# SPRIBE Games Integration API (1.9.0)

# **Game Launch Process**

To launch a game, online casino should generate launch link with appropriate parameters and open it in browser.

- <u>Production</u>
- <u>Demo</u>

Parameter	Туре	Description
game	string [game enum]	Identifies specific game. (Game Identificator)
user	string	ID of a player on the operators side
token	string	The one time token is a unique string generated by the ope
currency	string [currency enum]	Game currency (currency code)
operator	string	operator key name
lang optional	string [lang enum]	Game interface language
return_url optional	string [pattern url]	URL for return from game
account_history_url optional	string [pattern url]	URL for the players bet history in the game menu and the re
irc_duration optional	integer [seconds]	Period to stop the game and show the reality check window
irc_elapsed optional	integer [seconds]	The elapsed time from the first period of the reality check.

# **URL Structure**

https://{launch-

 $url \end{align} \footnote{\continuous} \label{token} \end{align} \footnote{\continuous} \$ 

# Specifications

### Games

Name	Provider key	Game identificator
Aviator	spribe_aviator	aviator
Dice	spribe_crypto	dice
Goal	spribe_crypto	goal
Plinko	spribe_crypto	plinko

Name	Provider key	Game identificator
Mines	spribe_crypto	mines
Hi Lo	spribe_crypto	hi-lo
Keno	spribe_crypto	keno
Mini Roulette	spribe_crypto	mini-roulette
Hotline	spribe_crypto	hotline
Balloon	spribe_crypto	balloon
Keno 80	spribe_keno	multikeno
Trader	spribe_trader	trader
Crystal Fall	spribe_slots	crystal-fall
Neo Vegas	spribe_slots	neo-vegas
Gates of Egypt	spribe_slots	gates-of-egypt

# Authentication

This is a method that consists in requesting an authentication for a player who is trying to launch the game

• Path: /auth

• Request Method: **POST** 

• Content-Type: application/json; charset=utf-8

• Headers: X-Spribe-Client-ID, X-Spribe-Client-TS, X-Spribe-Client-Signature

# Request

• <u>Parameters</u>

• <u>Sample</u>

Parameter	Туре	Description
user_token	string	Token generated by operator during game I
session_token	string	Token generated by provider for current ga
platform	string [platform enum]	Enum: mobiledesktop
currency	string [currency enum]	Game currency. (currency code)

- Parameters
- Success sample
- Error sample

Parameter	Туре	Description
code	integer [enum]	Response code
message	string	Response any logical message
data	object	only needed when code 200
user_id	string	ID of player on operator side
username	string	Name of player
balance	long	Current balance of player in specified curre
currency	string [currency enum]	Currency of player

#### Important!

Each request sent to the API requires validation using specific security headers. For details on implementing this, refer to <u>Securing API Requests</u>.

Amount/Balance example

Amount/Balance fiat is represented in units(1\$ = 1000 unit) and always is an integer value. For example: with 5.32 USD and the value will be 5.32 \*  $10^3 = 5320$ 

Amount/Balance crypto is represented in units(1BTC = 1000000000 unit) and always is an integer value. For example: with 0.0532 BTC and the value will be  $0.0532 * 10^8 = 5320000$ 

#### Possible codes

- 200 Success
- 401 User token is invalid
- 403 User token is expired
- 413 Invalid Client-Signature
- 500 Internal error

If code is **200** - operator should always return parameter data with information; HTTP status code should always be **200** 

Player information

This method retrieves player information

• Path: /info

• Request Method: POST

• Content-Type: application/json; charset=utf-8

Headers: X-Spribe-Client-ID, X-Spribe-Client-TS, X-Spribe-Client-Signature

# Request

- <u>Parameters</u>
- <u>Sample</u>

Parameter	Туре	Description
user_id	string	Player ID on operator side
session_token	string	Token generated by provider for current ga
currency	string [currency enum]	Game currency. (currency code)

# Response

- Parameters
- Success sample
- Error sample

Parameter	Туре	Description
code	integer [enum]	Response code
message	string	Response any logical message
data	object	only needed when code 200
user_id	string	ID of player on operator side
username	string	Name of player
balance	long	Current balance of player in specified curre
currency	string [currency enum]	Currency of player

# Important!

Each request sent to the API requires validation using specific security headers. For details on implementing this, refer to <u>Securing API Requests</u>.

