

eCommerce Interface Reference - Hosted Pages

Document Change History

| Version | Date | Author | Position | Comment |
|---------|------------|---------------------|--------------------|--|
| 5.0.46 | 29.09.2020 | Catherine Deborah | Software Developer | Added parameter s-t-5-256_merchant-logo-url |
| 5.0.45 | 11.06.2020 | Markku Hyppönen | Software Developer | Added parameter s-t-1-100_app-deeplink-prefix |
| 5.0.44 | 14.05.2020 | Juan Feng | Software Developer | Added parameter l-t-12-12_card-filing-code. |
| 5.0.43 | 20.09.2019 | Mounika Ramamoorthy | Software Developer | Added parameter i-t-1-2_shipping-method-indicator. |
| 5.0.42 | 19.09.2019 | Markku Hyppönen | Software Developer | Dynamic parameter descriptions updated. |
| 5.0.41 | 28.06.2019 | Toni Kankkunen | Support Manager | Corrected collation for signature calculation in the documentation. Re-added 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, s-t-1-30_bill-to-address-city, s-t-1-30_bill-to-address-state, i-t-1-3_bill-to-address-country-code parameters for buyer billing address to be used with Strong Customer Authentication for cards. |
| 5.0.40 | 10.06.2019 | Catherine Deborah | Software Developer | Added dynamic-feedback parameter i-t-1-3_failed-auth-response. Added error message payment-requires-3ds. |
| 5.0.39 | 17.11.2018 | Toni Kankkunen | Support Manager | Added AfterPay -specific parameters s-t-1-2048_image-url, s-t-1-2048_bi-image-url<N>, i-t-1-1_allow-delivery-address-update, s-t-1-30_sub-payment-method-type, i-t-1-4_sub-payment-method-profile-number |
| 5.0.38 | 05.10.2018 | Vitthal Wable | Project Manager | Added i-t-1-1_existing-buyer for AfterPay |
| 5.0.38 | 02.10.2018 | Markku Hyppönen | Software Developer | Added Vipps and MobilePay to payment method list. |
| 5.0.37 | 11.04.2018 | Anttu Sohlberg | Software Developer | i-t-2-2_card-3ds-auth-status changed to i-t-1-2_card-3ds-auth-status, as that is the actually used parameter. Also added possible returned values. |
| 5.0.36 | 12.02.2018 | Akhil Balachandran | Software Developer | Added dynamic-feedback parameter s-t-1-36_card-name. |
| 5.0.35 | 16.11.2017 | Catherine Deborah | Software Developer | Added i-t-1-1_partial-approval to request parameters and l-t-1-20_authorized-amount to response parameters |
| 5.0.34 | 16.11.2017 | Ajay Sharma | Software Developer | Added dynamic-feedback parameter i-t-1-1_consumer-card |
| 5.0.33 | 16.09.2017 | Abhishek Vashista | Software Developer | Added s-t-2-2_account-item-type and i-t-1-1_payment-benefit ad dynamic parameter . |
| 5.0.32 | 31.07.2017 | Catherine Deborah | Software Developer | Edited description for s-t-1-36_service-code to specify that service code is also used for token distribution to acquirer. |
| 5.0.31 | 01.03.2017 | Matias Aikio | Software Developer | Edited description for s-t-1-36_service-code to specify that token scope is overruled if service code is passed. |
| 5.0.30 | 12.01.2017 | Matias Aikio | Software Developer | Edited description for s-t-1-36_token-masked-pan to specify that it is only returned if token extra info is requested. Removed description that s-t-10-10_token-expiration-date is only returned if extra info is requested as it is currently always returned. |
| 5.0.29 | 25.11.2016 | Vitthal Wable | Project Manager | Added payment link statuses to additional response fields section. And described payment API URL parameters properly. |
| 5.0.27 | 10.10.2016 | Jyri Virtanen | Software Developer | Updated i-t-1-1_register-token. |
| 5.0.26 | 22.09.2016 | Claudiu Chioariu | Software Developer | Documented l-f-1-20_dynamic-reference-number. |
| 5.0.25 | 21.09.2016 | Claudiu Chioariu | Software Developer | Moved s-t-1-1024_dynamic-feedback response parameters to their own table. |
| 5.0.24 | 20.09.2016 | Claudiu Chioariu | Software Developer | Removed s-t-1-100_referrer-url and s-t-1-30_forwarded-remote-address (custom parameters). |

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| 5.0.23 | 20.09.2016 | Claudiu Chioariu | Software Developer | Dynamic feedback parameter content and response parameters updated for Nordics. |
| 5.0.22 | 19.09.2016 | Claudiu Chioariu | Software Developer | Added s-t-10-10_token-expiration-date and s-t-1-36_token-masked-pan parameters as process-payment optional. |
| 5.0.21 | 07.09.2016 | Evgeni Kappinen | Software Developer | Updated payment method enumeration. |
| 5.0.20 | 02.08.2016 | Claudiu Chioariu | Software Developer | Added s-t-0-11_social-security-number. |
| 5.0.19 | 06.07.2016 | Mika Voutilainen | Software Developer | Added Euroloan and Arvato invoice payment methods. |
| 5.0.18 | 22.06.2015 | Sankararao Ravada | Software Developer | Added s-t-1-100_referrer-url and s-t-1-30_forwarded-remote-address for Direct feedback failure condition. |
| 5.0.17 | 10.06.2015 | Henri Huhtamäki | Quality Assurance Manager | Updated information for return values for invoice payments. |
| 5.0.16 | 03.06.2015 | Evgeni Kappinen | Software Developer | Update collector invoice notes |
| 5.0.15 | 24.04.2015 | Claudiu Chioariu | Software Developer | Added s-t-1-1024_dynamic-feedback parameter for merchant to request extra parameters to be sent in the payment process response. |
| 5.0.13 | 25.02.2015 | Aseefulla Kamtidars haik | Software Developer | Added s-t-1-30_bill-to-address-first-name, s-t-1-30_bill-to-address-last-name, s-t-1-100_bill-to-address-email, s-t-1-30_bill-to-address-phone-number, 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, s-t-1-30_bill-to-address-city, s-t-1-30_bill-to-address-state, i-t-1-3_bill-to-address-country-code parameters for Customer Bill To. |
| 5.0.12 | 25.02.2015 | Sangeetha Jaganathan | Software Developer | Added Ship To parameters s-t-1-30-delivery-address-first-name, s-t-1-30-delivery-address-last-name, s-t-1-30-delivery-address-state, s-t-1-30-delivery-address-phone-number, s-t-1-100-delivery-address-email |
| 5.0.10 | 18.02.2015 | Yinxia Zhao | Software Developer | Add section Mandatory Transaction Information, updated the Description for "i-t-1-1_save-payment-method" parameter under "Payment Initialization Form Parameters" section |
| 5.0.9 | 17.02.2015 | Sandip Haldar | Software Developer | Added i-t-1-1_skip-three-d-secure parameter for Selective 3D Secure |
| 5.0.7 | 10.02.2015 | Kristaps Kohs | Software Developer | Added token scope parameter |
| 5.0.6 | 28.01.2015 | Kristaps Kohs | Software Developer | Added Token extra info parameter |
| 5.0.5 | 25.9.2014 | Lassi Lehtinen | Project Manager | Fixed table of contents and other minor edits. |
| 5.0.4 | 19.8.2014 | Evgeni Kappinen | Software Developer | Updated payment method list. |
| 5.0.3 | 15.8.2014 | Björn Delin | Software Developer | Added s-t-1-32_type-of-payment parameter. |
| 5.0.2 | 6.6.2014 | Cristina Aldea | Software Developer | Added s-t-1-36_service-code optional parameter. |
| 5.0.1 | 12.5.2014 | Evgeni Kappinen | Software Developer | Added payment methods svea-webpay-installment and svea-webpay-invoice. |
| 5.0.0 | 17.3.2014 | Björn Delin | Software Developer | Added s-t-5-256_change-server-to-server-success-url parameter. |
| 4.0.2 | 17.3.2014 | Evgeni Kappinen | Software Developer | Added parameters s-f-5-256_success-url, s-f-5-256_rejected-url, s-f-5-256_cancel-url, s-f-5-256_expired-url, s-f-5-256_error-url. |
| 4.0.1 | 21.2.2014 | Sampo Korhonen | Software Developer | Added s-f-1-20_reference-number parameter to Payment Success Post. |
| 4.0.0 | 20.2.2014 | Evgeni Kappinen | Software Developer | Added s-t-1-6_card-expected-validity parameter. |
| 3.0.2.31 | 27.1.2014 | Tiina Virta | Technical Documentation | Added contact info for Norway. |
| 3.0.2.30 | 3.12.2013 | Tiina Virta | Technical Documentation | Added appendix to the end and did minor cleaning up. |
| 3.0.2.29 | 6.11.2013 | Kristaps Kohs | Software Developer | Added new save payment option. |

