BetSoft Games Integration Interface

Common Wallet

Version 3.08

Updated 2023-01-06

VERSION CONTROL

Version	Date	Description
3.08	May 2023	1. Updated all diagrams. 2. New sections added: Basic Integration Process, Promotional campaign, Jackpot ticker, Integrating mini games, FRB notifications, Additional request parameters. 3. Added optional request parameters with their descriptions to all requests with a link to «Additional request parameters table». 4. Minor syntactic, grammatical, and stylistic errors have been corrected.

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INTEGRATION DESCRIPTION

Introduction

This document describes the **Common Wallet** model of integration between «BetSoftGaming» and a client system (EC). The following chapters describe the general concept of integration as well as descriptions and examples of the API methods used for the **Common Wallet** integration.

Terms and Abbreviations

The following terms and abbreviations are used in this document:

- **BSG** — «BetSoftGaming».
- **BSG system, BSG server** — BSG game software/system, developed and supported by BSG, provider.
- **EC** — External Client, company/person who integrates BSG games.
- **Environment domain** — The environment domain provided by BSG side.
- **EC endpoint** — Endpoint (URL) provided by EC to perform the corresponding integration API calls.
- **EC system, EC server, ES** — software/system developed and supported by External Client.
- **CW** — Common Wallet.
- **FRB** — Free Rounds Bonus.
- **CM** — Casino Manager, back-office system.
- **COPY** — The Test or «staging» servers for the BSG system.
- **PJ** — Progressive Jackpot.

General Notes

The BSG Games standard integration interface assumes the following:

a) BSG-EC systems are integrated in a B2B configuration, where each side has its own system/back-end.

b) The BSG-EC Common Wallet integration treats the EC system as the primary system, and the BSG system is the secondary system. This means the EC system manages the primary user accounts database, balance, personal information, payment operations etc. The BSG system manages only the data necessary to perform game operations. This data is either provided on game startup (login, registration), or requested by the BSG system from the EC system. Similarly, the BSG system manages the player balance within the bounds of the turn, requesting confirmation on each bet from the EC system and notifying it of wins.

c) Communication between the BSG-EC systems is performed through the Internet, using HTTPS.

Basic integration process

BetSoft side operates with two environments — Copy/Staging (usually with environment domain «discreetgaming.com») and Production (usually with environment domain «betsoftgaming.com»). All changes must be delivered and tested to Staging environment first and only after that delivered to Production.

Note: BSG provides «Conclusion of the configuration» document for both Staging and Production environments separately in the form showed in Appendix B. The difference between them is in the endpoints provided by EC and in the BSG environment domains for Copy and Live environments (there may also be other differences, such as passkey).

Note: All URLs and names are case sensitive!

Staging (test/copy) environment integration process:

1. External client receives API documentation.
2. External client provides API endpoint URLs described in our API documentation.
3. BetSoft developers create Staging configuration.
4. EC side implements methods. Clarifying unclear points.
5. EC provides BSG side with a way to test developed API endpoints.
    a. Preferred method — providing BSG with EC Staging lobby URL with published launching strings and a test user credentials with funds on the account.
    b. Less preferable method — a permanent TOKEN which will be used during the API tests or token generation tool.
6. API validation tests and QA checks.

7. Confirmation the bank on Staging.
8. BSG provides access to CPMA (Client Promotional Material Area) and CM for the client.

Production environment integration process:

1. External client provides API endpoint URLs described in API documentation.
2. BetSoft developers create Production configuration.
3. EC provides BSG side with a HIDDEN (from real clients) production lobby URL and a test user credentials.
4. QA team does API validation tests and logic/User tests. EC lobby should contain all icons and game names. QA team checks every single game on this step.
5. Bank is checked and confirmed on Production.
6. Discussion of exposure and game settings of BetSoft games during the start.
7. Switch BSG games live to players and the launching date.
    a. We don't recommend launching on Fridays as developers are off during weekends and we will not be able to fix some fundamental issues fast.

Basic example of EC Endpoints, send to BSG for implementing integration:

- Authenticate:
  https://www.EC_domain.com/authenticate
- Bet/Result:
  https://www.EC_domain.com/betResult
- Get Account info (for unregistered player):
  https://www.EC_domain.com/account.
- Bonus Release (for Cash Bonus):
  https://www.EC_domain.com/bonusRelease
- Bonus Win (for FRB):
  https://www.EC_domain.com/bonusWin
- Refund Bet:
  https://www.EC_domain.com/refundBet
- Get Balance:
  https://www.EC_domain.com/balance
- Tournament (optional):
  https://www. EC_domain.com/tournament

Note: endpoints for copy server and live server must be separate.

SubCasinos and Banks

Each EC is configured as separate system within the BSG COPY/LIVE cluster. In the BSG CM, these systems are called a «SubCasino». For each SubCasino, BSG generates and provides its own domain (environment domain) that will be used in start game URLs and other URLs that can be called by the ES from the BSG server. The BSG server determines the SubCasino by the domain the request originates from. The BSG system can configure multiple aliases for each SubCasino. The EC can also provide their own domain to be configured as an alias for a SubCasino.

Each SubCasino has at least one Bank. Most configuration parameters are set on the Bank level: EC API configuration, game limits, coin denominations, Jackpots etc. An EC can have multiple sites/subsystems associated with it.

For each site / sub-system the BSG system can configure its own Bank. Configuring one bank for one separate site/sub-system is a major requirement for accessing separate reports and bank settings. Banks are created by BSG at the request of the EC. BSG defines a numeric ID for each bank, but the EC can define its own ID (can be String) for each bank. However, the EC must inform BSG about what ID should be used for each bank.

BSG Games

BSG provides many different games to be integrated into the EC site. BSG games (game clients) are available for several different platforms.

For all devices BSG game clients are implemented using HTML5.

Each game has its own ID. BSG uses numeric game IDs (integer). All new BSG games have a single gameId for all platforms. For example:

- **813 — Take The Bank (All platforms)**

Older BSG games had multiple identifiers (each identifier corresponded to a platform). These games are still available, but now, by default, a special setting is used that allows to launch old games on any platform using a single gameId for this game. At the same time, the gamelist («Game List» section) also displays games with a single gameId for all platforms.

Due to backwards compatibility, some existing EC's still have multiple gameId's for the same game (for the corresponding platforms). For example:

- **210 – MrVegas (Flash, desktop)**
- **269 – MrVegas Mobile (iOS)**
- **270 – MrVegas Android**

NOTE: The EC may require that their own game IDs be used. In this case the EC must provide an ID for each BSG game. BSG uses string representation to store external game IDs so they can be numeric or text. E.g., «gameId = 1234» or «gameId = MrVegas»

Localization

BSG game clients are localized for many languages. Required localization can be passed as a «lang» parameter to all BSG start game URLs. Each bank has a default language defined. If a «lang» parameter is not passed in the start game URL, the game will start in the specified default language.

BSG can configure two possible behaviors for cases where a non-existent language was passed in the «lang» parameter in the start game URL:

- Show an error message that the specified language is not available. (This is the default option)
- Open the game using the default language, as specified by the Bank's parameters, instead of the language parameter passed in the start game URL.

Game List

BSG provides a special URL to obtain a list of all available games for a bank.

- **URL example:**

  http://environment_domain/gamelist.do?bankId=[BANK_ID]

When called, this URL returns an XML response with all the information about all games configured for the bank specified. It includes the game ID, name, and supported languages.

XML example:

```
<GAMESSUITES>
      <SUITES>
            <SUITE ID="Slots" NAME="Slots">
                  <GAMES>
                        <GAME ID="2" NAME="Lucky Seven"
IMAGEURL="" LANGUAGES="en, no, se, fi, es, fr"></GAME>
                  </GAMES>
            </SUITE>
      </SUITES>
</GAMESSUITES>
```

Block 1. Game list XML

There is an extra parameter «&version=2» that allow to return a «DEVICETYPE» value.

- **URL example:**

  http://environament_domain/gamelist.do?bankId=[BANKID]&version=2

- **This URL returns an additional value for GAME container:**

  DEVICETYPE=«PC|IOSMOBILE|ANDROID|WINDOWSPHONE|ALL»

```
XML example:

<GAMESSUITES>
      <SUITES>
            <SUITE ID="Slots" NAME="Slots">
                  <GAMES>
                        <GAME ID="2" NAME="Lucky Seven"
IMAGEURL="" LANGUAGES="en, no, se, fi, es, fr"
DEVICETYPE="PC"></GAME>
                  </GAMES>
            </SUITE>
      </SUITES>
</GAMESSUITES>
```

Block 2. Game list with DEVICETYPE parameter

The «ALL» value for DEVICETYPE means the game have a single Game ID for all platforms (starting from «Reels of Wealth»).

Integrating PC Games

BSG game clients for all platforms are HTML5 web application loaded by a player's web browser. The process of starting the game may differ depending on the EC's front-end organization. For example, the following methods are generally used:

a) The EC site places game icons on the necessary pages of its site. When the player clicks on the game icon, EC redirects the player to the page of this game on its website and make game start call to the BSG. The game starts inside of this page.

b) The EC makes a game start call to the BSG using a new tab opening. The game loads in a new tab.

c) The EC web site provides a link to the BSG game lobby page. The Player navigates to the BSG game lobby page, and then loads the game from the lobby.

In all cases, the EC system must provide all necessary startup parameters in the game startup URL.

The default option is «a». It does not require any additional implementation.

Note: Mobile game integration has some limitations, see «Integrating Mobile Games» for details.

Integrating Mobile Games

Integrating Mobile Games has only one major restriction: Mobile Games cannot be opened in an iframe/div/span container. They should only be opened in their own window.

For more details about integrating mobile games, please refer to the «BSG Mobile Games Integration Guide» available on the BetSoftGaming CPMA.

Integrating Mini Games

Optional feature. Mini games —BSG casino game, which can be launch in a small window on the page of the casino site displaying other content (for example on «News» page). Some of the mini games has an identical «big/full» version of it, which does not differ from the «mini» version (i. e. it uses the same mathematics, drawing, etc.).

Each mini game has a separate «gameId» (which can be seen via «gamelist.do» for a specified bank), as well as an additional parameter that allows you to turn off the «Click to Continue» screen before the start of the game. Requires a banner for integration.

Mini games are responsive in design, so any resolution may be used. Each game has been optimized for the following two sizes:

- 320x420 Portrait
- 305x305 Square

Note: While the use of other sizes is possible, the minimum size we recommend for commercial use is 320x420 for Portrait representation and 305x305 for Square representation. The use of any other sizes is at the discretion of the client and will require click-to-load banners to be prepared in that same size.

Note: Integration requires animated gif to be positioned absolutely over the empty iframe and JavaScript attached to the click event (i. e. pressing the button) will dynamically load iframe src and remove animated gif from DOM.

Launching mini games

Launching mini game on a website is similar to implementing any of the BetSoft games using the same URL structure (see «Starting Games» section for more info). The differences are that it will require the addition of a «click-to-load» banner with the two options of using special URL calls for further refinement of mini game launch experience.

To limit unwanted server load, caused by loading mini-games every time a page-load is requested regardless of user interaction, implementation of a «click-to-load» banner is required.

This banner may be of any design. However, we recommend implementing something which entices the user's engagement and reflects the game itself. BetSoft has provided ready-to-use static and gif-animated «click-to-load» banners in the recommended sizes noted above for ease of use.

In-game splash screen

Due to the required «Click-To-Load» banner, we offer the option to remove «click to continue» welcome/splash screen for players. The purpose of this optional step is to allow the players to engage with the game in the most seamless way possible.

To disable «Click-To-Continue» in-game screen, use ***&ngnu_noppc*** parameter in the launching URL.

Note: At this time, this parameter is applicable only to mini game Ids and cannot be used on standard games. Attempts to use this parameter on incompatible games will result with error.

Fixed Size Optimization

When mini games are presented in a fixed-size frame and the user cannot «expand» the game to a larger size, we offer the option to load only the necessary quality of assets for the given fixed-size, which should decrease load time.

To apply this improvement to your mini games, add parameter ***&ngnu_fvp*** to the launching URL.

Note: Use this option only with a fixed size frame game. For example, if the game can be maximized in size, then we recommend to not use this option, as any larger sizes could potentially look blurry due to the use of optimized assets.

Starting Games

BSG provides two launch game URLs depending on the desired game launch mode:

- **Guest Mode** (does not require player authorization; games are not recorded in the BSG backoffice)

  http://environment_domain/cwguestlogin.do?bankId=271&gameId=813&lang=en

- **Real/Free Mode** (requires player authorization)

  http://environment_domain/cwstartgamev2.do?token=simpleTokenOfUserOnECSide&bankId=271&gameId=813&mode=REAL&lang=en

Launch URLs above are used for all BSG games (Desktop, iOS, Android). Games can be started in Guest, FREE or REAL mode.

Guest mode is for game demonstration only. That is, the player does not pass authorization, the game is not logged on the BSG side, and the BSG does not store any information about such game sessions.

In FREE mode, the player is playing with Fun Money. The player's fun money balance is set to the default value upon starting a FREE mode game session. The Initial Fun Money Balance can be configured at the EC's request. The default amount is 1000.00 of whatever the default currency for the originating bank is set to.

FREE mode games are not logged or recorded on the BSG side. The player cannot continue an unfinished round for a FREE mode game. FREE mode games are played with the same configuration as for REAL mode, per the originating Bank's parameters. No calls to the ES are made during FREE mode games. FREE mode Progressive Jackpot games have separate Progressive Jackpot banks from any REAL mode PJ banks, FREE mode PJ banks are saved in server memory cache and are reset on server restart.

REAL mode games are played for Real money. BSG makes calls to the ES to inform it about all bet/wins made by the player. REAL mode games are logged and recorded on the BSG side. The player can continue an unfinished round next time they enter the game in REAL mode.

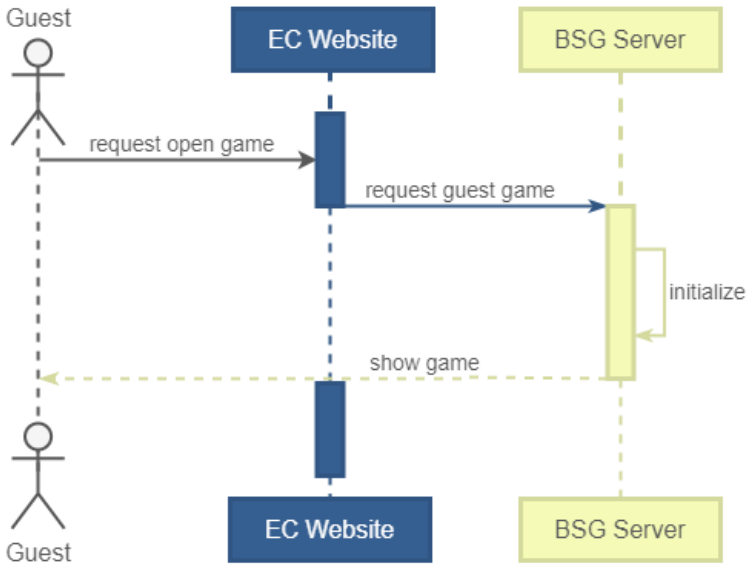
Starting a Game for Guest Players

The Start Game URL for Guest Player has the following parameters:	
bankId	specifies from what bank the game was started. The configuration parameters of this bank will be used to start the game.
gameId	specifies what game should be started.
lang	specifies what localization should be used. (optional)
homeURL	for mobile games only: specifies the URL where the player should be redirected on pressing HOME button. If this parameter is not passed, the default URL configured for the bank is used. (optional)

- **URL example:**

  http://environment_domain/cwguestlogin.do?bankId=[BANK_ID]&gameId=[GAME_ID]&lang=[LANG]&homeURL=[HOME_URL]

Starting a game for Guest mode is very simple. See diagram below.



Workflow:

1. When the player presses the button/banner/link to launch the BSG game in guest mode on EC's Website, the EC Server can open the game differently depending on the however the prefers. For this example, we will assume the link opens the game in a popup window.

