### **API Slotegrator**

#### Overview

This document describes an API based on HTTP/1.1 protocol RFC 2616.

Document version	1.4.2
Links	- RFC 2616, Hypertext Transfer Protocol HTTP/1.1 - ISO 4217, Currency codes - ISO 639-1, Languages codes - ISO 8601, Date and time format

#### Changelog

Version (date)	Change description
1.0.0 (2016-09- 01, d6)	Documentation initialized
1.0.1 (2016-09- 07, d2)	Games/init POST request format specified
1.0.2 (2016-09- 15, d2)	Limits and self-validate endpoints added
1.0.3 (2016-09- 23, d2)	Specify response status on duplicate requests
1.0.4 (2016-10- 20, d2)	"is_mobile" parameter added to games
1.0.5 (2016-11- 15, d2)	Demo mode
1.0.6 (2017-02- 17, d2)	Updated "/limits" response
1.0.7 (2017-03- 21, d2)	Added "/jackpots" endpoint
1.0.8 (2017-03- 30, d2)	Added "game_uuid" and "player_id" to "bet", "win" and "refund" requests
1.1.0 (2018-02- 22, d2)	Added freespins
1.1.1 (2019-07- 04, d2)	Added balance notifications
1.1.2 (2020-08- 25, d2)	Parameter "is_finished" changed to "finished".
1.1.3 (2020-10- 06, d2)	Rollback. Parameter `round_id` is fixed.
1.1.4 (2020-11- 25, d2)	FreeSpins. Property `total_bets` added.

1.2.0 (2022-10- 21)	Updated "/games"  • Added `expand` request parameter and available expansions list.  • Added optional win parameters "bonus", "pragmatic_prize_drop" and "pragmatic_tournament"  • Added optional refund parameters "bet", "tip" and "freespin"
1.2.1 (2023-01- 18)	Added optional win parameters "promo".
1.2.2 (2023-01- 30)	<ul> <li>Add related_games expansion for /games.</li> <li>Add notes about /games rate limit and caching instructions.</li> </ul>
1.2.3 (2023-03- 30)	Added explanation for variables in XSign calculation
1.3.0 (2024-04- 29)	Added freevouchers
1.3.1 (2024-05- 09)	Added optional win parameters "prize_drop" and "tournament"
1.3.2 (2024-07- 29)	Fixed win types for promo activities
1.4.0 (2024-08- 23)	Added a new "device" parameter to streamline launching mobile versions of games via the /games/init and /games/init-demo endpoints
1.4.1 (2024-11- 21)	Added explanation about subsessions (the ability to launch another provider's game after the init->launch phase - in its game interface) described in the /games/init and seamless transaction introduction sections.
1.4.2 (2025-03- 11)	Added new win type "loyalty_win" for BarbaraBang provider

#### **Game Aggregator**

#### **Overview**

Integration data provided by Game Aggregator

- Merchant ID
   Merchant Key
   Base API URL

#### **Endpoints and Base API URL**

For example, Base API URL is \*https://example.com/api/v1\* and Endpoint is \*/games/lobby\*

Then calls from integrator to Game Aggregator should be done to \*https://example.com/api/v1/games/lobby\*

#### Request format

Query parameters should be passed with `application/x-www-form-urlencoded` content type.

#### **Response format**

Default response format is `json` with `Content-Type: application/json` header.

#### List of used HTTP codes

Code	Interpretation
200	OK. Everything worked as expected.

201	A resource was successfully created in response to a `POST` request. The `Location` header contains the URL pointing to the newly created resource.
204	The request was handled successfully and the response contains no body content (like a `DELETE` request).
304	The resource was not modified. You can use the cached version.
400	Bad request. This could be caused by various actions by the user, such as providing invalid JSON data in the request body, providing invalid action parameters, etc.
401	Authentication failed.
403	The authenticated user is not allowed to access the specified API endpoint.
404	The requested resource does not exist.
405	Method not allowed. Please check the `Allow` header for the allowed HTTP methods.
415	Unsupported media type. The requested content type or version number is invalid.
422	Data validation failed (in response to a `POST` request, for example). Please check the response body for detailed error messages.
429	Too many requests. The request was rejected due to rate limiting.
430	Internal server error. This could be caused by internal program errors.

#### Error response Generic errors

Generic error response contains a single object with following attributes:

Attribute: data type	Description
`name`, `string`	Exception name
`message`, `string`	Exception message
`code`, `integer`, `default: 0`	Exception code
`status`, `integer`	HTTP status code

#### **Example**

```
Response

HTTP/1.1 404 Not Found

{
  "name": "Not Found Exception",
  "message": "The requested resource was not found.",
  "code": 0,
  "status": 404
}
```

#### **Collections**

Collection is a set of objects of the same type. There is an additional metadata for working with collections like pagination or sorting.

#### Pagination headers

By default, pagination metadata is available via HTTP headers:

Attribute	Description
`X-Pagination-Total-Count`	The total number of resources
`X-Pagination-Page-Count`	The number of pages
`X-Pagination-Current-Page`	The current page (1-based)
`X-Pagination-Per-Page`	The number of resources in each page
`Link`	A set of navigational links allowing client to traverse the resources page by page

#### Collections enveloping

In case your client is incapable of working with HTTP headers you are able to receive this information within response body.

```
Response
HTTP/1.1 200 OK
X-Pagination-Total-Count: 1000
X-Pagination-Page-Count: 50
X-Pagination-Current-Page: 1
X-Pagination-Per-Page: 20
Link: <a href="https://example.com/endpoint?page=1">https://example.com/endpoint?page=2</a>; rel=next, <a href="https://example.com/endpoint?page=2">https://example.com/endpoint?page=2</a>; rel=next, <a href="https://example.com/endpoint/2">https://example.com/endpoint/2</a>; rel=next, <a href="http
/endpoint?page=50>; rel=last Content-Type: application/json; charset=UTF-8
 "items": [
 "id": 1,
 { "id": 2,
},
],
"_links": {
"self": {
 "href": "https://example.com/endpoint?page=1"
},
"next": {
 "href": "https://example.com/endpoint?page=2"
},
"last": {
 "href": "https://example.com/endpoint?page=50" }
 "_meta": {
 "totalCount": 1000, "pageCount": 50, "currentPage": 1, "perPage": 20
}
}
```

#### Game launch flow

Games should be stored/cached on the client side after retrieval. Game could be launched in several steps according to scenario based on lobby availability.

