



PayByBill

Integration Guide

Version 6.2.1

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Document history

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

ABOUT GOTHIA PAYBYBILL

General information about PayByBill

With PayByBill from the Gothia Financial Group you can offer your customers popular methods of payment such as direct debit, purchase on invoice or flexible hire purchase. PayByBill enables merchants to send their own invoice. At the same time merchants will receive payments. PayByBill takes care of the debt collection.

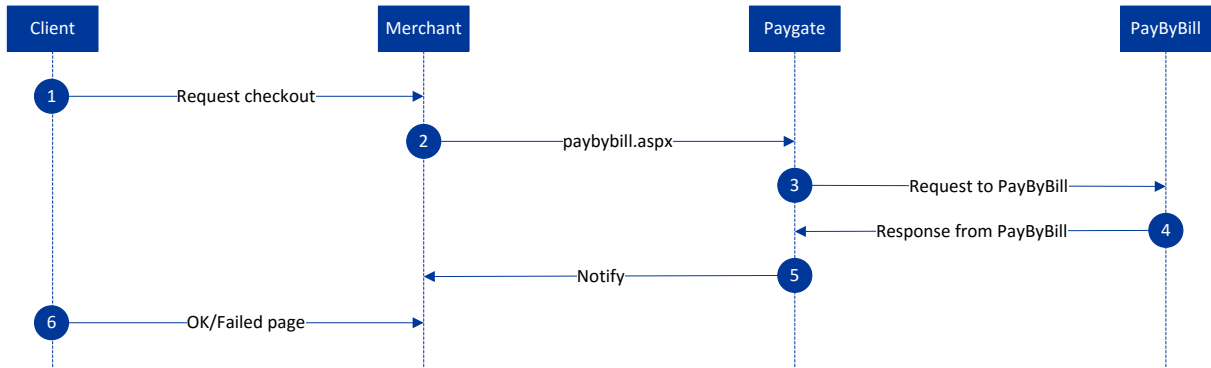


PayByBill enables merchants to offer payment methods such as invoice purchasing, financing and direct debit. The solution offers merchants a payment guarantee and is available for Denmark, Germany, Finland, the Netherlands, Norway and Sweden.

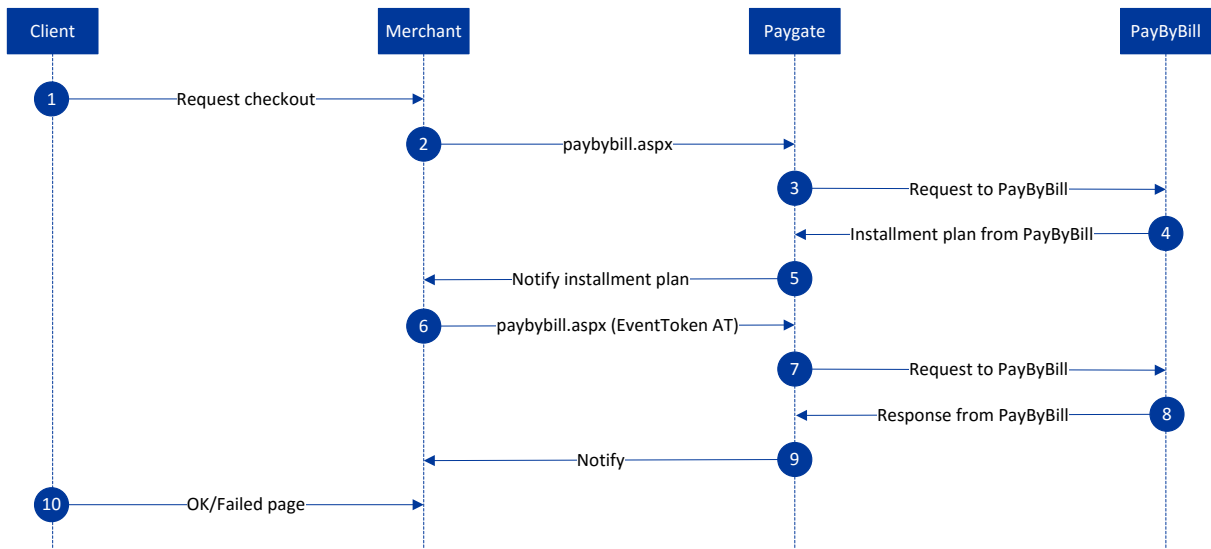
Further information can be found on the webpage of PayByBill (www.paybybill.com/de).



