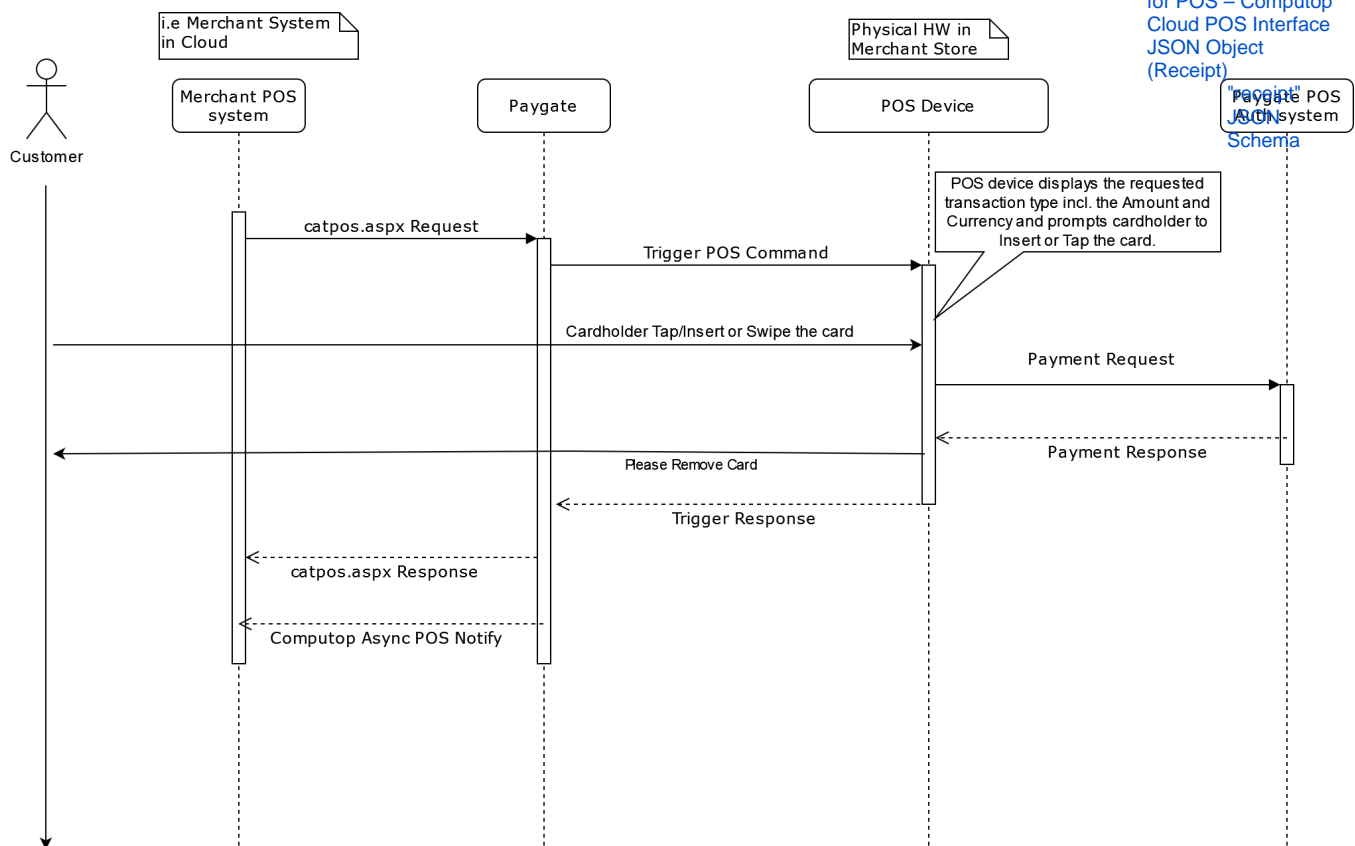


POS - Computop Cloud POS Interface (CAT)

Introduction and Prerequisites

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Process diagram



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-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.

