



# PayMorrow

## Integration Guide

Version 6.2.1

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# Table of Contents

<b>About PayMorrow</b> .....	<b>4</b>
General information about PayMorrow .....	4
Process flow chart.....	4
<b>Paygate interface</b> .....	<b>5</b>
Definitions .....	5
PayMorrow purchase on invoice and direct debit .....	5
Creating/updating a PayMorrow authorisation .....	6
Confirming a PayMorrow authorisation.....	9
Changing the PayMorrow TransID of an order.....	9
Capture a PayMorrow payment (full / partial capture) .....	10
Updating PayMorrow invoice numbers .....	12
Querying a PayMorrow order status .....	12
Pausing PayMorrow payments .....	13
Reversal of PayMorrow payments .....	14
Issuing a PayMorrow credit .....	15
<b>Batch processing via the interface</b> .....	<b>17</b>

**Document history**

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

# ABOUT PAYMORROW

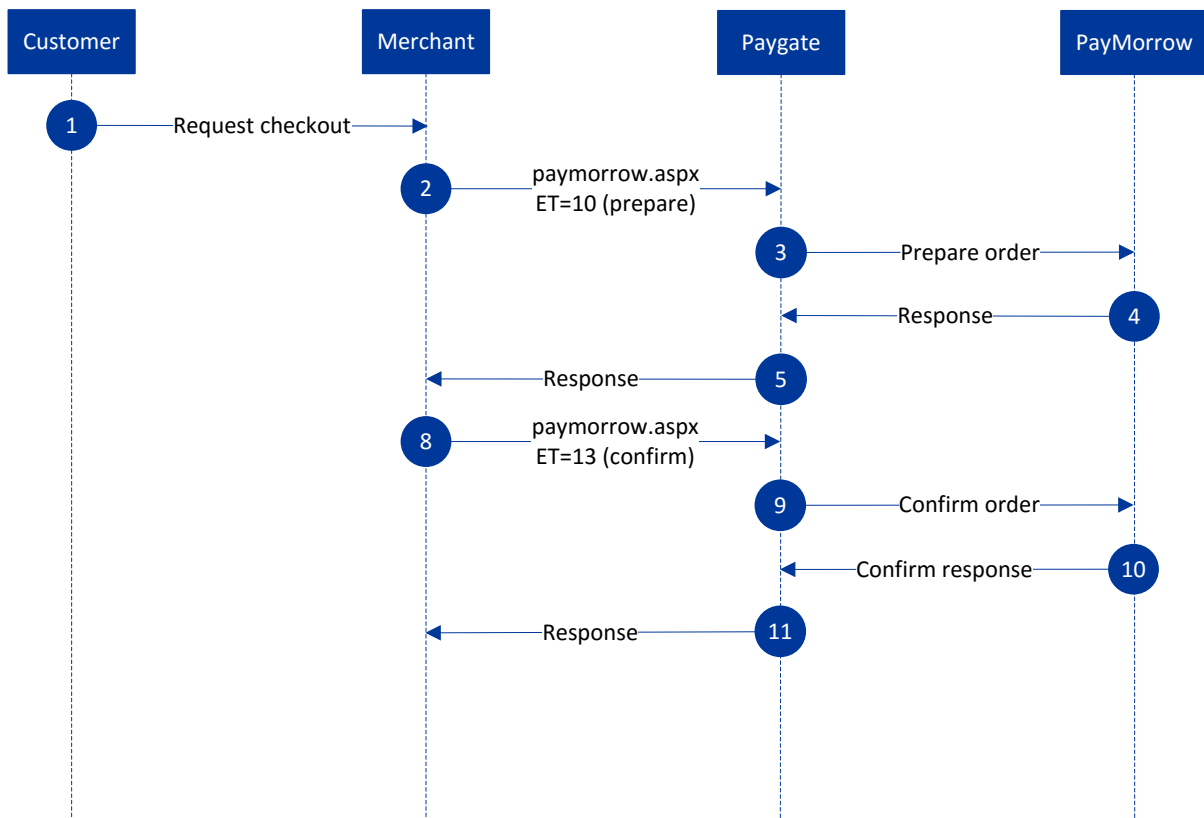
## General information about PayMorrow



PayMorrow supports invoice purchasing and secured direct debit in Germany. Merchants benefit from comprehensive protection against bad debt.

