

# Verotel FlexPay

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### 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

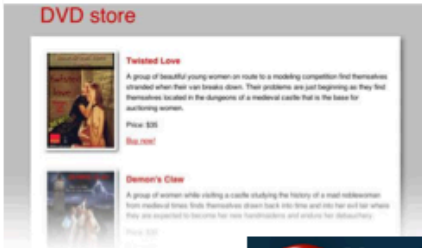
The only thing that you have to do is send us the data about your customer's purchase (description of the product, amount etc). We will then process the transaction for you and provide you with all the necessary details after the transaction has been completed.

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.

## Your website



## Verotel order page

The screenshot shows the Verotel order page. At the top, it says 'Order >> Confirmation >> Finished'. Below that, it says 'Your order' and 'Description: Full DVD - Twisted Love'. The price is 'Price: 35 USD'. The payment method is 'Pay by credit card'. There are several form fields: 'Country' (United States), 'Card number' (without spaces or dashes), 'Expiration date' (Month and Year), 'Security Code/CVS' (3 digit number), and 'Cardholder's name'. There is also a 'Contact info' section with an 'Email' field. On the right side, there is a 'Verotel QuickCharge' login section with a 'merchantsupport@verotel.com' email field and a 'Password' field. Below that, there is a 'Security and privacy' section with links to 'Verotel privacy statement' and 'General terms & conditions'. There are also logos for 'Verotel Verified' and 'McAfee SECURE'. At the bottom, there is a 'Continue' button.



## Success page on your web

## Setup Procedure

- Create a FlexPay website in Control Center :: Setup Websites
- 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 Purchase 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.

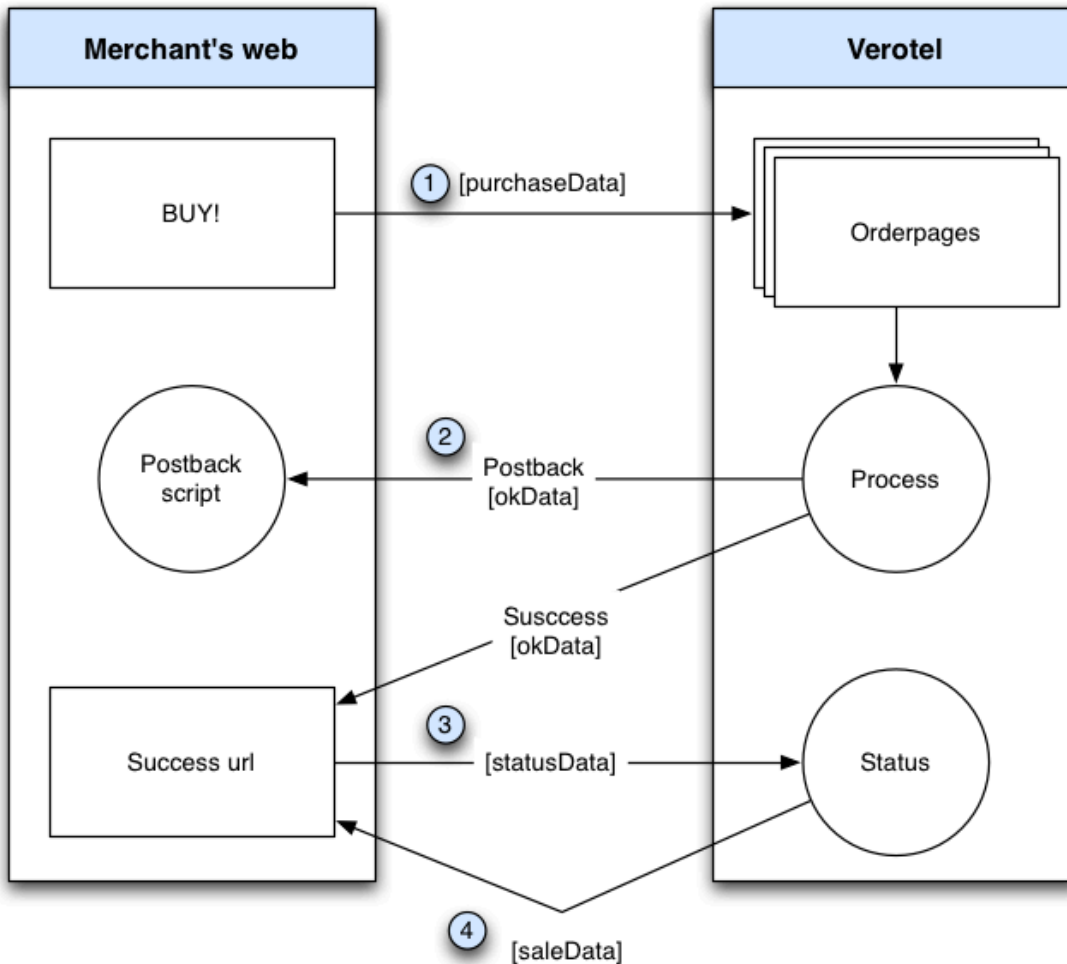
Your software redirects the buyer to the Verotel OrderPage Purchase service and sends along the data collected in step 1 [Purchase Data](#). As part of the input data a signature is sent. The signature is hash string generated from the [Purchase Data](#) and your signature key.

