



computop
the payment people

CTSF

Computop Settlement File Specification

– Version 1.17 / 2019-04-18 –

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1. Revision History

Content of Changes	Author	Version	Date
Initial release	swe	0.98	2014-10-14
Alipay domestic added, PPRO payment methods added	vsc	0.99	2015-08-11
New payment methods Bitnet, PayU; ExtInfo for Trustly revised	vsc	1.00	2015-12-02
new payment methods PayU, AfterPay. Deleted payment method YAPITAL	vsc	1.01	2016-07-22
Paydirekt, IC++, Versioning, BITNET deleted, RetrievalRequests, TC40/SAFE	vsc	1.10	2017-04-01
payment types for ExtInfo PPRO fixed	vsc	1.11	2017-05-22
new cc acquirer EVO new RecordType 58x iDEAL new RecordType 63x Klarna new RecordType 72x Amazon Pay ExtInfo for direct debit fixed	vsc	1.12	2017-07-27
RecordType 581 (iDEAL credit) added	vsc	1.13	2017-08-31
ChinaPay added PPRO CUSTOMER_INFO fixed Limonetik added	vsc	1.14	2018-04-19
new PayPal record types (disputes and withdrawal)	vsc	1.15	2018-06-29
V1.3 (Payout ID) and V1.4 (settlement data and DCC)	vsc	1.16	2018-08-09
additional infos for V1.3 and V1.4 b4payment/SEPAexpress	vsc	1.17	2019-04-18

2. General Notes

2.1 Purpose

The Computop Settlement File aggregates settlement data from various payment schemes as comma separated file in order to accommodate the reconciliation and reporting needs of our clients. Clearing and Settlement information are collected from the respective payment schemes, processors or acquiring organizations and matched with the transaction records on file at Computop.

Please note that Computop Settlement Files are generated in accordance with the frequency of clearing and settlement information made available with the relevant payment scheme(s), processor(s) or acquirer(s).

Please note that new record types can be added any time without previous notice.

2.2 Supported Payment Schemes, Payment Methods and Acquires

Category	Scheme	Processor / Acquirer / Gateway
Credit Cards	American Express	American Express (German & PANEUROP)
	*Multiple	B+S Card Service ConCardis Elavon EVO (GICC) iCard JPMorgan Chase (Salem and Tampa) Lufthansa AirPlus OmniPay (EMS, Global Payments, Paysquare) SIX Payment Services Vantiv Wirecard Worldline
Bank Transfers	iDEAL	*
	Paydirekt	Paydirekt
	Sofortüberweisung	*
Alternatives	AfterPay/PayByBill	AfterPay/arvato
	Alipay	Alipay
	Amazon Pay	Amazon
	Barzahlen	Cash Payment Solutions
	BillPay	BillPay
	ChinaPay	ChinaPay
	Klarna	Klarna
	Limonetik	Limonetik
	PayPal	PayPal
	SEPA Direct Debit	*
	Trustly	Trustly
	*Multiple	PagBrasil
	*Multiple	PayU
	*Multiple	PPRO

2.3 Retrieval

Merchants may collect Computop Settlement Files at their own discretion from a Computop SFTP account. For configuration and account credentials please contact the Computop helpdesk: helpdesk@computop.com.

2.4 File Structure

Each Settlement File is structured into a header record, one or multiple detail records and a total record. The encoding for the line breaks is configurable at merchant level. Some fields may contain values of variable length. Where sizes are not given, a field size limitation does not apply.

2.5 Notation of Data Types

Format	Description
A	Alphabetic characters A-Z, a-z
N	Numeric digits, 0-9
An	Alphanumeric characters A-Z, a-z, 0-9
Ans	Alphanumeric and special characters
Ns	Numeric and special characters
3	Fixed length data element of 3 characters
..17	Variable length data element up to a maximum of 3 characters. The minimum length is defined by the specific requirements of the data element itself, but shall be at least 1 character.
Tstp	Timestamp, format: <DD.MM.YYYY hh:mm:ss>

2.6 Data Element Directory

All data elements of the Computop Settlement File are listed in alphabetical order in the table below. Some of the elements may contain sub-fields that provide data which are specific to an individual payment method, payment scheme or processor. For further details on these data please refer to the original documentation of the acquirer / processor.

