-Secure.

This service requires the merchant to achieve PCI DSS certification.

### 1. Requesting payment towards Nexi payment endpoint

#### IN PRACTICE

A http request must be set up with the parameters/values shown below. Any corresponding fields for additional functionalities may be added (e.g. Recurring Payments, OneClick Payments), and it must be directed towards this URL:

#### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it/ecomm/ecomm/ServletS2S

#### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it/ecomm/ecomm/ ServletS2S

## 2. Managing 3D-Secure authentication

#### IN PRACTICE

If the credit card is enabled for 3D-Secure authentication, the API responds with an XML containing the html code to be printed on the user's browser.



#### 3. Managing the response upon completion of the transaction

#### IN PRACTICE

The user's return to your site must be managed, and the payment result recorded. If the transaction does not require 3D-Secure, you will receive an XML in response on the same connection as used for the request (synchronous response). If the transaction requires 3D-Secure, after authentication the user returns to your site with the payment result at the "url" address indicated in the request message. XPay also notifies the result directly to your server at the "urlpost" address indicated in the request message.

NB Below you will find characteristics for the fields to be created (name + description + format) and corresponding sample codes. You will also find information regarding the correct settings for the MAC field.

#### Codebase

#### **Payment Initiation Message: required fields**

This table indicates the mandatory fields that must be included in the request message, and their corresponding characteristics.

Name	Description	Format
alias	Merchant profile identification code (fixed value communicated by Nexi during the activation phase).	AN MAX 30 CHAR.
importo	Amount to be authorised, expressed in euro cents with no separator. The first 2 numbers to the right represent the euro cents, i.e. 5000 represents € 50.00.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed, with the only acceptable value being: EUR (Euro).	AN 3 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.	AN MIN 2 - MAX 30 CHAR.
url	Return url, directing back to the site upon completion of the transaction and transferring, using the GET method, the response parameters which show the transaction result.	AN MAX 500 CHAR.
pan	Credit card number	AN MAX 19 CHAR.



scadenza	Credit card expiry date	yyyymm
cv2	CVV2/CVC2, three-digit code found on the back of VISA, MASTERCARD, MAESTRO, DINERS, and JCB branded credit cards. 4DBC, four-digit code found on the front of AMERICAN EXPRESS cards. Whether it is mandatory or not depends on the rules in application for each individual acquirer.	AN MAX 4 CHAR.
Mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
urlpost	Url to which XPay sends the result of the transaction, transferring, in server-to-server mode using the POST method, the response parameters which show the transaction result.	AN MAX 500 CHAR.
Tipo_richiesta	PA - value to be set for payments	AN 2 CHAR.

## **Payment Initiation Message: optional fields**

This table indicates optional fields which can be used for data-entry at the discretion of the merchant.

Name	Description	Format
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. for MyBank: AN MAX 140 CHAR.
Parametri aggiuntivi	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values. The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url,	AN MAX 4000 CHAR.



	ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.	
OPTION_CF	Field which the merchant uses to send the user's Tax Code to XPay. This is only required if checks validating the Tax Code against associated PAN number are active (optional security control activated on request). This data will also be included in the report queryable by the back office.	AN 16 CHAR.
selectedcard	If present, the payment page that is shown only allows the user to make payment using the network or payment method indicated. This feature is useful for merchants who wish to enter the choice of payment method on their own check-out page. The possible values are shown in the table here.	AN MAX 25 CHAR.
TCONTAB	This field identifies the merchant's chosen deposit method for each transaction. If set to I (immediate), when the transaction is authorised the payment is deposited without any further intervention on the part of the merchant and without considering the default profile set for the terminal. If set to D (deferred) or if the field is empty, when the transaction is authorised it will be handled as defined by the terminal profile.	AN 20 CHAR.
infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.	AN MAX 35 CHAR.
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.	AN MAX 20 CHAR.

#### Remember

- The values of the "url", "urlpost" and "url\_back" fields must start with "http://" or https://
- The address indicated in "urlpost" must have a public certificate and must not be protected by authentication
- Standard ports 80 or 443 must be used
- For proper call management, remember to comply with RFC 2396 and RFC 3986 standards



For the transaction initiation message, the string to sign must contain the following fields:

- codTrans
- divisa
- importo
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>divisa=<val>importo=<val><SecretKey>)

#### Response message for 3D-Secure authentication

This XML message is returned by XPay in response to a transaction initiation message if the credit card authentication stage is supposed to occur prior to payment, in accordance with 3D-Secure protocols. The message is forwarded using the same connection that was used for receiving the transaction initiation message. The parameters in the message are described in the following table.

Name	Description	Format
TERMINAL_ID	Store identification code transferred in the payment initiation message (alias).	AN MAX 30 CHAR.
TRANSACTION_ID	Payment identification code transferred in the payment initiation message in the transCode field.	AN MIN 2 - MAX 30 CHAR.
HTML_CODE	HTML code to be "printed" on the user's browser for redirection to the 3D-Secure authentication page.	
MAC	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

**NB:** Parsing of XML responses should not be validating: thanks to the evolution of the system, additional elements will be able to be added to the messages in future. Applications must ignore unknown elements without causing malfunctions.

#### Example of returned XML:

```
<?xml version="1.0" encoding="ISO-8859-15"?>
<VPOSRES>
<TERMINAL_ID>7182815</TERMINAL_ID>
<AUTHRES>
<TRANSACTION_ID>ID00000000025486A</TRANSACTION_ID>
<HTML_CODE>
<![CDATA]</pre>
```



```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
<html>
<head>
<title>MDpay default response template for web</title>
</head>
<body bgcolor="#02014E" OnLoad="OnLoadEvent();" >
<form name="downloadForm"
action="https://acsNexi.it:443/pareg/3c39e31733373131633430313331313139363030653
33430/3ds/veregauthid=31376271324E6B684F325544753350757664706C56644F513D3
D"
method="POST">
<input type="hidden"
name="PaReq"
value="eJxVUm1PwjAQ/iuE79Lry9qNHE3QYVxUQtCp38zcGlgiY3SDwL+3HUO06Yd77q"
XPPXfF17U1Jn4x+d4ajc+mabKVGZTFZCiUIMBhgHExXZqdxoOxTbmtNB3BiCG5QFdk83
VWtRqzfHebzLWleACAple4MTaJNfQnUAGTCm4EBxUC5UjOcayyjdGKhiykAZlOYb7dV6
09aR669y4A9/Zbr9u2HhOCxAMk1yYWe281rvhYFvgjivm8uF+9J7Onr+Uhjsu0rN/SNnpMJ
0h8BhZZazQD2t0BDcagxsIJ7PyYbTyrngXLgRPuVZ0dWHue6RIQH/jrQDdPa6r8pCMVus
4vCM2x3lbGZTiCXxsL0+Q6ieH3sECEcvpJOVMgQyFZxlXryKchuSq8e/BDz1s3PsalDKW
KJAUKgkkplN9AF/OspRscDUB2tB4g8dWkXy7pV++sf1/iB2NMqeE=">
<input type="hidden"
name="TermUrl"
value="https://ecommerce.nexi.it:443/mdpaympi/MerchantServer?msgid=4766030">
<input type="hidden"
name="MD"
value="D6A7882ACB6D8D32645DA85B381FD3AD.ecdvas">
<!-- To support javascript unaware/disabled browsers -->
<noscript>
<center>Please click the submit button below.<br>
<input type="submit" name="submit" value="Submit"></center>
</noscript>
</form>
<SCRIPT LANGUAGE="Javascript" >
<!-- about:blank -->
<!--
function OnLoadEvent() {
document.downloadForm.submit();
}
//-->
</SCRIPT>
</body>
</html>
]]>
</HTML CODE>
</AUTHRES>
<MAC>e1c2597cb5fe1f066e0008469f0b70659de6be85</MAC>
```



#### </VPOSRES>

**NB**: the elements in italics do not form part of the html to be returned to the cardholder's browser. They indicate to the xml parser that the contents of the tag can be ignored since they contain characters specific to the xml protocol.

