Introduction

There are two ways of integrating with Verotel. The first way works with content that is sold - for a predetermined price - behind a username and password protected area. This members area uses typically a .htpasswd and .htaccess file to control access. The Verotel Remote User Manager allows Verotel to add, modify and delete users to this members area.

This document describes the second way of integrating: Verotel FlexPay. With Verotel FlexPay the Verotel order page is generated based on certain information that is sent to the FlexPay API interface. This information, or parameters, can be very dynamic. This is especially useful when integrating with eCommerce or other systems which use dynamic pricing.

FlexPay version 3 offers two types of orders:

- **purchase**
- **subscription**

The main difference between purchase and subscription is that **subscription** has some duration - a time period - for which it is active while **purchase** is just a simple one-off sale.

Please refer to Appendix A for the **purchase** integration of Verotel FlexPay.

Please refer to Appendix B for the **subscription** integration of Verotel FlexPay.

Verotel can assist merchants with integrating their website. Please consult your Verotel Specialist for more information of such assistance.

Verotel Merchant Services B.V.
Danzigerkade 23D
1013 AP Amsterdam
Netherlands
Email: merchantsupport@verotel.com

APPENDIX A

This appendix provides the description of **v3 FlexPay Purchase API.**

Setup

- Create a FlexPay website in *Control Center > Setup Websites*. From the *Website detail* page you will now have access to several configuration options.

- Configure the "Postback script" and the "Success page" URLs in *FlexPay options* page.

- Select which payment methods are enabled for your purchases. Currently Credit card and Bitcoin payments are supported. At least one payment method has to be enabled.

- Get the FlexPay "**Signature Key**" - this can be found on the same page. This key is used for calculating signatures to ensure integrity of data in requests and postbacks (SEE Calculating signature).

FLEXPAY REQUEST DATA

Shop ID and Signature Key are required to generate FlexPay signature.

Signature Key: DKeweGGsPAhc3bfJJqhbGkKEgz46GQ

- Customize the order page to match your website design

ORDERPAGE DESIGN SETUP

ORDERPAGE STYLE

Background color

without #, e.g. FFFFFF

Please enter a hexadecimal RGB value which is 6 characters long.

Foreground color

without #, e.g. 000000

Please enter a hexadecimal RGB value which is 6 characters long.

ORDERPAGE LOGO

There is currently no logo for this website.

⦿ No changes
◯ Upload new logo

Continue

- Additionally you can require the buyers to enter their billing address by enabling this option in the *Orderpage options* section. You can also restrict sales to one of the predefined territories.

ORDERPAGE OPTIONS

Billing address
If checked, users have to fill in the address during the order.
☐ Require billing address

Sales territory

World

- NEXT: Integrate the Verotel OrderPage to your website.

FlexPay Purchase interactions
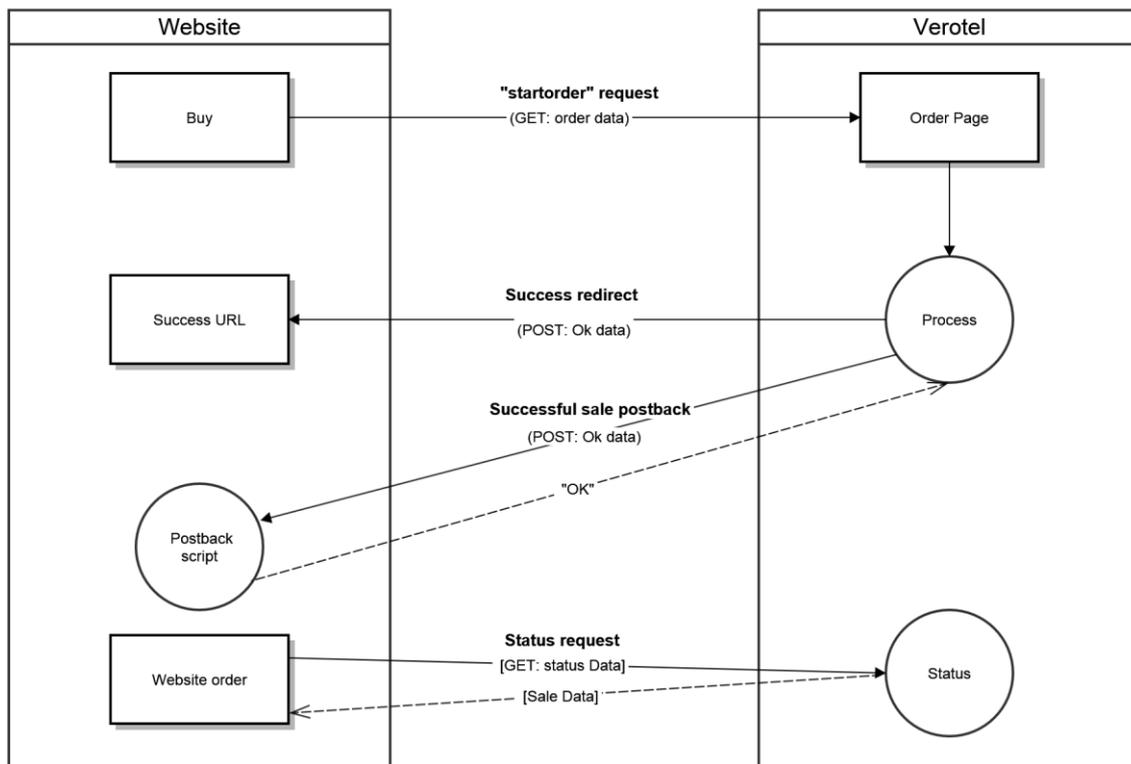
FlexPay purchase is a once-off operation without any active time period. It is an ideal dynamic pricing solution for:

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

FlexPay purchase supports payments by Credit Card and Bitcoin.

