



Barzahlen

Integration Guide

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Document history

Date	Name	Change
13.02.2017	Peter Posse	Plain & Custom added
04.10.2016	Peter Posse	First version

ABOUT BARZAHLEN

General information about Barzahlen

This manual describes configuring and using the Computop interface for Barzahlen:

Barzahlen is aimed at customers in Germany who do not want to enter sensitive data online, and those who do not use credit cards or online banking. An alternative to cash on delivery, Barzahlen is quicker and less expensive. Customers pay the amount to an associated retailer, on the basis of a payment form; the retailer transmits a payment confirmation in real time to the online shop so that the goods can be dispatched quickly.

Barzahlen is a payment provider for cash transactions. Customers use cash to pay for online purchases, travel bookings or diverse invoices. It is also possible to pay by cash to one's own giro account.

The customer receives a barcode via email, SMS or Post to process the payment. This barcode is then scanned at the checkout of an individual partner branch and the customer pays with cash or another permitted payment method. The supplier is notified about payment in real time by the checkout system once the customer has paid. The payment service is carried out by Greensill Bank AG from Bremen.

Currently cash payments are made throughout Germany in over 10,000 branches of the REWE markets, dm-drogerie markets, PENNY markets, real,- supermarkets, Telekom Shops, mobilcom-debitel branches and with Budni chemists and in branches of the Dr. Eckert group.

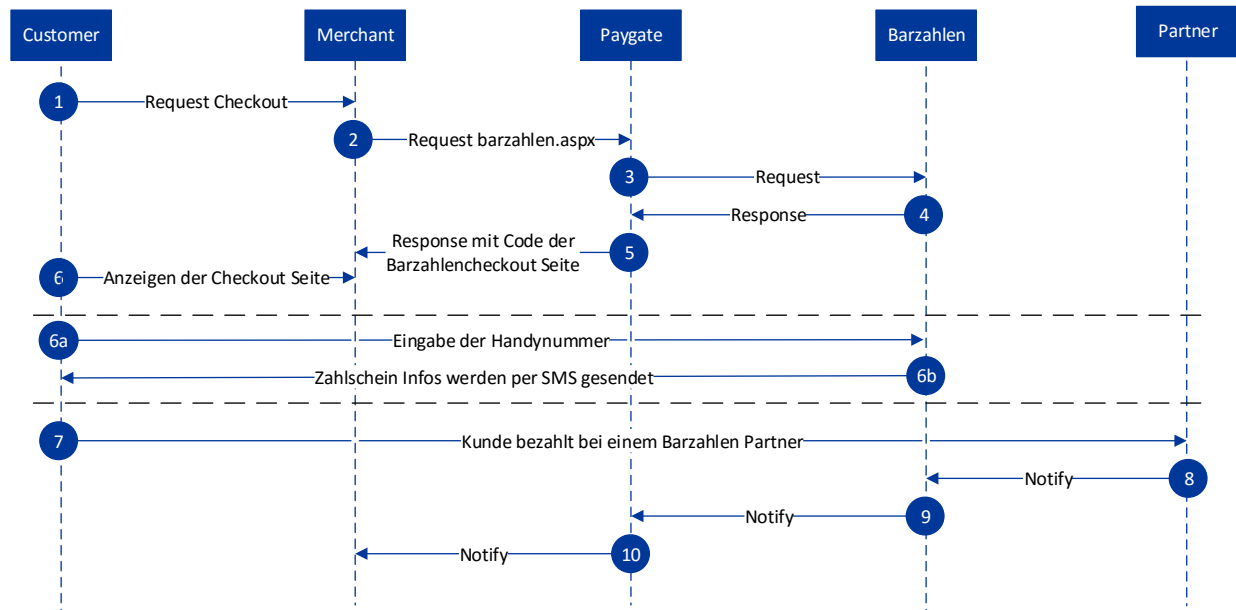
Cash payments offer users who prefer cash, the option to buy, gamble or to book travel online without entering sensitive financial data. This cash option, means it is the only payment system available to every German without restriction. 68% of Germans over 18 years have no credit card (Deutsche Bundesbank 2015) and 51% do not use online banking (Bundesverband deutscher Banken 2014).



With Barzahlen online purchases in Germany at over 10,000 branches of retail partners such as real,- can be paid for in cash. The additional customer potential encompasses amongst other things those Internet users who do not yet purchase online.