Calling the interface for POS – Computop Cloud POS Interface

In order to use the Cloud POS Interface, please use the following URL:

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

Notice: For security reasons, Computop 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](#):

Key	Format	CND	Description
MerchantID	ans..30	M	MerchantID, assigned by Computop. Additionally this parameter has to be passed in plain language too.
MessageType	an2	M	Defines the type of payment: Supported values are: <ul style="list-style-type: none"> • 01 - Sale • 02 - Reverse • 03 - Credit • 05 - Authorization/Reservation • 0B - Capture • 0C - Card Read • 0D - Diagnose
CardReadMode	ans..10	C	Defines the technology to be used to read the card. Valid values are <ul style="list-style-type: none"> • msr • icc • manual • ctl Required for MessageType=0C (CardRead)
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
RefNr	ans..21	O	Merchant reference number
POSTerminalID	an..20	M	TerminalID of pin entry device

Printer	an1	M	<p>Possible values that the merchant POS application can send are:</p> <p>1 - Printer is ready</p> <p>0 - Printer is not ready</p> <p>Should be populated with 1 (further clarifications are in progress for usage of value 0)</p>
Amount	n..10	M	Amount in the smallest currency unit (e.g. EUR Cent). Please contact the Compu top 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
localDate	n8	M	Transaction date: YYYYMMDD
localTime	n6	M	Transaction time: hhmmss
TraceNr	ans8	C	<p>Mandatory for subsequent functions Reversal or Capture (MessageType=02 /08).</p> <p>It must be equal to the value TraceNr received from the original authorization response.</p> <p>Merchant POS system must provide this in the request.</p>
AppCode	ans6	C	<p>Mandatory for subsequent function Capture (MessageType=08).</p> <p>It must be equal to the value Approvalcode received from the original authorization response.</p> <p>Merchant POS system must provide this in the request.</p>
RTF	a1	O	Host protocol specific – COF: RTF parameter. Possible values: I or E
ContractID	n..12	O	Special merchant ID at the acquirer to overrule the default merchant ID

Key	Format	CND	Description	Beschreibung
MessageType	an2	M	<p>Defines the type of payment:</p> <p>Supported values are:</p> <ul style="list-style-type: none"> 01 - Sale 02 - Reverse 03 - Credit 05 - Authorization /Reservation 0B - Capture 0C - Card Read 0D - Diagnose 	<p>Definiert die Art der Zahlung:</p> <p>Unterstützte Werte sind:</p> <ul style="list-style-type: none"> 01 - Verkauf (Sale) 02 - Storno 03 - Gutschrift 05 - Autorisierung/Reservierung 0B - Buchung 0C - Karte lesen 0D - Diagnose
CardReadMode	ans..10	C	<p>Defines the technology to be used to read the card. Valid values are</p> <ul style="list-style-type: none"> msr icc manual ctl <p>Required for MessageType=0C (CardRead)</p>	<p>Definiert die Technologie, die zum Lesen der Karte verwendet werden soll. Gültige Werte sind</p> <ul style="list-style-type: none"> msr icc manual ctl <p>Erforderlich für MessageType=0C (CardRead)</p>

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
RefNr	ans..21	O	Merchant reference number	Händler-Referenznummer
POSTerminalID	an..20	M	TerminalID of pin entry device	TerminalID des PIN-Eingabegeräts

Printer	an1	M	<p>Possible values that the merchant POS application can send are:</p> <p>1 - Printer is ready</p> <p>0 - Printer is not ready</p> <p>Should be populated with 1 (further clarifications are in progress for usage of value 0)</p>	<p>Mögliche Werte, welche die POS-Anwendung des Händlers senden kann:</p> <p>1 - Drucker ist bereit</p> <p>0 - Drucker ist nicht bereit</p> <p>Sollte mit 1 ausgefüllt werden (Weitere Abklärungen zur Verwendung des Wertes 0 sind in Arbeit)</p>
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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
localDate	n8	M	Transaction date: YYYYMMDD	Transaktionsdatum: JJJJMMTT
localTime	n6	M	Transaction time: hhmmss	Transaktionszeit: hhmmss
TraceNr	ans8	C	<p>Mandatory for subsequent functions Reversal or Capture (MessageType=02/08).</p> <p>It must be equal to the value TraceNr received from the original authorization response.</p> <p>Merchant POS system must provide this in the request.</p>	<p>Pflicht für Folgefunktionen Storno oder Buchung (MessageType=02/08).</p> <p>Muss gleich dem Wert TraceNr sein, der von der ursprünglichen Autorisierungsantwort empfangen wurde.</p> <p>Das POS-System des Händlers muss dies in der Anfrage übermitteln.</p>
AppCode	ans6	C	<p>Mandatory for subsequent function Capture (MessageType=08).</p> <p>It must be equal to the value Approvalcode received from the original authorization response.</p> <p>Merchant POS system must provide this in the request.</p>	<p>Pflicht für Folgefunktion Buchung (MessageType=08).</p> <p>Muss gleich dem Wert Approvalcode sein, der von der ursprünglichen Autorisierungsantwort empfangen wurde.</p> <p>Das POS-System des Händlers muss dies in der Anfrage übermitteln.</p>
RTF	a1	O	Host protocol specific – COF: RTF parameter. Possible values: I or E	Host-Protokoll-spezifisch – COF: RTF-Parameter. Mögliche Werte: I oder E
ContractID	n..12	O	Special merchant ID at the acquirer to overrule the default merchant ID	Spezielle Händler-ID beim Acquirer, um die Standard-Händler-ID außer Kraft zu setzen