2. EC Website opens a new popup window using a BSG guest mode launch URL (see above).

3. BSG initializes the game and shows a page with the embedded game client to the Player.

Starting a Game for Authorized Players

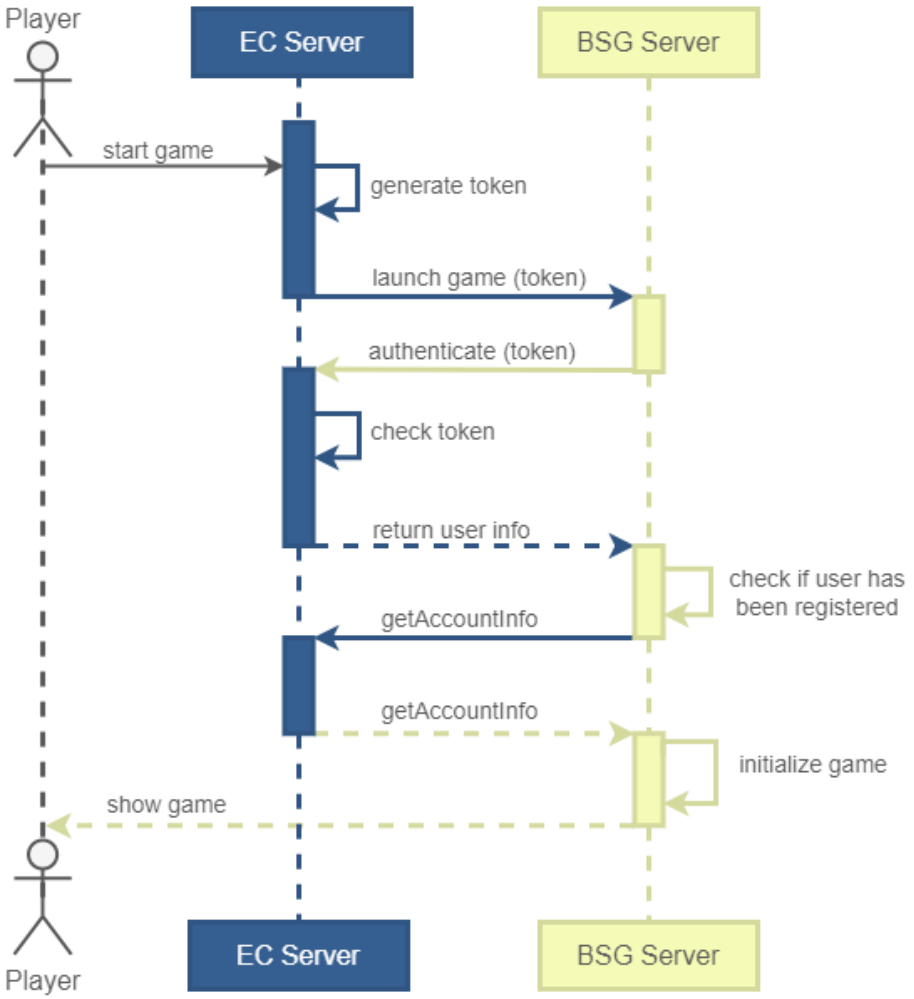
The Start Game URL for Authorized Players has following parameters:	
token	Used to verify that the player is authorized to play the game.
bankId	Specifies from what bank the game was started. The configuration parameters of this bank will be used to start game.
gameId	Specifies what game should be started.
mode	For an authorized player the game can be started in REAL or FREE mode.
lang	Optional. Specifies what localization should be used.
homeUrl	Optional. For mobile games only: specifies the URL where the player should be redirected on pressing HOME button. If this parameter is not passed, the default URL configured for the bank is used.
cashierUrl	Optional. Specifies the URL where the player should be redirected if they have no money in their balance and the «go to cashier» button is pressed. If this parameter is not passed, the default URL configured for the bank is used.

- **URL example:**

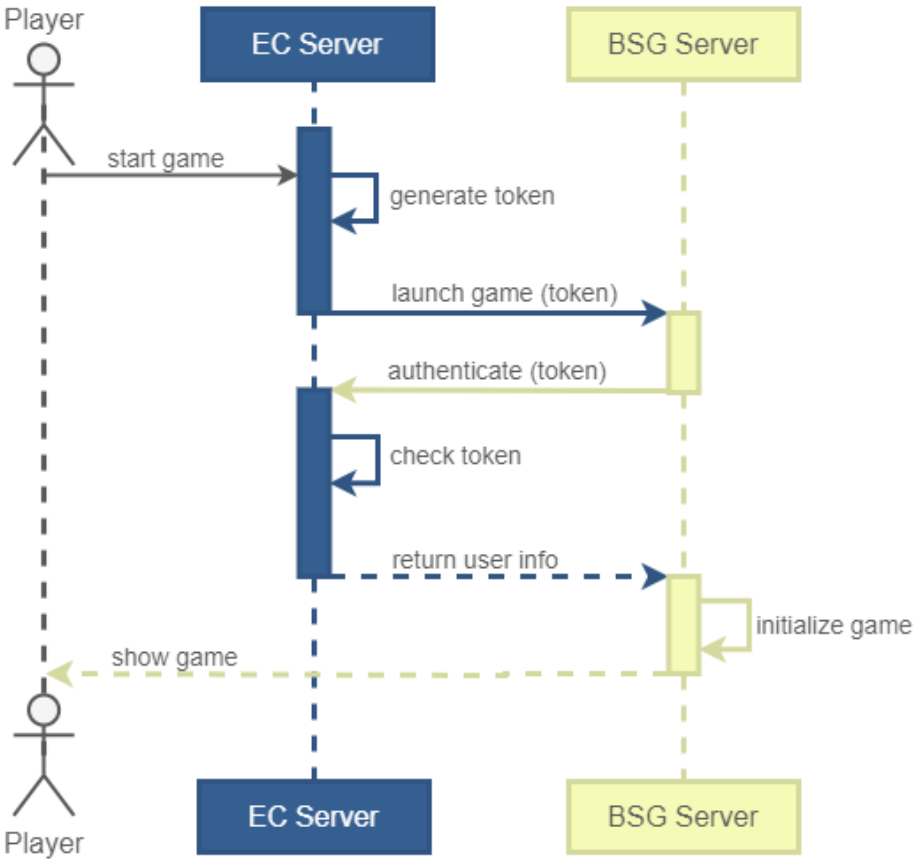
  http://environment_domain/cwstartgamev2.do?token=[TOKEN]&bankId=[BANK_ID]&gameId=[GAME_ID]&mode=[MODE]&lang=[LANG]&homeURL=[HOME_URL]&cashierURL=[CASHIER_URL]

BSG uses a token model to authenticate players.

Here is diagram describing how starting game for the player that launched a BSG game for the first time (i. e. not registered on BSG server earlier):



Here is diagram describing how starting game for authorized player, that was registered on BSG server earlier:



Workflow:

1. Player presses button/banner/link to launch a BSG game in REAL mode on the EC's Website. The EC Server can open the game differently (depending on how the EC prefers). For this example, we will assume the game opens in a popup window.

2. Before the EC server redirects player to the BSG Authorized launch URL it must generate a unique token and associate it with the player. See recommendations for generating token below.

3. EC server opens a new window and redirects the Player to the BSG launch game URL passing the token as one of the parameters.

4. BSG server receives the request and checks the token by making an «Authenticate» API request to the EC Server passing the received token as a parameter.

5. EC Server authenticates the Player by token and returns information about the Player to the BSG Server.

6. The BSG Server performs the login operation for the Player. In the event that a player starts a game for the first time and is not yet registered on the BSG side – The BSG server will make a «getAccountInfo» API call to get information about the player and then register them on the BSG side. The «getAccountInfo» API must return a valid CURRENCY tag for this first call during registration. After this the BSG server initializes the game for the Player and redirects the Player to the page with the embedded game client, as normal.

Recommendations for token:

- A new token should be generated each time player starts a game.

- The token should automatically expire after a short period of time (several seconds) and at the moment player has left EC's site (session expired).

- The token should also expire as soon as it is used to authenticate the API request.

Please note that the token is not hidden and can be «sniffed». So, for security purposes the token must be at least: different for each session and only be valid for a limited time.

Mobile Detector

BSG offers a platform detection system to determine if a mobile device is being used to access a game. It works as follows:

- EC starts a Desktop game session (provides gameId of Desktop game to launch game URL).
- BSG detects the platform that the user is playing from.
- Depending on platform detected, BSG starts the appropriate version of the game and launches the appropriate game client.

Now the mobile detector for launching the game with the required «gameId» for the platform used by the player is enabled only for some existing EC systems (banks). For all new banks, this functionality is disabled by default, and as a result, for games with multiple identifiers for different platforms (old games) a single gameId for the game is used (as for new ones).

Beginning with the release of «Reels Of Wealth» all BSG games have a single gameId for all platforms. That means choosing an appropriate game client will never change a gameId that was sent on launching. However, an appropriate client-side application (Desktop or Mobile) is still being chosen accordingly. Thus, there is an option that forces sending «clientType» value for all wallet operations. It can be enabled on demand. And if enabled, «Mobile Detector» recognizes the platform from where the call was initiated (PC/Android/IOS /Windows) and sends the «clientType» value for all BetResult operations.

In-Game History for players

BSG provides a game history URL that can be used to show any game's history to player. By default, the interface is not skinned, but it can be skinned at the EC's request.

- **URL example:**

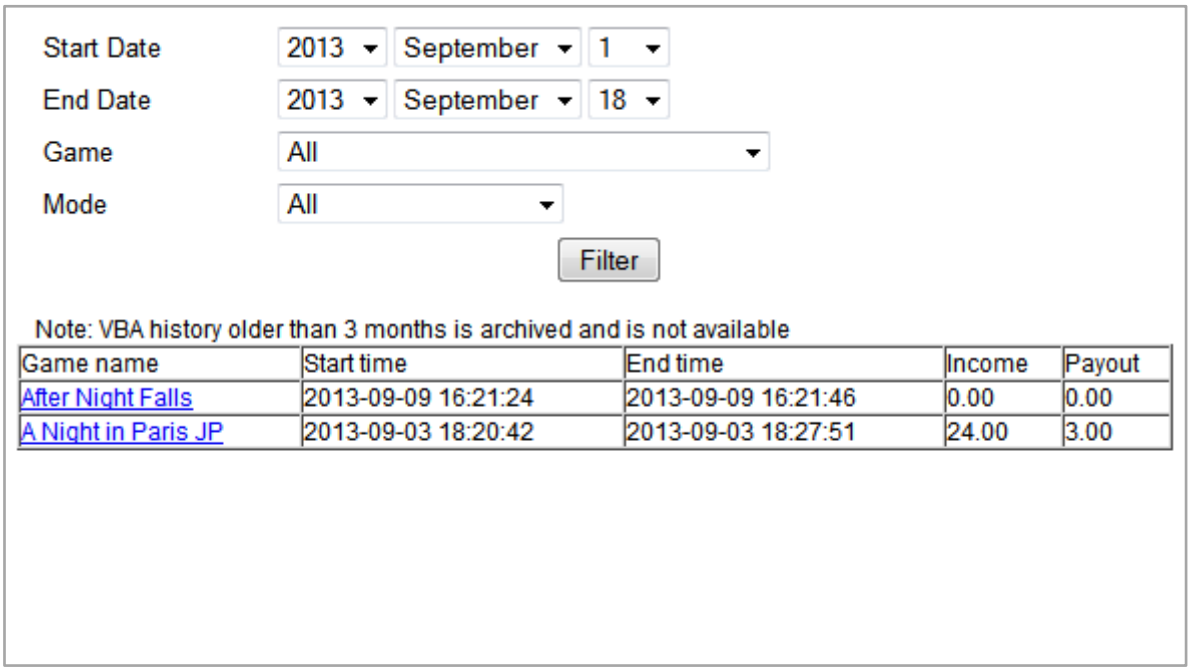
  http://environment_domain/cwstarthistory.do?bankId=[BANK_ID]&token=[TOKEN]

Game history URL uses the same token authorization as start game URL.

Parameters:

- bankId.
- token.

Below is an example of how the default history is presented:



Also, access to the game history can be obtained using the API call:

- **URL example:**

  http://environment_domain/vabs/show.jsp?VIEWSESSID=[GAMESESSION_ID]&GAMEID=[GAME_ID]

Bet History can also be viewed via back-office system (CM) for EC managers.

Winners Feed

BSG can be configured to collect information about big winners and provide this information to EC. It can be used to show a Winners feed on the EC's site. The Winner's feed is provided only at the EC's request and is not configured by default.

Winners are collected by analyzing the results of a game session. The Player's win is calculated as follows: «Total game session wins amount» - «Total game session bets amount».

It is possible to configure a minimum win threshold to be included into feed as well as the total number of records to show in Winner's feed.

When a new player wins the same or a higher amount than the current lowest ranking winner that has been previously registered in the feed, the oldest record is removed, and the newest entry is included.

The Winner's feed is provided as xml that is updated by server once per minute.

XML example:

```
<WINNERS>
      <GAMESESSION>
            <NICKNAME>betsoftars</NICKNAME>
            <GAMENAME>European Roulette</GAMENAME>
            <GAMEREVENUE>3.00</GAMEREVENUE>
            <TIME>2013-09-17 11:54:12</TIME>
            <CURRENCY>ARS</CURRENCY>
      </GAMESESSION>
</WINNERS>
```

Block 3. Info about winner

- **URL example:**

  http://environment_domain/winners/winners_[BANKID].xml

Jackpot Feed

The Jackpot feed is an API that provides the current amounts of all available jackpots for all games in xml format. It can be used to build a section with information about jackpots on the EC's site. The Jackpot feed is configured at the EC's request and is not configured by default.

The Jackpot feed can be configured to contain the total amount of all Jackpot banks for game+currency, or to contain information about each Jackpot Bank for each coin.

XML example with totals:

```
<jackpots>
     <jackpotGame>
          <gameId>231</gameId>
          <gameName>Tycoons</gameName>
          <currencyCode>EUR</currencyCode>
          <jackpotAmount>145075.05</jackpotAmount>
     </jackpotGame>
</jackpots>
```

XML example for each coin:

```
<jackpots>
     <jackpotGame>
          <gameId>269</gameId>
          <gameName>Mr. Vegas Mobile</gameName>
          <coin>0.02</coin>
          <currencyCode>EUR</currencyCode>
          <jackpotAmount>181.38</jackpotAmount>
     </jackpotGame>
</jackpots>
```

Block 4. Info about all jackpot banks at once (top one) and for each jackpot bank separately (bottom one).

- **Jackpot feed URL example:**

  http://environment_domain/jackpots/jackpots_[BANKID].xml

There are also games that may use complex or network/combined Jackpot models: JP3 and JP4.

- **JP3 URL example:**

  http://environment_domain/jackpots/jackpot3_[BANKID].xml

Example for JP3 feed:

```
<jackpots>
      <jackpot3Game>
            <gameId>588</gameId>
            <gameName>Mega Glam Life JP Android</gameName>
            <jackpotBankId>0</jackpotBankId>
            <currencyCode>EUR</currencyCode>
            <jackpotAmount>322.20</jackpotAmount>
      </jackpot3Game>
      <jackpot3Game>
            <gameId>588</gameId>
            <gameName>Mega Glam Life JP Android</gameName>
            <jackpotBankId>1</jackpotBankId>
            <currencyCode>EUR</currencyCode>
            <jackpotAmount>30012.40</jackpotAmount>
      </jackpot3Game>
      <jackpot3Game>
            <gameId>588</gameId>
            <gameName>Mega Glam Life JP Android</gameName>
            <jackpotBankId>2</jackpotBankId>
            <currencyCode>EUR</currencyCode>
            <jackpotAmount>400068.90</jackpotAmount>
      </jackpot3Game>
</jackpots>
```

Block 5. Example of jackpot bank info for JP3

- **JP4 URL example:**

  http://environment_domain/jackpots/jackpot4_[BANKID].xml

Example for JP4 feed:

```
<?xml version="1.0" encoding="UTF-8"?>
<jackpots>
      <jackpot jackpotId="724390883" jackpotName="ROW">
            <jackpotAmount currency="LSL" amount="521890.64"/>
            <jackpotAmount currency="NOK" amount="296719.61"/>
            <games>
                  <game id="798" name="Faerie Spells"/>
                  <game id="792" name="Reels Of Wealth"/>
            </games>
      </jackpot>
      <jackpot jackpotId="724390884" jackpotName="ROW">
            <jackpotAmount currency="SDG" amount="200378.34"/>
            <jackpotAmount currency="RMB" amount="76472.07"/>
            <games>
                  <game id="792" name="Reels Of Wealth"/>
                  <game id="798" name="Faerie Spells"/>
            </games>
      </jackpot>
</jackpots>
```

Block 6. Example of jackpot bank info for JP4.