#### Games without lobby:

- 1. Call '/games/init'
- 2. Launch game by redirecting player to the provided URL

#### Games with lobby:

- Call `/games/lobby`
   Call `/games/init` with provided `lobby\_data`
   Launch game by redirecting player to the provided URL
- > Info: More info on `/games`, `/games/lobby` and `/games/init` endpoints could be found in corresponding documentation sections. > Note: Base API URL should be provided by manager.

#### Security

All requests should contain authorization headers (except \*\*Launch\*\* phase with player redirection).

#### **Authorization headers**

Attribute	Description	
`X-Merchant-Id`	Merchant ID provided by integration manager	
`X-Timestamp`	Request timestamp. If differ from current timestamp for more than 30 seconds - request considered expired	
`X-Nonce`	Random string	
`X-Sign`	Sign calculated with sha1 hmac	

#### X-Sign calculation

- 1. Merge request array with authorization headers array
- 2. Sort resulting array by key in ascending order
- 3. Generate a URL-encoded query string from this array
- 4. Use sha1 hmac algorithm with Merchant Key (provided by integration manager) for signing

#### PHP example of the X-Sign calculation

All of the parameters you send in POST or GET request should be in hash string.

PHP code for X_Sign calculation	How the variables should look like (Example)
---------------------------------	----------------------------------------------

```
<?php
$merchantKey =
'Merchant Key provided
by integration
manager';
$headers = [
  'X-Merchant-Id' =>
'value',
  'X-Timestamp' =>
time().
  'X-Nonce' => md5
(uniqid(mt_rand(),
true)),
$requestParams = [
  'game_uuid' =>
'abcd12345',
  'currency' => 'USD',
  'return url' =>
'https://someclient.com
/somegamepage'
1;
$mergedParams =
array_merge
($requestParams,
$headers);
ksort($mergedParams);
hashString =
http_build_query
($mergedParams);
$XSign = hash_hmac
('shal', $hashString,
$merchantKey);
```

```
<?php
$merchantKey = '38f874f531b9475df59ef5ad8d5436206c3eef2a';
$headers = [
  'X-Merchant-Id' => 'ff955b5759b3885f08cf125d4454ceb4',
  'X-Timestamp' => '1471857411',
  'X-Nonce' => 'e115cf0f66a645aca08225c9c1b20b80',
1;
$requestParams = [
  'game_uuid' => 'abcd12345',
  'currency' => 'USD',
  'return_url' => 'https://someclient.com/somegamepage'
];
$mergedParams = array_merge($requestParams, $headers);
/* Array $mergedParams after merging $requestParams and $headers arrays
[
  'game_uuid' => 'abcd12345',
  'currency' => 'USD',
  'return url' => 'https://someclient.com/somegamepage',
  'X-Merchant-Id' => 'ff955b5759b3885f08cf125d4454ceb4',
  'X-Timestamp' => '1471857411',
  'X-Nonce' => 'e115cf0f66a645aca08225c9c1b20b80'
]
* /
ksort($mergedParams);
/* Array $mergedParams after sorting itself by keys
[
  'X-Merchant-Id' => 'ff955b5759b3885f08cf125d4454ceb4',
  'X-Nonce' => 'el15cf0f66a645aca08225c9c1b20b80',
  'X-Timestamp' => '1471857411',
  'currency' => 'USD',
  'game_uuid' => 'abcd12345',
  'return_url' => 'https://someclient.com/somegamepage'
1
* /
$hashString = http_build_query($mergedParams);
/* Builded $hashString:
"X-Merchant-Id=ff955b5759b3885f08cf125d4454ceb4&X-
Nonce=e115cf0f66a645aca08225c9c1b20b80&X-
Timestamp=1471857411&currency=USD&game_uuid=abcd12345&return_url=https%3A%2F%
2Fsomeclient.com%2Fsomegamepage"
$XSign = hash_hmac('sha1', $hashString, $merchantKey);
/* Resulting signature with these parameters:
"b41458071467ded86b230b37b1a78169bbfa49f0"
```

#### Request

```
GET /games
```

X-Merchant-Id: ff955b5759b3885f08cf125d4454ceb4

X-Timestamp: 1471857411

X-Nonce: e115cf0f66a645aca08225c9c1b20b80

X-Sign: 1bb7e4cd5c43f9885ba6a1758ad30fc562f88821

#### **Games**

#### **Endpoint URL**

/games

`[ GET / ]` Retrieving games list

You will receive games collection available for your Merchant ID.

Note: The production server only returns 50 games per page. Per page = 0 doesn't work there.

Note: Games list **rate limit** is set for 100 requests in 1 second for production environment and 1 request per second for staging or demo environments.

Warning: Games lists data MUST be cached at the client's side, including static data such as game images. It's forbidden to publish aggregator's images URLs by the client's front-end in any form.