#### **MAC Calculation:**

For the AUTHRES message, the string to sign must contain tags and corresponding values for the following fields:

- TERMINAL ID
- TRANSACTION ID

The MAC will be calculated as follows:

- HTML CODE
- SecretKey

```
mac= HASH
SHA(<TERMINAL ID>value</TERMINAL ID><TRANSACTION ID>value</TRANSACTI
ON ID><HTML CODE>value</HTML CODE>secret string)
Below is an example of the MAC calculation for an AUTHRES message:
mac= HASH SHA('<TERMINAL ID>7182815</TERMINAL ID>
<TRANSACTION ID>ID000000000025469A</TRANSACTION ID>
<HTML CODE>
<![CDATA[
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
<html>
<head>
<title>MDpay default response template for web</title>
<body bgcolor="#02014E" OnLoad="OnLoadEvent();" >
<form name="downloadForm"
action="https://acsNexi.it:443/pareq/3c63af6a333731316334303136333131333033306137
3130/3ds/veregauthid=33377337556F4D48656B7659417264576D436547387835513D3D
method="POST">
<input type="hidden"
name="PaReg"
value="eJxVUttOAjEQ/RXCq5Hetu2WDE0QTOBBqqiJ+ml23cZdlQW6RcGvt10W1KYPc+
bSOXOmsCycteMHa/bOarizdZ292k6ZD7qJFAlz1tUwHy7sTsOndXW5qTTp4R4FdlahyJki
```

q7yGzOxupjOdKMYxBtRCWFs3HWvcHi45FRJfJwzLFBMG6BSHKltbLUIKU8IBNQjMZl95d9QsDe+dAezdhy683/YRAhQBoF8S83206lB8KHO9eptMlth+PS9oYRS5vyoen/xMjPz3+wBQzIA881ZTTJrblaLPcT8JtBo/ZOvYVd+uFp0weJzq5IBt7DM8ARIDfx0Q9HS2MketZBqYn



```
xHYw3ZT2ZARFLzYkNva6OkYXw7liVDDF8KoxDIRCWNYBUYxDdDvhKNJFN34IB9lQiilp
CRBUyK4Ys0GmljsWgbhwny8aRsBoFiN2uWidvXB+vclfgA8Gam7">
<input type="hidden"
name="TermUrl"
value="https://ecommerce.nexi.it:443/mdpaympi/MerchantServer?msgid=4766033">
<input type="hidden"
name="MD"
value="4E7311C0EEF2F0C861D81963B419C637.ecdvas">
<!-- To support javascript unaware/disabled browsers -->
<noscript>
<center>Please click the submit button below.<br>
<input type="submit" name="submit" value="Submit"></center>
</noscript>
</form>
<SCRIPT LANGUAGE="Javascript" >
<!-- about:blank -->
<!--
function OnLoadEvent() {
document.downloadForm.submit();
}
//-->
</SCRIPT>
</body>
</html>
11>
</HTML CODE>macCalculationExample');
```

# Payment Result Message: required fields

"adb669b9f5a703bd088525385a0c6d6ce77e9d6c"

For a transaction without 3D-Secure, the payment result will be sent in direct response to the request message. For a transaction with 3D-Secure, the result will be received when the user is returned to the address indicated in the "url" field, along with a notification from our server to the address indicated in the "urlpost" field.

The XML containing the payment result consists of two sections:

- StoreRequest
- StoreResponse

The value obtained will be:

The transaction initiation message fields are replicated in StoreRequest, with the exception of the "pan" field (which is only populated with the last four digits) and the cv2 field (which is replaced with the character "\*"):

Name Description Format



alias	Store identification code transferred in the payment initiation message.	AN MAX 30 CHAR.
importo	Transaction amount retrieved from the payment initiation message.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed (EUR = Euro).	AN 3 CHAR.
codTrans	Code associated with the payment retrieved from the payment initiation message.	AN MIN 2 - MAX 30 CHAR.
brand	Type of card used by the user to make payment. The possible values are shown in the <u>table</u> here.	AN MAX 100 CHAR.
esito	Payment result (OK or KO)	AN 2 CHAR.
pan	Partial credit card number, only the last 4 digits are shown.	AN 4 CHAR.
scadenza	Credit card expiry date	yyyymm
cv2	This is shown as masked with: *	AN MAX 4 CHAR.
tipo_richiesta	PA	AN 2 CHAR.

The tags described in the following table can be found in StoreResponse:

Name	Description	Format
tipoCarta	Type of card used by the user to make payment. The possible values are shown in the table here.	AN MAX 15 CHAR.
TipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN 20 CHAR.
Regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
Paese	If enabled, this will return the ISO 3166-1 alpha-3 code which identifies the country of the card used for payment.	ISO 3166-1 alpha-3 code
tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN 200 CHAR.
codiceAutorizzazione	Authorisation code assigned to payment.	AN MAX 6 CHAR.
dataOra	Transaction date and time	yyyymmddThhmmss
codiceEsito	Transaction result. The possible values are shown in the <u>table here</u> .	N MAX 3 CHAR.
descrizioneEsito	Description of the transaction result. The possible values are shown in the <u>table</u> <u>here</u> .	AN MAX 2000 CHAR.



dettaglioEsito	Shows a brief description of the payment result. The possible values are shown in the <u>table here</u> .	AN MAX 200 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

## Payment Result Message: optional fields

This table indicates optional fields which may be present depending on the merchant configuration.

Name	Description	Format
Parametri aggiuntivi	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values.	AN MAX 4000 CHAR.
Hash	If expected under the merchant profile, this field will be populated and returned with the hash of the PAN of the card used for payment.	AN 28 CHAR.
Infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.	AN MAX 35 CHAR.
Infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.	AN MAX 20 CHAR.
codiceConvenzione	Merchant code assigned by the acquirer. Where required.	AN MAX 15 CHAR.

**NB:** Parsing of XML responses should not be validating: thanks to the evolution of the system, additional elements will be able to be added to the messages in future. Applications must ignore unknown elements without causing malfunctions.

### **EXAMPLES**

Below is an example of a response XML for a successful result:

- <RootResponse>
- <StoreRequest>
- <alias>payment test XXXX</alias>
- <codTrans>XXXXXXXXX-1</codTrans>
- <divisa>EUR</divisa>
- <importo>1</importo>
- <mail>xxxxx.xxxx@xxxx.it</mail>
- <scadenza>202508</scadenza>
- <pan>9992</pan>
- <cv2>\*\*\*</cv2>

# nexi

```
< num contratto >123456789</ num contratto >
< tipo richiesta > PP </ tipo_richiesta >
< tipo servizio > paga multi </ tipo servizio >
< gruppo >XXXX</ gruppo >
< descrizione >sdfgfddf gdfgdfdfgdfdf</ descrizione >
</StoreRequest>
- <StoreResponse>
<tipoCarta>MasterCard</tipoCarta>
<codiceAutorizzazione>TESTOK</codiceAutorizzazione>
<dataOra>20090618T160701</dataOra>
<codiceEsito>0</codiceEsito>
<descrizioneEsito>autorizzazione concessa</descrizioneEsito>
<ParametriAggiuntivi>
<parametro1>XXXXX</parametro1>
<parametro2>XXXXX</parametro2>
</ParametriAggiuntivi>
<mac>gdfdfdgdfgdfgdfgdfr3434g345gedggdf=</mac>
</StoreResponse>
</RootResponse>
And here is a response XML for an unsuccessful result:
<RootResponse>
<StoreRequest>
<alias>payment test XXXX</alias>
<codTrans>XXXXXXXXX-1</codTrans>
<divisa>EUR</divisa>
<importo>1</importo>
<mail>xxxxx.xxxx@xxxx.it</mail>
<scadenza>202508</scadenza>
<pan>9992</pan>
<cv2>***</cv2>
< num contratto >123456789</ num contratto >
< tipo richiesta > PP </ tipo richiesta >
< tipo servizio > paga multi </ tipo servizio >
< gruppo >XXXX</ gruppo >
< descrizione >sdfgfddf gdfgdfdfgdfdf</ descrizione >
</StoreRequest>
- <StoreResponse>
<tipoCarta>MasterCard</tipoCarta>
<codiceAutorizzazione/>
<dataOra>20090618T160701</dataOra>
<codiceEsito>103</codiceEsito>
<descrizioneEsito>autorizzazione negata dell'emittente della carta</descrizioneEsito>
<ParametriAggiuntivi>
<parametro1>XXXXX</parametro1>
<parametro2>XXXXX</parametro2>
</ParametriAggiuntivi>
<mac>gdfdfdgdfgdfgdfgdfr3434g345gedggdf </mac>
```



</StoreResponse> </RootResponse>

### **MAC Calculation:**

For the server-to-server transaction result message, the string to sign must contain the following fields:

- codTrans
- divisa
- importo
- codAut (in the XML result message this corresponds to the field: authorisationCode)
- data (in the XML result message this corresponds to the values which precede the "T" value in the field: dateTime)
- orario (in the XML result message this corresponds to the values which follow the "T" value in the field: dateTime)
- secretKey

### **SAMPLE STRING**

mac= HASH SHA1

(codTrans=<val>divisa=<val>importo=<val>codAut=<val>data=<val>orario=<val><SecretKey)



# Payment for CardOnFile/Recurring/OneClick Registration

Integrating recurring, CardOnFile, or OneClick payments allows merchants to store credit card details, and use them to make subsequent payments. At a technical level, the operation involves 2 stages: a registration or first payment stage, where the contract is registered and associated with a credit card, and a second stage, where subsequent payment requests are forwarded for existing contracts. Technically, the integration of services is the same. It is only at a contractual level that the merchant profile alias issued will differ.