A JSON formatted feed can optionally be enabled for all mentioned models.

- **URL examples:**

  http://environment_domain/ jackpots/jackpots_[BANKID].json

  http://environment_domain/ jackpots/jackpot3_[BANKID].json

  http://environment_domain/ jackpots/jackpot4_[BANKID].json

Examples for JSON content:

SimpleJP:


```
{
  "jackpots": [
    {
      "gameId": "158",
      "gameName": "Treasure Room",
      "currencyCode": "EUR",
      "jackpotAmount": "48417.43"
    },
    {
      "gameId": "173",
      "gameName": "Glam Life",
      "currencyCode": "EUR",
      "jackpotAmount": "34351.11"
    },
    {
      "gameId": "210",
      "gameName": "Mr. Vegas",
      "currencyCode": "USD",
      "jackpotAmount": "17416.35"
    }
  ]
}
```


Block 7. Example of JSON response for general jackpot.

JP3:


```
{
  "jackpots": [
    {
      "gameId": 554,
      "gameName": "Mega Glam Life JP",
      "jackpotBankId": 0,
      "currencyCode": "USD",
      "jackpotAmount": "300.00"
    },
    {
      "gameId": 554,
      "gameName": "Mega Glam Life JP",
      "jackpotBankId": 1,
      "currencyCode": "USD",
      "jackpotAmount": "30000.00"
    },
    {
      "gameId": 554,
      "gameName": "Mega Glam Life JP",
      "jackpotBankId": 2,
      "currencyCode": "USD",
      "jackpotAmount": "400000.00"
    }
  ]
}
```


JP4


```
{
  "jackpots": [
    {
      "jackpotId": 409564642,
      "jackpotName": "LegendOfTheNile-833",
      "jackpotAmounts": [
        {
          "currency": "EUR",
          "amount": "15007.45"
        },
        {
          "currency": "USD",
          "amount": "17707.90"
        }
      ],
      "games": {
        "games": [
          {
            "id": "775",
            "name": "Legend Of The Nile"
          },
          {
            "id": "776",
            "name": "Legend Of The Nile
Mobile"
          },
          {
            "id": "777",
            "name": "Legend Of The Nile
Android"
          }
        ]
      }
    }
  ]
}
```


Block 8.Example of JSON response for JP3 and JP4 jackpot.

Jackpot Ticker

Jackpot Ticker — an interface that allows the EC to obtain current jackpot data for a particular game and currency on a particular bank.

To get up-to-date data on the jackpot of a particular game, the EC must pass the following parameters to the request:

- **gameId** — game identifier.
- **currency** — currency for which the operator needs to view the jackpot.
- **bankId** — the identifier of the bank on which the game data is to be found.

All parameters are mandatory and if they are missing, the system will display an appropriate message.

For jackpots that are not linked to a currency (such as UNJ), the currency setting will simply translate the value into the specified currency (relative to the base currency of jackpot).

For jackpots that are linked to a currency (such as SPG), the currency parameter will display the jackpot for that respective currency.

Depending on the parameters, specified when starting this interface, the system will output the following parameters:

- **gameId** — id of the game about which information is displayed.
- **bankId** — id of the bank for the game of which the information is displayed.
- **currency** — the name of currency in which the jackpot is displayed.
- **sign** — the symbol of currency which is displayed next to the jackpot amount.
- **type** — jackpot type, one of the following: «JP3», «JP4», «SPG» or «sideSPG».
- **jackpots** — a parameter indicating the list of jackpots which participate in the selected game on the selected bank. For each jackpot the following parameters are specified:
    - **id** — jackpot identifier.
    - **value** — jackpot value in the selected currency.

NOTE: For SPG jackpots only the jackpot value for the maximum coin is displayed. For games with side SPG jackpots, all side jackpots for the maximum coin are displayed.

- **General URL example:**

  https://environment_domain/jackpot/ticker?gameId=[GAME_ID]&bankId=[BANK_ID]&currency=[CURRENCY]

JP4/UNJ:

```
<Ticker>
      <gameId>798</gameId>
      <bankId>271</bankId>
      <currency>EUR</currency>
      <sign>€</sign>
      <type>JP4</type>
      <jackpots>
            <jackpots>
                  <id>42103682</id>
                  <value>75002.07655</value>
            </jackpots>
            <jackpots>
                  <id>42103683</id>
                  <value>52502.49186</value>
            </jackpots>
            <jackpots>
                  <id>42103684</id>
                  <value>31273.83</value>
            </jackpots>
            <jackpots>
                  <id>42103685</id>
                  <value>9524.78</value>
            </jackpots>
      </jackpots>
</Ticker>
```

Block 9. JP4/UNJ ticker response with EUR currency.

SPG Jackpot:

```
<Ticker>
      <gameId>426</gameId>
      <bankId>271</bankId>
      <currency>EUR</currency>
      <sign>€</sign>
      <type>SPG</type>
      <jackpots>
            <jackpots>
                  <id>147628545</id>
                  <value>3779.9</value>
            </jackpots>
            <jackpots>
                  <id>147628546</id>
                  <value>7538.2</value>
            </jackpots>
      </jackpots>
</Ticker>
```

Block 10. SPG Jackpot ticker response with EUR currency

- **Error messages examples**

    - Required parameter is not present.

```
<StatusResponse>
  <status>error</status>
  <message>Required String parameter 'currency' is not present</message>
</StatusResponse>
```

    - Game does not have jackpot.

```
<StatusResponse>
  <status>error</status>
  <message>Game with id 754 does not have jackpot</message>
</StatusResponse>
```

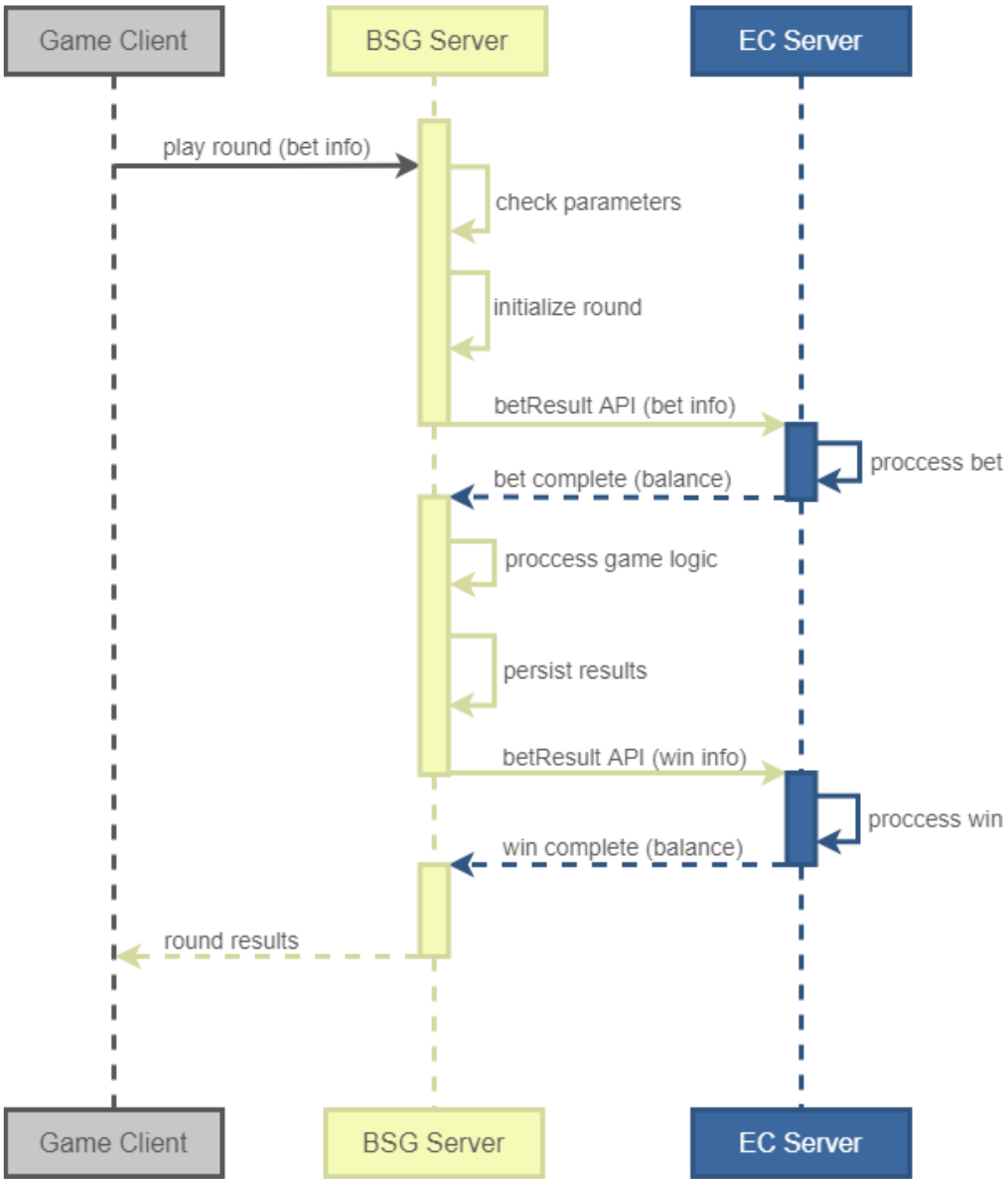
REAL Mode Game Playing

Overview

A game can only be started in REAL mode for authorized players. The BSG server creates a game session for each real mode game. A Game Session is recorded as the time that the game client is opened until it has been closed by the player, or the session times out due to inactivity. REAL mode game sessions are logged and recorded. Each game session has a unique ID (gameSessionId) that is sent to the ES with each «Bet/Result» API call.

BSG uses the «Bet/Result» API to inform the ES about each wager the player has made and each win that the player receives during a REAL mode game session. Each «Bet/Result» API call contains information about one single wallet transaction (it can be either bet or win). Each wallet transaction has its own unique ID.

Here is simplified diagram that describes how the games are played:



Workflow of how actions are normally processed for a simple game (erroneous cases will be described below):
1. Player selects bet amount and initiates round in the game client. Game client sends a request to BSG server specifying bet parameters.
2. BSG server validates request parameters and initializes new round. Please note that BSG server does not validate balance at this stage. Balance must be checked by EC server during processing bet.
3. BSG server creates wallet transaction for the bet and sends a «Bet/Result» API request to EC Server to get approval for a bet.
4. EC server checks available balance, applies bet to player balance, persists bet information and respond with information about bet transaction status and new balance (with bet applied).
5. BSG server updates wallet transaction and synchronizes player's balance.
6. BSG server processes game logic (deal cards, spin reels etc.), calculates payout and persists it on the BSG side. **Note:** Persisted rounds can’t be rolled back. BSG supposes that the win can ’t be rejected by any reason.
7. BSG server creates a wallet transaction for win and sends it using «Bet/Result» API to EC.
8. EC server applies win to player balance, persists win in EC DB and responds with information about win transaction status and new balance (with win applied).
9. BSG server updates wallet transaction and synchronizes player's balance.
10. BSG server responds with round results to the game client.
11. Game client animates round for player.

Rounds

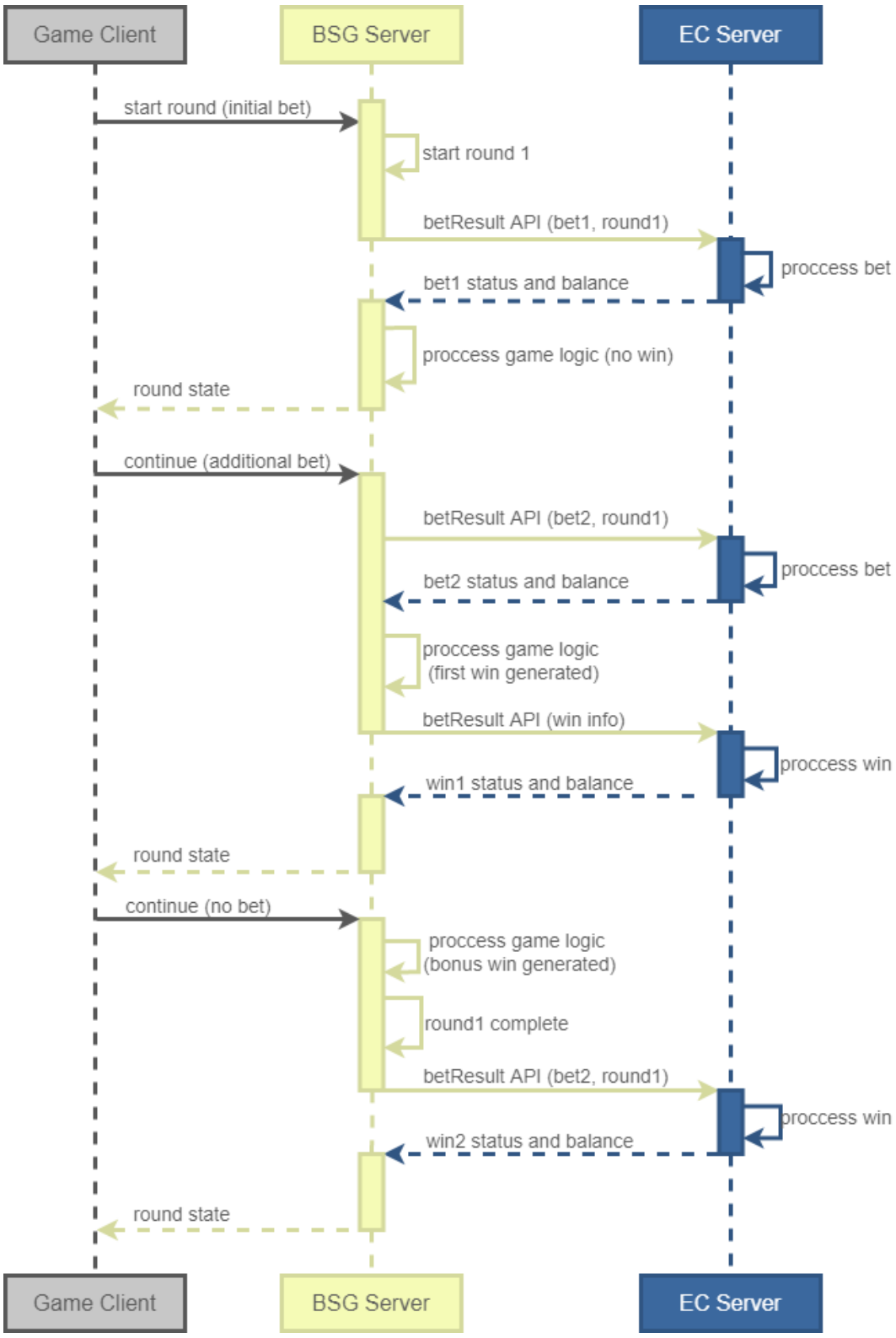
Above is a description of a very simple, single-step game. For most games, rounds require several actions from the player to be complete and can contain several bet/win transactions. The BSG server maintains rounds for each game and sends the ID of a round (Big Int/Long) with each «Bet/Result» API call.

The BSG server persists the state of a round after each player action. The saved game state is called «Lasthand». It's possible that the player can leave the game with a pending (incomplete) round. In this case, the BSG server will allow the player to continue their round on next time they enter the same game. The round can be spread over several game sessions. Pending rounds can exist for several games at once (BSG does not force the player to complete a pending round in one game to play another game).

