Verotel FlexPay - Integration Guide

Introduction

With the launch of our new order pages Verotel understands the need for transaction processing to be quick, easy and secure. With our new order pages, we also developed a new system which makes it possible to send customized orders directly to our order page. Verotel FlexPay is the perfect dynamic pricing solution for your:

- camsites
- pay per view sites
- pay per download sites
- shopping cart systems (also for tangible products)
- token / credit purchase systems

The only thing that you have to do is send us the data about your customer's purchase (description of the product, amount etc). We will then process the transaction for you and provide you with all the necessary details after the transaction has been completed.

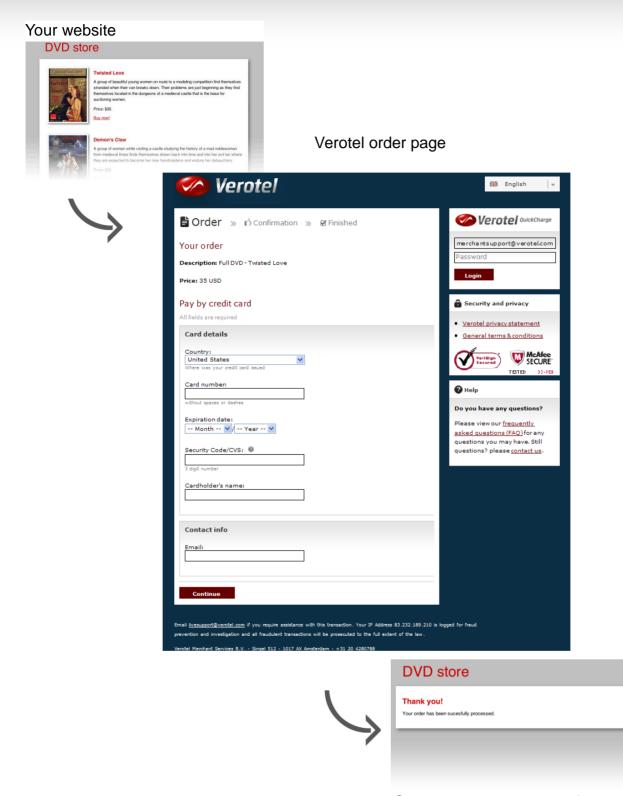
In this document we will describe the features of the FlexPay system and its integration to your merchant's web services. We will explain step by step what is needed to implement the FlexPay system on your website.

Example

The pictures on the next page describe the flow of the screens during the process of a DVD purchase for an online shop.

The process starts on the merchant's website. The buyer clicks on the "buy" button, which will re-direct the buyer to the Verotel Order Page. Your system will send the data about the transaction, such as amount, currency, description of the sale to our system on the background. A full list of the input parameters is shown further down in this document. After the transaction the customer is redirected back to your website.





Success page on your web

Setup Procedure

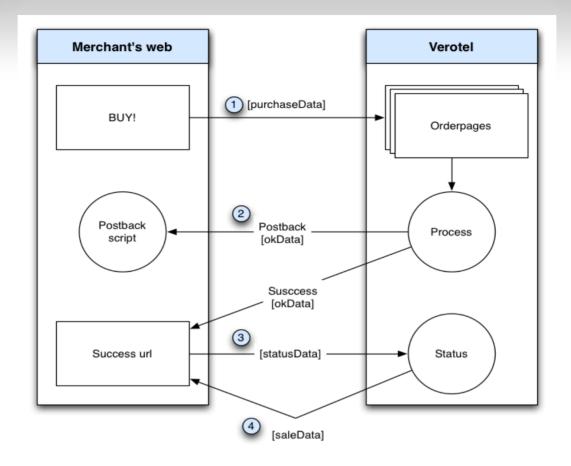
- Please enable "FlexPay" in the Verotel Control Center (my setup > FlexPay options)
- Please add the URLs of your "Postback script" and the "Success page".
- You will also receive your private "signature key", which is a verification code to verify that the postback is sent by your system.
- Please integrate the Verotel FlexPay OrderPage to your website.

