

# FlexPay Subscription API v3.4

Author:	Verotel IT Services
Related documents:	FlexPay Purchase v3.4 API

# Document History \_\_\_\_\_

No.	Description	Changed by:	Date:
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
1.0.3	Added information for CardBilling	Verotel IT Services	11/06/2015
1.1	Added DDEU payment method	Verotel IT Services	15/10/2015
1.1.1	Added BTC for one-time subscriptions	Verotel IT Services	18/01/2016
1.2	Listed Verotel IPs, Testing postbacks, priceAmount and trialAmount description in postbacks	Verotel IT Services	10/5/2016
1.3	Version updated to 3.2, added backURL	Verotel IT Services	17/03/2016
1.4	Added Credit and Chargeback postback calls	Verotel IT Services	22/08/2016
1.5	Added "declineURL" parameter, latest version updated to <b>3.3</b>	Verotel IT Services	05/09/2016
1.6	Added downgrade postback	Verotel IT Services	20/09/2016
1.7	version updated to <b>3.4</b> , added upgrade call and postback, added subscription cancel call.	Verotel IT Services	07/10/2016

# **Table of contents**

introduction	3
New in v3.4	3
Setup	3
FlexPay Subscription interactions	5
A new subscription order starts with a subscription "startorder" request	5
Successful initial sale postback ("OK data") is sent in the background	6
Existing active subscriptions can be upgraded	6
The follow-up actions depend on the subscription type	6
Postback summary	8
Sale status request	8
Cancel request	8





T	Fechnical details	9
	Constructing subscription "startorder" request	9
	Data posted to success URL upon the FlexPay Subscription transaction (OK data)	11
	'OK data' postback call	13
	'Downgrade' Postback call	14
	'Rebill' Postback call	15
	'Cancel' Postback call	17
	'Uncancel' Postback call	18
	'Extend' Postback call	19
	'Expiry' Postback call	20
	'Credit' Postback call	21
	'Chargeback' Postback call	23
	FlexPay status page request	25
	FlexPay Subscription Status response:	25
	Cancel-subscription request	27
	Calculating signature	28
	Verotel IP addresses used postbacks	28
	Testing postbacks	29





#### 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:

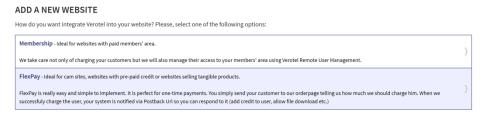
- "one-time" subscriptions simply expire after a given time.
- "recurring" subscriptions Verotel will attempt to rebill the buyer periodically until the subscription is cancelled or terminated. Recurring subscriptions can have a trial period.

#### 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.

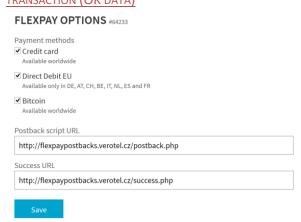
# Setup

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



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)







• 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 (<u>SEE</u> "
- <u>Cancel-subscription</u> request

In order 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=0aeb4dad680e5968d9e6b840fe f8f8faa262538a

• Calculating signature).

FLEXPAY REQUEST DATA

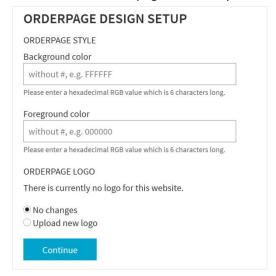
Shop ID and Signature Key are required to generate FlexPay signature.

Signature Key: DKeweGGsPAhc3bfJJqhbGkKEgz46GQ





Customize the order page to match your website design



 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 in order 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 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 <u>query the status page</u>.