- 1. Activation and/or first payment
- 2. Management of recurring payments/subsequent payments

## Activation and/or first payment

During the first transaction, a contract code must be generated for use in subsequent purchases. This contract code allows Nexi to save a paired link between the user and the payment card used.

## IN PRACTICE

The information described in the "Codebase" must be integrated and the following specific parameters added.

3D-Secure management occurs exactly as described in the "Codebase".

## "First Payment" Initiation Message

Name	Description	Format
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	AN MIN 5 - MAX 30 CHAR.
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
tipo_richiesta	PP (first payment)	AN 2 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.



# "First Payment" Result Message: required fields

The same information found in the "<u>Codebase</u>" module is received in response, along with the following specific parameters.

Name	Description	Format
num_contratto	Contract number retrieved from the	AN MIN 5 - MAX 30
	initiation message.	CHAR.
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
gruppo	The "group" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

## "First Payment" Result Message: optional fields

The same optional information found in the "<u>Codebase</u>" module can be received in response, along with the following specific parameter.

Name	Description	Format
Check	This is populated if one or more of the controls programmed under the merchant profile fail.  The check to see if a card PAN exists against other contract codes will be set to: "PGP". Depending on the merchant profile, if the check fails the transaction can be blocked or a notification can be sent advising that the pan exists on another n_contract.	AN 3 CHAR.
	If all checks are passed, the field will not be populated.	



# Payment on Registered Contracts

When you need to make a charge on a previously registered contract, the message is the same as that in the first payment described above, without the pan and cv2 fields. Payment will take place in synchronous mode with the following fields suitably populated.

Name	Description	Format
n_contract	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details during the first payment with FP contract registration.	AN MAX 30 CHAR.
service_type	The field must be set to: "multi_pay".	AN MAX 30 CHAR.
request_type	"PR" payment on a registered contract	AN 2 CHAR.
group	The "group" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

# Payment with External 3D-Secure MPI

This paragraph describes the message made available for merchants whose applications use Nexi XPay platform for sending authorisation requests. In this situation, the merchant is equipped with an MPI (Merchant Plug In), and handles the cardholder's 3D-Secure authentication stage.

# 1. Requesting payment towards Nexi payment endpoint

## IN PRACTICE

The XML message containing the parameters/values shown below must be sent, using the post method, to this URL:

### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it/ecomm/ecomm/XPayServlet

### **TEST ENVIRONMENT URL**

https://int-ecommerce.nexi.it/ecomm/ecomm/XPayServlet



# 2. Recording the transaction result

## IN PRACTICE

The payment result must always be managed in XML format, and on the same connection as used for the request (synchronous response).

# **Payment Initiation Message**

This table indicates the mandatory fields that must be included in the request message, and their corresponding characteristics.

Name	Description	Format
TERMINAL ID	Merchant identification code within XPay.	AN MAX 30 CHAR.
TRANSACTION_ID	Unique code which identifies the merchant order.	AN MAX 30 CHAR.
REQUEST_TYPE	Possible values: FA: First Attempt RA: Payment request retry	AN 2 CHAR.
ACTION_CODE	Type of transaction requested. The following values are allowed: VERI: transaction requesting authorisation verification only	AN MAX 10 CHAR.
PAN	Number of the card being used in the payment request.	N MAX 19 CHAR.
EXPIRE_DATE	Expiry date for the card being used in the payment request.	yymm
CVV2	Security code for the card being used in the payment request.	N MAX 4 CHAR.
AMOUNT	Amount of the payment requested. This is a string of 9 fixed numbers, where the last two numbers represent the 2 decimal places, and no separator is used between whole numbers and decimal numbers.	AN MAX 9 CHAR.
CURRENCY	ISO code for the payment currency, where the only value currently managed is 978 (Euro).	N 3 CHAR.
*PPO	Allowed values: Y or N. If present and set to Y, identifies a card from the MasterCard Masterpass wallet, therefore the CVV2 field becomes optional. If set to N, identifies a card acquired directly by the merchant.	AN MAX 4 CHAR.
ECI XID	Electronic Commerce Indicator Order identifier	AN 2 CHAR. 28 byte base64 encoding



CAVV	Cardholder Authentication Verification Value	28 byte base64 encoding
VERSION_CODE	Fixed value: "01.00"	AN 5 CHAR.
MAC	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.

### Example:

- <?xml version="1.0" encoding="ISO-8859-15"?>
- <VPOSREQ>
- <TERMINAL ID>000000050242004</TERMINAL ID>
- <AUTHONLYREQ>
- <TRANSACTION\_ID>T00000000000000001</TRANSACTION\_ID>
- <REQUEST\_TYPE>FA</REQUEST\_TYPE>
- <ACTION\_CODE>VERI</ACTION\_CODE>
- <PAN>1234567890123456</PAN>
- <EXPIRE DATE>0605</EXPIRE DATE>
- <CVV2>123</CVV2>
- <AMOUNT>000123056</AMOUNT>
- <CURRENCY>978</CURRENCY>
- <ECI>30</ECI>
- <XID>20002232324ER2345678</XID>
- <CAVV>12345655545454QWE1QWQWERDFSA</CAVV>
- <VERSION CODE>01.00</VERSION CODE>
- </AUTHONLYREQ>
- <MAC>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</MAC>
- </VPOSREQ>



### **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- TERMINAL\_ID
- TRANSACTION ID
- PAN
- EXPIRE\_DATE
- CVV2
- AMOUNT
- CURRENCY
- ECI
- XID
- CAVV
- VERSION CODE
- secretKey

### **SAMPLE STRING**

mac= HASH SHA1(<TERMINAL\_ID>< TRANSACTION\_ID><PAN><EXPIRE\_DATE><
CVV2><AMOUNT>< CURRENCY>< ECI>< XID>< CAVV>< VERSION\_CODE><secretKey>)

## **Payment Result Message**

This XML message is returned by the XPay platform in response to the AuthOnlyReq message. It uses the same connection on which the message was received, and contains the transaction result for the requested authorisation.

The following table lists the XPay parameters that are included in the message:

Name	Description	Format
TERMINAL_ID	Merchant identification code within XPay.	AN MAX 30 CHAR.
TRANSACTION_ID	Unique code which identifies the merchant order.	AN MAX 30 CHAR.
REQUEST_TYPE	Possible values: FA: First Attempt RA: Payment request retry	AN 2 CHAR.
RESPONSE	Result of the payment requested. For possible values see the table below.	AN MAX 3 CHAR.
AUTH_CODE	This is the authorisation code obtained from the credit card issuer. If the payment result is negative, an empty string will be sent.	AN MIN 2 - MAX 6 CHAR.



AMOUNT	Amount of the payment requested. This is a string of 9 fixed numbers, where the last two numbers represent the 2 decimal places, and no separator is used between whole numbers and decimal numbers.	AN MAX 9 CHAR.
CURRENCY	ISO code for the payment currency, where the only value currently managed is 978 (Euro).	N 3 CHAR.
*PPO	Allowed values: Y or N. If present and set to Y, identifies a card from the MasterCard Masterpass wallet, therefore the CVV2 field becomes optional. If set to N, identifies a card acquired directly by the merchant.	AN MAX 4 CHAR.
ECI	Electronic Commerce Indicator	AN 2 CHAR.
XID	Order identifier	28 byte base64 encoding
CAVV	Cardholder Authentication Verification Value	28 byte base64 encoding
TRANSACTION_DATE	Transaction date	dd/mm/yyyy hh.mm.ss
TRANSACTION_TYPE	Transaction type, indicates the level of security for the payment undertaken. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN 30 CHAR.
MAC	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.



