

# SGS Universal Integration API

## Review history

Date	Version	Changes
2014-12-01	1.0.0	First version.
2014-12-03	1.0.1	Add 7 Start games.
2015-02-26	1.0.2	Add 9.2 Supported games.
2015-03-13	1.0.3	Additional info about method Login (upper/lower case).
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2017-03-10	1.0.13	Add new slots to section 9.2.1 SGS Universal Slots <ul style="list-style-type: none"><li>FlatBots HTML5 version</li><li>Chess Kingdom HTML5 version</li><li>LostWorld HTML5 version</li><li>Zodiac HTML5 version</li><li>Pirates HTML5 version</li><li>Hot Fruits HTML5 version</li><li>Arabian Nights HTML5 version</li><li>Beach Party HTML5 version</li><li>Garage HTML5 version</li><li>Cabaret HTML5 version</li></ul> Add Lottery and Bingo games to section 9.2.4 SGS Universal Lottery and Bingo Add Scratch games to section 9.2.5 SGSUniversal Scratch Games Add Spinomenal games to section 9.2.6 External Games Provider Spinomenal Add MrSlotty games to section 9.2.7 External Games Provider MrSlotty

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# 1 Introduction

This document provides an overview of the methods the Integration API must expose to support authentication and game play via the SGS Casino Gaming system.

## 2 Expected API Architecture

### 2.1 Method Invocation via API

The SGS system uses XML to communicate with the operator's API. The structure of this XML is defined in the document. The XML changes according to the method the service invokes.

### 2.2 XML Packet Specifications

All packets to and from the SGS system must be wrapped in a pkt envelope as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<pkt>
</pkt>
```

### 2.3 Method Request

The request parameters are wrapped in the method call XML element. All requests that are sent to the API should be authenticated. The authentication credentials must be contained in the auth element. Method-specific parameters are contained in the call XML element and these could change depending on the method. The seq and token attributes exist in all packets.

```
<pkt>
  <methodcall name="login" timestamp="2011/01/18 14:33:03.000" system="casino">
    <auth login="test" password="test" />
    <call seq="24971455-aecc-4a69-8494-f544d49db3da" token="someothertoken" />
  </methodcall>
</pkt>
```

Element/attribute	Description
methodcall	The methodcall XML element indicates that the packet is a request.
name	The name attribute identifies the method name that is called.
timestamp	The timestamp attribute represents the date and time that API sent the request, in the format: year/month/day hour:minute:second.millisecond The time zone may vary depending on the hosting location.
system	The system attribute identifies the gaming system that the game is played on. Possible values currently include casino.
auth	The auth XML element contains the API login credentials.
login	The credentials for API authentication. You must send this information to SGS prior to integration testing.
password	The credentials for API authentication. You must send this information to SGS prior to integration testing.
call	The call XML element contains the parameters required for method execution on the operator's system.
seq	The sequence attribute is generated by the SGS system and uniquely identifies the request. This value should not be interpreted, as the type can change.
token	The token is generated by the operator and passed in from the SGS client. The operator is responsible for authenticating the player.

extinfo	The extinfo element is used to pass data between the SGS client and the API.
---------	--

## 2.4 Method Response

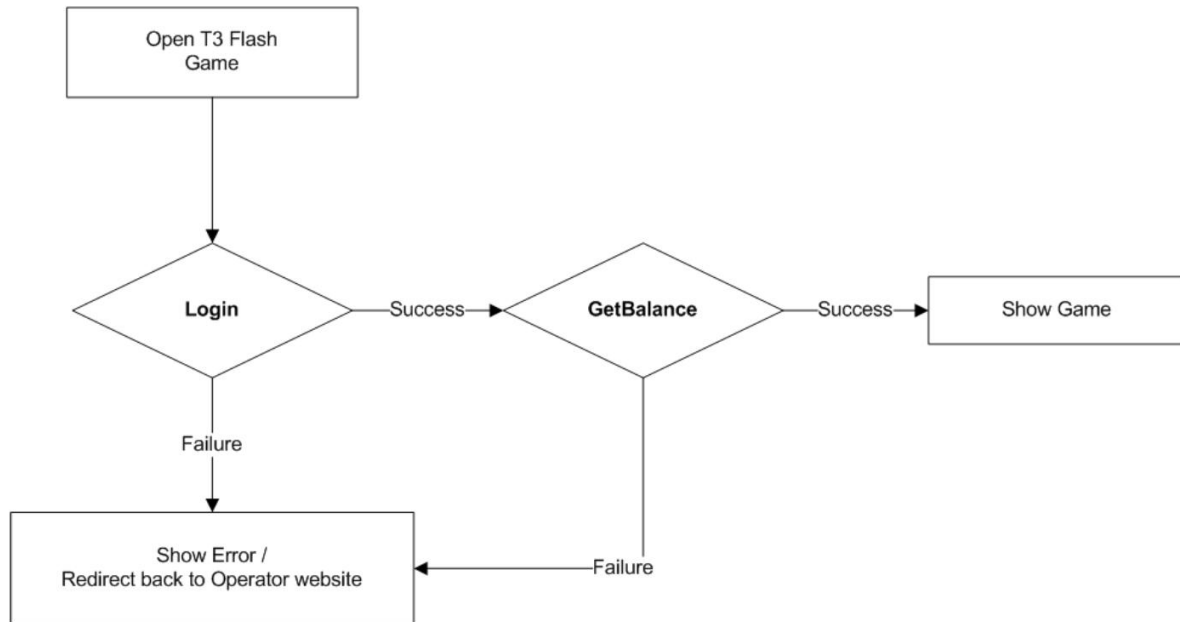
Every method call must return a result XML packet that is wrapped in the methodresponse element.