Field Name	Description
ACQUIRER_FEE	Charges for the services of Acquirer.
AUTHORIZATION_AMOUNT	Authorized amount in smallest unit of transaction currency.
CAPTURE_DATE	The date and time a transaction has been accepted by the acquirer / payment scheme for settlement, <DD.MM.YYYY hh:mm:ss>. If the time is not given it will be set to '00:00:00'
COUNTER	Enumerator to ensure unique file names (left justified zero filled).
CUSTOMER_INFO	Constructed field encompassing specific customer related information depending on the payment method. Sub-fields are divided by '#' (U+0023) (Number Sign). For more details please refer to section '4. Customer Information'.
EXTENDED_INFO	Constructed field encompassing additional information that is available depending on the payment method. Sub-fields are divided by '#' (U+0023) (Number Sign). For more details please refer to section '5. Extended Information'.
FILE_CREATION_DATE	Date the Computop Settlement File was created, <DDMMYYYY>.
INTERCHANGE_FEE	Fees charged by the card issuer.
MERCHANT_ID	Computop merchant identification.
ORDER_DESCRIPTION	A description of the order the payment relates to.
PAYMENT_CREATION_DATE	Date and time the payment has been created, <DD.MM.YYYY hh:mm:ss>.
PAYOUT_DATE	Payout date by Payment Institution.
PAYOUT_ID	Reference number of payout generated by Payment Institution.

Field Name	Description
PROCESSING_FEE	Charges for the services of Processors (PSP, Gateway, Network Operator).
RECORD_COUNT	Total number of rows in detailed records section.
RECORD_TYPE	<p><u>Header Record</u> Identifies the respective entry as header record, value '100'.</p> <p><u>Detail Record</u> Identifier that specifies the payment method and type of account ledger entry (e.g. debit and credit). Charges to customers are indicated as debits and payments to customers as credits.</p> <p>For more details please refer to section '6. Record Types'.</p> <p><u>Totals Record</u> Identifies the respective entry as totals record, value '900'.</p>
REFERENCE_NUMBER	The Reference Number is a unique string submitted by the merchant in order to identify a payment (e.g. invoice number, ticket number etc.). It usually gets forwarded to the payment scheme and is echoed in the clearing records / reports so that it can be matched with submitted transactions.
SCHEME_FEE	Fee charged by the card organization.
STATUS	The status of the payment, currently always 'OK'.
TOTAL_AMOUNT	Sum of all transaction amounts (credits are also summed up to the total amount) in the detailed record section in the smallest unit of transaction currency.
TRANSACTION_AMOUNT	The amount that has been processed by the payment scheme in smallest unit of the transaction currency.
TRANSACTION_CURRENCY	Refers to the three-letter ISO 4217 currency code of the currency in which the transaction was processed.
TRANSACTION_ID	Unique reference submitted by the merchant in order to recognize a payment for an order. It might be shared across a sequence of related transactions (requests) that constitute a payment (e.g. authorization, capture, credit, etc).

2.7 File Names

Naming Convention: <MERCHANT_ID>#<FILE_CREATION_DATE>#<COUNTER>.ctsf

No	Element	Format	Example
1	MERCHANT_ID	An..20	ACME01
2	FILE_CREATION_DATE	N8	20141014
3	COUNTER	N3	001

File Name Example: ACME01#20141014#001.ctsf

3. Records

3.1 Header Record

No	Field Name	Format	Example
1	RECORD_TYPE	N3	100
2	MERCHANT_ID	An..30	ACME01
3	DATE	N8	20140424
4	VERSION	An..4	1.0

3.2 Detail Record

Version 1.0

No	Element	Format	Example
1	RECORD_TYPE	N3	510
2	TRANSACTION_ID	An..64	890_XUoqyBWuGw
3	TRANSACTION_CURRENCY	A3	EUR
4	AUTHORIZATION_AMOUNT	N..12	789
5	TRANSACTION_AMOUNT	N..12	700
6	PAYMENT_CREATION_DATE	Tstp	20.04.2014 14:18:23
7	STATUS	An..	OK
8	REFERENCE	An..30	qArxtOE4w3FsSX5
9	CUSTOMER_INFO	Ans..160	4111xxxxxxxx9996#VISA
10	CAPTURE_DATE	Tstp	24.04.2014 00:00:00
11	ORDER_DESCRIPTION	Ans..384	Monthly subscription fee to ACME TV
12	EXTENDED_INFO	Ans..	1.875#EUR