A new purchase order starts with a "startorder" request

The "**startorder**" purchase request is used to redirect buyer to the Verotel Order Page in order to process one-off purchase with a given amount, currency and other parameters .

SEE "Constructing purchase "startorder" request"

Once the initial transaction is successfully processed the enduser is redirected to the "success URL"

Verotel

Verotel system also sends a set of data ("OK data") describing the sale along as HTTP parameters.

SEE "Data posted to success URL upon the FlexPay Subscription transaction (OK data)"

Successful initial sale postback ("OK data") is sent in the background

The "**initial**" OK data postback is sent to the nominated "Postback URL" immediately after the sale has been processed.

"OK data" is sent only for successfully approved transactions. The data in the postback provide essential information about the sale. If more information is needed, for example billing address or email address of the buyer, the merchant should query the [status page](#).

Important: The Verotel system expects "**OK**" response. For Credit Card payments - If no such response is received, an automatic refund is initiated.

SEE "'OK DATA' POSTBACK CALL"

Sale status request

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 or the sale Reference ID (if you have provided one in the "**startorder**" request) 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. (SEE "FlexPay status page request")

Technical details

Constructing purchase "startorder" request

FlexPay purchase call is used to redirect buyer to the Verotel Order Page in order to process the purchase sale.

The "**startorder**" request for FlexPay purchase consists of number of parameters passed to **"https://secure.verotel.com/startorder?"** *for Verotel accounts or* **"https://secure.billing.creditcard/startorder?"** *for CardBilling accounts* and is secured by a signature.

Parameter	Type	Optional / Mandatory	Description
version	*number*	mandatory	version of the FlexPay call, "**3**" for this version
shopID	*number*	mandatory	numerical ID of the shop or website in the Verotel system
type	*string*	mandatory	"**purchase**"
priceAmount	*number*	mandatory	amount to be processed in nnn.nn format
priceCurrency	*string*	mandatory	3 char ISO code, must be one of the Sale currencies (**USD, EUR, GBP, AUD, CAD, CHF, DKK, NOK, SEK**) **Note:** only **EUR** is can be used for **DDEU** payment method
description	*string*	mandatory	description of the product. Text is displayed on the order page
referenceID	*string*	optional	Merchant's reference identifier. It must be unique if provided
custom1	*string*	optional	pass-through variable - max 255 printable characters
custom2	*string*	optional	pass-through variable - max 255 printable characters
custom3	*string*	optional	pass-through variable - max 255 printable characters
email	*string*	optional	email of the buyer. If not set, it will be collected on the Order Page **NOTE:** email is **excluded** from signature calculations
paymentMethod	*string*	optional	payment method, "**CC**", "**DDEU**" or "**BTC**" (if not set then buyers can choose from available payment methods) **Note**: **DDEU** is available only in DE, AT, CH, BE, IT, NL, ES and FR
signature	*string*	mandatory	security token to verify the integrity of the postback data (SEE Calculating signature)

Verotel

Example "startorder" request:

https://secure.verotel.com/startorder?custom1=my+custom+code&description=Spring+Special&priceAmount=9.99&priceCurrency=USD&shopID=64233&type=purchase&version=3&signature=b690ae8daca52243c85d3ce4365f137944e58d1d

Since the Payment method was not specified this opens a page which lets the buyer to select from the available payment methods. (DDEU is not offered as the sale currency is USD)
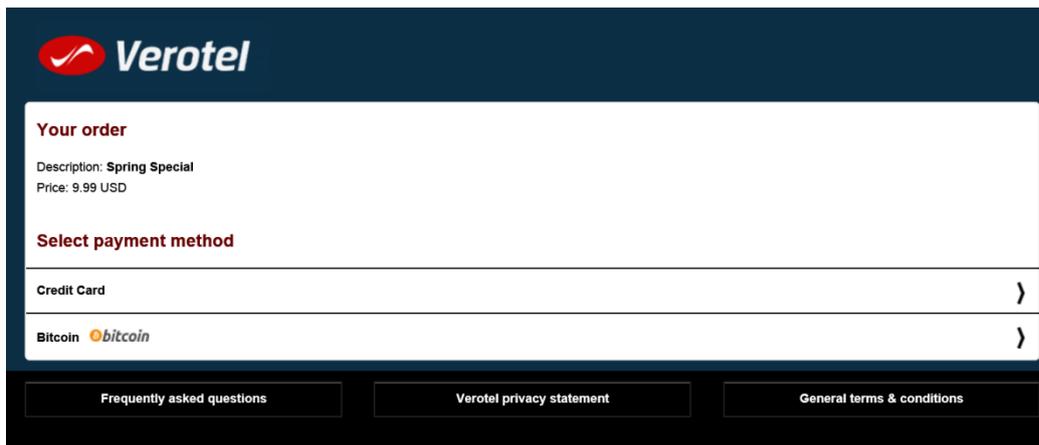
Data posted to success URL upon the FlexPay Subscription transaction (OK data)

After a successful transaction, the buyer is redirected to a nominated "Success URL" and a set of data describing the sale is sent along as HTTP parameters.