#### Request fields

Attribute: data type	Description
`expand`: `string`, `optional`	Request additional object expansions, separated by comma

#### Game item fields

Attribute: data type	Description
`uuid`: `string`	Game UUID that will be used in '/init' and '/lobby'
`name`: `string`	Game name
`image`: `string`	Game image url
`type`: `string`	Game type
`provider`: `string`	Game provider name
`technology`: `string`	Game technology
`has_lobby`: `integer`	1 or 0 - indicates if game has lobby
`is_mobile`: `integer`	1 or 0 - indicates if game used for mobile devices and should be opened in new window (not in iframe or some <div> container)</div>
`has_freespins`: `integer`	1 or 0 - indicates if game has freespins
`has_tables`: `integer`	1 or 0 - indicates if game has game tables
`freespin_valid_until_fu Il_day`: `integer`	1 or 0 - indicates that `freespins/set` property `valid_until` must have time 00:00:00. Example pass valid_unit = 2020-01-25 freespin campaign will be valid until 2020-01-26 00:00:00
`label`: `string`	Sub provider's label

#### Available expansions

Attribute: data type	Description
`tags`: `object[]`	assigned tags objects
`parameters`: `object`	additional game parameters
`images`: `object[]`	game images objects, including high-quality if available
`related_games`: `object[]`	games list related to the game

#### **Example**

#### Request

GET /games?expand=tags,parameters,images,related games HTTP/1.1

#### Response

```
HTTP/1.1 200 OK
    "items": [
         {
              "uuid": "abcd12345",
              "name": "Book of Ra",
              "image": "https://static.game-aggregator.com/games/4694605316aalca969fe89227aabe51cle8b091b.jpg",
              "type": "Slots",
              "provider": "abcd12345",
"technology": "Flash",
              "has_lobby": 0,
              "is_mobile": 0,
              "label": "Some Sub Provider Legal Name GmBH.",
              "tags": [
                  {
                       "code": "jackpots",
"label": "Jackpots"
                       "code": "freespins",
                       "label": "FreeSpins'
              1.
              "parameters": {
                  "rtp": 98.72,
                   "volatility": "medium-high",
                  "reels_count": "5+1",
                  "lines_count": 20
              "images": [
                  {
                       "name": "4694605316aalca969fe89227aabe51c1e8b091b.jpg",
"file": "games/4694605316aalca969fe89227aabe51c1e8b091b.jpg",
                       "url": "https://static.game-aggregator.com/games/4694605316aalca969fe89227aabe51cle8b091b.
jpg",
                       "type": "regular"
                       "name": "4694605316aalca969fe89227aabe51c1e8b091b_hq.png",
                       "file": "games/4694605316aalca969fe89227aabe51cle8b091b_hq.png",
                       "url": "https://static.game-aggregator.com/games
/4694605316aa1ca969fe89227aabe51c1e8b091b_hq.png",
                       "type": "high-quality"
              "related_games": [
                       "uuid": "4694605316aalca969fe89227aabe51cle8b091b",
                       "is mobile": 0
                       "uuid": "4694605316aalca969fe89227aabe51cle8b091c",
                       "is_mobile": 1
                  }
              1
             "uuid": "abcd12345",
             "name": "Baccarat",
             "image": "https://static.game-aggregator.com/games/4694605316aa1ca969fe89227aabe51c1e8b091b.jpg",
             "type": "Baccarat",
             "provider": "abcd12345",
             "technology": "HTML5",
             "has_lobby": 1,
             "is_mobile": 0,
             "label": "Some Sub Provider Legal Name GmBH.",
             "tags": [],
             "parameters": {
                  "rtp": null,
                 "volatility": null,
                 "reels_count": null,
```

```
"lines_count": null
            "images": [
                {
                    "name": "4694605316aalca969fe89227aabe51c1e8b091b.jpg",
                    "file": "games/4694605316aa1ca969fe89227aabe51c1e8b091b.jpg",
                    "url": "https://static.game-aggregator.com/games/4694605316aalca969fe89227aabe51c1e8b091b.
jpg",
                    "type": "regular"
                    "name": "4694605316aa1ca969fe89227aabe51c1e8b091b_hq.png",
                    "file": "games/4694605316aalca969fe89227aabe51cle8b091b_hq.png",
                    "url": "https://static.game-aggregator.com/games
/4694605316aa1ca969fe89227aabe51c1e8b091b_hq.png",
                    "type": "high-quality"
            "related_games": []
       }
   "href": "https://game-aggregator.com/endpoint?page=1"
        "next": {
            "href": "https://game-aggregator.com/endpoint?page=2"
        "last": {
            "href": "https://game-aggregator.com/endpoint?page=50"
     _meta": {
        "totalCount": 1000,
        "pageCount": 50,
        "currentPage": 1,
        "perPage": 20
```

#### Game tags

#### **Endpoint URL**

/game-tags

#### [ GET / ] Retrieving game tags list

You will receive game tags collection.

#### Request fields

• expand: string, optional, request additional object expansion

#### Game item fields

- code: string, Game tag code
- label: string, Game tag name

#### Available expansions

• category: object[], assigned tag category object

#### Example

```
Request:
```

```
GET /game-tags?expand=category HTTP/1.1
...
```

Response:

```
HTTP/1.1 200 OK
{
     "items": [
               "code": "jackpots",
"label": "Jackpots",
               "category": {
    "code": "financial",
                    "label": "Financial"
               "code": "freespins",
"label": "FreeSpins",
               "category": {
    "code": "financial",
    "label": "Financial"
          }
    "href": "https://game-aggregator.com/endpoint?page=1"
          "next": {
                "href": "https://game-aggregator.com/endpoint?page=1"
          },
"last": {
    "bref
                "href": "https://game-aggregator.com/endpoint?page=1"
      _meta": {
          "totalCount": 20,
          "pageCount": 1,
          "currentPage": 1,
"perPage": 20
}
```

#### Lobby

If game has lobby integrator should call this action to get lobby tables, so player can choose which table to play.