Version 1.1¹

No	Element	Format	Example
1	RECORD_TYPE	N3	510
2	TRANSACTION_ID	An..64	890_XUoqyBWuGw
3	TRANSACTION_CURRENCY	A3	EUR
4	AUTHORIZATION_AMOUNT	N..12	789
5	TRANSACTION_AMOUNT	N..12	700
6	PAYMENT_CREATION_DATE	Tstp	20.04.2014 14:18:23
7	STATUS	An..	OK
8	REFERENCE	An..30	qArxtOE4w3FsSX5
9	CUSTOMER_INFO	Ans..160	4111xxxxxxxx9996#VISA
10	CAPTURE_DATE	Tstp	24.04.2014 00:00:00
11	ORDER_DESCRIPTION	Ans..384	Monthly subscription fee to ACME TV
12	EXTENDED_INFO	Ans..	1.875#EUR
13	INTERCHANGE_FEE	Ans..	1.875#13#EUR

¹ IC++ elements are only available if provided by acquiring bank

No	Element	Format	Example
14	SCHEME_FEE	Ans..	1.875#13#EUR
15	ACQUIRER_FEE	Ans..	1.875#13#EUR
16	PROCESSING_FEE	Ans..	1.875#13#EUR

Version 1.2²

No	Element	Format	Example
1	RECORD_TYPE	N3	510
2	MERCHANT_ID	An..20	ACME01
3	TRANSACTION_ID	An..64	890_XUoqyBWuGw
4	TRANSACTION_CURRENCY	A3	EUR
5	AUTHORIZATION_AMOUNT	N..12	789
6	TRANSACTION_AMOUNT	N..12	700
7	PAYMENT_CREATION_DATE	Tstp	20.04.2014 14:18:23
8	STATUS	An..	OK
9	REFERENCE	An..30	qArxtOE4w3FsSX5
10	CUSTOMER_INFO	Ans..160	4111xxxxxxxx9996#VISA
11	CAPTURE_DATE	Tstp	24.04.2014 00:00:00
12	ORDER_DESCRIPTION	Ans..384	Monthly subscription fee to ACME TV
13	EXTENDED_INFO	Ans..	1.875#EUR
14	INTERCHANGE_FEE	Ans..	1.875#13#EUR
15	SCHEME_FEE	Ans..	1.875#13#EUR
16	ACQUIRER_FEE	Ans..	1.875#13#EUR
17	PROCESSING_FEE	Ans..	1.875#13#EUR

Version 1.3³

No	Element	Format	Example
1	RECORD_TYPE	N3	510
2	TRANSACTION_ID	An..64	890_XUoqyBWuGw
3	TRANSACTION_CURRENCY	A3	EUR
4	AUTHORIZATION_AMOUNT	N..12	789
5	TRANSACTION_AMOUNT	N..12	700
6	PAYMENT_CREATION_DATE	Tstp	20.04.2014 14:18:23
7	STATUS	An..	OK
8	REFERENCE	An..30	qArxtOE4w3FsSX5
9	CUSTOMER_INFO	Ans..160	4111xxxxxxxx9996#VISA
10	CAPTURE_DATE	Tstp	24.04.2014 00:00:00
11	ORDER_DESCRIPTION	Ans..384	Monthly subscription fee to ACME TV
12	EXTENDED_INFO	Ans..	1.875#EUR

² IC++ elements are only available if provided by acquiring bank

³ PAYOUT elements are only available if provided by acquiring bank

No	Element	Format	Example
13	PAYOUT_ID	Ans..	1586789310000001
14	PAYOUT_DATE	N8	20.04.2014

PAYOUT elements are available for:

- AirPlus
- Amex (EPA)
- B+S/PayOne
- Concardis
- Elavon
- Klarna
- PPRO

Version 1.4⁴

Like V1.0 but with settlement and DCC data added in EXTENDED_INFO:

```

<EXTENDED_INFO>#
settlementamount=<SETTLEMENT_AMOUNT>#
settlementcurrency=<SETTLEMENT_CURRENCY>#
dccRate=<DCC_RATE>#
dccMargin=<DCC_MARGIN>

```

Without DCC only settlement information is provided.

3.3 Total Record

No	Element	Format	Example
1	RECORD_TYPE	N3	900
2	RECORD_COUNT	N..5	36
3	TOTAL_AMOUNT	N..12	798960