Some games allow the player to make additional bets within the same round. For example: Blackjack allows the player to double their bet with Double Up action. For such games, the BSG server can send several bet wallet transactions for the same round. **Please note** that the BSG server must check each bet the player makes – so the BSG server can't be configured to send only one bet for a round.

Rounds for some games can result in several wins. For example: the «Click Me» bonus in slot games. In this case, BSG can send several win wallet transactions for the same round by default. The BSG server can be configured to send only one single resulting win wallet transaction at the end of a round. We do not recommend using such configuration because wins will not be applied on EC side but will be applied on the BSG side in the game client. This can confuse the player.

Below is a diagram of a general round that can be played.


Game Client
BSG Server
EC Server
start round (initial bet)
start round 1
betResult API (bet1, round1)
proccess bet
bet1 status and balance
proccess game logic (no win)
round state
continue (additional bet)
betResult API (bet2, round1)
proccess bet
bet2 status and balance
proccess game logic
(first win generated)
betResult API (win info)
proccess win
win1 status and balance
round state
continue (no bet)
proccess game logic
(bonus win generated)
round1 complete
betResult API (bet2, round1)
proccess win
win2 status and balance
round state
Game Client
BSG Server
EC Server

In a general case, the BSG server works as following:
1. The player makes any action within the game client. The game client sends a request to the BSG server specifying what should be done (command with required parameters).
2. The BSG server loads the state of a round (if it exists) and checks the request parameters. In case a new round is started, BSG creates a new round.
3. The BSG server checks if the command received includes a bet. If it does, the BSG server creates wallet transaction for this bet and send a «Bet/Result» API request to the EC server.
4. The BSG server processes the game logic according to the command received and persists the round state/results.
5. In case the game logic resulted in any winnings, the BSG server creates a wallet transaction and sends it to ES.
6. The BSG server responds to the game client.

The BSG server can be configured to inform the EC server about the round that has ended. In this case, the BSG server always sends a «Bet/Result» API call with a win operation at the end of a round (even with zero amount) with «isRoundFinished=true» parameter.

Most games have rounds with one or more bet transactions at the beginning and zero or more win-transactions at the end. But BSG has one exceptional game — Craps. Craps allows the player to put stakes on the table and leave them there for several dice drops (rounds). As a result — Craps can have rounds without any bets.

Negative Bets

Craps game allow the player to remove a bet that was previously put on the table. BSG accounts such removing of bets as a decreasing of game session Income (not as a win) and calls it Negative Bets. The BSG server sends negative bets as separate parameter in «Bet/Result» API calls with a win transaction. Negative bets are not included in the win amount.

Processing of «Bet/Result» Requests on EC Server

In general, the EC server should process «Bet/Result» requests as follows:

- Check the request parameters and validate the hash.
- Check if the transaction was already processed. If yes – just return success response (See details below).
- Process operation: check balance, update player balance and save BSG wallet transaction if processing was successful.
- Return response to BSG.

First, that should make the EC server, when processing a «Bet/Result» request, check that the operation has not already been processed recently. For this check, the EC server must have complete BSG wallet transactions persisted for some safe time period (at least for 1 day). A BSG wallet transaction has a unique ID. The wallet transaction ID is sent with each «Bet/Result» request.

The EC server should check the operation by ID (other parameters should not be checked). In case the wallet transaction was already processed, the EC server must return a success response with the current player balance and should not process the transaction again.

EC must check that player has enough of a balance when processing bet transactions. The BSG server does not check it. The BSG server has no actual player balance, only a «screenshot» of it from the last transaction. Balance can be reduced on the EC server while the player is playing a BSG game and the BSG server will not know about it.

Note: BSG game clients do not allow for making bets higher than the known balance. In case the player has a low balance and made a deposit with an open BSG game client, their balance in the BSG game client will not be updated by default. The game needs to be restarted to update the balance.

Fail-safety

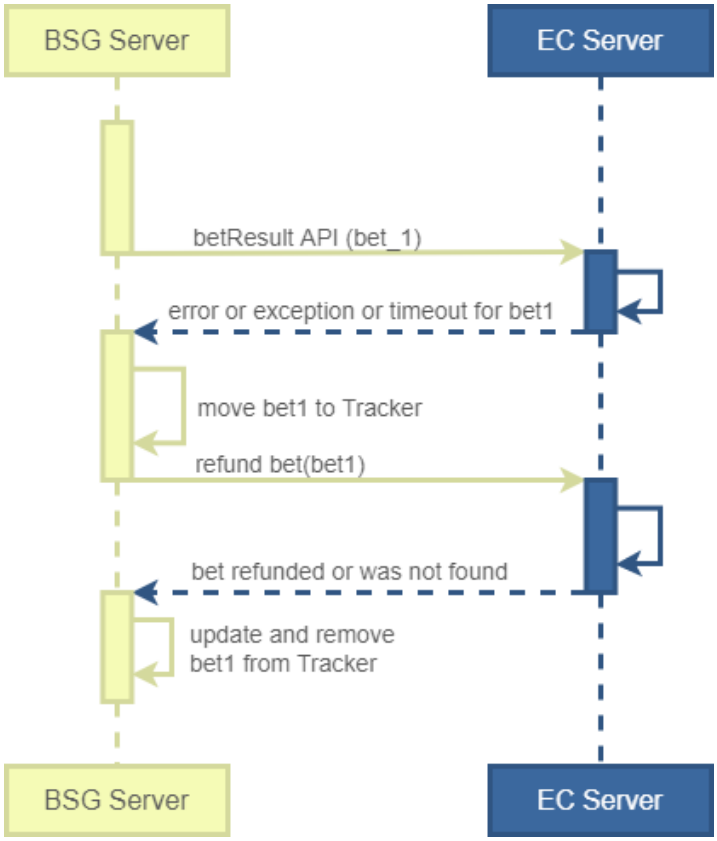
The BSG server always tries to resolve «Bet/Result» errors automatically. Resolving pending wallet transactions is completed by the Wallet Transaction Tracker. This Tracker is a multithreaded process, running on each cluster node, that periodically checks the status of pending transactions and tries to fix them.

NOTE: The player can't play a BSG game while they have a pending transaction for it.

The wallet transaction is moved to the Tracker in case of ANY error (API error code in response, BSG application error, any other error such as network timeout, hardware error, etc.). The Tracker works as follows: it has a list of pending transactions and periodically tries to resolve each transaction. In case the transaction was not resolved, it is left in the queue, and the Tracker will make another attempt in some time.

Bet and Win transactions are tracked differently.

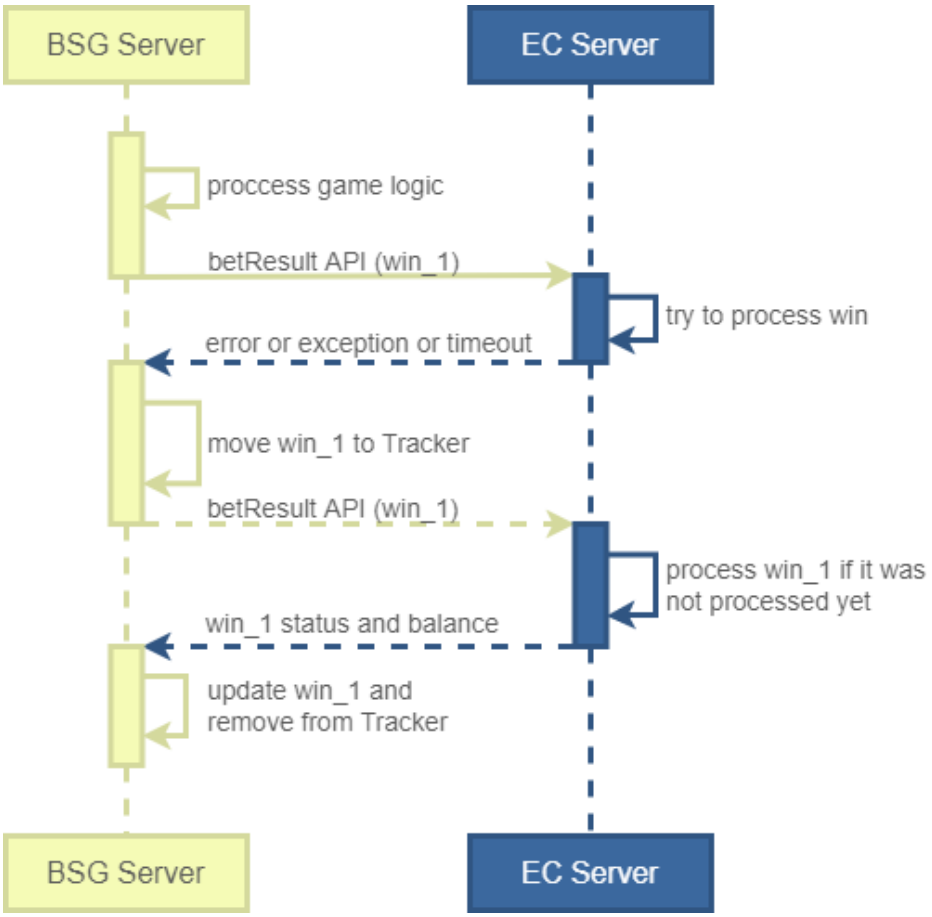
Below is a diagram of the Bet operation tracking process.



As can be seen from the gaming workflow, the bet transaction is performed before any game logic processing on the BSG side. So, in case the bet is rejected by EC Server, or any error occurred, the bet was not yet saved and processed on the BSG side. The BSG server stops any game logic execution in case it received any error on the bet and sends the bet to the Tracker.

The Tracker always tries to reject the bet if the bet exists and is complete on the EC server but does not try to complete it if it is not yet completed. For bet tracking, BSG uses a special API method: refundBet. The BSG Tracker sends refundBet API requests until it gets a successful result: transaction not found error (code 302) or successfully refunded.

Tracking Win operations is different. Below is a diagram of the Win operation tracking process.



On the other hand, win transactions are created after the game logic was processed and the round state persisted. In case of error for win operation, the BSG server tries to complete it. The Tracker will send a «Bet/Result» API call with all the same win transaction parameters as in the original request until the EC server successfully processes it.

The BSG tracker does not try to resolve transactions for an infinite amount of time. By default, the Tracker is configured to resolve transactions for a 48-hour period. In case the transaction was not resolved in 48 hours, the Tracker removes it from the tracking queue. The unresolved transaction is not removed completely, and the player will still be locked out of the game. The BSG CM has a report about such wallet transactions that fail to be resolved by the Tracker. Transactions can be removed or moved to the Tracker again from that report.

The Tracker has one additional rule while tracking bets: the «Transaction not found» error code is ignored for the first 5 minutes of tracking.

The frequency of calls by the tracker depends on the settings of a particular cluster and is usually 30 or 60 seconds.

Errors Within Game Clients

If errors are received in the BSG game client-server communication, the corresponding error is displayed to the player. By default, the following errors are reserved and displayed:

Error	Description
INTERNAL ERROR	internal error of the BSG system. The BSG development team must perform investigations.
SESSION ERROR	displayed in case of any problems reached through BSG - EC communication
Insufficient funds	if the player's balance reaches zero during the session, the player is asked to deposit more money. Corresponding dialog is displayed in the game client. If the player confirms, the EC payment page is opened (if adjusted).

By default, banks are configured to show the SESSION ERROR message within game clients for all CW errors. Also, the bank can be configured to show EC specified text within the game client for each CW error code. EC can also extend a list of error codes for their own purposes and provide BSG with the message to be shown for each new code. New error codes must be agreed upon with BSG. Messages can be localized for each supported language.

Optionally, the BSG provides the ability to use special error codes that allow to display to the player the appropriate messages in the game client. This option can be enabled upon request.

Code	Text in game client
311	You have exceeded the one time max bet limit.
312	You have exceeded the weekly max bet limit.
313	You have exceeded the max bet limit.
314	You have exceeded the daily max bet limit.
315	You have exceeded the monthly max bet limit.
317	You have exceeded the session max bet limit.
320	Spin is canceled and the bet is being refunded.
325	You have reached one of the play limits.
330	You have exceeded the session max loss limit.
331	You have exceeded the daily max loss limit.
332	You have exceeded the weekly max loss limit.
333	You have exceeded the monthly max loss limit.

Bonuses

BSG provides two bonus functionalities that can be used by EC: cash bonus (OCB) and free rounds bonuses (FRB). In case EC has their own bonuses, CW API contains workarounds to inform BSG about them.

EC System Bonus Model

The EC system can have its own bonus models. EC needs to inform BSG about bonus activities of players to allow the BSG CM to have actual reports. «Bet/Result» API response has the optional parameters (BONUSBET/BONUSWIN) to inform the BSG server about what part of bet/win was made with the bonus money.

BSG Cash Bonus

Cash Bonus Functionality Description

Each Cash Bonus has an initial bonus balance. The player can play BSG games allowed for the bonus (list of games can be specified) for that bonus balance. Bonus balance is persisted between game sessions (i.e., the player will continue with bonus balance. The player needs to reach the required total amount of bets (rollover amount) playing games for the bonus to release it (the rest of the bonus balance is released). It is possible to lose the Cash Bonus in case the player has played out all of the bonus balance and has not reached the rollover amount. The Cash Bonus can be configured to have an expiration period. The Cash Bonus can be configured for any BSG game.

Cash Bonuses can be awarded to players using BSG CM or using a special server-to-server award Bonus API method. BSG bonuses are available only for playing BSG games. The player can have several active bonuses simultaneously.

The following parameters need to be specified to award a bonus:	
type	used to categorize bonuses. Available types: Deposit, Slots, Loss, Prize, Promo, Special. Type does not affect functionality any way.
amount	bonus money awarded to the player. Specifies initial bonus money balance of the bonus the player will start with.
rollover multiplier	used to calculate rollover amount (sum of bets to do to release bonus to cash) = amount * rollover multiplier.
description	description for the player.
comment	comment field for support/internal use.
list of games	specifies list of games available to play for the bonus.
expiration date	bonus will expire at the beginning of the next date after the expiration date.
Additional properties of a bonus:	
time awarded	automatically filled during bonus award.
status	ACTIVE|RELEASED|LOST|CANCELLED|EXPIRED. There may also be special transitional statuses such as RELEASING|CANCELLING etc., depending on the requirements of the integration.
balance	current balance of the bonus. When a bonus is awarded — balance is set to the amount and will be used to (affected by) playing games in BONUS mode for this bonus.
bet sum	current sum of bets made by playing this bonus.
comment	comment field for support/internal use.
end time	time the bonus was released/cancelled/expired/lost.
currency	Bonus has the same currency as the player (who has bonus awarded).

The player is able to play BSG games on bonus money if they have an active bonus. BSG provides a special mode for such playing: BONUS mode. To play the BONUS mode, the player needs to choose any of their active bonus and select a game to play from a list of available games for the selected bonus. Balance of the selected bonus is used to play the game. The balance of the bonus is affected by game play.

The bonus is released when the player collects the rollover amount. The current balance of the bonus is released to the player balance.

Notes about releasing:

- Bonus is released in the currency of player.
- The game will be automatically closed when the rollover amount for the current bonus is collected.
- If rollover is collected during a round at a multi-step game, the player will be able to finish their current round at the current game session. If the round was not finished and the game was closed, the player will not be able to resume the round.
- After the game session is closed, the current balance of the bonus is released to cash, all lasthands for this bonus are removed and the bonus is marked as released.

The bonus expires when the specified date is passed. If the player is playing on the bonus during expiration, the game session will be terminated.

The bonus can be canceled by an administrator from CM or by API call from ES. If the player is playing on the bonus during cancelling, the game session will be terminated.

Player can lose all money on the bonus before the rollover amount is collected. In this case, the bonus is closed with status LOST.