Further information can be found on the webpage of PayMorrow (<https://paymorrow.de/>).

## Process flow chart



PayMorrow 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

## PayMorrow purchase on invoice and direct debit

A payment with PayMorrow consists of several transaction steps, which are partly optional and depend on the situation. The PayMorrow interface offers 12 different requests for this, which can be used in different ways.

During the creation of an authorisation or at the latest when confirming it, PayMorrow requires a DeviceID which is unique and which the merchant himself can assign. A UUID with 128 bits should be used for this. This UUID is generated during communication with the customer's browser and is then transferred to Paygate in one of the requests.

A payment with PayMorrow always starts by creating an authorisation, which can still be updated if necessary. Subsequently, this authorisation must be confirmed. Optionally a received TransID of an order can still be changed before the capture. The capture or partial capture of payments takes place via the usual capture interface. Note that with PayMorrow you must make sure that a pay-

ment received in another way (bank transfer) must also be noted in this way in the capture. If necessary, you can optionally update an invoice number after capture. You can determine the status of a procedure by means of a query. In addition you can optionally shift the date for an order or individual invoices belonging to it by pausing them. Furthermore, cancellations as well as credits and partial credits are possible via the usual interfaces.

## Creating/updating a PayMorrow authorisation

In order to initialise a payment with PayMorrow via a server-to-server-connection or to update an existing authorisation, please go to the following URL:

<https://www.computop-paygate.com/paymorrow.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 transfer parameters to be encrypted:

Parameter	Format	CND	Description
<b>MerchantID</b>	ans..30	M	MerchantID, assigned by Computop
<b>TransID</b>	ans..64	M	TransactionID which should be unique for each payment
<b>PayID</b>	an32	C	Obligatory if EventToken=11: ID assigned by Paygate for the payment, e.g. for referencing in batch files
<b>RefNr</b>	ns..30	M	Unique reference 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>TaxAmount</b>	n..11	M	Tax amount of the entire order in the smallest currency unit (e.g. EUR Cent). Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>OrderDesc</b>	ans..384	M	Description of purchased goods, unit prices etc. The first 50 characters appear in the merchant's settlement file. You can view the full data in Computop Analytics.
<b>EventToken</b>	a2	M	10 for prepareOrder (create authorisation) 11 for updateOrder (update authorisation)
<b>TermsAndConditions</b>	a..3	M	YES/NO
<b>ArticleList</b>	ans..1024	M	Article list with the following parameters: „;" separates the single parameters „+" separates several articles Quantity;ArticleID;Name;Type;Category;UnitPriceGross;GrossAmount;VatRate;VatAmount Possible values for "type": GOODS, VOUCHER, SHIPPING, PAYMENT_FEE Please use the values specified for "Category" from the Paymorrow specification. Example "VatRate": for 19%, enter 1900
<b>CustomerID</b>	ans..50	O	Customer number
<b>Title</b>	ans..20	O	Title, e.g. Dr.