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| 3.0.2.28 | 21.10.2013 | Markku Hyppönen | Support Coordinator | Contact information part edited. Added subtitle 'Finland'. Information for all markets will be added soon. |
| 3.0.2.27 | 18.10.2013 | Joonas Kekoni | Software Developer | Clarified shopping basket item documentation somewhat. |
| 3.0.2.26 | 15.10.2013 | Cristina Aldea | Software Developer | Added new cancel reject message cancel-bank_axess_error. |
| 3.0.2.25 | 12.9.2013 | Evgeni Kappinen | Developer | Channel-mode interface update. |
| 3.0.2.24 | 12.9.2013 | Lassi Lehtinen | Project Manager | Updated production and customer test environment URLs. |
| 3.0.2.23 | 3.9.2013 | Joonas Kekoni | Software Developer | Added bi-unit-gross-cost-X parameter support. |
| 3.0.2.22 | 27.6.2013 | Markku Hyppönen | Scrum Master | Parameter post l-t-1-20_saved-payment-method-id removed from payment success result |
| 3.0.2.21 | 18.6.2013 | Cristina Aldea | Software Developer | Fixed return/accepted values enumeration parameters (mismatch with Java code) |
| 3.0.2.20 | 13.6.2013 | Kristaps Kohs | Software Developer | Added missing payment method codes. |
| 3.0.2.19 | 4.6.2013 | Markku Hyppönen | Scrum Master | Added supported locales. |
| 3.0.2.18 | 3.6.2013 | Evgeni Kappinen | Software Developer | Payment interface changes |
| 3.0.2.17 | 8.5.2013 | Tommi Laukkanen | Head of Research and Development | Updated checks to be done on payment response and production URLs. |
| 3.0.2.16 | 8.5.2013 | Joonas Kekoni | Software Developer | Updated "Payment Cancellation Scenarios" |
| 3.0.2.15 | 22.3.2013 | Risto Virtanen | Software Developer | Added notification about creation of recurring subscription and recurring payment. |
| 3.0.2.14 | 20.3.2013 | Risto Virtanen | Software Developer | Removed token-included parameter. |
| 3.0.2.13 | 28.2.2013 | Tommi Laukkanen | Head of Research and Development | Clarified collation when ordering parameters for signature content. Updated production URLs. |
| 3.0.2.12 | 15.2.2013 | Risto Virtanen | Software Developer | Added tokenization parameters. |
| 3.0.2.11 | 1.2.2013 | Risto Virtanen | Software Developer | Added optional parameter s-t-1-26_filing-code to Payment Success Result Form Parameters. |
| 3.0.2.10 | 31.1.2013 | Joonas Kekoni | Developer | Added the password 'password' of demo merchant agreement. |
| 3.0.2.9 | 23.1.2013 | Joonas Kekoni | Developer | Documented anonymous payment. Changed save payment only. |
| 3.0.2.8 | 9.1.2013 | Lassi Lehtinen | Project Manager | Fixed production environment URLs. |
| 3.0.2.7 | 9.1.2013 | Joonas Kekoni | Developer | Save Payment Method definition updated. Skip confirmation updated. |
| 3.0.2.6 | 15.12.2012 | Markku Hyppönen | Scrum Master | Fixed wrong parameter definition. |
| 3.0.2.5 | 31.10.2012 | Henri Huhtamäki | Quality Assurance Manager | Added possible values for payment method code. |
| 3.0.2.4 | 24.10.2012 | Henri Huhtamäki | Quality Assurance Manager | Fixed a typo in one parameter name. |
| 3.0.2.4 | 5.10.2012 | Jarno Tammelin | Quality Assurance Engineer | Formatting changes for pdf export |

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| 3.0.2.3 | 25.9.2012 | Tommi Laukkanen | Head of Research and Development | Added buyer external identifier parameter to payment initialization form. Added information about delayed result post URL. |
| 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 | Modified instructions related to payment response handling. |
| 3.0.2.0 | 13.6.2012 | Henri Huhtamäki | Quality Assurance Manager | Added new functional columns, e.g. recurring payment -related, to the interface and added instructions related to payment response handling. |
| 3.0.1.2 | 30.5.2012 | Tommi Laukkanen | Head of Research and Development | Added document change history. |
| 3.0.1.1 | 29.5.2012 | Tommi Laukkanen | Head of Research and Development | Fixed incorrect reference of SHA-1 to SHA-256 in interface changes. |
| 3.0.1.0 | 29.5.2012 | Tommi Laukkanen | Head of Research and Development | Updated payment interface version 3.0.1 changes to document. See interface changes for details. |
| 3.0.0.0 | 2.3.2012 | Tommi Laukkanen | Head of Research and Development | Updated payment interface version 3.0.0 changes to document. See interface changes for details. |
| 2.0.0.0 | 17.2.2012 | Tommi Laukkanen | Head of Research and Development | Updated payment interface version 2.0.0 changes to document. See interface changes for details. |
| 1.0.0.0 | 5.4.2011 | Tommi Laukkanen | Head of Research and Development | Updated payment interface version 1.0.0 changes to document. See interface changes for details. |

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Introduction

This document describes integration process and browser 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 where primary communication channel between a shop system and the payment system is via web browser of an end customer (later buyer). Authentication of both systems and verification of message integrity is implemented using digital signatures.

Interface Change Log

Version 5.0.x

1. Added parameter s-t-5-256_change-server-to-server-success-url, which sets the delayed status url if the value has been changed.
2. Added optional parameter s-t-1-36_service-code used to save a token associated to a specific VAS code
3. Added parameter s-t-1-32_type-of-payment for limiting the type of payment if specified.
4. Added parameter i-t-1-1_skip-three-d-secure parameter for merchant's request to skip 3DSecure
5. Added parameters s-t-1-30-delivery-address-first-name, s-t-1-30-delivery-address-last-name, s-t-1-30-delivery-address-state, s-t-1-30-delivery-address-phone-number, s-t-1-30-delivery-address-email to get Ship To information
6. Added parameter s-t-1-1024_dynamic-feedback, which indicates the parameters to be added to the response if available.
7. Removed parameters s-t-1-100_referrer-url and s-t-1-30_forwarded-remote-address (custom parameters).
8. Added parameter i-t-1-2_shipping-method-indicator.
9. Added parameter l-t-12-12_card-filing-code.

Version 4.0.x

1. Added parameter s-t-1-6_card-expected-validity, which is returned on card saving via payment interface. Also, during list of payment methods via server interface. Value represents card expiration date.
2. Added parameters, s-f-5-256_success-url, s-f-5-256_rejected-url, s-f-5-256_cancel-url, s-f-5-256_expired-url, s-f-5-256_error-url, extended lengths of the previous interface values.

Version 3.0.2

1. Added more instructions related to checking payment response columns.
2. New Payment Initialization Form parameter i-t-1-1_web-terminal-payment (nullable, backwards compatible)
3. New Payment Initialization Form parameter s-t-1-30_recurring-payment-subscription-name (nullable, backwards compatible)
4. New Payment Initialization Form parameter s-t-1-30_recurring-payment-subscription-code (nullable, backwards compatible)
5. New Payment Initialization Form parameter i-t-1-3_recurring-payment-subscription-expected-period (nullable, backwards compatible)
6. New Payment Initialization Form parameter t-t-14-19_recurring-payment-subscription-end (nullable, backwards compatible)
7. New Payment Success Result Form parameter l-t-1-20_saved-payment-method-id (nullable, backwards compatible)
8. New Payment Initialization Form parameter s-t-1-255_buyer-external-id (nullable, backwards compatible)
9. Documented anonymous payment.
10. Added "s-t-1-36_bi-merchant-agreement-code", String, 1, 36, t => Merchant code of the of the merchant selling the product (nullable)
11. Added "s-t-1-36_bi-product-number", String, 1, 36, t => Textual product number assigned by shop system. Valid characters are a-z, A-Z,0-9 and minus sign. (nullable)
12. Added "i-t-1-4_bi-commission-percentage", Integer, 1, 4, t => Commission percentage. Integer formatted as string with 1-4 numeric characters (nullable)
13. Added "l-t-1-20_bi-fee-amount", Long, 1,20, t (conditional) => Commission fee, Long formatted as string with 1-20 numeric characters

Version 3.0.1

1. Payment token calculation algorithm switched from MD5 to SHA-256.

Version 3.0.0

1. Changed s-f-1-30_buyer-email-address to s-f-1-100_buyer-email-address
2. Changed signature string format as follows: If ';' occurs in value it will be replaced with ';';' in signature content string. This applies to both request and response.
3. Changed success form s-f-1-40_payment-method to s-f-1-30_payment-method-code
4. Added l-t-1-20_saved-payment-method-id to Payment Initiation Form
5. Added i-t-1-1_skip-confirmation-page to Payment Initiation Form
6. Changed s-f-1-15_transaction-number to l-f-1-20_transaction-number

Version 2.0.0

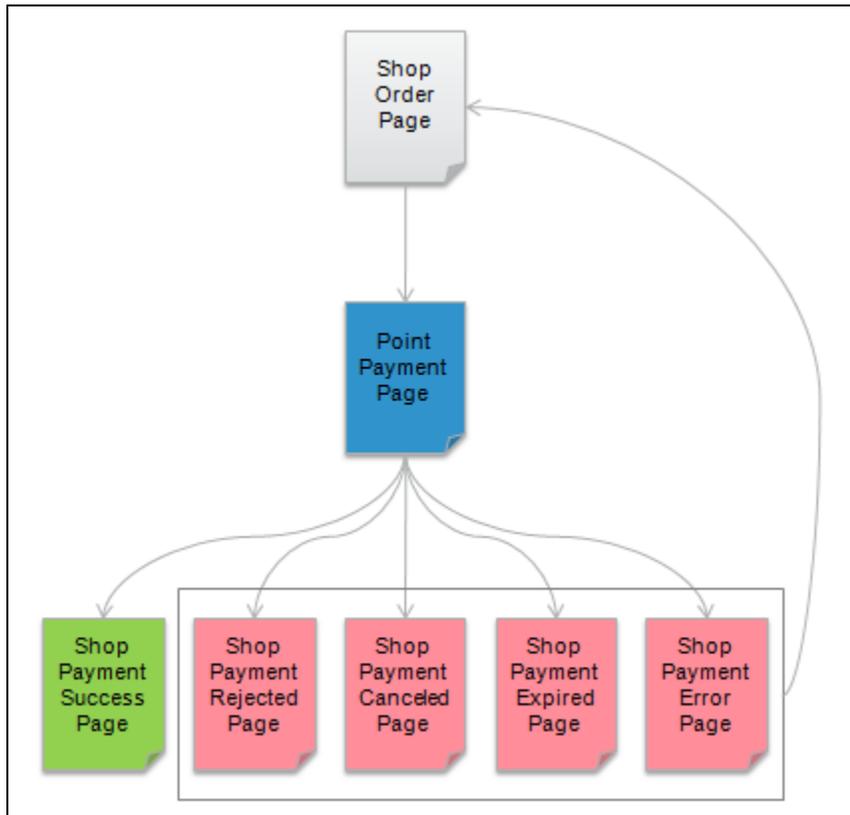
1. Added optional parameter s-t-1-30_payment-method-code.
2. Added optional parameter s-t-1-30_style-code.
3. Added optional parameter i-t-1-1_recurring-payment.
4. Added optional parameter i-t-1-1_deferred-payment.
5. Removed l-t-1-20_bi-discounted-amount-<N>.
6. Added l-f-1-20_order-gross-amount.
7. Modified l-f-1-20_order-net-amount description.
8. Added l-t-1-20_bi-gross-amount-<N>.
9. Modified l-t-1-20_bi-net-amount-<N>.