RESPONSE: Result of the payment requested, it can take on the following values:

<b>RESPONSE</b>	Description
0	Payment executed correctly
1	Payment error: incorrect message format or missing or incorrect field
3	Payment error: duplicate TRANSACTION_ID field ("FA" case)
	TRANSACTION_ID not found ("RA" case)
16	Payment error: TERMINAL_ID field unknown or not enabled
18	Payment error: payment declined by credit card issuer
2	Payment error: an unexpected error occurred while processing the request
8	Payment error: incorrect MAC
17	MAXimum number of operations denied for the same TRANSACTION_ID,
	RA case (*)

(\*) The maximum number of operations is set by the payment platform

```
Example of a successful payment:
```

```
<?xml version="1.0" encoding="ISO-8859-15"?>
< VPOSRES>
<TERMINAL ID>000000050242004</TERMINAL_ID>
<AUTHONLYRES>
<TRANSACTION ID>T0000000000000001</TRANSACTION ID>
<REQUEST TYPE>FA</REQUEST TYPE>
<RESPONSE>0</RESPONSE>
<AUTH CODE>098765</AUTH CODE>
<AMOUNT>000123056</AMOUNT>
<CURRENCY>978</CURRENCY>
<TRANSACTION DATE>06/07/2005 16.55.56</TRANSACTION DATE>
<TRANSACTION TYPE>VBV FULL</TRANSACTION TYPE>
<ECI>30</ECI>
<XID>20002232324ER2345678</XID>
<CAVV>12345655545454QWE1QWQWERDFSA</CAVV>
</AUTHONLYRES>
<MAC>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</MAC>
```

### Example of a denied payment:

</VPOSRES>

```
<?xml version="1.0" encoding="ISO-8859-15"?>
<VPOSRES>
<TERMINAL_ID>0000000050242004</TERMINAL_ID>
<AUTHONLYRES>
<TRANSACTION_ID>T000000000000001</TRANSACTION_ID>
<REQUEST_TYPE>FA</REQUEST_TYPE>
<RESPONSE>21</RESPONSE>
<AUTH_CODE></AUTH_CODE>
<AMOUNT>000123056</AMOUNT>
<CURRENCY>978</CURRENCY>
```



- <TRANSACTION\_DATE>06/07/2005 16.55.56</TRANSACTION\_DATE>
- <TRANSACTION TYPE></TRANSACTION TYPE>
- <ECI>30</ECI>
- <XID>20002232324ER2345678</XID>
- <CAVV>12345655545454QWE1QWQWERDFSA</CAVV>
- </AUTHONLYRES>
- <MAC>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</MAC>
- </VPOSRES>

### **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- TERMINAL\_ID
- TRANSACTION ID
- RESPONSE
- AUTH CODE
- AMOUNT
- CURRENCY
- secretKey

### THE MAC WILL BE CALCULATED AS FOLLOWS

mac= HASH SHA1(TERMINAL\_ID><TRANSACTION\_ID>< RESPONSE>< AUTH\_CODE>< AMOUNT>< CURRENCY><secretKey>)



# Generating PayMail Links

This service allows to generate a payment link which can be sent to customers for example by email, enabling them to be redirected to the XPay payment pages to complete their transaction securely, without the merchant needing to worry about managing sensitive customer details. At a technical level, the implementation requires two stages:

## 1. Requesting an XPay payment link

### IN PRACTICE

Set up a Get request (redirect - link) or Post request (by sending a form with hidden fields) which is directed to this URL:

#### PRODUCTION ENVIRONMENT URL

https://ecommerce.nexi.it/ecomm/ecomm/OffLineServlet

#### TEST ENVIRONMENT URL

https://int-ecommerce.nexi.it/ecomm/ecomm/OffLineServlet

The request must be integrated with the parameters/values shown below, and any corresponding fields for additional functionalities may be added (e.g. Recurring Payments, OneClick Payments).

The resulting link can be inserted into an email to your customer, who, by following the link or pasting it into the browser address bar, will be redirected to the secure Nexi environment to make the payment.

## 2. Managing the response upon completion of the transaction

### IN PRACTICE

The user's return to your site must be managed, and the payment result recorded. Alternatively, if you would rather not implement the response message, you will need to check the XPay back office for any transactions made.

NB Below you will find characteristics for the fields to be created (name + description + format) and corresponding sample codes. You will also find information regarding the correct settings for the MAC field.

## Codebase

# Payment Initiation Message: required fields

This table indicates the mandatory fields to be entered as part of the redirect URL, and their corresponding characteristics.



Name	Description		Format
alias	Merchant profile id	dentification code (fixed ted by Nexi during the	AN MAX 30 CHAR.
importo	euro cents with no	norised, expressed in separator. The first 2 this represent the euro presents € 50.00.	N MAX 8 CHAR.
divisa		ncy in which the amount the only acceptable (Euro).	AN 3 CHAR.
codTrans	Payment identification code consisting of alphanumeric characters, excluding the # character. The code must be unique for each authorisation request. If, and only if, the authorisation request fails, then the merchant may repeat the same request with the same transCode twice more. In the configuration stage, the merchant may choose to decrease this to less than 3 attempts.		AN MIN 2 - MAX 30 CHAR.
url	Return url, directing completion of the transferring, using response parameter transaction result.	AN MAX 500 CHAR.	
url_back	Recall url, in case the user decides to abandon the transaction during the payment phase on the check-out page (result = CANCELLED) or if the call contains formal errors (result = ERROR). The url will be called queuing the following parameters:		AN MAX 200 CHAR.
	Field name Importo Divisa codTrans  Esito	Description Request amount EUR payment identification code assigned by the merchant Possible values: ANNULLO or ERROR	
	may choose to ret	NULLO, the merchant urn the user to the h the same transaction	



mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
urlpost	Url to which XPay sends the result of the transaction, transferring, in server-to-server mode using the POST method, the response parameters which show the transaction result.	AN MAX 500 CHAR.
userid	User provided by Nexi.	N 11 CHAR
Password	Password provided by Nexi.	AN 8 CHAR.

# **Payment Initiation Message: optional fields**

This table indicates optional fields which can be used for data-entry at the discretion of the merchant.

Name	Description	Format
mail	Buyer's email address to which the payment result will be sent.	AN MAX 150 CHAR.
languageld	Language identifier for the language to be displayed on the check-out page. The available languages are shown in the <u>table here</u> . If this field is not specified or is left blank, the text displayed will be in the default language defined during the service configuration process.	AN MAX 7 CHAR.
descrizione	Field where the merchant can specify a description of the type of service offered. This field will also be shown in the text of the email sent to the cardholder. For the MyBank service, the field is transmitted to the bank for inclusion in the SCT instruction description, but is truncated to 140 characters.	AN MAX 2000 CHAR. for MyBank: AN MAX 140 CHAR.
Note1	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200 CHAR.
Note2	Field where the merchant can show information relating to the order. This	AN MAX 200 CHAR.



	data will also be included in the report queryable by the back office.	
Note3	Field where the merchant can show information relating to the order. This data will also be included in the report queryable by the back office.	AN MAX 200 CHAR.
Parametri aggiuntivi	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values. The following parameter names should be avoided as they are already in use by XPay: TRANSACTION_TYPE, return-ok, tid, INFO_PAGE, RECALL_PAGE, back_url, ERROR_URL, \$EMAIL, \$NAME, \$SURNAME, EMAIL.	AN MAX 4000 CHAR.
OPTION_CF	Field which the merchant uses to send the user's Tax Code to XPay. This is only required if checks validating the Tax Code against associated PAN number are active (optional security control activated on request). This data will also be included in the report queryable by the back office.	AN 16 CHAR.
selectedcard	If present, the payment page that is shown only allows the user to make payment using the network or payment method indicated. This feature is useful for merchants who wish to enter the choice of payment method on their own check-out page. The possible values are shown in the table here.	AN MAX 25 CHAR.
TCONTAB	This field identifies the merchant's chosen deposit method for each transaction. If set to I (immediate), when the transaction is authorised the payment is deposited without any further intervention on the part of the merchant and without considering the default profile set for the terminal. If set to D (deferred) or if the field is empty, when the transaction is authorised it will be handled as defined by the terminal profile.	AN 20 CHAR.
infoc	Additional information about the individual payment. This information can be transmitted to the company on	AN MAX 35 CHAR.



	the basis of prior agreement with the same company.	
infob	Additional information about the individual payment. This information can be transmitted to the bank on the basis of prior agreement with the same bank.	AN MAX 20 CHAR.



