

Verifone eCommerce Server to server Interface Reference

Introduction

This document describes integration process and server to server interface between a web shop and Verifone E-Commerce System. The interface is designed to operate over HTTPS (Hypertext Transfer Protocol Secure). Authentication of both systems and verification of message integrity is implemented using digital signatures.

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Document Change History

| Version | Date | Author | Position | Comment |
|---------|------------|-----------------|--------------------|--|
| 6.0.56 | 02.10.2018 | Markku Hyppönen | Software Developer | Added Vipps and MobilePay to payment method list. |
| 6.0.55 | 27.09.2018 | Vitthal Wable | Project Manager | Added new AfterPay specific parameters to process-payment request: <ul style="list-style-type: none"> s-t-1-30_sub-payment-method-type i-t-1-4_sub-payment-method-profile-number |
| 6.0.54 | 17.09.2018 | Bhawana Prakash | Software Developer | Updated is-available Operation with if no connectivity then response configured in set-status-response field. |

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| 6.0.53 | 15.09.2018 | Priya Prakash | Software Developer | Updated Refund Payment operation with the basket item data table. |
| 6.0.52 | 10.09.2018 | Priya Prakash | Software Developer | Updated Payment Result Code to the corresponding create-payment-request operation and Callback response. |
| 6.0.51 | 08.09.2018 | Priya Prakash | Software Developer | Updated s-t-1-30_payment-status-code to s-t-1-10_payment-request-result for create-payment-request api and Callback response. |
| 6.0.50 | 06.09.2018 | Priya Prakash | Software Developer | <p>Updated create-payment-request api with addition of</p> <ul style="list-style-type: none"> s-t-1-30_delivery-address-line-two s-t-1-30_delivery-address-line-three <p>And removed l-t-1-20_bi-gross-amount-<N> parameter from create-payment-request api</p> |
| 6.0.49 | 05.09.2018 | Priya Prakash | Software Developer | <p>Removed the following parameter from callback response parameter.</p> <ul style="list-style-type: none"> s-t-1-30_buyer-phone-number s-f-1-100_buyer-email-address <p>Updated validation error code with</p> <ul style="list-style-type: none"> invalid-phone-number payer-not-enrolled validation-error-callback-url error-missing-callback-url <p>Updated Callback Response code</p> <ul style="list-style-type: none"> PAID DECLINED FAILED ERROR <p>Updated Basket item with i-t-1-4_bi-discount-percentage-<N> and l-t-1-20_bi-unit-gross-cost-<N> for create-payment-request operation.</p> |
| 6.0.48 | 21.08.2018 | Priya Prakash | Software Developer | Updated s-t-5-256_callback-url to s-f-5-256_callback-url and added s-f-1-30_error-message parameter on create-payment-request api operation. |
| 6.0.47 | 11.06.2018 | Priya Prakash | Software Developer | Added create-payment-request api operation and Callback notification response parameter field. |
| 6.0.46 | 23.05.2018 | Visa Korhonen | Software Developer | Corrected parameters of 3ds authentication in payment processing and completing |

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|--------|------------|-------------------|-------------------------------|---|
| 6.0.45 | 26.04.2018 | Vandita Verma | Software Development Engineer | <p>Added i-t-1-1_token-type-identifier and s-t-1-36_token-masked-bank-account parameters to SaveToken and GetToken.</p> <p>Added Server Interface GetToken Info operation.</p> |
| 6.0.44 | 11.04.2018 | Anttu Sohlberg | Software Developer | <p>Changed i-t-2-2_card-3ds-auth-status to i-t-1-2_card-3ds-auth-status, as the latter is the one actually used in application.</p> <p>Added possible return values.</p> |
| 6.0.43 | 11.04.2018 | Anttu Sohlberg | Software Developer | <p>Removed the following parameters, as they are not in use. They have, or have not, been used along with peos-payment-processor's DetokenizeTask. DetokenizeTask is not called from anywhere, so the are obsolete. If DetokenizeTask is put to use again, then consider resurrecting these.</p> <ul style="list-style-type: none"> s-t-1-30_bill-to-address-first-name s-t-1-30_bill-to-address-last-name s-t-1-30_bill-to-address-line-one s-t-1-30_bill-to-address-line-two s-t-1-30_bill-to-address-line-three s-t-1-30_bill-to-address-postal-code |
| 6.0.42 | 14.03.2018 | Esa Lehti | Java Developer | Added s-t-1-36_service-code optional parameter to process-payment. |
| 6.0.41 | 09.03.2018 | Catherine Deborah | Software Developer | Modified dynamic feedback response parameters for refund-amount and refund-payment |
| 6.0.40 | 09.03.2018 | Bhawana Prakash | Software Developer | <p>Modified error codes failed-contact-swish-service, cancel-pay-reject-incor-amt ,invalid-payment-req-collector ,delivry-addr-crdt-chk-mismatch, invalid-merchant-agrmnt-code in Server Api as previously it was more than 30 character. So reduced its size</p> |

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| 6.0.39 | 12.02.2018 | Akhil Balachandran | Software Developer | <p>Added Dynamic feedback parameter s-t-1-1024_dynamic-feedback to list saved payment method in Server Api.</p> <p>Also added s-t-1-36_card-name to Process-payment, Debit-payment, List saved payment methods & Test shop, can be requested as a dynamic parameter (s-t-1-1024_dynamic-feedback) and if requested it will be present in the response.</p> |
| 6.0.38 | 23.11.2017 | Subrat | Software Developer | Added error code details for process-supplementary operation |
| 6.0.37 | 16.11.2017 | Ajay Sharma | Software Developer | <p>Added Dynamic feedback parameter s-t-1-1024_dynamic-feedback to debit payment method in Server Api. Key value present in debit request will be "s-t-1-1024_dynamic-feedback" = "i-t-1-1_consumer-card"</p> <p>Also added i-t-1-1_consumer-card to Process Payment, Debit Payment and HPP request for all card payment.</p> |
| 6.0.36 | 06.11.2017 | Subrat | Software Developer | Added request and response details for process-supplementary operation |
| 6.0.35 | 13.10.2017 | Abhishek Vashistha | Software developer | Added s-t-2-2_account-item-type and i-t-1-1_payment-benefit to to Process Payment as dynamic feedback parameter and if requested it will be present in response . |
| 6.0.34 | 04.09.2017 | Catherine Deborah | Software Developer | <p>Added i-t-1-1_partial-approval to process-payment additional request fields and i-t-1-20_authorized-amount to process-payment additional response fields. Added new error codes partial-approval-not-allowed and part-approval-req-deferred-payment.</p> |
| 6.0.33 | 30.08.2017 | Anttu Sohlberg | Software Developer | added i-t-4-4_card-pan-last4 to Process Payment - can be requested as a dynamic parameter (s-t-1-1024_dynamic-feedback) and if requested it will be present in the response. |
| 6.0.32 | 10.08.2017 | Catherine Deborah | Software Developer | Modified s-f-1-256_token to s-t-1-256_token in save-card-payment-method request as it is optional parameter |
| 6.0.31 | 07.08.2017 | Catherine Deborah | Software Developer | Added new optional parameters to process-payment request. |

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|--------|------------|-------------------|--------------------|---|
| 6.0.30 | 01.08.2017 | Catherine Deborah | Software Developer | Updated description for s-t-1-256_token in remove-saved-payment-method and added new error code token-terminal-serial-missing in Error codes. |
| 6.0.29 | 31.07.2017 | Catherine Deborah | Software Developer | Edited description for s-t-1-36_service-code in save-card-payment-method request to specify that service code is also used for token distribution to acquirer. |
| 6.0.28 | 26.07.2017 | Catherine Deborah | Software Developer | Modified payment method code as optional in save-token, get-token and delete-token requests and added description. |
| 6.0.27 | 10.07.2017 | Catherine Deborah | Software Developer | Added s-t-1-255_app-id in save-token and get-token additional response fields. |
| 6.0.26 | 03.07.2017 | Catherine Deborah | Software Developer | Added s-t-1-36_service-code and s-f-1-256_token in save-card-payment-method additional request fields. Added s-f-1-256_token in remove-saved-payment-method additional request fields |
| 6.0.25 | 21.06.2017 | Catherine Deborah | Software Developer | Removed I-t-1-20_payment_option_id in Save Card Payment Method |
| 6.0.24 | 15.06.2017 | Anttu Sohlberg | Software Developer | Corrected faulty parameter names. |
| 6.0.23 | 13.06.2017 | Henri Huhtamäki | QA Manager | Added comments / modified descriptions related to tokens. |
| 6.0.22 | 18.05.2017 | Sumeet Kumar | Software Developer | Changing i-t-1-8_payment_option_id to I-t-1-20_payment_option_id in Save Card Payment Method |
| 6.0.21 | 16.05.2017 | Sumeet Kumar | Software Developer | Added i-t-1-8_payment_option_id in Save Card Payment Method |
| 6.0.20 | 15.05.2017 | Vitthal Wable | Project Manager | Added s-t-1-255_app-id in Save Card Payment Method & updated the information at s-t-1-255_buyer-external-id with customer id |
| 6.0.19 | 13.04.2017 | Visa Korhonen | Software Developer | Added description of a new operation and new parameters that are related to new 3D secure mode in server interface. |
| 6.0.18 | 10.04.2017 | Matias Aikio | Software Developer | Some more changes to error codes of length of more than 30 characters. |
| 6.0.17 | 01.03.2017 | Matias Aikio | Software Developer | Some operation related error codes were of length of more than 30 characters. Shortened those in code and documentation. |
| 6.0.16 | 10.01.2017 | Toni Kankkunen | Support Manager | Corrected generate-payment-link parameters |
| 6.0.15 | 04.01.2017 | Priya Prakash | Software Developer | Added swish server-api parameters. |

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| 6.0.14 | 28.11.2016 | Vitthal Wable | Project Manager | 1. Remove s-t-1-36_token-masked-pan and s-t-10-10_token-expiration-date parameters. wrong response parameters listed for generate-payment-link(SC-5770) 2. Server API missing list of payment link statuses(SC-5771) |
| 6.0.13 | 21.09.2016 | Claudiu Chioariu | Software Developer | Removed dynamic parameters from cancel-payment that are not available. Added l-f-1-20_dynamic-reference-number. |
| 6.0.12 | 20.09.2016 | Claudiu Chioariu | Software Developer | Removed weaver references. |
| 6.0.11 | 19.09.2016 | Claudiu Chioariu | Software Developer | Removed void-payment. |
| 6.0.10 | 19.09.2016 | Claudiu Chioariu | Software Developer | Added s-t-1-36_token-masked-pan and s-t-10-10_token-expiration-date parameters. |
| 6.0.9 | 19.09.2016 | Claudiu Chioariu | Software Developer | s-t-1-8_card-product documentation changed (removed customer specific information). |
| 6.0.8 | 07.09.2016 | Evgeni Kappinen | Software Developer | Updated payment method enumeration. |
| 6.0.7 | 15.12.2015 | Claudiu Chioariu | Software Developer | Listed methods not supported in Weaver: list-saved-payment-methods, remove-saved-payment-method, list-transaction-numbers, save-card-payment-method, generate-payment-link, get-payment-link-status, reactivate-payment-link. |
| 6.0.6 | 07.10.2015 | Aseefulla Kamtidar Shaik | Software Developer | Added s-t-1-6_fraud-error-code additional parameter to response fields. |
| 6.0.5 | 06.10.2015 | Claudiu Chioariu | Software Developer | Added s-t-1-30_bill-to-address* (6 params) to get-token and save-token. |
| 6.0.4 | 17.09.2015 | Sandip Kumar Haldar | Software Developer | Added s-f-1-30_payment-method-code in process-payment additional request field. |
| 6.0.3 | 24.04.2015 | Aseefulla Kamtidar Shaik | Software Developer | Added refund-operation additional request and response fields. |
| 6.0.2 | 24.04.2015 | Claudiu Chioariu | Software Developer | Added s-t-1-1024_dynamic-feedback parameter. |
| 6.0.1 | 16.04.2015 | Srinivasulu Vedala | Software Developer | Added void-operation additional request and response fields. |
| 6.0.0 | 07.04.2015 | Björn Delin | Software Developer | Updated save-card-payment-method's additional request fields |
| 5.0.13 | 10.02.2015 | Kristaps Kohs | Software Developer | Added token scope parameter |