Interface Description

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

Process

The payment process starts at Shop Order Page (later order page) where order is summarized and button for moving to Verifone Payment Page (later payment page) is present. Pushing the payment button posts the Verifone Payment Initialization Form (later initialization form) to the payment page. The payment process ends with posting of Verifone Payment Success Result Form (later success form) to the Shop Success Page (later success page) or posting of Payment Cancel Result Form (later cancel form) to one of the four cancel pages as illustrated below. It should be possible for the user to move with a single click from the cancel page to the order page to retry payment. Alternatively, the order page can implement functionality in all the four cancel pages, in which case the order page should be able to process the cancel result form post and the order page URL should be given to all four cancel page URLs.



Payment Cancellation Scenarios

Payment process has four main cancel scenarios as listed below:

| Name | Message | Description |
|----------------|-------------------------------|--|
| Rejected | cancel-payment-rejected | Payment was rejected by payment acquirer due to restrictions placed on payment method or lack of funds in the corresponding account. |
| Buyer Canceled | cancel-user-canceled | Buyer canceled to payment process. |
| Expired | cancel-payment-expired | The payment process expired due to timeout or usage of browser navigation buttons. |
| Error | cancel-system-error | The payment process failed due to error in the payment system or payment acquirer system. |
| Error | cancel-inv-payment-params | The payment process failed due to payment parameters from merchant, that lead to situation that could not be fulfilled, such as an attempt to make recurring bank payment. (recurring payments are supported by payment cards only). Failure to enter required parameters or their meet basic validity, such as lengths does not lead to this situation, but to a blank page. |
| Error | cancel-external-system-error | They payment failed due to external system giving invalid message authentication code. |
| Rejected | cancel-save-rej-not-enrolled | Attempt to save a non 3d secure enrolled card, when this is not supported by acquirer agreement for this type of card. |
| Buyer Canceled | cancel-paym-rej-not-enrolled | Attempt to pay with non 3d secure enrolled card more than the maximum set by acquirer agreement of the merchant for that card type. (Example: Customer is trying to buy 30€ payment with business visa, that does not support 3ds and the merchant has 20 € limit for non enrolled card in VISA acquirer agreement.) |
| Rejected | cancel-ext-address-mismatch | External system has different address than given one. |
| Buyer Canceled | cancel-too-many-sms-passwords | User tried to enter wrong sms password too many times. |
| Buyer Canceled | cancel-too-many-input-retries | Page has been reloaded for too many times. Browsers have been instructed not to reload payment web pages, so if this happens payment web assumed that the request is not from browser or browser is reloading page infinitely. |
| Rejected | cancel-bank_axess_error | Payment rejected because of a BankAxess error code returned. (Example: J1: Bank does not support BankAxess). |
| Rejected | payment-requires-3ds | Payment rejected because 3DS authentication is required. To avoid this error, contact Verifone to disable 3DS skipping. |

The message value is passed in cancel result posts (using parameter s-t-1-30_cancel-reason).

Transport

Transport between shop system and payment system is carried out via web browser of the buyer and secured using transport layer security (HTTPS) in both connections: browser to shop system and browser to payment system. Only server side certificate granted by public certificate authorities are used in transport layer security. Messages are encoded as HTML forms with UTF-8 character set as part of the page buyer views and transmitted with HTTP POST requests.

Security

Digital signatures are used to authenticate participating systems and to 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_abcdefghijklmnopqrstuvwxy". The signed content is created from this value list according to the following format:

Format of the Signed Parameter Content

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

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

Example of the Signed Parameter Content

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

Digital Signature Types

Current supported types are as follows:

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

There are two separate parameters in all POSTs for the above signature types.

Example POST with signature

```
i-f-1-11_interface-version=3&i-f-1-3_order-currency-code=978&i-t-1-11_bi-unit-count-0=1
&i-t-1-1_deferred-payment=0&i-t-1-1_recurring-payment=0&i-t-1-1_save-payment-method=0
&i-t-1-1_skip-confirmation-page=0&i-t-1-3_delivery-address-country-code=246
&i-t-1-4_bi-discount-percentage-0=0&i-t-1-4_bi-vat-percentage-0=2300
&i-t-1-4_order-vat-percentage=2300&l-f-1-20_order-gross-amount=1230
&l-f-1-20_order-net-amount=1000&l-f-1-20_order-vat-amount=230
&l-t-1-20_bi-gross-amount-0=1230&l-t-1-20_bi-net-amount-0=1000
&l-t-1-20_bi-unit-cost-0=1000&l-t-1-20_saved-payment-method-id=
&locale-f-2-5_payment-locale=fi_FI
&s-f-1-100_buyer-email-address=matti.meikalainen%40point.fi
&s-f-1-10_software-version=1.0.1&s-f-1-30_buyer-first-name=John
&s-f-1-30_buyer-last-name=Smith&s-f-1-30_software=My+Web+Shop
&s-f-1-36_merchant-agreement-code=line-test-merchant-agreement-code
&s-f-1-36_order-number=1336741353584
&s-f-32-32_payment-token=4952A81A2BD143AA3FDDF6D8BB5EF432
&s-f-5-128_cancel-url=https%3A%2F%2Fdev-test-ecom%2Ftest-shop%2Fcancel
&s-f-5-128_error-url=https%3A%2F%2Fdev-test-ecom%2Ftest-shop%2Fcancel
&s-f-5-128_expired-url=https%3A%2F%2Fdev-test-ecom%2Ftest-shop%2Fcancel
&s-f-5-128_rejected-url=https%3A%2F%2Fdev-test-ecom%2Ftest-shop%2Fcancel
&s-f-5-128_success-url=https%3A%2F%2Fdev-test-ecom%2Ftest-shop%2Freceipt
&s-t-1-30_bi-name-0=test-basket-item-0
&s-t-1-30_buyer-phone-number=%2B358+40+163+9099
&s-t-1-30_delivery-address-city=City
&s-t-1-30_delivery-address-line-one=Street+Address+%231
&s-t-1-30_delivery-address-line-three=Street+Address+%233
&s-t-1-30_delivery-address-line-two=Street+Address+%232
&s-t-1-30_delivery-address-postal-code=00234&s-t-1-30_payment-method-code=&s-t-1-30_style-code=
&s-t-1-36_order-note=x213
&s-t-256-256_signature-one=13AE7CC1B32F385A487354FDD83E9EDADEF122A730766EF38CC3A0E64F72B0D40E16
E40C1072CD221F55A70E5594692C06B6A1BCAC0A48CE57E869D67585BFE206DADE823CD7FA03C3B6BD13B9D42AEC83
86521890526EB476FE42F4591F52388775CE013120F4D2556CA0956C820241C03BAB5097CC336861182D5ED72DA09DE
&t-f-14-19_order-timestamp=2012-05-11+13%3A02%3A33
&t-f-14-19_payment-timestamp=2012-05-21+13%3A04%3A26
```

Reliability

Selecting Working Payment Node

For each payment the shop system will execute availability check to the payment page of payment cluster nodes in round robin manner to select a working node to communicate with.

Ensuring Transmission of Payment Result

The payment interface has two different feedback channels to signal payment result. First channel is the consumer returning with browser to web shop thus making a result form post. Second channel is redundant programmatic posting of result form directly from the payment system to the shop system. This is done to guarantee sending of result form in case of premature closing of browser of the buyer. The redundant post is sent to static delayed result URL defined by merchant web shop.

Note that the URL for delayed success result must not be a redirect, only direct URLs are supported. The shop should reply with HTTP 200 status, other status codes will result in payment system to retry sending the delayed result to the shop. Actual contents of the page are not checked by the payment system.