Parameter	Type	Description
shopID	*number*	numerical ID of the shop or website in the Verotel system
type	*string*	"**purchase**"
referenceID	*string*	Merchant's reference identifier if provided.
saleID	*number*	identifier of the sale in the Verotel system
priceAmount	*number*	amount to be processed in nnn.nn format
priceCurrency	*string*	3 char ISO code of the Sale currency
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
paymentMethod	*string*	Used payment method, "CC", "DDEU" or "BTC"
signature	*string*	security token to verify the integrity of the postback data (SEE Calculating signature)

'OK data' postback call

The successful sale postback is sent to the nominated "**Postback URL**" immediately after the sale has been processed.

The postback is sent only for successfully approved transactions. The data in the postback provide essential information about the sale. If more information is needed, for example billing address or

email address of the buyer, the merchant should query the status page.

Important: The Verotel system expects "**OK**" response. If no such response is received, an automatic refund is initiated. (Or in case of BTC payment a notification is sent to merchant, support and enduser).

Parameter	Type	Description
shopID	*number*	numerical ID of the shop or website in the Verotel system
type	*string*	"purchase"
referenceID	*string*	merchant reference identifier. It must be unique if provided
saleID	*number*	identifier of the sale in the Verotel system
priceAmount	*number*	amount to be processed in nnn.nn format
priceCurrency	*string*	3 char ISO code of the Sale currency
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
paymentMethod	*string*	payment method, "CC", "DDEU" or "BTC"
signature	*string*	security token to verify the integrity of the postback data (SEE Calculating signature)

FlexPay status page request

A status of a sale made with a FlexPay API can be reviewed by querying the status page. Status page provides complete information about the sale, the buyer, and its status.

Status request URL**: "https:// secure.verotel.com/status/order?**" (*Verotel*) or
"**https://secure.billing.creditcard/status/order?**" (*CardBilling*) followed by parameters in the table bellow:

GET parameters in response	Description
version	Version of the Verotel Purchase OrderPage protocol. Currently "**1**" , "**2**" or "**3**"
shopID	numerical ID of the website or shop in Verotel system
referenceID (optional)	Merchant's reference identifier if provided (referenceID OR saleID must be posted - NOT BOTH)
saleID (optional)	Verotel saleID identifier (referenceID OR saleID must be posted - NOT BOTH)
signature	SHA-1 hash generated on data listed above and Merchant's private key stringsha1_hex(signatureKey + ":referenceID=" + referenceID + ":saleID=" + saleID + ":shopID=" + shopID + ":version=" + version)

Verotel

Example:

https://secure.verotel.com/status/order?saleID=7263519&shopID=64233&version=3&signature=cde e1607c7746ed63d6d8ec54875ed43b07895f7

Flexpay Purchase Status response:

The date returned to the status request is in plain-text and contains lines with parameterName, colon, parameterValue:

Output parameter name	Description
response	**FOUND** - purchase record found and returned **NOTFOUND** - purchase not found **ERROR** - error (see 'error' key)
error	message (for response=ERROR)
saleID	identifier of the transaction in Verotel System
shopID	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: "**Credit Card**", "**Direct Debit EU**" or "**Bitcoin**"
priceAmount	amount to be processed. in nnn.nn formatt
priceCurrency	3 char ISO code of the Sale currency
description	Product description text
referenceID	Merchant reference identifier
name	name of the buyer
email	email address of the buyer
country	selected or detected country ISO code (ISO 3166-1-alpha-2 code)
btc_transaction_status	Only for Bitcoin sales: The status of Bitcoin transaction as set by the postback from Bitcoin processor: "**paid**" - the transaction was successfully sent to the processor "**complete**" - the transaction was confirmed and processed completely "**invalid**" - the transaction could not be processed, it was unsuccessful
createdOn	Timestamp of purchase creation
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)

Verotel

Example response:

```
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

country: CZ


billingAddr_fullName: John Black

billingAddr_company:

billingAddr_addressLine1: Longstreet 3782/13

billingAddr_addressLine2:

billingAddr_city: London

billingAddr_zip: 73811

billingAddr_state:

billingAddr_country: GB
```

Calculating signature

The signature used in FlexPay requests and postbacks is calculated as SHA-1 hash (hexadecimal output) from the request parameters.

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.

The email parameter in "**startorder**" request is not included in the signature calculations.

It is mandatory to convert arguments values into UTF-8 before computing the signature.

e.g.

signature = sha1_hex(signatureKey + ":description=" + description + ":period=" + period + ":priceAmount=" + priceAmount + ":priceCurrency=" + priceCurrency + ":referenceID=" + referenceID + ":shopID=" + shopID + ":subscriptionType=" + subscriptionType + ":type=" + type + ":version=" + version)

Example calculation:

Parameter	Value
(signatureKey)	BddJxtUBkDgFB9kj7Zwguxde4gAqha
description	Super video download
priceAmount	9.99
priceCurrency	USD
custom1	xxyyzz
shopID	64233
type	purchase
version	3

Signature calculation using the values above:

signature = sha1_hex(BddJxtUBkDgFB9kj7Zwguxde4gAqha:custom1=xxyyzz:description=Super video download:priceAmount=9.99:priceCurrency=USD:shopID=64233:type=purchase:version=3) => a043071d3db1d3bbacee04e1eaf07da0d3ab1d17

The FlexPay subscription request then is:
https://secure.verotel.com/startorder?custom1=xxyyzz&description=Super+video+download&priceAmount=9.99&priceCurrency=USD&shopID=64233&type=purchase&version=3&signature=a043071d3db1d3bbacee04e1eaf07da0d3ab1d17

APPENDIX B

This appendix provides the description of **v3 FlexPay Subscription API.**

Setup

- Create a FlexPay website in *Control Center > Setup Websites*. From the *Website detail* page you will now have access to several configuration options.