```
<pkt>
  <methodresponse name="login" timestamp="2011/01/18 14:33:00.000">
    <result seq="24971455-aecc-4a69-8494-f544d49db3da" token="2fd9f9d4-012a-4b54-a4a9-6b3bf78d73bb" loginname="someothertoken"
currency="USD" country="" city="" balance="0" bonusbalance="0">
      <extinfo/>
    </result>
  </methodresponse>
</pkt>
```

Element/attribute	Description
methodresponse	This XML element indicates that the packet is a response. This element is mandatory.
name	The name attribute identifies the method call and must match the corresponding request. This attribute is mandatory.
timestamp	The timestamp attribute represents the date and time the API sent the response, in the format: year/month/day hour:minute:second.millisecond This must be in UTC. This attribute is mandatory.
result	This XML element contains the result of the method execution. The attribute list will change depending on the method call. This element is mandatory.
seq	The sequence attribute must match what was sent in the corresponding request. This value should not be interpreted, as the type can change. This is mandatory.
token	The token attribute is mandatory and must always contain a valid token that uniquely identifies the player. It is recommended that a new token is sent in every response packet.
errorcode	The errorcode attribute contains a code associated with the error. In some cases the API interface defines these codes, otherwise the operator defines them. Where the error code is defined by the operator, the code can be represented by a string value. See a list of API defined codes here. If the method execution did not result in an error, then this attribute should be excluded.
errordescription	The errordescription attribute contains a description of the error. If the method execution did not result in an error, then this attribute should be excluded.

## 3 Work Flows

### 3.1 Login



*Illustration 1: Login workflow*

## 3.2 Game Play

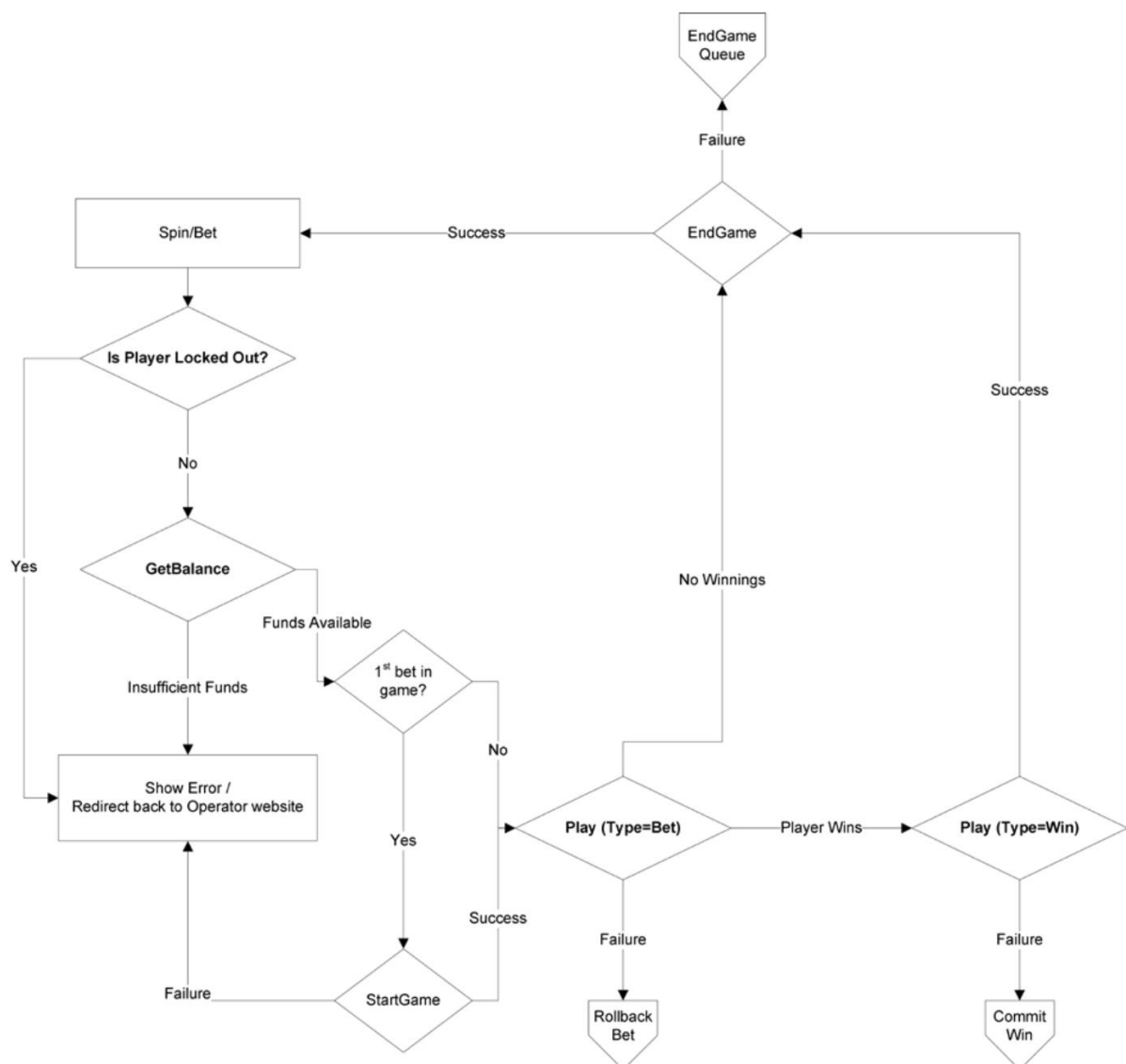


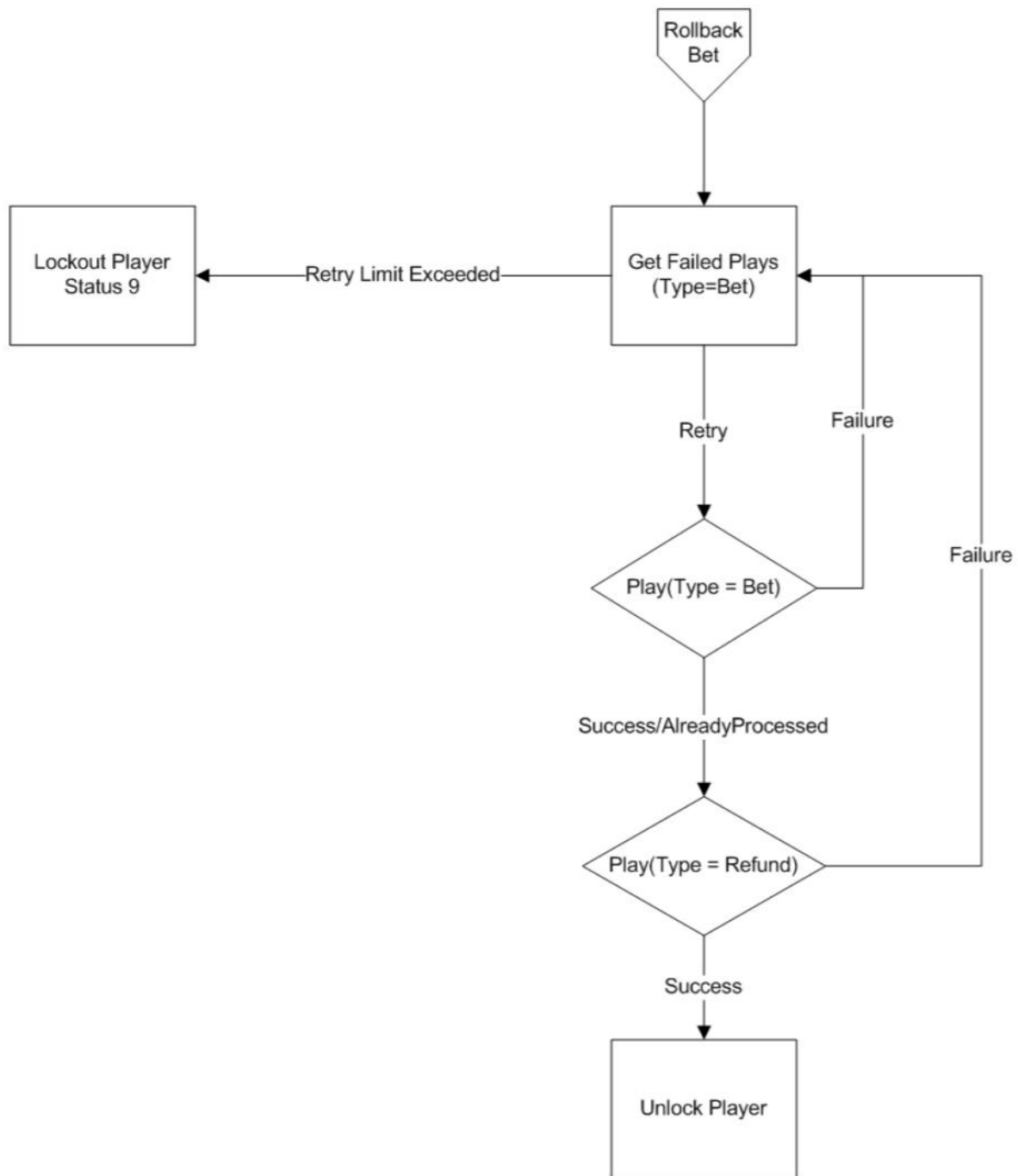
Illustration 2: GamePlay workflow

## 3.3 Rollback Bet

The rollback bet process enables the SGS system to refund a player's bet. The rollback is initiated only when the SGS system does not receive a response for a play (bet) request. When a player has a transaction in the rollback queue, they are locked and unable to continue playing.

