

History of changes

Date	Topic	Type	Comments
2024-03-21	Release March 2024	✓	<ul style="list-style-type: none"> Computop Analytics password reset / forgot password process implemented: Password-Reset
2024-03-11	Automatic SEPA Mandate Management	✓	<ul style="list-style-type: none"> Documentation for SEPA Mandate Management: Automatic SEPA Mandate Management
2024-02-29	customerInfo	i	<ul style="list-style-type: none"> Customerinfo Json Schema firstName and lastName changed from 30 to 50 characters: customerInfo
2024-02-01	Release January 2024	✓	<ul style="list-style-type: none"> SEPA Logo has been replaced by official SEPA Logo Introduction of Customer Data Storage Introduction of Customizable Confirmation Page
2024-01-22	Error codes	i	<ul style="list-style-type: none"> new error codes 1550/1551 + new categories 325-337: A4 Error codes
2023-11-30	Release November 2023	✓	<ul style="list-style-type: none"> New paymethod Tink available in Hosted Payment Page Paymethod PayPal V2 available in Hosted Payment Page New paymethod PFconnect via BNP available
2023-11-29	New mandatory fields for Visa Secure	⚠	<ul style="list-style-type: none"> Banner "Action required: New mandatory fields for Visa Secure from 02/12/2024" added to starting page
2023-11-10	iDEAL PPRO	i	<ul style="list-style-type: none"> new issuers N26 bank and Nationale Nederlanden bank added: iDEAL
2023-10-27	Computop AI protect	i	<ul style="list-style-type: none"> Added new Logo Added new pages to use AI protect panel
2023-10-26	Release October 2023	✓	<ul style="list-style-type: none"> PayByLink: labels in Analytics and Templates have been unified (order, TransactionId, ...) both match now credit card, CB2A: Installment and Payment upon shipment tested in production and working Extending our CAT POS interface with new functionality and request/ response parameters, e.g.: <ul style="list-style-type: none"> Add a new Card Read function to the CAT interface. (A Card Read is a non financial transaction to read a card and to retrieve card data) Add request/response parameters such as: inputMode, RTF, ContractID Add response parameters such as: RefNr, receiptNr, schemeReferenceID, dccForeignAmount, dccCommission, dccForeignCurrencyCode, dccDisclaimer, dccMargin, dccRateValue, dccSource, dccTimestamp, ExpiryDate, PCNr, VerificationCode, PayID, aidParameters CustomerId parameter for Paytype InteracEDD becomes conditional Adding GetNet a credit card Paytype to our TPNS Service
2023-10-23	Zinia	✓	<ul style="list-style-type: none"> Added new Parameter PayType
2023-10-23	Computop AI protect (Nethone)	i	<ul style="list-style-type: none"> update then name from nethone Computop AI Protect
2023-09-28	Release September 2023	✓	<ul style="list-style-type: none"> new error code 0344 has been added: A4 Error codes
2023-09-26	Debitorenmanagement Riverty	i	<ul style="list-style-type: none"> Updated the json parameter for ArticleList: changed from grossPrice amount updated the eventtoken for credit: changed from OC CR
2023-09-25	Amazon Pay V2	i	<ul style="list-style-type: none"> Information for German/EU-accounts (Developer Name / Developer account) added: MWS Authorization Token added request to update amount in review-process: UpdateAmount:
2023-08-24	Release August 2023	✓	<ul style="list-style-type: none"> Analytics: Display diacritics (äöüÄÖÜßéíóú, ...) are shown correctly in Analytics Operation Table View Analytics: Enhancement for AMEX payments via CAPN with multiple partial credits, which now can also be done via or Analytics. Before this was only available via API (credit.aspx). Customerinfo Json Schema email to 256 chars: customerInfo


2023-07-27	Release July 2023	✓	<ul style="list-style-type: none"> Analytics, language change (bugfix): currently language-change always requires 2x click; suppose to be 1x click Paynow, EMV 3DS, colorDepth=30/36: the official EMVCo list for colorDepth does not support colorDepth=30/36 which is in use by some browsers, this is now automatically converted: 30 -> 24, 36 -> 32. Pay By Link, email sender (display name): Email sender name can be setup by Computop Helpdesk to your company name
