



Payolution

Integration Guide

Version 6.2.1

As of: 04.10.2016

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Document history

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

ABOUT PAYOLUTION

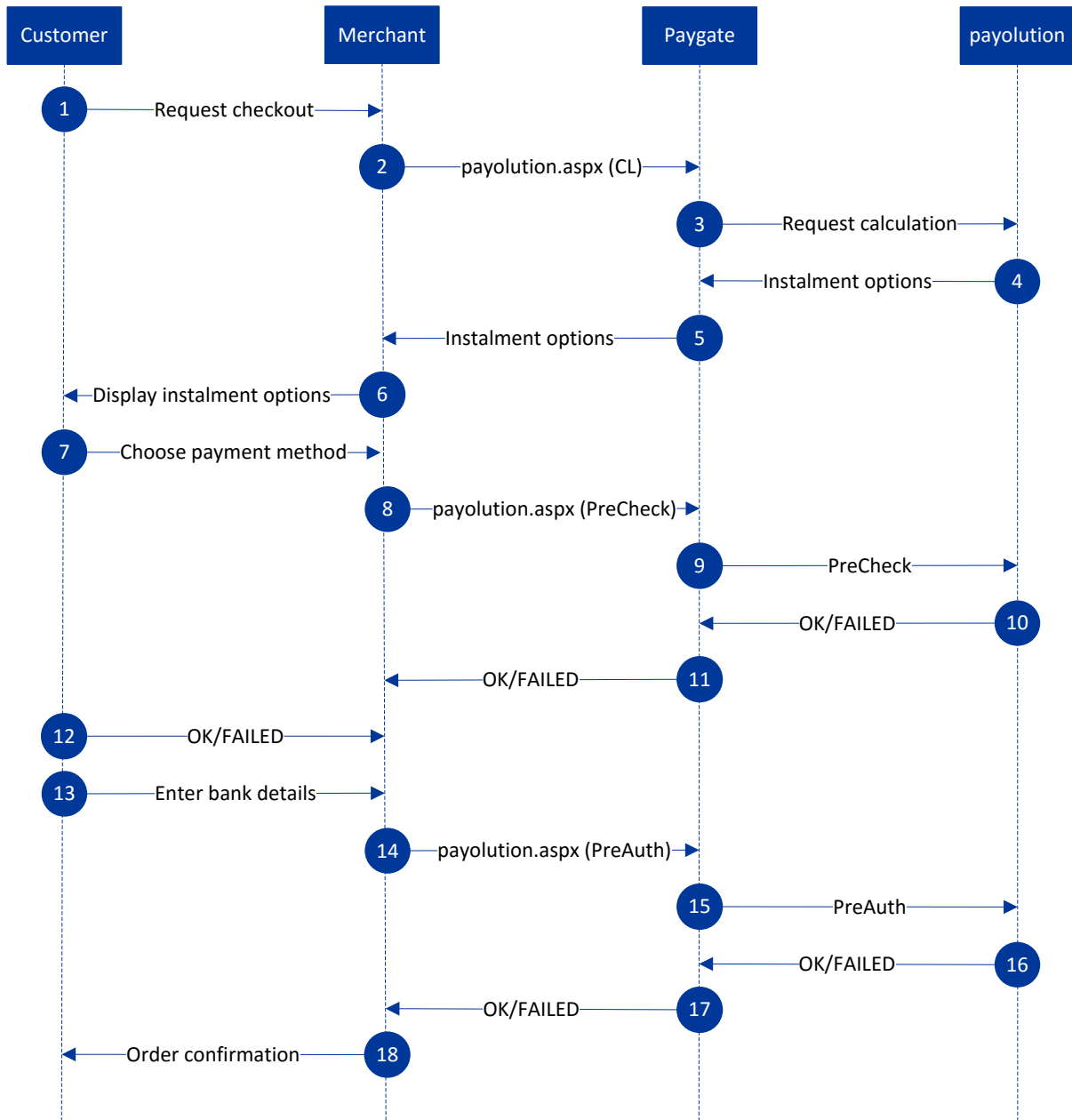
General information about Payolution



With the products Purchase on invoice and Hire purchase merchants get tailored solutions for the region D-A-CH. Payolution especially features a fast and guaranteed payout as well as a comprehensive support for the B2B and B2C business.

Further information can be found the website of Payolution (<https://www.payolution.com/>).

Process flow chart



Payolution process flow

PAYGATE INTERFACE

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

Payolution Invoice payment and Instalment payment

Payolution offers payment by instalment, on account or direct debit options. Different requests, which are controlled via the EventToken parameter, are necessary to completely finalise an authorisation.