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

Process flow chart



Barzahlen process flow

CONFIGURATION FOR BARZAHLEN

Merchants need to initially setup an account with Barzahlen on their webpage: <https://controlcenter.barzahlen.de/#/account/signin>

You start configuration once you have logged on.

In the cash payment Control Center you need to enter the following URLs under Settings / Divisions (<https://controlcenter.barzahlen.de/#/settings/divisions>).

Notification URL: <https://www.computop-paygate.com/BarzahlenComplete.aspx>

Sandbox notification URL: <https://www.computop-paygate.com/BarzahlenComplete.aspx>

Field	Value
Status	Noch nicht freigeschaltet
Division Titel	Computop GmbH (Produktiv)
Division-URL	http://www.computop.com
Benachrichtigungs-URL	https://www.computop-paygate.com/BarzahlenComplete.aspx
Sandbox-Benachricht.-URL	https://www.computop-paygate.com/BarzahlenComplete.aspx
Bankkonto	Fügen Sie ein Bankkonto hinzu
Division ID	[Blurred]
Zahlungsschlüssel	[Blurred]
Benachrichtigungsschlüssel	[Blurred]

You must send the division-ID together with the payment key to the Computop Support at helpdesk@computop.com, in order to activate this payment method within your MID on Paygate.

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

Call of Paygate interface for Barzahlen

To carry out a Barzahlen payment via a Server-to-Server connection, call the following URL:

<https://www.computop-paygate.com/barzahlen.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 This parameter is to be passed in plain language.

TransID	ans..40	M	TransactionID which should be unique for each payment
RefNr	ns..40	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	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
URLNotify	ans..256	O	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 UserData parameter instead.
UserData	ans..1024	O	If specified upon call, Paygate forwards the parameter with the payment result to the shop
OrderDesc	ans..512	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 the list within Computop Analytics.
ReqID	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 ReqID, Paygate will not carry out the payment, but will just return the status of the original transaction.
CustomerID	ans..80	C	Customer ID or customer number. If this value is not transmitted, the email address must be transmitted.
Email	ans..80	C	Email address of the customer. If this value is not transmitted, the CustomerID must be transmitted.
Street	ans..60	O	Customer's street and street number to find the nearest points of acceptance
ZIP	ans..10	O	Customer's post code to find the nearest points of acceptance
City	ans..50	O	Customer's city/town to find the nearest points of acceptance
CountryCode	a2	O	Country code according to ISO 3166. The default is DE.
Language	a5	O	5-digit language code which impacts the language of the payment form and the response parameters. The default is de-DE
Expiration	n..4	O	Validity of payment form in days. The default validity period of the payment form can also be provided within the Barzahlen backend.
MobileNo	ans..50	O	Customer's mobile phone number with country code. e.g. +49151123456789
Plain	ans..50	O	A value to be set by the merchant to return some information unencrypted, e.g. the MID
Custom	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

Parameters for payments with Barzahlen

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	ns..40	O	Unique reference number
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
Status	a..50	M	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)
CodeExt	n..10	O	Detailed error code from Barzahlen. <u>Notice:</u> Is returned only if Status=FAILED. Use is possible only in agreement with Computop support.
ErrorText	ans..256	O	Detailed error message from Barzahlen. <u>Notice:</u> Is returned only if Status=FAILED. Use is possible only in agreement with Computop support.
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
TokenExt	ans..255	M	Token to display the Barzahlen checkout page
TransactionID	ans..50	M	ID for identification of payment form
ExpirationNotice	dtm	M	Expiration date of the payment form

Response parameters for payments with Barzahlen

The following table gives the results parameters which the Paygate transfers to your URLNotify:

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	ns..40	O	Unique reference number
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
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 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)
CodeExt	n..10	O	Detailed error code from Barzahlen. <u>Notice:</u> Is returned only if Status=FAILED. Use is possible only in agreement with Computop support.
ErrorText	ans..256	O	Detailed error message from Barzahlen. <u>Notice:</u> Is returned only if Status=FAILED. Use is possible only in agreement with Computop support.
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
TransactionID	ans..50	M	ID for identification of payment form
ExpirationNotice	dtm	M	Expiration date of the payment form
Plain	ans..50	O	A value to be set by the merchant to return some information unencrypted, e.g. the MID

Custom	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
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Response parameters for URLNotify with Barzahlen

The merchant has to implement the following code on his page in order to display the Barzahlen checkout page.

```
<!-- Barzahlen Checkout -->
<script src=https://cdn.barzahlen.de/js/v2/checkout.js
        class="bz-checkout"
        data-token="CHECKOUT_TOKEN">
</script>
<!-- End Barzahlen Checkout -->
```

The value of the Checkout_Token is transferred by Computop in the **TokenExt** parameter.

