



# **POSTPAY**

Integration Guide

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## Document history

Date	Name	Change
04.10.2016	Peter Posse	First version based on Paygate Manual 6.10

# ABOUT POSTPAY

## General information about POSTPAY

Electronic wallets are convenient, popular and have been taken for granted for many years. There are several benefits from the direct exchange of virtual cash: The merchant can access cash payments quickly and can ship goods to the customer immediately. The merchant generally pays lower fees for small amounts. The customer can pay for goods without giving out bank or credit card details.

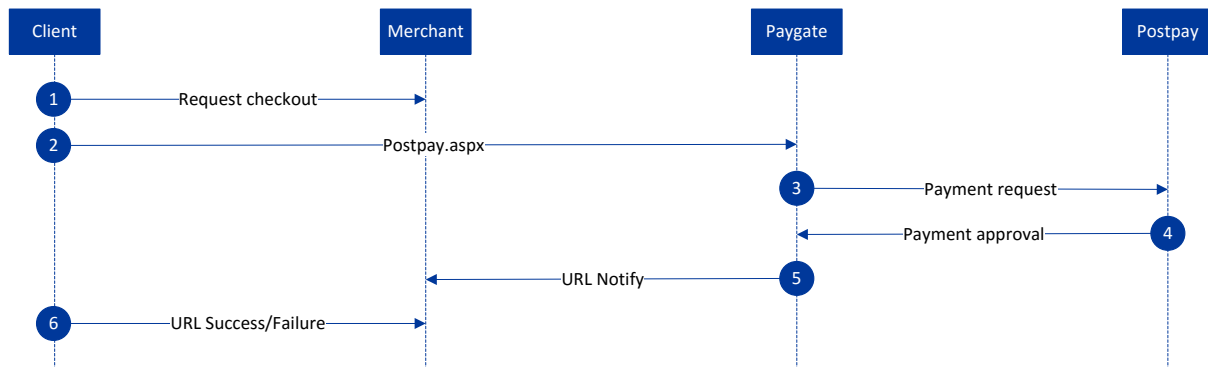
eWallets are usually topped up by bank transfer, direct debit or saved credit card details. It is now possible to use them in retail outlets with a special app on your smartphone controlling the payment process via QR code or NFC technology.



The Wallet from the Deutsche Post offers the secure and convenient handling of orders and payments in Germany. Customers benefit from cost-free buyer protection and a wide range of payment methods.

Further information can be found on the webpage of POSTPAY (<https://www.postpay.de>).

## Process flow chart



POSTPAY process flow

# PAYGATE INTERFACE

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## Definitions

Data formats:

Format	Description
a	alphabetical
as	alphabetical with special characters
n	numeric
an	alphanumeric
ans	alphanumeric with special characters
ns	numeric with special characters
bool	boolean expression (true or false)
3	fixed length with 3 digits/characters
..3	variable length with maximum 3 digits/characters
enum	enumeration of allowed values
dtm	ISODateTime (YYYY-MM-DDDhh:mm:ss)

Abbreviations:

Abbreviation	Description
CND	condition
M	mandatory
O	optional
C	conditional

## Calling the POSTPAY interface

A payment by POSTPAY is divided into two steps. Where first a payment for an order is initialised before you capture it separately on dispatch of goods. The subsequent transactions then take place via a server-to-server connection. You can capture or reverse these payments or issue a credit in the event of a goods return.

In order to initialise a payment with POSTPAY via a Paygate form, go to the following URL:

<https://www.computop-paygate.com/postpay.aspx>

**Notice:** For security reasons, Paygate rejects all payment requests with formatting errors. Therefore please use the correct data type for each parameter.

The following table describes the encrypted payment request parameters:

Parameter	Format	CND	Description
<b>MerchantID</b>	ans..30	M	MerchantID, assigned by Computop
<b>TransID</b>	ans..64	M	TransactionID of the merchant, which has to be unique for each payment (order number)
<b>RefNr</b>	ns..30	O	Unique reference number (invoice number)
<b>Amount</b>	n..12	M	Amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>Currency</b>	a3	M	Currency, three digits DIN / ISO 4217 Only EUR is permissible.
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
<b>URLSuccess</b>	ans..256	M	Complete URL which calls up Paygate if payment has been successful. The URL may be called up only via port 443 This URL may not contain parameters: In order to exchange values between Paygate and shop, please use the parameter <b>UserData</b> .
<b>URLFailure</b>	ans..256	M	Complete URL which calls up Paygate if payment has been unsuccessful. The URL may be called up only via port 443 This URL may not contain parameters: In order to exchange values between Paygate and shop, please use the parameter <b>UserData</b> .
<b>Response</b>	a7	O	Status response sent by Paygate to <b>URLSuccess</b> and <b>URLFailure</b> , should be encrypted. For this purpose, transmit <b>Response=encrypt</b> parameter.
<b>URLNotify</b>	ans..256	M	Complete URL which Paygate calls up in order to notify the shop about the payment result. The URL may be called up only via port 443 It may not contain parameters: Use the <b>UserData</b> parameter instead.
<b>ReqID</b>	ans..32	O	To avoid double payments, enter an alphanumeric value which identifies your transaction and may be assigned only once. If the transaction is submitted again with the same <b>ReqID</b> , Paygate will not carry out the payment, but will just return the status of the original transaction.
<b>shAmount</b>	n..12	M	Shipping costs in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>ArticleList</b>	ans..1024	M	Article list with description of items and prices: <ArticleNumber>;<ProductName>;<GrossPrice>;<VAT>;<Quantity> <;> separates the fields of an article data set <+> separates the article data sets Data type (size): Article number (ans..100) Product name (ans..100)

			Gross amount (n..12) in the smallest currency unit (e.g. EUR Cent) VAT (ans..32); 'Standard' for 19%, 'Reduced' for 7% or 'Free' for 0% Quantity (n..5)
<b>Plain</b>	ans..50	O	A value to be set by the merchant to return some information unencrypted, e.g. the MID
<b>Custom</b>	ans..1024	O	The merchant can submit several values separated by   which are returned un-encrypted and separated by &. Custom=session=123 id=456 will change in the answer to Session=123&id=456

Parameters for payments with POSTPAY

The following table gives the result parameters which the Paygate transmits to **URLSuccess** or **URLFailure** and **URLNotify**. If you have specified the **Response=encrypt** parameter, the following parameters are forwarded Blowfish encrypted to your system:

Parameter	Format	CND	Description
<b>MID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
<b>XID</b>	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
<b>TransID</b>	ans..64	M	Merchant's transaction number
<b>RefNr</b>	ns..30	O	Unique reference number
<b>Status</b>	a..50	M	OK or FAILED
<b>Description</b>	ans..1024	M	Further details in the event that payment is rejected. Please do not use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
<b>Code</b>	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from <a href="http://www.computop.de/manual">www.computop.de/manual</a> )
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
<b>OrderID</b>	ans..100	M	Unique POSTPAY order number, which is assigned by POSTPAY on creation of the order.
<b>CustomerID</b>	ans..100	O	Unique checkout customer number
<b>PackstationID</b>	ans..100	O	Number of packstation
<b>Email</b>	ans..100	O	Alias email address of the customer via the checkout
<b>sdSalutation</b>	ans..16	O	Salutation in the delivery address
<b>sdTitle</b>	ans..64	O	Title in the delivery address
<b>sdCompany</b>	ans..100	O	Company name in the delivery address
<b>sdFirstName</b>	ans..100	M	First name in the delivery address
<b>sdLastName</b>	ans..30	M	Last name in the delivery address
<b>sdStreet</b>	ans..100	O	Street name in the delivery address
<b>sdHouseNumber</b>	ans..8	O	Street number in the delivery address
<b>sdAddressAddition</b>	ans..32	O	Additional address information in the delivery address, e.g. c/o
<b>sdZip</b>	n..8	M	Postcode in the delivery address
<b>sdCity</b>	ans..100	M	Town/city in the delivery address
<b>sdCountryCode</b>	a2	M	Country code in the delivery address, 2 characters according to ISO 3166

<b>bdSalutation</b>	ans..16	O	Salutation in the invoicing address
<b>bdTitle</b>	ans..64	O	Title in the invoicing address
<b>bdCompany</b>	ans..100	O	Company name in the invoicing address
<b>bdFirstName</b>	ans..100	M	First name in the invoicing address
<b>bdLastName</b>	ans..30	M	Last name in the invoicing address
<b>bdStreet</b>	ans..100	O	Street name in the invoicing address
<b>bdHouseNumber</b>	ans..8	O	Street number in the invoicing address
<b>bdAddressAddition</b>	ans..32	O	Additional address information in the invoicing address, e.g. c/o
<b>bdZip</b>	n..8	M	Postcode in the invoicing address
<b>bdCity</b>	ans..100	M	Town/city in the invoicing address
<b>bdCountryCode</b>	a2	M	Country code in the invoicing address, 2 characters according to ISO 3166
<b>ErrorText</b>	ans..256	O	Error text from POSTPAY, if agreed with Computop support
<b>Plain</b>	ans..50	O	A value to be set by the merchant to return some information unencrypted, e.g. the MID
<b>Custom</b>	ans..1024	O	The merchant can submit several values separated by   which are returned unencrypted and separated by &. Custom=session=123 id=456 will change in the answer to Session=123&id=456