# Possible codes

- **200** Success
- 401 User token is invalid
- 403 User token is expired
- 413 Invalid Client-Signature
- 500 Internal error

If code is **200** - operator should always return parameter data with information; HTTP status code should always be **200** 

### Withdraw

This method withdraws money from player balance. Method sends one transaction and returns transaction ID, player balance and status of transaction.

• Path: /withdraw

• Request Method: POST

• Content-Type: application/json; charset=utf-8

• Headers: X-Spribe-Client-ID, X-Spribe-Client-TS, X-Spribe-Client-Signature

# Request

• <u>Parameters</u>

• <u>Sample</u>

Parameter	Туре	Description
user_id	string	Player ID on operator side
currency	string [currency enum]	Bet currency (currency code)
amount	long	Amount that should be transferred from pl
provider	string	Game provider
provider_tx_id	string	The transaction ID assigned by provider
game	string [game enum]	Identifies specific game. (game identificato
action	string [action enum]	Enum: betrain
action_id	string	ID of action in game, which depends on gai
session_token	string	Game session token
platform	string [platform enum]	Enum: mobiledesktop

- <u>Parameters</u>
- Success sample
- <u>Duplication sample</u>
- Error sample

Parameter	Туре	Description
code	integer [enum]	Response code

Parameter	Туре	Description
message	string	Response any logical message
data	object	only needed when code 200 or 409
user_id	string	ID of a player on the operators side
operator_tx_id	string	Unique transaction ID on side of operator
provider	string	Game provider
provider_tx_id	string	The transaction ID received by provider
old_balance	long	Balance before deposit
new_balance	long	Balance after deposit
currency	string [currency enum]	Transaction currency

# Important!

Each request sent to the API requires validation using specific security headers. For details on implementing this, refer to <u>Securing API Requests</u>.

If request is timed out, game sends same transaction, with same provider\_tx\_id again. If transaction is already processed on the side of the operator, operator identifies duplication and adds in answer duplication error code with already processed information of transaction. The Transaction should be unique with provider\_tx\_id.

If operator processed transaction successfully, but after this, provider can't process it in the game, provider will rollback transaction with rollback method.

# Amount/Balance example

Amount/Balance fiat is represented in units(1\$ = 1000 unit) and always is an integer value. For example: with 5.32 USD and the value will be 5.32 \*  $10^3 = 5320$ 

Amount/Balance crypto is represented in units(1BTC = 1000000000 unit) and always is an integer value. For example: with 0.0532 BTC and the value will be  $0.0532 * 10^8 = 5320000$ 

#### Possible codes

- 200 Success
- 401 User token is invalid
- 402 Insufficient fund
- 403 User token is expired
- 405 Internal error with no retry
- 409 Duplicate transaction
- **412** For stop the game and show the reality check window. In the window will shown the message from the response. (read more)

- 413 Invalid Client-Signature
- 500 Internal error

If code is **200** - operator should always return parameter data with information; HTTP status code should always be **200** 

# Deposit

This method makes a deposit into players account. The method sends transaction and returns transaction ID, player balance and status of transaction.

• Path: /deposit

Request Method: POST

• Content-Type: application/json; charset=utf-8

• Headers: X-Spribe-Client-ID, X-Spribe-Client-TS, X-Spribe-Client-Signature

### Request

- Parameters
- <u>Sample</u>

Parameter	Туре	Description
user_id	string	Player ID
currency	string [currency enum]	Bet currency (currency code)
amount	long	Amount that should be transferred to playe
provider	string	Game provider
provider_tx_id	string	The transaction ID assigned by provider
game	string [game enum]	Identifies specific game. (game identificato
action	string	Type of action: betrainfreebetrainfreebetpr
action_id	string	ID of action in game, which depends on gar
session_token	string	Game session token
platform	string [platform enum]	Enum: mobiledesktop
withdraw_provider_tx_id optional	string	Provider id of withdrawn transaction, to wh