Instalment payment:

1. Instalment calculation (Calculation)
2. Acceptance check before transaction with disclosure of instalment term (PreCheck)
3. Authorization of the amount at transaction (PreAuthorization)

Purchase on account & direct debit:

1. Acceptance check before transaction (PreCheck)
2. Authorization of the amount at transaction (PreAuthorization)

There are further requests after authorisation which are carried out via the same URL:

1. Re-authorization in order to change the amount before posting/dispatch. Not possible with payment by instalment. (ReAuthorization)
2. Credit notification. Only possible after posting/dispatch. (RefundAnnouncements)
3. Data completion only after subsequent disclosure of IDs. (AddData)

Creating/updating payolution payments

In order to initialize a payolution payment via server-to-server communication, please go to the following URL:

<https://www.computop-paygate.com/payolution.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
MerchantID	ans..30	M	MerchantID, assigned by Computop
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ns..30	O	Unique reference number
Amount	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).
Currency	a3	M	Currency, three digits DIN / ISO 4217
MAC	an64	O	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..768	O	Description of the goods purchased
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
EventToken	a2	M	Token for the call of a specific request. <CL> for Calculation <PC> for PreCheck <PA> for PreAuthorization <PZ> for ReAuthorization (not with instalment payment) <RA> for RefundAnnouncement (only after capture/shipment) <AD> for AddData
PayID	an32	C	ID assigned by Paygate for the payment, e.g. for referencing of batch files. Obligatory for EventToken <PC> (only for instalment payment), <PA>, <PZ>, <RA>, <AD>.
PayType	ans..15	C	Payment method Mandatory for: instalment, if EventToken <CL>: INSTALLMENT purchase on invoice, if EventToken <CL>: INVOICE direct debit, if EventToken <CL>: DIRECTDEBIT
CompanyOrPerson	a1	O	<P> person (standard) or <F> company. Only <P> possible for PayType <INSTALLMENT>.
Reason	a..64	O	Legible reason for the transaction

InstallmentNumber	n..2	C	Number of monthly instalments. Mandatory for EventToken <PC> and PayType <INSTALLMENT>
TaxAmount	n..12	O	VAT. Amount in the smallest currency unit (e.g. EUR Cent)
FirstName	ans..30	C	First name. Obligatory for EventToken <PC>
LastName	ans..30	C	Last name. Obligatory for EventToken <PC>
BirthDate	ans10	C	Date of birth in the format YYYY-MM-DD Obligatory for CompanyOrPerson <P>
Gender	a1	OC	Gender: <F> for female, <M> for male. The gender may not be forwarded for CompanyOrPerson <F>.
Title	ans..20	O	Title, e.g. Dr. or Prof.
AddrCountryCode	a2	OC	Country code for the invoicing address, 2 characters according to ISO 3166. Obligatory for EventToken <PC>. Optional for EventToken <CL>.
AddrCity	ans..40	C	Town/city. Obligatory for EventToken <PC>.
AddrZip	ans..10	C	Postcode. Obligatory for EventToken <PC>.
AddrStreet	ans..100	C	Street name and house number. Obligatory for EventToken <PC>.
AddrState	ans..40	O	Federal state
Email	ans..100	C	Email address of the customer. Obligatory for EventToken <PC>.
IPAddr	ans..15	C	IP address. Obligatory for EventToken <PC>.
Language	a2	O	Customer's language, e.g. <de> for German
Phone	ans..20	C	Telephone number. Obligatory for AddrCountryCode <nl>.
MobileNo	ans..20	O	Mobile telephone number
Delivery data			
sdFirstName	ans..30	O	First name in the delivery address
sdLastName	ans..30	O	Last name in the delivery address
sdCompany	ans..100	O	Company name in the delivery address
sdCountryCode	a2	C	Country code for the delivery address, 2 characters according to ISO 3166. Obligatory if sdFirstName or sdCompany is transmitted.
sdStreet	ans..100	C	Number and street of the delivery address. Obligatory if sdFirstName or sdCompany is transmitted.
sdZIP	ans..10	C	Postcode of the delivery address. Obligatory if sdFirstName or sdCompany is transmitted.
sdCity	ans..40	C	Town/city of the delivery address. Obligatory if sdFirstName or sdCompany is transmitted.
sdState	ans..40	O	Federal state of the delivery address
Company data			
CompanyName	ans..100	C	Company name. Obligatory for CompanyOrPerson <F>.
VatID	ans..25	O	VAT ID
RegisterNumber	ans..20	O	Register of Companies number/commercial register
CompanyID	ans..30	O	Other register number except VAT ID or Register of Companies number/Commercial Register
CountryCode	a2	C	Country code for the bank account, 2 characters according to ISO 3166. Obligatory for PayType <INSTALLMENT> or <DIRECTDEBIT> and EventToken <PA>.
HolderName	ans..100	C	Name of account holder. Obligatory for PayType <INSTALLMENT> or <DIRECTDEBIT> and EventToken <PA>.