#### **Endpoint URL**

/games/lobby

`[ GET / ]` Returns list of tables for the selected game

#### Request fields

Attribute: data type	Description
`game_uuid`: `string`, `required`	Game UUID provided in `/games`
`currency`: `string`, `required`	Player currency that will be used in this game session
`technology`: `string`, `optional`	Parameter for lobby tables filtering by technology

Can be two types: "html5" or "flash".

#### Response fields

`lobby`: `array`,Contains lobby data of the selected game with following attributes:

Attribute: data type	Description	
`lobbyData`: `string`	Data required on `/games/init` phase for *lobby_data* parameter	
`name`: `string`	Table name	
`isOpen`: `boolean`	True or false - indicates if game is open right now	

`openTime`: `string`	Lobby open time
`closeTime`: `string`	Lobby close time
`dealerName`: `string`	Dealer name
`dealerAvatar`: `string`	Dealer avatar url
`technology`: `string`	Lobby technology ("html5" or "flash")
`limits`: `array`	Table limits. Notice! Some games can return single limit object
`tableId`: `string`	Table id that could be used in the /freevouchers/set request

#### Request

GET /games/lobby?game\_uuid=abc123&currency=USD HTTP/1.1

#### Response

```
HTTP/1.1 200 OK
...
{
lobbyCata: "abcd12345",
name: "Baccarat",
isOpen: true,
openTime: "11:00:00",
closeTime: "12:00:00",
dealerName: "abcd12345",
dealerAvatar: "https://avatar-url.com",
technology: "html5",
"limits": [
{
    currency: "USD",
    min: 1,
    max: 100
}
}
}
```

#### Init

This action will prepare game for launch and return final url where player should be redirected to start playing.

Please note that some providers may allow launching their different games even after init phase (in a game's interface, in its lobby). In this case we may send seamless transactions with different 'game\_uuid' but with the same 'session\_id' fields. Other providers may even allow placing a bet in the mobile version of the game, yet credit a win in the desktop version, in this case 'session\_id' will be different for bet and win transaction, but 'round\_id' will be the same.

#### **Endpoint URL**

#### **Endpoint URL**

/games/init

`[ POST / ]` Initializing game session

#### Request fields

Attribute: data type	Description
`game_uuid`: `string`, `required`	Game UUID provided in `/games`
`player_id`: `string`, `required`	Unique player ID on the integrator side

`player_name`: `string`, `required`	Player nickname that will be shown in some games
`currency`: `string`, `required`	Player currency that will be used in this game session
`session_id`: `string`, `required`	Unique game session ID on the integrator side
`device`: `string`, `optional`, `default: "desktop"`	The type of device that will be used when launching the game.
	Available values: "desktop", "mobile".
`return_url`: `string`, `optional`	Redirect player to this url after game ends
`language`: `string`, `optional`	Player language
`email`: `string`, `optional`	Player email
`lobby_data`: `string`, `optional`	Used only for games with lobby. Provided in `/lobby`

#### Request

POST /games/init HTTP/1.1

game\_uuid=abcd12345&player\_id=abcd12345&player\_name=abcd12345&currency=USD& ....

#### Response

```
HTTP/1.1 200 OK
{
"url": "https://example.com/endpoint"
```

#### Init demo game (only if provider has demo mode)

This action will prepare game for launch in demo mode and return final url where player should be redirected to start playing.

#### **Endpoint URL**

/games/init-demo

`[ POST / ]` Initializing game session

#### Request fields

Attribute: data type	Description
`game_uuid`: `string`, `required`	Game UUID provided in `/games`
`device`: `string`, `optional`, `default: "desktop"`	The type of device that will be used when launching the game.  Available values: "desktop", "mobile".
`return_url`: `string`, `optional`	Redirect player to this url after game ends
`language`: `string`, `optional`	Player language

#### Example

#### Request

```
POST /games/init-demo HTTP/1.1
```

...

game\_uuid=abcd12345&language=en&return\_url=....

## Response HTTP/1.1 200 OK { "url": "https://example.com/endpoint" }

#### Game launch

To launch the game redirect player to the URL returned by `/games/init` or `/games/init-demo`.

#### Integrator

#### Overview

Integrator should provide endpoint URL to communicate with Game Aggregator during the game session

Game Aggregator could send 4 type of calls to integrator

- Balance
- Win
- Bet
- Refund

Please note that some providers may allow launching their different games even after init phase (in a game's interface, in its lobby). In this case we may send seamless transactions with different 'game\_uuid' but with the same 'session\_id'. Other providers may even allow placing a bet in the mobile version of the game, yet credit a win in the desktop version, in this case 'session\_id' will be different for bet and win transaction, but 'round\_id' will be the same.

#### Request format

All calls from Game Aggregator to integrator will be done via `POST` and parameters will be passed with `application/x-www-form-urlencoded` content type

#### Response format

All integrator responses should have 'Content-Type: application/json' header, 'json' format and 'HTTP/1.1 200 OK' status code.

#### **Error format**

In case of error integrator should return json object with following attributes and `HTTP/1.1 200 OK` status code.