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| 5.0.12 | 21.01.2015 | Kristaps Kohs | Software Developer | Added reactivate payment link method |
| 5.0.11 | 19.12.2014 | Tiina Virta | Technical Documentation | Amendid field l-f-1-20_request-id |
| 5.0.10 | 04.11.2014 | Kristaps Kohs | Software Developer | Added Get Payment link status method |
| 5.0.9 | 23.10.2014 | Evgeni Kappinen | Software Developer | Added error codes |
| 5.0.8 | 16.10.2014 | Kristaps Kohs | Software Developer | Added sender email and delivery text parameters to payment link. |
| 5.0.7 | 3.10.2014 | Lassi Lehtinen | Project Manager | Fixed table of contents and other minor edits |
| 5.0.6 | 22.9.2014 | Sampo Korhonen | Software Developer | Added Refund Amount -operation |
| 5.0.5 | 1.9.2014 | Kristaps Kohs | Software Developer | Added Generate Payment link |
| 5.0.4 | 19.8.2014 | Evgeni Kappinen | Software Developer | Updated payment method list |
| 5.0.3 | 6.6.2014 | Cristina Aldea | Software Developer | Added Server Interface DeleteToken operation. |
| 5.0.2 | 19.5.2014 | Evgeni Kappinen | Software Developer | Added payment methods: svea-webpay-installment, svea-webpay-invoice |
| 5.0.1 | 9.4.2014 | Cristina Aldea | Software Developer | Added Server Interface SaveToken and GetToken operations. |
| 5.0.0 | 17.3.2014 | Björn Delin | Software Developer | Added Server Interface Cancel Task. |
| 4.0.2 | 21.2.2014 | Evgeni Kappinen | Software Developer | Added s-t-1-6_card-expected-validity |
| 4.0.1 | 21.2.2014 | Sampo Korhonen | Software Developer | Added s-f-1-20_reference-number |
| 3.0.2.37 | 17.2.2014 | Kristaps Kohs | Software Developer | Added new partial capture parameters. |
| 3.0.2.36 | 27.1.2014 | Tiina Virta | Technical Documentation | Added contact info for Norway. |
| 3.0.2.35 | 3.12.2013 | Tiina Virta | Technical Documentation | Added appendix to the end and did minor cleaning up. |
| 3.0.2.34 | 8.11.2013 | Markku Hyppönen | Support Coordinator | Description of parameter s-f-1-30_software updated. |
| 3.0.2.33 | 21.10.2013 | Markku Hyppönen | Support Coordinator | Contact information part edited. Added subtitle 'Finland'. Information for all markets will be added soon. |
| 3.0.2.32 | 18.9.2013 | Joonas Kekoni | Software Developer | Added unit gross cost, and fixed unit gross cost |
| 3.0.2.31 | 12.9.2013 | Lassi Lehtinen | Project Manager | Updated production and customer test environment URLs. |
| 3.0.2.30 | 6.9.2013 | Markku Hyppönen | Scrum Master | Process payment and list saved payment methods descriptions improved. Some misleading texts removed. |
| 3.0.2.29 | 16.8.2013 | Cristina aldea | Software Developer | Updated l-t-1-20_saved-payment-method-id as mandatory parameter for process-payment and remove-saved-payment-method methods. |

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| 3.0.2.28 | 14.6.2013 | Kristaps Kohs | Software Developer | Added Server interface error codes |
| 3.0.2.27 | 4.6.2013 | Björn Delin | Software Developer | Decreased max length of payment-method-type parameter from 40 to 30 |
| 3.0.2.26 | 27.5.2013 | Björn Delin | Software Developer | Increased max length of payment-method-type parameter from 30 to 40 |
| 3.0.2.25 | 16.5.2013 | Markku Hyppönen | Scrum Master | Currency code descriptions fixed payment-method-type |
| 3.0.2.24 | 15.5.2013 | Risto Virtanen | Software Developer | Increased max length of encrypted-card-details parameter from 256 to 512. |
| 3.0.2.23 | 8.5.2013 | Tommi Laukkanen | Head of Research and Development | Updated production URLs. |
| 3.0.2.22 | 16.4.2013 | Markku Hyppönen | Scrum Master | Payment status codes added to get payment status operation description. |
| 3.0.2.21 | 12.4.2013 | Risto Virtanen | Software Developer | Updated description of basket items of refund operation. |
| 3.0.2.20 | 10.4.2013 | Risto Virtanen | Software Developer | Updated save-card-payment-method's additional request fields |
| 3.0.2.19 | 22.3.2013 | Risto Virtanen | Software Developer | Added notification about creation of recurring subscription and recurring payment. |
| 3.0.2.18 | 20.3.2013 | Risto Virtanen | Software Developer | Removed token-included parameter. |
| 3.0.2.17 | 28.2.2013 | Tommi Laukkanen | Head of Research and Development | Clarified collation when ordering parameters for signature content. Updated production URLs. |
| 3.0.2.16 | 15.2.2013 | Risto Virtanen | Software Developer | Added token parameters. |
| 3.0.2.15 | 1.2.2013 | Risto Virtanen | Software Developer | Added optional parameter s-t-1-26_filing-code to Payment process' additional response fields. |
| 3.0.2.14 | 20.12.2012 | Antti Julku | QA Engineer | Fixed incorrect parameter name for list-transaction-numbers, should be I-f-1-20_transaction-number instead of I-f-1-20_transaction-id. |
| 3.0.2.13 | 19.12.2012 | Tommi Laukkanen | Head of Research and Development | Fixed incorrect parameter names. |
| 3.0.2.12 | 2.11.2012 | Markku Hyppönen | Scrum Master | Recurring payment subscription code parameter added for operation list saved payment options. |
| 3.0.2.11 | 9.10.2012 | Markku Hyppönen | Scrum Master | Operation list-transaction-ids renamed as list-transaction-number and payment method added to response message parameters. |
| 3.0.2.10 | 5.10.2012 | Jarno Tammelin | Quality Assurance Engineer | Formatting changes for pdf export. |
| 3.0.2.9 | 27.9.2012 | Markku Hyppönen | Scrum Master | Production environment URLs fixed. |

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| 3.0.2.8 | 25.9.2012 | Markku Hyppönen | Scrum Master | Added operation for listing transaction IDs. |
| 3.0.2.7 | 25.9.2012 | Markku Hyppönen | Scrum Master | Added operation for removing saved payment option. |
| 3.0.2.6 | 25.9.2012 | Tommi Laukkanen | Head of Research and Development | Added buyer external identifier parameter to buyer details. |
| 3.0.2.5 | 11.9.2012 | Markku Hyppönen | Scrum Master | Counter suffix in response fields unified. There were some _<N> suffixes while it should be -<N> |
| 3.0.2.4 | 10.8.2012 | Jarno Tammelin | Tester | Removed "Can be empty" from Process payment VAT and discount percentages' descriptions. |
| 3.0.2.3 | 13.7.2012 | Henri Huhtamäki | Quality Assurance Manager | Fixed test address from "/si" to "/serverinterface". |
| 3.0.2.2 | 5.7.2012 | Risto Virtanen | Scrum Master | Specified valid characters for order number. |
| 3.0.2.1 | 15.6.2012 | Henri Huhtamäki | Quality Assurance Manager | Minor addition (merchant agreement code) to post result checking instructions. |
| 3.0.2.0 | 13.6.2012 | Henri Huhtamäki | Quality Assurance Manager | Added 3.0.2 version to match to that of Payment interface. Did minor fixes on parameters. Added instructions for checking post results. |
| 3.0.1.2 | 30.5.2012 | Henri Huhtamäki | Quality Assurance Manager | Fixed e-mail variable lengths from max 30 to max 100 to match actual implementation. |
| 3.0.1.1 | 30.5.2012 | Tommi Laukkanen | Head of Research and Development | Added document change history. |
| 3.0.1.0 | 29.5.2012 | Tommi Laukkanen | Head of Research and Development | Updated interface version 3.0.1 to document. Changes were done on payment interface. No changes to server interface. |
| 3.0.0.0 | 2.3.2012 | Tommi Laukkanen | Head of Research and Development | Created initial server interface description for interface version 3.0.0. First E-Commerce interface version to include server interface. |

Introduction

This document describes integration process and server to server interface between a web shop (later a shop system) and Verifone E-Commerce System (later the payment system). The interface is designed to operate over HTTPS (Hypertext Transfer Protocol Secure). Authentication of both systems and verification of message integrity is implemented using digital signatures.

Interface Change Log

Version 5.0.x

Added Server Interface Cancel Task.

Version 3.0.2

Completely backwards incompatible with 3.0.1 version.

Interface Description

This document describes the server interface to enable third party integrations of shop systems to the payment system.

Note that in case of errors only the mandatory fields described in [General Response Headers](#) are compulsory in practice. The operation specific mandatory fields might not be present in case of errors.

Processes

Transport

Transport between shop system and payment system is carried out using POST operations over HTTPS (Hypertext Transfer Protocol Secure) which is combination of HTTP (Hypertext Transfer Protocol) and TLS (transport layer security). Only server side certificate granted by public certificate authorities are used in transport layer security. Post and response contents are encoded with 'application/x-www-form-urlencoded'-encoding with UTF-8 character set.

Security

Digital signatures are used to authenticate participating systems and verify message integrity. Messages are signed with two different alternative algorithms to allow for wide variety of technical platforms to be supported. The public key size is 1024.

Calculating Digital Signature from Form Parameters

Form parameter name value pairs are sorted by key according the following collation: "0123456789-_abcdefghijklmnopqrstuvwxyz". The signed content is created from this value list according to the following format:

Format of the Signed Parameter Content

```
<key1>=<value1>;<key2>=<value2>;...<keyN=valueN>;
```

Note: If ';' occurs in value it will be replaced with ';;' in signature content string. This applies to both requests and responses.

Example of the Signed Parameter Content

```
i-f-1-3_order-currency-code=978;...;
```

Digital Signature Types

| Signature Number | Algorithm |
|------------------|------------------|
| 1 | RSA with SHA-1 |
| 2 | RSA with SHA-512 |

Operations

General notice, that if parameter is not null-able and is missing from request. Server to server interface will not respond and log internally that parameter is missing.

General Request and Response Header Fields

Request Header

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------------------|---|-----|---------------------|-------------------------|---------|---|
| s-f-1-30_operation | String with length of 1-30 characters. | No | is-available | Operation | 3 | The operation which this request is requesting to be invoked. |
| l-f-1-20_request-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Request ID | 3 | Unique request identifier per merchant agreement. |
| t-f-14-19_request-timestamp | yyyy-MM-dd HH:mm:ss | No | 2012-06-13 16:00:02 | Request Timestamp | 3 | Timestamp defining the request time from web shop point of view. |
| s-f-1-36_merchant-agreement-code | String with length of 1-36 characters. | No | 023423423345 | Merchant Agreement Code | 3 | Textual code of the merchant agreement. |
| s-f-1-30_software | String with length of 1-30 characters. | No | My Shop Software | Software | 3 | Name of the web shop software (Merchant determines) |
| s-f-1-10_software-version | String with length of 1-10 characters. | No | 1.0.1 | Software Version | 3 | Version of the web shop software. |
| i-f-1-11_interface-version | String with length of 1-11 numeric characters. | No | 3 | Interface Version | 3 | Version of the payment interface. |
| s-t-256-256_signature-one | String with length of 256-512 characters. | Yes | FA12...FF | Signature One | 3 | 128 byte signature converted to upper case hexadecimal string. Parameter name includes 256 due to backwards compatibility issues. |
| s-t-256-256_signature-two | String with length of 256-512 characters. | Yes | FA12...FF | Signature Two | 3 | 128 byte signature converted to upper case hexadecimal string. Parameter name includes 256 due to backwards compatibility issues. |

Response Header

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------------|--------------------|---------|---|
| s-f-1-30_operation | String with length of 1-30 characters. | No | is-available | Operation | 3 | The operation which was requested to be invoked. |
| l-f-1-20_response-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Response ID | 3 | Unique response identifier per merchant agreement. |
| t-f-14-19_response-timestamp | yyyy-MM-dd HH:mm:ss | No | 2012-06-13 16:00:02 | Response Timestamp | 3 | Timestamp defining the response time from payment system point of view. |
| l-f-1-20_request-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Request ID | 3 | Unique request identifier per merchant agreement. |

| | | | | | | |
|----------------------------|--|-----|-----------------------------|-------------------|---|---|
| s-f-1-30_error-message | String with length of 1-30 characters. | Yes | No such merchant agreement. | Error message | 3 | The error which occurred. Only returned when an error occurs. |
| s-f-1-10_software-version | String with length of 1-10 characters. | No | 1.0.1 | Software Version | 3 | Version of the web shop software. |
| i-f-1-11_interface-version | String with length of 1-11 numeric characters. | No | 3 | Interface Version | 3 | Version of the payment interface. |
| s-t-256-256_signature-one | String with length of 256-512 characters. | Yes | FA12...FF | Signature One | 3 | 128 byte signature converted to upper case hexadecimal string. Parameter name includes 256 due to backwards compatibility issues. |
| s-t-256-256_signature-two | String with length of 256-512 characters. | Yes | FA12...FF | Signature Two | 3 | 128 byte signature converted to upper case hexadecimal string. Parameter name includes 256 due to backwards compatibility issues. |

Cancel Payment (cancel-payment)

Operation for canceling a payment.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---|--------------------|---------|---|
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 5 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 5 | String key identifying the payment method used. |
| s-t-1-1024_dynamic-feedback | String with length of 1-1024 chars. | Yes | s-t-1-30_card-type, s-t-1-4_error-code, l-f-1-20_dynamic-reference-number | Dynamic feedback | 5 | List of parameters to be added to response if available. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------|---------------------|---------|---|
| s-f-1-30_payment-result-code | String with length of 1-30 characters. | No | success | Payment Result Code | 5 | Code identifying status of the cancel payment |
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 6 | Unique number from identifying the payment transaction. |
| s-t-1-30_card-type | String with length of 1 to 30. | Yes | visa | Card type | 5 | Card type. |
| s-t-1-4_error-code | String with length of 1 to 4. | Yes | H002 | Error code | 5 | Error code, generated by Sales Connector (Hxxx) or received from acquirer (Bxxx). |

| | | | | | | |
|-----------------------------------|---|-----|----------|--------------------------|---|---------------------------|
| I-f-1-20_dynamic-reference-number | Integer value formatted as string with 1-20 numeric characters. | Yes | 23452345 | Dynamic reference number | 5 | Dynamic reference number. |
|-----------------------------------|---|-----|----------|--------------------------|---|---------------------------|

Is Available (is-available)

Operation for testing connectivity, signatures and requesting availability status of server interface for the merchant agreement.