In this event, the bet is not committed to the player's bet log, and an error is displayed in the client. The system adds a bet message to the rollback queue where it is picked up and processed. If the play (refund) response is received, the transaction is flagged as processed and the player is unlocked.

If the play (refund) response is not received, the request is retried. If a response is still not received after 5 refund attempts, the transaction is flagged as failed. The operator is required to process the transaction through one of the provided admin tools – API Admin or Admin backend. The rollback bet process is shown below.



*Illustration 3: Rollback Bet workflow*

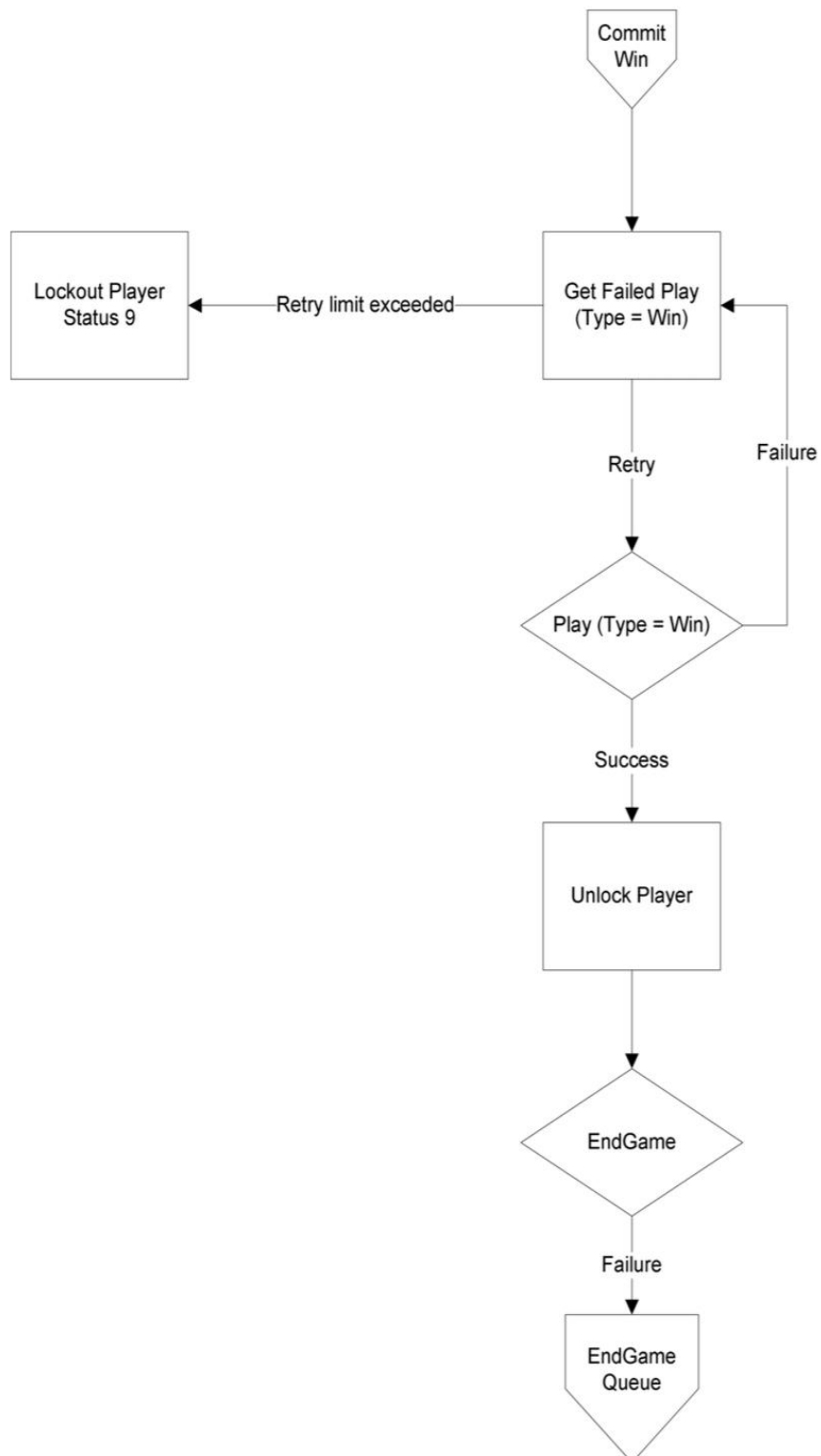
### **3.4 Commit Win**

The commit win process enables the SGS system to resend a player's win. This can happen when a response is not received for a play (win) request, or when the operator responds with an error packet.

In this event, the win is committed to the player's bet log, and an error is displayed in the client. The system adds a win message to the commit queue where it is picked up and processed. When a player has a transaction in the commit queue, they are locked and cannot continue playing. If the SGS system is unable to process the message in the commit queue through the retry mechanism, the transaction is flagged as failed. The operator is required to process the transaction through one of the provided admin tools – API Admin or Admin backend.



The commit win process is shown below.



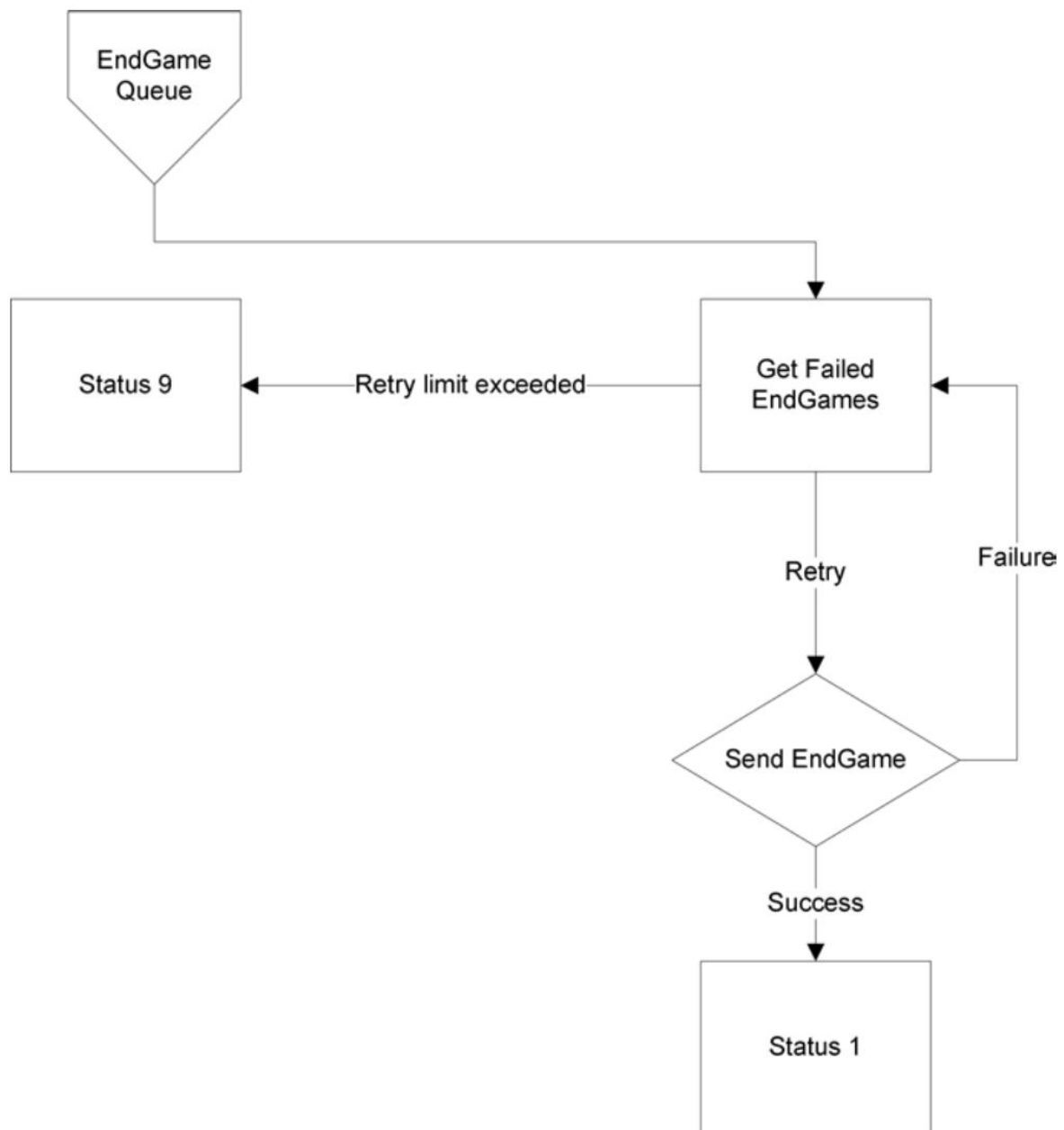
*Illustration 4: Commit Win workflow*

### **3.5 EndGame Queue**

The endgame process enables the SGS system to resend the EndGame request for a player's game round. This can happen when a response is not received for the original EndGame request sent at the end of the game round.

If the SGS system is unable to process the message in the endgame queue through the retry mechanism, the transaction is flagged as failed. The operator is required to process the transaction through one of the provided admin tools – API Admin or Admin backend.

A player is not locked if they have an EndGame request in the queue.



*Illustration 5: End Game queue*

## 4 Method Schemas and Descriptions

### 4.1 Login

The Login method is used to authenticate players. See the Login workflow. The method supports the token-based authentication models.

Typically, the Flash or HTML5 client, uses the token-based authentication model and this is triggered when a game is launched.

The method returns the player's details, if the player is successfully authenticated.

## 4.1.1 Request

