Introduction to Integrators

Introduction to Verifone eCommerce Payment & Server Interface

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1. Introduction

Verifone eCommerce is a payment solution for companies that sell products or services on the Internet and via other online self-service channels (e.g. telephone and mail order). The service includes a comprehensive range of reliable and well-known methods of payment as well as advanced payment management, monitoring and reporting services.

By integrating with Verifone, the merchant will be provided these payment services without any hardware or proprietary software installed on the merchant's premises.

Verifone eCommerce interfaces can be used to invoke payments, deferred payments, recurring payments, subsequent payments and to perform refunds. In addition, the interfaces can be used to list payments related to a certain order and to get payment statuses. Payment cards can be stored for later reuse, and naturally the payment card data can also be removed if the merchant so wishes.

1.1. Integration overview

The communication between the merchant's web shop system and Verifone will be carried out using POST operation over HTTPS. This and use of digital signatures in all messages will ensure the security needed in order to authenticate participating systems and verify message integrity.

Each merchant will be assigned a unique merchant agreement code that will be used in all the requests to identify the merchant. Merchant will sign the messages with his private RSA key and Verifone will do the same for response messages.

Verifone provides two types of integration:

1. Hosted payment pages
2. Direct server-to-server integration

Implementation alternatives:

1. Implementing Hosted payment page and/or Server HTTP interface according to Verifone interface specifications
2. Use of Open Source web shop modules (e.g. Magento or PrestaShop.)

1.2. Hosted payment pages

Verifone provides payment services for merchant in 3 steps that involve the merchant's customer and Verifone as a payment provider:

1. From the checkout page of the merchant's web shop, the merchant must initiate a payment with Verifone. This is done by displaying a HTML form on the checkout page where the target of the form is the Verifone eCommerce payment hosted pages. The form must contain a list of parameters, including the merchant agreement code, order and customer information. By setting the value of a parameter, the merchant has the possibility to just reserve the amount or to reserve + capture it. If just reserved, later, using a server interface request, the merchant will be able to capture the amount based on the transaction number.
2. Verifone will handle the entire card processing of data, including for example Verified by Visa / MasterCard SecureCode and will reply back to the merchant with the appropriate status. If an error occurs or a cancel command was issued, then the non-successful state is returned. If the transaction is successful then a transaction number is returned to the merchant.
3. Based on the status reply from Verifone, the merchant is able to send a "Thank you" or an "Error message" to the customer.

Verifone, and not the merchant, provides the webpage for the customer to enter a credit card number (or other payment method). This will to a large extent put the merchant out of scope from PCI requirements that would be otherwise required.

If wanted, the merchant has the possibility to capture the amount in the same step as the authorization, without having to make any server

interface request.

The merchant has the possibility to just authorize the transaction as a first step and perform capture on the moment of the delivery of the order.

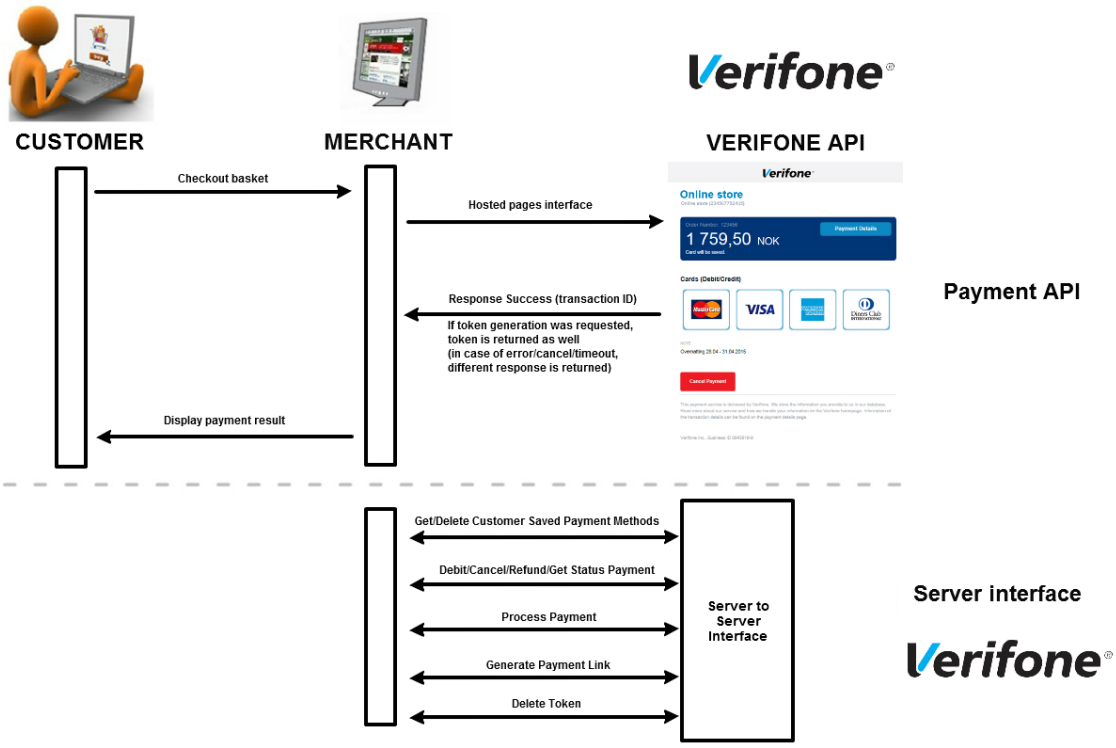
The merchant has the option to perform repeating payment of Card holder, without any Card holder interaction after the initial payment, by activating the recurring payment flag in the original payment request. The payment will be created as a subscription and the merchant will have to provide information about the subscription: name, frequency, and end date.