<b>Gender</b>	a1	M	Gender (M=male/F=female)
<b>FirstName</b>	ans..50	M	First name
<b>LastName</b>	ans..100	M	Last name
<b>Phone</b>	ans..20	O	Telephone number
<b>MobileNo</b>	ans..50	O	Mobile telephone number
<b>e-mail</b>	ans..80	M	E-mail address
<b>DateOfBirth</b>	ans8	M	Date of birth in the format YYYYMMDD
<b>bdStreet</b>	ans..50	M	Street name in the invoicing address
<b>bdStreetNr</b>	ans..5	M	Street number of the invoicing address
<b>bdZIP</b>	ans..5	M	Postcode in the invoicing address
<b>bdCity</b>	ans..50	M	Town/city of the invoicing address
<b>bdCountryCode</b>	a3	M	Country code for the invoicing address, 3 characters according to ISO 3166
<b>sdLastName</b>	ans..50	O	Name of company
<b>sdStreet</b>	ans..50	O	Street name of the separate delivery address
<b>sdStreetNr</b>	n..5	O	Street number of the delivery address
<b>sdStreet2</b>	ans..50	O	Address addition in the delivery address
<b>sdZIP</b>	ans..5	O	Postcode in the delivery address
<b>sdCity</b>	ans..50	O	Town/city in the delivery address
<b>sdCountryCode</b>	a3	O	Country code for the delivery address, 3 characters according to ISO 3166
<b>IPAddr</b>	ans..15	O	Customer's IP address
<b>BrowserSessionID</b>	ans..50	M	Customer's Session ID
<b>CookiesID</b>	ans..50	M	Customer's CookieID
<b>BrowserHeader</b>	ans..100	M	Customer's BrowserHeader
<b>Language</b>	a2	M	Language: DE
<b>IBAN</b>	ans..34	O	International Bank Account Number
<b>BIC</b>	ans..11	O	Bank Identifier Code
<b>MandateProvided</b>	a..3	O	SEPA mandate issued YES / NO
<b>RPMMethod</b>	a..10	O	INVOICE / SDD (SEPA direct debit) If nothing is transferred both payment methods are validated, otherwise PayMorrow validates only this one.
<b>CustomerHistory</b>	ans..1024	O	Customer's article list in the form: OrderDate;totalAmount;RPMMethod;Paymentstatus OrderDate = YYYY-MM-DD Paymentstatus = PAID,NOT_PAID,IN_DUNNING_PROCESS "+" separates further entries
<b>ShoppingDuration</b>	n..100	O	Shopping duration in milliseconds
<b>CheckoutDuration</b>	n..100	O	Checkout duration in milliseconds
<b>DeviceID</b>	ans..100	O	Unique Device-ID

Parameters for PayMorrow payment initialisations

The following table describes the result parameters with which the Paygate responds 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>Status</b>	a..30	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>bdStreet</b>	ans..50	C	Only in case of correction by PayMorrow: Street name in the invoicing address
<b>bdStreetNr</b>	s..5	C	Only in case of correction by PayMorrow: Street number of the invoicing address
<b>bdZIP</b>	ans..5	C	Only in case of correction by PayMorrow: Postcode in the invoicing address
<b>bdCity</b>	ans..50	C	Only in case of correction by PayMorrow: Town/city of the invoicing address
<b>bdCountryCode</b>	a3	C	Only in case of correction by PayMorrow: Country code for the invoicing address, 3 characters according to ISO 3166
<b>sdLastName</b>	ans..50	C	Only in case of correction by PayMorrow: Name of company
<b>sdStreet</b>	ans..50	C	Only in case of correction by PayMorrow: Street name of the separate delivery address
<b>sdStreetNr</b>	n..5	C	Only in case of correction by PayMorrow: Street number of the delivery address
<b>sdStreet2</b>	ans..50	C	Only in case of correction by PayMorrow: Address addition in the delivery address
<b>sdZIP</b>	ans..5	C	Only in case of correction by PayMorrow: Postcode in the delivery address
<b>sdCity</b>	ans..50	C	Only in case of correction by PayMorrow: Town/city in the delivery address
<b>sdCountryCode</b>	a3	C	Only in case of correction by PayMorrow: Country code for the delivery address, 3 characters according to ISO 3166
<b>InvoiceStatus</b>	a..20	M	VALIDATED / NOT_VALIDATED
<b>InvoiceDeclineType</b>	ans..20	M	
<b>InvoiceDeclineCommunicated</b>	ans..512	M	Possible detailed feedback for the customer with regard to purchase on invoice
<b>SDDStatus</b>	a..20	M	VALIDATED / NOT_VALIDATED
<b>SDDDeclineType</b>	ans..20	M	
<b>SDDDeclineCommunicated</b>	ans..512	M	Possible detailed feedback for the customer with regard to SEPA direct debit