2023-06-29	Release June 2023	✓	<ul style="list-style-type: none"> New response code 139H for "payment has not been completed" (Instant Payment): A4 Error codes Added request parameter "ReturnRefundAccount" to Instanea Enablement of JCB 3DS 2.x solution: JSecure 2 Our POS solution will be extended to Canada region for VISA and Mastercard with the Next Family terminals and Acquirer Chase Paymentech. For Payment Method Bancontact via PPRO now is possible to forward a dynamic descriptor value defined by the merchant similar to what has been supported previously on Refund/Credit transactions. Computop Instant Payment (Token.io) is now available via Hosted Payment Page (HPP): Instant Payment Computop Analytics supports additional search criterias: <ul style="list-style-type: none"> standard: Account holder, E-Mail address, Card Holder, Customer Info, First name, Last name, Billing Email Address agreed with Computop Helpdesk: POSTerminalId, TerminalId, VuNr, SchemeReferenceId
2023-05-30	Added various parameters to URLBack, ...	i	Added various response parameters missing in documentation by now to URLSuccess/URLFailure/URLNotify: Credit Card Form (paySSL)
2023-05-16	3DS JSON threeDSData:request	i	Added missing attributes challengeRequestInd, challengeCancelInd, dsScore, transStatusReason to threeDSData:request
2023-05-16	TermURL + URLNotify, M C	i	URLNotify and TermURL changed from "M" (Mandatory) to "C" (Conditional), i.e.: in case of recurring payments (Credential On File) initiated by the merchant (without consumer interaction) no 3DS is performed and therefore response values are returned as response of direct.aspx.
2023-04-28	Parameter industrySpecificTxType	i	Parameter industrySpecificTxType has been changed from "M" (Mandatory) to "C" (Conditional) as it is only used to indicate specific use cases, but must not be used for normal authentications/authorizations.
2023-04-26	Error codes	i	new error codes 1958-1961: A4 Error codes
2023-04-18	Implementation Samples incl. AES	i	Pls. find some implementation samples supporting AES: Implementation Sources
2023-04-17	Currency ISK has changed decimals	⚠	Currency ISK has changed decimals from 2 to 0: A1 Currency table
2023-04-04	Links for PayPal V2 Signup	i	We provide PayPal-Links for easy signup to PayPal Sandbox and PayPal Production: PayPal V2 Signup
2023-04-03	Currency ISK is changing decimals	⚠	Information for change on ISK currency from 2 decimals 0 decimals: Paygate ISK
2023-03-23	Release March 2023	✓	<ul style="list-style-type: none"> API to create Pay By Link Payments has been implemented: Pay By Link API
2023-02-21	Certificate Renewal	i	Information to Certificate Renewal: Paygate Documentation
2023-01-02	URLBack, Parameter	i	Notes added how to pass parameters: URLBack
2022-12-22	Finland OBT PayU CEE Single	i	<p>Email-address of consumer will become mandatory: Finland OBT</p> <p>Phone of consumer is not mandatory with Twisto any more: PayU CEE Single</p>
2022-12-01	Release December 2022	✓	<ul style="list-style-type: none"> Computop Analytics now supports search for ApprovalCode (with credit card payments) ChasePNS supports 3-D Secure 2.x (MsgVer=2.0) RBI supports unreferenced Refunds Computop Paygate now also supports AES encryption: Create an API call and use encryption
2022-11-03	CustomFields Netcetera SDK	i	<ul style="list-style-type: none"> notes for allowed character set in: CustomField[n] Link updated to Netcetera SDK: Server-2-Server Integration
2022-10-14	HPP-parameter, ExpirationDate	✓	<ul style="list-style-type: none"> we added parameter "ExpirationDate" to add an expiration date/time for HPP-/PaymentPage-calls: Hosted Payment Page