Attribute: data type	Description
`error_code`: `string`, `required`	Error code (specific for every action)
`error_description`: `string`, `required`	Human readable error description. Can be empty

```
HTTP/1.1 200 OK
{
"error_code": "INSUFFICIENT_FUNDS",
"error_description": "Not enough money to continue playing"
}
```

#### **Error codes**

Error code	Description
`INSUFFICIENT_FUN DS`	code used in **bet** action when player has insufficient funds
`INTERNAL_ERROR`	code used in all other cases meaning that action has not been executed: player not found, database or file system errors, etc

#### Security

All Game Aggregator requests contains authorization headers.

#### **Authorization headers**

Header name	Description
`X-Merchant-Id`	Merchant ID provided by integration manager
`X-Timestamp`	Request timestamp. If differ from current timestamp for more than 30 seconds - request considered expired
`X-Nonce`	Random string
`X-Sign`	Sign calculated with sha1 hmac

#### X-Sign calculation

- 1. Merge request array with authorization headers array
- 2. Sort resulting array by key in ascending order
- 3. Generate a URL-encoded query string from this array
- 4. Use sha1 hmac algorithm with Merchant Key (provided by integration manager) for signing

#### PHP example of the X-Sign validation

```
""php
%merchantKey = 'Merchant Key provided by integration manager';

$headers = [
'X-Merchant-Id' => 'Get header value',
'X-Timestamp' => 'Get header value',
'X-Nonce' => 'Get header value',
];

$XSign = 'Get header value';

$mergedParams = array_merge($_POST, $headers);
ksort($mergedParams);
$hashString = http_build_query($mergedParams);

$expectedSign = hash_hmac('shal', $hashString, $merchantKey);

if ($XSign !== $expectedSign) {
    throw new \Exception('Invalid sign');
}
```

#### Example

```
POST <client_callback_endpoint> HTTP/1.1
Content-Type: application/x-www-form-urlencoded
...
X-Merchant-Id: ff955b5759b3885f08cf125d4454ceb4
X-Timestamp: 1471857411
X-Nonce: e115cf0f66a645aca08225c9c1b20b80
X-Sign: 1bb7e4cd5c43f9885ba6a1758ad30fc562f88821
param=value&param2=value2
```

#### **Balance**

Game Aggregator will call this action to retrieve actual player balance

#### **Endpoint URL**

<cli>client\_callback\_endpoint>

#### Request

`[ POST / ]` Balance request

#### Request fields

Attribute: data type	Description
`action`: `string ["balance"]`	Action "balance"
`player_id`: `string`	Unique player ID on integrator side
`currency`: `string`	Balance currency
`session_id`: `string`	Session ID (if option enabled)

#### Response fields

Attribute: data type	Description
`balance`: `double`, `required`	Player's balance

#### Example

#### Request

POST <cli>ent\_callback\_endpoint> HTTP/1.1

• • •

 $action = balance \& player\_id = 123456 \& currency = USD \& session\_id = c4ca4238a0b923820dcc509a6f75849b$ 

#### Response

```
HTTP/1.1 200 OK .... {
"balance": 57.12 }
```

#### Bet

This action is called when player trying to make a bet.

#### Bet types

Туре	Description
`bet`	Default bet type
`tip`	Tip for a dealer
`freespin`	Freespin

#### Request fields

Attribute: data type	Description
`action`: `string ["bet"]`	Action "bet"
`amount`: `double`	Bet amount
`currency`: `string`	Bet currency
`game_uuid`: `string`	Game UUID from the list of games '/games'
`player_id`: `string`	Unique player ID on integrator side
`transaction_id`: `string`	Unique transaction ID on Game Aggregator side
`session_id`: `string`	Unique integrator game session ID, provided in `/games/init`
`type`: `string`	"bet", "tip" or "freespin"
`freespin_id`: `string`	Unique campaign identifier provided in /freespins/set (present in case of active freespin campaign)
`quantity`: `int`	Number of freespin rounds left in campaign (present in case of active freespin campaign)
`round_id`: `string`, `optional`	id of current transaction round
`finished`: `boolean`, `optional`	is round is finished in game

#### Response fields

Attribute: data type	Description
`balance`: `double`, `required`	Player's balance after transaction
`transaction_id`: `string`, `required`	Unique transaction ID on the integrator side

#### Important!

Bet with provided \*\*transaction\_id\*\* should be processed only once. If you already processedthis transaction, then return successful response with processed transaction ID on the integrator side.

#### **Example**

```
Request

POST <client_callback_endpoint> HTTP/1.1
...
action=bet&amount=10.00&currency=USD&transaction_id=abcd12345&session_id=abcd12345&type=bet
```

```
Response

HTTP/1.1 200 OK
...

{
"balance": 27.18,
"transaction_id": "abcd12345",
}
```

#### Win

Action called when player win in a game

#### Win types

Туре	Description
`win`	Default win type

`jackpot`	Player get a jackpot
`freespin`	Freespin

#### Request fields

Attribute: data type	Description
`action`: `string ["win"]`	Action "win"
`amount`: `double`	Win amount
`currency`: `string`	Win currency
`game_uuid`: `string`	Game UUID from the list of games `/games`
`player_id`: `string`	Unique player ID on integrator side
`transaction_id`: `string`	Unique transaction ID on Game Aggregator side
`session_id`: `string`	Unique integrator game session ID, provided in `/games/init`
`type`: `string`	"win", "jackpot" or "freespin".  - For some Pragmatic provider games also can be "bonus", "pragmatic_prize_drop" or "pragmatic_tournament".  - For other providers, the following types are used for promotional activities: "promo" (GameArt, BetGames, AmigoGaming), "prize_drop" (Endorphina, BGaming) , "tournament" (Endorphina), "unaccounted_promo" (Spribe), "loyalty_win" (BarbaraBang)
`freespin_id`: `string`	Unique campaign identifier provided in /freespins/set (present in case of active freespin campaign)
`quantity`: `int`	Number of freespin rounds left in campaign (present in case of active freespin campaign)
`round_id`: `string`, `optional`	id of current transaction round
`finished`: `boolean`, `optional`	is round is finished in game

#### Response fields

Туре	Description
`balance`: `double`, `required`	Player's balance after transaction
`transaction_id`: `string`, `required`	Unique transaction ID on the integrator side

#### Important!

Win with provided \*\*transaction\_id\*\* should be processed only once. If you already processedthis transaction, then return successful response with processed transaction ID on the integrator side.

