# FlexPay Subscription API v3.4

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|---|---|
| **Related documents:** | FlexPay Purchase v3.4 API |

## Document History

| No. | Description | Changed by: | Date: |
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| 1.0 | Document created | Verotel IT Services | 14/4/2015 |
| 1.0.1 | Corrections in text | Verotel IT Services | 11/5/2015 |
| 1.0.2 | Added notes on Rebill retry and minimum periods | Verotel IT Services | 06/06/2015 |
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| 1.7.2 | Added note on Cardbilling single currency | Verotel IT Services | 22/11/2016 |
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## Introduction

FlexPay API allows dynamically set parameters for Verotel Order Pages. This is especially useful when integrating with eCommerce or other systems which use dynamic pricing.

FlexPay 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.

The subscriptions can be of two types:

- **"one-time"** subscriptions - simply expire after a given time.
- **"recurring"** subscriptions - Verotel will attempt to rebill the buyer periodically until the subscription is cancelled or terminated. Recurring subscriptions can have a trial period.

### New in v3.4

- In version **3.4** it is now possible to switch between subscriptions using the **upgrade** call. Please refer to FlexPay Upgrade documentation for details.
- A new "**cancel-subscription**" action is available. You can now generate cancel links for your subscribers.
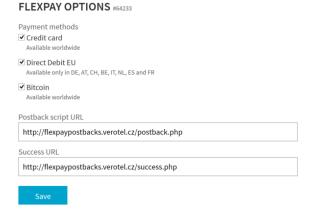
## Setup

- 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 successfully 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.

**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 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
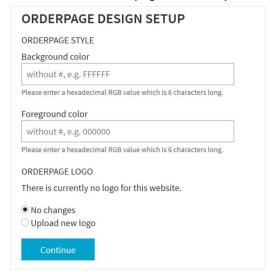
☑ Bitcoin
  Available worldwide

- 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 Calculation signature)
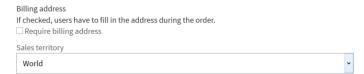
**FLEXPAY REQUEST DATA**

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

Signature Key:  DKeweGGsPAhc3bfJJqhbGkKEgz46GQ

Verotel

- 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 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 to process subscription with a given amount, duration and currency.

(See Constructing Subscription Startorder request)

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

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

**NOTE:** The data is **not** sent to URL defined in **backURL**, the buyer is only redirected there. The **backURL** is a dynamic parameter so it can by itself contain enough data to identify the sale.

(See Data posted to Success URL on success)

### 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)

### Existing active subscriptions can be upgraded

As of version 3.4 FlexPay also supports "**subscriptionupgrade**" type.

FlexPay subscription upgrade allows switching from currently active subscription to a new one with new pricing and rebill period.

Please refer to FlexPay upgrade documentation for more details about this feature.

### 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 Extend 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**" 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)
d) If Merchant or Verotel support changes the next rebill price the Downgrade postback call is sent. (See Downgrade 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.
- "**credit**" is sent when refund transaction is processed and subscription is terminated and ends.
- "**chargeback**" is sent when chargeback transaction is processed and subscription is terminated.
- "**upgrade**" is sent when subscription is successfully upgraded to a new one

**Please note:** "**Chargeback**" and "**Credit**" postbacks are not sent by default for websites created prior 15th September 2016.

#### Recurring subscription specific postbacks

- "**rebill**" informs about a successful rebill in the case of recurring subscription
- "**downgrade**" informs about a successful change of next rebill price 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 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 any time after the transaction took place and it will give you information about the current state of the subscription. (FlexPay status request)

### Cancel subscription request

To allow your subscribers to cancel their subscriptions on your website you can now generate a subscription specific cancel URL. (See Cancel subscription request)

## Technical details

### Constructing subscription "startorder" request

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

The "**startorder**" request for FlexPay purchase consists of number of parameters passed to the startorder URL and secured by a signature.

The URLs for different account brands:

| Brand | startorder URL |
|---|---|
| **Verotel** | *https://secure.verotel.com/startorder?* |
| **CardBilling** | *https://secure.billing.creditcard/startorder?* |
| **FreenomPay** | *https://secure.freenompay.com/startorder?* |

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 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 |
|---|---|---|---|
| backURL | *string* | optional | URL for redirect after successful transaction. **NOTE:** |