Response parameters for the PayMorrow payment initialisation



## Confirming a PayMorrow authorisation

In order to confirm a PayMorrow authorization, go to the following URL:

<https://www.computop-paygate.com/paymorrow.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
MerchantID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
EventToken	a2	M	13 for confirmOrder (confirm authorisation)
RPMETHOD	a..10	C	Obligatory if INVOICE and SDD have been validated
DeviceID	ans..100	C	Obligatory if not yet transferred: Unique Device-ID

Parameters for the confirmation of a PayMorrow authorisation

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
MID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID which should be unique for each payment
Status	a..50	M	OK or FAILED
Description	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!
Code	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> )
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
RefNr	ns..30	M	Unique reference number

Reply parameters for the confirmation of a PayMorrow authorisation

## Changing the PayMorrow TransID of an order

In order to change the TransID of a PayMorrow order, for instance to change a provisional order number into a final order number, visit the following URL:

<https://www.computop-paygate.com/paymorrow.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 This parameter is to be passed in plain language.
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
<b>TransID</b>	ans..64	M	Merchant's transaction number which is used as the order number
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>EventToken</b>	a2	M	12 for updateOrderID (change order number)

Parameters for changing the PayMorrow TransID

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	Unique reference number

Reply parameters for changing the PayMorrow TransID

## Capture a PayMorrow payment (full / partial capture)

In order to execute a capture or partial capture for a PayMorrow order or to note another receipt of payment, go to 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, e.g. for referencing in batch files.



<b>TransID</b>	ans..64	MC	Merchant's transaction number Optional if EventToken=27: serves to settle an order or all associated invoices after transfer of the original TransID
<b>Amount</b>	n..12	M	Amount of the entire order to be captured 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>TaxAmount</b>	n..11	M	Tax amount of the entire order to be captured in the smallest currency unit (e.g. EUR Cent). Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>RefNr</b>	ns..30	MC	Unique reference number / invoice number Optional if EventToken=27: to settle a certain invoice after transfer of the original RefNr
<b>EventToken</b>	a2	M	21 for partial capture 22 for partial capture with approval of the remaining authorised amount 27 for registerDirectPayment (capture of a payment receipt via a different way)
<b>ArticleList</b>	ans..1024	C	Not if EventToken=27; obligatory if EventToken=21 or 22 Article list with the following parameters: “;” separates the individual parameters “+” separates several articles Quantity;ArticleID;Name;Type;Category;UnitPriceGross;GrossAmount;VatRate;VatAmount Possible values for “type”: GOODS, VOUCHER, SHIPPING, PAYMENT_FEE Please use the values specified for “Category” from the Paymorrow specification. Example “VatRate”: for 19%, enter 1900 Optional and only by arrangement with PayMorrow, also the following short article list: VatRate;VatAmount

Parameters for capture of a PayMorrow payment

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	Unique reference number / invoice number

Response parameters for capturing a PayMorrow payment

## Updating PayMorrow invoice numbers

In order to update an invoice number for a PayMorrow payment that was not yet known at the time of the capture, please go to the following URL:

<https://www.computop-paygate.com/paymorrow.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
MerchantID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
RefNr	ns..30	M	Unique reference number / invoice number
EventToken	a2	M	24 for updateInvoiceID (update invoice number)

Parameters for the updating of an invoice number with PayMorrow payments

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
MID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	Merchant's transaction number
Status	a..50	M	OK or FAILED
Description	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!
Code	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> )
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
RefNr	ns..30	M	Unique reference number / invoice number

Reply parameters for the updating of an invoice number with PayMorrow payments

## Querying a PayMorrow order status

In order to query the status of a PayMorrow order, please go to the following URL:

<https://www.computop-paygate.com/inquire.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, e.g. for referencing in batch files.
<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>EventToken</b>	a2	M	52 for getOrderStatus (query order status)

Parameters for querying the status of a PayMorrow order

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>Status</b>	a..50	M	OK or FAILED
<b>LastStatus</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	Unique reference number

Reply parameters for querying the status of a PayMorrow order

## Pausing PayMorrow payments

In order to pause an order or a payment with PayMorrow, please go to the following URL:

<https://www.computop-paygate.com/paymorrow.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, e.g. for referencing in batch files.
<b>XID</b>	an32	O	XID of the transaction to be paused If no XID is transferred, the entire order is paused.