If the connectivity is ok then status will be 200 and if there will be no connectivity then response configured in set-status-response field in peos-payment-web-ext.properties

and e.g.: set-status-response = 500 if HTTP 500 needed for no connectivity response

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------|--------|-----|---------------|-------|---------|-------------|
|------|--------|-----|---------------|-------|---------|-------------|

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------|---|-----|---------------|-------------------------------|---------|--|
| i-f-1-1_availability | Integer value formatted as string with 1 numeric character. | No | 0 | Server Interface Access Level | 3 | 0 = No access to Server Interface has been granted by Verifone. 1 = Express level access to Server Interface. 2 = Advanced level access to Server Interface. If you receive value 0 then contact Verifone in order to activate Server Interface access. |

List Payment Methods (list-payment-methods)

Operation for listing available payment methods and their amount limits for the merchant agreement.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|-----------------------|---|-----|---------------|---------------|---------|---------------------------------|
| i-f-1-3_currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------------------|--|-----|---------------|----------------|---------|---|
| s-t-1-30_payment-method-code-<N> | String with length of 1-30 characters. | Yes | visa | Payment Method | 3 | The payment method code. Value can be found in Appendix (please see the end of this document) |

| | | | | | | |
|----------------------------------|---|-----|-------|-------------------------------|---|--|
| l-t-1-20_payment-method-min-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 0 | Payment Method Minimum Amount | 3 | Minimum amount for the payment method. |
| l-t-1-20_payment-method-max-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 10000 | Payment Method Maximum Amount | 3 | Maximum amount for the payment method. |
| s-t-1-30_payment-method-type-<N> | String with length of 1-40 characters. | Yes | VISA | Payment Method Type | 3 | Type of the payment method. Value can be found in Appendix (please see the end of this document) |

List Saved Payment Methods (list-saved-payment-methods)

Operation for listing saved payment methods for given buyer.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|--|--|-----|----------------------|-------------------------------------|---------|--|
| s-f-1-30_buyer-first-name | String with length of 1-30 characters. | No | John | First Name | 3 | First name of the buyer. |
| s-f-1-30_buyer-last-name | String with length of 1-30 characters. | No | Smith | Last Name | 3 | Last name of the buyer. |
| s-t-1-30_buyer-phone-number | String with length of 0,1-30 characters. | Yes | +358 40 234234234 | Phone Number | 3 | Phone number of the buyer. |
| s-f-1-100_buyer-email-address | String with length of 1-100 characters. | No | john.smith@gmail.com | Email Address | 3 | Email address of the buyer. |
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier | 3 | Identifier of the buyer assigned by web shop. Not recommended to be used. Will be replaced identification mechanism based on other mandatory user details. |
| s-t-1-30_delivery-address-line-one | String with length of 0,1-30 characters. | Yes | Street 31 | Delivery Address Line #1 | 3 | Line one of the delivery address. |
| s-t-1-30_delivery-address-line-two | String with length of 0,1-30 characters. | Yes | Apartment 2 | Delivery Address Line #2 | 3 | Line two of the delivery address. |
| s-t-1-30_delivery-address-line-three | String with length of 0,1-30 characters. | Yes | Room 3 | Delivery Address Line #3 | 3 | Line three of the delivery address. |
| s-t-1-30_delivery-address-city | String with length of 0,1-30 characters. | Yes | Helsinki | Delivery Address City | 3 | City of the delivery address. |
| s-t-1-30_delivery-address-postal-code | String with length of 0,1-30 characters. | Yes | 00270 | Delivery Address Postal Code | 3 | Postal code of the delivery address. |
| i-t-1-3_delivery-address-country-code | String with length of 0,1-3 characters. | Yes | 246 | Delivery Address Country Code | 3 | Numeric ISO 3166 country code of the delivery address. |
| s-t-1-30_recurring-payment-subscription-code | String with length of 0,1-30 characters. | Yes | 123 | Recurring Payment Subscription Code | 3 | Subscription code for recurring payment. When given lists only saved payment methods related to subscription. |
| s-t-1-1024_dynamic-feedback | String with length of 1-1024 chars. | Yes | s-t-1-36_card-name | Dynamic feedback | 5 | List of parameters to be added to response if available. |

Additional Response Fields

| Name | Format | Opt | Example Value | Version | Title | Description |
|---|---|-----|-----------------|---------|----------------------|--|
| s-t-1-30_payment-method-code-<N> | String with length of 1-30 characters. | Yes | visa | 3 | Payment Method | The payment method code. |
| l-t-1-20_payment-method-id-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 2426425 | 3 | Payment Method ID | ID of the saved payment method. |
| s-t-1-30_payment-method-title-<N> | String with length of 1-30 characters. | Yes | 455566*****8887 | 3 | Payment Method Title | The title of payment method. |
| s-t-1-6_card-expected-validity-<N> | String with length of 1-6 characters | Yes | | 4 | | |
| s-t-1-1024_encrypted_payment_method_details | String with length of 1-1024 characters. | Yes | | 5 | | <PAN>, converted to upper case hexadecimal string. This field will contain the encrypted PAN |
| s-t-1-36_card-name | String with length of 1-36 characters. | Yes | Classic | 5 | Card Name | Requested as a dynamic parameter (s-t-1-1024_dynamic-feedback = s-t-1-36_card-name) and if requested it will be present in the response. |

Remove Saved Payment Method (remove-saved-payment-method)

Operation for removing saved payment method.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------------------|---|-----|---------------|-------------------------|---------|--|
| l-t-1-20_saved-payment-method-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 242 | Saved Payment Method ID | 3 | ID of the saved payment method. |
| s-t-1-256_token | String with length of 1-256 characters. | Yes | 1234567890 | Token | 5 | The token that was generated by Verifone. Although the type is String, valid values are the ones that can be parsed as Long. If this parameter is set with token id, then token associated with the payment method is also removed. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------|--------|-----|---------------|-------|---------|-------------|
|------|--------|-----|---------------|-------|---------|-------------|

| | | | | | | |
|------------------------|--|-----|---|---------------|---|--|
| l-t-1-10_removed-count | Long integer value formatted as string with 1-10 numeric characters. | Yes | 1 | Removed Count | 3 | 0 = Payment method not removed, 1 = Payment method removed |
|------------------------|--|-----|---|---------------|---|--|

Process Payment (process-payment)

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Ver. | Description |
|-------------------------------|---|-----|----------------------|-------------------|------|---|
| locale-f-2-5_payment-locale | String with length of 2-5 characters. | No | fi_FI | Locale | 3 | The language locale used by buyer. |
| t-f-14-19_payment-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Payment Timestamp | 3 | UTC timestamp defining the payment start time from web shop point of view. If payment is retried then payment timestamp has to differ from first payment for same order. |
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 3 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |
| t-f-14-19_order-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Order Timestamp | 3 | UTC timestamp defining the orders time from web shop point of view. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 3 | Custom parameter reserved for shop system to use. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| l-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | Total amount including taxes and discount with two decimal precision. Example value corresponds to 1 EUR. |
| s-f-1-30_buyer-first-name | String with length of 1-30 characters. | No | John | First Name | 3 | First name of the buyer. |
| s-f-1-30_buyer-last-name | String with length of 1-30 characters. | No | Smith | Last Name | 3 | Last name of the buyer. |
| s-t-1-30_buyer-phone-number | String with length of 0,1-30 characters. | Yes | +358 40 234234 | Phone Number | 3 | Phone number of the buyer. |
| s-f-1-100_buyer-email-address | String with length of 1-100 characters. | No | john.smith@gmail.com | Email Address | 3 | Email address of the buyer. |

| | | | | | | |
|---------------------------------------|---|-----|-------------|-------------------------------|---|--|
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier | 3 | Identifier of the buyer assigned by web shop. Not recommended to be used. Using this will replace identification mechanism normally based on other mandatory user details. |
| s-t-1-30_delivery-address-line-one | String with length of 0,1-30 characters. | Yes | Street 31 | Delivery Address Line #1 | 3 | Line one of the delivery address. |
| s-t-1-30_delivery-address-line-two | String with length of 0,1-30 characters. | Yes | Apartment 2 | Delivery Address Line #2 | 3 | Line two of the delivery address. |
| s-t-1-30_delivery-address-line-three | String with length of 0,1-30 characters. | Yes | Room 3 | Delivery Address Line #3 | 3 | Line three of the delivery address. |
| s-t-1-30_delivery-address-city | String with length of 0,1-30 characters. | Yes | Helsinki | Delivery Address City | 3 | City of the delivery address. |
| s-t-1-30_delivery-address-postal-code | String with length of 0,1-30 characters. | Yes | 00270 | Delivery Address Postal Code | 3 | Postal code of the delivery address. |
| i-t-1-3_delivery-address-country-code | String with length of 0,1-3 characters. | Yes | 246 | Delivery Address Country Code | 3 | Numeric ISO 3166 country code of the delivery address. |
| i-t-1-20_saved-payment-method-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 242 | Payment Method ID | 3 | ID of the saved payment method. Parameter can be omitted only with parameters i-t-1-1_3ds-secure-mode and s-t-256-512_encrypted-card-details. This is allowed only for merchant that is PCI enabled. |
| i-t-1-1_3ds-secure-mode | Integer with value 1 or 2 | Yes | 1 | 3D secure mode | 3 | Integer defining 3D secure operation. This is allowed only for merchant that is PCI enabled. |
| s-t-256-512_encrypted-card-details | String with length of 256-512 characters. | Yes | FA12...FF | Encrypted card details | 3 | <PAN>=<MMyyyy> padded with PKCS #1 padding and RSA encrypted and converted to upper case hexadecimal string. This can be used only with parameter i-t-1-1_3ds-secure-mode, which is allowed only for merchant that is PCI enabled. |
| s-t-1-256_http-accept | String with length of 0,1-256 characters. | Yes | */* | Http-accept | 3 | Http-client parameter. Used only in 3D secure mode. |

| | | | | | | |
|----------------------------|--|-----|--|--------------------------|---|---|
| s-t-1-256_http-user-agent | String with length of 0,1-256 characters. | Yes | Mozilla/5.0 (Windows NT 6.1; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/57.0.2987.133 Safari/537.36 | Http-user-agent | 3 | Http-client parameter. Used only in 3D secure mode. |
| i-t-1-1_recurring-payment | Integer with value 0 or 1. | Yes | 1 | Recurring Payment | 3 | Integer defining that payment is recurring payment. 0) Not recurring payment. 1) A recurring payment. It must be noted that the recurring subscription must be created via Payment interface. |
| i-t-1-1_deferred-payment | Integer with value 0 or 1 or 2. | Yes | 1 | Deferred Payment | 3 | Integer defining that payment is deferred payment. 0) Not deferred payment. Both payment authorization and debiting will be done. 1) Deferred payment. Only authorization will be done. 2) Deferred payment. Only authorization will be done |
| s-t-1-4_card-security-code | String with length of 1-4 characters. | Yes | 123 | Card Security Code | 3 | The card security code. Must not be used unless separately agreed. |
| i-t-1-1_register-token | Integer with value 0 or 1. | Yes | 1 | Register Token | 3 | Integer defining if a token should be registered for the card that is used. |
| i-t-1-1_token-extra-info | Integer with value 0 or 1 | Yes | 1 | Request extra token info | 5 | Integer defining if extra info (masked pan/ expiration date) should be returned. |
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Integer defining which scope token should belong to 1 = Terminal Group, 2 = Company, 3 = Company Group. |
| s-t-1-36_service-code | String with length of 1-36 characters. | Yes | service_code | Service Code | 5 | Value Added Service Code. Service code is also used for token distribution to acquirer |
| s-t-1-256_token | String with length of 0 or 1-256 characters. | Yes | 100 | Token | 6 | Token that was registered for the card. |

| | | | | | | |
|---|---|-----|---|---------------------------------------|---|---|
| s-t-1-1024_dynamic-feedback | String with length of 1-1024 chars. | Yes | s-t-1-6_authorization-number, l-f-1-20_dynamic-reference-number, s-t-1-30_card-type, s-t-1-6_card-expiry-date, s-t-1-4_error-code, i-t-1-2_card-3ds-auth-status, i-t-1-1_card-3ds-enrollment-status, s-t-1-1_3ds-charge-back, i-t-1-3_customer-ip-country, i-t-1-3_card-issued-country, i-t-2-2_card-pan-last 2, i-t-6-6_card-pan-first6, s-t-1-256_token-two-way, s-t-1-8_card-product (applies only to specific issuer), i-t-4-4_card-pan-last 4, s-t-2-2_account-item-type, i-t-1-1_payment-benefit, i-t-1-1_consumer-card, s-t-1-36_card-name | Dynamic feedback | 5 | List of parameters to be added to response if available. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 6 | String key identifying the payment method used. |
| s-t-1-2048_payment-token-data | String with length of 1-2048 characters | Yes | fPZHf....S2GhIQ= | Payment token data | 5 | Payment data dictionary (encrypted payment data), Base64 encoded as a string. |
| s-t-1-32_payment-token-version | String with length of 1-32 characters | Yes | EC_v1 | Payment token version | 5 | Token version information. Supported only EC_v1 |
| s-t-1-8192_payment-token-signature | String with length of 1-8192 characters | Yes | MIAGCS.....F4wAA AAAAAA== | Payment token signature | 5 | Signature of the payment and header data. The signature includes the signing certificate, its intermediate CA certificate and information about the signing algorithm |
| s-t-1-512_payment-token-header-ephemeral-pk | String with length of 1-512 characters | Yes | MFkwE....ihpoM9aog== | Payment token header ephemeral PK | 5 | X.509 encoded key bytes, Base64 encoded as a string. |
| s-t-1-256_payment-token-header-application-data | String with length of 1-256 characters | Yes | L+t9VafnB.....KAhm Bqcz0 | Payment token header application data | 5 | SHA-256 hash of the applicationData property of the original PKPaymentRequest object. Hex encoded as string. |

| | | | | | | |
|---|--|-----|--------------------------|-------------------------------------|---|---|
| s-t-1-256_payment-token-header-pk-hash | String with length of 1-256 characters | Yes | L+t9VafnB.....KAhmBqcz0= | Payment token header PK hash | 5 | SHA-256 hash of X-509 encoded PK of the merchant, Base64 encoded as a string. |
| s-t-1-256_payment-token-header-transaction-id | String with length of 1-256 characters | Yes | c9bbaca178.....ed81fb1a1 | Payment token header transaction ID | 5 | Transaction identifier, generated on the device. |
| i-t-1-1_partial-approval | Integer with value 0 or 1. | Yes | 1 | Partial Approval | 5 | Integer defining that payment is allowed to be approved partially. 0) Partial approval not allowed. 1) Partial approval allowed |
| s-t-1-30_sub-payment-method-type | String with length of 1-30 characters. | Yes | Installment | Sub Payment Method Type | 5 | Pre-selected AfterPay payment option type. |
| i-t-1-4_sub-payment-method-profile-number | Integer formatted as string with 0,1-4 numeric characters. | Yes | 3 | Sub Payment Method Profile Number | 5 | Pre-selected AfterPay payment option profile number. |