Process flow charts



Process flow PayByBill



Process flow PayByBill instalment payment

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

PayByBill purchase on invoice and hire purchase

This chapter describes how to reserve a PayByBill payment. Following successful reservation you can capture PayByBill payments or if necessary credit them. Merchants can also cancel PayByBill reservations.

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

<https://www.computop-paygate.com/paybybill.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
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ans..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	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop.
PayType	ans..16	M	Payment type: "Invoice" or "DirectDebet". "DirectDebet" is permitted in Germany only. In case of hire purchase via Germany only 'DirectDebet' is allowed.
FirstName	ans..30	M	First name of the customer
LastName	ans..30	M	Last name of the customer or company name
AddrStreet	ans..128	M	Customer's street
AddrHouseNr	ans..5	O	Customer's street number
AddrZipCode	ans..15	M	Postcode of the customer
AddrCity	ans..30	M	Customer's place of residence
AddrCountryCode	a2	M	Country code of the customer's residence, 2 characters according to ISO 3166.
BirthDate	ans..10	OC	Obligatory if AddrCountryCode=DE: Date of birth in the format YYYY-MM-DD
SocialSecurityNumber	ans..20	OC	Obligatory if AddrCountryCode=DE: Social security number if CompanyOrPerson=P. Register of Companies number if CompanyOrPerson=C. Country-specific formats SE: DDMMYYNNNN NO: DDMMYYNNNN DK: DDMMYY-NNNN FI: DDMMYY-NNNN NL: DDMMYYYY
Email	ans..100	M	Email address of the customer
Phone	ans..20	O	Customer's phone number
MobileNo	ans..16	O	Customer's mobile telephone number

AccIBAN	n8	OC	Obligatory if PayType=DirectDebet: Identification of the financial institution of the account holder
AccNr	n..11	OC	Obligatory if PayType=DirectDebet: account holder's account number
CustomerID	ans..50	M	Customer number at the merchant
CompanyOrPerson	a1	O	P=Person (standard), C=Company
Salutation	ans..10	O	Salutation – 'Mr', 'Mrs', 'Miss'
Title	ans..20	O	Title, e.g. Dr. or Prof.
DistributionType	ans..8	O	Method of dispatch of the invoice: 'paper' or by 'email'
DistributionBy	ans..8	O	Sender of the printed invoice. 'Company' for Gothia; 'Client' if the merchant is the sender.
In case of hire purchase			
EventToken	a2	M	1. call: "IP" for Instalment Purchase (to request the terms & conditions and AcceptID) 2. call: "AT" for AcceptAccountTermsAndConditions (to confirm the terms & conditions)
Month	n..2	M	Number of instalments
ProductNr	ans..4	O	Account profile number, as configured with Gothia, e.g. '1'
PayID	an32	OC	Obligatory on second call: Paygate ID for the identification of a payment

Parameters for payments with PayByBill

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. AUTHORIZE_REQUEST on first call with EventToken=IP
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
RefNr	ns..30	O	Merchant's unique reference number
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
CodeExt	n..10	O	Error code from PayByBill, if agreed with Computop Support
ErrorText	ans..1024	O	Error text from PayByBill, if agreed with Computop Support
InstallmentData	ans..1024	O	Installment plan InstallmentData=<Month>;<PaymentAmount>;<CapitalBalance>;<Fees>;<Interest>+ <Month>;<PaymentAmount>; ...
TermsAndConditions	ans..1024	O	Terms & conditions for payment by instalment
FirstName	ans..128	O	First name

LastName	ans..128	O	Last name
AddrStreet	ans..255	O	Street and street number in the delivery address
AddrZip	ans..20	O	Postcode in the delivery address
AddrCity	ans..50	O	Town/city in the delivery address
InvoiceText	ans..1024	O	Access data for the instalment payment portal and the minimum instalment amount for the product plus invoice information. Example: InvoiceText=<minimum rate amount>;<Text>;<account number>;<password>;<LogonText>;<OCR number>

Result parameters for PayByBill payments

Capture

Captures are possible via a Server-to-Server connection. To settle an invoice / carry out dispatch by PayByBill 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
MerchantID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment to be captured
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	a..3	M	Currency, three digits DIN / ISO 4217
RefNr	ns..30	O	Reference number of merchant (e.g. invoice number)
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
InvoiceNr	ans..16	M	unique reference number
ProductNr	ans..4	O	Account profile number, as configured with Gothia, e.g. '1'
ArticleList	ans..1024	M	Article list with description of items and prices: <Article number> ;<quantity> ;<article description> ;<net price> ;<gross price> ;<VAT> ;<tax rate>; <unit> <;> separates the fields of an article data set <+> separates the article data sets Data type (size): Article number (ans..100) Quantity (n..3) Article description (ans..100) Net amount (n..12) in the smallest currency unit (e.g. EUR Cent) Gross amount (n..12) in the smallest currency unit (e.g. EUR Cent) VAT amount (n..12) in the smallest currency unit (e.g. EUR Cent) VAT rate (n..2), e.g. 19 for 19% unit (ans..50), e.g. kg for kilogram, or l for litre