**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 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 "'CANCEL' POSTBACK CALL")

#### If the subscription is "recurring"

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'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"	
referenceID	string	Merchant's reference identifier if provided	
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	





	_			
Parameter	Туре	Description		
		yet supported)		
custom1	string 		variable - max 255 printable	
custom2	string 		variable - max 255 printable	
custom3	string	· ·	variable - max 255 printable	
signature	string	security token to verify the integrity of the postback data (SEE "		e postback data ( <u>SEE "</u>
		CANCEL-SUBSCRIPTION request		al thair subscriptions on
		In order to allow your subscribers to cancel their subscriptions of your website you can now generate a subscription specific cancel.		
		URL.	you can now generate a suc	scription specific caricer
			ription request URL:	
		Brand	TPERSON FEMALES	Status URL
		Verotel		https://secure.verotel.co
		CardBilling		https://secure.billing.cre
		FreenomPay		https://secure.freenomp
		contains lines	rned to the status request is with parameterName, colo	·
		Parameter	Description	
		version	Version of the Verotel Pur protocol: "3.4"	rchase OrderPage
		shopID	numerical ID of the websi system	te or shop in Verotel
		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(signature	Key + ":saleID=" + saleID
		+ ":shopID=" + shopID +		
			·	
			":version=" + version)	
		Example:	·	
		Example: https://secure	·	
		https://secure	":version=" + version)	251&version=3.4&signat
		https://secure subscription?s	":version=" + version)  e.verotel.com//cancel-	_

- a) '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.
- "<u>credit</u>" is sent when refund transaction is processed and subscription is terminated and ends
- "<a href="mailto:chargeback">chargeback</a>" is sent when chargeback transaction is processed and subscription is terminated.
- "upgrade" is sent when subscription is successfully upgraded to a new one

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 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 any time after the transaction took place and it will give you information about the current state of the subscription. (SEE "FLEXPAY STATUS REQUEST")

#### **Cancel subscription request**

In order 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 in order 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 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	Туре	Optional / Mandatory	Description
backURL	string	optional	URL for redirect after successful transaction.  NOTE:  Max 255 characters  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.  NOTE:  Max 255 characters  Supported from version 3.3
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
name	string	optional	name of the subscription. Text is displayed on the order page
paymentMethod	string	optional	payment method, "CC", "DDEU" or "BTC" (if not set then buyers can choose from available payment methods) Note:





			NL, ES • BTC is	is available only in DE, AT, C and FR and only for " <b>one-ti</b> only available for " <b>one-time</b>	me" e"
period	string	mandatory		n ISO8601 format, for examp is 7 days for "recurring" and	•
priceAmount	number	mandatory		be processed in nnn.nn forr	
priceCurrency	string	mandatory	currencies <b>NOK, SEK</b> )	code, must be one of the Sa (USD, EUR, GBP, AUD, CAD, EUR is can be used for DDE	, CHF, DKK,
referenceID	string	optional	Merchant' if provided	s reference identifier. It mus I	t be unique
shopID	number	mandatory	numerical system	ID of the shop or website in	the Verotel
signature	string	mandatory	data (SEE " CANCEL-SUE In order to subscription generate a	SECRIPTION request allow your subscribers to case on your website you can a subscription request URL:	ancel their now
			Brand		Status
			Verotel		https://
			CardBillir	ng	https://
			Freenom	Pay	https://
			plain-text	eturned to the status reques and contains lines with Name, colon, parameterVal	
			Parame ter	Description	
			version	Version of the Verotel Pur OrderPage protocol: "3.4"	
			shopID	numerical ID of the websit in Verotel system	e or shop
			saleID	Verotel saleID identifier (referenceID OR saleID mu posted - NOT BOTH)	ıst be
			signatur	SHA-1 hash generated on a	
			e	above and Merchant's priv stringsha1_hex(signaturek ":saleID=" + saleID + ":shop shopID +	Cey +
				":version=" + version)	