0-50 basket items supported and they are only viewed to user as reminder of what the order contains.

| | | | | | | |
|---------------------------|---|-----|-----------|----------------|---|---|
| s-t-1-30_bi-name-<N> | String with length of 1-30 characters. | Yes | Red Apple | Item Name | 3 | Item name of the Nth basket item. |
| I-t-1-20_bi-unit-cost-<N> | <p>64 bit signed integer value formatted as a string with 1-20 numeric characters. Must not be present if unit gross cost is used.</p> <p>Must be filled if unit gross cost is not filled. Must not be filled if it is.</p> | Yes | 100 | Item Unit Cost | 3 | <p>Unit cost with two decimal precision but without discount and tax. Example value corresponds to 1 EUR.</p> <p>NOTE: usage of unit cost instead of unit gross cost can create rounding errors, when refunding individual items.</p> <p>If you for example have gross cost of 89.00 EUR, there is no corresponding unit cost with discount 0% and GST 24%. 77.17 EUR and 24% GST is 88.99 EUR, but 77.18 EUR lead to gross cost of 89.01 EUR.</p> <p>Thus if consumer buys 2 items with gross cost of 89.00 and returns only one he will be returned 88.99 EUR. (If he returns both then the entire row will be refunded he will get full refund.)</p> <p>The solution to this problem is either to use unit gross cost, or calculate unit cost first and calculate gross cost by adding GST, and not by calculating GST from unit gross cost, because if one does it this way, there will be rounding errors unless prices are selected not to have them, since EURO and other currencies are finitely dividable.</p> |

| | | | | | | |
|------------------------------------|--|-----|------|--------------------------|---|---|
| I-t-1-20_bi-unit-gross-cost-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. Must be filled if unit cost is not filled. Must not be filled if it is. | yes | 124 | Item Unit Gross Cost | 3 | Unit cost with two decimal precision,with discount and tax. Example value corresponds 1 EUR , 24% vat and 0% discount. |
| i-t-1-11_bi-unit-count-<N> | Integer value formatted as string with 1-11 numeric characters. | Yes | 1 | Item Unit Count | 3 | Number of units in the item. |
| I-t-1-20_bi-gross-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Item Gross Amount | 3 | Item gross amount including tax and discount with two decimal precision. Example value corresponds to 1 EUR. |
| I-t-1-20_bi-net-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Item Net Amount | 3 | Item net amount calculated from unit cost times unit count with two decimal precision. Example value corresponds to 1 EUR. |
| i-t-1-4_bi-vat-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 2250 | Item VAT Percentage | 3 | Item value added tax percentage with two decimal precision. Example value corresponds to 22,5%. Currently, cannot be an empty string nor missing. |
| i-t-1-4_bi-discount-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 550 | Item Discount Percentage | 3 | Item discount percentage tax with two decimal precision. Example value corresponds to 5,5%. Currently, cannot be an empty string nor missing. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------------|--------------------|---------|--|
| I-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | String key identifying the payment method used. |
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 3 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |
| s-t-1-36_order-note | String with length of 1-36 characters. | Yes | Example note. | Order Note | 3 | Custom parameter reserved for shop system to use echoed back to shop. |
| t-f-14-19_order-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Order Timestamp | 3 | UTC timestamp defining the orders time from web shop point of view. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| I-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | Gross amount including tax with two decimal precision. |
| s-t-1-26_filing-code | String with length of 1-26 characters. | Yes | 1234567890 | Filing code | 3 | Filing code of the transaction |

| | | | | | | |
|------------------------------------|---|-----|-----------------|--------------------------|---|--|
| s-t-1-256_token | String with length of 0 or 1-256 characters. | Yes | 100 | Token | 3 | Token that was registered for the card that the used. |
| s-t-10-10_token-expiration-date | yyyy-MM-dd | Yes | 2010-01-01 | Token expiration date | 5 | Token expiration date |
| s-t-1-36_token-masked-pan | String with length of 0 or 1-36 characters. | Yes | 123456*****0000 | Masked pan | 5 | Masked pan used to generate token |
| s-t-1-6_authorization-number | String with length of 1 to 6 characters. | Yes | 123456 | Authorization id. | 5 | A reference provided by the authorizing institution. Only required in response messages and will only be present where the transaction is approved. |
| l-f-1-20_dynamic-reference-number | Integer value formatted as string with 1-20 numeric characters. | Yes | 23452345 | Dynamic reference number | 5 | Dynamic reference number. |
| s-t-1-30_card-type | String with length of 1 to 30. | Yes | visa | Card type | 5 | Card type. |
| s-t-1-6_card-expiry-date | String with length of 1 to 6. | Yes | 042015 | Expiry date | 5 | Expiry date of the card in format MMDDYY. |
| s-t-1-4-error-code | String with length of 1 to 4. | Yes | H002 | Error code | 5 | Error code, generated by Sales Connector (Hxxx) or received from acquirer (Bxxx). |
| i-t-1-2_card-3ds-auth-status | String with length of 2. | Yes | 03 | 3DS authorization status | 5 | <p>Status of 3DS authorization.(Note: The value returned is String.)</p> <p>valid return values are:</p> <p>0 = Cavv Not Present Or Issuer Did Not Respond With Result Code</p> <p>1 = Authentication Result Invalid</p> <p>2 = Validation Failed Authentication</p> <p>3 = Validation Passed Authentication</p> <p>4 = Validation Passed Attempt</p> <p>5 = Validation Failed Attempt</p> <p>(6 = Reserved 5, this is present in enumeration but not in any use)</p> <p>7 = Not Validated Issuer Not Participating</p> <p>8 = Validation Failed Attempt Us Card</p> <p>9 = Validation Success Attempt Us Card</p> <p>10 = Validation Failed Attempt Us Card Stand In</p> <p>11 = Validation Success Attempt Us Card Stand In</p> <p>12 = Validation Passed Info Only No L Shift</p> <p>13 = Not Validated Attempt No Cavv From Issuer</p> <p>14 = Not Validated Authentication No Cavv From Issuer</p> <p>15 = Duplicate Cavv</p> <p>16 = Not Validated System Error</p> <p>17 = Not Validated Invalid Data</p> |
| i-t-1-1_card-3ds-enrollment-status | String with length of 1. | Yes | 1 | 3DS enrollment status | 5 | Electronic Commerce Indicator (ECI) value is returned by Directory Server to indicate the authentication results of your customer's credit card payment on 3D Secure. |

| | | | | | | |
|-----------------------------|---|-----|--|---------------------------------|---|---|
| s-f-1-4096_md | String with length of 1 to 4096. | Yes | MD_0_____12302.. c3 | MD token for 3DS authentication | 3 | One time token for 3D secure authentication. Used only in 3D secure mode. |
| s-t-1-8192_pareq | String with length of 1 to 8192. | Yes | eJxdUV...lg | PaReq | 3 | One time token for 3D secure authentication. Used only in 3D secure mode. |
| s-t-1-256_3ds-acurl | String with length of 1 to 256. | Yes | https://3ds-acurl.test.m dirum.com/mdpayacs/p areq | 3DS authentication URL | 3 | Forward URL for 3D secure authentication. Used only in 3D secure mode. |
| s-t-1-1_3ds-charge-back | String with length of 1. | Yes | N | 3DS charge back | 5 | 3DS charge-back (J=3DS, N=CVV after attempt to 3DS, P=only CVV). |
| i-t-1-3_customer-ip-country | String with length of 1 to 3. | Yes | 233 | Estonia | 5 | Country code of the customer (resolved from customer ip address). |
| i-t-1-3_card-issued-country | String with length of 1 to 3. | Yes | 40 | Austria | 5 | Code of country which issued the card. |
| i-t-2-2_card-pan-last2 | String of digits with length of 2. | Yes | 11 | Last two digits on the card | 5 | Last 2 digits of the card used to make the payment. |
| i-t-6-6_card-pan-first6 | String of digits with length of 6. | Yes | 453288 | First six digits on the card | 5 | First 6 digits of the card used to make the payment. |
| s-t-1-256_token-two-way | String with length of 1 to 256. | Yes | 100 | Token | 5 | Token that was registered for the card that the used. |
| s-t-1-8_card-product | String with length of 1 to 8. | Yes | debit | Card product | 5 | Card product type (applied only to specific issuer). |
| i-t-4-4_card-pan-last4 | String with length of 4 | yes | 1111 | Last four digits of the card | 5 | Last 4 digits of the card (PAN or DPAN) used to make the payment |
| i-t-1-20_authorized-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Authorized Amount | 5 | Partially approved transaction amount |
| i-t-1-1_payment-benefit | integer value either zero or one | Yes | 0 | SOK Payment Benefit value | 5 | If the card is having SOK Payment benefit . |
| s-t-2-2_account-item-type | String value | Yes | L1 | Account type | 5 | Card Account type |
| i-t-1-1_consumer-card | Integer value | Yes | o / 1 | Consumer Card | 5 | Consumer Card |

Complete Payment (complete-3d-secure-payment)

Operation for completing payment in 3D secure mode. This operation is not actual distinct operation, but it merely continues process payment operation that was interrupted because of 3D secure mode. Operation complete payment (complete-payment) is required to be inside the same http session as operation process payment (process-payment), which initiated the payment.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------|----------------------------------|-----|-----------------------------|------------------------------------|---------|--|
| s-f-1-4096_md | String with length of 1 to 4096. | No | MD_0_____12302.. 02...c3 | MD token for 3DS authentication | 3 | One time token for 3D secure authentication. |
| s-f-1-8192_pares | String with length of 1 to 8192. | No | eJzVWNmuo0qy/Z.. ..M= | PaRes token for 3DS authentication | 3 | One time token for 3D secure authentication. |

Notice! Besides conventional request parameters, 'complete-3d-secure-payment' request is required to contain session header from process payment operation. Request 'complete-3d-secure-payment' will only work within same session as process payment operation.

Notice! 3DS authentication related fields MD and Pares are not included in message signature calculation in complete payment operation.

Additional Response Fields

Operation complete payment has the response parameters of operation process payment (process-payment).

Debit Payment (debit-payment)

Operation for triggering payment debit in case of deferred payment.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------|--------------------|---------|---|
| I-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 3 | Custom parameter reserved for shop system to use. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| I-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | Total amount including taxes and discount with two decimal precision. Example value corresponds to 1 EUR. |

0-50 basket items supported and they are only viewed to user as reminder of what the order contains.

Request must have all the order items that are to be debited, order items are matched by id.