#### Remember

- The values of the "url", "urlpost" and "url back" fields must start with "http://" or https://
- The address indicated in "urlpost" must have a public certificate and must not be protected by authentication
- Standard ports 80 or 443 must be used
- For proper call management, remember to comply with RFC 2396 and RFC 3986 standards

## **MAC Calculation**

For the transaction initiation message, the string to sign must contain the following fields:

- codTrans
- divisa
- importo
- secretKey

#### **SAMPLE STRING**

MAC = HASH SHA1(codTrans=<val>divisa=<val>importo=<val><SecretKey>)

## Payment Result Message: required fields

The merchant may choose to configure the receipt/display of the payment result in the following ways:

- Via e-mail: the merchant will receive a message with transaction details sent to the e-mail address indicated during configuration
- Online: once the payment has been completed, the user is redirected straight to the merchant's site, at the address indicated in the payment initiation message (field name: "url"). The user then returns to the merchant's site, bringing the parameters that attest to the conclusion of the transaction
- Online server to server: the merchant can receive the result directly from the Nexi server through a server-to-server call. The notification contains the same parameters as the previous method, and is carried out to the address indicated in the payment initiation message (field name: "urlpost").



The table below shows the parameters that are returned in the result message.

Name	Description	Format
alias	Store identification code transferred in the	AN MAX 30 CHAR.
	payment initiation message.	
importo	Transaction amount retrieved from the payment initiation message.	N MAX 8 CHAR.
divisa	Code of the currency in which the amount is expressed (EUR = Euro).	AN 3 CHAR.
codTrans	Code associated with the payment retrieved from the payment initiation message.	AN MIN 2 - MAX 30 CHAR.
brand		AN MAX 100 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR.
esito	Payment result (OK or KO)	AN 2 CHAR.
data	Transaction date	yyyymmdd
orario	Transaction time	HHmmss
codiceEsito	Transaction result. The possible values are shown in the <u>table here</u> .	N MAX 3 CHAR.
codAut	Authorisation code assigned by the credit card issuer, only present when authorisation is granted.	AN MIN 2 - MAX 6 CHAR.
Pan	Masked credit card number with only the first 6 and the last 4 digits showing.	AN MAX 19 CHAR.
scadenza_pan	Credit card expiry date	yyyymm
regione	If enabled, this will return the global region associated with the card used for payment (e.g. Europe).	AN MAX 30 CHAR.
nazionalita	Shows the country of the card used for making payment.	AN 3 CHAR. ISO 3166-1 alpha-3 code
messaggio	Shows a brief description of the payment result. The possible values are shown in the table here.	AN MAX 300 CHAR.
descrizione	If this information is provided during INPUT from the merchant, it will also be returned as OUTPUT, otherwise the field will be null.	AN MAX 2000 CHAR.
languageld	Value retrieved from the payment initiation message.	AN MAX 7 CHAR.
TipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.



tipoProdotto	If enabled, this will return a description of the card type used for payment (e.g. consumer).	AN MAX 200 CHAR.
Name	Name of the person who made the payment.	AN MAX 150 CHAR.
cogName	Surname of the person who made the payment.	AN MAX 150 CHAR.
mail	Email address of the person who made the payment.	AN MAX 150 CHAR.



# **Payment Result Message: optional fields**

This table indicates optional fields which may be present depending on the merchant configuration.

Name	Description				Form at
Parametri aggiuntivi	An n number of additional parameters can be specified, which will be returned in the result messages. There is no limit to the number of additional parameters, but the length of the string must not exceed 4,000 characters in total, including all parameter names and values.				AN MAX 4000 CHA R.
hash	_	er the merchant profile, the turned with the hash of yment.			AN 28 CHA R.
infoc	Additional information about the individual payment. This information can be transmitted to the company on the basis of prior agreement with the same company.				AN MAX 35 CHA R.
infob	information can be transmitted to the bank on the basis of prior agreement with the same bank.			AN MAX 20 CHA R.	
codiceConvenzion e	Merchant code assigned by the acquirer. Where required.				AN MAX 15 CHA R.
dati_gestione_con	Xml containing s	hipping information			MAX
segna	NA	Field name	Req.	Descripti	
	WalletAddress				CHA R.
	BillingAdo		VEC	City	
		City Country	YES YES	Country	
		CountrySubdivision	YES	Country	
		Line1	YES	address	
		Line2	NO	address	
		Line3	NO	address	
		PostalCode	YES	postal cod	
	BillingAdo				
	Shipping A		VEC	City	
		City Country	YES YES	City Country	
		CountrySubdivision	YES	•	
		Line1 Line2	YES NO	address address	



```
Line3
                                       NO
                                             address
                PostalCode
                                       YES
                                             postal cod
                RecipientName
                                       YES
                                             Contact
                RecipientPhoneNumber YES
                                             Tel. no.
      ShippingAddress
WalletAddress
Example:
<WalletAddress>
      <BillingAddress>
           <City>Milan</City>
           <Country>ITA</Country>
           <CountrySubdivision>-</CountrySubdivision>
            <Line1>corso sempione 55</Line1>
           <Line2/>
            <Line3/>
           <PostalCode>20100</PostalCode>
      </BillingAddress>
      <ShippingAddress>
           <City>Milan</City>
           <Country>ITA</Country>
           <CountrySubdivision>-</CountrySubdivision>
           <Line1> corso sempione 55</Line1>
            <Line2/>
           <Line3/>
      <PostalCode>20100</PostalCode>
      <RecipientName>Luca Rossi</RecipientName>
      <RecipientPhoneNumber>0234111111</RecipientP
honeNumber>
</ShippingAddress>
</WalletAddress>
```

# Payment Result Message: additional fields for PayPal

This table indicates the fields provided in response to PayPal payments.

Name	Description Format
PAYERID	Unique identifier of AN 13
	the user's PayPal CHAR. account.
PAYMENTINFO_0_TRANSACTIONID	Unique identifier of AN 17-19 the payment CHAR.
	transaction.



PAYMENTREQUEST_0_SHIPTONAME	Name and surname attached to the shipping address.	
PAYMENTREQUEST_0_SHIPTOSTREET	First shipping address field	AN 100 CHAR.
PAYMENTREQUEST_0_SHIPTOSTREET2	Second shipping address field. Optional.	
PAYMENTREQUEST_0_SHIPTOCITY	Shipping address city	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOSTATE	Shipping address country or province. The PayPal country code list can be found here.	AN 40 CHAR.
PAYMENTREQUEST_0_SHIPTOZIP	Postal Code	AN 20 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYCODE	Country Code	AN 2 CHAR.
PAYMENTREQUEST_0_SHIPTOCOUNTRYNAME	Country	AN 20 CHAR.
BILLINGAGREEMENTACCEPTEDSTATUS	Indicates whether the customer accepts recurring payments (valued with "1" if he accepts otherwise with "0")	N
BILLINGAGREEMENTID	Token that PayPal associates with the Nexi contract number	AN



#### Remember

- The values of the "url", "urlpost" and "url back" fields must start with "http://" or https://
- The address indicated in "urlpost" must have a public certificate and must not be protected by authentication
- Standard ports 80 or 443 must be used
- For proper call management, remember to comply with RFC 2396 and RFC 3986 standards

### **MAC Calculation**

For the transaction result message, the string to sign must contain the following fields:

- codTrans
- esito
- importo
- divisa
- data
- orario
- codAut
- secretKey

## **SAMPLE STRING**

mac- HASE

 $SHA1(codTrans=<\!val>\!esito=<\!val>\!importo=<\!val>\!divisa=<\!val>\!data=<\!val>\!orario=<\!val>\!codaut=<\!val>\!Secret\ Key>)$ 



# Recurring/Card on File Payment

Integrating recurring or CardOnFile payments using PayMail for the first payment allows merchants to store credit card details, and use them to make subsequent payments. At a technical level, the operation involves 2 stages: a registration or first payment stage, where the contract is registered and associated with a credit card, and a second stage, where subsequent payment requests are forwarded for existing contracts.