```
<pkt>
<methodcall name="login" timestamp="2011/01/18 14:33:00.000" system="casino">
  <auth login="" password="" />
  <call seq="24971455-aecc-4a69-8494-f544d49db3da" token="AAD8EE30-8C43-11DC-9755-668156D89593">
    <extinfo/>
  </call>
</methodcall>
</pkt>
```

## 4.1.2 Success Response

```
<pkt>
<methodresponse name="login" timestamp="2011/01/18 14:33:00.000">
  <result seq="24971455-aecc-4a69-8494-f544d49db3da" token="2fd9f9d4-012a-4b54-a4a9-6b3bf78d73bb" loginname="johnc"
  currency="USD" country="USA" city="NY" balance="100" bonusbalance="0" wallet="API" idnumber="12345678">
    <extinfo/>
  </result>
</methodresponse>
</pkt>
```

## 4.1.3 Success Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (login) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (responsiblegaming , regulatedmarket, extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result token CDATA #REQUIRED>
<!ATTLIST result loginname CDATA #REQUIRED>
<!ATTLIST result currency CDATA #REQUIRED>
<!ATTLIST result country CDATA #REQUIRED>
<!ATTLIST result city CDATA #REQUIRED>
<!ATTLIST result balance CDATA #REQUIRED>
<!ATTLIST result bonusbalance CDATA #REQUIRED>
<!ATTLIST result wallet CDATA #IMPLIED>
<!ATTLIST result idnumber CDATA #IMPLIED>
<!ELEMENT responsiblegaming ANY>
<!ELEMENT regulatedmarket ANY>
<!ELEMENT extinfo ANY>
```

Element/attribute	Description
loginname	The loginname attribute is mandatory and represents the unique identifier for the player on the operator's system. The SGS system limits the length of the login name to 17 characters and register player in lower case
currency	The currency attribute is mandatory and must match the operator's wallet currency. This value cannot change between player logins. You must use the relevant ISO currency code, such as USD for United States Dollar, or FUN for play for fun (demo games). See list of supported currency in Ошибка: источник перекрестной ссылки не найден Ошибка: источник перекрестной ссылки не найден
country	The country attribute is mandatory although the value can be left blank. You must use the ISO country code.
city	The city attribute is mandatory although the value can be left blank.
balance	The balance attribute is mandatory and must represent the player's real time balance. It is essential that this value is always in cents. It is handled as an Int32 in the SGS system.
bonusbalance	The bonusbalance attribute is mandatory. However, it is possible to default this to zero, as currently it is not supported by our casino interface.

## 4.1.4 Failure Response

```
<pkt>
<methodresponse name="login" timestamp="2011/01/18 14:33:00.000" >
```

```

<result seq="24971455-aecc-4a69-8494-f544d49db3da" errorcode="6102" errordescription=" Account is Locked">
  <extinfo/>
</result>
</methodresponse>
</pkt>

```

## 4.1.5 Failure Response DTD

```

<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (login)>
<!ATTLIST methodresponse name (play) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)> <!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result errorcode CDATA #REQUIRED>
<!ATTLIST result errordescription CDATA #REQUIRED>
<!ELEMENT extinfo ANY>

```

## 4.2 GetBalance

The GetBalance method is used to retrieve a player's real time balance.

This method is called after the player has logged in and normally before every bet. Depending on the game that is played, there is a possibility of multiple bets with a single GetBalance call. See the Login and Game Play workflow sections.

### 4.2.1 Request

```

<pkt>
  <methodcall name="getbalance" timestamp="2011/01/19 15:31:00.000" system="casino">
    <auth login="test" password="test" />
    <call seq="d8382c1d-6ce0-433d-9233-e7358b10a70b" token="7699e837-3488-41f2-8ce5-f2816f633339">
      <extinfo />
    </call>
  </methodcall>
</pkt>

```

### 4.2.2 Success Response

```

<pkt>
  <methodresponse name="getbalance" timestamp="2011/01/19 15:31:00.000">
    <result seq="d8382c1d-6ce0-433d-9233-e7358b10a70b" token="9800710f-51e1-4906-aa85-641bfaf41ef3" balance="25000"
bonusbalance="0">
      <extinfo />
    </result>
  </methodresponse>
</pkt>

```

### 4.2.3 Success Response DTD

```

<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (getbalance) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result token CDATA #REQUIRED>
<!ATTLIST result balance CDATA #REQUIRED>
<!ATTLIST result bonusbalance CDATA #REQUIRED> <!ELEMENT extinfo ANY>

```

Element/attribute	Description
balance	The balance attribute is mandatory and must represent the player's real time balance. It is essential that this value is always in cents. It is handled as an Int32 in the SGS system.
bonusbalance	The bonusbalance attribute is mandatory. However, it is possible to default it to zero as it is not currently supported by our casino interface.