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------|--------------------|---------|---|
| I-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | String key identifying the payment method used. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| I-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | Gross amount including tax with two decimal precision. |

Process Supplementary (process-supplementary)

Operation for triggering process supplementary.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|--------------------------------------|---|-----|---------------|--------------------|---------|---|
| l-f-1-20_original-transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | The transaction number for which supplementary will be initiated. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 3 | Custom parameter reserved for shop system to use. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| l-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | The amount for which supplementary authorization will be triggered. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------|--------------------|---------|---|
| l-t-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | Yes | 123 | Transaction Number | 3 | Transaction number identifying the supplementary payment transaction. Assigned by payment system. |
| s-t-1-30_payment-method-code | String with length of 1-30 characters. | Yes | visa | Payment Method | 3 | String key identifying the payment method used. |
| i-t-1-3_order-currency-code | String with length of 1-3 numeric characters. | Yes | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| l-t-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Gross Amount | 3 | Gross amount including tax with two decimal precision. |

Refund Payment (refund-payment)

Operation for refunding payments. Refund is supported for Card, Electronic and Invoice payments.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|-----------------------------|---|-----|---------------|--------------------|---------|---|
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |

| | | | | | | |
|------------------------------|---|-----|---|------------------|---|--|
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| i-f-1-3_refund-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| l-f-1-20_refund-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Refund Amount | 3 | Amount to refund. Example value corresponds to 1 EUR. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 3 | Custom parameter reserved for shop system to use. |
| s-t-1-1024_dynamic-feedback | String with length of 1-1024 chars. | Yes | l-f-1-20_dynamic-reference-number, s-t-1-30_card-type, s-t-1-4_error-code | Dynamic feedback | 5 | List of parameters to be added to response if available. |

0-50 basket items supported and they are only show to the user as reminder of what the order contains.
Order has to have all the basket items that are refunded. Basket items are matched by their id.

| | | | | | | |
|---------------------------------|--|-----|-----------|----------------------|---|---|
| s-t-1-30_bi-name-<N> | String with length of 1-30 characters. | Yes | Red Apple | Item Name | 3 | Item name of the Nth basket item. |
| l-t-1-20_bi-unit-cost-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. Must be filled if unit gross cost is not filled. Must not be filled if it is. | Yes | 100 | Item Unit Cost | 3 | Unit cost with two decimal precision but without discount and tax. Example value corresponds to 1 EUR. NOTE: usage of unit cost instead of unit gross cost can create rounding errors, when refunding individual items. If you for example have gross cost of 89.00 EUR, there is no corresponding unit cost with discount 0% and GST 24%. 77.17 EUR and 24% GST is 88.99 EUR, but 77.18 EUR lead to gross cost of 89.01 EUR. Thus if consumer buys 2 items with gross cost of 89.00 and returns only one he will be returned 88.99 EUR. (If he returns both then the entire row will be refunded he will get full refund.) The solution to this problem is either to use unit gross cost, or calculate unit cost first and calculate gross cost by adding GST, and not by calculating GST from unit gross cost, because if done this way, there will be rounding errors unless prices are chosen not to have them, since EURO and other currencies are finitely dividable. |
| l-t-1-20_bi-unit-gross-cost-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. Must be filled if unit cost is not filled. Must not be filled if it is. | yes | 124 | Item Unit Gross Cost | 3 | Unit cost including discount and tax with two decimal precision. Example value corresponds 1 EUR , 24% vat and 0% discount. |

| | | | | | | |
|------------------------------------|---|-----|------|--------------------------|---|---|
| i-t-1-11_bi-unit-count-<N> | Integer value formatted as string with 1-11 numeric characters. | Yes | 1 | Item Unit Count | 3 | Number of units in the item. |
| I-t-1-20_bi-gross-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Item Gross Amount | 3 | Item gross amount including tax and discount with two decimal precision. Example value corresponds to 1 EUR. |
| I-t-1-20_bi-net-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Item Net Amount | 3 | Item net amount calculated from unit cost times unit count with two decimal precision. Example value corresponds to 1 EUR. |
| i-t-1-4_bi-vat-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 2250 | Item VAT Percentage | 3 | Item value added tax percentage with two decimal precision. Example value corresponds to 22,5%. Currently, cannot be an empty string nor missing. |
| i-t-1-4_bi-discount-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 550 | Item Discount Percentage | 3 | Item discount percentage tax with two decimal precision. Example value corresponds to 5,5%. Currently, cannot be an empty string nor missing. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|-----------------------------------|---|-----|---------------|--------------------------|---------|---|
| I-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Unique number identifying the payment transaction. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | String key identifying the payment method used. |
| I-f-1-20_dynamic-reference-number | Integer value formatted as string with 1-20 numeric characters. | Yes | 23452345 | Dynamic reference number | 5 | Dynamic reference number. |
| s-t-1-30_card-type | String with length of 1 to 30. | Yes | visa | Card type | 5 | Card type. |
| s-t-1-4-error-code | String with length of 1 to 4. | Yes | H002 | Error code | 5 | Error code, generated by Sales Connector (Hxxx) or received from acquirer (Bxxx). |

Refund Amount (refund-amount)

Operation for refunding amounts like lottery wins in special cases. Must not and cannot be used without separate agreement with Verifone.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------|--------|-----|---------------|-------|---------|-------------|
|------|--------|-----|---------------|-------|---------|-------------|

| | | | | | | |
|-------------------------------------|---|-----|--|-------------------------|---|--|
| l-f-1-20_saved-payment-method-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 123 | Saved Payment Method ID | 5 | ID of the saved payment method. |
| s-t-256-512_encrypt-ed-card-details | String with length of 256-512 characters. | Yes | FA12...FF | Encrypted Card Details | 6 | <PAN>=<MMyyyy> padded with PKCS #1 padding and RSA encrypted and converted to upper case hexadecimal string. |
| s-t-1-256_token | String with length of 0 or 1-256 characters. | Yes | 100 | Token | 6 | Token that was registered for the card that the used. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 5 | The payment method code. |
| i-f-1-3_refund-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 5 | Numeric ISO 4217 currency code. |
| l-f-1-20_refund-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Refund Amount | 5 | Amount to refund. Example value corresponds to 1 EUR. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 5 | Custom parameter reserved for shop system to use. |
| s-t-1-1024_dynamic-feedback | String with length of 1-1024 chars. | Yes | l-f-1-20_dynamic-reference-number, s-t-1-30_card-type, s-t-1-4_error-code, s-t-1-256_token-two-way | Dynamic feedback | 5 | List of parameters to be added to response if available. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|-----------------------------------|---|-----|---------------|--------------------------|---------|---|
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | String key identifying the payment method used. |
| l-f-1-20_dynamic-reference-number | Integer value formatted as string with 1-20 numeric characters. | Yes | 23452345 | Dynamic reference number | 5 | Dynamic reference number. |
| s-t-1-30_card-type | String with length of 1 to 30. | Yes | visa | Card type | 5 | Card type. |
| s-t-1-4-error-code | String with length of 1 to 4. | Yes | H002 | Error code | 5 | Error code, generated by Sales Connector (Hxxx) or received from acquirer (Bxxx). |
| s-t-1-256_token-two-way | String with length of 1 to 256. | Yes | 100 | Token | 5 | Token that was registered for the card that the used. |

Get Payment Status (get-payment-status)

Operation for getting payment status.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------|--------------------|---------|---|
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------------|---------------------|---------|--|
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 3 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |
| t-f-14-19_order-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Order Timestamp | 3 | UTC timestamp defining the orders time from web shop point of view. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| l-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | Gross amount including tax with two decimal precision. |
| s-f-1-30_payment-status-code | String with length of 1-30 characters. | No | authorized | Payment Method Code | 3 | Code identifying status of the chosen payment method. |
| s-f-1-20_reference-number | String with length of 1-20 characters. | Yes | 1230000045678 | Reference Number | 4 | Verifone Reference Number of electronic payment. |

Payment Status Codes

Card Payment Status Codes

| Status Code | Description |
|-------------|--|
| committed | CardPayment commitment has been captured and committed |
| settled | CardPayment has been settled by acquiring Bank |
| verified | CardPayment has been verified |
| refunded | CardPayment has been refunded |
| authorized | CardPayment has been authorized |

| | |
|------------|---|
| cancelled | CardPayment has been cancelled |
| subscribed | CardPayment is used for creating a subscription |

Invoice Payment Status Codes

| Status Code | Description |
|-------------|---|
| committed | InvoicePayment commitment has been received |
| settled | InvoicePayment has been settled by acquiring Bank |
| verified | InvoicePayment has been verified |
| refunded | InvoicePayment has been refunded |
| authroized | InvoicePayment has been authorized |
| initiated | InvoicePayment commitment has not been received |
| cancelled | InvoicePayment has been cancelled |

Electronic Payment Status Codes

| Status Code | Description |
|-------------|--|
| committed | ElectronicPayment commitment has been received |
| settled | ElectronicPayment has been settled by acquiring Bank |
| verified | ElectronicPayment has been verified |
| refunded | ElectronicPayment has been refunded |
| initiated | ElectronicPayment commitment has not been received |

List Transaction Numbers (list-transaction-numbers)

Operation for listing transaction numbers.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|-----------------------|--|-----|---------------|--------------|---------|--|
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 3 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------------------|---|-----|---------------|--------------------|---------|---|
| l-f-1-20_transaction-number-<N> | Integer value formatted as string with 1-20 numeric characters. | No | 123 | Transaction Number | 3 | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code-<N> | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |

Save Card Payment Method (save-card-payment-method)

Operation for saving payment method. Must not and cannot be used without separate agreement with Verifone.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|---------------------------------------|---|-----|----------------------|---------------------------------------|---------|--|
| s-f-1-30_buyer-first-name | String with length of 1-30 characters. | No | John | First Name | 3 | First name of the buyer. |
| s-f-1-30_buyer-last-name | String with length of 1-30 characters. | No | Smith | Last Name | 3 | Last name of the buyer. |
| s-t-1-30_buyer-phone-number | String with length of 0,1-30 characters. | Yes | +358 40 234234234 | Phone Number | 3 | Phone number of the buyer. |
| s-f-1-100_buyer-email-address | String with length of 1-30 characters. | No | john.smith@gmail.com | Email Address | 3 | Email address of the buyer. |
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier/Customer id | 3 | Identifier of the buyer assigned by web shop. If this is given, the other fields are not used in determining the buyer. Information is also stored as part of a token, if token is created and returned for token use cases so that the token's owner can be mapped in calling systems (e.g. with get-token). |
| s-t-1-30_delivery-address-line-one | String with length of 0,1-30 characters. | Yes | Street 31 | Delivery Address Line #1 | 3 | Line one of the delivery address. |
| s-t-1-30_delivery-address-line-two | String with length of 0,1-30 characters. | Yes | Apartment 2 | Delivery Address Line #2 | 3 | Line two of the delivery address. |
| s-t-1-30_delivery-address-line-three | String with length of 0,1-30 characters. | Yes | Room 3 | Delivery Address Line #3 | 3 | Line three of the delivery address. |
| s-t-1-30_delivery-address-city | String with length of 0,1-30 characters. | Yes | Helsinki | Delivery Address City | 3 | City of the delivery address. |
| s-t-1-30_delivery-address-postal-code | String with length of 0,1-30 characters. | Yes | 00270 | Delivery Address Postal Code | 3 | Postal code of the delivery address. |
| i-t-1-3_delivery-address-country-code | String with length of 0,1-3 characters. | Yes | 246 | Delivery Address Country Code | 3 | Numeric ISO 3166 country code of the delivery address. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| s-f-256-512_encrypted-card-details | String with length of 256-512 characters. | No | FA12...FF | Encrypted card details | 3 | <PAN>=<MMyyyy> padded with PKCS #1 padding and RSA encrypted and converted to upper case hexadecimal string. |
| i-t-1-1_register-token | Integer with value 0 or 1. | Yes | 1 | Register Token | 3 | Integer defining if a token should be registered for the card that is used. |

| | | | | | | |
|--------------------------|---|-----|--------------|--------------------------|---|--|
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Integer defining which scope token should belong to 1 = Terminal Group, 2 = Company, 3 = Company Group |
| i-t-1-1_token-extra-info | Integer with value 0 or 1 | Yes | 1 | Request extra token info | 5 | Integer defining if extra info (masked pan/ expiration date) should be returned. |
| s-t-1-36_service-code | String with length of 1-36 characters. | Yes | service_code | Service Code | 5 | Value Added Service Code. Service code is also used for token distribution to acquirer |
| s-t-1-256_token | String with length of 1-256 characters. | Yes | 1234567890 | Token | 5 | The token that was generated by Verifone. Although the type is String, valid values are the ones that can be parsed as Long. |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|---------------------------------|---|-----|-----------------|-----------------------|---------|---|
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | visa | Payment Method | 3 | The payment method code. |
| l-t-1-20_payment-method-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 242 | Payment Method ID | 3 | ID of the saved payment method. |
| s-t-1-30_payment-method-title | String with length of 1-30 characters. | No | 455566*****8887 | Payment Method Title | 3 | The title of payment method. |
| s-t-1-256_token | String with length of 0 or 1-256 characters. | Yes | 100 | Token | 3 | Token that was registered for the card that the used. |
| s-t-10-10_token-expiration-date | yyyy-MM-dd | Yes | 2010-01-01 | Token expiration date | 5 | Token expiration date |
| s-t-1-36_token-masked-pan | String with length of 0 or 1-36 characters. | Yes | 123456*****0000 | Masked pan | 5 | Masked pan used to generate token |

Save Token (save-token)