⁴ settlement and DCC elements are only available if provided by acquiring bank

4. Customer Information

Payment Method	Structure / Comment	Example
AFTERPAY	[Customer_ID]	8902265613
ALIPAY cross-border	-	
ALIPAY domestic	[Customer_ID]	John.doe@gmail.com
AMAZON PAY	[Customer_Name]# [Customer_E-Mail]	John Doe# john.doe@gmail.com
BARZAHLEN	[Customer_E-Mail]# [Shop_URL]	john.doe@gmx.de
BILLPAY	[Merchant_Customer_ID]# [Billpay_Customer_ID]# [Claim_ID]# [Activation_Date]# [Due_Date]# [Customer_Country]	184614# 836758# 1092900# 08.09.2014 00:00:00# 24.09.2014 00:00:00# DEU
CHINAPAY	-	
CREDIT CARD	Masked card number or card token and card brand: [0000xxxxxxx0000]# [Brand]	4111xxxxxxx9996# Visa
DIRECT DEBIT	[Account_Holder]# [Account_Number]# [Bank_Code]# [Bank] <i>or</i> [Account_Holder]# [IBAN]# [BIC]# [Bank] <i>or</i> [IBAN]# [BIC]	John Doe# 10602437# 205950# Barclays <i>or</i> John Doe# GB58BARC20595010602437# BARCGB22# Barclays <i>or</i> GB58BARC20595010602437# BARCGB22
IDEAL	[Account_Holder]# [IBAN]# [BIC]# [Bank]	John Doe# NL12RABO0388375809# RABONL2U# Rabobank
KLARNA	[OCR_No]# [Invoice_No]	1834143680436# 519072450221831988
LIMONETIK	[Customer_E-Mail]	john.doe@gmail.com
PAGBRASIL	[Customer_Name]# [Customer_E-Mail]	John Doe# john.doe@bol.com.br
PAYDIREKT	[Customer_BankID]	eba960e5-dd37-4d82-b479-ae3d28205994
PAYPAL	[Payer_ID]# [Payer]	A59XV256BZ# john.doe@gmx.de
PAYU	[Customer_Name]# [Customer_E-Mail]	MAGDALENA WITKOWSKA# magdalena.witkowska@interia.pl
PPRO	-	
SOFORTÜBERWEISUNG	see DIRECT DEBIT	see DIRECT DEBIT
TRUSTLY	[Customer_Country]# [Customer_First_Name]# [Customer_Last_Name]#	SE# John# Doe

5. Extended Information

Payment Method	Structure / Comment	Example
AFTERPAY	[Invoice_No]	61075095
ALIPAY cross-border	[Merchant_Discount]	2.25
ALIPAY domestic	[Merchant_Discount_Rate]# [Merchant_Discount]	0.014# 9.87
AMAZON PAY	[SellerOrderId]# [SellerReferenceId]# [AmazonOrderReferenceId]# [AmazonTransactionId]# [TotalTransactionFee]	
BARZAHLEN	[Merchant_Discount]# [VAT]	2.469# 0.46911
BILLPAY	[Portal_ID]# [Merchant_Discount_Type]# [Merchant_Discount_Rate]# [Merchant_Discount]	4151# 3# 0.0135# 2.07
CHINAPAY	[Merchant_Discount]#[Currency]	10.00#CNY
CREDIT CARD ⁵	[Merchant_Discount_Rate]# [Merchant_Discount]# [Currency] CHARGEBACK [ARN]# [Reason_Code]# [Status] RETRIEVAL REQUEST [ARN]# [Reason_Code]# [Status] TC40/SAFE [ARN]# [Code]#	1.875# 1.95# EUR 74527646319021051645048# 0350# MI1 74527646319021051645048# 0350# MI1 74627546887030655470117# 6
DIRECT DEBIT	[PmtInflId] or [Mandate_ID]#[IP address] Chargeback⁶ [reasonCode]#[trigger]#[token] reasonCode - 4 digit SEPA reason code trigger - "CHB" = Chargeback "B1".."B3" = CB after 1st, 2nd or 3rd retry token - ACT - CB was initiated by the customer RFND - CB was initiated by the merchant FRM - format error NSF - no sufficient funds OTHR - other reason	5e736c2d718843149b71e3439b292dfe reasonCode=MD17#trigger=CHB#token=NSF
IDEAL	NL# [IP address]	NL# 82.151.44.149
KLARNA	[Merchant_Discount]	3.97