We don't provide \*\*round\_id\*\* value for freespin wins of the ELK provider.

#### Example

#### Request

POST <cli>ent\_callback\_endpoint> HTTP/1.1

 $...\\ action=win\&amount=100.00\&currency=USD\&transaction\_id=abcd12345\&session\_id=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd12345\&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1234b&type=wind=abcd1$ 

# HTTP/1.1 200 OK ... { "balance": 170.21, "transaction\_id": "abcd12345", }

#### Refund

Refund is a cash back in case bet problems.

After receiving `refund` call integrator should cancel corresponding bet transaction and return funds to player. If such bet transaction does not exists then integrator should just save this refund transaction and respond with success.

#### Request fields

Attribute: data type	Description
`action`: `string ["refund"]`	Action "refund"
`amount`: `double`	Refund amount
`currency`: `string`	Refund currency
`game_uuid`: `string`	Game UUID from the list of games `/games`
`player_id`: `string`	Unique player ID on integrator side
`transaction_id`: `string`	Unique transaction ID on Game Aggregator side
`session_id`: `string`	Unique integrator game session ID, provided in `/games/init`
`type`: `string`, `optional`	Transaction type. Available values: 'bet', 'tip', 'freespin'
`bet_transaction_id`: `string`	Game Aggregator bet transaction ID to be refunded
`freespin_id`: `string`	Unique campaign identifier provided in /freespins/set (present in case of active freespin campaign)
`quantity`: `int`	Number of freespin rounds left in campaign (present in case of active freespin campaign)
`round_id`: `string`, `optional`	ID of current transaction round
`finished`: `boolean`, `optional`	is round is finished in game

#### Response fields

Attribute: data type	Description
`balance`: `double`, `required`	Player's balance after transaction
`transaction_id`: `string`, `required`	Unique refund transaction ID on the integrator side

#### Important!

Bet with provided  $**bet_transaction_id^**$  should be refunded processed only once. If you already refundedthis transaction, then in response return processed refund transaction ID on the integrator side.

#### Request

```
POST <client_callback_endpoint> HTTP/1.1
```

action=refund&amount=10.

00&currency=USD&transaction\_id=abcd12345&session\_id=abcd12345&bet\_transaction\_id=abcd1234&type=bet

# Response HTTP/1.1 200 OK { "balance": 27.18, "transaction\_id": "abcd12345", }

#### Rollback

In case enabled only for two providers

Rollback is a cancel of the whole round or part of the session if provider does not support rounds.

After receiving `rollback` call integrator should cancel corresponding bet, refund and win transactions and actualize player balance. If such bet or win transaction does not exists then integrator should just save this transaction as `rollbacked` and respond with success.

The integrator should cancel transactions from **the `rollback\_transactions` list only**. Any additional logic based on `provider\_round\_id`, that will rollback other transactions in the same round, can produce a lot of errors within out of sync session data between provider, game aggregator and integrator.

#### Request fields

Attribute: data type	Description
`action`: `string ["rollback"]`	Action "rollback"
`currency`: `string`	Rollback currency
`game_uuid`: `string`	Game UUID from the list of games `/games`
`player_id`: `string`	Unique player ID on integrator side
`transaction_id`: `string`	Unique transaction ID on Game Aggregator side
`rollback_transactions`: `array`	List of round transactions
`action`: `string`	'bet', 'win' or 'refund'action
`amount`: `double`	Transaction amount
`transaction_id`: `string`	Unique transaction ID on Game Aggregator side for rollbacking transaction
`type`: `string`	See types for 'bet' or 'win'
`session_id`: `string`	Unique integrator game session ID, provided in `/games/init`
`type`: `string`	"rollback"
`provider_round_id`: `string`	Game Aggregator round id
`round_id`: `string`	Game Aggregator round id

#### Response fields

Attribute: data type	Description
'balance': 'double', 'required'	Player's balance after transaction
`transaction_id`: `string`, `required`	Unique rollback transaction ID on the integrator side
`rollback_transactions`: `array`, `required`	All transactions id related to rollbacked round should be in array

If some transaction will be missed Game Aggregator will accept rollback response as failed.



All transactions specified in rollback request should be refunded processed only once. If you already processedsome transaction, then transaction\_id should be in response as successfully processed.

#### Request

```
Response

HTTP/1.1 200 OK
...

{
    "balance": 27.18,
    "transaction_id": "12345",
    "rollback_transactions" => {
    12346,
    12347
    }
}
```

#### Additional requests to Game Aggregator

#### **Merchant limits**

#### Returns list of limits for merchant

```
Endpoint URL
/limits
```

#### Request

`[ GET / ]` Returns list of limits for merchant

#### Response fields

Attribute: data type	Description
`amount`: `string`	Amount left
`currency`: `string`	Limit currency
`provider`: `array`	List of providers attached to this limit

#### Example

```
Response
GET /limits ...
```

```
Response
```

```
HTTP/1.1 200 OK
...

[
{
    "amount": "1000.00",
    "currency": "USD",
    "provider1",
    "Provider2",
    "Provider3"
]
},
{
    "amount": "1000.00",
    "currency": "EUR",
    "providers":[
    "Provider1"
]
}
```

#### Merchant freespin limits

Returns list of freespin limits for merchant.