IBAN	ans..34	C	International Bank Account Number. Obligatory for PayType <INSTALLMENT> or <DIRECTDEBIT>, EventToken <PA> and CountryCode <de> or CountryCode <at>.
BIC	ans..11	C	Bank Identifier Code. Obligatory for PayType <INSTALLMENT> or <DIRECTDEBIT>, EventToken <PA> and CountryCode <de> or CountryCode <at>.
CustomerGroup	ans..12	O	Description of the customer group
CustomerID	ans..30	O	Customer number at the merchant
NumberPaidPurchases	n..4	O	Number of successful purchases
CustomerScore	n..4	O	Internal score value at merchant
ShopURL	ans..128	O	URL of the web shop
DateOfRegistration	n8	O	Registration date of customer in format YYYYMMDD
TrackingID	ans..50	O	Tracking ID of merchant system
ParcelTrackingID	ans..50	O	Parcel tracking number for returns
ParcelService	ans..12	O	Logistics company
OrderID	ans..32	O	Order number
ArticleList	ans..1024	O	Description and price of the goods purchased Example: <Description>;<Net price>;<VAT>+... <;>separates fields within an article <+> separates several article data records Data type (size): Description = alphanumeric (100) NetPrice = numerical (12) VAT = numerical (12)
ShopID	ans..64	O	ID of the shop: ID issued by Payolution.
ShopName	ans..128	O	Shop-URL without www. or http. - e.g. „myShop.com“
LegalName	ans..128	OC	Obligatory if ShopID is transmitted: Shop company name including legal form, e.g. “MyShop GmbH” or “MyShop AG” If ShopID is not transmitted the parameter will be ignored.
GoodsCategory	a..20	OC	Obligatory if ShopID is transmitted: Type of product Tangible goods: TANGIBLE_GOODS Services: SERVICE_PROVIDER If ShopID is not transmitted the parameter will be ignored.

Parameters for payolution payments

The following table describes the result parameters with which the Paygate responds to your system:

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
RefNr	ans..30	O	Unique reference number for your accounts
Status	a..50	M	OK, AUTHORIZE_REQUEST or FAILED

Description	ans..1024	M	Further details in the event that payment is rejected. Please do not use the Description but the Code parameter for the transaction status analysis!
Code	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from www.computop.de/manual)
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
CodeExt	ans..10	O	Error code from payolution, if agreed with Computop support
ErrorText	ans..256	O	Error text from payolution, if agreed with Computop support
Reference	ans..32	M	Internal payolution-ID for the transaction
PaymentPurpose	ans..32	O	Purpose of payment from payolution, which must be stated by the customer upon transfer
PaymentDetails	ans..1024	O	Payment details Example: <OriginalAmount>;<TotalAmount>;<MinimumInstalment>;<TermHirePurchase>;<InterestRate>;<EfflntRate>;<PaymentReason>;<Currency>;<CreditInfoUrl>;<PaymentAmount1>;<PaymentDate1>;<PaymentAmountN>;<PaymentDateN>+... <;>separates fields within an article <+> separates several article data records Data type (size): Original amount = alphanumeric (16) Total amount = alphanumeric (16) Minimum instalment amount = alphanumeric (16) Duration of hire purchase =numeric (2) Interest rate = alphanumeric (6) eff. interest rate = alphanumeric (6) Payment reason = alphanumeric (128) Currency = text (3): CreditInfoURL = alphanumeric (256) Payment amount = alphanumeric (16) Payment date = alphanumeric (10)
UrlTerms	ans..1024	O	URL to the general terms and conditions of business
ConsentUrl	ans..1024	O	URL to data protection regulations

Result parameters for payolution payments

Capturing a payolution payment

In order to capture a payolution payment via a server-to-server communication, go to the following URL:

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

Notice: A capture or partial capture is only possible for invoice payment. For instalment payment the capture is made automatically (Autocapture), so that a capture is not possible anymore.