Page URLs

| Name | Description | Posted Form |
|--|---|-----------------------------|
| Verifone E-Commerce Payment Node #1 Availability | The URL to payment node #1 availability check page. | |
| Verifone E-Commerce Payment Node #2 Availability | The URL to payment node #2 availability check page. | |
| Verifone E-Commerce Payment Node #1 Payment Page | The URL to payment node #1 payment page. | Payment Initiation Form |
| Verifone E-Commerce Payment Node #2 Payment Page | The URL to payment node #2 payment page. | Payment Initiation Form |
| Web Shop Payment Success Page | The URL to payment success page of the web shop. | Payment Success Result Form |
| Web Shop Payment Rejected Page | The URL to payment rejected page of the web shop. | Payment Cancel Result Form |
| Web Shop Payment Canceled Page | The URL to payment canceled page of the web shop. | Payment Cancel Result Form |
| Web Shop Payment Expired Page | The URL to payment expired page of the web shop. | Payment Cancel Result Form |
| Web Shop Payment Error Page | The URL to payment error page of the web shop. | Payment Cancel Result Form |

Messages

Availability Get

HTTP GET directed to one of the payment page URLs will result HTTP 200 (OK) and empty response content if the node is available. Any HTTP error code or other content in the response or no response at all (timeout) indicates that the payment system node is not available.

Payment Initialization Post

Optional fields without values should to be omitted entirely from the HTTP POSTs.

Payment Initialization Form Parameters

| Name | Format | Opt | Example Value | Title | Version | Description |
|----------------------------------|---|-----|---------------------|-------------------------|---------|--|
| s-f-32-32_payment-token | String with 32 characters. | No | FA12...FF | Payment Token | 3 | SHA-256 hash of combination of merchant agreement code, order number and payment timestamp: SHA-256 s-f-1-36_merchant-agreement-code + ';' + s-f-1-36_order-number + ';' + t-f-14-19_payment-timestamp) converted to upper case hexadecimal string and truncated to 32 character string. |
| locale-f-2-5_payment-locale | String with length of 2-5 characters. | No | fi_FI | Locale | 3 | The language locale used by buyer. Supported locales are: fi_FI, sv_SE, no_NO, dk_DK, sv_FI and en_GB. Nonsupported languages are redirected to en_GB. |
| t-f-14-19_payment-timestamp | yyyy-MM-dd HH:mm:ss | No | 2012-04-21 21:50:01 | Payment Timestamp | 3 | UTC timestamp defining the payment start time from web shop point of view. If payment is retried then payment timestamp have to differ from first payment for same order. |
| 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-1-36_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. |
| 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. |
| I-f-1-20_order-net-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | Net Amount | 3 | Total amount with two decimal precision. Calculated by summing over basket item net amounts. Example value corresponds to 1 EUR. |

| | | | | | | |
|---|---|-----|----------------------|-------------------------------|---|--|
| i-f-1-20_order- vat-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | No | 100 | VAT Amount | 3 | Value added tax amount with two decimal precision. Example value corresponds to 1 EUR. |
| i-t-1-4_order- vat-percentage | Integer formatted as string with 0,1-4 numeric characters | Yes | 2250 | VAT Percentage | 3 | Value added tax with two decimal precision. Example value corresponds to 22,5%. Can be empty if multiple VAT percentages are used in order. |
| 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 2342342 | 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. To be used only in such cases where a unique buyer identifier defined by web shop system is required. |
| 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_bill-to- address-first-name | String with length of 0,1-30 characters. | Yes | Jane | Bill To Address First Name | | Cardholder's first name if different from buyer |
| s-t-1-30_bill-to- address-last-name | String with length of 0,1-30 characters. | Yes | Doe | Bill To Address Last Name | | Cardholder's last name if different from buyer |
| s-t-1-30_bill-to- address-line-one | String with length of 0,1-30 characters. | Yes | Street 22 | Billing Address Line #1 | | Line one of the billing address. |
| s-t-1-30_bill-to- address-line-two | String with length of 0,1-30 characters. | Yes | Apartment 5 | Billing Address Line #2 | | Line two of the billing address. |
| s-t-1-30_bill-to- address-line-three | String with length of 0,1-30 characters. | Yes | Room 8 | Billing Address Line #3 | | Line three of the billing address. |
| s-t-1-30_bill-to- address-postal-code | String with length of 0,1-30 characters. | Yes | New York | Billing Address Postal Code | | Postal code of the billing address. |
| s-t-1-30_bill-to- address-city | String with length of 0,1-30 characters. | Yes | 10001 | Billing Address City | | City of the billing address |
| s-t-1-30_bill-to- address-state | String with length of 0,1-30 characters. | Yes | 18 | Billing Address City | | Numeric ISO 3166-2 country subdivision code; used with 3D Secure v2 transactions. Not mandatory for 3D Secure v2 transactions. |
| i-t-1-3_bill-to- address-country-code | String with length of 0,1-3 characters. | Yes | 840 | Billing Address Country Code | | Numeric ISO 3166 country code of the billing address. |
| s-t-1-30_payment- method-code | String with length of 1-30 characters. | Yes | visa | Payment Method Code | 3 | Code identifying the chosen payment method or empty string if payment method is not chosen. Value can be found in Appendix (please see the end of this document) |

| | | | | | | |
|--|---|-----|-------------------------|----------------------|---|--|
| 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. |
| s-t-1-30_style-code | String with length of 1-30 characters. | Yes | my-style | Style | 3 | Code identifying the style sheet used in payment page or empty string if default style sheet is used. |
| 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. 1) Deferred payment. 2) Deferred payment.(Filters only deferred supported payment methods) |
| i-t-1-1_web-terminal-payment | Integer with value 0 or 1 | Yes | 0 | Web Terminal Payment | 3 | If set to 1 instructs the payment process to skip payer identification and make a MOTO transaction. 0) Normal payment. 1) Web terminal (MOTO) payment (e.g. order taken in by merchant help desk/phone sales). Cannot be used without being agreed to with Verifone first. |
| i-t-1-1_recurring-payment | Integer with value 0 or 1. | Yes | 1 | Recurring Payment | 3 | Integer defining that payment is recurring payment. If set to 1 then parameters s-t-1-30_recurring-payment-subscription-name, s-t-1-30_recurring-payment-subscription-code and i-t-1-3_recurring-payment-subscription-expected-period are also mandatory. The post that provides the first details. The following recurring payments are initiated via Server Interface. 0) Not recurring payment. 1) Recurring subscription should be created When this is set to 1, only recurring subscription is created. If a recurring payment should be processed after subscription creation, it must be processed via Server Interface as Payment Interface creates only the subscription. Cannot be used without being agreed to with Verifone first. NOTE: Either s-t-1-30_buyer-phone-number or s-t-1-255_buyer-external-id needs to be present for recurring payment to be saved. |
| s-t-1-30_recurring-payment-subscription-name | String with length 1-30 characters. | Yes | Merchant Magazine Order | Subscription Name | 3 | Human-readable name of the subscription that the payer can identify. |
| s-t-1-30_recurring-payment-subscription-code | String with length 1-30 characters. | Yes | MMOSubs123 | Subscription Code | 3 | Subscription code that should be unique in the merchant's system. |
| i-t-1-3_recurring-payment-subscription-expected-period | Integer with value of 7-999 | Yes | 7 | Subscription Period | 3 | Number of days expected between recurring payments. Safeguards payer from being billed multiple times in short period. The limits are to be agreed with Verifone. |
| i-t-1-19_recurring-payment-subscription-end | yyyy-MM-dd HH:mm:ss | Yes | 2012-06-13 14:38:11 | Subscription End | 3 | Datetime when the subscription ends - no payments can be done after this. Can be left empty, which means that the recurring payment is valid and can be used until the payer's credit card expiry date. If payer's credit card expires, the payments will fail so submitting larger value than that has the same effect than leaving this empty. |
| i-t-1-1_save-payment-method | Integer with value 0 or 1 or 2 or 3. | Yes | 1 | Save Payment Method | 3 | 0) Normal payment. If user chooses credit card, then s/he is given save payment yes/no radio button as part of card information page. In case of successful payment with radio button set as yes, the payment is saved into the system. 1) Save payment method and pay. Card information page will not contain "save payment" radio button. When payment is successful, the credit card is saved into the system If payment method is not given, only cards are offered to user. No texts are changed. NOTE: Payment Method Code can be supplied, but only credit card payments are accepted. 2) Save payment only. UI texts will be changed, so that user is communicated that her credit card will be saved, but it will not be charged. Pay buttons will contain "Save card" and so on. Payment details page and Shopping baskets are not shown. Card information page does not contain save payment radio button. The card will be authorized with the given sum, but the authorized funds will not be captured. The funds used in authorization will be reversed immediately to buyer. Card will be saved to the system. Field i-t-1-1_skip-confirmation-page is assumed to be "1" even if 0 (or empty) is given. 3) Disable save payment UI. Save payment options will be removed from UI. In this case credit card will not be saved in system. NOTE2: The payment sum <u>needs to be filled</u> , the funds are authorized and the payment sum will be shown in 3D secure, if 3d secure is used. It is suggested to use smallest possible amount (such as 0.01 €) for the charge, even the funds are returned immediately to the end user. NOTE3: UI features "Payment details button disable" and "shopping basket disable" are present on templates and templates predating this feature, will show those features. NOTE4: Either s-t-1-30_buyer-phone-number or s-t-1-255_buyer-external-id needs to be present for saving to be allowed |
| i-t-1-1_register-token | Integer with value 0 or 1 | Yes | 1 | Register Token | 3 | When payment is successful, a token is registered for the card that the user has used. |