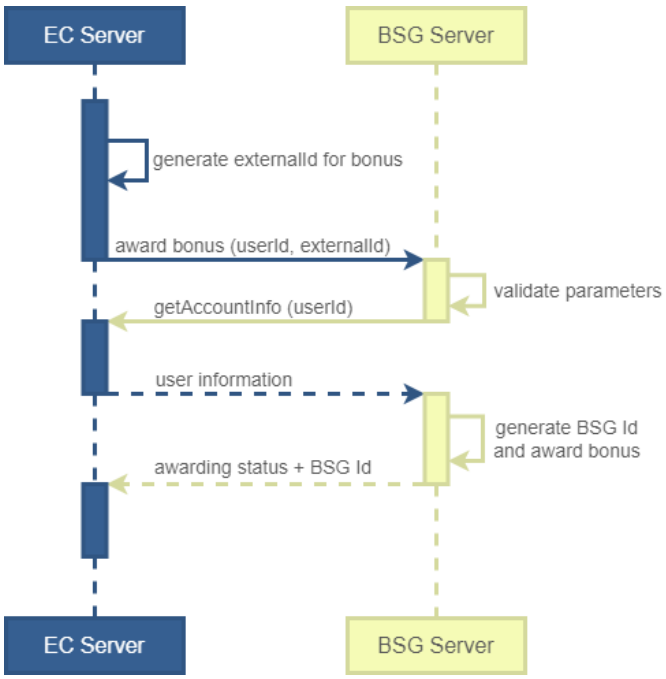
The game state during bonus games is saved separately from REAL mode games, other Cash Bonuses and FRB (see below). This means that round states are not mixed between bonuses and real mode games. The player can have unfinished rounds for the game in REAL mode and for each active bonus at the same time.

BSG provides the following API related to Cash Bonuses:	
awardBonus	allows to award a cash bonus to the player.
checkBonus	used for checking if the award Bonus was successful.
cancelBonus	allows to cancel the cash bonus.
getBonusInfo	returns information about all of the active cash bonuses of the player.
getBonusHistory	returns information about all closed cash bonuses of the player.
The EC Server must implement the following API methods to support cash bonuses:	
bonusRelease	called when a cash bonus is released, to put released money on the player's balance.
getAccountInfo	called to obtain information about the player when the award Bonus API was used for a player not yet registered on the BSG server. This is very similar to Authenticate API.

Creating Cash Bonus Using API

The EC server can create a BSG bonus for a player, using API. It allows the EC server to automatically award a bonus on an event on the EC Server (user registration, deposit, etc.). Please note that it is not required to implement this. Bonuses can be also created from the BSG CM.

Awarding bonus using API diagram:



Comments:

1. On the first step, the EC server should generate an external ID for a new bonus. The main purpose of this external ID is tracking the bonus.
   Note: BSG checks the external ID only among active bonuses. Closed bonuses are not checked. So, this external ID does not have to be unique. It is not required to save them all. The EC server can generate an external ID, like a session for one time use for awarding.

2. The EC Server calls an awardBonus API URL on the BSG server, passing user ID, external ID, and all required parameters of the bonus.

3. The BSG Server validates all parameters.

4. The BSG Server checks player. If the player is not registered, BSG server makes getAccountInfo API call to EC Server, receives information about the player and registers player on BSG side.

5. The BSG Server creates a bonus, return status and bonus ID on the BSG side to EC Server.

In case EC Server receives error on an awardBonus API call, it is possible to check the status of an award by calling a checkBonus API, passing the externalID used during the awardBonus API call as a parameter. The BSG server responds with the bonus information if the bonus was created or responds that it does not exist.

Starting Cash Bonus Game

Below is a common model of how a Cash Bonus should be started.

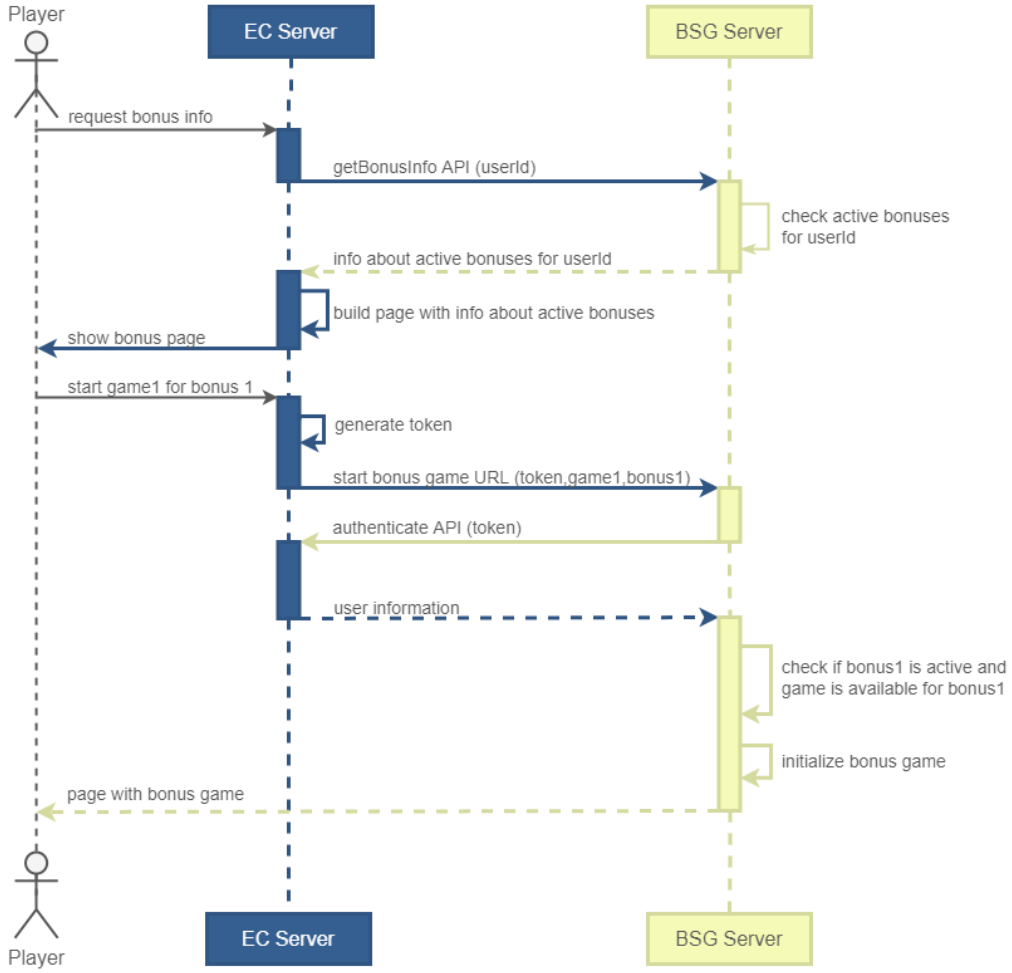
- **URL example:**

  http://environment_domain/bsstartgame.do?token=[TOKEN]&bankId=[BANKID]&gameId=[GAME_ID]&bonusId=[BONUS_ID]&lang=[LANG]

Parameters:

Parameters	Description
token	the authentication token.
bankId	specifies from what bank the game was started. Configuration of this bank will be used to start the game.
gameId	specifies what game should be started.
bonusId	ID of the Cash Bonus the game should be started for.
lang	specifies what localization should be used.

Here is the model of how the Cash Bonus can be started by the player:



Description:

1. EC implements a special bonus page where the player can view a list of all their active Cash Bonuses and start a bonus game. The bonus page can be built dynamically. The EC Server makes a getBonusInfo API call to the BSG Server to obtain information about all active bonuses of a player. Using the information obtained, EC renders a bonus page for the player.
2. Player starts game for bonus.
3. EC Server generates a token (the same way as it is described in Starting Game for Authorized Player)
4. EC Server redirects the player to the BSG launch bonus game URL, providing the token as a parameter.
5. The BSG server makes an authenticate API call to EC server to obtain information about the player.
6. The BSG server validates parameters and starts the bonus game session for player.
7. The BSG server redirects the player to the page with the game client embedded.

Free Rounds Bonus (FRB)

Description

Free Rounds Bonus (FRB) allows the player to play a defined number of free rounds in a game(s). Free rounds are always played with a defined constant bet (specified for each game per bank and currency). During FRB game play, bets/stakes are not deducted from the player's balance, but all wins received are still added to the player's balance. For each win, the BSG server sends a bonusWin API call to EC server to add money to the player's balance. Please note that not all BSG games support FRB.

Free Rounds Bonus (FRB) can be awarded to players registered within the BSG casino cluster from CM by administrators or from EC server using API. The BSG FRB is available for playing BSG games only.

The following parameters need to be specified to award an FRB:	
rounds	specifies how many free rounds the player will be able to play.
description	how many free rounds the player will be able to play.
comment	comment field for support/internal use.
list of games	specifies a list of games available to play on this bonus.
Additional properties of the bonus:	
time awarded	automatically filled during bonus award.
status	ACTIVE|CLOSED|CANCELLED.
rounds left	how many free rounds are left to be played.
end time	time the bonus was closed/cancelled.
currency	Bonus has the same currency as player (who has the bonus awarded).

The game state during FRB games is saved separately from REAL mode games, other FRB, and Cash Bonuses. This means that round states are not mixed between bonuses and real mode games. The player can have unfinished rounds for the game in REAL mode and for each active bonus at the same time.

Each win received by the player during an FRB game is immediately sent to the EC server using a **bonusWin** API call. FRB is closed at the end of the game session when there are no free rounds left.

Notes about closing an FRB:

- The game will be automatically closed when all free rounds are played (if the round has several steps, the game will be automatically closed after the last step).
- In case of multistep rounds, if the last free round was interrupted (unfinished), the player will not be able to finish it. The FRB will be closed and the lasthand will be removed. This is done to not leave an active FRB with 0 free rounds left.
- An FRB can be canceled by an administrator from the CM or by an API call from ES. If the player is playing on a FR bonus during cancelling, the game session will be terminated.

API Methods

BSG provides the following API related to FRB Bonuses:	
award FRB	allows awarding FRB to player.
check FRB	used for checking if award FRB API call was successful.
cancel FRB	allows cancelling cash bonus.
get FRB Info	returns information about all active cash bonuses of the player.
get FRB History	returns information about all closed cash bonuses of the player.
The EC Server must implement the following API methods to support FRB:	
bonus Win	called by the BSG server for each win during FRB game session.
get Account Info	called to obtain information about the player when an award FRB API was called for a player who is not yet registered on the BSG server. Very similar to Authenticate API.

Awarding FRB Using API

The EC server can create a BSG bonus for a player using API. It allows the EC server to automatically award an FRB on some event on the EC Server (user registration, deposit, etc.). Please note that it is not required to implement this. An FRB can be also created from the BSG CM.

Not all BSG games support FRB. Call the following API to obtain a list of games configured for banks, that are supporting FRB.

- **URL example:**

  http://environment_domain/frbgamelist.do?bankId=[BANKID]

```
Response example:

<GAMESSUITES>
      <SUITES>
            <SUITE ID="Slots" NAME="Slots">
                  <GAMES>
                        <GAME NAME="Enchanted" ID="10207"></GAME>
                  </GAMES>
            </SUITE>
      </SUITES>
</GAMESSUITES>
```

Block 11. FRB Configured game list.

Awarding an FRB using API is done the same way as awarding Cash Bonuses except the API call:

1. On the first step, the EC server should generate an externalID for a new bonus. The main purpose of this external ID is to track the bonus.
   Note: BSG checks the external ID only among active bonuses. Closed bonuses are not checked, so the external ID does not have to be unique. The EC server can generate an external ID like a session for one time use for awarding.

2. The EC Server calls an awardFRB API URL, passing user ID, external ID and all the required parameters of the bonus.

3. The BSG Server validates all parameters.

4. The BSG Server checks user. If the user is not registered, the BSG server makes a getAccountInfo API call to EC server, receives information about the player and registers the player on the BSG side.

5. The BSG Server creates an FRB and returns status and bonus ID to EC server.

In case EC server receives error on the awardFRB API call, it is possible to check the status of the award by calling a checkFRB API, passing externalID (used during the awardFRB API call) as a parameter. The BSG server responds with bonus information if an FRB was created or responds that it does not exist.

Starting FRB

It is possible to start an FRB using two different ways.

An FRB game is started automatically when a default REAL mode launch URL (***/cwstartgamev2.do***) is used and the player has an active FRB. Play mode is automatically switched to FREE ROUNDS and the game is started using the active FRB. In case the player has several active FRB, the oldest one is used first.

Another way is to start an FRB game directly. The EC can have an FRB page and start FRB games directly using special FRB launch URL.

- **URL example:**
  http://environment_domain/cwstartgameidfrb.do?token=[TOKEN]&bankId=[BANK_ID]&gameId=[GAME_ID]&bonusId=[BONUS_ID]&lang=[LANG]

Parameters:

Parameters	Description
token	player's token.
bankId	specifies from what bank game was started. Configuration of this bank will be used to start the game.
gameId	specifies which game should be started.
bonusId	ID of a Cash Bonus the game should be started for.
lang	specifies what localization should be used.

In addition, EC should use another real mode start URL to prevent an FRB from being started automatically:

- **URL example:**

  http://environment_domain/cwstartgamenotfrb.do?token=[TOKEN]&bankId=[BANK_ID]&gameId=[GAME_ID]&bonusId=[BONUS_ID]&lang=[LANG]

Parameters are the same as for /cwstartgamev2.do

Promotional system

BSG currently provides two types of promotion that can be used by EC:

- **Take the Prize Promo** — promotion, during which at certain points in time (according to the logic of the promo) players can receive any prizes. For players, it looks like they win a random prize at random time while they are playing a game that participating in this promo.

- **Drive Tournament** — promotion, in which all participating players must score as many points as possible to win. The calculation of a player's points depends on the type of tournament. Prizes are awarded after the promotion ends based on points earned.

Take The Prize Promo

Main idea of this promo is to reward the players participating in the promotion with a cash prize or other (by using text prize functionality) at a random time during the game.

It does not share mathematical models with the game and does not affect the RTP of the game in any way. Each Take the Prize will utilize its own math/calculation logic to determine which/when prizes should drop within what time interval. Creating and configuring a specific Take the Prize promotion, as well as providing the necessary reporting, must be done through the Casino Manager.

All types of Responsive Design version 2 (a. k. a. RDv2) games must support Take the Prize functionality.

One game can take part simultaneously in multiple Take the Prize promotions. Each Take the Prize promotion can include any set of RDv2 games at the same time.

The player can see the cash prizes in his currency. The exchange rate is set on a certain date before the start of the promotion and does not change until the end of the promotion. If after conversion, the resulting value in the player’s currency is greater than one, it will be rounded down to 0 decimal places, otherwise it will remain unchanged.

Payouts of this promo are made by extending the «Bet/Result» API with additional parameters, indicating the amount of winnings, promotion’s type, and a unique promo ID. Parameters are added to the WIN request only if the player wins in the promo. In case of winning a text prize, these parameters will also be added, but with «promoWinAmount=0».

Drive Tournament

Main idea of this promotion is that players can take part in the tournament if they qualify (special criteria). If qualification criteria are not set, then all players who have launched specific games during the promo will participate in the tournament.

The tournament has several types. Depending on the type, points are awarded for fulfilling the necessary conditions. The winners are the players who scored the most points during the tournament (there may be several prizes with different payouts). During the tournament, players should be able to see their scores and the scores of top players presented as a progress bar.

All players or only the specified ones can take part in tournaments.

All RDv2 games must support tournament functionality, with the exception of games with RTP close to 100%. There can be several tournament promos for one game. If qualified, the player always takes part at once in all promos assigned to a specific game of a specific bank. Any list of available games can be selected for each tournament.

At the end of the tournament, players should be rewarded with prizes depending on their position in the leaderboard. Prizes can be cash or other (by using text prize functionality).

The player should see the cash prizes in his currency. The exchange rate is set on a certain date before the start of the promotion and does not change until the end of the promotion.

The creation and management of tournaments, as well as the viewing of reports, must be done through the CM.

For automatic payouts of a tournament, a special API was developed. It is a separate API and does not depend on the main integration protocol (CW/CT/Custom). It can be provided upon licensee's request.