ADD A NEW WEBSITE

How do you want integrate Verotel into your website? Please, select one of the following options:

Membership - Ideal for websites with paid members' area.

We take care not only of charging your customers but we will also manage their access to your members' area using Verotel Remote User Management.

FlexPay - Ideal for cam sites, websites with pre-paid credit or websites selling tangible products.

FlexPay is really easy and simple to implement. It is perfect for one-time payments. You simply send your customer to our orderpage telling us how much we should charge him. When we successfuly charge the user, your system is notified via Postback Url so you can respond to it (add credit to user, allow file download etc.)

- Configure the "*Postback script*" and the "*Success page*" URLs in *FlexPay options* page. (SEE POSTBACK SUMMARY AND Data posted to success URL upon the FlexPay Subscription transaction (OK data)

FLEXPAY OPTIONS #64233

Payment methods
☑ Credit card
  Available worldwide

☑ Direct Debit EU
  Available only in DE, AT, CH, BE, IT, NL, ES and FR

☑ Bitcoin
  Available worldwide

Postback script URL

http://flexpaypostbacks.verotel.cz/postback.php

Success URL

http://flexpaypostbacks.verotel.cz/success.php

Save

- As subscription FlexPay only supports Credit card payment method, this method needs to be enabled in order for the "**startorder**" request to work.

FLEXPAY OPTIONS #64233

Payment methods
☑ Credit card
  Available worldwide

☑ Direct Debit EU
  Available only in DE, AT, CH, BE, IT, NL, ES and FR

☑ Bitcoin
  Available worldwide

Get the FlexPay "**Signature Key**" - this can be found on the same page. This key is used for calculating signatures to ensure integrity of data in requests and postbacks (SEE

Verotel

- Calculating signature).

FLEXPAY REQUEST DATA

Shop ID and Signature Key are required to generate FlexPay signature.

Signature Key: DKeweGGsPAhc3bfJJqhbGkKEgz46GQ

- Customize the order page to match your website design

ORDERPAGE DESIGN SETUP

ORDERPAGE STYLE

Background color

| without #, e.g. FFFFFF |

Please enter a hexadecimal RGB value which is 6 characters long.

Foreground color

| without #, e.g. 000000 |

Please enter a hexadecimal RGB value which is 6 characters long.

ORDERPAGE LOGO

There is currently no logo for this website.

◉ No changes
◯ Upload new logo

Continue

- Additionally you can require the buyers to enter their billing address by enabling this option in the *Orderpage options* section. You can also restrict sales to one of the predefined territories.

ORDERPAGE OPTIONS

Billing address
If checked, users have to fill in the address during the order.
☐ Require billing address

Sales territory

| World | ⌄ |

- NEXT: Integrate the Verotel OrderPage to your website.

Verotel

FlexPay Subscription interactions
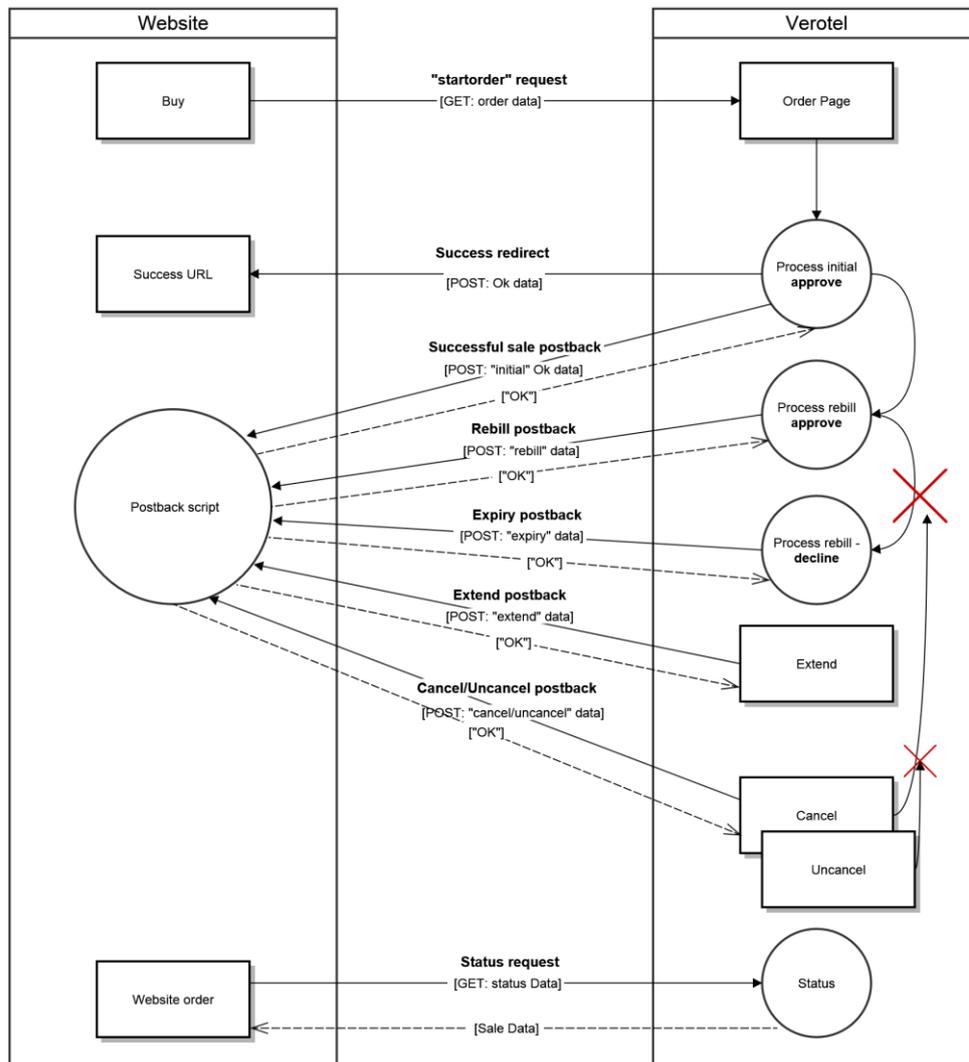
While FlexPay purchase is a once-off operation without any active time period, subscription has a duration for which it is active.