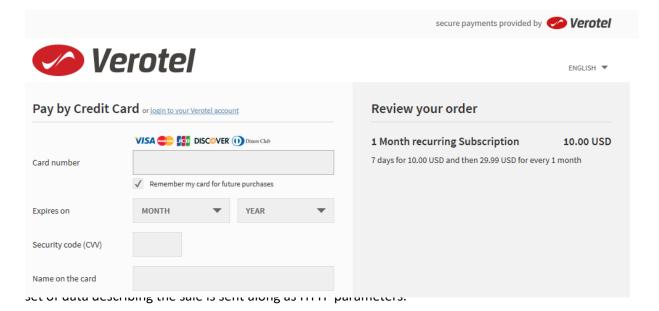


			https://secure.verotel.com//cancel- subscription?saleID=9519961&shopID=88251&ver sion=3.4&signature=0aeb4dad680e5968d9e6b84 Ofef8f8faa262538a Calculating signature)
subscriptionType	string	mandatory	"one-time" or "recurring" Note: DDEU and BTC only support "one-time"
trialAmount	number	optional recurring 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
type	string	mandatory	"subscription"
version	number	mandatory	version of the FlexPay call, " <b>3.4</b> " 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=a1eaced551d406f0227e32759e743c6b5269f7e3

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



**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	Туре	Description
shopID	num ber	website id
type	strin g	"subscription"
subscriptio	strin	"one-time" or "recurring"





B		B		
Parameter	Type	Description		
nType	g	U		
event	strin g	"initial"		
referencel D	strin g	Merchant's reference identif	fier if provided.	
saleID	num ber	identifier of the sale in the Verotel system		
priceAmou nt	num ber	amount to be processed (ma	ax 2 decimal places, stripped zeroes)	
priceCurre ncy	strin g	3 char ISO code of the Sale c	urrency	
period	num ber	subscription duration in ISO8		
trialAmoun t	num ber	amount to be processed (ma trial period	ax 2 decimal places, stripped zeroes) for the initial	
trialPeriod	strin g	duration in ISO8601 format		
expiresOn or	date	date of next rebill or expiry of e.g "2015-04-24"	date [yyyy-mm-dd]	
nextCharge On				
custom1	strin g	pass-through variable - max		
custom2	strin g	pass-through variable - max	255 printable characters	
custom3	strin g	pass-through variable - max	255 printable characters	
paymentM ethod	strin g	used payment method		
signature	strin g	security token to verify the i  CANCEL-SUBSCRIPTION request	ntegrity of the postback data ( <u>SEE "</u>	
		•	ribers to cancel their subscriptions on your website scription specific cancel URL. 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 sta parameterName, colon, para	tus request is in plain-text and contains lines with ameterValue:	
		Parameter Description		
			f the Verotel Purchase OrderPage protocol: "3.4"	
			I ID of the website or shop in Verotel system	
		1 3 100		





Parameter	Туре	Description	
		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)
		subscription?so	verotel.com//cancel- aleID=9519961&shopID=88251&version=3.4&signature=0aeb4dad b840fef8f8faa262538a nature)

# '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 <u>status page</u>.

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

Parameter	Туре	Description
shopID	num ber	numerical ID of the shop or website in the Verotel system
type	strin g	"subscription"
subscriptio nType	strin g	"one-time" or "recurring"
event	strin g	"initial"
referencel D	strin g	merchant reference identifier. It must be unique if provided
saleID	num ber	identifier of the sale in the Verotel system
priceAmou nt	num ber	amount to be processed (max 2 decimal places, stripped zeroes)
priceCurre ncy	strin g	3 char ISO code of the Sale currency
period	num ber	duration in ISO8601 format, for example P30D
trialAmoun t	num ber	amount to be processed (max 2 decimal places, stripped zeroes)
trialPeriod	strin g	duration in ISO8601 format, for example P30D
expiresOn or nextCharge On	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	strin	pass-through variable - max 255 printable characters