- 1. First payment
- 2. Management of recurring payments/subsequent payments

## Activation and/or first payment

During the first transaction, a contract code must be generated for use in subsequent payments. This contract code allows Nexi to save a paired link between the user and the payment card used.

## IN PRACTICE

The "Codebase" module must be integrated and the following specific parameters added.

## "First Payment" Initiation Message

Name	Description	Format
num_contratto	Unique code assigned by the merchant for pairing with the archive storing sensitive credit card details.	AN MIN 5 - MAX 30 CHAR.
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
tipo_richiesta	PP (first payment)	AN 2 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.



# "First Payment" Result Message: required fields

The same information found in the "<u>Codebase</u>" module is received in response, along with the following specific parameters.

Name	Description	Format
num_contratto	Contract number retrieved from the	AN MIN 5 - MAX 30
	initiation message.	CHAR.
tipo_servizio	The field must be set to: "paga_multi".	AN MAX 30 CHAR.
gruppo	The "gruppo" value is assigned by Nexi during activation.	AN MIN 5 - MAX 30 CHAR.

## "First Payment" Result Message: optional fields

The same optional information found in the "<u>Codebase</u>" module can be received in response, along with the following specific parameter.

Name	Description	Format
Check	This is populated if one or more of the controls programmed under the merchant profile fail.  The check to see if a card PAN exists against other contract codes will be set to: "PGP". Depending on the merchant profile, if the check fails the transaction can be blocked or a notification can be sent advising that the pan exists on another n_contract.	AN 3 CHAR.
	If all checks are passed, the field will not be populated.	



## Management of subsequent recurring/Card on File payments

Each time registered users make subsequent purchases, the e-commerce provider must send a call to Nexi with the registered contract details.

## IN PRACTICE

When you need to make a charge on a previously registered contract, two options are available: either through synchronous calls in server-to-server mode, or through batch file.

## Synchronous call

In server-to-server mode, the services displayed by Nexi use http POST methods and a RESTful structure. Requests must be sent in JSON format and responses are formatted JSON objects. Alternatively, Non-Rest APIs are available, where communication is handled synchronously (using https calls accompanied by a series of parameters and values). The result message is an XML handled on the same connection. See the <u>Subsequent Payment</u> section for detailed information on the call and the response to handle.

### **Batch file**

The trace for managing recurring payments through batch files can be found here.

Download trace



## **Back Office API**

# Deposit/Cancellation/Refund

The merchant's application must send this message in order to make requests for processing, cancelling, or reversing transactions where payments have previously been successfully made.

## 1. Requesting operation towards Nexi payment endpoint

## IN PRACTICE

The XML message containing the parameters/values shown below must be sent, using the post method, to this URL:

https://ecommerce.nexi.it/ecomm/ecomm/XPayBo

# 2. Recording the result of the requested operation

# IN PRACTICE

The request result must always be managed in XML format, and on the same connection as used for the request (synchronous response).

## Request message - ECREQ

This table indicates the mandatory fields that must be included in the request message, and their corresponding characteristics.

Name	Description	Format
alias	Merchant identification code within XPay.	AN MAX 30 CHAR.
codTrans		AN MAX 30 CHAR.
	Payment order unique identification code.	
request_type	Possible values: FA: First Attempt RA: Payment request retry	AN 2 CHAR. fixed
id_op	Unique identifier of the requested operation; single identifier for any type of operation.	N MAX 10 CHAR.
type_op	Type of operation requested. For possible values see the table below.	AN 1 CHAR.
importo	Amount for which payment authorisation has previously been requested.	AN 9 CHAR. fixed



divisa	ISO code for the currency in which payment authorisation has previously been requested.	AN 3 CHAR. fixed
codAut	Authorisation code received by the merchant in response to the payment request.	AN MAX 10 CHAR.
importo_op	Amount that the merchant wants to use for the specified operation. Consequently, depending on the type of operation requested, it is the amount to be processed/cancelled/reversed.	AN 9 CHAR. fixed
*user	Merchant operator requesting the operation.	AN MAX 20 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR. fixed

<sup>\*</sup>optional value

**type\_op**: the types of operations managed by XPay are as follows:

type_op	Description
R	Cancellation or accounting reversal. Depending on the status of the transaction, this could be an authorisation
	and/or accounting reversal.
	NB: a partial reversal can only be done on operations that have already been processed. Authorised operations must be cancelled in full, or partially deposited.
Р	
	Processing



### **Example:**

```
<?xml version="1.0" encoding="ISO-8859-15"?>
< VPOSREQ>
     <alias>0000000050242004</alias>
     <ECREQ>
          <codTrans>T00000000000000001</codtrans>
          <request type >FA</request type>
          <id op>000000001</id op>
          <type op>C</type op>
          <importo>000123056</importo>
          <divisa>978</divisa>
          <codAut>098765</codAut>
          <importo op>000120056</importo op>
     </ECREQ>
     <user>User001</user>
     <mac>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</mac>
</VPOSREQ>
```

### **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- alias
- codTrans
- id op
- type\_op
- importo
- divisa
- codAut
- importo\_op
- user
- secretKey

## SAMPLE STRING

mac= HASH

SHA1(<alias><codTrans><id\_op><type\_op><importo><divisa><codAut><importo\_op><user><SecretKey>)



This message is returned by XPay in response to the ECReq message. It uses the same connection on which the message was received, and contains the result for the requested operation.

The following table lists the parameters that are included in the result:

Name	Description	Format
alias	Merchant identification code within XPay.	AN MAX 30 CHAR.
codTrans	Value indicated in the relevant ECReq message.	AN MAX 30 CHAR.
request_type	Value indicated in the relevant ECReq message.	AN 2 CHAR. fixed
esitoRichiesta	Result of the requested operation. For possible values, see the table below.	AN MAX 3 CHAR.
id_op	Value indicated in the relevant ECReq message.	N MAX 10 CHAR.
type_op	Value indicated in the relevant ECReq message.	AN 1 CHAR.
importo_op	Value indicated in the relevant ECReq message.	AN 9 CHAR. fixed
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR. fixed



requestResult: result of the requested operation. This field can take on the following values:

Code	Description
0	Request executed correctly
1	Request error: incorrect message format or missing or incorrect field
3	Request error: duplicate id_op field ("FA" case) or id_op not found ("RA" case)
16	Request error: alias field unknown or not enabled
18	Request error: operation denied by credit card issuer
2	Request error: an unexpected error occurred while processing the request
8	Request error: incorrect MAC
21	Operation error: transCode field unknown
22	Operation error: non-executable operation (e.g. reversal greater than deposit)

### Example of a positive result:

```
<?xml version="1.0" encoding="ISO-8859-15"?>
<VPOSRES>
<alias>000000050242004</alias>
<ECRES>
<codTrans>T00000000000000001</codTrans>
<request_type>FA</request_type>
<esitoRichiesta>0</esitoRichiesta>
<id_op>000000001</id_op>
<type_op>C</type_op>
<importo_op>000120056</importo_op>
</ECRES>
<mac>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</mac>
</VPOSRES>
```

### Example of a negative result:

```
<?xml version="1.0" encoding="ISO-8859-15"?>
<VPOSRES>
<alias>000000050242004</alias>
<ECRES>
<codTrans>T00000000000000001</codTrans>
<request_type>FA</request_type>
<esitoRichiesta>32</esitoRichiesta>
<id_op>000000001</id_op>
<type_op>C</type_op>
<importo_op>000120056</importo_op>
</ECRES>
<mac>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</mac>
</VPOSRES>
```

### **MAC Calculation:**



The fields used for the calculation of the MAC of this message are:

- alias
- codTrans
- esitoRichiesta
- id\_op
- type\_op
- importo\_op
- secretKey

### THE MAC WILL BE CALCULATED AS FOLLOWS

mac= HASH SHA(<alias><codTrans><esitoRichiesta><id\_op><type\_op><importo\_op><SecretKey>)

# **Order Query**

This message can be used by the merchant's application to ask XPay for the current status of an order, and the status of all associated operations.

## 1. Requesting query towards Nexi payment endpoint

## IN PRACTICE

The XML message containing the parameters/values shown below must be sent, using the post method, to this URL:

### https://ecommerce.nexi.it/ecomm/ecomm/XPayBo

# 2. Recording transaction details

## IN PRACTICE

The query result must always be managed in XML format, and on the same connection as used for the request (synchronous response).

## Request message - INTREQ

This table indicates the fields that must be included in the request message, and their corresponding characteristics.

