

Request for order registration with pre-authorization, shopping cart, Online Lending (registerPreAuth.do)

The request used for registering an order on payment system side is `registerPreAuth.do`.

Requests for registration of an order (with- and without pre-authorization) pass the cart data in the `orderBundle` parameter.

- Prices of all the items within the cart must be specified in one currency (if the currency of an item is to be specified); and this currency must match the currency of the order.
- The sum of all line items in the shopping cart must be equal to the order amount.
- A passed value of the `quantity` parameter is to be checked for each line item. If the value is too large or too small, the request will result in an error.
- All the parameters of the cart are to be checked for meeting the required format (length).

If at least one of the above conditions is not met, the order is considered incorrectly generated and the payment gateway returns an error.

Request parameters

The request parameters are given in table below.

Name	Type	Mandatory	Description
userName	AN..30	Yes	Login of the service account of the merchant. If login and password are used for authentication during token registration, then the token parameter does not need to be passed.
password	AN..30	Yes	Merchant's service account password. If login and password are used for authentication during token registration, then the token parameter does not need to be passed.
orderNumber	ANS..32	Yes	Number (identifier) of the order in the store system. It is unique for every store within the Payment Gateway. If the order number is generated on the Payment Gateway side, this parameter is not mandatory.

Name	Type	Mandatory	Description
amount	N..12	Yes	Payment amount in minimum currency units (kopecks, cents, etc.). Must match the total amount for all line items in the shopping cart. Before summing up all line items, the product of quantity and price for each good item is rounded to an integer. If the value is followed by 5 or greater after the decimal point, it is rounded up. Below there are examples of rounding. 1. If quantity = 0.111, and price = 5500, then the result is 611 (610.5 rounded up). 2. If quantity = 1.455, and price = 6900, then the result is 10040 (10039.5 rounded up). 3. If quantity = 1.211, and price = 6988, then the result is 8462 (8462.468 rounded down). Therefore, the «amount» parameter value must be equal to the sum of the line items rounded.
currency	N3	No	ISO 4217 code of the payment currency. If not specified, default value is used.
returnUrl	ANS..512	Yes	The URL to which the user is to be redirected in case of a successful payment (and also in case of a failed payment where the failUrl parameter is not passed). The address must be specified in full including the protocol used (for example, https://test.ru instead of test.ru). Otherwise, the user will be redirected to the address of the following type: http://<payment_gateway_address>/<merchant_address>.
failUrl	ANS..512	No	The address to which the user is to be redirected in case of a failed payment. The address must be specified in full including the protocol used (for example, https://test.ru instead of test.ru). Otherwise, the user will be redirected to the address of the following type: http://<payment_gateway_address>/<merchant_address>. The parameter is optional. In this case, an unsuccessful payment will lead to a redirect to returnUrl, in the same way it happens when the payment is successful.
description	ANS..512	No	Description of the order in free form. To enable sending this field to the processing system, contact the technical support service.
language	A2	No	Language in the ISO 639-1 encoding. If the language is not specified, the default language defined in the store settings is used.

Name	Type	Mandatory	Description
pageView	ANS..20	No	The value of this parameter defines what kind of pages of the payment interface will be loaded for the Customer. The available values are: • DESKTOP - pages designed to be displayed on desktop computers (pages with names like payment_<locale>.html and errors_<locale>.html will be searched for in the payment service archive); • MOBILE - pages designed to be displayed on mobile devices (pages with names like mobile_payment_<locale>.html and mobile_errors_<locale>.html will be searched for in the payment service archive); • If a store has created payment interface pages with arbitrary prefixes added to the names of page files, pas the value of the necessary prefix in the pageView parameter to load corresponding pages. For example on passing the iphone value, a search will be carried out in the archive of payment interface pages for pages with the iphone_payment_<locale>.html and iphone_error_<locale>.html names. Where: • locale - the language of the page in ISO 639-1. For example, ru for Russian or en for English. If the parameter is missing or its value is in incorrect format, the default value is pageView=DESKTOP.
clientId	ANS..255	No	Identifier of the Customer in the Store system. This parameter is used for the binding functionality. May be present if the store is allowed to create bindings. Specifying this parameter when processing payments with the use of bindings is mandatory. Otherwise, a payment will be unsuccessful.
merchantLogin	ANS..255	No	To register an order on behalf of a child Merchant, specify the Merchant login in this parameter.

