Third-Party Notification Service (TPNS)

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Introduction

UrlNotify / Server-Response

Normally Computop Paygate sends payment details to UrlNotify for Form-Payments (Hosted Payment Page, Credit Card Form, Direct Debit Form, PayPal, ...).

For Server-2-Server requests the payment details are returned in Server-response.

Payment details returned do depend on the paymethod that has been used.

Third-Party Notification Service (TPNS)

TPNS is used to inform a central management system with a set of basic payment details. This works for Form-Payments as well as for Server-2-Server requests and for Analytics actions. It also is used for multiple MIDs / Merchant entities.

TPNS endpoints need to be setup within Computop Paygate. Please contact Computop Sales.

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
dttm	ISODateTime (YYYY-MM-DDThh:mm:ss)

Abbreviations

Abbreviation	Description	Comment
CND	condition	

M	mandatory	If a parameter is mandatory, then it must be present
O	optional	If a parameter is optional, then it can be present, but it is not required
C	conditional	If a parameter is conditional, then there is a conditional rule which specifies whether it is mandatory or optional

Notice: Please note that the names of parameters can be returned in upper or lower case.

Notification callback

Computop server will execute an HTTPS POST request directly to the web server of the Partner (URL) . To integrate with this notification, the Partner should supply Computop with the IP address and the URL that leads to the callback entry point of the server. This is usually a small module /application, which constantly listens and waits for incoming HTTPS requests from the Computop server. The Computop server will send data via an HTTPS POST request to the server URL configured including all the relevant parameters in the HTTPS POST request.

The parameters will be transmitted in the HTTP Body as a Blowfish encrypted parameter string. The content type will be **application/x-www-form-urlencoded; charset=iso-8859-1**.

Note: Please note that the Notify-call is permitted only via Port 443 (SSL) for security reasons. The **URL encoded** parameters are transmitted in key-value pairs.

If one of these parameters (IP or URL) during time changes, the partner should notify Computop Helpdesk to perform the related configuration changes.

For security reasons a common **Blowfish Secret Key** (password) will be shared between Computop and the Partner regarding this notification process and the parameter MAC should be present in the callback request.

The calculation of the MAC value is done using SHA-256 algorithm and with the subsequent parameter values: **PayID*XID*TransID*MerchantID*Status*Code.**

The receiver should use the MAC SHA-256 algorithm, which nearly all programming languages support, to calculate the hash value with the HMAC key and the parameter values.

Computop Paygate will submit a notification request via HTTP POST in order to transfer the authorization status and transaction details to the server URL as stored in the merchant configuration.

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

pls. be prepared to receive additional parameters at any time and do not check the order of parameters

the key (e.g. MerchantId, RefNr) should not be checked case-sentive

Key	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 as well as for capture or credit request.
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
Status	a..30	M	Status of the action performed: 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 (A4 Error codes)
refnr	ns..30	O	Merchant's unique reference number
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: • HMAC Authentication (Request) • HMAC Authentication (Notify)
CCBrand	a..22	OC	Card scheme brand (e.g. Visa, MasterCard, Maestro etc.) Please note the spelling! According to table of credit card brands!

MaskedPan	an..19	OC	Masked card number (6X4). Format: 666666**XXXXXX**4444 (X masking digit)
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the Computop Helpdesk, if you want to capture amounts <100 (smallest currency unit).
Currency	a3	M	Currency, three digits DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: A1 Currency table
TxType	ans..30	M	Action name being performed which triggered the notification message. Expected values such as: • Authorize • Capture • Credit • CreditEx • Increment • ReverseAuthorize • ReverseCapture • ReverseCredit • ReverseIncrement • ReverseSale • ReverseOrder
AQ	ans..3	OC	Acquirer short code (valid for credit card payments only)
PayType	ans..30	M	Showing the name of the payment type used. Expected values such as: • GICC • Omnipay • PayPal • etc. **Note**: Please get in touch with Computop Merchant Services team for a full list of supported payment methods.
TimeStamp	ans..20	M	Timestamp of the performed original TxType within format: DD.MM.YYYY HH:MM:SS
Channel	ans..30	M	The entry method/channel which was used for the original TxType triggering this notification. Values like: Client, Server, Analytics, Payshow
TerminalID	an..8	C	Acquirer Terminal ID (valid for credit cards only)
VUNr	n5..12	C	Merchant contract number. The length depends on the acquirer. (valid for credit cards only)

Key	Format	CND	Description	Beschreibung
PayID	an32	M	ID assigned by Paygate for the payment, e.g. for referencing in batch files as well as for capture or credit request.	Vom Paygate vergebene ID für die Zahlung; z.B. zur Referenzierung in Batch-Dateien sowie im Capture- oder Credit-Request.

Key	Format	CND	Description	Beschreibung
XID	an32	M	ID for all single transactions (authorisation, capture, credit note) for one payment assigned by Paygate	Vom Paygate vergebene ID für alle einzelnen Transaktionen (Autorisierung, Buchung, Gutschrift), die für eine Zahlung durchgeführt werden

Key	Format	CND	Description	Beschreibung
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment	Ihre eigene TransaktionsID, die für jede Zahlung eindeutig sein muss

Key	Format	CND	Description	Beschreibung
Status	a..30	M	Status of the action performed: OK or FAILED	Status der ausgeführten Aktion: OK oder FAILED

Key	Format	CND	Description	Beschreibung
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!	Nähere Beschreibung bei Ablehnung der Zahlung. Bitte nutzen Sie **nicht** den Parameter **Description, sondern** Code für die Auswertung des Transaktionsstatus!