Parameter	Туре	Description		
	g			
custom2	strin g	pass-through variable - max 255 printable characters		
custom3	strin g	pass-through variable - max 255 printable characters		255 printable characters
paymentM ethod	strin g	payment method	d used for th	e payment, "CC", "DDEU" or "BTC"
signature	strin g	CANCEL-SUBSCRIPTION request In order to allow your subscribers to cancel their subscriptions on your web you can now generate a subscription specific cancel URL. Cancel-subscription request URL:  Brand Status URL		scription specific cancel URL. URL:  Status URL  https://secure.verotel.com/cancel-subscription?  https://secure.billing.creditcard/cancel-subscription?  https://secure.freenompay.com/cancel-
		The date returne parameterName		tus request is in plain-text and contains lines with
		Parameter	Description	
		version		f the Verotel Purchase OrderPage protocol: "3.4"
		shopID		I ID of the website or shop in Verotel system
		saleID	Verotel sa	aleID identifier (referenceID OR saleID must be
		signature	private ke saleID + "	sh generated on data listed above and Merchant's ey stringsha1_hex(signatureKey + ":saleID=" + eshopID=" + shopID + eshopID=" + version)
		Example: https://secure.ve subscription?sale 680e5968d9e6b8 Calculating signa	2ID=9519962 840fef8f8fac	1&shopID=88251&version=3.4&signature=0aeb4dad

# '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	Туре	Description
shopID	number	numerical ID of the shop or website in the Verotel system
type	string	"subscription"
subscriptionType	string	"recurring"
event	string	"downgrade"





Parameter	Туре	Description			
referenceID	string		Merchant's reference identifier if provided		
saleID	number		•		
		identifier of the sale in the Verotel system amount to be processed (max 2 decimal places, stripped zeroes)			
amount	number				
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	•	n to verify the integrity of the RIPTION request	postback data ( <u>SEE "</u>	
			low your subscribers to cance	el their subscriptions on	
			you can now generate a subs	·	
		URL.	,		
		Cancel-subsci	ription request URL:		
		Brand		Status URL	
		Verotel		https://secure.verotel.co	
		CardBilling		https://secure.billing.cre	
		FreenomPay	<i>'</i>	https://secure.freenomp	
			rned to the status request is with parameterName, colon	•	
		Parameter	Description		
		version	Version of the Verotel Pure protocol: "3.4"	chase OrderPage	
		shopID	numerical ID of the websit system	e or shop in Verotel	
		saleID	Verotel saleID identifier (remust be posted - NOT BOT		
		signature	SHA-1 hash generated on o	·	
		- <b>G</b>	Merchant's private key		
			stringsha1_hex(signatureK	ev + ":saleID=" + saleID	
			+ ":shopID=" + shopID +	<i>'</i>	
			":version=" + version)		
		subscription?	e.verotel.com//cancel- saleID=9519961&shopID=882 d680e5968d9e6b840fef8f8fa		

# 'Rebill' Postback call

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

Parameter	Туре	Description
shopID	number	numerical ID of the shop or website in the Verotel system
type	string	"subscription"





Parameter	Туре	Description		
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 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	· · · · · · · · · · · · · · · · · · ·	variable - max 255 printable	characters
custom2	string		variable - max 255 printable	
custom3	string		variable - max 255 printable	
paymentMethod	string	payment met support one-t	hod used for the payment - ' ime)	'CC" (DDEU and BTC only
signature	string	CANCEL-SUBSCR In order to all your website URL.	n to verify the integrity of the EIPTION request ow your subscribers to cance you can now generate a subs	el their subscriptions on
			iption request URL:	
		Brand		Status URL
		Verotel		https://secure.verotel.co
		CardBilling		https://secure.billing.cr
		FreenomPay	1	https://secure.freenom
			rned to the status request is with parameterName, color	•
		Parameter	Description	
		version	Version of the Verotel Pur protocol: "3.4"	chase OrderPage
		shopID	numerical ID of the websit system	te or shop in Verotel
		saleID	Verotel saleID identifier (r must be posted - NOT BO	
		signature	SHA-1 hash generated on Merchant's private key stringsha1_hex(signaturek + ":shopID=" + shopID + ":version=" + version)	data listed above and
			e.verotel.com//cancel- saleID=9519961&shopID=88.	251&version=3.4&siqnat