## 4.2.4 Failure Response

```
<pkt>
  <methodresponse name="getbalance" timestamp="2011/01/19 15:31:00.000">
    <result seq="d8382c1d-6ce0-433d-9233-e7358b10a70b" errorcode="6508" errordescription="The player exceeded their game play duration.">
      <extinfo />
    </result>
  </methodresponse>
</pkt>
```

## 4.2.5 Failure Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (getbalance)>
<!ATTLIST methodresponse name (play) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result errorcode CDATA #REQUIRED>
<!ATTLIST result errordescription CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

## 4.3 Play

The Play method is used for any balance updates. The playtype attribute defines the type of balance update. It is possible to have multiple bets and wins in a single game round depending on the game type, such as Blackjack. To view the standard bet event's process flow, see the Game Play work flow section.

### 4.3.1 Request

```
<pkt>
  <methodcall name="play" timestamp="2011/01/19 14:53:00.000" system="casino">
    <auth login="test" password="test" />
    <call seq="df829722-9826-4540-8a58-1d1c0feada93" playtype="bet" token="96b1f112-cd21-4e9e-a29a-75a1e454d7df" gameid="20" gamereference="10025_10001" actionid="12158" actiondesc="" amount="225" start="false" finish="false" offline="false" currency="zar">
      <extinfo />
    </call>
  </methodcall>
</pkt>
```

Element/attribute	Description
seq	The sequence code generated by API. This must be sent back in the response.
token	The token generated by the third party that is used for authentication. This is also used to send an offline transaction identifier.
playtype	The playtype attribute indicates the type of balance update. <ul style="list-style-type: none"><li>bet (Debit the player's balance.)</li><li>win (Credit the player's balance.)</li><li>refund (Credit the player's balance. This is triggered by the rollback queue.)</li></ul>
gameid	The gameid attribute identifies the player's game round. The gameid is used to link the various game events (bets and wins) to a single game round. In the case where a bet is rolled back, this value is re-used for the next game that the player triggers. You should not use this value to uniquely identify a transaction or game event. It is seen as a 64-bit integer.
gamereference	The gamereference attribute identifies the game that is played.
actionid	The actionid attribute uniquely identifies each game event (bet or win) in the SGS system. This reference is linked to the gameid described above.

Element/attribute	Description
amount	The amount attribute refers to the amount the player's balance is updated by. This value is always in cents.
start	The start attribute indicates if this is the first event of the game round. This is either true or false.
finish	The finish attribute indicates if the game round is complete. Currently, the Casino system does not support it and it defaults to false. It is there for future use.
offline	The offline attribute is used to indicate an offline transaction. It is possible for the system to send a transaction when a player is not logged in. In this case, API is not aware of the player's token, so an offline transaction is sent. The offline parameter is set to true and an alternate value is sent in the token parameter. Offline transactions are permitted only for tournament wins and cancellations (refunds). The token parameter is used to identify the player and the original transaction. The login name is used as a prefix. For example: player1_4000_3521. In this example, player1 is the login name, 4000 is the moduleid and 3521 is the clientid. Only the username is sent for admin transactions.
currency	The currency attribute is optional and used to indicate the currency of the transaction.

### 4.3.2 Success Response

```
<pkt>
<methodresponse name="play" timestamp="2011/01/19 14:53:00.000">
  <result seq="df829722-9826-4540-8a58-1d1c0feada93" token="847ab65e-82f9-4ee5-a7be-242a5e1d1b80" balance="24250"
bonusbalance="0" extrtransactionid="1763178465" >
  <extinfo />
</result>
</methodresponse>
</pkt>
```

### 4.3.3 Success Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (play) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result token CDATA #REQUIRED>
<!ATTLIST result balance CDATA #REQUIRED>
<!ATTLIST result bonusbalance CDATA #REQUIRED>
<!ATTLIST result extrtransactionid CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

Element/attribute	Description
balance	The balance attribute is mandatory and must represent the player's real time balance. It is essential that this value is always in cents. It is handled as an Int32 in the SGS system.
bonusbalance	The bonusbalance attribute is mandatory. However, it is possible to default it to zero as currently our Casino interface does not support it.
extrtransactionid	The extrtransactionid attribute is mandatory and must uniquely identify the transaction (bet, win, refund, admin, TransferToSgs or TransferFromSgs) on the operator's system. This value is handled as a string in the SGS system.
extinfo	

#### 4.3.3.1 bet/win distribution for play with bonusbalance

If bonusbalance used in play action, operator must provide bet/win distribution for this play action

```
<extinfo betreal="1" betbonus="0"></extinfo>
<extinfo winreal="0" winbonus="0"></extinfo>
```

Values for betreal, betbonus, winreal, winbonus is a absolute, e.g full bet =betreal+betbonus, full win =winreal+winbonus

### 4.3.4 Failure Response

```
<pkt> <methodresponse name="play" timestamp="2011/01/19 14:53:00.000"> <result seq="df829722-9826-4540-8a58-1d1c0feada93"
errorcode="6503" errordescription="Player has insufficient funds."> <extinfo /> </result> </methodresponse> </pkt>
```

### 4.3.5 Failure Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (play) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result errorcode CDATA #REQUIRED>
<!ATTLIST result errordescription CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

If an error is included in a bet's response (play request), the SGS Casino does not commit the transaction to the player's bet log, and an error is displayed in the client. When the player starts a new game round, either by launching a new game or the same game, the gameid from the previous game round is re-used. However, the actionid does change.

If an error is included in a win's response (play request), the SGS Casino commits the transaction to the player's bet log. An error is displayed in the client. A win message is also added to the commit queue where API picks it up and retries, until either a success is received or the maximum retry count is reached. The maximum retry count is defaulted to 5. See the Commit Win work flow.

If a response is not received for a bet or win play request, the transaction is added to either the rollback or commit queues. See the Rollback Bet and Commit Win work flows.

## 4.4 EndGame

The endgame method is used to indicate when a particular game round is complete.

There are various endgame triggers:

- After the last bet or win in a game round. The one exception to this is progressive games where a progressive win comes from an independent system. You can identify a progressive win from the information included in the packet.
- If a player has one or multiple transactions in the commit queue, an endgame is automatically sent once the last win for the game round is processed through one of the admin systems.
- When a game is auto-completed by the SGS system. Typically, this can occur sometime after the player has closed the client window or even logged out of the operator's website.

No endgame request is sent after a refund request.

### 4.4.1 Request

```
<pkt>
<methodcall name="endgame" timestamp="2011/01/21 14:33:00.000" system="casino">
  <auth login="test" password="test" />
  <call seq="633b0a18-3cd8-4e59-8c1b-16fc301a5f53" token="48546f57-68c8-46e0-9994-bd3451d5a5ee" gamereference="slsx"
gameid="18_2cf92c89-8b08-4e8e-ab41-709f7f622090">
    <extinfo />
  </call>
</methodcall>
</pkt>
```



Element/attribute	Description
gamereference	The gamereference attribute identifies the game identifier.
gameid	The gameid attribute identifies the player's game round that closes.