Operation for saving a token for a card or mobile app id.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|--|-----|---------------|----------------|---------|--|
| s-t-1-30_payment-method-code | String with length of 1-30 characters. | Yes | visa | Payment Method | 5 | The payment method code. Payment method code will not be present when saving a token for mobile app id. |

| | | | | | | |
|----------------------------------|---|-----|--|---------------------------------------|---|--|
| s-f-256-512_encrypt-card-details | String with length of 256-512 characters. | Yes | FA12...FF | Encrypted card details | 5 | <p><PAN>=<MMyyyy> padded with PKCS #1 padding and RSA encrypted and converted to upper case hexadecimal string.</p> <p>Note! Either this parameter or s-t-1-255_app-id must be present but never both. The selection depends on whether a card payment method is tokenized or a non-card method is tokenized (e.g. a unique application id or other value).</p> |
| s-t-1-36_service-code | String with length of 1-36 characters. | Yes | service_code | Service Code | 5 | Value Added Service Code |
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Integer defining which scope token should belong to 1 = Terminal Group, 2 = Compan, 3 = Company Group |
| i-t-1-1_token-extra-info | Integer with value 0 or 1 | Yes | 1 | Request extra token info | 5 | Integer defining if extra info (masked pan/ expiration date) should be returned. |
| s-t-1-255_app-id | String with length of 1-255 characters | Yes | appid-123e4567-e89b-12d3-a456-426655440000 | Mobile App Id | 5 | <p>Mobile App Id for mobile installation.</p> <p>Note! Either this parameter or s-f-256-512_encrypt-card-details must be present but never both. The selection depends on whether a card payment method is tokenized or a non-card method is tokenized (e.g. a unique application id or other value).</p> |
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier/Customer id | 5 | Identifier of the buyer / token owner. Information is stored as part of a token, if token is created and returned for token use cases so that the token's owner can be mapped in calling systems (e.g. with get-token). |

| | | | | | | |
|-------------------------------|--|-----|------------|-----------------------|---|--|
| s-t-1-256_token | tring with length of 0 or 1-256 characters | Yes | 1234567890 | Token/Token Id | 6 | The token that was generated by Verifone. Although the type is String, valid values are the ones that can be parsed as Long. Token that was registered for the card.Customer Id(s-t-1-255_buyer-external-id) can be updated by using the token. |
| i-t-1-1_token-type-identifier | Integer with value 1. | Yes | 1 | Token Type Identifier | 5 | Integer defining that save token 1) BANK Acept |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------------|--|-----|--|-----------------------|---------|--|
| s-t-1-256_token | String with length of 0 or 1-256 characters. | Yes | 100 | Token | 5 | Token that was registered for the card that was send. |
| s-t-10-10_token-expiration-date | yyyy-MM-dd | Yes | 2010-01-01 | Token expiration date | 5 | Token expiration date |
| s-t-1-36_token-masked-pan | String with length of 0 or 1-36 characters. | Yes | 123456*****0000 | Masked pan | 5 | Masked pan used to generate token |
| s-t-1-255_app-id | String with length of 1-255 characters | Yes | appid-123e4567-e89b-12d3-a456-426655440000 | Mobile App Id | 5 | Mobile App Id for mobile installation. Note! Either parameter s-t-1-36_token-masked-pan or s-t-1-255_app-id will be present in the response depending on whether a card payment method is tokenized or a non-card method is tokenized. |
| s-t-1-36_token-masked-bank-account | String with length of 0 or 1-36 characters. | Yes | *****1234 | Masked Bank Account | 5 | Masked Bank Account used to generate token |

Get Token (get-token)

Operation for getting an existing token associated to a card or mobile app id.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|--|-----|---------------|----------------|---------|---|
| s-t-1-30_payment-method-code | String with length of 1-30 characters. | Yes | visa | Payment Method | 5 | The payment method code. Payment method code will not be present when getting a token for mobile app id. |

| | | | | | | |
|----------------------------------|---|-----|--|--------------------------|---|--|
| s-f-256-512_encrypt-card-details | String with length of 256-512 characters. | Yes | FA12...FF | Encrypted card details | 5 | <p><PAN>=<MMyyyy> padded with PKCS #1 padding and RSA encrypted and converted to upper case hexadecimal string.</p> <p>Note! Either this parameter or s-t-1-255_app-id must be present but never both. The selection depends on whether a card payment method is tokenized or a non-card method is tokenized (e.g. a unique application id or other value).</p> |
| s-t-1-36_service-code | String with length of 1-36 characters. | Yes | service_code | Service Code | 5 | Value Added Service Code |
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Integer defining which scope token should belong to 1 = Terminal Group, 2 = Company, 3 = Company Group |
| i-t-1-1_token-extra-info | Integer with value 0 or 1 | Yes | 1 | Request extra token info | 5 | Integer defining if extra info (masked pan/ expiration date) should be returned. |
| s-t-1-255_app-id | String with length of 1-255 characters | Yes | appid-123e4567-e89b-12d3-a456-426655440000 | Mobile App Id | 5 | <p>Mobile App Id for mobile installation.</p> <p>Note! Either this parameter or s-f-256-512_encrypt-card-details must be present but never both. The selection depends on whether a card payment method is tokenized or a non-card method is tokenized (e.g. a unique application id or other value).</p> |
| i-t-1-1_token-type-identifier | Integer with value 1. | Yes | 1 | Token Type Identifier | 5 | <p>Integer defining that save token</p> <p>1) BANK Acept</p> |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|---------------------------------|--|-----|-----------------|-----------------------|---------|---|
| s-t-1-256_token | String with length of 0 or 1-256 characters. | Yes | 100 | Token | 5 | Token that was registered for the card that was send. |
| s-t-10-10_token-expiration-date | yyyy-MM-dd | Yes | 2010-01-01 | Token expiration date | 5 | Token expiration date |
| s-t-1-36_token-masked-pan | String with length of 0 or 1-36 characters. | Yes | 123456*****0000 | Masked pan | 5 | Masked pan used to generate token |

| | | | | | | |
|------------------------------------|---|-----|--|---------------------------------------|---|--|
| s-t-1-255_app-id | String with length of 1-255 characters | Yes | appid-123e4567-e89b-12d3-a456-426655440000 | Mobile App Id | 5 | Mobile App Id for mobile installation. Note! Either parameter s-t-1-36_token-masked-pan or s-t-1-255_app-id will be present in the response depending on whether a card payment method is tokenized or a non-card method is tokenized. |
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier/Customer id | 5 | Identifier of the buyer / token owner. Information is stored as part of a token and returned if value has been provided when the token has been created. |
| s-t-1-36_token-masked-bank-account | String with length of 0 or 1-36 characters. | Yes | *****1234 | Masked Bank Account | 5 | Masked Bank Account used to generate token |

Delete Token (delete-token)

Operation for Deleting an existing token associated to a card or mobile app id.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|---|-----|---------------|----------------|---------|--|
| s-t-1-30_payment-method-code | String with length of 1-30 characters. | Yes | visa | Payment Method | 5 | The payment method code. Payment method code will not be present when deleting a token for mobile app id. |
| s-f-1-256_token | String with length of 1-256 characters. | No | 1234567890 | Token | 5 | The token that was generated by Verifone. Although the type is String, valid values are the ones that can be parsed as Long. |
| s-t-1-36_service-code | String with length of 1-36 characters. | Yes | service_code | Service Code | 5 | Value Added Service Code. |
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Integer defining which scope token should belong to 1 = Terminal Group, 2 = Company, 3 = Company Group |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------|--------|-----|---------------|-------|---------|-------------|
|------|--------|-----|---------------|-------|---------|-------------|

| | | | | | | |
|------------------------|---|-----|---|--------------|---|--|
| l-t-1-10_removed-count | Integer value formatted as string with 1-10 numeric characters. | Yes | 1 | Remove Count | 5 | 0 = Token not removed, 1 = Token removed |
|------------------------|---|-----|---|--------------|---|--|

Generate payment link (generate-payment-link)

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|-------------------------------------|---|-----|---------------------|----------------------------|---------|---|
| locale-f-2-5_payment-locale | String with length of 2-5 characters. | No | fi_FI | | 5 | The language locale used by buyer. |
| t-f-14-19_order-expires-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-03 01:01:32 | Order expiration timestamp | 5 | UTC timestamp defining when the payment link expires. |
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 5 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |
| t-f-14-19_order-time stamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Order Timestamp | 5 | UTC timestamp defining the orders time from web shop point of view. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 5 | Custom parameter reserved for shop system to use. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 978 | Currency Code | 5 | Numeric ISO 4217 currency code. |
| l-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 5 | Total amount including taxes and discount with two decimal precision. Example value corresponds to 1 EUR. |
| l-f-1-20_order-net-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 200 | Net Amount | 5 | Order net amount without discount or taxes. |
| l-f-1-20_order-vat-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Vat amount | 5 | Order VAT amount |
| s-t-1-30_payment-method-code | String with length of 1-30 characters. | Yes | visa | Payment Method | 5 | The payment method code. Value can be found in Appendix (please see the end of this document) |
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | Yes | 123456789 | Payment link number | 5 | Number of the payment link |
| s-f-1-32_payment-link-delivery-mode | String with length of 1-32 characters | No | email | Payment link delivery mode | 5 | Delivery mode of payment link, either sms or email |
| s-f-1-30_buyer-first-name | String with length of 1-30 characters. | No | John | First Name | 5 | First name of the buyer. |

| | | | | | | |
|---------------------------------------|---|-----|-------------------------|-------------------------------|---|--|
| s-f-1-30_buyer-last-name | String with length of 1-30 characters. | No | Smith | Last Name | 5 | Last name of the buyer. |
| s-t-1-30_buyer-phone-number | String with length of 0,1-30 characters. | Yes | +358 40 234234 | Phone Number | 5 | Phone number of the buyer. |
| s-f-1-100_buyer-email-address | String with length of 1-100 characters. | No | john.smith@gmail.com | Email Address | 5 | Email address of the buyer. |
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier | 5 | Identifier of the buyer assigned by web shop. Not recommended to be used. Using this will replace identification mechanism normally based on other mandatory user details. |
| s-t-1-30_delivery-address-line-one | String with length of 0,1-30 characters. | Yes | Street 31 | Delivery Address Line #1 | 5 | Line one of the delivery address. |
| s-t-1-30_delivery-address-line-two | String with length of 0,1-30 characters. | Yes | Apartment 2 | Delivery Address Line #2 | 5 | Line two of the delivery address. |
| s-t-1-30_delivery-address-line-three | String with length of 0,1-30 characters. | Yes | Room 3 | Delivery Address Line #3 | 5 | Line three of the delivery address. |
| s-t-1-30_delivery-address-city | String with length of 0,1-30 characters. | Yes | Helsinki | Delivery Address City | 5 | City of the delivery address. |
| s-t-1-30_delivery-address-postal-code | String with length of 0,1-30 characters. | Yes | 00270 | Delivery Address Postal Code | 5 | Postal code of the delivery address. |
| i-t-1-3_delivery-address-country-code | String with length of 0,1-3 characters. | Yes | 246 | Delivery Address Country Code | 5 | Numeric ISO 3166 country code of the delivery address. |
| l-t-1-20_saved-payment-method-id | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 242 | Payment Method ID | 5 | ID of the saved payment method. |
| i-t-1-1_deferred-payment | Integer with value 0 or 1 or 2. | Yes | 1 | Deferred Payment | 5 | Integer defining that payment is deferred payment. 0) Not deferred payment. Both payment authorization and debiting will be done. 1) Deferred payment. Only authorization will be done. 2) Deferred payment. Only authorization will be done. |
| s-t-1-160_additional-delivery-text | String with length 1-160 | Yes | Link has been generated | Additional delivery text | 5 | Text included in link email or SMS |
| s-t-1-128_sender-email | String with length 1-128 | Yes | noreply@merchant.com | Sender email | 5 | Email that will show as sender for the link email. |
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | No | 1234567890 | Payment link Number | 5 | If payment-link-number is provided, the system will update an existing link and not create a new one. A new, updated email will be sent to the buyer email address. |

0-50 basket items supported

| | | | | | | |
|---------------------------------|---|-----|-----------|----------------------|---|--|
| s-t-1-30_bi-name-<N> | String with length of 1-30 characters. | Yes | Red Apple | Item Name | 3 | Item name of the Nth basket item. |
| I-t-1-20_bi-unit-cost-<N> | <p>64 bit signed integer value formatted as a string with 1-20 numeric characters.</p> <p>Must be filled if unit gross cost is not filled. Must not be filled if it is.</p> | Yes | 100 | Item Unit Cost | 3 | <p>Unit cost with two decimal precision but without discount and tax. Example value corresponds to 1 EUR.</p> <p>NOTE: usage of unit cost instead of unit gross cost can create rounding errors, when refunding individual items.</p> <p>If you for example have gross cost of 89.00 EUR, there is no corresponding unit cost with discount 0% and GST 24%. 77.17 EUR and 24% GST is 88.99 EUR, but 77.18 EUR lead to gross cost of 89.01 EUR.</p> <p>Thus if consumer buys 2 items with gross cost of 89.00 and returns only one he will be returned 88.99 EUR. (If he returns both then the entire row will be refunded he will get full refund.)</p> <p>The solution to this problem is either to use unit gross cost, or calculate unit cost first and calculate gross cost by adding GST, and not by calculating GST from unit gross cost, because if done this way, there will be rounding errors unless prices are chosen not to have them, since EURO and other currencies are finitely dividable.</p> |
| I-t-1-20_bi-unit-gross-cost-<N> | <p>64 bit signed integer value formatted as a string with 1-20 numeric characters.</p> <p>Must be filled if unit cost is not filled. Must not be filled if it is.</p> | yes | 124 | Item Unit Gross Cost | 3 | Unit cost including discount and tax with two decimal precision. Example value corresponds 1 EUR , 24% vat and 0% discount. |
| i-t-1-11_bi-unit-count-<N> | Integer value formatted as string with 1-11 numeric characters. | Yes | 1 | Item Unit Count | 3 | Number of units in the item. |
| I-t-1-20_bi-gross-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Item Gross Amount | 3 | Item gross amount including tax and discount with two decimal precision. Example value corresponds to 1 EUR. |
| I-t-1-20_bi-net-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 100 | Item Net Amount | 3 | Item net amount calculated from unit cost times unit count with two decimal precision. Example value corresponds to 1 EUR. |
| i-t-1-4_bi-vat-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 2250 | Item VAT Percentage | 3 | Item value added tax percentage with two decimal precision. Example value corresponds to 22.5%. Currently, cannot be an empty string nor missing. |

| | | | | | | |
|------------------------------------|---|-----|-----|--------------------------|---|---|
| i-t-1-4_bi-discount-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 550 | Item Discount Percentage | 3 | Item discount percentage tax with two decimal precision. Example value corresponds to 5,5%. Currently, cannot be an empty string nor missing. |
|------------------------------------|---|-----|-----|--------------------------|---|---|

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|--|-----|---------------|---------------------|---------|--|
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | Yes | 1234567890 | Payment link Number | 5 | Returns the created payment-link-number back. Can be used to update the link if necessary. |

Get Payment Link Status (get-payment-link-status)

Operation for getting payment status.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|--|-----|---------------|---------------------|---------|---------------------|
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | No | 1234567890 | Payment link number | 5 | Payment link number |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------------------|--|-----|--|---------------------|---------|---|
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | No | 1234567890 | Payment link Number | 5 | Payment link number, echoing from request. |
| s-t-1-36_payment-link-status | String with length of 1-36 characters. | No | Payment status could be from below- <ul style="list-style-type: none"> • new • used • expired • canceled | Payment link status | 5 | Current status of payment link |
| t-f-14-19_order-expiry-timestamp | yyyy-MM-dd HH:mm:ss | Yes | 2010-01-01 01:01:32 | Order expiry | 5 | Payment link expiry, present only if status is EXPIRED or NEW |
| t-f-14-19_payment-timestamp | yyyy-MM-dd HH:mm:ss | Yes | 2010-01-01 01:01:32 | Payment timestamp | 5 | Payment timestamp when link was used or canceled, present only with status USED or CANCELED |

Reactivate Payment Link (reactivate-payment-link)

Operation for reactivating a payment link or changing the expiry date. Note that this will send an email to the buyer. You can use this with history date to deactivate a payment link.