INTEGRATION API
Protocol Format and Description

The communication protocol is XML over HTTP/HTTPS. In order to send a request, the EC/BSG side calls specified URL with the parameters submitted using GET/POST method. The response is returned as an XML document.

The response should always be XML. All tags should be capped. The root tag name depends on the side: BSG API responds with BSGSYSTEM as the root tag, ES API responds with EXTSYSTEM as the root tag.

The root tag always contains 3 tags: REQUEST, TIME, and RESPONSE. The REQUEST tag contains all request parameters (as tags) which were passed in the request. TIME has value = time response was compiled. RESPONSE contains response parameters as tags. Each RESPONSE must contain a RESULT tag with possible values: OK|ERROR. OK is for a successful response, ERROR is for errors. In case of error, the RESPONSE should contain a CODE tag with code of error.

- **URL example:**

  http://environment_domain/awardBonus.do?userId=[USER_ID]&amount=[AMOUNT]

Example of a response:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>someUserID</USERID>
            <AMOUNT>10000</AMOUNT>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUSID>193782</BONUSID>
      </RESPONSE>
</BSGSYSTEM>
```

Block 12. Award Bonus Response

Security

Each API request has a «hash» parameter that contains MD5 hash (hex representation) of the string build based on request parameters and a secret PASS_KEY. The receiving side should validate the request using the hash passed (build a hash from the parameters and PASS_KEY and compare it to the passed one).

The string for hash is built by concatenating parameters in a specified order and adding PASS_KEY at the end. Values of the parameters must be the same as passed in request (the values should not be reformatted).

If an optional parameter has not been passed or has no value, nothing should be inserted to string at its place (do not insert «null» or «nil» or something like this).

Landing URLs on BSG Side

Start Game for Guest

Used to start the selected BSG game in free mode for an unauthorized player.

Parameters:

Name	Type	Description
gameId	Integer	ID of BSG game. List of IDs is provided by BSG.
bankId	String	ID of bank. Provided by BSG.
lang	String	Language for game client to start with. If language is not specified or not supported, the default will be used.
homeURL	Sting	Specifies URL where the player should be redirected on pressing the HOME button. In case the parameter was not passed, the default URL configured for the bank is used.

- **URL example:**

  http://environment_domain/cwguestlogin.do?bankId=[BANK_ID]&gameId=[GAME_ID]&lang=[LANG]&homeUrl=[HOME_URL]

SUCCESS RESULT: page with game embedded ready to play in free mode.

ERROR RESULT: page with error description.

Start Game for Authorized Player

Used to start a BSG game for an authorized player.

Parameters:

Name	Type	Description
token	String	Unique token generated by ES for the player's current session.
gameId	Integer	ID of BSG game. List of IDs is provided by BSG.
bankId	String	ID of bank. Provided by BSG.
mode	String	Values: «real» or «free». Specifies if the game will be played with real money or not.
lang	String	Language for the game client to start with. If language is not specified or not supported, default will be used.
homeUrl	Sting	For mobile games only: specifies URL where the player should be redirected on pressing the HOME button. In case the parameter was not passed, the default URL configured for the bank is used.
cashierUrl	Sting	Specifies the URL where the player should be redirected in case, they have no money on their balance and the “go to cashier” button is pressed. In case the parameter was not passed, the default URL configured for the bank is used.

- **URL example:**

  http://environment_domain/cwstartgamev2.do?bankId=[BANK_ID]&gameId=[GAME_ID]&mode=[MODE]&token=[TOKEN]&lang=[LANG]

SUCCESS RESULT: page with the game embedded ready to play.

ERROR RESULT: page with the error description.

Note: In case the player has an active FRB for game, the game will be started in FRB mode automatically.

Start Game for Authorized Player Without FRB Auto-start

Start BSG game for authorized player.

Parameters:

Name	Type	Description
token	String	Unique token generated by ES for the player's current session.
gameId	Integer	ID of BSG game. List of IDs is provided by BSG.
bankId	String	ID of bank. Provided by BSG.
mode	String	Values: «real» or «free». Specifies if the game will be played with real money or not.
lang	String	Language for the game client to start with. If language is not specified or not supported, the default will be used.
homeUrl	String	For mobile games only: specifies URL where the player should be redirected on pressing the HOME button. In case the parameter was not passed, the default URL configured for the bank is used.
cashierUrl	String	Specifies the URL where the player should be redirected in case, they have no money on their balance and the “go to cashier” button is pressed. In case the parameter was not passed, the default URL configured for the bank is used.

- **URL example:**

  http://environment_domain/cwstartgamenotfrb.do?bankId=[BANK_ID]&gameId=[GAME_ID]&mode=[MODE]&token=[TOKEN]&lang=[LANG]

SUCCESS RESULT: page with the game embedded ready to play.

ERROR RESULT: page with the error description.

Start Bonus Game

Used to start the selected BSG game in bonus mode for the selected bonus.

Parameters:

Name	Type	Description
token	String	Unique token generated by ES for the player's current session.
gameId	Integer	ID of BSG game. List of IDs is provided by BSG
bankId	String	ID of bank. Provided by BSG.
bonusId	Integer	ID of bonus. Provided by BSG.
lang	String	Language for the game client to start with. If language is not specified or not supported, the default will be used.

- **URL example:**

  http://environment_domain/bsstartgame.do?gameId=[GAME_ID]&bonusId=[BONUS_ID]&token=[TOKEN]&lang=[LANG]&bankId=[BANK_ID]

SUCCESS RESULT: page with the game embedded ready to play for the selected bonus.

ERROR RESULT: page with error description.

Start FRB Game

Used to start a selected BSG game in bonus mode for the selected bonus.

Parameters:

Name	Type	Description
token	String	Unique token generated by ES for player's current session.
gameId	Integer	ID of BSG game. List of IDs is provided by BSG.
bankId	String	ID of bank. Provided by BSG.
bonusId	Integer	ID of FRB.
lang	String	Language for the game client to start with. If the language is not specified or not supported, the default will be used.

- **URL example:**

  http://environment_domain/cwstartgameidfrb.do?gameId=[GAME_ID]&bonusId=[BONUS_ID]&token=[TOKEN]&lang=[LANG]&bankId=[BANK_ID]

SUCCESS RESULT: page with the game embedded ready to play for selected FRB.

ERROR RESULT: page with the error description.

Requests from BSG System to EC system

Authenticate

Authorize user by token. The method is called on stating the game/bonus for the authorized player.

Parameters:

Name	Type	Description
token	String	Token provided by ES.
hash	String	order: token

Response parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES.
balance	Integer	Current balance of the player (in cents) on the EC system side.
username	String	Optional
firstname	String	Optional
lastname	String	Optional
email	String	Optional
currency	String	Optional. ISO code of the player's currency.

NOTE: the firstname, lastname and email parameters are optional. The BSG system can store the information if necessary for EC convenience.

- **URL example:**

  http://EC_endpoint?token=[TOKEN]&hash=[HASH]

Possible error codes	
399	Internal Error
400	Invalid token
500	Invalid hash

Success response example:

```
<EXTSYSTEM>
      <REQUEST>
            <TOKEN>123123-12312312-12342342</TOKEN>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <USERID>123123</USERID>
            <USERNAME>testplayer</USERNAME>
            <FIRSTNAME>Richard</FIRSTNAME>
            <LASTNAME>Smith</LASTNAME>
            <EMAIL>rs@somemail.com</EMAIL>
            <CURRENCY>EUR</CURRENCY>
            <BALANCE>23200</BALANCE>
      </RESPONSE>
</EXTSYSTEM>
```

Error response example:

```
<EXTSYSTEM>
      <REQUEST>
            <TOKEN>123123-12312312-12342342</TOKEN>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>399</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 13. Authorize responses.

Bet/Result

Bet/Result request parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES
bet	String	Amount of the bet (in cents) and the unique ID of the transaction on the BSG side in the format: bet_amount|transactionId
win	String	Amount of the win (in cents) and the unique ID of the transaction on the BSG side in the format: win_amount|transactionId
roundId	Big Integer	Unique ID of the game round on the BSG side. The game round can have several Bet/Result requests.
gameId	Integer	Unique ID of the game.
gameSessionId	String	Unique ID of the game session on BSG side.
hash	String	Order: userId, bet, win, isRoundFinished(optional), roundId, gameId
isRoundFinished	Boolean	Optional. Informs the EC system if the current round is finished. See line 6 of «Additional request parameters» table for more info.
token	string	Optional. Token provided by ES. See line 3 of «Additional request parameters» table for more info.
negativeBet	Integer	Optional. Can be sent only with a win operation. Specifies the amount in cents to return to the player's balance as result of a partially canceled bet (can occur in game). **Note:** negativeBet is not part of the win amount and must be processed separately. For more info see «Negative Bets» section.
clientType	String	Optional. Specifies the platform from where the call was initiated. Possible values: FLASH, WIN32, AIR, MOBILE, ANDROID, IOSMOBILE, WINDOWSPHONE, ELECTRON; The «FLASH» may also be considered as «FLASH/HTML5PC». See line 7 of «Additional request parameters» table for more info.
promoWinAmount	Integer	Optional. Prize amount that the player is awarded with during a promotional campaign. The field is optional and will appear only if there is a winning in a campaign. See line 9 of «Additional request parameters» table for more info.

promoID	Integer	Optional. Unique ID of the promo. See line 9 of «Additional request parameters» table for more info.
promoCampaignType	String	Optional. Describes the type of the promo. There will be only «Take the Prize» option for now. See line 9 of «Additional request parameters» table for more info.
jpWin	Integer	Optional. Shows amount of player's jackpot winnings. See line 1 of «Additional request parameters» table for more info. In cents.
jpContribution	Double	Optional. See line 1 of «Additional request parameters» table for more info. In cents with fractional part (example: 2.34566556). The separator is a dot.
jpContributionDetails	string	Optional. See line 2 of «Additional request parameters» table for more info.

The EC system must save and check the ID of BSG transactions. EC must not process the same operation (with the same ID) twice. If the transaction was already registered and successfully processed on the EC system, the EC system must return an OK response without affecting the player's balance once again.

Note: Each request contains only a bet or win parameter. Bet and win cannot be sent in the same request.

Note: «isRoundFinished» is an optional parameter. By default, it is not passed. ES should inform BSG if it is required on the ES side to receive this flag. Please note that isRoundFinished will require sending an additional zero-win operation at the end of a round in case there was no win on the last turn (to inform ES that the round is finished).

Note: «jpWin» is an optional parameter. Amount of jackpot win from this parameter should also be included in regular ***win*** parameter. I. e. simple win in game = 500, jackpot win = 100000, then «win=100500|transaction_id», «jpWin=100000».

Note: «promoWinAmount» parameter is **NOT** added to the regular ***win*** parameter. It is required to process the parameters related to promo payouts separately and add them to the player's balance. Therefore, the «promoWinAmount» value must be added to the ***BALANCE*** field's value in the response.

Response parameters:

Name	Type	Description
extSystemTransactionId	String	ID of the transaction on the EC side.
balance	Integer	Balance of the player in cents on the EC system side (after transaction was applied).
bonusBet	Integer	Optional. Specifies what part of the bet was done on bonus money. If a parameter is not provided, the BSG system will account the whole bet as cash (real money).
bonusWin	Integer	Optional. Specifies what part of the win was applied to bonus money. If a parameter is not provided, the BSG system will account the whole win as cash (real money).

Possible error codes	
300	Insufficient funds
301	Operation failed
310	Unknown user id
399	Internal Error
500	Invalid hash

- **URL example:**

  http://EC_endpoint?userId=[USER_ID]&bet=[BET]&win=[WIN]&roundId=[ROUND_ID]&gameId=[GAME_ID]&isRoundFinished=[IS_ROUND_FINISHED]&token=[TOKEN]&hash=[HASH]&gameSessionId=[GAME_SESSION_ID]&negativeBet=[NEGATIVE_BET]&clientType=[CLIENT_TYPE]&promoWinAmount=[PROMO_WIN_AMOUNT]&promoID=[PROMO_ID]&promoCampaignType=[PROMO_CAMPAIGN_TYPE]&jpWin=[JP_WIN]&jpContribution=[JP_CONTRIBUTION]&jpContributionDetails=[JP_CONTRIBUTION_DETAILS]

Example of the response in case of a successful operation:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>12345</USERID>
            <BET>123407|12344546</BET>
            <ROUNDID>12345</ROUNDID>
            <GAMEID>12</GAMEID>
            <GAMESESSIONID>13214536477435412</GAMESESSIONID>
            <ISROUNDFINISHED>false</ISROUNDFINISHED>
            <HASH>8cb54b1924dbbd626a3b079a47527d17</HASH>
      </REQUEST>
      <TIME>12 Jan 2004 15:15:15</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <EXTSYSTEMTRANSACTIONID>154456456</EXTSYSTEMTRANSACTIONID>
            <BALANCE>235500</BALANCE>
            <BONUSBET>123407</BONUSBET>
      </RESPONSE>
</EXTSYSTEM>
```

Block 14. Successful response of betResult.

Example of a response in case of a failed operation:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>12345</USERID>
            <BET>123407|12344546</BET>
            <ROUNDID>12345</ROUNDID>
            <GAMEID>12</GAMEID>
            <GAMESESSIONID>13214536477435412</GAMESESSIONID>
            <ISROUNDFINISHED>false</ISROUNDFINISHED>
            <HASH>8cb54b1924dbbd626a3b079a47527d17</HASH>
      </REQUEST>
      <TIME>12 Jan 2004 15:15:15</TIME>
      <RESPONSE>
            <RESULT>FAILED</RESULT>
            <CODE>300</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 15. Failed response of betResult.

Refund Bet

Request parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES
casinoTransactionId	String	ID of the transaction on the BSG side. ID of the transaction is sent to the EC system with BetResult call.
hash	String	order: userId, casinoTransactionId
token	String	Optional. Token provided by ES. See line 3 of «Additional request parameters» table for more info.
gameId	Integer	Optional. Unique ID of the game. See line 4 of «Additional request parameters» table for more info.
amount	Integer	Optional. Amount of returned bet, presented in cents. See line 4 of «Additional request parameters» table for more info.
roundId	Big Integer	Optional. Unique ID of the game round on the BSG side. See line 4 of «Additional request parameters» table for more info.

Response parameters:

Name	Type	Description
extSystemTransactionId	String	ID of the transaction on the EC side.

Possible error codes	
302	Unknown transaction id
310	Unknown user id
399	Internal Error
500	Invalid hash

- **URL example:**

  http://EC_endpoint?userId=[USER_ID]&casinoTransactionId=[CASINO_TRANSACTION_ID]&token=[TOKEN]&gameId=[GAME_ID]&amount=[AMOUNT]&roundId=[ROUND_ID]&hash=[HASH]

Example of a response in case of successful operation:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>12345</USERID>
            <CASINOTRANSACTIONID>123787845</CASINOTRANSACTIONID>
            <HASH>8cb54b1924dbbd626a3b079a47527d17</HASH>
      </REQUEST>
      <TIME>12 Jan 2004 15:15:15</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <EXTSYSTEMTRANSACTIONID>154456456</EXTSYSTEMTRANSACTIONID>
      </RESPONSE>
</EXTSYSTEM>
```

Block 16. RefundBet successful response.

Example of a response in case of a failed operation:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>12345</USERID>
            <CASINOTRANSACTIONID>123787845</CASINOTRANSACTIONID>
            <HASH>8cb54b1924dbbd626a3b079a47527d17</HASH>
      </REQUEST>
      <TIME>12 Jan 2004 15:15:15</TIME>
      <RESPONSE>
            <RESULT>FAILED</RESULT>
            <CODE>301</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 17. RefundBet failed response.

Get Balance

Returns the actual balance of the player on the EC system. This can be used in case the game lobby is implemented on the BSG side.

Request parameters:

Name	Type	Description
userId	String	Unique ID of the user within ES

Response parameters:

Name	Type	Description
balance	Integer	Balance of the player in cents on EC system side.