#### **Endpoint URL**

/limits/freespin

#### Request

`[ GET / ]` Returns list of freespin limits for merchant

#### Response fields

Attribute: data type	Description
`quantity`: `int`	Quantity of freespin left
`currency`: `string`	Freespin limit currency
`provider`: `array`	List of providers attached to this freespin limit

#### Example

#### Request

GET /limits/freespin

•••

#### Response

```
HTTP/1.1 200 OK
...

[
{
    "quantity": 17,
    "currency": "USD",
    "providers":[
    "Provider1",
    "Provider2",
    "Provider3"
    ]
},
{
    "quantity": 1000,
    "currency": "EUR",
    "providers":[
    "Provider1"
    ]
}
```

#### List of jackpots (LEGACY)

Returns list of jackpots for every game provider (if available) assigned to a certain merchant. List of jackpots is cached for 60 seconds.

#### **Endpoint URL**

/jackpots

`[ GET /]` Returns a list of jackpots assigned to a certain merchant

#### Response fields

Attribute: data type	Description	
`name`: `string`, `null`	Jackpot name (string or null if game provider does not have names for jackpots)	
`amount`: `string`	Amount left	
`currency`: `string`	Limit currency	
`provider`: `string`	Game provider	

#### Example

Request	
GET /jackpots	

# HTTP/1.1 200 OK ... [ { "name": "jackpot name", "amount": "1000.00", "currency": "USD", "provider": "Provider1" }, { "name": null, "amount": "1000.00", "currency": "EUR", "provider": "Provider2" } ]

#### **Balance notification (LEGACY)**

Notify every game provider (if available) assigned to merchant key about balance changes.

```
Endpoint URL
/balance/notify
```

#### `[ POST / ]` Notify that player's balance was changed

Attribute: data type	Description
'balance': 'double', 'required'	Updated player balance
`session_id`: `string`	Unique integrator game session ID, provided in `/games/init`

#### Example

```
Request

POST /balance/notify HTTP/1.1
...
balance=11.23&session_id=23456
```

```
HTTP/1.1 200 OK
...

HTTP/1.1 500 Internal Server Error
...

{
"name": "Internal Server Error",
"message": "Session related to casino_session_uuid was not found",
"code": 0,
"status": 500
}
```

List of available freespin bets for chosen game and currency

#### **Endpoint URL**

/freespins/bets

`[ GET / ]` Get list of available freespin bets for chosen game and currency

#### Request fields

Attribute: data type	Description
`game_uuid`: `string`, `required`	Game UUID provided in `/games`
`currency`: `string`, `required`	Player currency that will be used in freespin campaign

#### Response fields

Attribute: data type	Description
`denominations`: `array`	Available denominations
`bets`: `array`	Available freespin bets, optional
`total_bets`: `array`	Possible total bets values, optional

#### Bets description

field name	type	description
bet_id	string	id of bet in list
bet_per _line	string /float	if it is float it means bet amount for onr line. Or it is can be one of the next value: "max", "mid", "min". It is means that final bet amount determined by provider
lines	integer	lines count of game

#### Total bets description

field name	type	description
bet_id	integer	id of bet in total_bets list
amount	float	free spin total bet amount per spin

#### Example

#### Request:

#### Request

GET /freespins/bets?game\_uuid=abcd12345&currency=USD HTTP/1.1

...

#### Response:

#### Response

```
HTTP/1.1 200 OK

"denominations":["0.01","0.1","1"],
"bets":[
{
    bet_id":"0",
    "bet_per_line":1,
    "lines":25
},
    "bet_per_line":2,
    "lines":25
},
    ...
],
    "total_bets":[
    {
    "bet_id": 0,
    "amount": 10.0
},
    {
    "bet_id": 1,
    "amount": 25.0
},
    ...
]
```

#### Set a freespin campaign

#### **Endpoint URL**

/freespins/set

#### Request

`[ POST / ]` Set a freespin campaign for player

#### Request fields

Attribute: data type	Description	
`player_id`: `string`, `required`	Unique player ID on the integrator side	
`player_name`: `string`, `required`	Player nickname that will be shown in some games	
`currency`: `string`, `required`	Player currency that will be used in this freespin campaign	
`quantity`: `int`, `required`	Number of freespin rounds in this campaign	
`valid_from`: `int`, `required`	Start date (Timestamp) of campaign	
`valid_until`: `int`, `required`	End date (Timestamp) of campaign. Also see description in method `/games`, property `freespin_valid_until_full_day`	
`freespin_id`: `string`, `required`	Unique identifier of campaign	
`bet_id`: `integer`, `optional`	Bet ID provided in `/freespins/bets`	
`total_bet_id`: `integer`, `optional`	Total bet ID	

`denomination`: `double`, `optional`	Denomination provided in `/freespins/bets`, `required` if `bet_id` used
`game_uuid` : `string`, `required`	Game UUID provided in `/games` that will be included in campaign

One of optional fields `bet\_id` and `denomination` or `total\_bet\_id` is required.

#### Example

#### Request

POST /freespins/set HTTP/1.1

...

 $player\_id=abcd12345\&player\_name=abcd12345\&currency=USD\&quantity=5\&valid\_from=1518610000\&valid\_until=1519610000\&\dots$ 

#### Response

HTTP/1.1 200 OK

...