The src value must contain the following values for test and productive transactions:

Test: <https://cdn.barzahlen.de/js/v2/checkout-sandbox.js>

Productive: <https://cdn.barzahlen.de/js/v2/checkout.js>

Updating a payment

To update a Barzahlen payment via a Server-to-Server connection, call the following URL:

<https://www.computop-paygate.com/barzahlenUpdate.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 This parameter is to be passed in plain language.
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
Resending a payment form			
EventToken	a1	M	R = Resend
DistributionType	ans..5	O	Delivery method of payment form for resending. Possible values: Email, Phone; default is Email. When resending a payment form for credits always an email is sent to the customer.
Updating a payment form			
EventToken	a1	M	U = Update
Amount	n..12	OC	Amount in the smallest currency unit (e.g. EUR Cent) Not for credits.
MobileNo	ans..50	OC	Customer's new mobile telephone number Not for credits.

Email	ans..255	OC	New email address of the customer Not for credits
Expiration	n..4	O	New validity of payment form in days. Updating the validity of a payment form.

Parameters for updating a payment with Barzahlen

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
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 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)
CodeExt	ans..10	O	Detailed error code from Barzahlen. Notice: Is returned only if Status=FAILED. Use is possible only in agreement with Computop support.
ErrorText	ans..1024	O	Detailed error message from Barzahlen. Notice: Is returned only if Status=FAILED. Use is possible only in agreement with Computop support.
TransactionID	ans..50	M	ID for identification of payment form
ExpirationNotice	dtm	M	Expiration date of the payment form

Response parameters for updating of Barzahlen

Credit with reference

Credits (refunds) are possible via a Server-to-Server connection. 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
MerchantID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	Paygate ID for the identification of a payment
TransID	ans..64	M	TransactionID which should be unique for each payment
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

MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..768	O	Description of refunded goods, unit prices, merchant's comment etc.

Parameters for credits of Barzahlen payments

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
MID	ans..30	MC	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 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)

Result parameters for credits of Barzahlen payments

Reversal

In order to cancel a Barzahlen payment via a server-to-server communication, 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.

Notice: Reverse.aspx does not only reverse authorisations, but any LAST TRANSACTION STAGE! If the last transaction was a capture, Reverse.aspx initiates the reverse, e.g. a credit. Therefore, the utmost caution is urged. Use is at your own risk. We recommend checking the transaction status with Inquire.aspx before using Reverse.aspx.

The following tables describe the transfer parameters and return values which are exchanged via the socket connection.

Parameter	Format	CND	Description
MerchantID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	Paygate ID for the identification of a payment
TransID	ans..64	M	TransactionID which should be unique for each payment
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
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm

Parameters for reversals of Barzahlen payments

The following table describes the Paygate response parameters:

Parameter	Format	CND	Description
MID	ans..30	MC	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 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)

Result parameters for reversals of Barzahlen 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 reversals or credits with Barzahlen and which information can be found within the response file about the payment status.

For Batch calls there must be considered batch versions, from which optional parameters depend. All version designations starting with „2.“ pertain calls for a group of enterprises. That means within a batch file for a particular MerchantID can be transferred transactions for other merchants with a separate Sub-MID.

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

Action	Version	Description
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 Barzahlen payment within a Batch file to be submitted is the following:

```
HEAD,<MerchantID>,<Date>,<Version>
Barzahlen,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>
Barzahlen,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
Type	a..11	M	HEAD for Header, FOOT for Footer, Barzahlen for Barzahlen
Action	a..20	M	The parameter Action defines the type of transaction: Credit Reverse (cancellation)
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	ns..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>
Barzahlen,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<Status>,<Code>
Barzahlen,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
Action	a..20	M	The parameter Action defines the type of transaction: Credit Reverse (cancellation)
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