Additional Request Fields

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|--|--|--|--|--|--|--|
| | | | | | | |
|--|--|--|--|--|--|--|

| Name | Format | Opt | Example Value | Title | Version | Description |
|-----------------------------------|--|-----|---------------------|-----------------------------|---------|----------------------------|
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | No | 1234567890 | Payment link number | 5 | Payment link number |
| t-f-14-19_order-expires-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Order expiration time stamp | 5 | Order expiration timestamp |

Additional Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|------------------------------|--|-----|---------------|---------------------|---------|--|
| s-t-1-36_payment-link-number | String with length of 1-36 characters. | No | 1234567890 | Payment link Number | 5 | Payment link number, echoing from request. |

Swish payment (create-payment-request)

Operation for swish payment.

Additional Request Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|---------------------------------------|---|-----|----------------------|-------------------------------|---------|--|
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 752 | Currency Code | 5 | Numeric ISO 4217 currency code. |
| i-t-1-3_delivery-address-country-code | String with length of 0,1-3 characters. | Yes | 246 | Delivery Address Country Code | 5 | Numeric ISO 3166 country code of the delivery address. |
| l-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 1230 | Gross Amount | 5 | Gross amount including tax with two decimal precision. |
| s-f-5-256_callback-url | String with length of 5 to 256. | No | https:// | Call Back URL | 5 | Call back url of the Webshop, to get notification of the outcome of the payment request. It only supports https. |
| locale-f-2-5_payment-locale | String with length of 2-5 characters. | No | fi_FI | Locale | 5 | The language locale used by buyer. |
| s-f-1-100_buyer-email-address | String with length of 1-100 characters. | No | john.smith@gmail.com | Email Address | 5 | Email address of the buyer. |
| s-f-1-30_buyer-first-name | String with length of 1-30 characters. | No | John | First Name | 5 | First name of the buyer. |
| s-f-1-30_buyer-last-name | String with length of 1-30 characters. | No | Smith | Last Name | 5 | Last name of the buyer. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | swish | Payment Method | 5 | String key identifying the payment method used. |
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 5 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |

| | | | | | | |
|--------------------------------------|---|-----|---------------------|---------------------------|---|---|
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 6633 | Buyer External Identifier | 5 | Identifier of the buyer assigned by web shop. Not recommended to be used. Using this will be replace identification mechanism normally based on other mandatory user details. |
| s-t-1-30_buyer-phone-number | String with length of 0,1-30 characters. | Yes | 358401639099 | Phone Number | 5 | Phone number of the buyer. |
| s-t-1-30_delivery-address-city | String with length of 0,1-30 characters. | Yes | Helsinki | Delivery Address City | 5 | City of the delivery address. |
| s-t-1-30_delivery-address-line-one | String with length of 0,1-30 characters. | Yes | Street 31 | Delivery Address Line #1 | 5 | Line one of the delivery address. |
| s-t-1-30_delivery-address-line-two | String with length of 0,1-30 characters. | Yes | Apartment 2 | Delivery Address Line #2 | 5 | Line two of the delivery address. |
| s-t-1-30_delivery-address-line-three | String with length of 0,1-30 characters. | Yes | Room 3 | Delivery Address Line #3 | 5 | Line three of the delivery address. |
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 5 | Custom parameter reserved for shop system to use. |
| t-f-14-19_order-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Order Timestamp | 5 | UTC timestamp defining the orders time from web shop point of view. |
| t-f-14-19_payment-timestamp | yyyy-MM-dd HH:mm:ss | No | 2010-01-01 01:01:32 | Payment Timestamp | 5 | UTC timestamp defining the payment start time from web shop point of view. If payment is retried then payment timestamp has to differ from first payment for same order. |

0-50 basket items supported and they are only viewed to user as reminder of what the order contains.

| | | | | | | |
|----------------------|--|-----|-----------|-----------|---|-----------------------------------|
| s-t-1-30_bi-name-<N> | String with length of 1-30 characters. | Yes | Red Apple | Item Name | 3 | Item name of the Nth basket item. |
|----------------------|--|-----|-----------|-----------|---|-----------------------------------|

| | | | | | | |
|---------------------------------|---|-----|------|----------------------|---|--|
| I-t-1-20_bi-unit-cost-<N> | <p>64 bit signed integer value formatted as a string with 1-20 numeric characters. Must not be present if unit gross cost is used.</p> <p>Must be filled if unit gross cost is not filled. Must not be filled if it is.</p> | Yes | 1000 | Item Unit Cost | 3 | <p>Unit cost with two decimal precision but without discount and tax. Example value corresponds to 10 EUR.</p> <p>NOTE: usage of unit cost instead of unit gross cost can create rounding errors, when refunding individual items.</p> <p>If you for example have gross cost of 89.00 EUR, there is no corresponding unit cost with discount 0% and GST 24%. 77.17 EUR and 24% GST is 88.99 EUR, but 77.18 EUR lead to gross cost of 89.01 EUR.</p> <p>Thus if consumer buys 2 items with gross cost of 89.00 and returns only one he will be returned 88.99 EUR. (If he returns both then the entire row will be refunded he will get full refund.)</p> <p>The solution to this problem is either to use unit gross cost, or calculate unit cost first and calculate gross cost by adding GST, and not by calculating GST from unit gross cost, because if one does it this way, there will be rounding errors unless prices are selected not to have them, since EURO and other currencies are finitely dividable.</p> |
| I-t-1-20_bi-unit-gross-cost-<N> | <p>64 bit signed integer value formatted as a string with 1-20 numeric characters.</p> <p>Must be filled if unit cost is not filled. Must not be filled if it is.</p> | Yes | 124 | Item Unit Gross Cost | 3 | Unit cost including discount and tax with two decimal precision. Example value corresponds 1 EUR , 24% vat and 0% discount. |
| i-t-1-4_bi-vat-percentage | Integer formatted as string with 0,1-4 numeric characters | Yes | 2300 | Item VAT Percentage | 3 | Item value added tax percentage with two decimal precision. Example value corresponds to 22,5%. Currently, cannot be an empty string nor missing. |
| i-t-1-11_bi-unit-count-<N> | Integer value formatted as string with 1-11 numeric characters. | Yes | 1 | Item Unit Count | 3 | Number of units in the item. |
| I-t-1-20_bi-gross-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 1230 | Item Gross Amount | 3 | Item gross amount including tax and discount with two decimal precision. Example value corresponds to 10 EUR with 23% VAT, 0% discount. |
| I-t-1-20_bi-net-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes | 1000 | Item Net Amount | 3 | Item net amount calculated from unit cost times unit count with two decimal precision. Example value corresponds to 10 EUR. |

| | | | | | | |
|------------------------------------|---|-----|-----|--------------------------|---|---|
| i-t-1-4_bi-discount-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters | Yes | 550 | Item Discount Percentage | 3 | Item discount percentage tax with two decimal precision. Example value corresponds to 5,5%. Currently, cannot be an empty string nor missing. |
|------------------------------------|---|-----|-----|--------------------------|---|---|

Additional Response Fields

| Name | Format | Opt | Example value | Title | Version | Description |
|---------------------------------|---|-----|---------------|---------------------|---------|--|
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 821613 | Transaction Number | 3 | Unique number from identifying the payment transaction. |
| s-t-1-10_payment-request-result | String with length of 1-10 characters. | No | Created | Payment Result Code | 3 | Code identifying status/result of the payment transaction. |

Payment Request Result

create-payment-request API Response Result Codes

| Status Code | Description |
|-------------|---------------------------------------|
| Created | The payment is successfully initiated |
| Failed | The payment is failed |

Swish payment (Callback response field)

Note! Callback will only be sent if create-payment-request returns s-t-1-10_payment-request-result with value Created.

Callback Response Fields

| Name | Format | Opt | Example value | Title | Version | Description |
|---------------------------------|---|-----|---------------|---------------------|---------|--|
| i-f-1-11_interface-version | String with length of 1-10 characters. | No | 1 | Interface Version | 3 | Version of the payment interface. |
| l-f-1-20_transaction-number | Integer value formatted as string with 1-20 numeric characters. | No | 821613 | Transaction Number | 3 | Unique number from identifying the payment transaction. |
| s-t-1-10_payment-request-result | String with length of 1-10 characters. | No | PAID | Payment Result Code | 3 | Code defines the status/result of the transaction during callback. |
| s-f-1-10_software-version | String with length of 1-10 characters. | NO | 1.0.1 | Version | 5 | Version of the payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | No | swish | Payment Method | 5 | String key identifying the payment method used. |
| s-f-1-36_order-number | String with length of 1-36 characters. | No | 123 | Order Number | 3 | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |

| | | | | | | |
|-----------------------------|---|-----|---------------------|-----------------|---|--|
| s-t-1-36_order-note | String with length of 0 or 1-36 characters. | Yes | Example note. | Order Note | 3 | Custom parameter reserved for shop system to use. |
| t-f-14-19_order-time stamp | yyyy-MM-dd HH:mm:ss | No | 2018-06-11 01:01:32 | Order Timestamp | 3 | UTC timestamp defining the orders time from web shop point of view. |
| i-f-1-3_order-currency-code | String with length of 1-3 numeric characters. | No | 752 | Currency Code | 3 | Numeric ISO 4217 currency code. |
| l-f-1-20_order-gross-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Gross Amount | 3 | Gross amount including tax with two decimal |
| s-t-256-256_signature-two | String with length of 512 characters. | Yes | fa12...ff | Signature Two | 3 | 256 byte signature converted to lower case hexadecimal string. String length will be 512 characters but the parameter name includes 256 due to backwards compatibility issues. |
| s-t-256-256_signature-one | String with length of 512 characters. | Yes | fa12...ff | Signature One | 3 | 256 byte signature converted to lower case hexadecimal string. String length will be 512 characters but the parameter name includes 256 due to backwards compatibility issues. |

Payment Request Result

Callback Response Result Codes

| Status Code | Description |
|-------------|--|
| PAID | The payment was successful |
| DECLINED | The payer declined to make the payment |
| ERROR | Payment failed at PSP/verifone for Some error occurred, like payment request timed out from 3rd party (Swish Handler, Siirto ..) |
| FAILED | Payment failed at the payment service |

Get Token Info (get-token-info)

Get Token Info Request Fields

| Name | Format | Opt | Example value | Title | Version | Description |
|------------------------------|--|-----|---------------|----------------|---------|---|
| s-t-1-30_payment-method-code | String with length of 1-30 characters. | Yes | visa | Payment Method | 5 | The payment method code. Payment method code will not be present when getting a token for mobile app id. |

| | | | | | | |
|----------------------------------|---|-----|--------------|--------------------------|---|--|
| s-f-256-512_encrypt-card-details | String with length of 256-512 characters. | Yes | FA12...FF | Encrypted card details | 5 | <p><PAN>=<MMyyyy> padded with PKCS #1 padding and RSA encrypted and converted to upper case hexadecimal string.</p> <p>Note! Either this parameter or s-t-1-255_app-id must be present but never both. The selection depends on whether a card payment method is tokenized or a non-card method is tokenized (e.g. a unique application id or other value).</p> |
| s-t-1-36_service-code | String with length of 1-36 characters. | Yes | service_code | Service Code | 5 | Value Added Service Code |
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Integer defining which scope token should belong to 1 = Terminal Group, 2 = Company, 3 = Company Group |
| i-t-1-1_token-extra-info | Integer with value 0 or 1 | Yes | 1 | Request extra token info | 5 | Integer defining if extra info (masked pan/ expiration date) should be returned. |
| s-f-1-256_token | String with length of 1-256 characters. | No | 1234567890 | Token | 5 | Token that was registered for the card or for account number that was send. |

Get Token Info Response Fields

| Name | Format | Opt | Example Value | Title | Version | Description |
|---------------------------------|---|-----|--|-----------------------|---------|---|
| s-t-1-256_token | String with length of 1-256 characters. | Yes | 1234567890 | Token | 5 | Token that was registered for the card or for account number that was send. |
| s-t-10-10_token-expiration-date | yyyy-MM-dd | Yes | 2010-01-01 | Token expiration date | 5 | Token expiration date |
| s-t-1-36_token-masked-pan | String with length of 0 or 1-36 characters. | Yes | 123456*****0000 | Masked pan | 5 | Masked pan used to generate token |
| s-t-1-255_app-id | String with length of 1-255 characters | Yes | appid-123e4567-e89b-12d3-a456-426655440000 | Mobile App Id | 5 | <p>Mobile App Id for mobile installation.</p> <p>Note! Either parameter s-t-1-36_token-masked-pan or s-t-1-255_app-id will be present in the response depending on whether a card payment method is tokenized or a non-card method is tokenized.</p> |

| | | | | | | |
|------------------------------------|---|-----|-----------|---------------------------------------|---|--|
| s-t-1-255_buyer-external-id | String with length of 1-255 characters. | Yes | 213123123 | Buyer External Identifier/Customer id | 5 | Identifier of the buyer / token owner. Information is stored as part of a token and returned if value has been provided when the token has been created. |
| s-t-1-36_token-masked-bank-account | String with length of 0 or 1-36 characters. | Yes | *****1234 | Masked Bank Account | 5 | Masked Bank Account used to generate token |

Usage

Service Agreement

Service agreement is required for using the server interface. The service agreement can be acquired through Verifone sales:

Finland

Phone: +358 9 477 433 40

Email: myynti@verifone.fi

Norway

Sales/Call center: kundeservice@verifone.no

Email: support@verifone.no

Phone 1st line: +47 815 02 200

Technical Support

Technical support for integration is available through Verifone customer support:

Finland

Email: asiakaspalvelu@verifone.fi

Norway

Mail Incident Manager: incidentmanager@verifone.no

Phone Incident Manager: +47 969 01 873

Mail Crisis Management Team: IM-drift@verifone.no

Exchanging Keys

Customer generates 1024 bit long RSA private key - public key pair (or self signed X.509 certificate) and delivers the their public key in PEM format (or certificate in .cer format) to Verifone via TCS Client.