#### Get a freespin campaign

#### **Endpoint URL**

/freespins/get

#### Request

`[ GET / ]` Get list of set campaigns

#### Request fields

Attribute: data type	Description
`freespin_id`: `string`, `required`	Unique identifier of campaign

#### Response fields

Attribute: data type	Description
`player_id`: `string`	Unique player ID on the integrator side
`currency`: `string`	Player currency that will be used in this freespin campaign
`quantity`: `int`	Number of freespin rounds in this campaign
`quantity_left`: `int`	Number of freespin rounds left in this campaign
`valid_from`: `int`	Start date (Timestamp) of campaign
`valid_until`: `int`	End date (Timestamp) of campaign
`freespin_id`: `string`	Unique identifier of campaign
`bet_id`: `int`	Bet ID provided in `/freespins/bets`
`total_bet_id`: `int`	Total bet ID
`denomination`: `double`	Denomination provided in `/freespins/bets`

`game_uuid`: `string`	Game UUID provided in `/games`
`status`: `string`	Status of campaign
`is_canceled`: `int`	is campaign canceled
`total_win`: `double`	Total win

## Request GET /freespins/get?freespin\_id=abcd12345 ...

```
HTTP/1.1 200 OK
...

{
  "player_id": "abcd12345",
  "currency": "USD",
  "quantity": 10,
  "quantity" left": 8,
  "freespin_id": "abcd12345",
  ...
}
```

#### Cancel set camping

#### **Endpoint URL**

/freespins/cancel

`[ POST / ]` Cancel set camping for player

#### Request fields

Attribute: data type	Description
`freespin_id`: `string`, `required`	Unique identifier of campaign

#### Example

# Request POST /freespins/cancel HTTP/1.1 ... freespin\_id=abcd12345

```
Response
HTTP/1.1 200 OK
...
```

#### Set a freevoucher campaign

## Endpoint URL /freevouchers/set

#### Request

`[ POST / ]` Set a freevoucher campaign for player

#### Request fields

Attribute: data type	Description
`player_id`: `string`, `required`	Unique player ID on the integrator side
`title`: `string`, `required`	Human readable title of the voucher.1 to 40 chars limit
`currency`: `string`, `required`	Player currency that will be used in this freevoucher campaign
`initial_balance`: `double`, `required`	Initial amount of money the free voucher has
`max_winnings`: `double`, `required`	Maximum amount of money a player can win using the free voucher
`valid_until`: `int`, `required`	End date (Timestamp) of campaign. Also see description in method `/games`, property `freevoucher_valid_until_full_day`
`voucher_id`: `string`, `required`	Unique identifier on the integrator side
`table_ids`: `string[]`, `required`	Table UUID ('tableId') received from the '/games/lobby' endpoint response
`short_terms`: `string`, `optional`	Short description of terms and conditions for the voucher
`terms_and_conds`: `string`, `optional`	Url with terms and conditions for the voucher

#### Example

#### Request

POST /freevouchers/set HTTP/1.1

...

 $player\_id=abcd12345\&title=delight\&currency=USD\&voucher\_id=abcd12345\&initial\_balance=100\&valid\_until=1519610000\&max\_winning\\s=150\&table\_ids[]=f3c4f3ad046f419e8111b537e055817$ 

#### Response

HTTP/1.1 200 OK

•••

#### Get a freevoucher campaign

#### **Endpoint URL**

/freevouchers/get

#### Request

`[ GET / ]` Retrieve status and data for the free voucher

#### Request fields

Attribute: data type	Description
• •	•

	`voucher_id`: `string`, `required`	Unique identifier on the integrator side
--	------------------------------------	------------------------------------------

#### Response fields

Attribute: data type	Description
`player_id`: `string`	Unique player ID on the integrator side
`currency`: `string`	Player currency that will be used in this freevoucher campaign
`title`: `string`	Human readable title of the voucher
`state`: `string`	Status of campaign
`valid_from`: `int`	Start date (Timestamp) of campaign
`valid_until`: `int`	End date (Timestamp) of campaign
`voucher_id`: `string`	Unique identifier on the integrator side
`playable`: `double`	Remaining amount of money available for betting
`winnings`: `double`	Amount of money the player has won using the voucher

#### Example

```
Request
/freevouchers/get?voucher_id=abcd12345
...
```

```
### Response

HTTP/1.1 200 OK

...

{
    "player_id": "abcd12345",
    "voucher_id": "abcd12345",
    "currency": "USD",
    "valid_from": 1519610000,
    "valid_until": 1519810000,
    "title": "delight",
    "state":"Active",
    "playable":50,
    "winnings":12.5
    ...
}
```

#### Cancel freevoucher campaign

## Endpoint URL /freevouchers/cancel

`[ POST / ]` Cancel freevoucher campaign for player

#### Request fields

Attribute: data type	Description
`voucher_id`: `string`, `required`	Unique identifier on the integrator side

```
'reason': 'string', 'required'
                                            The reason why the voucher can be closed manually.
                                            Possible values:

Canceled - a licensee has canceled the voucher.
Forfeited - a licensee has forfeited the voucher.
```

```
Request
POST /freevouchers/cancel HTTP/1.1
voucher_id=abcd12345
reason=Canceled
```

```
Response
HTTP/1.1 200 OK
```

#### Integrator self validation

Integrator could check if implementation on his side is correct. To start validation integrator should have active game session (opened not longer than 15 minutes ago). Game Aggregator will send set of requests ('bet', 'win', etc) during validation and return result in response.

```
Endpoint URL
/self-validate
```

#### `[ POST / ]` Self validation

#### Response fields

Attribute: data type	Description
`success`: `boolean`	true or false - indicates if validation is passed and implementation is correct
`log`: `array`	Validation log

#### Example

```
Request
POST /self-validate
```

```
Response
```

```
HTTP/1.1 200 OK
"success": true,
"log": [
"Log message",
"Log message",
```