## 4.4.2 Success Response

```
<pkt>
  <methodresponse name="endgame" timestamp="2011/01/21 14:33:00.000">
    <result seq="633b0a18-3cd8-4e59-8c1b-16fc301a5f53" token="07f926a0-156a-4da0-b70a-4107add1b39b"
balance="25275" bonusbalance="0">
      <extinfo />
    </result>
  </methodresponse>
</pkt>
```

Element/attribute	Description
balance	The balance attribute is mandatory and must represent the player's real time balance. It is essential that this value is always in cents. It is handled as an Int32 in the SGS system.
bonusbalance	The bonusbalance attribute is mandatory. However, it is possible to default it to zero, as currently our Casino interface does not support it.

## 4.4.3 Success Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (endgame) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result token CDATA #REQUIRED>
<!ATTLIST result balance CDATA #REQUIRED>
<!ATTLIST result bonusbalance CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

## 4.4.4 Failure Response

```
<pkt>
  <methodresponse name="endgame" timestamp="2011/01/21 14:33:00.000">
    <result seq="633b0a18-3cd8-4e59-8c1b-16fc301a5f53" errorcode="#" errordescription="">
      <extinfo />
    </result>
  </methodresponse>
</pkt>
```

## 4.4.5 Failure Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (endgame) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result errorcode CDATA #REQUIRED>
<!ATTLIST result errordescription CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

If a response is not received for an endgame request, the message is flagged to retry. The endgame is retried, until a success is received or the maximum retry count is reached. The maximum retry count is defaulted to 5. See the EndGame Queue work flow.

If the SGS system is unable to process the message through the retry mechanism, it is marked as failed. You can see all the failed endgame requests through one of the admin systems, where you need to manually flag the endgame request as closed. You also need to ensure that the relevant

game round is closed in your system. The player is not locked as is the case with the rollback and commit queues.

## 4.5 Refresh Token

It is recommended that a new player token is generated for each response sent back to API and that each token should expire after a period of time. This means that during a period of player inactivity the token held in state by API could expire. See the Token Management section.

The refreshtoken method enables API to request a new token when it detects that its current token is about to expire. API will keep requesting a new token until:

- The operator's API responds with an error to the refreshtoken request.
- The period of inactivity reaches the configured maximum API session timeout. This is typically set to 12 minutes.

The token's lifespan determines the frequency of the refreshtoken method call - the longer the lifespan, the longer the interval between calls.

This method is not mandatory and can be disabled.

### 4.5.1 Request

```
<pkt>
  <methodcall name="refreshtoken" timestamp="2011/01/19 15:00:00.000">
    <auth login="test" password="test" />
    <call seq="f6fbaf29-19ca-4c9a-955b-709e11570f99" token="7205e83f-974c-48ab-881c-2f4ffdaa7e2b">
      <extinfo />
    </call>
  </methodcall>
</pkt>
```

### 4.5.2 Success Response

```
<pkt>
  <methodresponse name="refreshtoken" timestamp="2011/01/19 15:00:00.000">
    <result seq="f6fbaf29-19ca-4c9a-955b-709e11570f99" token="f3d608b5-531d-43f7-ae6d-a7637594cca7">
      <extinfo />
    </result>
  </methodresponse>
</pkt>
```

### 4.5.3 Success Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (result)>
<!ATTLIST methodresponse name (refreshtoken) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)>
<!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result token CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

### 4.5.4 Failure Response

```
<pkt>
  <methodresponse name="refreshtoken" timestamp="2011/01/19 15:00:00.000">
    <result seq="f6fbaf29-19ca-4c9a-955b-709e11570f99" errorcode="6002" errordescription="The player token
expired.">
      <extinfo />
    </result>
  </methodresponse>
</pkt>
```

## 4.5.5 Failure Response DTD

```
<!ELEMENT pkt (methodresponse)>
<!ELEMENT methodresponse (refreshtoken)>
<!ATTLIST methodresponse name (play) #REQUIRED>
<!ATTLIST methodresponse timestamp CDATA #REQUIRED>
<!ELEMENT result (extinfo)> <!ATTLIST result seq CDATA #REQUIRED>
<!ATTLIST result errorcode CDATA #REQUIRED>
<!ATTLIST result errordescription CDATA #REQUIRED>
<!ELEMENT extinfo ANY>
```

If an error response is received for the refreshtoken request, the SGS system removes the token from memory. The next request that the player triggers will result in an error in the client, and the request is not sent to your API.

## 4.5.6 Additional parameters in section extinfo

### Loginname, currency, gamereference

Because the number of operators in case of loss of the token is not possible to identify the player in refreshtoken method adds a number of optional attributes for which an operator can find a player and give him a new token

```
<?xml version="1.0" encoding="UTF-8"?>
<pkt>
  <methodcall timestamp="2015/09/28 16:02:36.218" system="casino" name="refreshtoken">
    <auth login="4PyA42uDEjjW0TVY237ph7Fs4UYxdIUY" password="LdH3IIHUVycKJHCAQbRPwKTCxV0x53VB"/>
    <call seq="79cdf8d6-2ab8-4f6c-87b3-604e8a326153" token="TokfLarg0tjUccdv">
      <extinfo loginname="spice" currency="USD" gamereference="slgf"/>
    </call>
  </methodcall>
</pkt>
```

## 5 Error Codes

To enable the SGS system to display informative error messages to players, we require that the following error codes are returned under the prescribed conditions:

### 5.1 General Errors

Code	Description	Applicable Methods
6000	Unspecified Error	All
6001	The player token is invalid.	All (Excl. Ping)
6002	The player token expired.	All (Excl. Ping)
6003	The authentication credentials for the API are incorrect.	All

### 5.2 Login Errors

Code	Description	Applicable Methods
6101	Login validation failed. Login name or password is incorrect.	Login (with credentials)
6102	Account is locked.	Login
6103	Account does not exist.	Login
6104	Player is self-excluded.	Login
6105	Player must accept the T&Cs.	Login
6106	Must Show Player Protection.	Login

6107	The IP address is restricted.	Login
6108	The password expired.	Login

### 5.3 Game Play Errors

Code	Description	Applicable Methods
6500	Already Processed	Play (Bet / TransferToSgs)
6501	Already processed with different details.	Play (Type = Refund)
6503	Player has insufficient funds.	Play (Bet / TransferToSgs)
6505	The player exceeded their daily protection limit.	Play (Bet / TransferToSgs)
6506	The player exceeded their weekly protection limit.	Play (Bet / TransferToSgs)
6507	The player exceeded their monthly protection limit.	Play (Bet / TransferToSgs)
6508	The player exceeded their game play duration.	Play (Bet / TransferToSgs)
6509	The player exceeded their loss limit.	Play (Bet / TransferToSgs)
6510	The player is not permitted to play this game.	Play (Bet / TransferToSgs)
6511	The external system name does not exist (gamereference).	Play (Bet / TransferToSgs)

## 6 Token Management

The SGS system will store only a single token per player. This is always the last known token. The temporary mapping of a player and their token is initiated from the login call. Thereafter, this token is overwritten by any successful request or response call triggered by either the player or on behalf of the player.