During this period Verotel system sends various postback calls notifying the webmaster's system about the subscription state. If the subscription is recurring, Verotel system manages periodical charges (rebills) of the buyer's credit card.

A new subscription order starts with a subscription "startorder" request

The "**startorder**" subscription request is used to redirect buyer to the Verotel Order Page in order to process subscription with a given amount, duration and currency.

SEE "Constructing purchase "startorder" request"

Once the initial transaction is successfully processed the enduser is redirected to the "success URL"

Verotel system also sends a set of data ("OK data") describing the sale along as HTTP parameters.

SEE "DATA POSTED TO SUCCESS URL UPON THE FLEXPAY SUBSCRIPTION TRANSACTION (OK DATA)"

Successful initial sale postback ("OK data") is sent in the background

The "**initial**" OK data postback is sent to the nominated "Postback URL" immediately after the sale has been processed.

The postback is sent only for successfully approved transactions. The data in the postback provide essential information about the sale. If more information is needed, for example billing address or email address of the buyer, the merchant should query the status page.

Important: The Verotel system expects "**OK**" response otherwise an automated refund will be issued (for Credit Card payments).

SEE "'OK DATA' POSTBACK CALL"

The follow-up actions depend on the subscription type

If the subscription is "one-time"

  a) Subscription will expire after the given period (subscription can also be terminated, by performing refund or in case Verotel receives a chargeback request) and the "**expiry**" postback is sent to inform the webmaster's system about the "end-of-life" event. (SEE "'EXPIRY' POSTBACK CALL")
  b) If the webmaster or Verotel staff extend the subscription from Verotel Control Center then the "**extend**" postback is sent. (SEE "'CANCEL' POSTBACK CALL")

If the subscription is "recurring"

  a) Verotel system will attempt to rebill the enduser again at the end of the current period. If the rebill is successful the website will receive "**rebill**" postback. (SEE "'REBILL' POSTBACK CALL")
  b) The "**expiry**" postback is sent in case the last rebill got declined or the next rebill was cancelled and the subscription ended. (And of course subscription can also be terminated by performing refund or Verotel receives a chargeback request). (SEE "'EXPIRY' POSTBACK CALL")
  c) Enduser, Merchant or Verotel staff can cancel further rebills - in this case the "**cancel**" postback gets sent and the subscription expires at the end of the current active period. (SEE "'CANCEL' POSTBACK CALL")

     The cancel action can be reverted by Verotel staff in which case the "**uncancel**"

Verotel

postback informs the webmaster's website and there will be again a rebill at the end of the current rebill period. (SEE "'UNCANCEL' POSTBACK CALL")

Postback summary

- "**initial**" - Successful sale - informs about a successful initial transaction
- "**extend**" is sent when subscription duration is manually extended either by the webmaster or Verotel support staff
- "**expiry**" is sent when a subscription is terminated and ends.

Recurring subscription specific postbacks

- "**rebill**" informs about a successful rebill in the case of recurring subscription
- "**cancel**" is sent when the recurring subscription rebill is cancelled by enduser, webmaster or Verotel support. This means that although the subscription might still be active, there will be no more rebills in the future and the subscription will expire at the end of the current period.
- "**uncancel**" is sent in case the subscription cancel gets reverted by Verotel support.

Sale status request

Although it is an optional step, we recommend that you cross check the received data with the Verotel Status service. You need send the Verotel transaction ID or the sale Reference ID (if you have provided one in the "**startorder"** request) 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 and it will give you information about the current state of the subscription. (SEE "FLEXPAY STATUS PAGE REQUEST")

Technical details

Constructing subscription "startorder" request

The FlexPay subscription call is used to redirect the buyer to the Verotel Order Page in order to process one-time or recurring payment subscriptions.