- Parameters
- Success sample
- Duplication sample

### Error sample

Parameter	Туре	Description
code	integer [enum]	Response code
message	string	Response any logical message
data	object	only needed when code 200 or 409
user_id	string	ID of a player on the operators side
operator_tx_id	string	Unique transaction ID on side of operator
provider	string	Game provider
provider_tx_id	string	The transaction ID received by provider
old_balance	long	Balance before deposit
new_balance	long	Balance after deposit
currency	string [currency enum]	Transaction currency

#### Important!

Each request sent to the API requires validation using specific security headers. For details on implementing this, refer to <u>Securing API Requests</u>.

If request gets on timeout, or an internal error, game sends same transaction, with same provider\_tx\_id again. If transaction is already processed on the side of the operator, operator identifies duplication and adds in answer duplication error code with processed information of transaction. The Transaction should be unique with provider\_tx\_id.

### Amount/Balance example

Amount/Balance fiat is represented in units(1\$ = 1000 unit) and always is an integer value. For example: with 5.32 USD and the value will be 5.32 \*  $10^3 = 5320$ 

Amount/Balance crypto is represented in units(1BTC = 1000000000 unit) and always is an integer value. For example: with 0.0532 BTC and the value will be 0.0532 \*  $10^{8}$  = 5320000

### Possible codes

- 200 Success
- 401 User token is invalid
- 403 User token is expired
- **409** Duplicate transaction
- **413** Invalid Client-Signature
- **500** Internal error

If code is **200** - operator should always return parameter data with information; HTTP status code should always be **200** 

### Rollback

This method rollbacks transaction with provider transaction ID.

• Path: /rollback

• Request Method: POST

Content-Type: application/json; charset=utf-8

• Headers: X-Spribe-Client-ID, X-Spribe-Client-TS, X-Spribe-Client-Signature

# Request

• <u>Parameters</u>

• <u>Sample</u>

Parameter	Туре	Description
user_id	string	Player ID
amount	long	Amount of money that should be rollbacke
provider	string	Game provider
rollback_provider_tx_id	string	Provider transaction ID which should be rol
provider_tx_id	string	The transaction ID assigned by provider
game	string [game enum]	Identifies specific game. (game identificator
session_token	string	Game session token
action	string [action enum]	Enum: betrain
action_id	string	ID of action in game, which depends on gar

- Parameters
- Success sample
- <u>Duplication sample</u>
- Error sample

Parameter	Туре	Description
code	integer [enum]	Response code
message	string	Response any logical message

Parameter	Туре	Description
data	object	only needed when code 200 or 409
user_id	string	ID of a player on the operators side
currency	string [currency enum]	Transaction currency
operator_tx_id	string	Transaction ID on side of operator
provider	string	Game provider
provider_tx_id	string	The transaction ID assigned by provider
old_balance	long	Balance before deposit
new_balance	long	Balance after deposit

#### Important!

Each request sent to the API requires validation using specific security headers. For details on implementing this, refer to <u>Securing API Requests</u>.

If request gets on timeout, or an internal error, game sends same transaction, with same provider\_tx\_id again. If transaction is already processed on the side of the operator, operator identifies duplication and adds in answer duplication error code with processed information of transaction. The Transaction should be unique with provider\_tx\_id.

### Amount/Balance example

Amount/Balance fiat is represented in units(1\$ = 1000 unit) and always is an integer value. For example: with 5.32 USD and the value will be 5.32 \*  $10^3 = 5320$ 

Amount/Balance crypto is represented in units(1BTC = 1000000000 unit) and always is an integer value. For example: with 0.0532 BTC and the value will be 0.0532 \*  $10^{8}$  = 5320000

#### Possible codes

- **200** Success
- 401 User token is invalid
- 403 User token is expired
- 408 Transaction does not found
- **409** Duplicate transaction
- 413 Invalid Client-Signature
- **500** Internal error

If code is **200** - operator should always return parameter data with information; HTTP status code should always be **200** 

#### Reality check

A Reality Check gives to the players the option of setting a time frequency at which you will receive an notification about the length of time you have spent in game.