Name	Description	Format
alias	Merchant identification code within XPay.	AN MAX 30 CHAR.
codTrans	Unique identification code for the order	AN MAX 30 CHAR.
	being queried by the merchant.	



id_op	Unique identifier of the requested query.	N MAX 10 CHAR.
type_op	Always set to V (Verify order status).	AN 1 CHAR.
*user	Merchant operator making the query.	AN MAX 20 CHAR.
mac	Message Authentication Code.	AN 40 CHAR. fixed
	Transaction signature field. For calculation	
	details, see the end of this chapter: MAC	
	Calculation.	

<sup>\*</sup>optional value

## **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- alias
- codTrans
- id op
- type\_op
- user
- secretKey

## THE MAC WILL BE CALCULATED AS FOLLOWS

mac= HASH SHA1(<alias><codTrans><id\_op><type\_op><user><SecretKey>)

# **Response message - INTRES**

This table indicates the fields that must be included in the request message, and their corresponding characteristics.

This message is returned by XPay in response to the IntReq message. It uses the same connection on which the message was received, and contains a list of the operations requested for the specified order, along with their corresponding status.

The message consists of the following elements:



- An alias element (always included) containing the merchant identification code within XPay
- An INTRES element (always included) containing the general transaction details and a list of operations undertaken on the specified transaction. The list of operations is contained in the OPERATIONS\_LIST type element (which is always included where a transCode exists), consisting of OPERATION type elements and a NUMELM attribute which indicates the number of OPERATION type elements that are present in the list, and which may be 0 if the search did not return any results. The structure of the OPERATION element is detailed below.

The list contains an OPERATION type element for each of the operations requested in relation to the specified order. The list contains only those operations that were successful.

A MAC element (always included) containing the message security code.

The following table contains a description of the elements that XPay will include in the message (except for the OPERATIONS\_LIST element):

Name	Description	Format
codTrans	Value indicated in the relevant IntReq message.	AN MAX 30 CHAR.
esitoRichiesta	Result of the requested query. For possible values, see the table below.	AN MAX 3 CHAR.
tipoCarta	Type of card used for payment.	AN MAX 15 CHAR.
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
importo	Payment request amount	AN 9 CHAR. fixed
divisa	ISO code for the payment request currency.	AN 3 CHAR. fixed
codAut	Authorisation code for the payment request.	AN MAX 10 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	40 CHAR. fixed

**requestResult**: result of the requested operation. This field can take on the following values:

Name	Description
0	Operation processed correctly
1	Search error: incorrect message format or missing or incorrect field
16	Search error: alias field unknown or not enabled
2	Search error: an unexpected error occurred while processing the request
8	Search error: incorrect MAC



21	Search error: transCode field unknown (no successful payment associated with the order specified) Please note that in this case the cardType, transactionType, importo, currency, and authCode elements of the message will contain an empty string and the OPTION FIELDS elements will not be included.
3	Request error: duplicate id_op field
32	transCode expired due to timeout, the user did not complete the payment within 30 minutes of the order being generated.



The structure of the OPERATION element is as follows:

Name	Description	Format
id_op	Value indicated in the ECReq message which initiated the operation, or empty string for operations not performed using ECReq.	N MAX 10 CHAR.
type_op	Operation type. For possible values, see the table below.	AN 1 CHAR.
importo_op	Operation amount	AN 9 CHAR. fixed
divisa	ISO code for the operation currency.	AN 3 CHAR. fixed
dataOra	Date the operation was carried out.	Format: dd/mm/yyyy hh.mm.ss
result	Operation status. For possible values, see the table below.	AN MAX 3 CHAR.
*user	Merchant operator requesting the operation.	AN MAX 20 CHAR.
codiceEsito	Transaction result. The possible values are shown in the table here.	N MAX 3 CHAR.
descrizioneEsito	Transaction result. The possible values are shown in the table here - only for type_op=A	AN MAX 2000 CHAR.
dettaglioEsito	Shows a brief description of the payment result. The possible values are shown in the table here - only for type_op=A	AN MAX 200 CHAR.

<sup>\*</sup>optional value

**type\_op**: the types of operations managed by XPay are as follows:

type_op	Description
Α	Payment authorisation
R	Cancellation
Р	Processing
С	Accounting reversal



**result**: the types of operations managed by XPay are as follows:

result	Description
Е	Executed: this is the status used for authorisation and authorisation reversal operations, which are executed immediately.
D	To be sent: this is the status used for accounting and accounting reversal operations.  In fact, XPay takes responsibility for these operations and subsequently processes them by generating an accounting file to be sent to the credit card issuer. Operations have this status if they have not yet been entered into an accounting file.
1	Sent: this is the status used for accounting and accounting reversal operations. Operations have this status if they have already been entered into an accounting file.

# Example of an XML with a successful result:

```
<?xml version="1.0" encoding="ISO-8859-15"?>
< VPOSRES>
     <alias>000000050242004</alias>
     <INTRES>
           <codTrans>T00000000000000001</codTrans>
           <esitoRichiesta>0</esitoRichiesta>
           <tipoCarta>VISA</tipoCarta>
           <tipoTransazione>VBV FULL</tipoTransazione>
           <importo>000123056</importo>
           <divisa>978</divisa>
           <codAut>098765</codAut>
            <OPERATIONS LIST NUMELM="3">
                 <OPERATION>
                      <id_op></id_op>
                      <type_op>A</type_op>
                      <importo op>000123056</importo op>
                      <divisa>978</divisa>
                      <dataOra>06/07/2005 16.55.56</dataOra>
                      <result>E</result>
                      <user>User001</user>
                      <codiceEsito>0</codiceEsito>
                      <descrizioneEsito>autorizzazione
     concessa</descrizioneEsito>
                      <dettaglioEsito>Message OK</dettaglioEsito>
                 </OPERATION>
                 <OPERATION>
                      <id_op></id_op>
                      <type op>P</type op>
                      <importo op>000123056</importo op>
                      <divisa>978</divisa>
```



```
<dataOra>06/07/2005 16.56.20</dataOra>
                      <result>E</result>
                      <user>User001</user>
                 </OPERATION>
                 <OPERATION>
                      <id_op>000000001</id_op>
                      <type_op>C</type_op>
                      <importo op>000120056</importo op>
                      <divisa>978</divisa>
                      <dataOra>07/07/2005 16.56.20</dataOra>
                      <result>E</result>
                      <user>User001</user>
                 </OPERATION>
           </OPERATIONS LIST>
     </INTRES>
     <mac>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</mac>
</VPOSRES>
Example of an XML with an unsuccessful result:
< VPOSRES>
<alias>0000000050242004</alias>
     <INTRES>
           <codTrans>T00000000000000001</codTrans>
           <esitoRichiesta>21</esitoRichiesta>
           <tipoCarta>VISA</tipoCarta>
           <tipoTransazione>VBV FULL</tipoTransazione>
           <importo>000123056</importo>
           <divisa>978</divisa>
           <codAut></codAut>
           <codiceEsito>103</codiceEsito>
```

<descrizioneEsito>aut. negata dall'emittente della

<dettaglioEsito>Auth. Denied</dettaglioEsito>

<mac>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</mac>

carta</descrizioneEsito>

</INTRES>

</VPOSRES>



## **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- alias field
- transCod field of the INTRES tag
- requestResult field of the INTRES tag
- importo field of the INTRES tag
- currency field of the INTRES tag
- authCod field of the INTRES tag
- NUMELM field of the OPERATIONS LIST tag

For each OPERATION element for the OPERATIONS\_LIST tag, the following fields are also considered:

- id\_op field
- type\_op field
- importo op field
- currency field
- result field
- user field
- secretKey

OPERATION tags must be considered in the order they were listed in the VPOSRes message forwarded by XPay.



# **Order List**

This message can be used by the merchant's application to request a complete list of transactions filtered by appropriate parameters.

# 1. Requesting query towards Nexi payment endpoint

## IN PRACTICE

The XML message containing the parameters/values shown below must be sent, using the post method, to this URL:

https://ecommerce.nexi.it/ecomm/ecomm/XPayBo

# 2. Recording the transaction list

## IN PRACTICE

The query result must always be managed in XML format, and on the same connection as used for the request (synchronous response).

## Request message - REPREQ

This table indicates the fields that must be included in the request message, and their corresponding characteristics.