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.

TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ans..30	M	Unique reference number for your accounts
Amount	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).
Currency	a3	M	Currency, three digits DIN / ISO 4217
MAC	an64	O	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..768	O	Description of purchased goods, unit prices, merchant's comment etc.
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
TaxAmount	n..12	O	VAT. Amount in the smallest currency unit (e.g. EUR Cent)
Reason	a..64	O	Legible reason for the transaction
CustomerID	ans..30	O	Customer number at the merchant
TrackingID	ans..50	O	Tracking ID of merchant system
ParcelTrackingID	ans..50	O	Parcel tracking number for returns
ParcelService	ans..12	O	Logistics company
OrderID	ans..32	O	Order number

Parameters for capturing a payolution payment

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
RefNr	ans..30	O	Unique reference number for your accounts
Status	a..50	M	OK, AUTHORIZE_REQUEST or FAILED
Description	ans..1024	M	Further details in the event that payment is rejected. Please do not use the Description but the Code parameter for the transaction status analysis!
Code	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from www.computop.de/manual)
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
CodeExt	ans..10	O	Error code from payolution, if agreed with Computop support
ErrorText	ans..256	O	Error text from payolution, if agreed with Computop support
Reference	ans..32	M	Internal payolution-ID for the transaction

Response parameters for capturing a payolution payment

Canceling a payolution authorization

In order to cancel a payolution authorization via a server-to-server communication, go to the following URL:

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

Notice: A cancellation is only possible for invoice payment. For instalment payment the capture is made automatically (Autocapture), so that a cancellation is not possible anymore.

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.
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ans..30	M	Unique reference number for your accounts
Amount	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).
Currency	a3	M	Currency, three digits DIN / ISO 4217
MAC	an64	O	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..768	O	Description of purchased goods, unit prices, merchant's comment etc.
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.

Parameters for capturing a payolution payment

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
RefNr	ans..30	O	Unique reference number for your accounts
Status	a..50	M	OK, AUTHORIZE_REQUEST or FAILED
Description	ans..1024	M	Further details in the event that payment is rejected. Please do not use the Description but the Code parameter for the transaction status analysis!
Code	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from www.computop.de/manual)
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
CodeExt	ans..10	O	Error code from payolution, if agreed with Computop support

ErrorText	ans..256	O	Error text from payolution, if agreed with Computop support
Reference	ans..32	M	Internal payolution-ID for the transaction

Response parameters for cancelling a payolution payment

Crediting payolution payments

In order to credit a payolution payment via a server-to-server communication, 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
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.
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ans..30	M	Unique reference number for your accounts
Amount	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).
Currency	a3	M	Currency, three digits DIN / ISO 4217
MAC	an64	O	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..768	O	Description of purchased goods, unit prices, merchant's comment etc.
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
TaxAmount	n..12	O	VAT. Amount in the smallest currency unit (e.g. EUR Cent)
Reason	a..64	O	Legible reason for the transaction

Parameters for crediting a payolution payment

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
RefNr	ans..30	O	Unique reference number for your accounts
Status	a..50	M	OK, AUTHORIZE_REQUEST or FAILED
Description	ans..1024	M	Further details in the event that payment is rejected. Please do not use the Description but the Code parameter for the transaction status analysis!

Code	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from www.computop.de/manual)
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop.
CodeExt	ans..10	O	Error code from payolution, if agreed with Computop support
ErrorText	ans..256	O	Error text from payolution, if agreed with Computop support
Reference	ans..32	M	Internal payolution-ID for the transaction

Response parameters for crediting a payolution 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 payolution capture or credit 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
Capture	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)
Credit	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)
Reverse	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>
Payolution,Capture,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>
Payolution,Credit,<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
Type	a..11	M	HEAD for Header, FOOT for Footer, Payolution for the transactions
Action	a..20	M	The parameter Action defines the type of transaction: Capture Credit
Amount	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).
Currency	a3	M	Currency code, three digits DIN / ISO 4217
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ans..30	O	Unique reference number
PayID	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>
Payolution,Capture,<Amount>,<Currency>,<TransID>,(,<RefNr>,<PayID>,<Status>,<Code>
Payolution,Credit,<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
Action	a..20	M	The parameter Action defines the type of transaction: Capture Credit
PayID	an32	M	ID for this transaction given by Paygate
Status	a..50	M	OK or FAILED
Code	n8	M	Error code according to Paygate Response Codes Excel file (part of the software client from www.computop.de/manual)

Description of result parameters within the record for Batch files