⁵ CB, RR and TC40/SAFE elements are only available if provided by acquiring bank

⁶ b4payment/SEPAexpress

Payment Method	Structure / Comment	Example
LIMONETIK	<pre> "paytype="[Brand]# "PaymentOrderId="[OrderId]# "fee="[Fee] FEE "paytype="[Brand]# "PaymentOrderId="[OrderId]# "type="[Type] </pre>	<pre> paytype=FacilyPay 3xCB# PaymentOrderId=465224938699# fee=2.64 paytype=FacilyPay 3xCB# PaymentOrderId=162741148844# type=Charge </pre>
PAGBRASIL	<pre> [Pymt_Mthd]# [Settled_Amount]# [Merchant_Discount]# [Pymt_Date] CHARGEBACK [Pymt_Mthd]# [Settled_Amount]# [CB_Date]# [Pymt_Date] </pre>	<pre> Boleto bancário# 129.9# 22.9# 04/15/2014 Credit card# 0# 16/05/14# 03/09/2014 </pre>
PAYDIREKT	<pre> [correlationId]# [endToEndReferenceNumber]# [paymentInformationId] </pre>	<pre> 113811779-00000001# PD29AC32139C0F40F4B2541287900138D6# GIMBPROVDR20161201000000021579 </pre>
PAYPAL	<pre> [Merchant_Discount]# [Currency]# [Transaction_Type (credit / debit)] </pre>	<pre> 203# EUR# CR </pre>
PAYU	<pre> [Order_ID]# [Trans_ID]# [Merchant_Discount] </pre>	<pre> [P6061489]# [608365647]# [1.25] </pre>

Payment Method	Structure / Comment	Example
PPRO	<p>Credit [Channel]# [TAG]# [Country]# [Selling_Point]# fixed_fee=[FIXED_FEE_AMOUNT]# fixed_fee_currency=[FIXED_FEE_CURRENCY]# external_fee=[EXTERNAL_FEE_AMOUNT]# external_fee_currency=[EXTERNAL_FEE_CURRENCY]# minimum_discount_fee=[MINIMUM_DISCOUNT_FEE_AMOUNT]# discount_rate=[DISCOUNT_RATE]</p> <p>Channel From payment scheme or provided by merchant. <i>This is individually handled but usually we use the value "testchannel" for test accounts and "livechannel" for live accounts.</i></p> <p>TAG Depends on payment scheme provided by paygate (has to be arranged with PPRO). <i>This is individually handled. The most current list will get distributed during the integration process.</i></p> <ul style="list-style-type: none"> • ideal • p24 • sepadirectdebit • sofort • yellowpay • ... <p>Country Parameter AddrCountryCode provided in merchant request</p> <p>SellingPoint Provided by merchant</p> <p>Chargeback [Chargeback_ID]# [Chargeback_Reason_Code]# [Chargeback_RefNumber]</p>	<p>livechannel# ideal# NL# T63542# fixed_fee=0.45# fixed_fee_currency=EUR# external_fee=0.00# external_fee_currency=EUR# minimum_discount_fee=0.00# discount_rate=0</p> <p>1055329# MD06# 15072617000095/OCMT/EUR26,49/CHGS/EUR4,20</p>
SOFORTÜBERWEISUNG	<p>[Customer_ID]# [Country]# [Mandate_ID]# [IP address]</p>	<p>9139795844# DE# 9135762874-203185592# 78.49.133.9</p>
TRUSTLY	<p>[Merchant_Discount]# [Currency]# [Value_Date]# [Order_ID]# [Acc_Name]# [Order_Type]</p>	<p>0.05 SEK 2014-01-30 13:28:45# 3209647863# SWEDENESSE# User deposit of client funds to SWEDENESSE#</p>

6. Record Types

Record Type	Payment Method	Transaction Type
500	DIRECT DEBIT	Debit
501		Credit
502		Chargeback
510	CREDIT CARD ⁷	Debit
511		Credit
512		Chargeback
513		Fee
514		RetrievalRequest
517		TC40/SAFE
520	PAYPAL	Debit
521		Credit
522		Chargeback
524		Hold for Dispute Investigation
525		Cancellation of Hold for Dispute Resolution
526		General Withdrawal from PayPal Account
530	BARZAHLEN	Debit
531		Credit
530	AFTERPAY	Debit
531		Credit
540	LIMONETIK	Debit
541		Credit
543		Fee
550	SOFORTÜBERWEISUNG	Debit
551		Credit
560	BILLPAY	Debit
561		Credit
570	TRUSTLY	Debit
571		Credit
580	iDEAL	Debit
590	ALIPAY	Debit
591		Credit
600	CHINAPAY	Debit
601		Credit
610	PAYU	Debit
611		Credit
620	PAYDIREKT	Debit
621		Credit

⁷ CB, RR and TC40/SAFE records are only available if provided by acquiring bank

Record Type	Payment Method	Transaction Type
630	KLARNA	Debit
631		Credit
700	PAGBRASIL	Debit
701		Credit
702		Chargeback
710	PPRO	Debit
711		Credit
712		Chargeback
720	Amazon Pay	Debit
721		Credit
722		Chargeback
723		Authorization