Parameters for payments with POS – Computop Cloud POS Interface

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-sensitive

(Note: List of parameters in response may differ based on the Computop Cloud POS Interface function called and the final POS transaction result.)

Key	Format	CND	Description
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mid	ans..30	M	MerchantID, assigned by Computop
TransID	ans..64	M	TransactionID provided by you which should be unique for each payment
Status	a..50	M	OK (URLSuccess) or FAILED (URLFailure)
RefNr	ans..21	O	Merchant reference number
Description	ans..1024	M	Further details in the event that payment is rejected. Please do not use the Description but the CATCode parameter for the transaction status analysis!
CATCode	ans3	M	Code from the POS Server or POS device
MaskedPAN	an12..19	C	Masked card number (6X4). Only in case of successful credit card transactions.
BankAccount	an64	C	Masked Bank account number for EC transactions
additionalresponse data	an..128	O	Additional text which the operator's processing system can send optionally in replies to payment/cutover requests.
Approval code	ans6	C	Approval code from authorization host in the response message to the client. Only in case of successful credit card transactions. Merchant must save this value from the response and use it when referencing Capture subsequent action.
CCSeqNr	n3	O	Card sequence number
Brand	an..22	O	Brand: VISA, MasterCard, Maestro, AMEX, DINERS, JCB, CUP
CodeExt	n3	C	Financial transaction Authorization Host response code (Payment).
TraceNr	ans8	C	Merchant must save this value from the response and use it when referencing subsequent actions i.e Reverse, Capture
VUNr	n8	O	Acquirer Contract ID number on which the transaction was processed
Receipt	object	C	Receipt content for the Merchant and the cardholder. The information should be than used from Merchant Printer system to print out the respective receipts.
ReceiptNr	an..10	O	Receipt Number
schemeReferenceID / TransactionID	an..22	O	Unique transaction identifier provided by Schemes/Issuer to reference the transaction in MIT or COF scenarios
dccForeignAmount	n..10	O	Only when DCC was performed
dccCommission	ans..7	O	Only when DCC was performed
dccForeignCurrencyCode	n..4	O	Only when DCC was performed
dccDisclaimer (new Param)	ans..1024	O	Only when DCC was performed
dccMargin	ans..5	O	Only when DCC was performed
dccRateValue	n..13	O	Only when DCC was performed
dccSource	ans..32	O	Only when DCC was performed
dccTimestamp	ans..20	O	Only when DCC was performed
ExpiryDate	n..6	O	YYYYMM
PCNr	n16	O	Pseudo Card Number: Random number generated by Computop Paygate which represents a genuine credit card number. The pseudo card number (PCN) starts with 0 and the last 3 digits correspond to those of the real card number. The PCN can be used like a genuine card number for authorisation, capture and credits. PCNr is a response value from Computop Paygate and is sent as CCNr in Request or part of card -JSON