Name	Type	Mandatory	Description
jsonParams	String	No	Block for transferring additional parameters of the merchant. Fields of additional information for further storage are transferred in the following form. {name1:value1,...,nameN:valueN} These fields can be transferred to the bank processing for subsequent display in the registers. The inclusion of this functionality is possible by agreement with the bank during the integration period. If sending notifications from merchant to customer is enabled, the customer's email address must be passed in this block in the email parameter. The following can be passed as additional parameters: • «email» – if the customer's email address is passed, it will be displayed on the payment page; • phone – if the customer's cell phone number is passed, it will be displayed on the payment page; • «backToShopUrl» – if this parameter is passed, the payment page will display a button for returning the customer to the store. Specify the address of the store's website in this parameter. • «backToShopName» – the caption on the return-to-store button that will be displayed if the parameter «backToShopUrl» is passed. It is forbidden to pass reserved names in the parameter (if they are passed, the order may be rejected): • sbrf_spasibo:amount_bonus • sbrf_sbermiles:amount_bonus • loyaltyId
sessionTimeoutSecs	N..10	No	Order lifetime in seconds. If the parameter is not specified, the value specified in the Merchant settings or the default value (1200 seconds = 20 minutes) will be used. If the request contains the expirationDate parameter, then the value of sessionTimeoutSecs parameter is disregarded.
expirationDate	UTC	No	The date and time of the order lifetime expiration. Format: yyyy-MM-ddTHH:mm:ss. If this parameter is not passed in the request, sessionTimeoutSecs parameter is used to determine the end of lifetime of the order.
bindingId	AN..255	No	The identifier of the previously created binding. Can only be used if the merchant has permission to work with bindings. If this parameter is passed in the given request, it means that: 1. The given order can be paid only using a binding; 2. The payer will be redirected to the payment page on which only entering CVC is required.
orderBundle	Not applicable	Yes	Block containing the cart of items of the order. The description of the attributes is given below. (Go to description.)

By default, the following fields are passed to the Bank processing system:

- orderNumber – order number in the store system;
- description – order description (no more than 24 characters; %, +, carriage return \r, and line feed \n cannot be used).

orderBundle

orderBundle contains the following elements.

Name	Type	Mandatory	Description
orderCreationDate	ANS..21	No	Order creation date in the format YYYY-MM-DDTHH:MM:SS.
customerDetails	Not applicable	No	Block containing attributes with data about the customer. The description of the attributes is given below. (Go to description.)
cartItems	Not applicable	Yes	Block with the attributes of the items in the cart. The description of the attributes is given below. (Go to description.)
loyalties	Not applicable	No	A block with attributes of bonus programs, which include items from the cart. The description of the attributes is given below. (Go to description.)
installments	No longer relevant	Conditional Mandatory when providing the buyer with the possibility Online Lending	Section where parameters of the type of online credit granting are specified. The description is given below. (Go to description.)

installments

Parameters of the installments section

Name	Type	Mandatory	Description
productType	A..11	Yes	Sign of buying on credit. The following values are available: • CREDIT – payment on credit; • INSTALLMENT – payment in installments.
productId	String	Yes	The product identifier must be agreed with the bank.

customerDetails

customerDetails contains the following elements.

Name	Type	Mandatory	Description
email	ANS..40	See note below.	Customer's email address.

Name	Type	Mandatory	Description
phone	NS..12	See note below.	Customer's phone number. It can be of the following format: $^((+7 7 8)?([0-9]){10})\$$. Examples: +790000000000 890000000000 90000000000 790000000000 If the number is passed in a separate parameter and in additional parameters, the number specified in this phone parameter will be used.
contact	ANS..40	No	Customer's preferred way of communication.
deliveryInfo	Not applicable	No	Block containing the attributes of the delivery address. The description of the attributes is given below. (Go to description.)

It is mandatory to pass one of the two parameters: email or phone.

deliveryInfo

deliveryInfo contains the following elements.

Name	Type	Mandatory	Description
deliveryType	ANS..20	No	Delivery method.
country	A..2	Yes	The two-letter country code for the delivery country.
city	ANS..40	Yes	Delivery city.
postAddress	ANS..255	Yes	Delivery address.