ure=0aeb4dad680e5968d9e6b840fef8f8faa262538a





Parameter	Туре	Description
		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		of the shop or website in the	Verotel system
type	string	"subscription	I	
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 e.g "2015-04-	e cancelled subscription expi 24"	res [yyyy-mm-dd]
subscriptionPhase	string	"trial", "norm	<b>al</b> " (or " <b>discounted</b> " if cance	l discount was accepted -
		not yet suppo	· · · · · · · · · · · · · · · · · · ·	
cancelledBy	string		ort", "merchant", or "system	
custom1	string	<u> </u>	variable - max 255 printable	
custom2	string		variable - max 255 printable	
custom3	string	<u> </u>	variable - max 255 printable	
signature	Samg	security token to verify the integrity of the postback data (  CANCEL-SUBSCRIPTION request  In order to allow your subscribers to cancel their subscripti  your website you can now generate a subscription specific  URL.  Cancel-subscription request URL:		el their subscriptions on
		Brand	phon request one.	Status URL
			paron request one	
		Brand	paron request on Er	https://secure.verotel.co
		<b>Brand</b> Verotel		https://secure.verotel.co
		Verotel  CardBilling  FreenomPay  The date retucontains lines	rned to the status request is with parameterName, colon	https://secure.verotel.co https://secure.billing.cre https://secure.freenomp
		Prand Verotel CardBilling FreenomPay The date retu	rned to the status request is with parameterName, colon Description	https://secure.verotel.co https://secure.billing.cre https://secure.freenompe in plain-text and , parameterValue:
		Verotel  CardBilling  FreenomPay  The date retucontains lines	rned to the status request is with parameterName, colon	https://secure.verotel.co https://secure.billing.cre https://secure.freenompe in plain-text and , parameterValue:
		Verotel CardBilling FreenomPay The date retucontains lines Parameter	rned to the status request is with parameterName, colon Description Version of the Verotel Pur	https://secure.verotel.co https://secure.billing.cre https://secure.freenompe in plain-text and , parameterValue: chase OrderPage
		Brand  Verotel  CardBilling  FreenomPay  The date retucontains lines  Parameter  version	rned to the status request is with parameterName, colon Description Version of the Verotel Purprotocol: "3.4" numerical ID of the websit	https://secure.verotel.co https://secure.billing.cre https://secure.freenompe in plain-text and , parameterValue: chase OrderPage e or shop in Verotel





Parameter	Туре	Description
		Example:
		https://secure.verotel.com//cancel-
		subscription?saleID=9519961&shopID=88251&version=3.4&signat
		ure=0aeb4dad680e5968d9e6b840fef8f8faa262538a
		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	Туре	Description		
shopID	num	numerical ID of the shop or website in the Verotel system		
•	ber			
type	strin	"subscription"		
	g			
subscriptio	strin	"recurring"		
nType	g			
event	strin	"uncancel"		
	g			
referenceID	strin	merchant reference identifie	er. It must be unique if provided	
-	g			
saleID	num	identifier of the sale in the V	erotel system	
	ber	dele chile e de la constant	91	
nextCharge	date	date of the next planned reb	DIII	
On	strin			
subscriptio nPhase	strin g	"trial", "normal" (or "discounted" if cancel discount was accepted - not yet supported)		
uncancelled	strin	"supported"		
By	g	- предоставления пред		
custom1	strin	pass-through variable - max	255 printable characters	
0.000	g	pass among manager man		
custom2	strin	pass-through variable - max	255 printable characters	
	g			
custom3	strin	pass-through variable - max 255 printable characters		
	g	· ·		
signature	strin	security token to verify the integrity of the postback data (SEE "		
	g	<u>Cancel-subscription</u> request		
		In order to allow your subscribers to cancel their subscriptions on your website		
		•	scription specific cancel URL.	
		Cancel-subscription request URL:		
		Brand	Status URL	
		Verotel	https://secure.verotel.com/cancel-subscription?	
		CardBilling	https://secure.billing.creditcard/cancel-subscription?	