Key	Format	CND	Description	Beschreibung
Code	n8	M	Error code according to Paygate Response Codes (A4 Error codes)	Fehlercode gemäß Paygate Antwort-Codes (A4 Fehlercodes)

Key	Format	CND	Description	Beschreibung
refnr	ns..30	O	Merchant's unique reference number	Eindeutige Referenznummer des Händlers

Key	Format	CND	Description	Beschreibung
MAC	an64	M	Hash Message Authentication Code (HMAC) with SHA-256 algorithm. Details can be found here: • HMAC Authentication (Request) • HMAC Authentication (Notify)	Hash Message Authentication Code (HMAC) mit SHA-256-Algorithmus. Details finden Sie hier: • HMAC-Authentisierung (Anfrage) • HMAC-Authentisierung (Notify)

Key	Format	CND	Description	Beschreibung
CCBrand	a..22	OC	Card scheme brand (e.g. Visa, MasterCard, Maestro etc.) Please note the spelling! According to table of credit card brands!	Bezeichnung der Kreditkartenmarke (z.B. Visa, MasterCard, Maestro etc.) Bitte beachten Sie die Schreibweise gemäß Tabelle der Kreditkartenmarken!
Masked Pan	an..19	OC	Masked card number (6X4). Format: 666666**XXXXXX**4444 (X masking digit)	Maskierte Kartennummer (6X4). Format: 666666**XXXXXX**4444 (X maskiert eine Ziffer)

Key	Format	CND	Description	Beschreibung
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the Computop Helpdesk, if you want to capture amounts <100 (smallest currency unit).	Betrag in der kleinsten Währungseinheit (z.B. EUR Cent). Bitte wenden Sie sich an den Computop Helpdesk, wenn Sie Beträge < 100 (kleinste Währungseinheit) buchen möchten.

Key	Format	CND	Description	Beschreibung
Currency	a3	M	Currency, three digits DIN / ISO 4217, e.g. EUR, USD, GBP. Please find an overview here: A1 Currency table	Währung, drei Zeichen DIN / ISO 4217, z.B. EUR, USD, GBP. Hier eine Übersicht: A1 Währungstabelle

Key	Format	CND	Description	Beschreibung
TxType	ans..30	M	Action name being performed which triggered the notification message. Expected values such as: • Authorize • Capture • Credit • CreditEx • Increment • ReverseAuthorize • ReverseCapture • ReverseCredit • ReverseIncrement • ReverseSale • ReverseOrder	Name der ausgeführten Aktion, welche die Benachrichtigung ausgelöst hat. Erwartete Werte wie: • Authorize • Capture • Credit • CreditEx • Increment • ReverseAuthorize • ReverseCapture • ReverseCredit • ReverseIncrement • ReverseSale • ReverseOrder
AQ	ans..3	OC	Acquirer short code (valid for credit card payments only)	Acquirer-Shortcode (nur für Kreditkartenzahlungen)
PayType	ans..30	M	Showing the name of the payment type used. Expected values such as: • GICC • Omnipay • PayPal • etc. **Note**: Please get in touch with Computop Merchant Services team for a full list of supported payment methods.	Name der verwendeten Zahlungsart. Erwartete Werte wie: • GICC • Omnipay • PayPal • etc. **Hinweis**: Für eine vollständige Liste der unterstützten Zahlungsmethoden wenden Sie sich bitte an den Computop Händlerservice.
TimeStamp	ans..20	M	Timestamp of the performed original TxType within format: DD.MM.YYYY HH:MM:SS	Zeitstempel des ausgeführten originalen TxType im Format: DD.MM.YYYY HH:MM:SS

Channel	ans..30	M	The entry method/channel which was used for the original TxType triggering this notification. Values like: Client, Server, Analytics, Payshow	Eingabemethode/Kanal, die für den ursprünglichen TxType verwendet wurde, der diese Benachrichtigung ausgelöst hat. Werte wie: Client, Server, Analytics, Payshow
TerminalID	an..8	C	Acquirer Terminal ID (valid for credit cards only)	Acquirer Terminal ID (nur für Kreditkarten)
VUNr	n5..12	C	Merchant contract number. The length depends on the acquirer. (valid for credit cards only)	Händlervertragsnummer. Die Länge hängt vom Acquirer ab. (nur für Kreditkarten)

Response parameters for Third-party notification service via socket connections

The request will be sent in real-time. If the specified URL is not accessible Paygate will retry the notification according to the following time schedule.

Repeat	Waiting time	Time after 1. Notify
0	instantly	0
1	00:01 h	00:01 h
2	00:08 h	00:09 h
3	00:27 h	00:36 h
4	01:04 h	01:40 h
5	02:05 h	03:45 h
6	03:36 h	07:21 h
7	05:43 h	13:04 h
8	08:32 h	21:36 h

If the maximum number of repeats is reached and the Partner Web Service is still not available the retries will no longer be re-attempted.