A parameter included in a block and indicated as mandatory is only mandatory within that block. If the section is optional and missing, then the parameters included in it should not be passed.

cartItems

cartItems contains the following elements.

Name	Type	Mandatory	Description
items	Not applicable	Yes	Array of blocks describing line items in the cart. Information about every line item in the cart is passed in a separate block that is included in items. Do not use «'» character combination inside this section, or it will cause an error on the gateway side. (Go to description.)

items

items« contains the following elements.

Name	Type	Mandatory	Description
positionId	ANS..12	Yes	Unique identifier of a line item within the order cart.

Name	Type	Mandatory	Description
Name name Type ANS..100 Description REST Name or the description of an item in any format. Use - to pass \ use \«- to pass » REST Online Lending For Online Lending functionality, it's necessary to specify a description of the line item in accordance with the Yandex.Market catalog, subject to the following requirements: • The following words and character sequences are not allowed: file, exec, insert, as, select, or, procedure, limit, order, and, or, by, asc, desc, delete, update, distinct, having, truncate, replace, handler, like, regex, tz_offset, to_timestamp_tz, bfilename, union, sql-command, abort, alter, analyze, begin, audit, checkpoint, close, cluster, comment, commit, copy, create, deallocate, declare, delete, drop, end, execute, explain, fetch, grant, insert, lock, move, noaudit, notify, prepare, reindex, rename, reset, revoke, rollback, savepoint, select, set, show, shutdown, start, truncate, unlisten, update, vacuum • The following special characters are not allowed: ' & - # % ; = WS Name or the description of an item in any format. Use - to pass \ use \«- to pass » WS Online Lending For online crediting functionality it's necessary to specify a description of the good item in accordance with the Yandex.Market.	ANS..100	Yes	Name or the description of an item in any format. Use - to pass \ use \«- to pass »

Name	Type	Mandatory	Description
itemDetails	Not applicable	No	Additional block containing the parameters describing a line item. The description of the attributes is given below. (Go to description.)
quantity	N..18	Yes	Element describing the total of items of one positionId and its unit of measurement The description of the attributes is given below. (Go to description.)
itemAmount	N..18	Conditional Mandatory when providing the customer with the possibility of Online Lending.	The sum of the cost of all line items of one positionId in minimum currency units. Passing itemAmount is mandatory only if the itemPrice parameter was not passed. Otherwise passing of itemAmount is not required. If both parameters - itemPrice and itemAmount - are passed. then itemAmount must be equal to itemPrice * quantity, otherwise, the request will result in an error. When calculating itemAmount = itemPrice*quantity parameter, the result is rounded up to the second digit after the decimal point. For example, if the calculation result is 100.255, then final value will be 100.26.
itemCurrency	N3	Conditional Mandatory when providing the customer with the possibility of Online Lending.	Currency code of a line item according to ISO 4217. If the parameter is not specified, it is considered to be equal to the order currency.
itemCode	ANS..100	Yes	Number (identifier) of a line item in the store system.
itemPrice	N..18	Only for stores with enabled fiscalization settings	The cost of one line item in minimum currency units. Mandatory for merchants using fiscalization. • itemPrice cannot be less than 0. • itemPrice may be either string or integer.

==== quantity ==== quantity contains the following elements.

Name	Type	Mandatory	Description
value	N..18	Yes	Quantity of line items in given positionId. Use a decimal point as a separator in fractions.
measure	ANS..20	Yes	The unit of measurement for the quantity of line item instances.

==== itemDetails ==== 'itemDetails contains the following elements.

Name	Type	Mandatory	Description
itemDetailsParams	ANS..255	Yes	Additional information on a line item. The parameter represents an array of blocks each of which contains information on a certain characteristic of the line item. (Go to description.)

itemDetailsParams

'itemDetailsParams contains the following elements.