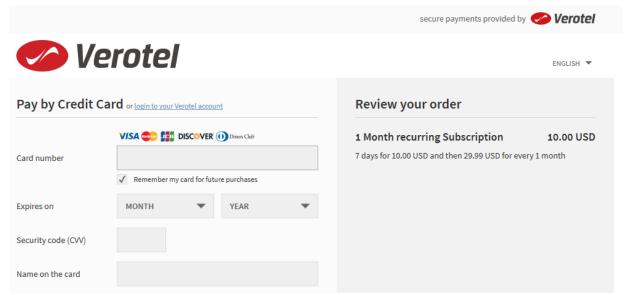| | | | Max 255 characters<br>Supported from version **3.2** |
|---|---|---|---|
| **custom1** | *string* | optional | pass-through variable - max 255 printable characters |
| **custom2** | *string* | optional | pass-through variable - max 255 printable characters |
| **custom3** | *string* | optional | pass-through variable - max 255 printable characters |
| **declineURL** | *string* | optional | URL for redirect after declined transaction.<br>**NOTE:**<br>Max 255 characters<br>Supported from version **3.3** |
| **email** | *string* | optional | email of the buyer. If not set, it will be collected on the Order Page<br>**NOTE**: email is **excluded** from signature calculations |
| **name** | *string* | optional | name of the subscription. Text is displayed on the order page - max 100 printable characters |
| **paymentMethod** | *string* | optional | payment method, "**CC**","**DDEU**" or "**BTC**"<br>(if not set then buyers can choose from available payment methods)<br>**Note**:<br>• **DDEU** is available only in DE, AT, CH, BE, IT, NL, ES and FR and only for "**one-time**"<br>• **BTC** is only available for "**one-time**" |
| **period** | *string* | mandatory | duration in ISO8601 format, for example: P30D, **minimum is 7 days for "recurring" and 2 days for "on-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**), **Cardbilling** customers can only use single sale currency they have selected for their account.<br>**Note:** only **EUR** is can be used for **DDEU** payment method. |
| **referenceID** | *string* | optional | Merchant's reference identifier. It must be unique if provided - max 100 printable characters |
| **shopID** | *number* | mandatory | numerical ID of the shop or website in the Verotel system |
| **signature** | *string* | mandatory | security token to verify the integrity of the posted data ([See Calculating signature](#)) |
| **subscriptionType** | *string* | mandatory | "**one-time**" or "**recurring**"<br>**Note**: DDEU and BTC only support "**one-time**" |
| **trialAmount** | *number* | optional<br>**recurring only** | amount to be processed in nnn.nn format for the initial trial period, **minimum is 2 days** |
| **trialPeriod** | *string* | optional<br>**recurring only** | duration in ISO8601 format, for example: P30D |
| **type** | *string* | mandatory | "**subscription**" |
| **version** | *number* | mandatory | version of the FlexPay call, "**3.4**" for this |

| version |
|---|

**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=3.4&signature=a1eaced551d406f0227e 32759e743c6b5269f7e3

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" parameter and a set of data describing the sale is sent along as HTTP parameters.

**NOTE:** The data is not sent to URL defined in **backURL**, the buyer is only redirected there. The **backURL** is a dynamic parameter so it can by itself contain enough data to identify the sale.

| 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. - max 100 printable characters |
| **saleID** | *number* | identifier of the sale in the Verotel system |
| **priceAmount** | *number* | amount to be processed (max 2 decimal places, stripped zeroes) |
| **priceCurrency** | *string* | 3 char ISO code of the Sale currency |
| **period** | *number* | subscription duration in ISO8601 format |
| **trialAmount** | *number* | amount to be processed (max 2 decimal places, stripped zeroes) for the initial trial period |
| **trialPeriod** | *string* | duration in ISO8601 format |
| **expiresOn** or | *date* | date of next rebill or expiry date [yyyy-mm-dd] |

| Parameter | Type | Description |
|---|---|---|
| nextChargeOn | | 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 (See Calculating signature) |

### '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 - max 100 printable characters |
| saleID | *number* | identifier of the sale in the Verotel system |
| priceAmount | *number* | amount to be processed (max 2 decimal places, stripped zeroes) |
| priceCurrency | *string* | 3 char ISO code of the Sale currency |
| period | *number* | duration in ISO8601 format, for example P30D |
| trialAmount | *number* | amount to be processed (max 2 decimal places, stripped zeroes) |
| 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) |

### 'Downgrade' Postback call

Rebill postback call is sent to the merchant's URL immediately after the next rebill price is changed by merchant or Verotel Support.

| Parameter | Type | Description |
|---|---|---|
| shopID | *number* | numerical ID of the shop or website in the Verotel system |
| type | *string* | "**subscription**" |
| subscriptionType | *string* | "**recurring**" |
| event | *string* | "**downgrade**" |

| Parameter | Type | Description |
|---|---|---|
| referenceID | string | Merchant's reference identifier if provided - max 100 printable characters |
| saleID | number | identifier of the sale in the Verotel system |
| amount | number | amount to be processed (max 2 decimal places, stripped zeroes) |
| currency | string | 3 char ISO code of the Sale currency |
| 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 |
| 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 - max 100 printable characters |
| saleID | number | identifier of the sale in the Verotel system |
| amount | number | amount to be processed (max 2 decimal places, stripped zeroes) |
| 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" |
| 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 - max 100 printable |

| Parameter | Type | Description |
|---|---|---|
| | | characters |
| **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 - max 100 printable characters |
| **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) |

### '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 - max 100 printable characters |
| 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 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 - max 100 printable characters |
| 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 |
| signature | *string* | security token to verify the integrity of the postback data ([See Calculating signature](#)) |

## 'Credit' Postback call

Credit postback call is sent to the merchant's postback URL when any transaction of the subscription is credited by merchant, Verotel support or by system (e.g. when an automated refund is performed). The refund also terminates subscription.