Managa	Description	Farmer
Name	Description	Format
alias	Merchant identification code within XPay.	AN MAX 30 CHAR.
id op	Identifier of the requested query.	N MAX 10 CHAR.
type_op	Indicates the type of operation for which the report is requested. If populated, it takes on the following values:  A = authorisation R = authorisation reversal P = deposit C = accounting reversal T = all operations	AN 1 CHAR.
user	Merchant operator making the query.	AN MAX 20 CHAR.
start_date (*)	Start date and time	Format: YYYY-MM- DDThh:mm:ss
finish_date(*)	Finish date and time	Format: YYYY-MM- DDThh:mm:ss
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR. fixed

(\*) The XPay payment platform makes the last 12 months of data available to merchants. Because of this, the validity range for the requested date must not be greater than 31 days.



## **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- alias
- id\_op
- type\_op
- user
- start date
- · finish date
- secretKey

## **SAMPLE STRING**

mac= HASH SHA1(<alias ><id\_op><type\_op><user><start\_date><finish\_date><SecretKey>)



## Response message - REPRES

This message is returned by XPay in response to the RepReq message. It uses the same connection on which the message was received, and contains the details of the requested report.

The message consists of the following elements:

- An alias element (always included) containing the merchant identification code within XPay
- A REPRES element (always included) consisting of a list of elements where each one corresponds to a specific operation (AUTH, MOV, ANNULMENT\_AUTH, ANNULMENT\_MOV). Each of these elements contains an attribute which indicates the number of transactions present for the specified operation, and which may be 0 if the search did not return any results.
- Each ELEMENT\_AUTH, ELEMENT\_MOV, ELEMENT\_ANNULMENT\_AUTH, ELEMENT\_ANNULMENT\_MOV element repeated for NUMELEM contains details specific to an individual transaction.
- A MAC element (always included) containing the message security code.

The following table contains a description of the elements included in the message:

Name	Description	Format
alias	Merchant identification code within XPay.	AN MAX 30 CHAR.
esitoRichiesta	Result of the requested query. For possible values, see the table below.	AN MAX 3 CHAR.
mac	Message Authentication Code. Transaction signature field. For calculation details, see the end of this chapter: MAC Calculation.	AN 40 CHAR. fixed

The structure of the ELEMENT\_AUTH, ELEMENT\_MOV, ELEMENT\_ANNULMENT\_AUTH and ELEMENT\_ANNULMENT\_MOV element is shown below:

Name	Description	Format
codTrans	Order identifier within XPay.	AN MAX 30 CHAR.
result	Status of the requested operation.	AN MAX 3 CHAR.
tipoCarta	Type of card used for payment.	AN MAX 15 CHAR.
tipoTransazione	Transaction type, indicates the payment method. See the <u>table here</u> for possible values. If the payment result is negative, an empty string will be sent.	AN MAX 20 CHAR.
importo	Request amount	AN 9 CHAR. fixed
divisa	ISO code for the payment request currency.	AN 3 CHAR. fixed
codAut	Authorisation code for the payment request.	AN MAX 10 CHAR.
dataOra	Date the operation was carried out.	Format: dd/mm/yyyy hh.mm.ss
user	Merchant operator requesting the operation.	AN MAX 20 CHAR.



**result**: the types of operations managed by XPay are as follows:

result	Description
Е	Executed: this is the status used for authorisation and authorisation reversal operations, which are executed immediately.
D	To be sent: this is the status used for accounting and accounting reversal operations.  In fact, XPay takes responsibility for these operations and subsequently processes them by generating an accounting file to be sent to the credit card issuer. Operations have this status if they have not yet been entered into an accounting file.
I	Sent: this is the status used for accounting and accounting reversal operations. Operations have this status if they have already been entered into an accounting file.

requestResult: result of the requested operation. This field can take on the following values:

code	Description
0	Operation processed correctly
1	Search error: incorrect message format or missing or incorrect field
16	Search error: alias field unknown or not enabled
3	Request error: duplicate id_op field
2	Search error: an unexpected error occurred while processing the request
8	Search error: incorrect MAC
30	Number of results returned is too high. Unable to process the request (*)
32	transCode expired due to timeout, the user did not complete the payment within 30 minutes of the order being generated.
31	Error in the start_date or finish_date field, due to format type or a range greater than a year

(\*) In order to optimise response times, the XPay platform does not consider any request which returns a number of results (elements) greater than 5,000 to be valid. In this case, the merchant must repeat the request, amending the filters for start\_date, finish\_date and transactionType fields.

Example of an XML with a successful result for a request where the merchant wants a report of all the operations made. It is distinguished by the tags AUTH = Authorisations, MOV = Movements, ANNULMENT\_AUTH = Authorisation reversals, ANNULMENT\_MOV = Accounting reversals.



```
<result>E</result>
     <cardType>VISA</cardType>
     <transactionType>VBV FULL</transactionType>
     <importo>000023056</importo>
     <currency>978</currency>
     <authCode>098765</authCode>
     <dateTime>06/07/2005 16.55.56</dateTime>
     <user>User001</user>
 </ELEMENT AUTH>
</AUTH>
<MOV NUMELM="1">
 <ELEMENT MOV>
     <transCode>T00000000000000001</transCode>
     <resultCode>0</resultCode>
     <result>E</result>
     <cardType>VISA</cardType>
     <transactionType>VBV FULL
     <importo>000023056</importo>
     <currency>978</currency>
     <authCode>098765</authCode>
     <dateTime>06/07/2005 16.55.56</dateTime>
     <user>User001</user>
 </ELEMENT MOV>
</MOV>
< ANNULMENT_AUTH NUMELM="1">
 <ELEMENT ANNULMENT AUTH>
     <transCode>T00000000000000001</transCode>
     <resultCode>0</resultCode>
     <result>E</result>
     <cardType>VISA</cardType>
     <transactionType>VBV FULL
     <importo>000023056</importo>
     <currency>978</currency>
     <authCode>098765</authCode>
     <dateTime>06/07/2005 16.55.56</dateTime>
     <user>User001</user>
 </ELEMENT ANNULMENT AUTH>
 </ANNULMENT AUTH>
<annulment_mov numelm="1">
 <ELEMENT ANNULMENT MOV>
     <transCode>T00000000000000001</transCode>
     <resultCode>0</resultCode>
     <result>E</result>
     <cardType>VISA</cardType>
     <transactionType>VBV FULL
     <importo>000023056</importo>
     <currency>978</currency>
     <authCode>098765</authCode>
     <dateTime>06/07/2005 16.55.56</dateTime>
     <user>User001</user>
  </ELEMENT ANNULMENT MOV>
```



```
</ANNULMENT_MOV>
    </REPRES>
    <requestResult>0</requestResult>
        <mac>70C4F1F621A5DED95C7EE8C5507A9E1F2970BCFE</mac>
</VPOSRES>
```

Example of an XML with an unsuccessful result for a request where the data requested by the merchant exceeds the allowable limit.

#### **MAC Calculation:**

The fields used for the calculation of the MAC of this message are:

- alias
- esitoRichiesta
- secretKey

## **SAMPLE STRING**

mac= HASH SHA1(<alias><esitoRichiesta><SecretKey>)

# **PLUGIN**

# Do you already have an e-commerce platform?

You can integrate Nexi with your e-commerce in just a few clicks.

Nexi solutions are compatible with the major e-commerce platforms on the market. Implementation is easy and fast. Just go to the marketplace, download the plugin, and integrate it.



# **PLUGIN for Prestashop**

Payment module for the Nexi system dedicated to the CMS Prestashop. Go to plugin





## **PLUGIN for WooCommerce**

Module which allows Nexi XPay gateway to be used on WordPress/WooCommerce platforms.

Go to plugin



## **PLUGIN for VirtueMart**

Module which allows Nexi XPay gateway to be integrated with the VirtueMart platform. Go to plugin



## **PLUGIN for Zen Cart**

Module dedicated to the open source e-commerce management software Zen Cart. Go to plugin



# **PLUGIN for Magento Community**

Module for integrating Nexi within Magento Community software. Go to plugin



# **PLUGIN for Magento Enterprise**

Module for integrating Nexi within Magento Enterprise software. Go to plugin (available soon)





# **PLUGIN for OS Commerce**

Module for managing payments on the OS Commerce platform. Go to plugin



# **PLUGIN for OpenCart**

Payment module which can be integrated with the CMS platform OpenCart. Go to plugin