The requirements for token management are:

Description	Manadatory
A token must uniquely identify the player.	Yes
A token must be included in each response.	Yes
A new token must be sent in the response.	No
If a new token is generated on each response, your system must support the retry process. Transactions are retried when SGS does not receive the response and new token.	Yes
A token must expire. We recommend that at the very minimum, the lifespan of the token is greater than 6 minutes.	Yes
You must notify us if the token lifespan is changed. Our refreshtoken call is dependent on this setting.	Yes
Error packets returned to SGS must differentiate between tokens not generated by your system and expired tokens.	Yes
The login token must expire, once the player is validated by the API and a new token is issued. This is due to the fact that only the login token can ever be visible in a client.	Yes

Note: It is only the login token that is ever visible in a client. So, we request that it is expired as soon as it is validated. After this, the transfer of tokens takes place only between the SGS Gaming Server and your API - ideally HTTPS.

## 7 Start games

For starting games for REAL operator must create auth token for player then redirect player browser to URL \$SGS\_API\_ENDPOINT/startGame with follow GET parameters

Element/attribute	Description
csid	Customer ID, you must conform this information with SGS prior to integration testing.
AuthToken	See token in section 4.1 Login. If AuthToken is absent, SGS start game for FUN
sxt2	If sxt2=genauth, SGS expects AuthToken for validate player and start game for REAL If sxt2=demo, SGS start game for FUN
gameid	Game identificator, see 9.2 Supported games
lang	Supported language ru (default) en es
skin	Supported game skin (preloader, game panels, etc). You must conform this information with SGS prior to integration testing. If skin is missing, SGS use default skin.
backURL	URL, to which the player's browser will be redirected to after clicking on Home / Exit button in the game

## 8 Glossary

Term	Description
Game Event	Either a bet or win.
Game Round	At the very minimum, a game round consists of a bet. However, it can include multiple bets and wins depending on the type of game. The gameid is used to identify a player's game round.

## 9 Appendix

### 9.1 Supported currency

Currency code	Currency
FUN	Used as currency code for demo game after login (play for Fun)
EUR	Euro Member Countries
GEL	Georgia Lari
RUB	Russia Ruble
UAH	Ukraine Hryvnia
USD	United States dollar
BRL	Brasilian Real
CHF	Swiss Franc
TRY	Turkish Lira
PYG	Paraguayan Guarani
PLN	Polish Zloty

### 9.2 Supported games

#### 9.2.1 SGS Universal Slots

Game Type	gameid	Game Name
Slot	sldd	Diamond Dream
Slot	slan	Arabian Nights

Game Type	gameid	Game Name
Slot	slbc	Big City Night
Slot	slbv	Bon Voyage
Slot	slca	Cabaret
Slot	slmm	Magic Mushroom
Slot	slps	Pirates
Slot	slrm	Russian Myth
Slot	slcg	Chicago
Slot	slrt	Reef Treasure
Slot	slsd	Sweet Dream
Slot	slde	Diamond Dream Deluxe
Slot	sldl	Demobee
Slot	sldw	Dwarves
Slot	slce	Cruise
Slot	slcr	Circus
Slot	slds	Dark Side
Slot	slgf	Golden Fiesta
Slot	sltr	Tropicana
Slot	slhh	Happy Holiday
Slot	slhu	Hunter
Slot	slsa	Samurai
Slot	sluf	Little Green man
Slot	slfz	Fun Zoo
Slot	sll	Sheriffs Life
Slot	sleg	Gold of Egypt
Slot	slru	Russian Tales
Slot	slve	Viking Expansion
Slot	slwf	Wheels of Fire
Slot	slgt	Gelateria
Slot	slls	Lucky Shamrock
Slot	slvi	Vino
Slot	slfa	Happy Farm
Slot	slmu	Mummy
Slot	slmr	Mister Mania
Slot	slgth5	Gelateria HTML5 version
Slot	sllsh5	Lucky Shamrock HTML5 version
Slot	slvih5	Vino HTML5 version
Slot	slfah5	Happy Farm HTML5 version
Slot	slmuh5	Mummy HTML5 version
Slot	slmrh5	Mister Mania HTML5 version

Game Type	gameid	Game Name
Slot	slre	Refresher
Slot	slreh5	Refresher HTML5 version
Slot	slsf	Smile of Fortune
Slot	slsfh5	Smile of Fortune HTML5 version
Slot	slbe	Game of Bear
Slot	slbeh5	Game of Bear HTML5 version
Slot	slsm	SpaceMon
Slot	slsmh5	SpaceMon HTML5 version
Slot	slflbh5	FlatBots HTML5 version
Slot	slcsh5	Chess Kingdom HTML5 version
Slot	slldwh5	LostWorld HTML5 version
Slot	slzoh5	Zodiac HTML5 version
Slot	slpih5	Pirates HTML5 version
Slot	slhfh5	Hot Fruits HTML5 version
Slot	slanh5	Arabian Nights HTML5 version
Slot	slbph5	Beach Party HTML5 version
Slot	slgrh5	Garage HTML5 version
Slot	slcah5	Cabaret HTML5 version

## 9.2.2 SGS Universal Card Games

Game Type	gameid	Game Name
Poker	pkgo	Poker Golden Oasis
Poker	pkru	Russian Poker
Poker	pkth	Texas Hold'em
Poker	pktp	Texas Poker
Poker	pkao	Poker All-In-One
Videopoker	vpjb	Videopoker Jacks or Better
Videopoker	vpjp	Videopoker Joker Poker
Videopoker	vptb	Videopoker Tens or Better
Videopoker	vpdw	Videopoker Dewces Wild
Videopoker	vpjbh5	Videopoker Jacks or Better HTML5 version
Videopoker	vpjph5	Videopoker Joker Poker HTML5 version
Videopoker	vptbh5	Videopoker Tens or Better HTML5 version
Videopoker	vpdwh5	Videopoker Dewces Wild HTML5 version
Blackjack	bjbj	Blackjack

## 9.2.3 SGS Universal Roulette

Game Type	gameid	Game Name
Roulette	roam	American 4-table Roulette

Game Type	gameid	Game Name
Roulette	roeu	European Roulette
Roulette	roeuvip	European Roulette VIP
Roulette	roeua	European Roulette A
Roulette	roeuvip	European Roulette A VIP
Roulette	rowz	Roulette without Zero
Roulette	rowza	Roulette without Zero A
Roulette	rowzavip	Roulette without Zero A VIP
Roulette	roeu5	European Roulette HTML5 version

### 9.2.4 SGS Universal Lottery and Bingo

Game Type	gameid	Game Name
Keno	keno	Keno
Bingo	loto_bingo	Bingo
Lotto	loto_family	Loto Family
Lotto	loto_home	Loto Home
Lotto	loto_key	Loto Key
Lotto	lottery5_36	Lottery 5 from 36
Lotto	lottery5_42	Lottery 5 from 42
Lotto	lottery6_45	Lottery 6 from 45
Lotto	lottery6_52	Lottery 6 from 52
Lotto	troyka	Lottery Triple

### 9.2.5 SGSUniversal Scratch Games

Game Type	gameid	Game Name
Scratch Lottery	adrenaline	Adrenaline
Scratch Lottery	arabian_tales	Arabian Tales
Scratch Lottery	athens	Athens
Scratch Lottery	casino	Casino
Scratch Lottery	champion	Champion
Scratch Lottery	china	China
Scratch Lottery	eldorado	Eldorado
Scratch Lottery	fortune	Fortune
Scratch Lottery	heads_or_tails	Heads or Tails
Scratch Lottery	inca_gold	Inca Gold
Scratch Lottery	jungle	Jungle
Scratch Lottery	leader	Leader
Scratch Lottery	sea_battle	Sea Battle
Scratch Lottery	three_wishes	Three Wishes
Scratch Lottery	zodiak	Zodiak