The merchant has the possibility to activate just specific payment types, according to its needs. It also has the possibility to create anonymous payments in which case, the buyers details will not be send to Verifone.

1.3. Direct server-to-server integration

The merchant has the possibility to integrate with Verifone Server Interface and perform the operations listed below.

1.4. Payment & Server Interface overview



2. Check list for test environment

Please go through the check list below befor initiating the test process.

Note that IP address needs to be handed over to Verifone to be able to get access to cust.test environment.

Check list	Note 1	Check
URL to customer test	Hosted pages:https://epayment.test.point.fi/test-shop/ Server to server:https://epayment.test.point.fi/pw/serverinterface.	👍

Report IP address to Verifone	Must be addressed to Verifone Norway AS to get access to customer test environment	
Test cards	Test cards are shown in section 2.1. Test Cards	
demo-merchant-no-private-key	-----BEGIN RSA PRIVATE KEY----- MIICXAIBAAKBgQC4YCakmNAjPYxfzJpOXRY7wv4mzXRMUEtybe5nimbY7fcYI3HS gc16jXwQg/xYz51AR9YSnZ2ibcGKAiwtFV7ahw6f07VNfg80ShnjMPP6FrY5om4a v+c22LF9c+9EYQ4FOq55hGdsqYYoguitEgsIR0YA9YvPbox3lOGvtLtTiwIDAQAB AoGAY/k++uEhevpUs11uDi/Lbnw88y1UckzXnCSfsOUK/3WJFj2h6lMX5+vv6cSn gECTM9e/7Dgq0XhSCVNEQO3lkA0lCyO+7GQ6lVfPFj1y3LWE5vAh1dtQVVUgYp0Q 6C+fdxbt56DRWy8lzib/ee9BVrhsavwDWSCdGs7d4JJZo4ECQQDdaeMraIlAEy95 7vH4/xlm5pFmv7PNaeWTZZgr1D9tOzGTbo8FARrN5JS56cyYGT2TXp6UlFVQ8n48 92MTEaH1AkEA1S0mLOVCUUxnWJuRky35o3dkE4GjBR4a8TpvYrS+LUjsY43YLhMD XCSJNDUowXEdZDv2i/jSuYIHyc2aUUAvfwJALN6Fc8mGbt60c1BR5vTDUBAPjTPy GwGHzZv7/33OsLMbM9Zm00vLA8h7v0U6+eO7j77QAiohM/tAS9iSUk3zdQJAeCq2 PVKSup9WFmXDfvLIqTPw7uoByi25REgLZ9m45nAYCNp5hSdkmnlh+lMJAVpRFiKT DT4bE0VQPJqwpaKH4wJBANlh+IL5r6yq1RIVULqTx3uBOmTZ5GlMjYfptRUhKm1w wQYAqxm63tlBWoEjPYa9ofiF6ZZEEkfUOX6Q+Ff+aNY= -----END RSA PRIVATE KEY-----	
demo-merchant-no-public-key	-----BEGIN PUBLIC KEY----- MIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQC4YCakmNAjPYxfzJpOXRY7wv4m zXRMUEtybe5nimbY7fcYI3HSgc16jXwQg/xYz51AR9YSnZ2ibcGKAiwtFV7ahw6f 07VNfg80ShnjMPP6FrY5om4av+c22LF9c+9EYQ4FOq55hGdsqYYoguitEgsIR0YA 9YvPbox3lOGvtLtTiwIDAQAB -----END PUBLIC KEY-----	
cust.test agreement code	demo-merchant-no • s-f-1-36_merchant-agreement-code value =demo-merchant-no	