<b>MAC</b>	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>RefNr</b>	ns..30	C	Obligatory if EventToken=26: Unique reference number
<b>EventToken</b>	a2	M	for postponeOrderCollection (capture): 26 (pauses the capture specified with XID) 53 (paused all captures belonging to the payment)
<b>NumberOfDays</b>	n..3	M	Number of days by which the order/payment is to be put back

Parameters for the pausing of PayMorrow 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	M	Unique reference number

Reply parameters for the pausing of PayMorrow payments

## Reversal of PayMorrow payments

In order to cancel an order or a payment with PayMorrow, please go to the following URL:

<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 This parameter is to be passed in plain language.
<b>PayID</b>	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files.
<b>XID</b>	an32	C	Obligatory if EventToken=42: XID of a certain capture
<b>Amount</b>	n..12	M	Amount of the entire order to be reverser 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	O	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>EventToken</b>	a2	M	40 to cancel the order 41 to cancel the capture 42 to cancel a certain partial capture

Parameters for reversal of a PayMorrow payment

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	Unique reference number

Reply parameters for reversal of PayMorrow payments

## Issuing a PayMorrow credit

In order to issue a full or partial credit for a previous capture with PayMorrow, please go to 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 This parameter is to be passed in plain language.
<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 assigned by Paygate for all single transactions (authorization, capture, credit), which are made for one payment. The XID of the Capture to which the credit is to take place must be transferred here
<b>Amount</b>	n..12	M	Amount of the entire order to be credited in the smallest currency unit (e.g. EUR Cent). Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>TaxAmount</b>	n..11	M	Tax amount of the entire order to be credited in the smallest currency unit (e.g. EUR Cent).

			Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).
<b>MAC</b>	an64	O	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
<b>RefNr</b>	ns..30	M	Unique reference number for the credit
<b>EventToken</b>	a2	M	30 credit for full amount 31 credit for partial amount 35 credit for full amount with receipt of authorisation for the amount 36 credit for partial capture with receipt of authorisation for the amount
<b>ArticleList</b>	ans..1024	C	(only with partial credits, EventToken=31 or 36) Article list with the following parameters: “,” separates the individual parameters “+” separates several articles Quantity;ArticleID;Name;Type;Category;UnitPriceGross;GrossAmount;VatRate;VatAmount Possible values for “type”: GOODS, VOUCHER, SHIPPING, PAYMENT_FEE Please use the values specified for “Category” from the Paymorrow specification. Example “VatRate”: for 19%, enter 1900 Optional and only by arrangement with PayMorrow, also the following short article list: VatRate;VatAmount

Parameters for crediting of a PayMorrow payment

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	Unique reference number

Response parameters for crediting a RatePAY payment



# 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 PayMorrow transaction 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 capture or credit within a Batch file to be submitted is the following:

```
HEAD,<MerchantID>,<Date>,<Version>
PAYMORROW,Capture,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<TaxAmount>
PAYMORROW,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<TaxAmount>
PAYMORROW,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, RatePay for the transactions
<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>	ans..30	O	Unique reference number
<b>PayID</b>	an32	M	ID for this transaction given by Paygate
<b>TaxAmount</b>	n..11	M	Tax amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).

Description of fields within the record for Batch files

The record area within the response file for Batch transactions looks as follows:

```
HEAD,<MerchantID>,<Date>,<Version>
PAYMORROW,Capture,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<TaxA-
mount>,<Status>,<Code>
PAYMORROW,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<TaxAmount>,<Sta-
tus>,<Code>
PAYMORROW,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 in):

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