Possible error codes	
310	Unknown user id
399	Internal Error

- **URL example:**

  http://EC_endpoint?userId=[USER_ID]

```
Example of a response in case of a
successful operation
<EXTSYSTEM>
      <REQUEST>
            <USERID>12345</USERID>
      </REQUEST>
      <TIME>12 Jan 2004 15:15:15</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BALANCE>12300</BALANCE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 18. getBalance successful response

```
Example of a response in case of a failed operation:

<EXTSYSTEM>
      <REQUEST>
            <USERID>12345</USERID>
      </REQUEST>
      <TIME>12 Jan 2004 15:15:15</TIME>
      <RESPONSE>
            <RESULT>FAILED</RESULT>
            <CODE>310</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 19. getBalance failed result.

Get Account Info

Gets account info by the ES ID of the player. This is called in case BSG got an API call for an unregistered user.

Parameters:

Name	Type	Description
userId	String	Unique ID of the user within ES
hash	String	order: userId

Response parameters:

Name	Type	Description
Username	String	Optional
Firstname	String	Optional
Lastname	String	Optional
Email	String	Optional
Currency	String	ISO code of the player's currency. If it is not provided, the default currency configured for the bank on the BSG side will be used. Mandatory.

Possible error codes	
310	Unknown user id
399	Internal Error
500	Invalid hash

- **URL example:**

  http://EC_endpoint?userId=[USER_ID]&hash=[HASH]

Success response example:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>432</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <USERNAME>testplayer</USERNAME>
            <FIRSTNAME>Richard</FIRSTNAME>
            <LASTNAME>Smith</LASTNAME>
            <EMAIL>rs@somemail.com</EMAIL>
            <CURRENCY>EUR</CURRENCY>
      </RESPONSE>
</EXTSYSTEM>
```

Block 20. AccountInfo successful response.

Error response example:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>432</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>500</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 21. AccountInfo failed response.

Bonus Release

BSG sends this request to ES to release a bonus to the player's cash balance. It is assumed that this operation cannot fail. In case of error code 699 or a network error, the bonusRelease call will be repeated with the same parameters. If ES has the bonus already released (check by bonusId), then ES should just reply with an OK response. Other errors will require manual resolving.

Parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES.
bonusId	Integer	ID of the bonus on BSG side.
amount	Integer	Amount in cents to release to cash.
hash	String	Order: userId, bonusId, amount
token	String	Optional. Token provided by ES. See line 3 of «Additional request parameters» table for more info.

Possible error codes	
310	Unknown user id
399	Internal Error
500	Invalid hash

- **URL example:**

  http://EC_endpoint?userId=[USER_ID]&bonusId=[BONUS_ID]&amount=[AMOUNT]&hash=[HASH]&token=[TOKEN]

Success response example:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <BONUSID>32132</BONUSID>
            <AMOUNT>7820</AMOUNT>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
      </RESPONSE>
</EXTSYSTEM>
```

Block 22. bonusRelease successful response

Error response example:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <BONUSID>32132</BONUSID>
            <AMOUNT>7820</AMOUNT>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>699</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 23. bonusRelease failed response.

Bonus Win

BSG sends this request for each win obtained during an FRB game session. All wins should be added to the player's cash balance. It is assumed that this operation cannot fail. In case of error code 699 or a network error, the bonusWin call will be repeated with the same parameters. If ES has the bonusWin already received and successfully processed (check by transactionId), then ES should reply with OK response. Other errors will require manual resolving.

Note: By default, the system sends only non-zero winnings. Sending 0 winnings for FRB can be implemented by licensee's request.

Parameters:

Name	Type	Description
userId	String	ID of used on ES side.
bonusId	Integer	ID of the FR bonus on the BSG side.
amount	Integer	Amount of the win in cents.
transactionId	String	ID of the transaction on the BSG side
hash	String	Order: userId, bonusId, amount
token	String	Optional. Token provided by ES. See line 3 of «Additional request parameters» table for more info.
gameId	Integer	Optional. Unique ID of the game. See line 5 of «Additional request parameters» table for more info.
roundId	Big Integer	Optional. Unique ID of the game round on the BSG side. See line 5 of «Additional request parameters» table for more info.
isRoundFinished	Boolean	Optional. Informs the EC system if the current round is finished. See line 5 of «Additional request parameters» table for more info.
gameSessionId	String	Optional. Unique ID of the game session on BSG side. See line 5 of «Additional request parameters» table for more info.
clientType	String	Optional. Specifies the platform from where the call was initiated. Possible values: FLASH, WIN32, AIR, MOBILE, ANDROID, IOSMOBILE, WINDOWSPHONE, ELECTRON; The «FLASH» may also be considered as «FLASH/HTML5PC». See line 8 of «Additional request parameters» table for more info.

Response parameters:

Name	Type	Description
balance	Integer	Balance of the player (in cents) on ES side after applying a win.

Possible error codes	
602	Invalid or empty amount
610	Invalid parameters
620	Invalid hash
631	User not found
699	Internal error

- **URL example:**

  http://EC_endpoint?userId=[USER_ID]&bonusId=[BONUS_ID]&amount=[AMOUNT]&transactionId=[TRANSACTION_ID]&hash=[HASH]&token=[TOKEN]&gameId=[GAME_ID]&roundId=[ROUND_ID]&isRoundFinished=[IS_ROUND_FINISHED]&gameSessionId=[GAME_SESSION_ID]&clientType=[CLIENT_TYPE]

Success response example:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <BONUSID>32132</BONUSID>
            <AMOUNT>7820</AMOUNT>
            <TRANSACTIONID>123456789</TRANSACTIONID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BALANCE>12345</BALANCE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 24. bonusWin successful response.

Error response example:

```
<EXTSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <BONUSID>32132</BONUSID>
            <AMOUNT>7820</AMOUNT>
            <TRANSACTIONID>123456789</TRANSACTIONID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>699</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 25. bonusWin failed response.

FRB notifications

Optional request sent at the end of the FRB bonus.

Parameters:

Name	Type	Description
amount	Integer	Win amount from an FRBonus, presented in cents.
bonusId	Integer	Unique ID of a bonus on the BSG side.
userId	String	Unique ID of the player within ES.
transactionId	String	ID of the transaction on the BSG side.
hash	String	order: userId, bonusId, amount.
status	String	Status of the bonus.

Response parameters:

Name	Type	Description
balance	Integer	Balance of the player (in cents) on ES side after applying a win.

- **URL example:**
  http://EC_endpoint?amount=[AMOUNT]&userId=[USER_ID]&bonusId=[BONUS_ID]&transactionId=[TRANSACTION_ID]&hash=[HASH]&status=[STATUS]

```
Success response example:


<EXTSYSTEM>
      <REQUEST>
            <AMOUNT>12</AMOUNT>
            <BONUSID>1234321</BONUSID>
            <USERID>123432156</USERID>
            <TRANSACTIONID>123465321</TRANSACTIONID>
            <HASH>3234b59b48ed19ccdea6479ffce93e49</HASH>
            <STATUS>CLOSED</STATUS>
      </REQUEST>
      <RESPONSE>
            <BALANCE>1293</BALANCE>
            <RESULT>OK</RESULT>
      </RESPONSE>
      <TIME>26.05.2023 12:19:45</TIME>
</EXTSYSTEM>
```

Block 26. FRB notification success response.

Error response example:

```
<EXTSYSTEM>
      <REQUEST>
            <AMOUNT>12</AMOUNT>
            <BONUSID>1234321</BONUSID>
            <USERID>123432156</USERID>
            <TRANSACTIONID>123465321</TRANSACTIONID>
            <HASH>3234b59b48ed19ccdea6479ffce93e49</HASH>
            <STATUS>CLOSED</STATUS>
      </REQUEST>
      <TIME>26.05.2023 12:19:45</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>699</CODE>
      </RESPONSE>
</EXTSYSTEM>
```

Block 27. FRB notification failed response.

Additional request parameters

These parameters can extend current requests and can be implemented upon request.

#	Name	Parameters	Requests	Description
1	Jackpot Information	jpContribution, jpWin	Bet/Result	Adds «jpContribution» to BET-request and «jpWin» to WIN-request. «jpWin» will also be included in «WIN» parameter's amount. «jpContribution» in cents with fractional part (example 5.243435).
2	Jackpot Contribution Details	jpContributionDetails	Bet/Result	Adds info about contributions to jackpot banks alongside with «Jackpot Information» parameters (for a BET-request) in a form of «JP_BANK_NAME|CONTRIBUTION_AMOUNT». If there are several jackpot banks in game, all of them will be shown with comma separation. Works only when «Jackpot Information» enabled.
3	Add token	token	Bet/Result RefundBet BonusWin BonusRelease	Adds player's token to requests.
4	Send details on refund	gameId, amount, roundId	RefundBet	Allows to show detailed info about refunded round.
5	Send detailed info on FRBonus win	gameId, roundId, isRoundFinished, gameSessionId	BonusWin	Allows system to send additional information about FRBonus win.
6	Show isRoundFinished parameter	isRoundFinished	BetResult BonusWin	If enabled, isRoundFinished parameter must be sent.
7	Send Client Type	clientType	BetResult	Forces to send client type for CW operations.
8	Send Client Type on FRB Win	clientType	BonusWin	Forces to send client type in FRBonus Win request.

9	TTP promo auto payouts	promoWinAmount promoID promoCampaignType	BetResult	Adds information about promo in case of promo win. For more info see «Promotional system» section.

Cash Bonus API on BSG side

Award Bonus

Used to award a bonus. In case of a network error, the status of the award can be checked using a checkBonus API call.

Parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES.
bankId	String	ID of bank. Provided by BSG.
type	String	Type of bonus. Values: Deposit, Slots, Loss, Prize, Promo, Special
amount	integer	Amount of bonus in cents.
multiplier	float	Multiply to calculate the rollover amount.
games	String	Values: all|except|only
gameIds	String	List of BSG game IDs separated with "|"
expDate	String	Date in format DD.MM.YYYY
extBonusId	String	Bonus ID from ES.
hash	String	Order: userId, bankId, type, amount, multiplier, games, gameIds, expDate, comment, description, extBonusId
comment	String	Optional comment field for internal use.
description	String	Optional description for the bonus to show to the player.

Response parameters:

Name	Type	Description
bonusId	integer	ID of the bonus on the BSG side.

Possible error codes	
601	Invalid or empty bonus type
602	Invalid or empty amount
603	Invalid or empty multiplier
604	Invalid or empty game modes
605	Invalid or empty game ID
606	Invalid or empty exp Date
610	Invalid parameters
620	Invalid hash
699	Internal error
641	Bonus with such extBonusId already exists

- **URL example:**

  http://environment_domain/bsaward.do?userId=[USER_ID]&bankId=[BANK_ID]&type=[TYPE]amount=[AMOUNT]&multiplier=[MULTIPLIER]&games=[GAMES]&gameIds=[GAME_IDS]&expDate=[EXPIRATION_DATE]&comment=[COMMENT]&description=[DESCRIPTION]&extBonusId=[EXT_BONUS_ID]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>someUserID</USERID>
            <BANKID>2365</BANKID>
            <TYPE>Slot</TYPE>
            <AMOUNT>10000</AMOUNT>
            <MULTIPLIER>10.0</MULTIPLIER>
            <GAMES>only</GAMES>
            <GAMEID>234|257|652</GAMEID>
            <EXPDATE>01.05.2011</EXPDATE>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUSID>193782</BONUSID>
      </RESPONSE>
</BSGSYSTEM>
```

Block 28. awardBonus successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>someUserID</USERID>
            <BANKID>2365</BANKID>
            <TYPE>Slot</TYPE>
            <AMOUNT>10000</AMOUNT>
            <MULTIPLIER>10.0</MULTIPLIER>
            <GAMES>only</GAMES>
            <GAMEID>234|257|652</GAMEID>
            <EXPDATE>01.05.2011</EXPDATE>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>611</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 29. awardBonus failed response

Check Bonus

Used to check the status of a bonus award in case of a network error during the award Bonus call.

Parameters:

Name	Type	Description
extBonusId	String	Bonus ID from ES.
bankId	String	ID of bank. Provided by BSG.
hash	String	Order: extBonusId, bankId

Response parameters:

Name	Type	Description
bonusId	integer	ID of the bonus on the BSG side.

Possible error codes	
610	Invalid parameters
620	Invalid hash
630	Operation not found
699	Internal error

- **URL example:**

  http://environment_domain/bscheck.do?extBonusId=[EXT_BONUS_ID]&bankId=[BANK_ID]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUSID>193782</BONUSID>
      </RESPONSE>
</BSGSYSTEM>
```

Block 30. checkBonus successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>630</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 31. checkBonus failed response.

Cancel Bonus

Parameters:

Name	Type	Description
bonusId	Integer	ID of the bonus on the BSG side
hash	String	Order: bonusId

Possible error codes	
610	Invalid parameters
620	Invalid hash
630	Operation not found
699	Internal error

- **URL example:**

  http://environment_domain/bscancel.do?bonusId=[BONUS_ID]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <BONUSID>123423</BONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
      </RESPONSE>
</BSGSYSTEM>
```

Block 32. CancelBonus successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <BONUSID>123423</BONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>630</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 33. CancelBonus failed response.

Get Bonus Info

Returns active bonuses for the player.

Parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES.
bankId	String	ID of bank. Provided by BSG.
hash	String	Order: userId, bankId

Response parameters:

Name	Type	Description
bonus	Complex	Contains info about the bonus.

The following tags are specified for each bonus:

- **BONUS** ID
  ID of the bonus on the BSG side
- **TYPE**
  Type of bonus. Possible values: Deposit, Slots, Loss, Prize, Promo, Special
- **AWARDED DATE**
  Date the bonus was awarded. Format: DD.MM.YYYY
- **AMOUNT**
  Initial amount of the bonus in cents.
- **BALANCE**
  Current balance of the bonus in cents.
- **ROLLOVER**
  Rollover amount in cents.
- **COLLECTED**
  Currently collected rollover amount in cents.
- **DESCRIPTION**
  Description of the bonus, entered on awarding.

- **GAMEIDS**

  Comma-delimited list of BSG IDs of games available to play the bonus.

- **EXPDATE**

  Date the bonus will expire. Format: DD.MM.YYYY

Possible error codes	
610	Invalid parameters
620	Invalid hash
699	Internal error

- **URL example:**

  http://environment_domain/bsinfo.do?userId=[USER_ID]&bankId=[BANK]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>111</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUS>
                  <BONUSID>123</BONUSID>
                  <TYPE>Slot</TYPE>
                  <AWARDEDDATE>01.01.2011</AWARDEDDATE>
                  <AMOUNT>10000</AMOUNT>
                  <BALANCE>9723</BALANCE>
                  <ROLLOVER>100000</ROLLOVER>
                  <COLLECTED>15000</COLLECTED>
                  <DESCRIPTION>Mega Slot Bonus</DESCRIPTION>
                  <GAMEIDS>5,10,222,211</GAMEIDS>
                  <EXPDATE>01.04.2011</EXPDATE>
            </BONUS>
            <BONUS>
                  <BONUSID>124</BONUSID>
                  <TYPE>Deposit</TYPE>
                  <AWARDEDDATE>01.01.2011</AWARDEDDATE>
                  <AMOUNT>5000</AMOUNT>
                  <BALANCE>6395</BALANCE>
                  <ROLLOVER>50000</ROLLOVER>
                  <COLLECTED>43405</COLLECTED>
                  <DESCRIPTION>First Deposit Bonus</DESCRIPTION>
                  <GAMEIDS>5,10,222,211</GAMEIDS>
                  <EXPDATE>25.06.2011</EXPDATE>
            </BONUS>
      </RESPONSE>
</BSGSYSTEM>
```

Block 34. getBonusInfo successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>620</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 35. getBonusInfo failed response.

Get Bonus History

Returns a list of finished bonuses.

Parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES.
bankId	String	ID of bank. Provided by BSG.
hash	String	Order: userId, bankId

Response parameters:

Name	Type	Description
bonus	Complex	Contains info about the bonus.

The following tags are specified for each bonus:

- **BONUS ID**
  ID of the bonus on the BSG side.
- **STATUS**
  RELEASED|EXPIRED|CANCELLED|LOST
- **TYPE**
  Type of bonus. Possible values: Deposit, Slots, Loss, Prize, Promo, Special
- **AWARDED DATE**
  Date the bonus was awarded. Format: DD.MM.YYYY
- **AMOUNT**
  Initial amount of the bonus in cents.
- **BALANCE**
  Balance of the bonus in cents at the moment it was closed.
- **ROLLOVER**
  Rollover amount in cents.
- **COLLECTED**
  Collected amount in cents at the moment it was closed.

- **DESCRIPTION**
  Description of the bonus, entered on awarding.

- **GAME IDS**
  Comma-delimited list of BSG IDs of games available to play the bonus.

- **END DATE**
  Date the bonus was closed. Format: DD.MM.YYYY

Possible error codes	
610	Invalid parameters
620	Invalid hash
699	Internal error

- **URL example:**

http://environment_domain/bshistory.do?userId=[USER_ID]&bankId=[BANK]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>111</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUS>
                  <BONUSID>123</BONUSID>
                  <STATUS>RELEASED</STATUS>
                  <TYPE>Slot</TYPE>
                  <AWARDEDDATE>01.01.2011</AWARDEDDATE>
                  <AMOUNT>10000</AMOUNT>
                  <BALANCE>9723</BALANCE>
                  <ROLLOVER>100000</ROLLOVER>
                  <COLLECTED>100025</COLLECTED>
                  <DESCRIPTION>Mega Slot Bonus</DESCRIPTION>
                  <GAMEIDS>5,10,222,211</GAMEIDS>
                  <ENDDATE>01.04.2011</ENDDATE>
            </BONUS>
      </RESPONSE>
</BSGSYSTEM>
```

Block 36. getBonusHistory successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>620</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 37. getBonusHistory failed response.