2022-10-06	Release October 2022	✓	<ul style="list-style-type: none"> With 3-D Secure 1.0 sunset Computop Paygate indicates missing EMV 3DS data via Server-2-Server-API: <ul style="list-style-type: none"> if MsgVer=2.0 and "browserInfo" is missing -> response code 3002 is returned if MsgVer=2.0 and "javaScriptEnabled=false" -> response code 0093 is returned

2022-08-25	Release August 2022	✓	<ul style="list-style-type: none"> • Hosted Payment Page <ul style="list-style-type: none"> ◦ Paytype Klarna PM has been added ◦ Paytype Bluecode has been added • Analytics <ul style="list-style-type: none"> ◦ Multi-Merchant (several MIDs linked to the same MID-account) has been added to UserManagement • Server-zu-Server Blacklist Editing <ul style="list-style-type: none"> ◦ Support for PCNr and PBAN has been added
2022-07-28	Release July 2022	✓	<ul style="list-style-type: none"> • cavvAlgorithm is accepted and returned with threeDSData to support Cartes Bancaires with external MPI • Subscriber (part of phone number) has been extended from AN12 to AN15 <ul style="list-style-type: none"> ◦ https://developer.computop.com/display/EN/customerInfo ◦ https://developer.computop.com/display/EN/phone • email-properties have been extended from a50 -> a254 <ul style="list-style-type: none"> ◦ https://developer.computop.com/display/EN/customerInfo ◦ https://developer.computop.com/display/EN/merchantRiskIndicator • in simulation mode (OrderDesc=Test:0000) now <ul style="list-style-type: none"> ◦ Approvalcode is only returned for CC paymethods (e.g. not for Paydirekt any more) ◦ Approvalcode is only returned if activated in merchant configuration
2022-07-15	AuthenticationMethods	i	Additionally to AuthenticationTypes now also AuthenticationMethods with EmvCo 3DS are explained
2022-06-20	Release June 2022	✓	<ul style="list-style-type: none"> • in simulation mode (OrderDesc=Test:0000) now <ul style="list-style-type: none"> ◦ without MsgVer=2.0: TransactionId and Approvalcode are returned with random values for RTF=E I ◦ with MsgVer=2.0: schemeReferenceID and Approvalcode are returned with random values for credentialsOnFile={,,,,, initial=true} • 3DS JSON customerInfo + phone <ul style="list-style-type: none"> ◦ Typo in JSON schemes "maxLenght" has been corrected to "maxLength" ◦ https://developer.computop.com/display/EN/customerInfo ◦ https://developer.computop.com/display/EN/phone
2022-06-20	3DS2 Response Codes	!	Response codes for 3DS2 were duplicate and not unique, e.g. Code 0305. This has now been unified. Pls. find details here: A4 Error codes
2022-05-16	Amazon Payments	i	The old Amazon pages have been hidden (Amazon Pay + Amazon Pay Recurring). Pls. refer to Amazon Pay Checkout v2
	TransStatusReason	i	Specific codes 83 + 84 for MasterCard have been added to transStatusReason Codes
2022-05-10	Credit card, integration methods	✓	New parameter PayTypes added: Credit Card Form (paySSL)
2022-03-21	Credit card, externalPaymentData	✓	If request parameter msgver has been used a new data element externalPaymentData is returned - depending on acquirer and 3rd party.
2022-03-14	Klarna, B2B support	i	Added some additional information on parameters for B2B support (bdCompany, sdCompany, LegalForm, CompanyID + VatID): Klarna Payments
	CTSF / Paysafecard	✓	Paysafecard has been added to CTSF: Computop Settlement File
	PayU CEE Single		BLIK OneClick added, new parameters TokenAxt, AppKey, Alternatives: PayU CEE Single
2022-03-03	Release February 2022	✓	<ul style="list-style-type: none"> • Added attribute useCase in credentialOnFile-JSON to fulfill special use cases in authentication/authorization • Added useCase to 3DS 2.0 Merchant Use-Cases & Testing of 3D-Secure 2.0 <ul style="list-style-type: none"> ◦ recurring: useCase: fixed/flexibleAmount ◦ unscheduled: useCase: cof/ucof
2022-02-25	authenticationResponse, transStatusReason	i	Added additional values (80-88, scheme specific) to attribute transStatusReason in authenticationResponse -JSON.