The "**startorder**" request for FlexPay purchase consists of number of parameters passed to **"https://secure.verotel.com/startorder?"** *for Verotel accounts or* **"https://secure.billing.creditcard/startorder?"** *for CardBilling accounts* and is secured by a signature.The "**subscriptionType**" parameter specifies which of the two subscription types is to be created:

- **"one-time"** subscriptions - simply expire after the time specified in "**period**" parameter.
- **"recurring"** subscriptions - will attempt to rebill the buyer in order to stay active. The initial period can have different price and duration (set via "**trialPeriod**" and "**trialAmount**" parameters) then the following rebill periods (specified in "**period**" and "**priceAmount**" parameters).

Parameter	Type	Optional / Mandatory	Description
version	*number*	mandatory	version of the flexpay call, "**3**" for this version
shopID	*number*	mandatory	numerical ID of the shop or website in the Verotel system
type	*string*	mandatory	"**subscription**"
subscriptionType	*string*	mandatory	"**one-time**" or "**recurring**" **Note**: DDEU and BTC only support "**one-time**"
priceAmount	*number*	mandatory	amount to be processed in nnn.nn format
priceCurrency	*string*	mandatory	3 char ISO code, must be one of the Sale currencies (**USD, EUR, GBP, AUD, CAD, CHF, DKK, NOK, SEK**) **Note:** only **EUR** is can be used for **DDEU** payment method
period	*string*	mandatory	duration in ISO8601 format, for example: P30D, **minimum is 7 days for "recurring" and 2 days for "on-time"**
trialAmount	*number*	optional **recurring only**	amount to be processed in nnn.nn format for the initial trial period, **minimum is 2 days**
trialPeriod	*string*	optional **recurring only**	duration in ISO8601 format, for example: P30D
name	*string*	optional	name of the subscription. Text is displayed on the order page
referenceID	*string*	optional	Merchant's reference identifier. It must be unique if provided
custom1	*string*	optional	pass-through variable - max 255 printable characters
custom2	*string*	optional	pass-through variable - max 255 printable characters

custom3	*string*	optional	pass-through variable - max 255 printable characters
email	*string*	optional	email of the buyer. If not set, it will be collected on the Order Page **NOTE**: email is **excluded** from signature calculations
paymentMethod	*string*	optional	payment method, "**CC**","**DDEU**" or "**BTC**" (if not set then buyers can choose from available payment methods) **Note**: • **DDEU** is available only in DE, AT, CH, BE, IT, NL, ES and FR and only for "**one-time**" • **BTC** is only available for "**one-time**"
signature	*string*	optional	security token to verify the integrity of the postback data (SEE CALCULATING signature)

Example "startorder" request:

https://secure.verotel.com/startorder?name=1+Month+recurring+Subscription&period=P1M&priceAmount=29.99&priceCurrency=USD&shopID=64233&type=subscription&subscriptionType=recurring&trialAmount=10&trialPeriod=P7D&version=3&signature=a1eaced551d406f0227e32759e743c6b5269f7e3

Opens the Order Page for sale which will be recurring every 1 month and has a 7 day trial period:

Data posted to success URL upon the FlexPay Subscription transaction (OK data)

After a successful transaction, the buyer is redirected to a nominated "Success URL" and a set of data describing the sale is sent along as HTTP parameters.

Verotel

Parameter	Type	Description
shopID	*number*	website id
type	*string*	"**subscription**"
subscriptionType	*string*	"**one-time**" or "**recurring**"
event	*string*	"**initial**"
referenceID	*string*	Merchant's reference identifier if provided.
saleID	*number*	identifier of the sale in the Verotel system
priceAmount	*number*	amount processed in nnn.nn format
priceCurrency	*string*	3 char ISO code of the Sale currency
period	*number*	subscription duration in ISO8601 format
trialAmount	*number*	amount processed in nnn.nn format for the initial trial period
trialPeriod	*string*	duration in ISO8601 format
expiresOn or **nextChargeOn**	*date*	date of next rebill or expiry date [yyyy-mm-dd] e.g "2015-04-24"
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
paymentMethod	*string*	used payment method
signature	*string*	security token to verify the integrity of the postback data (SEE CALCULATING signature)

Verotel

'OK data' postback call

OK data postback is sent to the postback URL immediately after the sale has been processed.

OK data is sent only for successfully approved transactions. The data in the postback provide essential information about the sale. If more information is needed, for example billing address or email address of the buyer, the merchant should query the status page.

Important: The Verotel system expects "**OK**" response otherwise an automated refund will be issued.

Parameter	Type	Description
shopID	number	numerical ID of the shop or website in the Verotel system
type	string	"**subscription**"
subscriptionType	string	"**one-time**" or "**recurring**"
event	string	"**initial**"
referenceID	string	merchant reference identifier. It must be unique if provided
saleID	number	identifier of the sale in the Verotel system
priceAmount	number	amount to be processed in nnn.nn format
priceCurrency	string	3 char ISO code of the Sale currency
period	number	duration in ISO8601 format, for example P30D
trialAmount	number	amount charged for the trial period, nnn.nn format.
trialPeriod	string	duration in ISO8601 format, for example P30D
expiresOn or nextChargeOn	date	date when the cancelled or one-time subscription expires, or date of the next planned rebill [yyyy-mm-dd] e.g "2015-04-24"
custom1	string	pass-through variable - max 255 printable characters
custom2	string	pass-through variable - max 255 printable characters
custom3	string	pass-through variable - max 255 printable characters
paymentMethod	string	payment method used for the payment, "**CC**", "**DDEU**" or "**BTC**"
signature	string	security token to verify the integrity of the postback data (SEE CALCULATING signature)

'Rebill' Postback call

Rebill postback call is sent to the merchant's URL immediately after a successful rebill transaction.