Payment Process

We will start here with describing the data communication between your website and system and the communication with the Verotel OrderPage. After that we will continue with a step by step explanation about the parameters that are needed for the implementation of the FlexPay system.

- The first step is to gather the information about the purchase(s) on the website and prepare it for sending this to the Verotel Purchase OrderPage service.
- Your software redirects the buyer to the Verotel OrderPage Purchase service and sends along the data collected in step 1 [Purchase Data]. As part of the input data a signature is sent. The signature is hash string generated from the [Purchase Data] and your signature key.
- The buyer fills out his/her payment details, billing and shipping address (if required by your setup) and submits the transaction for processing.
- If the transaction is successfully processed, the buyer is redirected to your "Success page". As part of the redirection back to your website, the Verotel Purchase OrderPage service sends information about the transaction. This information is signed by the signature hash.
- If you set the "Postback script" URL in the Verotel Control Center, this script is called with the same parameters as in the redirection in the previous paragraph. <u>The response should be "OK".</u>
- Although it is an optional step, we recommend that you cross check the received data with the Verotel Status service. You send the Verotel transaction ID to the Verotel status script in order to verify the status of the transaction. Usually, this extra check is performed before the buyer is informed that the transaction was successfully processed. The Verotel Status service can be used anytime after the transaction took place.





Purchase request data (nr. 1)

The following table describes the [PurchaseData] that has to be sent to the Verotel Purchase OrderPage in order to process a transaction:

GET/POST Input parameter	Description
version	Version of the Verotel Purchase OrderPage protocol. Currently "1"
shopID	numerical ID of the website or shop in Verotel system
priceAmount	amount to be processed. in nnn.nn format
priceCurrency	3 char ISO format code. Must be one of USD, EUR, GBP, NOK, SEK, DKK, CAD or CHF
description	Text to be displayed on the Verotel Purchase OrderPage
referenceID (optional)	Merchant reference identifier (must be unique)
custom1 (optional)	custom text field (Only a-z or 0-9)
custom2 (optional)	custom text field (Only a-z or 0-9)
custom3 (optional)	custom text field (Only a-z or 0-9)
signature	SHA-1 hash generated on data listed above and Merchant's private key string



Signature calculation: The signature is calculated as **sha1_hex**(signatureKey + ":description=" + description + ":priceAmount=" + priceAmount + ":priceCurrency=" + priceCurrency + ":referenceID=" + referenceID + ":shopID=" + shopID + ":version=" + version)

SHA-1 hash is used (hexadecimal output)

Items are joined with colon ":"

The order of the parameters is very **imporant!** The first parameter has to be your signatureKey, followed by the parameters ordered alphabetically by their names. Optional arguments that are used (have value) **must be** contained in the signature calculation. Optional arguments that are not used **must not** be contained in the signature calculation. It is mandatory to convert arguments values into **UTF-8** before computing the signature. Please see the following example:

Example purchase request:

my signatureKey = "abc777X"

parameter	Value
version	1
shopID	60678
priceAmount	51.20
priceCurrency	EUR
description	some description of product
referenceID	

sha1_hex("abc777X:description=some description of
product:priceAmount=51.20:priceCurrency=EUR:shopID=60678:version=1")
=> 04d87d2718767ea0bef259c436ec63e3cde05be2

redirect URL:

https://secure.verotel.com/order/purchase?shopID=60678&version=1&priceAmount=51.20 &priceCurrency=EUR&description=some+description+of+product&signature=04d87d2718 767ea0bef259c436ec63e3cde05be2

OK data (nr. 2)

GET parameters in response	Description
shopID	numerical ID of the website or shop in Verotel system
referenceID	Original merchant's reference identifier
saleID	Generated unique identifier of this purchase in Verotel database
priceAmount	amount to be processed. in nnn.nn format
priceCurrency	3 char ISO format code. Must be one of USD, EUR, GBP, NOK, SEK, DKK, CAD or CHF
custom1	custom text field
custom2	custom text field



custom3	custom text field
signature	SHA-1 hash generated on data listed above and Merchant's private key
	string sha1_hex(signatureKey + ":priceAmount=" + priceAmount + ":priceCurrency=" + priceCurrency + ":referenceID=" + referenceID + ":saleID=" + saleID + ":shopID=" + shopID)