2022-02-23	HMAC calculation and handling	i	<ul style="list-style-type: none"> • added some notes to HMAC calculation <ul style="list-style-type: none"> ◦ pointed out that MerchantID / MID are case-sensitive ◦ pointed out that for request: MerchantID in plain request and in HMAC-calculation must be identical ◦ pointed out that for notify: MID from plain request must be used in HMAC-calculation
2022-02-21	Implementation Sources	i	<ul style="list-style-type: none"> • the PHP-Clients do now check for GET and POST within "includes/result.inc.php" (important for 3DS2-implementation)




2022-01-17	Release January 2022	✓	<ul style="list-style-type: none"> our new templates cards_v1, paymentpagelogs_v1, paymentpagedropdown_v1 now support GooglePay with 3-D Secure flow URLSuccess/URLFailure with optional URLEncode, i.e. spaces are encoded as "+", "/" is encoded as "%2f" can be optionally configured by Computop Helpdesk new user permission in Computop Analytics to enable/disable "Pay By Link" improved 3DS2-challenge-form for mobile devices by scaling challenge-form to device screen width CB2A: automatic brand correction (i.e. change to Mastercard/VISA if PAN is not CB-cobranded) not only for PAN, but also for PCNr CB2A: several improvements for recurring, credentialOnFile, GooglePay URLSuccess/URLFailure: if MsgVer=2.0 is used data are sent via POST - even in case of 3DS1 fallback (previously: GET for 3DS1 fallback; POST for 3DS2) TPNS now sends notifications for TestCard with capture=Auto Banksys: Fixing of wrong parameter mapping towards Banksys which is causing declines in 3DS 2.x transactions
2022-01-17	BillPay	ⓘ	BillPay will be discontinued at end of March 2022: BillPay
	Computop Scheme Token Service	✓	New documentation for Computop Scheme Token Service
2021-12-30	Credit card documentation	ⓘ	<p>The credit card documentation has been migrated to EMV 3DS:</p> <ul style="list-style-type: none"> Form: Card processing - common form S2S: Card processing - common Server-to-Server <p>The legacy-implementation is still available here:</p> <ul style="list-style-type: none"> Form: Card processing - common form - legacy S2S: Card processing - common Server-to-Server - legacy
2021-12-15	Node.JS sample	ⓘ	we now also provide a Node.JS implementation: Implementation Sources
	Chinapay	✓	OrderDesc changed to ans..128: ChinaPay
2021-12-14	Hmac calculation	ⓘ	better explained HMAC-calculation based on SHA256: Programming basics
2021-12-03	Error codes	✓	new error codes: 119, 123, 393; changed: 1859: A4 Error codes
2021-11-27	3DS 2.0, resultsResponse	✓	resultsResponse has been extended with dsScore, challengeRequestInd, cardholderInfo: resultsResponse
2021-11-03	Hosted Payment Page	✓	Payment type Google Pay added
	Direct debit	✓	Parameter OrderDesc moved to special parameters and modified for B4payments: Direct debit
	PayPal	✓	Parameter Account removed from credit.aspx and added for creditex.aspx: PayPal
	3DS 2.0	✓	Description of acsChallengeMandated extended: Server-2-Server Integration
2021-10-26	Programming samples	ⓘ	<p>Pls. find additional samples here:</p> <ul style="list-style-type: none"> Create an API call and use encryption HMAC Authentication (Request) HMAC Authentication (Notify)
2021-10-14	Update IP-changes, 2021-11-15	⚠	New schedule: Important technical information, 2021-11-15
2021-10-06	3DS 2.0	✓	3DS 2.0 Merchant Use-Cases & Testing of 3D-Secure 2.0 EN : schemereferenceID added in Scenario 05
	Klarna Payments	✓	Description of parameter Code "0" extended in Klarna Payments
2021-09-21	PagBrasil, CC: IPAddr + DeviceId added	✓	IPAddr + DeviceId added due to fraud prevention: PagBrasil
2021-09-20	Update IP-changes, 2021-10-18	⚠	Important technical information, 2021-10-18
2021-09-09	Currency table	✓	IDR changed back from 0 to 2 decimals: A1 Currency table EN
2021-09-07	Trustly, test data added	ⓘ	Test data for Trustly have been added: Test Trustly
2021-09-03	Klarna, RTF /recurring	✓	KlarnaPM now supports parameter RTF (recurring payments): Klarna Payments

2021-08-31	Analytics, show operation details		Analytics: Meaning of "Action" and "Status" have been explained when displaying operation details: Details on Action and Status
2021-08-13	POS Notify		Added IBANEMVfield to POS Notify Service into notification request and status response: POS Notify Service
	PayPal, PayerId		Added PayerId to response: PayPal
2021-07-16	Pages renamed		Pages have been renamed <ul style="list-style-type: none"> Payment methods in Computop Paygate Payment methods Services in Computop Paygate Services Section of EMV 3-D Secure 2.x moved from Services to Payment methods - Credit Cards
2021-07-15	Release July 2021		Release July 2021
	Analytics, CSV-export		Microsoft Excel has a problem with importing numbers/amounts having " " (Space) as a thousands separator. Therefore the space is now removed for CSV export
	Analytics, CSV-export		Empty cells have been exported in CSV as "-", now they are exported as empty cells.
