



Alipay

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 ALIPAY

General information about Alipay

China is the second largest market worldwide for online payments with annual sales of over 100 billion US Dollars and it offers the greatest growth potential for eCommerce. Alipay is a leading local Payment Service Provider (PSP) with a popular E-Wallet for online payments. Alipay supports transactions within China as well as cross-border transactions (CrossBorder) to foreign merchants, which are directly billed in one of the supported currencies.

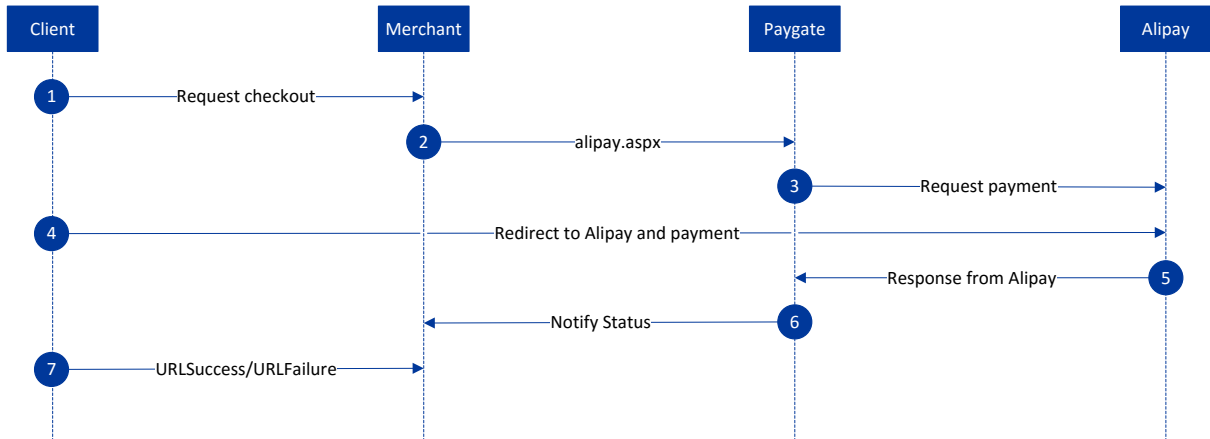
Alipay Spot Payment is a payment variant for Alipay customers who also want to use their Alipay account in store. The checkout system scans a barcode generated by the Alipay App from the customer's mobile phone and then calls an Alipay online interface via Paygate. Alipay Spot Payment is available only for cross-border partners.



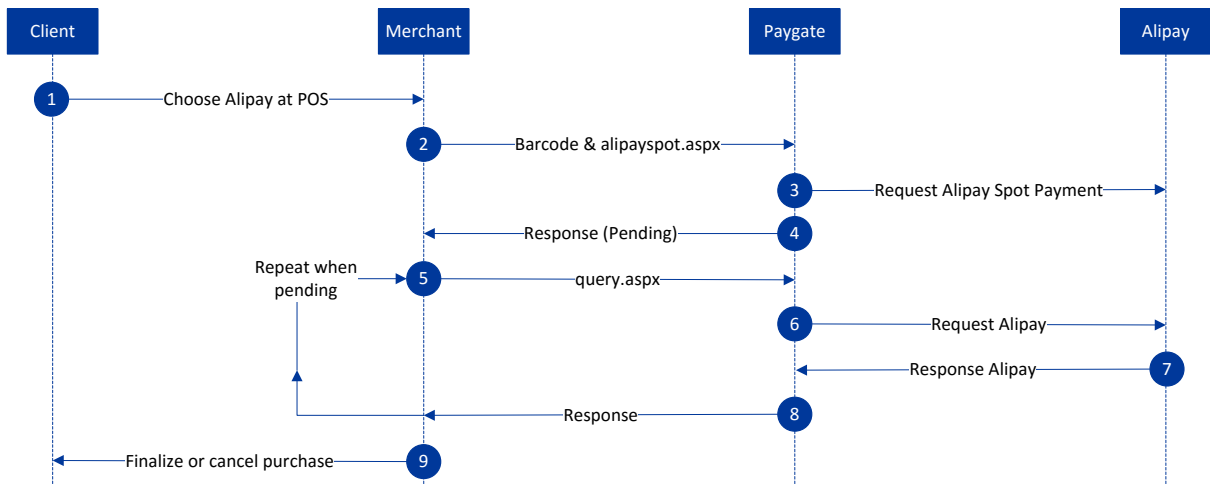
Customers and merchants can send and receive payments with the E-Wallet from China's leading online payment system. Alipay has over 800 million registered users and in 2014 it processed over 100 million online payments per day.