Parameter	Туре	Description		
		FreenomPay		https://secure.freenompay.com/cancel-subscription?
		The date returned to the status request is in plain-text and contains parameterName, colon, parameterValue:		
		Parameter	Descripti	on
		version	Version o	of the Verotel Purchase OrderPage protocol: "3.4"
		<b>shopID</b> numerical ID of the website or shop in Verotel system		IID of the website or shop in Verotel system
		saleID		aleID identifier (referenceID OR saleID must be NOT BOTH)
sig		signature	private ke saleID + "	sh generated on data listed above and Merchant's ey stringsha1_hex(signatureKey + ":saleID=" + ':shopID=" + shopID + =" + version)
		Example: https://secure.vec subscription?sale d680e5968d9e6b Calculating signat	ID=951996 840fef8f8f	1&shopID=88251&version=3.4&signature=0aeb4da

#### '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	Туре	Description
shopID	num ber	numerical ID of the shop or website in the Verotel system
type	strin g	"subscription"
subscriptio nType	strin g	"one-time" or "recurring"
event	strin g	"extend"
referenceID	strin g	merchant reference identifier if provided
saleID	num ber	identifier of the sale in the Verotel system
nextCharge	date	date when cancelled or one-time subscription expires, or date of the next





Parameter	Type	Description		
On or		planned rebill [yyyy-mm-dd]		
expiresOn		e.g "2015-04-24"		
subscriptio	strin	"trial", "normal" (or "discounted" if cancel discount was accepted - not yet		
nPhase	g	supported)		
custom1	strin	pass-through vai	riable - max	255 printable characters
	g			
custom2	strin	pass-through variable - max 255 printable characters		
	g			
custom3	strin	pass-through vai	riable - max	255 printable characters
	g			
signature	strin	security token to	verify the i	ntegrity of the postback data (SEE "
	g	CANCEL-SUBSCRIPT		
		In order to allow	your subsc	ribers to cancel their subscriptions on your website
		you can now ger	nerate a sub	scription specific cancel URL.
		Cancel-subscript	ion 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		
		Parameter	Descripti	
		version		of the Verotel Purchase OrderPage protocol: "3.4"
		shopID	numerica	IID of the website or shop in Verotel system
		saleID	Verotel s	aleID identifier (referenceID OR saleID must be
			•	NOT BOTH)
		signature	signature SHA-1 hash generated on data listed above and M	
			<pre>private key stringsha1_hex(signatureKey + ":saleID=" +</pre>	
			saleID + ":shopID=" + shopID +	
		":version=" + version)		
		Example:		
		https://secure.verotel.com//cancel-		
		subscription?saleID=9519961&shopID=88251&version=3.4&signature=0aeb4da		
		d680e5968d9e6b840fef8f8faa262538a		
		Calculating signa	iture)	

# '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	Туре	Description			
shopID	number	numerical ID	numerical ID of the shop or website in the Verotel system		
type	string	"subscription"			
subscriptionType	string	"recurring" o	"recurring" or "one-time"		
event	string	"expiry"	"expiry"		
referenceID	string	Merchant's re	eference identifier if provided	b	
saleID	number	identifier of the sale in the Verotel system			
custom1	string	pass-through	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 toker	n to verify the integrity of the	e postback data ( <u>SEE "</u>	
		CANCEL-SUBSCE	RIPTION request		
		In order to all	ow your subscribers to cance	el their subscriptions on	
		your website	you can now generate a sub	scription specific cancel	
		URL.			
			ription request URL:		
		Brand		Status URL	
		Verotel		https://secure.verotel.co	
		CardBilling		https://secure.billing.cre	
		FreenomPay	/	https://secure.freenomp	
		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 Pur protocol: "3.4"	chase OrderPage	
		shopID	numerical ID of the websit system	te or shop in Verotel	
		saleID	Verotel saleID identifier (r must be posted - NOT BO		
		signature	SHA-1 hash generated on	· ·	
		3 1 7 2	Merchant's private key		
			stringsha1_hex(signature)	Key + ":saleID=" + saleID	
		+ ":shopID=" + shopID +			
		":version=" + version)			
		Example:			
			e.verotel.com//cancel-		
		•	saleID=9519961&shopID=88.		
		ure=Uaeb4da	d680e5968d9e6b840fef8f8f6	102625380	