| | | | | | | |
|---|--|-----|---|-----------------------------|---|---|
| i-t-1-1_token-extra-info | Integer with value 0 or 1 | Yes | 1 | Request extra info on token | 5 | If token is successfully registered, masked pan will be returned in response. |
| i-t-1-1_token-scope | Integer with value 1,2,3 | Yes | 1 | Token scope | 5 | Value to indicate which scope token should belong to. 1. Terminal group 2. Company 3. Company group |
| s-t-1-36_service-code | String of max 36 chars | Yes | service_code | Register Token | 5 | The parameter will be used only if i-t-1-1_register-token is 1. If filled, the token will be associated to a specific VAS code and s-t-1-36_service-code will overrule i-t-1-1_token-scope (existing tokens are searched by service code only and not scope). It is also used for token distribution to acquirer. |
| i-t-1-1_skip-confirmation-page | Integer with value 0 or 1. | Yes | 1 | Skip Confirmation | 3 | Integer defining if confirmation page after successful payment should be skipped. 0) Include confirmation page to payment process. 1) Skip confirmation page in payment process. If the page has payment progress indicator the confirmation step will not be shown, if it is set to be skipped. (This is present on templates and templates predating this will show confirmation step, even if it is set to be skipped.) |
| s-f-5-128_success-url | String with length of 5-128 characters. | No | https://e.com/success | Success URL | 3 | URL of the web shop payment success page. *Mandatory only If you use version 3 of the interface. If so, you must use this parameter but you must not use this parameter with versions 4 and later* to the first fields. |
| s-f-5-128_rejected-url | String with length of 5-128 characters. | No | https://e.com/cancel | Rejected URL | 3 | URL of the web shop payment rejected page. *Mandatory only If you use version 3 of the interface. If so, you must use this parameter but you must not use this parameter with versions 4 and later* to the first fields. |
| s-f-5-128_cancel-url | String with length of 5-128 characters. | No | https://e.com/cancel | Cancel URL | 3 | URL of the web shop payment buyer canceled page. *Mandatory only If you use version 3 of the interface. If so, you must use this parameter but you must not use this parameter with versions 4 and later* to the first fields. |
| s-f-5-128_expired-url | String with length of 5-128 characters. | No | https://e.com/cancel | Expired URL | 3 | URL of the web shop payment expired page. *Mandatory only If you use version 3 of the interface. If so, you must use this parameter but you must not use this parameter with versions 4 and later* to the first fields. |
| s-f-5-128_error-url | String with length of 5-128 characters. | No | https://e.com/cancel | Error URL | 3 | URL of the web shop payment error page. *Mandatory only If you use version 3 of the interface. If so, you must use this parameter but you must not use this parameter with versions 4 and later* to the first fields. |
| s-f-5-256_success-url | String with length of 5-256 characters. | No | https://e.com/success | Success URL | 4 | URL of the web shop payment success page. *Mandatory only if you use version 4 or higher of the interface. If so, you must use this parameter but you must not use this with version 3.* to the latter fields as extra information. |
| s-f-5-256_rejected-url | String with length of 5-256 characters. | No | https://e.com/cancel | Rejected URL | 4 | URL of the web shop payment rejected page. *Mandatory only if you use version 4 or higher of the interface. If so, you must use this parameter but you must not use this with version 3.* to the latter fields as extra information. |
| s-f-5-256_cancel-url | String with length of 5-256 characters. | No | https://e.com/cancel | Cancel URL | 4 | URL of the web shop payment buyer canceled page. *Mandatory only if you use version 4 or higher of the interface. If so, you must use this parameter but you must not use this with version 3.* to the latter fields as extra information. |
| s-f-5-256_expired-url | String with length of 5-256 characters. | No | https://e.com/cancel | Expired URL | 4 | URL of the web shop payment expired page. *Mandatory only if you use version 4 or higher of the interface. If so, you must use this parameter but you must not use this with version 3.* to the latter fields as extra information. |
| s-f-5-256_error-url | String with length of 5-256 characters. | No | https://e.com/cancel | Error URL | 4 | URL of the web shop payment error page. *Mandatory only if you use version 4 or higher of the interface. If so, you must use this parameter but you must not use this with version 3.* to the latter fields as extra information. |
| s-t-5-256_change-server-to-server-success-url | String with length of 5-256 characters | Yes | https://shop.com/response | Delayed success url | 5 | URL of the delayed success URL for the webshop. |
| s-t-1-32_type-of-payment | String with length of 1-32 | Yes | card-payment | Type of payment | 5 | Type of payment limit the type of payment to only show card-payment, electronic-payment or invoice-payment. |
| s-f-1-30_software | String with length of 1-30 characters. | No | My Shop Software | Software | 3 | Name of the web shop software. |
| 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 | 1 | Interface Version | 3 | Version of the payment interface. |
| s-t-1-40_submit | String with length of 1-40 characters. | Yes | Submit | Submit Button | 3 | The submit button. |
| s-t-256-256_signature-one | String with length of 256 characters. | Yes | FA12...FF | Signature One | 3 | 128 byte signature converted to upper case hexadecimal string. |
| s-t-256-256_signature-two | String with length of 256 characters. | Yes | FA12...FF | Signature Two | 3 | 128 byte signature converted to upper case hexadecimal string. |

| | | | | | | |
|---|--|-----|---|---|---|---|
| i-t-1-1_skip-three-d-secure | Integer with value 0 or 1. | Yes | 1 | Skip 3DSecure | 5 | Integer defining whether 3DSecure to be skipped for this payment. 0) Do not skip 3DSecure. 1) Skip 3DSecure. Cannot be used without being agreed to with Verifone first. |
| s-t-1-30-delivery-address-first-name | String with length of 1-30 characters | Yes | John | First Name | 5 | First Name of the Ship To address |
| s-t-1-30-delivery-address-last-name | String with length of 1-30 characters | Yes | Smith | Last Name | 5 | Last Name of the Ship To address |
| s-t-1-30-delivery-address-state | String with length of 1-30 characters | Yes | Northern Savonia | State | 5 | State of the Ship To address |
| s-t-1-30-delivery-address-phone-number | String with length of 1-30 characters | Yes | +358 40 163 9099 | Phone number | 5 | Phone number of the Ship To address |
| s-t-1-100-delivery-address-email | String with length of 1-100 characters | Yes | john.smith@gmail.com | Email | 5 | Email address of the Ship To address |
| s-t-1-1024_dynamic-feedback | String with length of 1-1024 | Yes | s-t-1-6_authorization-number, l-f-1-20_dynamic-reference-number, s-t-1-30_card-type, <param>, <param> | Dynamic feedback | 5 | Comma separated list of optional parameters to be added to the response if available. Allowed parameters for dynamic feedback are listed later in this document in 'Payment Success Result Form Parameters' and 'Payment Cancel Result Form Parameters'. |
| s-t-0-11_social-security-number | String with length 0-11 | Yes | 071259-999M | Social security number | 3 | Social security number of the buyer. Used only by Collector. |
| i-t-1-1_partial-approval | Integer with value 0 or 1. | Yes | 1 | Partial Approval | 3 | Integer defining that payment is allowed to be approved partially. 0) Partial approval not allowed. 1) Partial approval allowed |
| s-t-1-2048_image-url | String with length of 1-2048 characters. | Yes | http://www.testshop.com/merchant_logo.png | Image URL | 5 | Used only with AfterPay payment method currently Order image URL. Image can be seen on the invoice and next to installments in AfterPay portal as "hero image". The merchant can provide a working url for a square or rectangled image. Size constraints: 100-1280px |
| i-t-1-1_existing-buyer | Integer with value 0 or 1. | Yes | 1 | Existing Buyer | 5 | Used only with AfterPay payment method currently. If set to 0, AfterPay will treat the buyer as one that the merchant is familiar with (eg. has made orders before). Impacts AfterPay risk assessment related to credit. |
| i-t-1-1_allow-delivery-address-update | Integer with value 0 or 1. | Yes | 1 | Allow Delivery Address Update | | Used only with AfterPay payment method currently. If 1, consumer is given the option to change the delivery address at the hosted page to be the one that AfterPay has as registered address. Webshop *must* read the updated delivery address from payment response message. Defaults to 0, which does not allow the payment to proceed with shop suggested delivery address, unless the buyer is strongly authenticate (Currently for Finland only; other markets will cause the payment to be cancelled unless consumer uses the registered address suggested by AfterPay) |
| s-t-1-30_sub-payment-method-type | String with length of 1-30 characters. | Yes | Installment | Sub Payment Method Type | | Used only with AfterPay payment method currently. Can be populated with AfterPay sub-payment method details received from server interface. |
| 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 | | Used only with AfterPay payment method currently. Can be populated with AfterPay sub-payment method profile number received from server interface. |
| i-t-1-2_shipping-method-indicator | Integer with value ranging from 1 to 7 | Yes | 1 | Shipping Method Indicator | | Shipping method indicator used towards 3D Secure v2 payments. Possible values: 1: Ship to buyer billing address. Bill-to address details are sent to the issuer, if bill-to address is not present, delivery-address is used instead. Used by default. 2: Ship to a merchant verified delivery address. Bill-to address and delivery-address details are sent to the issuer. 3: Ship to an unverified delivery address. Bill-to address and delivery-address details are sent to the issuer. 4: Ship to store. Bill-to address fields indicate buyer details, delivery-address details provide the store address details where pickup is done. 5: Digital goods. s-t-1-100-delivery-address-email may be additionally provided if delivery is to a different email address. 6: Travel and event tickets that are not physically delivered. delivery-address-email may be used as with case 5. 7: Other. |
| i-t-12-12_card-filing-code | 64 bit integer value formatted as a string with 12 numeric characters. | Yes | 222333444555 | Card filing code (Merchant defined filing code) | 5 | When merchant agreement allows merchant to override Field 37, card filing code is used in ISO auth and debit message field 37 replacing system generated filing code value (based on time and transaction ID). If merchant does not provide it, system generated filing code is used as default. May not be used without separate agreement. |

| | | | | | | |
|-------------------------------|---|-----|---------------------------------|--|---|---|
| s-t-1-100_app-deeplink-prefix | String with length of 1-100 characters. | Yes | merchantapp | Mobile app deeplink prefix | | Payments initiated from an inApp browser in a mobile app do not work without of this parameter. When payment initiation request is sent to service provider we provide an URL to which they should return after user has accepted/rejected the payment in mobile app (like Vipps). If this parameter is given in request from merchant to us, we will change URL prefix from 'https' to value specified in this parameter. This prefix in URL will launch merchant's app in mobile phone, which is then responsible to change URL back to normal, to be able to return back to eCommerce payment flow. For example, If parameter has value 'merchantapp', return URL will be changed from https://<psp-return-uri> to merchantapp://<psp-return-uri> |
| s-t-5-256_merchant-logo-url | String with length of 5-256characters. | Yes | https://e.com/merchant_logo.png | Merchant logo url to be shown in the mobilepay app | 3 | Mobilepay wants to show a merchant logo in the app for transactions. The url of the logo shown to the end-user. Must be: 250x250 pixels, png or jpg served over a secure connection, must be https, and publicly available. |

Payment Initialization Form Shopping Basket Extension Parameters

1-50 basket items (indexes 0-49) are supported and they viewed to user as reminder of what the order contains.