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. **The response should be "OK"**.

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:

### FlexPay v1 (Credit Card only)

GET/POST Input parameter	Description
version	Version of the Verotel Purchase OrderPage protocol: 1
shopID	numerical ID of the website or shop in Verotel system
email	valid email ( excluded from signature calculation)
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, AUD
description	100 chars, Text to be displayed on the Verotel Purchase OrderPage
referenceID (optional)	Merchant reference identifier (must be unique)

custom1 (optional)	custom text field
custom2 (optional)	custom text field
custom3 (optional)	custom text field
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 important! 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:

### FlexPay v2 ( Credit Card and Bitcoin )

GET/POST Input parameter	Description
version	Version of the Verotel Purchase OrderPage protocol: <b>2</b>
shopID	numerical ID of the website or shop in Verotel system
email (optional)	valid email ( excluded from signature calculation)
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, CHF, AUD
paymentMethod (optional)	The payment method for the sale. If the parameter is included its value must not be empty and has to be <b>CC</b> ( Credit Card) or <b>BTC</b> ( Bitcoin). If the parameter is omitted the default payment method is <b>CC</b>
description	Text to be displayed on the Verotel Purchase OrderPage
referenceID (optional)	Merchant reference identifier (must be unique)
custom1 (optional)	custom text field
custom2 (optional)	custom text field
custom3 (optional)	custom text field
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 + ":paymentMethod=" + paymentMethod + ":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 important! 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 (FlexPay v2):

my signatureKey = "abc777X"

parameter	Value
version	2
shopID	88251

priceAmount	51.20
priceCurrency	USD
description	some description of product
paymentMethod	BTC
referenceID	
email	user@email.com

sha1\_hex("abc777X:description=some description of product:paymentMethod=BTC:priceAmount=51.20:priceCurrency=USD:shopID=60678:version=2")  
=>4b8f4ac80ecd20843fd5c12b9d80501acd40913d

**redirect URL:** <https://secure.verotel.com/order/purchase?version=2&shopID=60678&email=user@email.com&description=some description of product&paymentMethod=BTC&priceAmount=51.20&priceCurrency=USD&signature=4b8f4ac80ecd20843fd5c12b9d80501acd40913d>

## 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, CHF, AUD
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" or "2"
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=13029033&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: <b>FOUND</b> - purchase record found and returned <b>NOTFOUND</b> - purchase not found <b>ERROR</b> - 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
paymentMethod	an identifier of payment method that was used for the transaction. Can be one of following: <b>Credit Card</b> or <b>Bitcoin</b>
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, CHF, AUD
description	Product description text
referenceID	Merchant reference identifier
name	name of the buyer
email	email address of the buyer
btc_transaction_status	<b>Only for Bitcoin sales:</b> The status of Bitcoin transaction as set by the postback from Bitcoin processor: <b>paid</b> - the transaction was successfully sent to the processor <b>complete</b> - the transaction was confirmed and processed completely <b>invalid</b> - the transaction could not be processed, it was unsuccessful
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  
paymentMethod: Credit Card  
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