Further information you will find also on the webpage of Alipay (<https://intl.alipay.com/>).

Process flow charts



Alipay process flow



Alipay Spot Payment 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

Calling the interface for an Alipay payment

Cancellations and credits are available for Alipay payments as described in the next section. Only credits are available in batch mode. For point-of-sale transactions please use Alipay Spot Payments connection.

Enter the following URL to process an Alipay payment via the Paygate form:

<https://www.computop-paygate.com/alipay.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..64	M	TransactionID which should be unique for each payment
RefNr	ns..30	O	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 For merchants in China (inland) only CNY is permitted; CNY is not permitted for cross-border merchants.
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..768	M	Name of the goods purchased. The special characters "#", "&", "%" and "+" are not permitted here.
OrderDesc2	ans..127	M	Description of purchased goods, unit prices etc. The special characters "#", "&", "%" and "+" are not permitted here.
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
URLSuccess	ans..256	M	Complete URL which calls up Paygate if payment has been successful. The URL may be called up only via port 443 This URL may not contain parameters: In order to exchange values between Paygate and shop, please use the parameter UserData .
URLFailure	ans..256	M	Complete URL which calls up Paygate if payment has been unsuccessful. The URL may be called up only via port 443 This URL may not contain parameters: In order to exchange values between Paygate and shop, please use the parameter UserData .
Response	a7	O	Status response sent by Paygate to URLSuccess and URLFailure , should be encrypted. For this purpose, transmit Response=encrypt parameter.
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.
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.
Timeout	ans..3	O	Time limit for a transaction (for domestic merchants only) from 1 minute up to 15 days Details are given in the form of a two-digit integer plus an identifier: m (minute) h (hour) d (day) Because only integer numbers are allowed, instead of 1.5 hours the value 90m must be used. Additionally 1c means until end of present day. Use is possible only in agreement with Computop support.
CustomerID	ans..16	O	unique customer number
AccBank	ans..7	OC	Obligatory for e-banking: The end customer is forwarded direct to the stated bank. Only possible for domestic merchants. - ICBCBTB: Industrial and Commercial Bank of China - ABCBTB: Agricultural Bank of China - CCBBTB: China Construction Bank - SPDBB2B: Shanghai Pudong Development Bank - BOCB2C: Bank of China - ICBCB2C: Industrial and Commercial Bank of China - CMB: China Merchants Bank - CCB: China Construction Bank - ABC: Agricultural Bank of China

			<ul style="list-style-type: none"> - SPDB: Shanghai Pudong Development Bank - CIB: Industrial Bank - GDB: Guangdong Development Bank - SDB: Shenzhen Development Bank - CMBC: China Minsheng Banking - COMM: Bank of Communications - CITIC: China Citic Bank - HZCBB2C: Bank of Hangzhou - CEBBANK: China Everbright Bank - SHBANK: Bank of Shanghai - NBBANK: Bank of Ningbo - SPABANK: Ping An Bank - BJBANK: Bank of Beijing - BJRCB: Beijing Rural Commercial Bank - FDB: Fudian Bank - POSTGC: PostalSavings Bank of China - abc1003: Visa - abs1004: Master
Device	a6	O	When submitting "Mobile" the mobile version of Alipay is called instead of the desktop version
FxCurrency	ans..	OC	Currency for settlement. Three digits DIN / ISO 4217. Only allowed for Crossborder merchants, obligatory if Currency=CNY CNY is not allowed here.
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

Parameters for payments with Alipay

The following table gives the result parameters which Paygate transmits to **URLSuccess** or **URLFailure** and **URLNotify**. If you have specified the **Response=encrypt** parameter, the following parameters are sent Blowfish encrypted 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 for URLSuccess and AUTHORIZE_REQUEST or FAILED for URLFailure
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	Unique reference number
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
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 &.