Even though these parameters are not mandatory as set, if they are filled, then they have to be filled for all items included in the delivery. Basket items have to be filled with index numbers starting from 0 and have no gaps it between them.

Shopping basket it mandatory for all Invoice payment methods.

If you have one parameter set for an item you must have all the other parameters set for that item as well, except for image-url and only one of **Item Unit Cost** and **Item Unit Gross Cost** must be filled. Both must not be filled.

Example:

If you have item 3, you must fill all fields of item 3, except you have to fill in only **I-t-1-20_bi-unit-cost-3** OR **I-t-1-20_bi-unit-gross-cost-3**, but not both.

| | | | | | |
|------------------------------------|---|-----|---|--------------------------|---|
| s-t-1-30_bi-name-<N> | String with length of 1-30 characters. | Yes | Red Apple | Item Name | Item name of the Nth basket item. NOTE: Only alphanumeric characters, space and dash should be used in basket item names. |
| I-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 | 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 gross cost with discount 0% and GST 24%. 71.77 EUR and 24% GST is 88.99 EUR, but 71.78 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 and no problem exists.) The solution to this problem is either to use unit gross cost, or calculate unit gross cost in the first place from unit costs, and not the other way around, because if one does it this way, there will be rounding errors, since EURO and currencies in general are finitely dividable. |
| 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 | 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 | 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 | 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 | 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 | Item value added tax percentage with two decimal precision. Example value corresponds to 22,5%. Can be empty if multiple VAT percentages are used in order. 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 | Item discount percentage tax with two decimal precision. Example value corresponds to 5,5%. Currently, cannot be an empty string nor missing |
| s-t-1-2048_image-url | String with length of 1-2048 characters. | Yes | http://www.testshop.com/merchant_logo.png | Image URL | Optional basket item parameter, does not need to be sent with the others. Order image URL, currently used in AfterPay payment method. Image can be seen on the invoice and next to installments in AfterPay portal. The merchant can provide a working url for a square or rectangled image. Size constraints: 100-1280px |
| i-t-1-1_bi-digital-product-N | Integer with value 0 or 1. | Yes | 1 | Digital product | Integer defining that basket item is digital, only used with AfterPay payment method. 0) Basket item is not digital 1) Basket item is digital |

Channel payments

On top of the basket item parameters, channel payments are enabled by filling below parameters. All of them must have values to enable channel payments or NULL to disable channel payments. If channel payment is used, merchant agreement needs to be set to allow this type of payment and sub-merchants need to exist.

Note: Channel payments feature is only for special cases and use of it must be agreed with Verifone in advance. These parameter must not and cannot be used otherwise.

| | | | | | |
|---|---|---|------|----------------------------|--|
| s-t-1-36_bi-merchant-agreement-code-<N> | String with length of 1-36 characters. | Yes, (if all are set to NULL). Otherwise, No. | NULL | Item Merchant Code | Channel-mode merchant code. Contains child merchant number for report transactions |
| s-t-1-36_bi-product-number-<N> | String with length of 1-36 characters. | Yes, (if all are set to NULL). Otherwise, No. | NULL | Item Product Number | Channel-mode product number. Contains product number for particular merchant |
| i-t-1-4_bi-commission-percentage-<N> | Integer formatted as string with 0,1-4 numeric characters. | Yes, (if all are set to NULL). Otherwise, No. | NULL | Item Commission percentage | Channel-mode commission percentage. |
| l-t-1-20_bi-fee-amount-<N> | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | Yes, (if all are set to NULL). Otherwise, No. | NULL | Item channel fee | Channel-mode fee amount. |

Anonymous payment

Any merchant wishing to use anonymous payment must communicate to Verifone before doing so. There is however no technical blocker in Verifone service, so any merchant is technically able to use it (as merchant is able to fill in bogus names.)

It is possible to issue anonymous payment by setting first name and last name to ?. Both have to be filled with ?. Email may be set to ?, but may also be given, in which case it is saved by the system. External id may not be given. Anonymous payments must not be recurring.

Mandatory Transaction Information

The merchant needs to provide the following minimum mandatory information :

| Mandatory Transaction Information | Description |
|--|--|
| l-f-1-20_order-gross-amount | 1. IF save-payment-method equals to 2, THEN the amount value could equal or be greater than 0 2. IF save-payment-method does not exist OR its value doesn't equal to 2, THEN the amount value could only be greater than 0 |
| l-f-1-20_order-net-amount | mandatory |
| l-f-1-20_order-vat-amount | mandatory |
| i-f-1-3_order-currency-code | mandatory |
| s-f-1-36_order-number | mandatory |
| s-f-1-100_buyer-email-address | mandatory |
| s-f-1-30_buyer-first-name | mandatory |
| s-f-1-30_buyer-last-name | mandatory |
| t-f-14-19_order-timestamp | mandatory |
| s-f-1-36_merchant-agreement-code | mandatory |
| s-t-1-30_buyer-phone-number s-t-1-255_buyer-external-id | 1. IF save-payment-method equals to 2, either buyer-phone-number or buyer-external-id are mandatory. Both can also be used. 2. optional with save-payment-method values other than 2. |

Initialization Form Example

```
<form id="integration-form" action="#" method="post">
<table>
<tbody><tr><td>i-f-1-11_interface-version</td><td><input type="text" name="i-f-1-11_interface-version" value="2"
></td></tr>
<tr><td>i-f-1-3_order-currency-code</td><td><input type="text" name="i-f-1-3_order-currency-code" value="978"><
/td></tr>
<tr><td>i-t-1-11_bi-unit-count-0</td><td><input type="text" name="i-t-1-11_bi-unit-count-0" value="1"></td></tr>
<tr><td>i-t-1-1_deferred-payment</td><td><input type="text" name="i-t-1-1_deferred-payment" value="0"></td></tr>
<tr><td>i-t-1-1_recurring-payment</td><td><input type="text" name="i-t-1-1_recurring-payment" value="0"></td><
/tr>
<tr><td>i-t-1-3_delivery-address-country-code</td><td><input type="text" name="i-t-1-3_delivery-address-country-
code" value="246"></td></tr>
<tr><td>i-t-1-4_bi-discount-percentage-0</td><td><input type="text" name="i-t-1-4_bi-discount-percentage-0"
value="0"></td></tr>
<tr><td>i-t-1-4_bi-vat-percentage-0</td><td><input type="text" name="i-t-1-4_bi-vat-percentage-0" value="2300"><
/td></tr>
<tr><td>i-t-1-4_order-vat-percentage</td><td><input type="text" name="i-t-1-4_order-vat-percentage" value="2300"
></td></tr>
<tr><td>l-f-1-20_order-gross-amount</td><td><input type="text" name="l-f-1-20_order-gross-amount" value="1230"><
/td></tr>
<tr><td>l-f-1-20_order-net-amount</td><td><input type="text" name="l-f-1-20_order-net-amount" value="1000"><
/td></tr>
<tr><td>l-f-1-20_order-vat-amount</td><td><input type="text" name="l-f-1-20_order-vat-amount" value="230"></td><
/tr>
<tr><td>l-t-1-20_bi-gross-amount-0</td><td><input type="text" name="l-t-1-20_bi-gross-amount-0" value="100"><
/td></tr>
<tr><td>l-t-1-20_bi-net-amount-0</td><td><input type="text" name="l-t-1-20_bi-net-amount-0" value="100"></td><
/tr>
<tr><td>l-t-1-20_bi-unit-cost-0</td><td><input type="text" name="l-t-1-20_bi-unit-cost-0" value="100"></td></tr>
<tr><td>locale-f-2-5_payment-locale</td><td><input type="text" name="locale-f-2-5_payment-locale" value="fi_FI"
></td></tr>
<tr><td>s-f-1-10_software-version</td><td><input type="text" name="s-f-1-10_software-version" value="1.0.1"><
/td></tr>
<tr><td>s-f-1-100_buyer-email-address</td><td><input type="text" name="s-f-1-100_buyer-email-address" value="
matti.meikalainen@point.fi"></td></tr>
<tr><td>s-f-1-30_buyer-first-name</td><td><input type="text" name="s-f-1-30_buyer-first-name" value="John"><
/td></tr>
<tr><td>s-f-1-30_buyer-last-name</td><td><input type="text" name="s-f-1-30_buyer-last-name" value="Smith"></td><
/tr>
<tr><td>s-f-1-30_software</td><td><input type="text" name="s-f-1-30_software" value="My Web Shop"></td></tr>
<tr><td>s-f-1-36_merchant-agreement-code</td><td><input type="text" name="s-f-1-36_merchant-agreement-code"
value="line-test-merchant-agreement-code"></td></tr>
<tr><td>s-f-1-36_order-number</td><td><input type="text" name="s-f-1-36_order-number" value="1325141018121"><
/td></tr>
<tr><td>s-f-5-128_cancel-url</td><td><input type="text" name="s-f-5-128_cancel-url" value="http://127.0.0.1:8081
/test-shop/cancel"></td></tr>
<tr><td>s-f-5-128_error-url</td><td><input type="text" name="s-f-5-128_error-url" value="http://127.0.0.1:8081
/test-shop/cancel"></td></tr>
<tr><td>s-f-5-128_expired-url</td><td><input type="text" name="s-f-5-128_expired-url" value="http://127.0.0.1:
8081/test-shop/cancel"></td></tr>
<tr><td>s-f-5-128_rejected-url</td><td><input type="text" name="s-f-5-128_rejected-url" value="http://127.0.0.1:
8081/test-shop/cancel"></td></tr>
<tr><td>s-f-5-128_success-url</td><td><input type="text" name="s-f-5-128_success-url" value="http://127.0.0.1:
8081/test-shop/receipt"></td></tr>
<tr><td>s-t-1-30_payment-method-code</td><td><input type="text" name="s-t-1-30_payment-method-code" value=""><
/td></tr>
<tr><td>s-t-1-30_style-code</td><td><input type="text" name="s-t-1-30_style-code" value=""></td></tr>
<tr><td>s-t-1-30_bi-name-0</td><td><input type="text" name="s-t-1-30_bi-name-0" value="test-basket-item-0"><
/td></tr>
<tr><td>s-t-1-30_buyer-phone-number</td><td><input type="text" name="s-t-1-30_buyer-phone-number" value="+358
40 163 9099"></td></tr>
<tr><td>s-t-1-30_delivery-address-city</td><td><input type="text" name="s-t-1-30_delivery-address-city" value="
City"></td></tr>
<tr><td>s-t-1-30_delivery-address-line-one</td><td><input type="text" name="s-t-1-30_delivery-address-line-one"
value="Street Address #1"></td></tr>
<tr><td>s-t-1-30_delivery-address-line-three</td><td><input type="text" name="s-t-1-30_delivery-address-line-
three" value="Street Address #3"></td></tr>
<tr><td>s-t-1-30_delivery-address-line-two</td><td><input type="text" name="s-t-1-30_delivery-address-line-two"
value="Street Address #2"></td></tr>
<tr><td>s-t-1-30_delivery-address-postal-code</td><td><input type="text" name="s-t-1-30_delivery-address-postal-
code" value="00234"></td></tr>
</tbody>
</table>
</form>
```

```

<tr><td>s-t-1-36_order-note</td><td><input type="text" name="s-t-1-36_order-note" value="x213"></td></tr>
<tr><td>state</td><td><input type="text" name="state" value="sign-and-forward"></td></tr>
<tr><td>t-f-14-19_order-timestamp</td><td><input type="text" name="t-f-14-19_order-timestamp" value="2011-12-29
06:43:38"></td></tr>
<tr><td>t-f-14-19_payment-timestamp</td><td><input type="text" name="t-f-14-19_payment-timestamp" value="2011-
12-29 06:43:38"></td></tr>
</tbody></table>
</form>