How to define Norwegian language	To define Norwegain language according to Payment interface the following string needs to be changed from: • &locale-f-2-5_payment-locale=fi_FI • &locale-f-2-5_payment-locale=no_NO	

2.1. Test Cards

Testcards	Type	Cardnumber	CVC / CVV + expiration date
Test cards	Amex	378282246310005	123 + todays date + 1 month ahead
	Amex	371449635398431	123 + todays date + 1 month ahead
	American Express Corporate	378734493671000	123 + todays date + 1 month ahead
	Australian BankCard	5610591081018250	123 + todays date + 1 month ahead
	Diners Club	30569309025904	123 + todays date + 1 month ahead
	Diners Club	38520000023237	123 + todays date + 1 month ahead
	Discover	6011111111111117	123 + todays date + 1 month ahead
	Discover	6011000990139424	123 + todays date + 1 month ahead
	JCB	3530111333300000	123 + todays date + 1 month ahead
	JCB	3566002020360505	123 + todays date + 1 month ahead
	MasterCard	5555555555554444	123 + todays date + 1 month ahead
	MasterCard	5105105105105100	123 + todays date + 1 month ahead
	Visa	4111111111111111	123 + todays date + 1 month ahead
	Visa	4012888888881881	123 + todays date + 1 month ahead
	Visa	4222222222222	123 + todays date + 1 month ahead
	Dankort (PBS)	76009244561	123 + todays date + 1 month ahead
	Dankort (PBS)	5019717010103742	123 + todays date + 1 month ahead

3. Check list for production environment

Action point	Note	Check
Received current version of Verifone eCommerce Server Interface?		
Received current version of Verifone eCommerce Payment Interface?		
Received current version of Verifone eCommerce Interface Integration Kit?		
Received correct URL to Verifone eCommerce production environment?	Current URL`s for Payment interface  https://epayment1.point.no/pw/payment https://epayment2.point.no/pw/payment https://epayment3.point.no/pw/payment  Current URL`s for Server interface https://epayment1.point.no/pw/serverinterface https://epayment2.point.no/pw/serverinterface https://epayment3.point.no/pw/serverinterface Verifone has three independent active hosting sites running in parallel. On a normal day all of the servers are active, but sometimes one site may be down for maintenance. To be able to handle this, implement availability check using HTTP GET as described in hosted pages interface reference before the payment redirect form is generated. If the Verifone host does not respond to the availability request, or if it does not respond as expected, please try the next host in the list.	
Are all three hosting sites added?	Current URL`s for Payment interface  https://epayment1.point.no/pw/payment https://epayment2.point.no/pw/payment https://epayment3.point.no/pw/payment  Current URL`s for Server interface https://epayment1.point.no/pw/serverinterface https://epayment2.point.no/pw/serverinterface https://epayment3.point.no/pw/serverinterface	
Generate Public Key	To generate key, use Verifone Interface Integration kit. During the "generate key" process, you will be asked to add Merchant number. This is the uniqe Merchant number the Merchants recieve from the Acquirer Password can be defined by integrator, or the ones integrating on behalf of the Merchant	
Generate Private Key	To generate key, use Verifone Interface Integration kit.	

How to use Verifone Interface Integration kit	These are the steps: • Download the Verifone toolkit • Unzip the toolkit • Change director to the toolkit folder • Execute the toolkit program with command java Verifone-key-pair-generate.jar • The toolkit will generate public private key pair in a folder called “keys” • The “keys” folder will be located in the toolkit folder • Copy the “keys” folder to your web-shop folder	
Handlig of Private Key	Merchants Integrator or merchant (If responsible for integration themselves) must store the private key. Verifone recommends to renew the private key every 2nd year, according to PCI best practice.	
Handling of Public key	Public key kan either be manual added in Merchants Verifone TCS-Client environment. Alternativly this can be handed over to Verifone. Must be added to be able to go live.	
Received Verifone Merchant number?	Verifone will provide the Merchants an uniqe merchants number, which will be handed over to the Merchant when registration process has been carried out.	
Handling of Verifone Public Key	Verifone service department will provide the "Verifone Public Key" directly to the integrator, ore the ones handling the integration. The Verifone Public Key can also be downloaded from Verifone TCS-Client environment. Every Merchant will get a super user access to this system, and will therefor be able to download this themselves	
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. **s-t-5-256_change-server-to-server-success-url** (String with length of 5-256 characters) = URL of the delayed success url for the webshop.	

4 Use of keys

Key type	Are used for
Public payment key	1. Verifiy signature after a payment was made/cancelled 2. Encrypt bank cards (test-environment only, in production a separate key is needed)
Private shop key	1. Create a signature