	Analytics, 3DS Dashboard		Computop Analytics Dashboard now shows a dedicated tab to show KPIs and reporting for 3-D Secure payments: Showing 3-D Secure Analysis
	Bluecode, cancellation		Cancellations via Bluecode.aspx have not been cancelled by Computop Paygate when user clicked on Cancel-button. This bug has been fixed.
2021-06-22	New error code		Added error codes 3004 / 4305 to: A4 Error codes
	Format of error codes		Format and character set explained: A4 Error codes
	Server-2-Server Integration		Parameter industrySpecificTxType added: Server-2-Server Integration
2021-06-10	Server-to-Server blacklist		Notice for return of BlockID added: Server-to-Server Blacklist Editing
	industrySpecificTxType for MIT		New parameter "industrySpecificTxType" according to the card brands MIT (M erchant I nitiated T ransactions) Framework: Server-2-Server+Integration
2021-05-xx	Debtor Management Real		Parameters for "Installment" (installment payment) have been added: Debtor Management Real
	Klarna		Format for "AccessToken" changed to ans..2048: Klarna Payments
	Card processing		Response parameter PAR added for Paytype CAPN: Card processing - interface via form#CAPN:AmericanExpress / Card processing - interface Server-to-Server#CAPN:AmericanExpress
2021-04-12	Analytics		Language selection added for Pay by link: Creating an operation with "Pay by link"
	PaqU CEE GECAD		Parameter PayType is mandatory: PayU CEE GECAD
	EMV 3DS		Notice added for schemeReferenceID: Server-2-Server Integration
	EMV 3DS		URLSuccess / URLFailure are currently called with 3DS2 via POST, but with a fallback from 3DS2 to 3DS1 via GET! Card processing / Credit card via Credit Card Form (PaySSL)
2021-03-17	Paygate Notify		The "Referer" field in the HTTP header of the Paygate Notify is expected to be removed on 2021-04-29: Paygate EN
	PayPal		Parameters TransactionID, TID, payerStatus added: PayPal
	schemeReferenceID		Note to regulatory changes added: schemeReferenceID
	EMV 3DS		Information for EMV 3DS, Scenario 09 added: 3DS 2.0 Merchant Use-Cases & Testing of 3D-Secure 2.0
	EMV 3DS		Details for direct3d.aspx Authorisation added: 3DS 1.0 Fallback
2021-02-25	Release February 2021		Release February 2021
	Param "URLBack"		Parameter "URLBack" is in use with payment pages (paymentPage.aspx, payssl.aspx, paysdd.aspx, billpay.aspx). The parameter "URLBack" can now be part of encrypted parameter "Data" (recommended variant) to prevent manipulation. For compatibility "URLBack" can still be sent plain.
	Credit card, CB2A		Additional response parameters available on request: CodeExt, Approvalcode, TerminalID, VUNr Card processing, CB2A
	Analytics Operation details		3-D Secure 2.x details are now displayed for all payment methods - if available and collected while processing.
2021-02-22	EMV 3-D Secure / JSON		Notice that javaScriptEnabled=true must be for 3DS 2.0: browserInfo

2021-02-10	Direct debit	✓	OrderDesc will not be forwarded with connection via PPRO.