To stop the game and show the reality check notification, the API should on withdraw\_method answer with the error code 412. In the window will be shown the message from the response.e.g { "code": 412, "message": "You have been playing for 60 minutes" }. In message should be information about the length of the time in game. Besides message, in the window following buttons will be presented: stop, continue & account history. When player presses the button stop or continue the game calls playerNotificationCallback\_method. When player presses the button account history, the game opens the link of the game history of players, which was presented in launch URL;

#### Important!

Currently reality check is available only for AVIATOR

# **Securing API Requests**

To maintain secure and verified communication between systems, all requests made between our API and operators must adhere to the following security requirements. The specifics below outline how requests should be validated, whether initiated by the API or the operator.

#### **Security Requirements for API Requests**

For requests originating from our API to operators, operators should validate each incoming request by checking the following headers. Similarly, operators should add these headers to requests they initiate to our API.

### **Required Headers for Request Validation**

Each secured request must contain the following headers:

- 1. **X-Spribe-Client-ID:** A unique identifier for the operator, provided by us.
- 2. X-Spribe-Client-TS: A timestamp in UTC, representing seconds since the Unix Epoch.
- 3. **X-Spribe-Client-Signature:** A hashed signature that verifies the integrity of the request parameters.

### **Generating the X-Spribe-Client-Signature Header**

The X-Spribe-Client-Signature ensures request authenticity by following these steps to create a signature:

#### 1. Concatenate the following values:

- **Timestamp** (X-Spribe-Client-TS): Timestamp at the time of the request.
- **Request URI:** URL path with ordered and encoded query parameters (without the domain).
- Request Body: For POST and PUT requests, include the request body as a string.
   Omit this for GET and DELETE requests.

2. **Hash the concatenated string:** Use the SHA256 HMAC algorithm, with the operator's Client Secret as the key, to hash the concatenated string.

#### **Validation Process**

Upon receiving a request, the server (operator's or ours) should validate the X-Spribe-Client-Signature by:

- 1. Retrieving the Client Secret based on X-Spribe-Client-ID.
- 2. Repeating the signature creation process using the headers and parameters.
- 3. Comparing the generated signature to the received X-Spribe-Client-Signature header. A match indicates the request is verified.

# **Example Implementation for Incoming API Requests**

Below is an example illustrating how to implement secure request handling on the operator's side or ours:

```
@PostMapping(path = "/secure-request")
public ResponseEntity<Void> secureRequest(@RequestBody final byte[] body,
                       @RequestHeader(name = "X-Spribe-Client-ID") final String clientId,
                       @RequestHeader(name = "X-Spribe-Client-TS") final long time,
                       @RequestHeader(name = "X-Spribe-Client-Signature") final String signature,
                       final HttpServletRequest request) {
  // Validate headers and timestamp expiration
  final var clientSecret = getClientSecretFromRepository(clientId); // Retrieve Client Secret
  final var queryString = request.getQueryString();
  final var path = request.getRequestURI() + (queryString == null | | "".equals(queryString)? "": "?" +
request.getQueryString());
  final var calculatedSignature = createSignature(time, path, body, clientSecret);
  if (!signature.equalsIgnoreCase(calculatedSignature)) {
    throw new SecurityException("Signature mismatch.");
  }
}
public static String createSignature(final long time, final String path, final byte[] body, final String
clientSecret) {
  try {
```

```
Mac sha256Hmac = Mac.getInstance("HmacSHA256");
    sha256Hmac.init(new SecretKeySpec(clientSecret.getBytes(StandardCharsets.UTF_8),
"HmacSHA256"));
    sha256Hmac.update((time + path).getBytes(StandardCharsets.UTF_8));

    byte[] bytes = body == null ? sha256Hmac.doFinal() : sha256Hmac.doFinal(body);
    return HexFormat.of().formatHex(bytes);
} catch (Exception e) {
    throw new SecurityException("Error creating signature.", e);
}
```

This structure clarifies that both the operator and the API system are responsible for including and validating security headers on their outgoing and incoming requests, ensuring consistent security standards across all communications.