**Please note: "Credit" postbacks are not sent by default for websites created prior 15th September 2016**. Expiry postback is sent instead when transaction is credited. Credit postback can be enabled by request for these websites.

| Parameter | Type | Description |
|---|---|---|
| priceAmount | *number* | Amount of refunded transaction |

| | | |
|---|---|---|
| priceCurrency | *string* | Refunded transaction 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 |
| **event** | *const "credit"* | Type of event "**credit**" |
| **parentID** | *number* | Id of the original transaction that is refunded |
| **saleID** | *number* | Verotel sale id |
| **transactionID** | *number* | Id of the refund transaction |
| **shopID** | *number* | Verotel website id |
| **signature** | *string* | security token to verify the integrity of the postback data (See Calculating signature) |

**Note:** credit transaction should terminate user access immediately.

### 'Chargeback' Postback call

Chargeback postback call is sent to the merchant's postback URL when any transaction of the subscription is chargebacked. This also terminates subscription and blacklists the buyer.

**Please note: "Chargeback" postbacks are not sent by default for websites created prior 15th September 2016**. Expiry postback is sent instead when transaction is chargebacked. Chargeback postback can be enabled by request for these websites.

| Parameter | Type | Description |
|---|---|---|
| **priceAmount** | *number* | Amount of refunded transaction |
| **priceCurrency** | *string* | Refunded transaction 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 |
| **event** | *const " chargeback "* | Type of event "**chargeback**" |
| **parentID** | *number* | Id of the original transaction that is refunded |
| **saleID** | *number* | Verotel sale id |
| **transactionID** | *number* | Id of the refund transaction |
| **shopID** | *number* | Verotel website id |
| **signature** | *string* | security token to verify the integrity of the postback data (See Calculating signature) |

**Note:** chargeback transaction should terminate user access immediately.

### 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:

| Brand | Status URL |
|-------|------------|
| Verotel | *https://secure.verotel.com/status/order?* |
| CardBilling | *https://secure.billing.creditcard/status/order?* |
| FreenomPay | *https://secure.freenompay.com/status/order?* |

followed by parameters in the table below:

| Parameter | Description |
|-----------|-------------|
| **version** | Version of the Verotel Purchase OrderPage protocol: "3.4" |
| **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?version=3.4&shopID=64233&saleID=7285297&signature=daaa46972dfce10dd68c8230d6c64259e60d60db*

### 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:<br>"**FOUND**" - purchase record found and returned<br>"**NOTFOUND**" - purchase not found<br>"**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 |
| **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 (max 2 decimal places, stripped zeroes) |

| Output parameter name | Description |
| --- | --- |
| 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* |
| nextChargeAmount | The price of next rebill |
| 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
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
```
"

### Cancel-subscription request

To allow your subscribers to cancel their subscriptions on your website you can now generate a subscription specific cancel URL.

Cancel-subscription request URL**:**

| Brand | Status URL |
|---|---|
| Verotel | *https://secure.verotel.com/cancel-subscription?* |
| CardBilling | *https://secure.billing.creditcard/cancel-subscription?* |
| FreenomPay | *https://secure.freenompay.com/cancel-subscription?* |

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

| Parameter | Description |
|---|---|
| **version** | Version of the Verotel Purchase OrderPage protocol: "**3.4**" |
| **shopID** | numerical ID of the website or shop in Verotel system |
| **saleID** | 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 + ":saleID=" + saleID + ":shopID=" + shopID + ":version=" + version) |

**Example**:

*https://secure.verotel.com//cancel-subscription?saleID=9519961&shopID=88251&version=3.4&signature=0aeb4dad680e5968d9e6b840fef8f8faa262538a*

## 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 | 3.4 |

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=3.4) => 9a873da77a18719bf623bf67e75400373f6ca85e*

**The FlexPay subscription request then is:**

*https://secure.verotel.com/startorder?custom1=xxyyzz&custom2=12345&name=1+Month+Subscription&paymentMethod=CC&period=P1M&priceAmount=9.99&priceCurrency=EUR&referenceID=345245245524&shopID=64233&subscriptionType=recurring&trialAmount=5.00&trialPeriod=P3D&type=subscription&version=3.4&signature= 9a873da77a18719bf623bf67e75400373f6ca85e*

## Verotel IP addresses used postbacks

The latest list of Verotel IPs is available here: http://www.verotel.com/static/nats/proxy-ips.txt

195.20.32.202
217.115.203.18
89.187.131.244

## Testing postbacks

For developers there is a tool available in the Control Center for generating postback calls. The "Test FlexPay postbacks" tool is available on FlexPay website detail:

**FLEXPAY**

For processing with FlexPay you only need to generate the "Buy now" link. However you should setup your postback urls in the FlexPay options for better reliability.

[ Generate BUY NOW link ] [ Test FlexPay postbacks ]

This tool allows developers to define Purchase Ok Data postback parameters, send the postback to the website postback URL and view the postback result.

## TEST FLEXPAY POSTBACKS

### PURCHASE POSTBACKS

- OK Data

### SUSCRIPTION POSTBACKS

- OK Data
- Rebill
- Cancel
- Uncancel
- Extend
- Expiry
- Downgrade
- Upgrade