Name	Type	Mandatory	Description
value	ANS..255	Conditional. Mandatory if itemDetailsParams parameter is present.	Additional information on a line item.
Name name Type AN..255 Type2 ANS..255 Description REST Name of the parameter describing the details of a line item WS Name of the parameter describing the details of a line item	AN..255	Conditional. Mandatory if itemDetailsParams parameter is present.	Name of the parameter describing the details of a line item

==== loyalties ==== loyalties contains the following elements.

loyalties	Not applicable	If the loyalties block was transferred	A block with attributes of bonus programs, which include items from the cart.
loyaltyProgramName	ANS..20	If the loyalties block was transferred	The name of the bonus program in which the product item is involved, you should use the value sbrf_spasibo.
positionId	ANS..12	If the loyalties block was transferred	Unique identifier of a line item within the order cart.
bonusAmountForDebit	N..18	If the loyalties block was transferred	The total amount of bonuses of all line items for this positionId to debiting, indicated in kopecks.
bonusAmountForCredit	N..18	No	The total amount of bonuses of all line items for this positionId to accrual, indicated in kopecks.

===== Response parameters ===== The response parameters are given in table below.

Name	Type	Mandatory	Description
orderId	ANS36	No	Identifier of the order in the payment system. It is unique within the system. Missing if order registration failed due to an error detailed in ErrorCode.
formUrl	AN..512	No	Payment form URL to redirect the client's browser to. This parameter is not returned if the registration of the order was not successful due to the error described in errorCode. To be able to accept payment in this way, you must have the respective rights in the system. If in doubt, contact technical support.
errorCode	ANS..3	No	Error code. Can be missing if the result has not caused an error.
errorMessage	AN..512	No	Error description in the language passed in the language parameter in the request.

===== Error codes =====

Error code	Error text
0	The request has been processed without system errors.
1	An order with this number has already been processed.
1	Wrong order number.
3	Unknown currency.
4	Order number is empty
4	Merchant name cannot be empty.
4	The amount is missing.
4	Empty return URL
4	Password cannot be empty.
5	Access denied.
5	The user is inactive.
7	System error.
8	[orderBundle.cartItems.totalAmount] the sum of items in the cart does not match the total.
8	Additional parameter amount_bonus is not allowed if the request contains a cart.
8	[orderBundle.cartItems.item.quantity.value] Too high or too low value.

===== Examples =====
 ===== POST request example =====
 <sxh javascript>
 amount=24000¤cy=643&language=ru&orderNumber=01a28722222299&returnUrl=<https://3dsec.sberbank.ru/payment/finish.html&dsec.sberbank.ru/payment/finish.html&>
 jsonParams={«name1»:«value1»}&merchantLogin=merch_child&orderBundle={
 «orderCreationDate»:1373622660000, «customerDetails»:{
 «email»:«1234567890123456789012345678901234567890», «phone»: «79851231234», «contact»:
 «Mega Tester», «deliveryInfo»:{ «deliveryType»:«courier», «country»:«RU», «city»:«Moscow»,
 «postAddress»:«Bld. 2, 50A/8 Zemlyanoy Val St.» }}, «cartItems»: { «items»: [{ «positionId»: «1»,
 «name»: «Metzeler Enduro 3 Sahara», «itemDetails»: { «itemDetailsParams»: [{ «value»: «Metzeler
 », «name»: «brand» }, { «value»: «17inch», «name»: «radius» }]}, «quantity»: { «value»: 0.71,
 «measure»: «pieces» }, «itemAmount»: 8000, «itemCurrency»: «643», «itemCode»: «NM-15», {
 «positionId»: «2», «name»: «Universal Mirror Enduro», «itemDetails»: { «itemDetailsParams»: [{
 «value»: «Noname», «name»: «brand» }, { «value»: «12mm», «name»: «diameter» }]}, «quantity»: {
 «value»: 1.0, «measure»: «pieces» }, «itemAmount»: 8000, «itemCurrency»: «643», «itemCode»:

```
«NM-15», { «positionId»: «3», «name»: «Warm Grips», «itemDetails»: { «itemDetailsParams»: [ {  
«value»: «Noname», «name»: «brand» } ] }, «quantity»: { «value»: 1.0, «measure»: «pieces» },  
«itemAmount»: 8000, «itemCurrency»: 643, «itemCode»: «G-16» } ] } } } </sxh> ==== Response  
example ==== <sxh javascript>  
{ «formUrl»: «https://3dsec.sberbank.ru/payment/merchants/789/payment\_ru.html?mdOrder=fc122907-e237-440e-9f25-48bf6120984b», «orderId»: «fc122907-e237-440e-9f25-48bf6120984b» } </sxh>
```