Customer can use point-key-pair-generator.jar to generate the keys. The key pair generator is provided in the integration kit. The key pair generator will generate public key PEM-file, unencrypted private key PEM-file and P12-file containing both public key and encrypted private key.


```
java -jar point-key-pair-generator.jar
```

Verifone delivers Verifone eCommerce System public key to customer via Verifone TCS Client reporting service.

Implementation

Checking Response Fields

It is important to do the following checks on the responses:

- s-f-1-30_operation matches to request.
- s-t-256-256_signature-one or/and s-t-256-256_signature-two are valid.
- s-f-1-30_error-message is empty (otherwise it means that the operation failed)
- l-f-1-20_request-id (it is also important to use unique ids in requests)

The above checks are necessary to check that the response is done by Verifone and that the operation is successful and its integrity is guaranteed. It is strongly advisable to include additional checks, such as checking the format and contents of all response columns and values that are known to the web shop.

Testing

It is recommended to test the implementation first in customer test environment with demo merchant keys. The demo merchant agreement code is 'demo-merchant-agreement'. The demo keys are provided in the integration kit.

Customer test environment is available in the following URL: <https://epayment.test.point.fi/pw/serverinterface>

Production

Production environment URLs are:

Node 1: <https://epayment1.point.fi/pw/serverinterface>

Node 2: <https://epayment2.point.fi/pw/serverinterface>

Appendix

| Payment method code (s-t-1-30_payment-method-code / s-f-1-30_payment-method-code) | Payment method type (s-t-1-30_payment-method-type) | Type of payment | Notes |
|--|---|-----------------|--|
| visa | VISA | CARD | |
| master-card | MASTER_CARD | CARD | |
| s-pankki-verkkomaksu | S_PANKKI_VERKKOMAKSU | BANK | S-Pankki interface doesn't support refunds. |
| aktia-maksu | AKTIA_MAKSU | BANK | |
| op-pohjola-verkkomaksu | OP_POHJOLA_VERKKOMAKSU | BANK | |
| nordea-e-payment | NORDEA_E_PAYMENT | BANK | |
| sampo-web-payment | SAMPO_WEB_PAYMENT | BANK | Danske Bank Finland. Danske interface doesn't support refunds. |
| tapiola-verkkomaksu | TAPIOLA_VERKKOMAKSU | BANK | Deprecated, not in use anymore. |
| handelsbanken-e-payment | HANDELSBANKEN_E_PAYMENT | BANK | |
| alandsbanken-e-payment | ALANDSBANKEN_E_PAYMENT | BANK | Ålandsbanken interface doesn't support refunds. |
| nordea-se-db | NORDEA_SE_DB | BANK | |
| handelsbanken-se-db | HANDELSBANKEN_SE_DB | BANK | |

| | | | |
|------------------------------|-----------------------------|---------|---|
| swedbank-se-db | SWEDBANK_SE_DB | BANK | |
| seb-se-db | SEB_SE_DB | BANK | |
| invoice-collector | INVOICE_COLLECTOR | INVOICE | Collector requires basket items and delivery address in the request. |
| bank-axess | BANK_AXESS | BANK | |
| dankort | DANKORT | CARD | |
| nordea-dk-db | NORDEA_DK_DB | BANK | |
| danske-netbetaling | DANSKE_NETBETALING | BANK | |
| handelsbanken-se-invoice | HANDELSBANKEN_SE_INVOICE | INVOICE | |
| amex | AMEX | CARD | |
| diners | DINERS | CARD | |
| handelsbanken-se-account | HANDELSBANKEN_SE_ACCOUNT | INVOICE | |
| svea-webpay-invoice | SVEA_WEBPAY_INVOICE | INVOICE | Requires delivery country and basket items |
| svea-webpay-installment | SVEA_WEBPAY_INSTALLMENT | INVOICE | Requires delivery country and basket items |
| seb-lt | SEB_LT | BANK | |
| seb-lv | SEB_LV | BANK | |
| dnb-lv | DNB_LV | BANK | |
| dnb-lt | DNB_LT | BANK | |
| pop-pankin-verkkomaksu | POP_PANKIN_VERKKOMAKSU | BANK | |
| saastopankin-verkkomaksu | SAASTOPANKIN_VERKKOMAKSU | BANK | |
| enterpay-invoice | ENTERPAY_INVOICE | INVOICE | Lasku Yritykselle.fi , requires basket items. |
| euroloan-invoice | EUROLOAN_INVOICE | INVOICE | Euroloan requires basket items in the request. |
| arvato-afterpay-invoice | ARVATO_AFTERPAY_INVOICE | INVOICE | |
| visa-electron | VISA_ELECTRON | CARD | bin table must be installed, in order to use this payment method. |
| master-card-maestro | MASTER_CARD_MAESTRO | CARD | bin table must be installed, in order to use this payment method. |
| jcb | JCB | CARD | |
| seb-ee | SEB_EE | BANK | |
| danske-bank-ee | DANSKE_BANK_EE | BANK | |
| swedbank-lv | SWEDBANK_LV | BANK | |
| swedbank-lt | SWEDBANK_LT | BANK | |
| paypal | PAYPAL | INVOICE | |
| swish | SWISH | BANK | |
| siirto | SIIRTO | BANK | |
| oma-saastopankin-verkkomaksu | OMA_SASTOPANKIN_VERKKOMAKSU | BANK | |
| afterpay-invoice | AFTERPAY_INVOICE | INVOICE | Current; AfterPay v3 API |
| vipps | VIPPS | CARD | Wallet payment. Payment method used in payment, depends on which card user selects from the wallet. |
| mobilepay | MOBILEPAY | CARD | Wallet payment. Payment method used in payment, depends on which card user selects from the wallet. |

Error Codes

Possible error codes which server to server interface can return during its operations. New error codes may be added without prior notice.

| Error Code | Description |
|-------------------------------|--|
| system_error | System error occurred while processing request. |
| signature_verification_failed | Indicates that signature verification was not succesful. |
| merchant_agreement_not_found | Indicates that such merchant agreement does not exist. |
| access_denied | Indicates that access level is not sufficient. |
| no_acquirer_agreements | Indicates that no acquirer agreements could be found. |
| buyer_payments_disabled | Indicates that payments are disabled. |
| service_unavailable | Service is currently unavailable |
| invalid_expiration_date | Indicate that payment expiration date is invalid. |
| unknown_saved_payment_method | Indicates that provided saved payment method was not found. |
| not_allow_payment_by_merchant | Indicates that merchant agreement does not allow buyer payments. |
| not_allow_payment_by_acquirer | Indicates that acquirer agreement does not allow buyer payments. |

Possible error codes returned by payment validator.

| | |
|----------------------------------|----------------------------------|
| order-number-not-valid | order number not valid |
| invalid-currency | invalid currency |
| invalid-currency-code | invalid currency code |
| invalid-payment-timestamp | invalid payment timestamp |
| delivery-address-country-code | delivery address country code |
| deferred-payment-not-0-or-1-or-2 | deferred payment not 0 or 1 or 2 |
| partial-capture-not-supported | partial capture not supported |
| invalid-card-security-code | invalid card security code |
| recurring-payment-parameter | recurring payment parameter |
| recurring-payment-name | recurring payment name |
| recurring-payment-mandatory | recurring payment mandatory |
| recur-subscrip-expec-per-mand | recur subscrip expec per mand |
| invalid-save-payment-method | invalid save payment method |
| invalid-save-payment-method | invalid save payment method |
| invalid-register-token | invalid register token |
| skip-confirmation-page | skip confirmation page |
| invalid-payment-method-code | invalid payment method code |
| lost-saved-payment-method-id | lost saved payment method id |
| invalid-payment-method-code | invalid payment method code |
| error-no-basket-items | error no basket items |
| negative-transaction-number | negative transaction number |

| | |
|--------------------------------|---|
| payment-method-missing | payment method missing |
| invalid-input-channel | invalid input channel |
| channel-mode-inv-missing-param | channel mode invalid missing parameters |
| channel-mode-inv-product-nr | channel mode invalid product number input |
| subscription-expected-period | subscription expected period |
| invalid-subscription-end | invalid subscription end |
| error-unknown-parameter-type | validation error unknown parameter type |
| subscription-expected-period | subscription expected period |
| invalid-subscription-end | invalid subscription end |
| cancel-pay-reject-incor-amt | Payment has been rejected because payment amount is incorrect |
| invalid-payment-req-collector | Payment Rejected by Collector |
| delivry-addr-crdt-chk-mismatch | The given delivery address doesn't match credit check result |
| invalid-merchant-agrmnt-code | invalid merchant agreement code |
| validation-error-callback-url | Validation failed for callback url |
| error-missing-callback-url | Missing callback url |
| payer-not-enrolled | Payer not enrolled |
| invalid-phone-number | Invalid phone number |

Operation related error codes.

| | |
|-------------------------------|--|
| unknown-error | unknown error |
| system-error | system error |
| signature-verification-failed | signature verification failed |
| merchant-agreement-not-found | merchant agreement not found |
| access-denied | Merchant agreement is not allowed to perform the operation requested. Contact Verifone to add these functions to the agreement. |
| no-acquirer-agreements | No available payment methods configured on the requested merchant agreement with the currency or amount given. |
| buyer-payments-disabled | Payments on the merchant agreement have been disallowed. Contact Verifone to (re)enable. |
| failed | failed |
| service-unavailable | Requested service is currently unavailable. Attempt again later. This can be due to backend maintenance and affects calls such as debit-payment that do not need to be handled realtime. |
| invalid-expiration-date | invalid expiration date |
| unknown-saved-payment-method | unknown saved payment method |
| not-allow-payment-by-merchant | not allow payment by merchant |
| not-allow-payment-by-acquirer | not allow payment by acquirer |
| invalid-card-number | invalid card number |
| invalid-currency | invalid currency |
| invalid-payment-method | invalid payment method |

| | |
|----------------------------------|--|
| invalid-order-number | invalid order number |
| order-already-debited | order already debited |
| invalid-order-amount | invalid order amount |
| invalid-transaction-number | invalid transaction number |
| order-already-canceled | order already canceled |
| unknown-terminal | unknown terminal |
| token-not-found | token not found |
| invalid-service | invalid service |
| not-supported-by-interface-ver | not supported by interface version |
| unsupported-auth-cancel | unsupported authorization cancel |
| token-expired | token expired |
| token-deleted | token deleted |
| failed-to-contact-services | failed to contact services |
| invalid-payment | invalid payment |
| invalid-phone-number-missing | invalid phone number missing |
| invalid-values-anonymous-buyer | invalid values anonymous buyer |
| incorrect-payment-method | incorrect payment method |
| payment-rejected | payment rejected |
| incorrect-token | incorrect token |
| incorrect-payment-link-number | incorrect payment link number |
| incorrect-link-delivery-mode | incorrect link delivery mode |
| sms-phone-number-missing | sms phone number missing |
| payment-link-inv-mer-agreement | invalid payment link merchant agreement |
| payment-link-not-found-for-upd | payment link not found for update |
| token-terminal-serial-missing | terminal serial not found for token update - contact Verifone to add token terminal serial to your ecom configuration. |
| buyer-email-invalid | buyer email id not in format. eg. abc@abc.com |
| sender-email-invalid | sender email id not in format. eg. abc@abc.com |
| partial-approval-not-allowed | Partial approval not allowed. Please contact Verifone. |
| part-approval-req-deferred-pmt | Partial approval requires deferred payment |
| supplementary-auth-not-supported | Supplementary auth is not supported if Afd Advice and AfdSupplementaryAuth is not enabled for the acquirer |
| already-suppl-authorized | Supplementary already processed for the original transaction number. |
| invalid-merchant-agreement-code | Process Supplementary merchant agreement code is not matching with original transaction merchant agreement code |
| error-orig-txn-wrong-status | process-supplementary is called when original transaction is not in debited/committed state. |
| failed-contact-swish-service | Failed to contact Swish server. |