Result parameters for URLNotify, URLSuccess and URLFailure in case of POSTPAY

## Capture

Captures are possible via a Server-to-Server connection. To carry out a Capture for POSTPAY via a Server-to-Server connection please use the following URL:

<https://www.computop-paygate.com/capture.aspx>

**Notice:** For security reasons, Paygate rejects all payment requests with formatting errors. Therefore please use the correct data type for each parameter.

The following table describes the encrypted payment request parameters:

Parameter	Format	CND	Description
<b>MerchantID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment to be captured
<b>TransID</b>	ans..64	M	TransactionID which should be unique for each payment
<b>RefNr</b>	ns..30	M	Merchant reference number: here a separate reference number, e.g. an invoice number, can be transferred
<b>Amount</b>	n..12	M	Amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>Currency</b>	a..3	M	Currency code, three digits DIN / ISO 4217. Only EUR is permissible.
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>ParcelTrackingID</b>	ans..100	O	Parcel tracking number
<b>ArticleList</b>	ans..1024	OC	Mandatory for partial delivery Article list with description of items and prices:



			<Article number> ;<quantity> <;> separates the fields of an article data set <+> separates the article data sets Data type (size) Article number (ans..100) Quantity (n..5)
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Parameters for POSTPAY captures

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
<b>MID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
<b>XID</b>	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
<b>TransID</b>	ans..64	M	Merchant's transaction number
<b>Status</b>	a..50	M	OK or FAILED
<b>Description</b>	ans..1024	M	Further details in the event that payment is rejected. Please do not use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
<b>Code</b>	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from <a href="http://www.computop.de/manual">www.computop.de/manual</a> )
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>RefNr</b>	ns..30	M	Merchant's unique reference number
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop

Result parameters for POSTPAY captures

## Credit with reference

Credits (refunds) are possible via a Server-to-Server connection. If you refer to a capture for a Credit the amount of the Credit is limited to the amount of the previous capture.

To carry out a credit with a reference transaction, please use the following URL:

<https://www.computop-paygate.com/credit.aspx>

**Notice:** For security reasons, Paygate rejects all payment requests with formatting errors. Therefore please use the correct data type for each parameter.

The following table describes the encrypted payment request parameters:

Parameter	Format	CND	Description
<b>MerchantID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment to be credited
<b>TransID</b>	ans..64	M	TransactionID which should be unique for each payment
<b>Amount</b>	n..12	M	Amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).

<b>Currency</b>	a..3	M	Currency code, three digits DIN / ISO 4217. Only EUR is permissible.
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>RefNr</b>	ns..30	O	Reference number (e.g. invoice number) which must be unique for each return shipment
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
<b>ArticleList</b>	ans..1024	OC	Mandatory for partial return. Article list with description of items and prices: <Article number> ;<quantity> <;> separates the fields of an article data set <+> separates the article data sets Data type (size) Article number (ans..100) Quantity (n..5)

Parameters for credits of POSTPAY payments

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
<b>MID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
<b>XID</b>	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
<b>TransID</b>	ans..64	M	Merchant's transaction number
<b>Status</b>	a..50	M	OK or FAILED
<b>Description</b>	ans..1024	M	Further details in the event that payment is rejected. Please do not use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
<b>Code</b>	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from <a href="http://www.computop.de/manual">www.computop.de/manual</a> )
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>RefNr</b>	ns..30	O	Merchant's unique reference number
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop

Response parameters for credits of POSTPAY payments

## Reversal of POSTPAY payments

Reversals are possible via a Server-to-Server connection.

Please enter the following URL to cancel a payment with POSTPAY:

<https://www.computop-paygate.com/reverse.aspx>

**Notice:** For security reasons, Paygate rejects all payment requests with formatting errors. Therefore please use the correct data type for each parameter.