# '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.

Calculating signature)





Parameter	Туре	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 - m	nax 255 printable	characters	
event	const	Type of event "credit"			
	"credit"				
parentID	number	Id of the original transact	tion that is refund	ed	
saleID	number	Verotel sale id			
transactionID	number	Id of the refund transacti	ion		
shopID	number	Verotel website id			
signature	string	security token to verify the	he integrity of the	postback data ( <u>SEE "</u>	
		CANCEL-SUBSCRIPTION request			
		In order to allow your subscribers to cancel their subscriptions on your website you can now generate			
		specific cancel URL.			
		Cancel-subscription request URL:  Status URL			
		Statio		Status Citi	
		Verotel		https://secure.verotel.com/cancel-subscription	
		CardBilling		https://secure.billing.creditcard/cancel-subscri	
		FreenomPay		https://secure.freenompay.com/cancel-subscri	
		The date returned to the state Parameter	tus request is in plair  Description	n-text and contains lines with parameterName, colon,	
		version	<u> </u>	rotel Purchase OrderPage protocol: "3.4"	
		shopID		ne website or shop in Verotel system	
		saleID		entifier (referenceID OR saleID must be posted -	
		signature		rated on data listed above and Merchant's priva	
		stringsha1_hex(signatureKey + ":saleID=" + saleID + ":shopID=" +			
		":version=" + version)			
		Example:			
		https://secure.verotel.com//o			
		subscription?saleID=95199 Calculating signature)	961 &shopID=88251	&version=3.4&signature=0aeb4dad680e5968d9e6b	
		Carculating 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.

Parameter	Туре	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	Type of event " <b>credit</b> "		
	"credit"			
parentID	number	Id of the original transaction tha	t 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 integ	rity of the postback data (SEE "	
Signature	String	, ,	Tity of the postback data (SEE_	
		<u>CANCEL-SUBSCRIPTION</u> request		
		In order to allow your subscribers to cancel their subscriptions on your website you can now generate specific cancel URL.		
		Cancel-subscription request URL:		
		Brand Status URL		
		Verotel	https://secure.verotel.com/cancel-subscription	
		CardBilling	https://secure.billing.creditcard/cancel-subscri	
		FreenomPay	https://secure.freenompay.com/cancel-subscri	
		The date returned to the status reque	st is in plain-text and contains lines with parameterName, colon,	
		Parameter Descrip	•	
		<b>version</b> Version	of the Verotel Purchase OrderPage protocol: "3.4"	
		shopID numerical ID of the website or shop in Verotel system		
			saleID identifier (referenceID OR saleID must be posted -	
		signature SHA-1 hash generated on data listed above and Merchant's private stringsha1_hex(signatureKey + ":saleID=" + saleID + ":shopID="		
		":version=" + version)		
		Evample		
		Example: https://secure.verotel.com//cancel-		
		subscription?saleID=9519961&sho	pID=88251&version=3.4&signature=0aeb4dad680e5968d9e6b	
		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=daaaa46972dfce10dd68c8230d6c64259e60d60db

# 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
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	date when the cancelled or one-time subscription expires, or date of the		
nextChargeOn	next planned rebill [dd-mmm-yyyy hh:mm:ss]		
	e.g. <b>16-APR-2014 09:20:23</b>		
nextChargeAmount	The price of next rebill		
cancelled	yes/no		
cancelledOn	date of cancel [dd-mmm-yyyy hh:mm:ss]		
	e.g. <b>16-APR-2014 09:20:23</b>		
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. <b>16-APR-2014 09:20:23</b>		
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**

In order 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=0aeb4dad680e5968d9e6b840fe f8f8faa262538a





# **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	ххуугг
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+Subscription2paymentMethod=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