	EMV 3-D Secure / JSON	✓	"R" removed from intermediateStatus: threeDSData:request
	paydirekt	✓	URLConfirm added for oneKlick registration: paydirekt
	EMV 3-D Secure	✓	Process flow for automated soft decline handling added: EMV 3-D Secure
	EMV 3-D Secure	✓	Notice added about browser cookies and session handling in Credit Card Form (paySSL) and Silent Order Post (PayNow)
2021-01-28	Release January 2021	i	Release January 2021
	Analytics Pay-By-Link	✓	Amount has to be input as X,XX or X.XX for currencies with 2 decimals; watermark is giving you a pattern.
	Analytics Pay-By-Link	✓	Language of Hosted Payment Page (HPP) can be selected; the last selected language is stored in a Cookie for next usage
	Analytics Pay-By-Link	✓	Validity of "7 days" has been added
	Analytics Pay-By-Link	✓	Approval Code / Authorization Code is displayed in Analytics (for transactions newly created from now on)
	Credit card, CB2A		
2021-01-18	EMV 3DS - browserinfo	i	Sample and description of "language" improved: browserInfo
	Currency table	✓	IDR changed from 2 to 0 decimals: A1 Currency table EN
	All PPRO payment methods	✓	Response parameter "TransactionID" removed from Credit notes
2021-01-11	Maybank2u	i	Credit has to be processed manually: Maybank2u#Creditwithreference
	PayU CEE GECAD	i	If PayType is used, then parameter bdCountryCode becomes mandatory: PayU CEE GECAD
2021-01-06	PayU	i	Bugfix in documentation regarding "ArticleList(n)" and clarification on "Amount": PayU CEE GECAD
	Base64-encoding and JSON	i	Some common notes on handling JSON and Base64-encoding: Basics of Base64-encoding
2020-12-29	EMV 3-D Secure / JSON	i	Added documentation to make handling of Base64-encoded parameters more transparent: Basics of Base64-encoding
	EMV 3-D Secure / Soft Decline	✓	Added section "Soft Decline" to make soft decline more clear: EMV 3-D Secure
	EMV 3-D Secure / Soft Decline	✓	Added key "challengePreference" to threeDSPolicy
	EMV 3-D Secure / Soft Decline	✓	Added new response code "0366" for Soft decline: Error codes
	EMV 3-D Secure / Soft Decline	i	Description for key "UserData" corrected (no Base64-encoding required): Hosted Payment Page
	Hosted Payment Page	i	Added hint to URLs (https required, no userdata allowed): Credit Card Form (paySSL)
	Hosted Payment Page	✓	Added key "Cryptocurrency" to credit card handling: Card processing
	Hosted Payment Page	✓	Added JSON-object for Payment Facilitator processing: subMerchantPF
	Credit card, Common	i	Description of bd*-keys corrected for creating a Klarna Session: Klarna Payments#CreateKlarnasessionfortheHPP
	Credit Card, Payment Facilitator	i	Added key "MandateURL" and values "OOF, FRST" to "MdtSeqType": Direct debit , Server-2-Server, PPRO
	Klarna, Klarna Session	i	Added table of allowed special characters for Cofidis: Cofidis
	Direct Debit via PPRO	✓	Added documentation to new feature "Delete person-related data" in: Computop Analytics EN
	Cofidis, special characters	✓	Added note that only TLS 1.2 is allowed: Programming basics#PrinciplesofPaygateprogramming
	Analytics, GDPR-Delete	✓	Note that exponent for Currency XOF has changed from "2" to "0": A1 Currency table EN
	Paygate, TLS 1.2	i	Added new payment methods (upchequedejeuner, apetiz, passrestaurant, sofinco2xcb, sofinco2xcbsansfrais, sofinco3xcb, sofinco3xcbsansfrais, sofinco4xcb, sofinco4xcbsansfrais) to Thunes (Limonetik)
	Currency XOF		
	Limonetik		

2020-07-10	EMV 3-D Secure		Notes for color depths 30 and 36 bits which are not officially supported by EMVCo: browserInfo

Legend:

Type	Description
	Bugfix
	Change, improvement
	Info, documentation only