# **Smart Data Reference Guide**

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## About this Guide

This guide serves as a reference to the format and contents of the reports generated and delivered via the Computop Smart Data product.

## Intended Audience

This document is intended for technical personnel who will be retrieving and parsing reports generated by the Computop Smart Data system.

# **Data Formats**

Format	Description
а	Alphabetic
as	Alphabetic 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)

# **Definitions**

Paym ent/ Trans action	Please note that the terms payment and transaction are used interchangeably throughout this document. A payment respectively a transaction may encompass a number of operational activities.  During a transaction lifecycle, the state of a transaction will change, depending on the performed action. These actions may include authorization, capture, sale, cancel and refund. A transaction is thereby defined as a sequence of actions.	
Action	An action is an operation that changes the status of a payment when performed successfully.	
Job	In the context of Computop Smart Data a job contains a set of general information about the report layout, filter options and data fields.	
Task	A task is the actual representation of a job with an assigned execution time.	

# **Product Overview**

Computop Smart Data is an automated service designed to create one or more predefined reports that are made available in a merchant's FTP account for retrieval. The service enables merchants to schedule periodic reports according to their individual needs.

Smart Data reports are delivered as delimited text files (CSV) with a standard set of data fields by default. Merchants however may customize their reports by choosing the fields from the standard set they would like have included. Data records may encompass transactions between one day and maximum one year prior to the report date. Please note that real-time data are not supported through this product.

For individual setup and configuration please contact Computop Helpdesk.

## Report Filter

The following filter options are available:

- MerchantID
- Company
- Currency
- Payment Method
- Payment Status
- Card Brand
- Action
- · Successful transactions only
- Unsuccessfull transactions only
- Only transactions with specific Code/s,
- · Only transactions without specific Code/s

Please note that all filter options may contain multiple values.

## Report Schedule

Smart Data reports can be setup according to the following options:

#### Once-off Report

· Given time period between two dates

#### Periodic Reports

- Daily
- · Weekly (weekday of delivery at merchant's discretion)
- Monthly (on 1st, 2nd, 3rd, ... each month)

## File Layout

Computop Smart Data reports are created as plain text files in CSV format. Currently comma, tab and colon are supported delimiters to separate values (please contact Computop Helpdesk for individual setup). The default delimiter is colon unless specified otherwise.

Each file will contain an initial header row and zero or more data rows. A header row will consist of a separated list of the individual field names, as defined in this document, in the specified order. The field names of the header row are currently available in English and German. The data rows will consist of a separated list of the data field values that contain characters encoded in UTF-8.

## Security

For security reasons all files are PGP encrypted and transferred via SFTP.

#### File Names

The file names are assigned according to the following convention: ComputopSmartData\_[JobID]\_[TaskID]\_[YYYYMMDD\_hhmmss].CSV.pgp

The individual name elements are described in the table below.

	#	Element	Format	Example
	1 Prefix		a17	ComputopSmartData
	2	JobID	n10	Internal job identifier
ſ	3	TaskID	n10	Internal task identifier

A valid file name example is: ComputopSmartData\_12\_789\_20160320\_023609.CSV.pgp

# Data Records and Field Description

Each record represents an operation/action that has been performed on a payment. Regularly a payment will consist of multiple operation records. Available data fields are listed in the table below. Individual data fields can be omitted on request.

#	Parameter	Format	Description
01	PaymentID	an32	Payment identifier generated by Paygate
02	MerchantID	an20	Merchant identifier assigned by Computop
03	Payment Date	ans19	Timestamp of payment creation time: DD.MM.YYYY hh:mm:ss
04	TransID	ans64	Transaction identifier assigned by the merchant on payment level
05	RefNr	ans30	Supplementary transaction identifier assigned by merchant on payment level
06	Amount Auth	n10	Authorized amount in its smallest unit of transaction currency
07	Amount Cap	n10	Captured amount in its smallest unit of transaction currency
08	Amount Cred	n10	Refunded amount in its smallest unit of transaction currency
09	Currency	a3	ISO 4217 three-letter currency code
10	Payment Status	a30	Transaction status with one of the following values:
			· AUTHORIZED
			· CANCELED
			· CAPTURE_REQUEST
			· CREDIT_REQUEST
			· FAILED
			· OK
			· PENDING
			· SUCCESS
			Please note that the above listed status values are not exhaustive and may vary depending on the payment method.
11	Payment Method	ans64	Payment method (e.g. Barzahlen, Card, PayPal etc.)
12	Payment Type	ans64	Payment type (e.g., 3X, 4X, etc)
13	Card Brand	a22	Card scheme (e.g. Visa, MasterCard, Maestro etc.)
14	Country of Origin Card A2	a2	Country of origin according to BIN/IIN (2 characters or n/a, e.g. DE)
15	Country of Origin Card A3	a3	Country of origin according to BIN/IIN (3 characters or n/a, e.g. DEU)
16	Country of Origin Card N3	an3	Country of origin according to BIN/IIN (3 digits or n/a, e.g. 276)
17	Card Number	an19	Masked card number
18	Card Token	n19	Card token generated by Paygate
19	SchemeReferenceID	ans64	Unique transaction identifier provided from the card scheme
20	Expiry date	n6	Credit card's expiry date in the format yyyyMM, e.g. 202005
21	Approval code	an6	Authorisation code of the transaction
22	Cardholder Name	ans60	Name of cardholder
23	CardType	ans64	Card type, e.g. Credit, Debit, Prepaid,
24	Category (Card)	ans64	Credit card category, e.g. Standard, Business,
25	SubBrand	a22	CardBrand2 or Sub-Brand
26	BIN	n611	Bank Identification Number
27	TerminalID	an78	ID of the terminal
28	POS TerminalID	an12	ID of the physical terminal (device)
29	CardAcceptorID	n512	Contract partner number

30	Acquirer Name	an5	Acquirer shortcode
31	IBAN	an30	International Bank Account Number
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32	BIC	an11	ISO 9362 Business Identifier Code
33	User Data	ans256	Custom merchant data that are included in the response and that might get conveyed to the subsequent processing host depending on the acquirer and custom arrangements
34	OrderDesc	an768	Order description
35	ActionID	an64	Unique action identifier assigned by Paygate
36	Payment Action	a30	Specifies the action performed on the payment:
			AUTHENTICATE: authentication for a payment
			AUTHORIZE: authorize of a payment
			CAPTURE: capture of an authorized payment
			CREDIT: credit of a payment
			SALE: authorize and capture of a payment
			CHARGEBACK: chargeback of a previously made payment
			For chargebacks it depends on acquirer whether they are notified in EPA and can be attributed to a payment process.
37	Action Date	ans19	Timestamp of the action: DD.MM.YYYY hh:mm:ss
38	Reference number (Transaction)	ans30	Additional Transactions-ID from the merchant on action level
39	Card holder information 1 (Transaction)	ans64	Text printed on the customer's credit card bill alongside the payee
40	Card holder information 2 (Transaction)	ans64	Text printed on the customer's credit card bill alongside the payee
41	Response Code	n8	Paygate response code
42	Action Status	a50	Status received on the performed action
43	Action Amount	n10	Operation amount in its smallest unit of transaction currency
44	Code Description	an1024	Error code description
45	EPA date (transaction)	ans19	Timestamp when EPA file has been processed
46	EPA status (transaction)	a3	Status of EPA processing
47	CustomerInfo	ans1024	Additional customer data provided by merchant (KVP parameter)