## 9.2.6 External Games Provider Spinomenal

Game Type	gameid	Game Name
Lottery	Lottery_DonutRush	Donut Rush
Lottery	Lottery_RedSquareGames	Red Square Games
Lottery	Lottery_SuperMask	Super Mask
Slot	SlotMachine_88LuckyCharms	88 Lucky Charms
Slot	SlotMachine_8LuckyCharms	8 Lucky Charms
Slot	SlotMachine_9FiguresClub	9 Figures Club
Slot	SlotMachine_AbundanceSpell	Abundance Spell
Slot	SlotMachine_AmigosFiesta	Amigos Fiesta
Slot	SlotMachine_AtlanticTreasures	Atlantic Treasure
Slot	SlotMachine_BikersGang	Bikers Gang
Slot	SlotMachine_BlazingTires	Blazing Tires
Slot	SlotMachine_BodogHeroes	Bodog Heroes
Slot	SlotMachine_CandySlotTwins	Candy Slot Twins
Slot	SlotMachine_CatsGoneWild	Cats Gone Wild
Slot	SlotMachine_DemiGods	Demi Gods
Slot	SlotMachine_DinerOfFortune	Diner Of Fortune
Slot	SlotMachine_EatThemAll	Eat Them All
Slot	SlotMachine_EgyptianAdventure	Egyptian Adventure
Slot	SlotMachine_EgyptianRebirth	Egyptian Rebirth
Slot	SlotMachine_EmpiresWarlords	Empires Warlords
Slot	SlotMachine_ExplodingPirates	Exploding Pirates
Slot	SlotMachine_FarmOfFun	Farm Of Fun
Slot	SlotMachine_FireIce	Fire Ice
Slot	SlotMachine_FluffySlot	Fluffy Slot
Slot	SlotMachine_ForbiddenSlot	Forbidden Slot
Slot	SlotMachine_ForestHarmony	Forest Harmony
Slot	SlotMachine_FortuneKeepers	Fortune Keepers
Slot	SlotMachine_GangsterSlots	Gangster Slots
Slot	SlotMachine_GodsOfSlots	Gods Of Slots
Slot	SlotMachine_GoldenDynasty	Golden Dynasty
Slot	SlotMachine_GreedyServants	Greedy Servants
Slot	SlotMachine_HawaiiVacation	Hawaii Vacation
Slot	SlotMachine_IrishCharms	Irish Charms
Slot	SlotMachine_IronAssassins	Iron Assassins
Slot	SlotMachine_JadeConnection	Jade Connection
Slot	SlotMachine_LiveSlot	Live Slot
Slot	SlotMachine_LootAFruit	Loot A Fruit
Slot	SlotMachine_LuckyMiners	Lucky Miners

Game Type	gameid	Game Name
Slot	SlotMachine_MasterPanda	Master Panda
Slot	SlotMachine_MayDanceFestival	May Dance Festival
Slot	SlotMachine_NightsOfFortune	Nights Of Fortune
Slot	SlotMachine_NutsCommander	Nuts Commander
Slot	SlotMachine_PeonyLadies	Peony Ladies
Slot	SlotMachine_PondOfKoi	Pond Of Koi
Slot	SlotMachine_PowerPupHeroes	Power Pup Heroes
Slot	SlotMachine_PreciousTreasures	Precious Treasures
Slot	SlotMachine_ReelCircus	Reel Circus
Slot	SlotMachine_ReelFighters	Reel Fighters
Slot	SlotMachine_RoyalWin	Royal Win
Slot	SlotMachine_SafariSamba	Safari Samba
Slot	SlotMachine_SamuraiPath	Samurai Path
Slot	SlotMachine_SantaWildHelpers	Santa Wild Helpers
Slot	SlotMachine_ScatteredSkies	Scattered Skies
Slot	SlotMachine_ScatteredToHell	Scattered To Hell
Slot	SlotMachine_SecretPotion	Secret Potion
Slot	SlotMachine_ShogunBots	Shogun Bots
Slot	SlotMachine_SlotBound	Slot Bound
Slot	SlotMachine_Slotosaurus	Slotosaurus
Slot	SlotMachine_SoccerBabes	Soccer Babes
Slot	SlotMachine_SteamingReels	Steaming Reels
Slot	SlotMachine_StinkySocks	Stinky Socks
Slot	SlotMachine_StripToWin	Strip To Win
Slot	SlotMachine_Surprising7	Surprising 7
Slot	SlotMachine_TastyWin	Tasty Win
Slot	SlotMachine_TennisChampion	Tennis Champion
Slot	SlotMachine_TerracotaWilds	Terracota Wilds
Slot	SlotMachine_ToysOfJoy	Toys Of Joy
Slot	SlotMachine_UndyingPassion	Undying Passion
Slot	SlotMachine_VeryBigGoats	Very Big Goats
Slot	SlotMachine_VikingsGlory	Vikings Glory
Slot	SlotMachine_WackyMonsters	Wacky Monsters
Slot	SlotMachine_WealthOfTheMonkey	Wealth Of The Monkey
Slot	SlotMachine_WildWildSpin	Wild Wild Spin
Slot	SlotMachine_WishList	Wish List
Slot	SlotMachine_YearOfLuck	Year Of Luck
Slot	SlotMachine_YearOfTheMonkey	Year Of The Monkey
Slot	SlotMachine_ZombieSlotMania	ZombieSlotMania

## 9.2.7 External Games Provider MrSlotty

Game Type	gameid	Game Name
Slot	777diamonds	777 Diamonds
Slot	aztecpyramids	Aztec Pyramids
Slot	classic7fruits	Classic 7 Fruits
Slot	cleopatra18	Cleopatra
Slot	crazyhalloween	Crazy Halloween
Slot	dolphinsgold	Dolphins Gold
Slot	electric7fruits	Electric 7 Fruits
Slot	emojislot	Emoji Slot
Slot	enchanted7s	Enchanted 7's
Slot	fruitcocktail7	Fruit cocktail 7
Slot	golden7fruits	Golden7 fruits
Slot	goldenjokerdice	Golden JokerDice
Slot	goldminers	Goldminers
Slot	hotfruits	Hotfruits
Slot	hothoney22	Hothoney
Slot	hothoney22vip	Hothoney VIP
Slot	insects18	Insects
Slot	jokercards	JokerCards
Slot	jokerdice	JokerDice
Slot	lionthelord	Lionthelord
Slot	marsdinner	MarsDinner
Slot	memefaces	Memefaces
Slot	mermaidgold	Mermaid Gold
Slot	monsterbirds	Monster Birds
Slot	monsterinos	Monsterinos
Slot	nomorefruits	No more fruits
Slot	pandameme	Pandameme
Slot	royal7fruits	Royal 7 Fruits
Slot	shehebeach	Shehe beach
Slot	sheheclub	Shehe club
Slot	superdragonsfire	Super dragons fire
Slot	treasuresofegypt	Treasures of Egypt
Slot	trendyskulls	Trendy skulls
Slot	trollfaces	Trollfaces
Slot	tropical7fruits	Tropical7 fruits
Slot	unicorngems	Unicorn gems
Slot	vegasafterparty	Vegas afterparty
Slot	wild7fruits	Wild7 fruits

Game Type	gameid	Game Name
Slot	zeusthethunderer	Zeus the thunderer
Slot	zeusthethunderer2	Zeus the thunderer 2