BDStreet	ans..100	M	Street name in the invoicing address
BDHouseNr	ans..5	O	Street number in the invoicing address
BDCity	ans..100	M	Town/city in the invoicing address
BDCountryCode	a2	M	Country code for the invoicing address, 2 characters according to ISO 3166
BDZipCode	ans..8	M	Postcode in the invoicing address
DueDate	n8	O	Due date in the format DDMMYYYY
InvoiceDate	n8	O	Invoice date in the format DDMMYYYY:
TxAmount	n..12	O	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).
NetAmount	n..12	O	Net amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).

Parameters for PayByBill captures

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 transaction number, which must be unique
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)
RefNr	ns..30	O	Merchant's unique reference number
Reference	ans..16	O	Reference number for PayByBill (OCR number)
DocumentLink	ans..1024	O	Link to PDF document of the invoice
InvoiceText	ans..1024	O	Access data for the instalment payment portal and the minimum instalment amount for the product plus invoice information. Example: InvoiceText=<minimum rate amount>;<Text>;<account number>;<password>;<LogonText>;<OCR number>
File	ans..1024	O	Instalment payment contract as PDF document: Base64 encrypted data string
CodeExt	n..10	O	Error code from PayByBill, if agreed with Computop Support
ErrorText	ans..256	O	Error text from PayByBill, if agreed with Computop Support

Result parameters for PayByBill captures

Credit with reference and partial credit

Credits (refunds) are possible via a Server-to-Server connection. For a Credit with reference to a capture the amount of the Credit is limited to the amount of the previous capture. To carry out a credit with a reference transaction (returns via PayByBill), 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	ID assigned by Paygate for the payment to be credited
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	a..3	M	Currency, three digits DIN / ISO 4217
RefNr	ns..30	O	Reference number of merchant (e.g. invoice number)
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
InvoiceNr	ans..16	M	Number of invoice as reference for the refund
ArticleList	ans..1024	M	Article list with description of items and prices: <Article number> ;<quantity> ;<article description> ;<net price> ;<gross price> ;<VAT> ;<tax rate>; <unit> <;> separates the fields of an article data set <+> separates the article data sets Data type (size): Article number (ans..100) Quantity (n..3) Article description (ans..100) Net amount (n..12) in the smallest currency unit (e.g. EUR Cent) Gross amount (n..12) in the smallest currency unit (e.g. EUR Cent) VAT amount (n..12) in the smallest currency unit (e.g. EUR Cent) VAT rate (n..2), e.g. 19 for 19% unit (ans..50), e.g. kg for kilogram, or l for litre
TxAmount	n..12	O	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).
NetAmount	n..12	O	Net amount in the smallest currency unit (e.g. EUR Cent) Please contact the helpdesk, if you want to capture amounts < 100 (smallest currency unit).

Parameters for PayByBill credits

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 transaction number, which must be unique
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)
RefNr	ns..30	O	Reference number of merchant (e.g. invoice number)
Reference	ans..16	O	Reference number for PayByBill
CodeExt	n..10	O	Error code from PayByBill, if agreed with Computop Support
ErrorText	ans..256	O	Error text from PayByBill, if agreed with Computop Support

Result parameters for PayByBill credits

Reversal and Updating

To reverse a payment with PayByBill, 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
MerchantID	ans..30	M	MerchantID, assigned by Computop
PayID	an32	M	ID assigned by Paygate for the payment to be reverted
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ns..30	O	Reference number of merchant (e.g. invoice 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	a..3	M	Currency, three digits DIN / ISO 4217
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm

Parameters for reversals of PayByBill 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 transaction number, which must be unique
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)

RefNr	ns..30	O	Reference number of merchant (e.g. invoice number)
CodeExt	n..10	O	Error code from PayByBill, if agreed with Computop Support
ErrorText	ans..256	O	Error text from PayByBill, if agreed with Computop Support

Result parameters for PayByBill reversals

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 PayByBill payment and which information can be found within the response file about the payment status. You can only cancel in full.

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

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

```
HEAD,<MerchantID>,<Date>,<Version>
PayByBill,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, PayByBill for PayByBill
Action	a..20	M	The parameter Action defines the type of transaction: 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>
PayByBill,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: 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