VerificationCode	an..40	O	Used authentication mode. Possible values: <ul style="list-style-type: none"> • Signature • PIN • On consumer device • NoAuth
PayID	an..32	O	Computop PayID of the respective payment completed and linked with this cat command
aidParameters	ans..1024	O	Authorisation parameters: if these are present, the authorisation parameters must be printed out on the terminal receipt in unpacked form as 10 hexadecimal numbers. Aid-parameters can contain up to 130 characters for electronic cash payments.
localDate	n..8	O	Transaction date: YYYYMMDD
localTime	n..6	O	Transaction time: hhmmss
VuNr	n..12	O	Acquirer MerchantID which is forwarded to the authorization host
RTF	a1	O	Echoed from the request parameter
ContractID	n..12	O	Echoed from the request parameter
POSTerminalId	an..20	O	Echoed from the request parameter
TerminalID	an..12	O	Terminal ID which is forwarded towards acquirer authorization host

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..50	M	OK (URLSuccess) or FAILED (URLFailure)	OK (URLSuccess) oder FAILED (URLFailure)

Key	Format	CND	Description	Beschreibung
RefNr	ans..21	O	Merchant reference number	Händler-Referenznummer
Description	ans..1024	M	Further details in the event that payment is rejected. Please do not use the Description but the CATCode parameter for the transaction status analysis!	Nähere Beschreibung bei Ablehnung der Zahlung. Bitte nutzen Sie nicht den Parameter Description , sondern CATCode für die Auswertung des Transaktionsstatus!
CATCode	ans3	M	Code from the POS Server or POS device	Code vom POS-Server oder POS-Gerät
Masked PAN	an12..19	C	Masked card number (6X4). Only in case of successful credit card transactions.	Maskierte Kartennummer (6X4). Nur bei erfolgreichen Kreditkarten-Transaktionen.
BankAccount	an64	C	Masked Bank account number for EC transactions	Maskierte Kontonummer für EC-Transaktionen
additionalresponseData	an..128	O	Additional text which the operator's processing system can send optionally in replies to payment /cutover requests.	Zusätzlicher Text, den das Verarbeitungssystem des Betreibers optional als Antwort auf Zahlungs-/Umstellungsanforderungen senden kann.
ApprovalCode	ans6	C	Approval code from authorization host in the response message to the client. Only in case of successful credit card transactions. Merchant must save this value from the response and use it when referencing Capture subsequent action.	Genehmigungscode vom Autorisierungshost in der Antwortnachricht an den Client. Nur bei erfolgreichen Kreditkarten-Transaktionen. Der Händler muss diesen Wert aus der Antwort speichern und ihn verwenden, wenn er in der Folgeaktion Buchung darauf verweist.
CCSeqNr	n3	O	Card sequence number	Kartenfolgenummer

Brand	an..22	O	Brand: VISA, MasterCard, Maestro, AMEX, DINERS, JCB, CUP	Marke: VISA, MasterCard, Maestro, AMEX, DINERS, JCB, CUP
CodeExt	n3	C	Financial transaction Authorization Host response code (Payment).	Antwortcode vom Autorisierungs-Host der Finanztransaktion (Zahlung)
TraceNr	ans8	C	Merchant must save this value form the response and use it when referencing subsequent actions i.e Reverse, Capture	Der Händler muss diesen Wert aus der Antwort speichern und ihn verwenden, wenn er in Folgetransaktionen darauf verweist, z.B. Storno, Buchung
VUNr	n8	O	Acquirer Contract ID number on which the transaction was processed	Vertrags-ID-Nummer des Acquirers, bei dem die Transaktion verarbeitet wurde
Receipt	object	C	Receipt content for the Merchant and the cardholder. The information should be than used from Merchant Printer system to print out the respective receipts.	Quittungsinhalt für den Händler und den Karteninhaber. Die Informationen sollten dann vom Drucksystem des Händlers verwendet werden, um die entsprechenden Quittungen auszudrucken.
Receipt Nr	an..10	O	Receipt Number	Quittungsnummer
scheme Referen ceID / Transac tionID	an..22	O	Unique transaction identifier provided by Schemes/Issuer to reference the transaction in MIT or COF scenarios	Eindeutige Transaktionskennung, die von Schemes/Issuern bereitgestellt wird, um die Transaktion in MIT- oder COF-Szenarien zu referenzieren
dccForei gnAmou nt	n..10	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccCom mission	ans..7	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccForei gnCurre ncyCode	n..4	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccDiscl aimer (new Param)	ans..1024	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccMarg in	ans..5	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccRate Value	n..13	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccSour ce	ans..32	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
dccTime stamp	ans..20	O	Only when DCC was performed	Nur wenn DCC durchgeführt wurde
ExpiryD ate	n..6	O	YYYYMM	JJJJMM