When the update is done, please respond with: "OK"

Purchase status request (nr. 3)

GET parameters in response	Description
version	Version of the Verotel Purchase OrderPage protocol. Currently "1"
shopID	numerical ID of the website or shop in Verotel system
referenceID (optional)	Merchant's reference identifier
saleID (optional)	Verotel saleID identifier (referenceID or saleID must be posted)
signature	SHA-1 hash generated on data listed above and Merchant's private key string sha1_hex(signatureKey + ":referenceID=" + referenceID + ":saleID=" + saleID + ":shopID=" + shopID + ":version=" + version)

Example purchase status request:

my signatureKey = "abc777X"

parameter	Value
version	1
shopID	60678
referenceID	
saleID	13029033

sha1 hex("abc777X:saleID==13029033:shopID=60678:version=1") => 2e057e4aeeb6700dc3712d027f2f5976626cf743 GET request: https://secure.verotel.com/status/purchase?shopID=60678&version=1&saleID=130290 33&signature=2e057e4aeeb6700dc3712d027f2f5976626cf743

Response 404:

If you request the status page without the mandatory parameter **shopID**, the page content will be text/HTML and the response will be 404!



Purchase status response (nr. 4)

This is plain-text response contains lines with parameterName, colon, parameterValue.

Output parameter name	Description
response	search response code:
	FOUND - purchase record found and
	returned
	NOTFOUND - purchase not found
	ERROR - error (see 'error' key)
error	error message (for
	response=ERROR)
saleID	a unique identifier of the transaction in
	Verotel System
shopID	numerical ID of the website or shop in
	Verotel system
priceAmount	amount to be processed. in nnn.nn
	format
priceCurrency	3 char ISO format code. Must be one
	of USD, EUR, GBP, NOK, SEK, DKK,
	CAD or CHF
description	Product description text
referenceID	Merchant reference identifier
paymentMethod	an identifier of payment method that
	was used for the transaction. Can be
	one of following: CC
name	name of the buyer
email	email address of the buyer
tsCreated	Timestamp of purchase creation in
	ISO 8601 format (YYYY-MM-
	DDThh:mm:ss)
saleResult	purchase processing result
	(APPROVED)
billingAddr_fullName	billing address: full name field value
billingAddr_company	billing address: company field value
billingAddr_addressLine1	billing address: 1st line field value
billingAddr_addressLine2	billing address: 2nd line field value
billingAddr_city	billing address: city name
billingAddr_zip:	billing address: zip code / postal code
billingAddr_state	billing address: US state code (ISO
	3166-2)
billingAddr_country	billing address: country ISO code (ISO
	3166-1-alpha-2 code)
shippingAddr_fullName	shipping address: full name field value
shippingAddr_company	shipping address: company field value
shippingAddr_addressLine1	shipping address: 1st line field value
shippingAddr_addressLine2	shipping address: 2nd line field value
shippingAddr_city	shipping address: city name

shippingAddr_zip	shipping address: zip code / postal code
shippingAddr_state	shipping address: US state code (ISO 3166-2)
shippingAddr_country	shipping address: country ISO code (ISO 3166-1-alpha-2 code)

Successful response example:

response: FOUND

shopID: 60678
priceAmount: 51.20
priceCurrency: EUR
description: some description of product
referenceID: AX62362I3
saleID: 13029033
saleResult: APPROVED
name: John Black
email: black@example.com

billingAddr_fullName: John Black billingAddr_company: billingAddr_addressLine1: Longstreet 3782/13 billingAddr_addressLine2: billingAddr_city: London billingAddr_zip: 73811 billingAddr_state: billingAddr_country: GB

shippingAddr_fullName: shippingAddr_company: My Company Name shippingAddr_addressLine1: Lincoln Park shippingAddr_addressLine2: Whitestreet 378 shippingAddr_city: New York shippingAddr_zip: XUL36 shippingAddr_state: US-NY shippingAddr_country: US

Purchase not found response example:

response: NOTFOUND

Error response example:

response: ERROR error: Invalid signature