FRB API on BSG side

Award FR Bonus

Used to award FRB. In case of a network error, the status of an award can be checked using a checkFRBonus API call.

Parameters:

Name	Type	Description
userId	String	Unique ID of user within ES.
bankId	String	ID of the bank. Provided by BSG. Optional.
rounds	integer	Available free rounds count.
games	String	List of BSG game IDs separated with "|"
extBonusId	String	Bonus ID from ES.
hash	String	Order: userId, bankId, rounds, games, comment, description, extBonusId
comment	String	Optional comment for internal use.
description	String	Optional description for the bonus to show to the player.
startTime	String	Optional. The time the bonus will begin to be available to the player. BSG server time. Format: dd.MM.yyyyHH:mm:ss or dd.MM.yyyy If not specified, it will be available immediately after awarded.
expirationTime	String	Optional. The time bonus will expire. BSG server time. Format: dd.MM.yyyyHH:mm:ss or dd.MM.yyyy If not specified, will not expire ever.
duration	integer	Optional. Duration in days that the bonus will be available to player from the moment of first-time bonus was used by player. If not specified, there is no duration limit.
expirationHours	integer	Optional. If used with expirationTime, expirationTime will be ignored. If used with startTime will be calculated expirationTime as startTime+expirationHours. If expirationHours used without startTime and expirationTime will calculate expirationTime as current system time + expirationHours.

frbTableRoundChips	integer	Optional. Used when FRB is awarded for table games. Specifies the balance, in cents, available for the player for each FRB round. In case a value will not be provided, the default (configured for bank) will be used.

Response parameters:

Name	Type	Description
bonusId	integer	ID of the bonus on the BSG side.

Possible error codes	
605	Invalid or empty games
607	Invalid rounds
610	Invalid parameters
620	Invalid hash
631	Invalid user
641	Bonus with such ExtBonusId specified already exists
642	Invalid Duration
643	Invalid startTime
644	Invalid expirationTime
645	Expiration Time less or equals Start Time
646	Duration is greater than selected time period
647	Invalid expirationHours
648	Invalid table chips value
699	Internal error

- **URL example:**

  http://environment_domain/frbaward.do?userId=[USER_ID]&bankId=[BANK]&rounds=[ROUNDS]&games=[GAMES]&comment=[COMMENT]&description=[DESCRIPTION]&extBonusId=[EXT_BONUS_ID]&startTime=[START_TIME]&expirationTime=[EXPIRATION_TIME]&duration=[DURATION]&expirationHours=[EXPIRATION_HOURS]&frbTableRoundChips=[FRB_TABLE_ROUND_CHIPS]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>someUserID</USERID>
            <BANKID>2354</BANKID>
            <ROUNDS>20</ROUNDS>
            <GAMES>224|225|226</GAMES>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUSID>193782</BONUSID>
      </RESPONSE>
</BSGSYSTEM>
```

Block 38. AwardFRB successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>someUserID</USERID>
            <BANKID>2354</BANKID>
            <ROUNDS>20</ROUNDS>
            <GAMES>224|225|226</GAMES>
            <EXPTIME>01.05.2011</EXPTIME>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>611</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 39. AwardFRB failed response.

Check Bonus

Used to check the status of a bonus award in case of a network error during an award FRBonus call.

Parameters:

Name	Type	Description
extBonusId	String	Bonus ID from ES.
bankId	String	ID of bank. Provided by BSG. Optional.
hash	String	Order: extBonusId, bankId

Response parameters:

Name	Type	Description
bonusId	integer	ID of the bonus on the BSG side.

Possible error codes	
610	Invalid parameters
620	Invalid hash
630	Bonus not found
699	Internal error

- **URL example:**

  http://environment_domain/frbcheck.do?extBonusId=[EXT_BONUS_ID]&bankId=[BANK_ID]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUSID>193782</BONUSID>
      </RESPONSE>
</BSGSYSTEM>
```

Block 40. checkBonus successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>630</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 41. checkBonus failed response.

Cancel Bonus

Parameters:

Name	Type	Description
bonusId	Integer	ID of the bonus on the BSG side.
hash	String	Order: bonusId

Possible error codes	
610	Invalid parameters
620	Invalid hash
630	Bonus not found
699	Internal error

- **URL example:**

http://environment_domain/frbcancel.do?bonusId=[BONUS_ID]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
      </RESPONSE>
</BSGSYSTEM>
```

Block 42. cancelBonus successful response.

Error response example:

```
<BSGSYSTEM>
      <REQUEST>
            <EXTBONUSID>123423</EXTBONUSID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>630</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 43. cancelBonus failed response.

Get FR Bonus Info

Returns active FR bonuses for the player.

Parameters:

Name	Type	Description
userId	String	Unique ID of the player within ES.
bankId	String	ID of bank. Provided by BSG. Optional.
hash	String	Order: userId, bankId

Response parameters:

Name	Type	Description
bonus	String	Contains info about bonus

The following tags are specified for each bonus:

- **BONUSID**
  ID of the bonus on the BSG side.
- **EXTBONUSID**
  ID of the bonus on the EC side. Optional. BSG can display this parameter after changing the system configuration at the request of the EC side.
- **AWARDEDDATE**
  Date the bonus was awarded. Format: DD.MM.YYYY
- **ROUNDS**
  Initial FR count.
- **ROUNDSLEFT**
  Number of free rounds left.
- **GAMEIDS**
  "|"-delimited list of BSG IDs of games available to play the bonus.
- **DESCRIPTION, STARTTIME, EXPIRATIONTIME, DURATION** – shown in case these properties were specified on award.

Possible error codes	
610	Invalid parameters
620	Invalid hash
631	Invalid user
699	Internal error

- **URL example:**

  http://environment_domain/frbinfo.do?userId=[USER_ID]&bankId=[BANK_ID]&hash=[HASH]

Success response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>111</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>OK</RESULT>
            <BONUS>
                  <BONUSID>123</BONUSID>
                  <AWARDEDDATE>01.01.2011</AWARDEDDATE>
                  <ROUNDS>20</ROUNDS>
                  <ROUNDSLEFT>12</ROUNDSLEFT>
                  <GAMEIDS>225,226, </GAMEIDS>
            </BONUS>
            <BONUS>
                  <BONUSID>124</BONUSID>
                  <AWARDEDDATE>01.01.2011</AWARDEDDATE>
                  <ROUNDS>15</ROUNDS>
                  <ROUNDSLEFT>5</ROUNDSLEFT>
                  <GAMEIDS>225</GAMEIDS>
                  <DESCRIPTION>PPP SPECIAL</DESCRIPTION>
                  <STARTTIME>01.01.2011</STARTTIME>
                  <EXPIRATIONTIME>30.05.2012 00:00:00</EXPIRATIONTIME>
                  <DURATION>1</DURATION>
            </BONUS>
      </RESPONSE>
</BSGSYSTEM>
```

Block 44. getFRBonusInfo successful response.

Failed response example:

```
<BSGSYSTEM>
      <REQUEST>
            <USERID>123423</USERID>
            <HASH>1e3b0ae551b1dfdc48137bc50ad26d1c</HASH>
      </REQUEST>
      <TIME>18 Mar 2011 12:13:44</TIME>
      <RESPONSE>
            <RESULT>ERROR</RESULT>
            <CODE>620</CODE>
      </RESPONSE>
</BSGSYSTEM>
```

Block 45. getFRBonusInfo failed response.

FAQ

Game is not started.

“This game does not exist” error message on game launch.

The game was not configured for the bank. Please check that the bank and gameId parameters contain correct values. A list of games configured for the bank can be obtained using the Game List API URL.

“Bank is incorrect” error message on game launch.

Please ensure that the value of the bankId parameter is correct. Refer to integration information provided by BSG during system configuration.

“Game disabled” error message on game launch.

Specified game is disabled. Please check that the bank and gameId parameters contain correct values. If all is correct, please contact BSG support to receive comments about the reason and duration that the game was disabled.

“Internal error” error message on game launch.

Possible reasons:

- The BSG server receives an error from the authenticate API for the provided token. Please check the logs for Authenticate API calls from the BSG server for the provided token.
- The BSG server has pending wallet operation for the player and game that can’t be resolved. Please check the logs for Bet/Result or Refund Bet API calls for the user and the game specified in launch URL.
- Internal error on BSG server. Please contact BSG support with the issue.

Error in game after first spin

Most likely the BSG server has received an error from the EC server on the Bet/Result API call. Please check the logs for error. If no errors are found, contact BSG support with the issue.

Wrong balance in game

BSG does not manage balances. BSG have screenshots of the balance received from the EC server on API calls. Please check the BALANCE tag in responses to BSG.

Session expired

By default, the session is expired after 10 minutes of inactivity (this can be configured to another value at the EC's request). Another reason is that the session was closed from the CM (killed) or another session for the same player was started.

Two or more games simultaneously

BSG does not support playing 2 or more games simultaneously. The player can have only one session and game session at the same time.

Currency of player

The player can have only one single currency on the BSG side. Currency is set for the player at the moment the game is first started (from Authenticate API call) or on a bonus award using API (GetAccountInfo API call) or on a mass bonus award (specified in csv). The BSG server does not support the changing of currency of the player. Currency can be changed at the EC's request to BSG support. Please also note that changing currency of an active player (who has played several games) is time consuming because it requires time to rebuild data in CM.

Default currency of bank

Default currency can be changed at the EC's request. Please also see note about changing the currency of players above.

The same user is registered twice in BSG CM

UserID is case sensitive for the BSG server. In case the EC server sends it differently, the BSG server creates duplicate players.

Game ID of mobile games

By default, the BSG server separates games by platforms. I.e., Mr. Vegas, Mr. Vegas Android, Mr. Vegas Mobile, Mr. Vegas Windows Phone – all have their own game ID and are denoted as separate games (with their own PJ banks, own pending rounds etc.). At the EC's request, the BSG server can be configured to use one single gameID for the game for all platforms.

Starting with the release of «Reels Of Wealth» all games now have a Single ID for all platforms. For all platforms such games use a single PJ bank, single pending rounds, and other data.

Several Refund Bet API calls

The BSG server ignores error code = 302 from a Refund Bet API for 5 minutes in case the original Bet/Result API resulted in timeout or another non-protocol error.

Changing game configurations

Game configuration (such as limit, coins, default bet etc.) can be changed by contacting BSG support.

Changing FRB configuration

The FRB configuration for a game (coin, bet per line, number of lines used during FRB) can be changed at the EC's request.

APPENDIX A - RESERVED ERROR CODES

BSG system error codes:	
Code	**Description**
601	Invalid or empty bonus type
602	Invalid or empty amount
603	Invalid or empty multiplier
604	Invalid or empty game modes
605	Invalid or empty game ID
606	Invalid or empty exp Date
607	Invalid rounds parameter
610	Invalid parameters
620	Invalid hash
630	Bonus not found
631	Invalid user
641	Bonus with such extBonusId already exists
642	Invalid duration
643	Invalid start time
644	Invalid expiration time
645	Expiration time less or equals to start time
646	Duration is greater than selected period
647	Invalid or empty expirationHours
699	Internal error

ES error codes:	
Code	**Description**
300	Insufficient funds
301	Operation failed
302	Unknown transaction id
310	Unknown user id
399	Internal Error
400	Invalid token
500	Invalid hash

APPENDIX B – EXAMPLES OF CONFIGURATION LISTS

Conclusion of the configuration

Configured on Copy

BankId	Site	Currency
9999	www.EC_domain.com	USD

API: CW v3.08

PASS KEY: EXAMPLE_fhuyfg29F3qA8

API Endpoint: http://www.EC_domain.com/<method>

URLs:

Game launching:

- Start in guest mode:
  https://environment_domain/cwguestlogin.do?bankId=[BANK_ID]&gameId=[GAME_ID]&lang=en
- Start real game:
  https://environment_domain/cwstartgamev2.do?bankId=[BANK_ID]&gameId=[GAME_ID]&mode=real&token=[VALID_CW_TOKEN]&lang=en
- Start game in stub mode:
  https://environment_domain/bsstartgame.do?bankId=[BANK_ID]&gameId=210&mode=bonus&bonusId=654647323&token=12346&lang=en

Cash Bonus related URLs:

- AwardBonus:
  https://environment_domain/bsaward.do?bankId=[BANK_ID]&amount=1000&games=all&hash=35546&extBonusId=1&gameIds=null&userId=1236&expDate=28.04.2012&type=Deposit&multiplier=2
- List of not active bonuses:
  https://environment_domain/bshistory.do?bankId=[BANK_ID]&userId=12346&hash=4324
- List of active bonuses:
  https://environment_domain/bsinfo.do?bankId=[BANK_ID]&userId=12346&hash=4324

- Cancel Bonus:
  https://environment_domain/bscancel.do?bankId=[BANK_ID]&bonusId=40643137&hash=4324

- Check Bonus:
  https://environment_domain/bscheck.do?bankId=[BANK_ID]&extBonusId=1&hash=4324

Free Round (OFRB) (Free spins) related URLs:

- Award OFR Bonus:
  https://environment_domain/frbaward.do?bankId=[BANK_ID]&userId=12346789&rounds=5&games=210|221&extBonusId=001&hash=12345

- Cancel OFR Bonus:
  https://environment_domain/frbcancel.do?bankId=[BANK_ID]&bonusId=50727361&hash=122345

- Get OFR Bonus Info:
  https://environment_domain/frbinfo.do?bankId=[BANK_ID]&userId=12346789&hash=12345

- Check OFR Bonus:
  https://environment_domain/frbcheck.do?bankId=[BANK_ID]&extBonusId=001&hash=1

- Get OFR Bonus History:
  https://environment_domain/frbhistory.do?bankId=[BANK_ID]&userId=12346789&hash=kj

- Get game list with OFRB:
  https://environment_domain/frbgamelist.do?bankId=[BANK_ID]

Jackpot (JP) related URLs:

- General JP feed:
  https://environment_domain/jackpots/jackpots_[BANKID].xml

- Jackpot3 feed
  https://environment_domain/jackpots/jackpot3_[BANKID].xml

- Jackpot4 feed
  https://environment_domain/jackpots/jackpot4_[BANKID].xml

- Winners feed:
  https://environment_domain/winners/winners_[BANKID].xml

Additional info URLs:

- Games feed:
  https://environment_domain/gamelist.do?bankId=[BANKID]

- History:
  https://environment_domain/cwstarthistory.do?bankId=[BANKID]&token=[VALID_CW_TOKEN]