```

Initialization Post Response

On success payment system will respond with HTTP status 200 OK. Any other response code indicates availability problem in the payment system node.

Payment Success Result Post

Payment Success Result Form Parameters

| Name | Format | Example Value | Supported in version | Title | Description |
|---------------------------------|---|----------------------|----------------------|--------------------|--|
| l-f-1-20_transaction-number | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | 123 | 3 | Transaction Number | Transaction number identifying the payment transaction. Assigned by payment system. |
| s-f-1-30_payment-method-code | String with length of 1-30 characters. | visa | 3 | Payment Method | String key identifying the payment method used. Value can be found in Appendix (please see the end of this document) |
| s-f-1-36_order-number | String with length of 1-36 characters. | 123 | 3 | Order Number | 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. | Example note. | 3 | Order Note | Custom parameter reserved for shop system to use. |
| t-f-14-19_order-timestamp | yyyy-MM-dd HH:mm:ss | 2010-01-01 01:01:32 | 3 | Order Timestamp | 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. | 978 | 3 | Currency Code | 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. | 100 | 3 | Gross Amount | Gross amount including tax with two decimal |
| s-f-1-10_software-version | String with length of 1-10 characters. | 1.0.1 | 3 | Version | Version of the payment system. |
| i-f-1-11_interface-version | String with length of 1-11 numeric characters. | 1 | 3 | Version | Version of the payment interface. |
| s-f-1-20_reference-number | String with length of 1-20 characters. | 1230000045678 | 4 | Reference Number | Verifone Reference Number of electronic payment. |
| s-t-256-256_signature-one | String with length of 512 characters. | fa12...ff | 3 | Signature One | 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-two | String with length of 512 characters. | fa12...ff | 3 | Signature Two | 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-1-256_token | String with length of 0 or 1-256 characters. | 100 | 3 | Token | Token that was registered for the card that the used. |
| s-t-1-26_filing-code | String with length of 0 or 1-26 characters. | 1234567890 | 3 | Filing Code | Filing code of the transaction. Returned for card payments. |
| s-t-0-11_social-security-number | String with length of 0 to 11 characters. | 110101-0000 | 3 | Person ID | Person ID of the payer in invoice payments. Returned only for invoices and only when available and agreed to be returned. |
| s-f-1-100_buyer-email-address | String with length of 1 to 100 characters. | someone@verifone.com | 3 | Email address | Email address of the payer in invoice payments. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |

| | | | | | |
|---------------------------------------|---|-----------------------|---|-------------------------------|---|
| s-t-1-30_buyer-phone-number | String with length of 1 to 30 characters. | +358123456789 | 3 | Phone Number | Phone number of the payer in invoice payments. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |
| s-t-1-30_delivery-address-city | String with length of 1 to 30 characters. | Vantaa | 3 | Delivery Address City | City of invoice payer's address. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |
| s-t-1-30_delivery-address-line-one | String with length of 1 to 30 characters. | Vantaankoskentie 14 C | 3 | Delivery Address Line One | First line of invoice payer's address. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |
| s-t-1-30_delivery-address-line-two | String with length of 1 to 30 characters. | C/O Verifone Inc. | 3 | Delivery Address Line Two | Second line of invoice payer's address. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |
| s-t-1-30_delivery-address-postal-code | String with length of 1 to 30 characters. | 001670 | 3 | Delivery Address Postal Code | Postal code of invoice payer's address. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |
| i-t-1-3_delivery-address-country-code | Number with length of 1 to 3 digits. | 246 | 3 | Delivery Address Country Code | Numeric ISO 3166 country code of the invoice payer's delivery address. Returned only for invoices and only when available. Note that the value is not necessarily the same as in payment request. |
| s-t-1-6_card-expected-validity | Date formatted as MMyyyy. | 122012 | 4 | Expiration date | Card expiration dates. Returned when i-t-1-1_save-payment-method = 1 2 via payment interface or list-saved-payment-methods is used via server interface. |
| s-t-10-10_token-expiration-date | Date formatted as yyyy-MM-dd. | 2010-01-01 | 5 | Token expiration date | Token expiration date. |
| s-t-1-36_token-masked-pan | String with length of 0 or 1-36 characters. | 123456*****0000 | 5 | Masked pan | Masked pan used to generate token. Returned if token extra info is requested. |
| l-t-1-20_authorized-amount | 64 bit signed integer value formatted as a string with 1-20 numeric characters. | 100 | 3 | Authorized Amount | Partially approved transaction amount |

Parameters present in the response if they were requested with s-t-1-1024_dynamic-feedback parameter and were available at the time of providing the response.

| | | | | | |
|-----------------------------------|---|----------|---|--------------------------|---|
| s-t-1-6_authorization-number | String with length of 1 to 6 characters. | 123456 | 5 | Authorization id. | 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. | 23452345 | 5 | Dynamic reference number | Dynamic reference number. |
| s-t-1-30_card-type | String with length of 1 to 30. | visa | 5 | Card type | Card type. |
| s-t-1-6_card-expiry-date | String with length of 1 to 6. | 042015 | 5 | Expiry date | Expiry date of the card in format MMDDYY. |

