## **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.

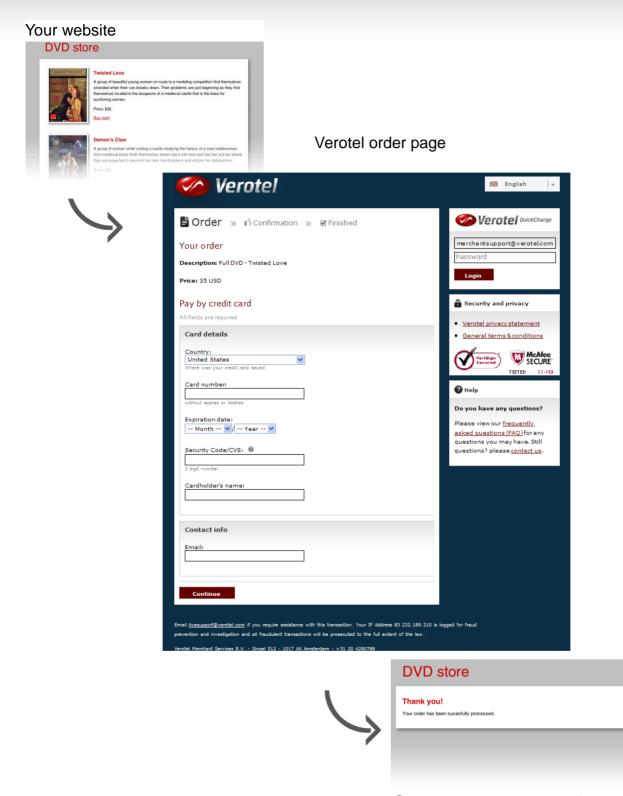
In this document we will describe the features of the FlexPay system and its integration to your merchant's web services. We will explain step by step what is needed to implement the FlexPay system on your website.

### 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**

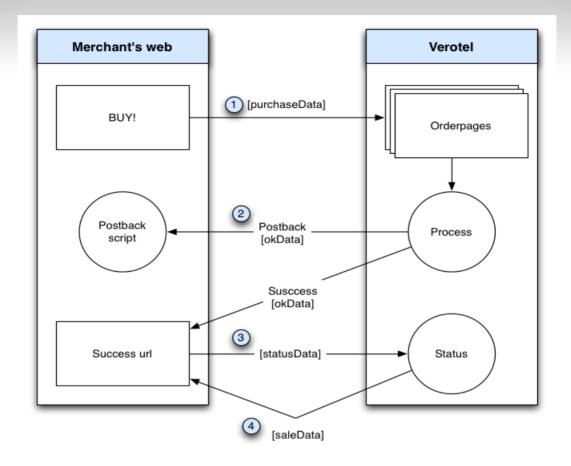
- Please enable "FlexPay" in the Verotel Control Center (my setup > FlexPay options)
- Please add the URLs of your "Postback script" and the "Success page".
- You will also receive your private "signature key", which is a verification code to verify that the postback is sent by your system.
- Please 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<br>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<br>of USD, EUR, GBP, NOK, SEK, DKK,<br>CAD or CHF |
| description              | Text to be displayed on the Verotel<br>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<br>above and Merchant's private key<br>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<br>Verotel system                              |
| referenceID                | Original merchant's reference<br>identifier   |
| saleID                     | Generated unique identifier of this<br>purchase in Verotel database                   |
| priceAmount                | amount to be processed. in nnn.nn format  |
| priceCurrency              | 3 char ISO format code. Must be one<br>of USD, EUR, GBP, NOK, SEK, DKK,<br>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<br>sha1_hex(signatureKey +<br>":priceAmount=" + priceAmount +<br>":priceCurrency=" + priceCurrency +<br>":referenceID=" + referenceID +<br>":saleID=" + saleID + ":shopID=" +<br>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<br>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<br>above and Merchant's private key<br>string<br>sha1_hex(signatureKey +<br>":referenceID=" + referenceID +<br>":saleID=" + saleID + ":shopID=" +<br>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<br>(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