Parameter	Type	Description
shopID	number	numerical ID of the shop or website in the Verotel system
type	string	"**subscription**"
subscriptionType	string	"**recurring**"
event	string	"**rebill**"
referenceID	string	Merchant's reference identifier if provided
saleID	number	identifier of the sale in the Verotel system
amount	number	amount processed in nnn.nn format
currency	string	3 char ISO code of the Sale currency
nextChargeOn	date	date of the next planned rebill [yyyy-mm-dd] e.g "2015-04-24"

Verotel

Parameter	Type	Description
subscriptionPhase	*string*	"**normal**" (or "**discounted**" if cancel discount was accepted - not yet supported)
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
paymentMethod	*string*	payment method used for the payment - "**CC**" (DDEU and BTC only support one-time)
signature	*string*	security token to verify the integrity of the postback data (SEE CALCULATING signature)

'Cancel' Postback call

Cancel postback call is sent to the merchant's URL after the subscription is cancelled by the buyer, merchant, Verotel support or by the system.

Parameter	Type	Description
shopID	*number*	numerical ID of the shop or website in the Verotel system
type	*string*	"**subscription**"
subscriptionType	*string*	"**recurring**"
event	*string*	"**cancel**"
referenceID	*string*	merchant reference identifier if provided
saleID	*number*	identifier of the sale in the Verotel system
expiresOn	*date*	date when the cancelled subscription expires [yyyy-mm-dd] e.g "2015-04-24"
subscriptionPhase	*string*	"**trial**", "**normal**" (or "**discounted**" if cancel discount was accepted - not yet supported)
cancelledBy	*string*	"**user**", "**support**", "**merchant**", or "**system**"
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
signature	*string*	security token to verify the integrity of the postback data (SEE CALCULATING signature)

'Uncancel' Postback call

Occasionally, buyers wish to revert cancellation of their subscription. Uncancel can be done only by Verotel support. The postback call is sent to the merchant's postback URL immediately after the subscription was uncancelled.

Parameter	Type	Description
shopID	*number*	numerical ID of the shop or website in the Verotel system
type	*string*	"**subscription**"
subscriptionType	*string*	"**recurring**"
event	*string*	"**uncancel**"
referenceID	*string*	merchant reference identifier. It must be unique if provided

Verotel

Parameter	Type	Description
saleID	*number*	identifier of the sale in the Verotel system
nextChargeOn	*date*	date of the next planned rebill
subscriptionPhase	*string*	"**trial**", "**normal**" (or "**discounted**" if cancel discount was accepted - not yet supported)
uncancelledBy	*string*	"**support**"
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
signature	*string*	security token to verify the integrity of the postback data (SEE CALCULATING signature)

Verotel

'Extend' Postback call

Merchant or Verotel support may grant extra days to an active subscription. This means that the expiration date or the date of the next planned rebill gets shifted by number of days to the future. The extend postback is then sent to merchant's postback URL to notify the merchant about that the subscription got extended.

Please note that the extend postback is also sent when the merchant has "Rebill-retry" enabled and the first rebill is declined. In such situation the system extends the subscription as if the rebill was approved (sends the extend postback) and rebill retries are scheduled. If any of the retries is successful the subscription continues normally. If the last rebill retry fails then the subscription gets terminated early.

Parameter	Type	Description
shopID	*number*	numerical ID of the shop or website in the Verotel system
type	*string*	"**subscription**"
subscriptionType	*string*	"**one-time**" or "**recurring**"
event	*string*	"**extend**"
referenceID	*string*	merchant reference identifier if provided
saleID	*number*	identifier of the sale in the Verotel system
nextChargeOn or expiresOn	*date*	date when cancelled or one-time subscription expires, or date of the next planned rebill [yyyy-mm-dd] e.g "2015-04-24"
subscriptionPhase	*string*	"**trial**", "**normal**" (or "**discounted**" if cancel discount was accepted - not yet supported)
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters
signature	*string*	security token to verify the integrity of the postback data (SEE CALCULATING signature)

'Expiry' Postback call

Expiry postback call is sent to the merchant's postback URL when the subscription gets terminated. The reason for the termination could be the end of a cancelled subscription, declined rebill transaction, refund, chargeback or termination by Verotel support or the merchant.

Parameter	Type	Description
shopID	*number*	numerical ID of the shop or website in the Verotel system
type	*string*	"**subscription**"
subscriptionType	*string*	"**recurring**" or "**one-time**"
event	*string*	"**expiry**"
referenceID	*string*	Merchant's reference identifier if provided
saleID	*number*	identifier of the sale in the Verotel system
custom1	*string*	pass-through variable - max 255 printable characters
custom2	*string*	pass-through variable - max 255 printable characters
custom3	*string*	pass-through variable - max 255 printable characters

Verotel

Parameter	Type	Description
signature	*string*	security token to verify the integrity of the postback data (SEE CALCULATING signature)

FlexPay status page request

A status of a sale made with a FlexPay API can be reviewed by querying the status page. Status page provides complete information about the sale, the buyer, and its status.