| | | | | | |
|------------------------------------|------------------------------------|-----------------|---|------------------------------|--|
| i-t-1-2_card-3ds-auth-status | String with length of 2. | 03 | 5 | 3DS authorization status | Status of 3DS authorization. (Note: The value returned is String.) valid return values are: 0 = Cavv Not Present Or Issuer Did Not Respond With Result Code 1 = Authentication Result Invalid 2 = Validation Failed Authentication 3 = Validation Passed Authentication 4 = Validation Passed Attempt 5 = Validation Failed Attempt (6 = Reserved 5, this is present in enumeration but not in any use) 7 = Not Validated Issuer Not Participating 8 = Validation Failed Attempt Us Card 9 = Validation Success Attempt Us Card 10 = Validation Failed Attempt Us Card Stand In 11 = Validation Success Attempt Us Card Stand In 12 = Validation Passed Info Only No L Shift 13 = Not Validated Attempt No Cavv From Issuer 14 = Not Validated Authentication No Cavv From Issuer 15 = Duplicate Cavv 16 = Not Validated System Error 17 = Not Validated Invalid Data |
| i-t-1-1_card-3ds-enrollment-status | String with length of 1. | 1 | 5 | 3DS enrollment status | 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-t-1-1_3ds-charge-back | String with length of 1. | N | 5 | 3DS charge back | 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. | 233 | 5 | Estonia | Country code of the customer (resolved from customer ip address). |
| i-t-1-3_card-issued-country | String with length of 1 to 3. | 40 | 5 | Austria | Code of country which issued the card. |
| i-t-2-2_card-pan-last2 | String of digits with length of 2. | 11 | 5 | Last two digits on the card | Last 2 digits of the card used to make the payment. |
| i-t-4-4_card-pan-last4 | String of digits with length of 4. | 32 88 | 5 | Last four digits on the card | Last 4 digits of the card used to make the payment. |
| i-t-6-6_card-pan-first6 | String of digits with length of 6. | 45 32 88 | 5 | First six digits on the card | First 6 digits of the cars used to make the payment. |
| s-t-1-256_token-two-way | String with length of 1 to 256. | 100 | 5 | Token | Token that was registered for the card that the used. |
| s-t-1-8_card-product | String with length of 1 to 8. | de bit | 5 | Card product | Card product type (applied only to specific issuer). |
| i-t-1-1_consumer-card | Integer with value 1 or 0 | 0 or 1 | 5 | Consumer Card | Consumer Card only for Card Payment(i-t-1-1_consumer-card) in response i-t-1-1_consumer-card=0 if(Bin Entry is present and marked as Corporate type or S_Business) else i-t-1-1_consumer-card =1, if requested in request |
| s-t-1-36_card-name | String with length of 1 to 36. | Cl as sic | 5 | Card Name | Card Name |

Payment Success Result Form Example

```

<form id="integration-form" action="http://127.0.0.1:8081/test-shop/receipt" method="post">
<input type="hidden" readonly="" name="i-f-1-11_interface-version" value="2">
<input type="hidden" readonly="" name="i-f-1-3_order-currency-code" value="978">
<input type="hidden" readonly="" name="s-t-1-26_filing-code" value="1234567890">
<input type="hidden" readonly="" name="s-f-1-20_reference-number" value="123000045678">
<input type="hidden" readonly="" name="l-f-1-20_order-gross-amount" value="1230">
<input type="hidden" readonly="" name="s-f-1-10_software-version" value="1.0.1467">
<input type="hidden" readonly="" name="l-f-1-20_transaction-number" value="5120103424">
<input type="hidden" readonly="" name="s-f-1-36_order-number" value="1325141401745">
<input type="hidden" readonly="" name="s-f-1-30_payment-method-code" value="nordea-e-payment">
<input type="hidden" readonly="" name="s-t-1-36_order-note" value="x213">
<input type="hidden" readonly="" name="s-t-256-256_signature-one" value="
27F6C1B8EFDD6B10F33D8D09FE1565B79C1937CEF128D972E01162BDA200727E5CE21BA1B3BE46143763BE31EE372F7D71AE91153703B04B
CBCF9396BBC9681EB3862B31B29D21CCCF552E0871018EC03793AC2BF0EC1BE9325E9A3E3BC2B4BDC89BCD222593BC7B78B0C80A3A9254
CBDCCBF3B7D07B059910B968189FC5AD5">
<input type="hidden" readonly="" name="s-t-256-256_signature-two" value="
295601A35A4117AE6F2FABE35ED24CA4E2569CF59E87CBB759465E8E89A86E7F57B223FC9C33F5B6856734A77E450BCD599D51118C5F9408
B66C3B0E32EC6088414E76B43F2912549D26FC3FE1F8DD6C7A13CFC75A44BEC00CC1290B8147A9929DD1094C9558062F7CA9533E5E92B7
6B233C8DB6B7D4BC057A82E671C5667F">
<input type="hidden" readonly="" name="t-f-14-19_order-timestamp" value="2011-12-29 06:50:01">
<input class="forward-button" type="submit" name="s-t-1-40_shop-receipt__phase" value="Siirry kuittisivulle">
</form>

```

Checking Payment Success Result

It is important to do the following checks on the success result:

1. l-f-1-20_transaction-number must be present in the response.
2. s-t-256-256_signature-one or/and s-t-256-256_signature-two are valid.
3. s-f-1-36_order-number and t-f-14-19_order-timestamp matches to the payment request. All shop systems should save order number and order time stamp before sending the payment request and check that the values in response matches to the values in the request.
4. l-f-1-20_order-gross-amount and i-f-1-3_order-currency-code matches to the payment request. All shop systems should save amount and currency before sending the payment request and check that the values in response matches to the values in the request.

The above checks are necessary to check that the response is done by Verifone and that the response really is a Payment Success Result. It is strongly advisable to actually check that all of the following parameters are present in the Payment Success Result Post:

- i-f-1-11_interface-version
- i-f-1-3_order-currency-code
- l-f-1-20_order-gross-amount
- s-f-1-10_software-version
- l-f-1-20_transaction-number
- s-f-1-30_payment-method-code
- s-t-1-36_order-note (if it was provided in request)
- t-f-14-19_order-timestamp
- s-t-1-256_token (if registration of token was requested)

Web Shops should also implement the replacement ";" with ";;" in the parameter values in signature validation for responses (similarly than in requests).

Note: s-t-1-40_shop-receipt__phase, s-t-1-40_shop-order__phase and s-t-1-40_submit that may be in the response are not used in signature calculation by Verifone and should be excluded from the signature verification process.

Payment Success Result Post Response

On successful processing of the post shop system will respond with HTTP status 200 OK. Any other response code indicates availability problem in the shop system.

Payment Cancel Result Post

Payment Cancel Result Form Parameters

| Name | Format | Example Value | Title | Description |
|------------------------|--|-------------------------|---------------|--|
| s-f-1-36_order-number | String with length of 1-36 characters. | 123 | Order Number | Textual order number assigned by shop system. Valid characters are a-z, A-Z, 0-9 and minus sign. |
| s-t-1-30_cancel-reason | String with length of 1-30 characters. | cancel-payment-rejected | Cancel Reason | The reason of payment cancellation. |

| | | | | |
|----------------------------|--|-----------|---------------|---|
| s-f-1-10_software-version | String with length of 1-10 characters. | 1.0.1 | Version | Version of the payment system. |
| i-f-1-11_interface-version | String with length of 1-11 numeric characters. | 1 | Version | Version of the payment interface. |
| s-t-256-256_signature-one | String with length of 512 characters. | fa12...ff | Signature One | 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-two | String with length of 512 characters. | fa12...ff | Signature Two | 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 |

Parameters present in the response if they were requested with s-t-1-1024_dynamic-feedback parameter and were available at the time of providing the response.

| | | | | | |
|------------------------------|-------------------------------|------|---|------------------------------------|---|
| s-t-1-4_error-code | String with length of 1 to 4. | H002 | 5 | Error code | Error code, generated by Sales Connector (Hxxx) or received from acquirer (Bxxx). |
| i-t-1-3_failed-auth-response | Integer with value 1 to 3 | 112 | 5 | Failed authorisation response code | Failed authorisation response code |

Payment Cancel Result Form Example

```
<form action="http://127.0.0.1:8081/test-shop/cancel" method="post">
<input type="hidden" readonly="" name="i-f-1-11_interface-version" value="2">
<input type="hidden" readonly="" name="s-f-1-10_software-version" value="1.0.1467">
<input type="hidden" readonly="" name="s-f-1-36_order-number" value="1325141018121">
<input type="hidden" readonly="" name="s-t-1-30_cancel-reason" value="cancel-payment-expired">
<input type="hidden" readonly="" name="s-t-256-256_signature-one" value="
46D30C64DF91453F2B026222DDFDB78425B1FDFC7636F355D881674DCABBF95EDE2100A95971AB823C9B52CFADB595895C8818664B9E4BA2
C2F958B61C19EB283DCB4CC7EF0C8D91B93B0A5D3E5D95B1C10FF6F5D37DC134B3E215EEE6974DFF7AD7010C24C731BBC3863BD3C3B57C4A
104D5DEB46398A834AC1073624D3075A">
<input type="hidden" readonly="" name="s-t-256-256_signature-two" value="
5B498C3BAB60351A03CF5DF90AEE441F85E3F64EC6E091207A7FC9C023341F8F8D2D18D39008516F54FBC7DC78DA65D323AD463F74E82081
D5676762C83B903E9499FC8758806D5061A2D2A5423D585AE8FE6914C5AD442F2CA9951264748E039D7B5C8C41DAAEB5504F0275FB074EC9
E128F5EA90DA946404AF1F77D70594CE">
<input class="backward-button" type="submit" name="s-t-1-40_shop-order__phase" value="Takaisin tilaussivulle">
</div>
</form>
```

Payment Cancel Result Post Response

On successful processing of the post shop system will respond with HTTP status 200 OK. Any other response code indicates availability problem in the shop system.

Usage

Service Agreement

Service agreement is required for using and testing Payment 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 the customer via Verifone TCS Client reporting service.

Implementation

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 integration kit.

The password for demo-merchant-agreement.p12 is 'password' (without quotes).

Customer test environment is available in the following URL:

Payment Page: <https://epayment.test.point.fi/pw/payment>
Test Shop: <https://epayment.test.point.fi/test-shop/>

Note that test environment is located behind a firewall, and access requires whitelisting of IP addresses testing is to be done from. IP whitelisting isn't required for production environment.

Production

Production environment URLs are:

Node 1: <https://epayment1.point.fi/pw/payment>
Node 2: <https://epayment2.point.fi/pw/payment>

Appendix

PaymentMethod enumeration

| 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. |
| 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 | Deprecated; uses old version of AfterPay API |
| 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 | |
| swedbank-ee | SWEDBANK_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. |