Key	Format	CND	Description	Beschreibung
PCNr	n16	O	<p>Pseudo Card Number: Random number generated by Computop Paygate which represents a genuine credit card number. The pseudo card number (PCN) starts with 0 and the last 3 digits correspond to those of the real card number. The PCN can be used like a genuine card number for authorisation, capture and credits.</p> <p>PCNr is a response value from Computop Paygate and is sent as CCNr in Request or part of card-JSON</p>	<p>Pseudo Card Number: Vom Computop Paygate generierte Zufallszahl, die eine reale Kreditkartennummer repräsentiert. Die Pseudokartennummer (PKN) beginnt mit 0, und die letzten 3 Stellen entsprechen denen der realen Kartennummer. Die PKN kann wie eine Kreditkartennummer für Autorisierung, Buchung und Gutschriften verwendet werden.</p> <p>PCNr ist ein Antwortwert von Computop Paygate und kann ebenfalls als CCNr im Request oder als Teil von card-JSON verwendet werden.</p>

Key	Format	CND	Description	Beschreibung
-----	--------	-----	-------------	--------------

VerificationCode	an..40	O	Used authentication mode. Possible values: <ul style="list-style-type: none">• Signature• PIN• On consumer device• NoAuth	Verwendeter Authentifizierungsmodus. Mögliche Werte: <ul style="list-style-type: none">• Signature• PIN• On consumer device• NoAuth
PayID	an..32	O	Computop PayID of the respective payment completed and linked with this cat command	Computop PayID der jeweiligen Zahlung, die abgeschlossen und mit diesem Cat-Befehl verknüpft ist
aidParameters	ans..1024	O	Authorisation parameters: if these are present, the authorisation parameters must be printed out on the terminal receipt in unpacked form as 10 hexadecimal numbers. Aid-parameters can contain up to 130 characters for electronic cash payments.	Autorisierungsparameter: Sofern diese vorhanden sind, müssen die Autorisierungsparameter auf dem Kassensbon unverschlüsselt als 10 Hexadezimalzahlen ausgedruckt werden. Bei elektronischen Barzahlungen können die Hilfsparameter bis zu 130 Zeichen lang sein.
localDate	n..8	O	Transaction date: YYYYMMDD	Transaktionsdatum: JJJJMMTT
localTime	n..6	O	Transaction time: hhmmss	Transaktionszeit: hhmmss
VuNr	n..12	O	Acquirer MerchantID which is forwarded to the authorization host	Acquirer MerchantID, die an den Autorisierungshost weitergeleitet wird
RTF	a1	O	Echoed from the request parameter	Echo vom Aufrufparameter
ContractID	n..12	O	Echoed from the request parameter	Echo vom Aufrufparameter
POSTterminalID	an..20	O	Echoed from the request parameter	Echo vom Aufrufparameter
TerminalID	an..12	O	Terminal ID which is forwarded towards acquirer authorization host	Terminal-ID, die an den Acquirer-Autorisierungshost weitergeleitet wird

Result parameters for payments with POS – Computop Cloud POS Interface

JSON Object (Receipt)

"receipt"

Key	Format	CND	Description
receiptCopies	integer	O	Number of receipt copies to be printed
receiptCustomer	string	O	Customer receipt data
receiptMerchant	string	O	Merchant receipt data
receiptNumber	integer	O	Receipt number

JSON Schema


```
{
  "$schema": "http://json-schema.org/draft-07/schema#",
  "$id": "http://json-schema.org/draft-07/schema#",
  "title": "receipt",
  "description": "Data containing the receipt information which can be printed out by the merchant system",
  "type": "object",
  "properties": {
    "receiptMerchant": {
      "type": "string",
      "description": "Merchant Receipt data"
    },
    "receiptCustomer": {
      "type": "string",
      "description": "Customer Receipt data"
    },
    "receiptCopies": {
      "type": "integer",
      "description": "Number of receipt copies to be printed"
    },
    "receiptNumber": {
      "type": "integer",
      "description": "Receipt Number "
    }
  },
  "additionalProperties": false
}
```