Status request URL**: "https:// secure.verotel.com/status/order?**" (*Verotel*) or
"**https://secure.billing.creditcard/status/order?**" (*CardBilling*) followed by parameters in the table bellow:

GET parameters in response	Description
version	Version of the Verotel Purchase OrderPage protocol. Currently "**1**" , "**2**" or "**3**"
shopID	numerical ID of the website or shop in Verotel system
referenceID (optional)	Merchant's reference identifier if provided (referenceID OR saleID must be posted - NOT BOTH)
saleID (optional)	Verotel saleID identifier (referenceID OR saleID must be posted - NOT BOTH)
signature	SHA-1 hash generated on data listed above and Merchant's private key stringsha1_hex(signatureKey + ":referenceID=" + referenceID + ":saleID=" + saleID + ":shopID=" + shopID + ":version=" + version)

Example:

https://secure.verotel.com/status/order?saleID=7285297&shopID=64233&version=3&signature=c36 189e5c5ec38e4b51416dcacd6d1d5c715d6a9

Flexpay Subscription Status response:

The date returned to the status request is in plain-text and 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)
description	Product description text
error	error message (for response=ERROR)
expired	"**yes**" or "**no**"
saleID	a unique identifier of the transaction in Verotel System
shopID	numerical ID of the website or shop in Verotel system

Verotel

Output parameter name	Description
paymentMethod	an identifier of payment method that was used for the transaction. Currently can be "**Credit Card**", "**Direct Debit EU**" or "**Bitcoin**"
priceAmount	amount to be processed. in nnn.nn format
priceCurrency	3 char ISO code of the Sale currency
period	duration in ISO8601 format, for example: P30D
referenceID	Merchant's reference identifier if provided
subscriptionType	**"recurring"** or "**one-time**"
subscriptionPhase	"**trial**", "**normal**" or "**discounted**"
type	"subscription"
name	name of the buyer
email	email address of the buyer
country	selected or detected country ISO code (ISO 3166-1-alpha-2 code)
expiresOn or nextChargeOn	date when the cancelled or one-time subscription expires, or date of the next planned rebill [dd-mmm-yyyy hh:mm:ss] e.g. *16-APR-2014 09:20:23*
cancelled	**yes/no**
cancelledOn	date of cancel [dd-mmm-yyyy hh:mm:ss] e.g. *16-APR-2014 09:20:23*
cancelledBy	**"user**, "**support**", "**merchant**" or "**system**"
discountPrice	if cancel discount was accepted, the price after discount
createdOn	Timestamp of sale creation (dd-mmm-yyyy hh:mm:ss) e.g. *16-APR-2014 09:20:23*
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)

Example response:

```
response: FOUND


shopID: 64233

paymentMethod: Credit Card

priceAmount: 51.20

priceCurrency: EUR
```

Verotel

```
period: P1M

trialAmount: 2.95

trialPeriod: P3D


type:  subscription

subscriptionType: recurring

description: some description of product

referenceID: AX62362I3

saleID: 13029033

createdOn: 27-DEC-2014 03:22:12

saleResult: APPROVED

name: John Black

email: black@example.com

country: GB


subscriptionPhase: trial

expired: no

expiresOn: 30-DEC-2015

cancelled: yes

cancelledOn: 28-DEC-2014

cancelledBy: user

discountPrice: 3.95


billingAddr_fullName: John Black

billingAddr_company:
```

```
billingAddr_addressLine1: Longstreet 3782/13

billingAddr_addressLine2:

billingAddr_city: London

billingAddr_zip: 73811

billingAddr_state:

billingAddr_country: GB
```

Calculating signature

The signature used in FlexPay requests and postbacks is calculated as SHA-1 hash (hexadecimal output) from the request parameters.

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.

The email parameter in "**startorder**" request is not included in the signature calculations.

It is mandatory to convert arguments values into UTF-8 before computing the signature.

e.g.

signature = sha1_hex(signatureKey + ":name=" + name + ":period=" + period + ":priceAmount=" + priceAmount + ":priceCurrency=" + priceCurrency + ":referenceID=" + referenceID + ":shopID=" + shopID + ":subscriptionType=" + subscriptionType + ":type=" + type + ":version=" + version)

Example calculation:

Parameter	Value
(signatureKey)	BddJxtUBkDgFB9kj7Zwguxde4gAqha
name	1 Month Subscription
period	P1M
priceAmount	9.99
priceCurrency	USD
custom1	xxyyzz
subscriptionType	one-time
type	recurring
version	3

Verotel

signature = sha1_hex *(BddJxtUBkDgFB9kj7Zwguxde4gAqha:custom1=xxyyzz:name=1 Month Subscription:period=P1M:priceAmount=9.99:priceCurrency=USD:shopID=64233:subscriptionType=one-time:type=subscription:version=3) => 721858402a06cf4315feef7e6ee163c05b4664d1*

The FlexPay subscription request then is:

https://secure.verotel.com/startorder?custom1=xxyyzz&name=1+Month+Subscription&period=P1M &priceAmount=9.99&priceCurrency=USD&shopID=64233&subscriptionType=one-time&type=subscription&version=3&signature=721858402a06cf4315feef7e6ee163c05b4664d1

Verotel