Paygate interface: Calling the interface for an Alipay payment

			Custom=session=123 id=456 will change in the answer to Session=123&id=456
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Result parameters for URLNotify, URLSuccess and URLFailure in case of Alipay

Calling the interface for a payment with Alipay Spot Payments

In order to execute a payment with Alipay Spot Payments via server-to-server communication, please go to the following URL:

<https://www.computop-paygate.com/alipayspot.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..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 For merchants in China (inland) only CNY is permitted; CNY is not permitted for cross-border merchants.
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
OrderDesc	ans..256	M	Name of the transaction which is displayed in the transactions list.
OrderDesc2	ans..256	O	Transaction notice
UserData	ans..1024	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
BuyerIDCode	ans..32	M	Code generated by the Alipay-App. It is designed for the identification of a user.

Parameters for payments with Alipay Spot Payment

The following table gives the parameters with which Paygate responds:

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, FAILED or AUTHORIZE_REQUEST (If no final status from Alipay exists. Customers may need to confirm the payment in the app. with their password.)
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 at request, Paygate forwards the parameter with the payment result to the shop
RefNr	ns..30	O	Unique reference number
ErrorText	ans..48	O	Error text from the downstream system, only when its response is discussed with Computop Support (configured in MAdmin).
TID	ans..64	O	TransactionID generated by Alipay system

Response parameters from Alipay Spot Payment

Reversal

Reversals of a payment with Alipay Spot Payment are possible via a Server-to-Server connection. The Paygate permits reversals that reference a capture previously made via Paygate. If you reference a payment in a cancellation, the whole payment is cancelled. A cancellation is only possible with Alipay before the daily reconciliation.

Cancellations are not available for Alipay online payments via `alipay.aspx`.

To carry out a Reversal for Alipay Spot Payments via a Server-to-Server connection please use 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	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	a..3	M	Currency code, three digits DIN / ISO 4217
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..256	O	If specified at request, Paygate forwards the parameter with the payment result to the shop

Parameters for reversal of Alipay Spot 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 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
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..256	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
ErrorText	ans..48	O	Error text from the downstream system, only when its response is discussed with Computop Support (configured in MAdmin).

Response parameters for reversal of Alipay Spot Payments

Credit with reference

Credits for a payment with Alipay or Alipay Spot Payment can be made via server-to-server communication. Paygate permits credits that reference on a capture previously made via Paygate. The amount of the credit is limited to the amount of the previous payment.

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	ID assigned by Paygate for the payment to be credited
TransID	ans..64	M	TransactionID which should be unique for each payment
RefNr	ans..30	O	Merchant's 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	a..3	M	Currency code, three digits DIN / ISO 4217
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..256	O	If specified at request, Paygate forwards the parameter with the payment result to the shop

Parameters for credits of Alipay 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 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..256	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
RefNr	ns..30	O	Merchant's unique reference number
ErrorText	ans..48	O	Error text from the downstream system, only when its response is discussed with Computop Support (configured in MAdmin).

Result parameters for credits of Alipay payments

Status request for Alipay Spot Payment

Status requests are only for payments with Alipay Spot Payment and is possible via a Server-to-Server connection. Paygate permits status requests that reference a payment previously made via Paygate. A status request is needed as soon as the value AUTHORIZE_REQUEST has been received in response to the deposit of a payment. In this case the customer needs to confirm the payment by entering their password again with the app.

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

<https://www.computop-paygate.com/inquireExt.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
RefNr	ans..30	O	Reference number (e.g. invoice number) which must be unique for each return shipment
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 code, three digits DIN / ISO 4217

MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm
UserData	ans..256	O	If specified at request, Paygate forwards the parameter with the payment result to the shop

Parameters for status requests with Alipay Spot 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	Merchant's transaction number
Status	a..50	M	OK, FAILED or AUTHORIZE_REQUEST (If no final status from Alipay exists. The customer may need to confirm the payment in the Alipay-App with their password.)
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..256	O	If specified at request, Paygate forwards the parameter with the payment result to the shop
RefNr	ns..30	O	Merchant's unique reference number
ErrorText	ans..48	O	Error text from the downstream system, only when its response is discussed with Computop Support (configured in MAdmin).

Response parameters for status requests of Alipay Spot 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 an Alipay payment and 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
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 an Alipay payment within a Batch file to be submitted is as follows:

```
HEAD,<MerchantID>,<Date>,<Version>
Alipay,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>
Alipay,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, Alipay for Alipay
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 as follows:

```
HEAD,<MerchantID>,<Date>,<Version>
Alipay,Credit,<Amount>,<Currency>,<TransID>,( <RefNr>,) <PayID>,<Status>,<Code>
Alipay,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
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