The following table describes the encrypted payment request parameters:

Parameter	Format	CND	Description
<b>MerchantID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment to be credited
<b>TransID</b>	ans..64	M	TransactionID which should be unique for each payment
<b>RefNr</b>	ns..30	M	Reference number (e.g. invoice number); must be unique for each reversal
<b>Amount</b>	n..12	M	Amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>Currency</b>	a..3	M	Currency code, three digits DIN / ISO 4217. Only EUR is permissible.
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
<b>ArticleList</b>	ans..1024	OC	Mandatory for partial cancellation. Article list with description of items and prices: <ArticleNumber;<Quantity>;<CancellationReason>;<CancellationRemark> <;> separates the fields of an article data set <+> separates the article data sets Data type (size) Article number (ans..100) Quantity (n..5) Reason for cancellation (a..16): 'CustomerRequest', 'OutOfStock', 'DamagedGoods' or 'DealerRequest'; CancellationRemark (ans..64)
<b>Reason</b>	a..16	OC	Obligatory in case of full cancellation without ArticleList Reason for cancellation: 'CustomerRequest', 'OutOfStock', 'DamagedGoods' or 'DealerRequest'
<b>Note</b>	ans..64	OC	Obligatory in case of full cancellation without ArticleList Remark about the cancellation reason

Parameters for reversals of POSTPAY payments

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
<b>MID</b>	ans..30	M	MerchantID, assigned by Computop
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
<b>XID</b>	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
<b>TransID</b>	ans..64	M	Merchant's transaction number
<b>RefNr</b>	ns..30	O	Merchant's unique reference number
<b>Status</b>	a..50	M	OK or FAILED
<b>Description</b>	ans..1024	M	Further details in the event that payment is rejected. Please do not use the <b>Description</b> but the <b>Code</b> parameter for the transaction status analysis!
<b>Code</b>	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from <a href="http://www.computop.de/manual">www.computop.de/manual</a> )
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>UserData</b>	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop

Response parameters for the cancellation of POSTPAY payments

# BATCH PROCESSING VIA THE INTERFACE

Basic information about using Batch files and about their structure can be found in the Batch Manager manual.

This section describes the parameters which must be transferred within the data set (**Record**) for executing a POSTPAY payment and which information can be found within the response file about the payment status.

Following table gives an overview of all batch versions that are possible for a specific action and their specialities:

Action	Version	Description
<b>Capture</b>	1.0 / 2.0	Standard version without return of parameter Code
	1.x / 2.x	with RefNr (valid for all versions other than 1.0)
<b>Credit</b>	1.0 / 2.0	Standard version without return of parameter Code
	1.x / 2.x	with RefNr (valid for all versions other than 1.0)
<b>Reverse</b>	1.0 / 2.0	Standard version without return of parameter Code
	1.x / 2.x.	with RefNr (valid for all versions other than 1.0)

Description of the possible batch versions

The structure for a POSTPAY payment within a Batch file to be submitted is the following:

```
HEAD,<MerchantID>,<Date>,<Version>
POSTPAY,Capture,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>
POSTPAY,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>
POSTPAY,Reverse,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>
FOOT,<CountRecords>,<SumAmount>
```

The following table describes the individual fields and values used within the data set (record) in the batch file:

Parameter	Format	CND	Description
<b>Type</b>	a..11	M	HEAD for Header, FOOT for Footer, POSTPAY for POSTPAY
<b>Action</b>	a..20	M	The parameter Action defines the type of transaction: Capture Credit Reverse (cancellation)
<b>Amount</b>	n..12	M	Amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>Currency</b>	a3	M	Currency code, three digits DIN / ISO 4217
<b>TransID</b>	ans..64	M	TransactionID which should be unique for each payment
<b>RefNr</b>	ns..30	O	Unique reference number
<b>PayID</b>	an32	M	ID for this transaction given by Paygate

Description of fields within the record for Batch files

The record area within the response file for Batch transactions looks the following way:

```
HEAD,<MerchantID>,<Date>,<Version>
POSTPAY,Capture,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<Status>,<Code>
POSTPAY,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<Status>,<Code>
POSTPAY,Reverse,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<Status>,<Code>
FOOT,<CountRecords>,<SumAmount>
```

The following table describes the response parameters which the Batch Manager saves in the Record area for each transaction (standard parameters not explained here, such as <TransID> or <RefNR> and request parameters are returned unchanged and correspond to the call as specified before):

Parameter	Format	CND	Description
<b>Action</b>	a..20	M	The parameter Action defines the type of transaction: Capture Credit Reverse (cancellation)
<b>PayID</b>	an32	M	ID for this transaction given by Paygate
<b>Status</b>	a..50	M	OK or FAILED
<b>Code</b>	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from <a href="http://www.computop.de/manual">www.computop.de/manual</a> )

Description of result parameters within the record for Batch files