

Fundist API OneWallet v133(wr)

Fundist

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Connecting to Fundist.org¹ API – One Wallet

¹ <http://Fundist.org>

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Change History

1.00	10 Feb 2014	First official version of Fundist One Wallet protocol
1.01	28 Feb 2014	Clarified usage of {extra_field} in successful response. Added “tid” and “balance” as mandatory response fields for debit and credit.
1.02	27 Mar 2014	Added information-only “i_gameid” and “i_rollback” fields to debit and credit. Updated introduction section with paragraph on transaction rollbacks.
1.03	01 Apr 2014	Added information-only “i_extparam” field to debit and credit.
1.04	03 Apr 2014	Added information-only “i_extparam” field also to balance request
1.05	06 Apr 2014	Added information-only “i_gamedesc” field to credit, debit and balance requests
1.06	03 May 2014	Added Holistic Picture
1.07	15 Jul 2014	Added clarification for error checking of requests with duplicated TID. Added hmac field in response examples Added type of ID fields description.
1.08	26 Nov 2014	Added “roundinfo” request from Lazy Mode spec.
1.09	07 Jan 2016	Added “i_actionid” field to debit and credit.
1.10	1 Sept 2016	Documentation improved. SDK added.

1.11	4 Oct 2017	Subtype of request is added for transaction cancellation cases. SDK temporarily excluded from the documentation.
1.12	17 Oct 2017	Mandatory prerequisites for one wallet callback URL. Minor erratum corrections.
1.13	13 Nov 2017	A note added regarding fields, being included for hash generation. Short description added to an "Error response" section for case when player has lower balance, than amount on debit callback request. Added code samples for hmac generation on PHP and Java.
1.14	12 Jul 2018	Rollback handling section is introduced.
1.15	21 Jun 2019	Added request and response examples, successful OW test example and test utility usage manual, CSharp hmac example, zero credit and jacpotwin notes, game_extra description, HTTP code for success response. Updated i_gameid, i_actionid and i_gamedesc descriptions.
1.16	11 Feb 2020	Description for HMAC generation for roundinfo callback has been introduced.
1.17	03 Mar 2020	Additional requirements for callback endpoint are introduced.
1.18	06 Jul 2020	Added example for generating Hmac in Nodejs.
1.19	08 Sep 2020	"round_ended" parameter description is added.
1.20	25 Nov 2020	"round_start" parameter description is added.
1.21	15 Feb 2021	Verification process for debit and credit requests extended by i_gameid, i_actionid parameters description.
1.22	18 Feb 2021	Short description: "balance field must contain current value" is updated for debit and credit requests.

1.23	22 Mar 2021	"i_reference_actionid" parameter description is added.
1.24	14 May 2021	Added promotion win parameter.
1.25	07 Jul 2021	Added additional checking note related to the verification process debit and credit requests. The Rollback Handling description is extended with i_gameid, i_actionid parameters.
1.26	31 Mar 2022	Parameter "tid" in OW test is now sent as longint.
1.27	16 Aug 2022	8.2. Error response paragraph is updated: parameter "balance" is added as a mandatory to response JSON message
1.28	3 May 2023	Changes in game_extra description, subtypes debit and credit are added
1.29	28 Dec 2023	Added information about boolean type parameter in 5. Message Authentication
1.30	23 Apr 2024	i_flag parameter is added to 7.4 Credit to user account
1.31	25 Apr 2024	action_details optional parameter is added to 7.3 Debit from user account and 7.4 Credit to user account
1.32	09 May 2025	New test scenario added with debit call, when debit amount exceeds current balance
1.33	26 Nov 2025	bonus_buy optional parameter is added to 7.3 Debit from user account

1. Introduction to One Wallet

In One Wallet implementation, there is a single wallet on Client's system side. Fundist.ORG system performs real-time requests to credit and debit a single user's account in Client's system. Fundist.ORG performs requests to Client's system through HTTPS as JSON-encoded object in POST data.

There is no concept of transaction rollback on protocol level. Instead, a standard credit request is sent to revert previous debit operation. Such special credit requests can be identified by presence of “i_rollback” field, which holds “tid” of related debit.

Note: Client's system must never depend on i_extparam for validation of OneWallet requests

Response is expected as JSON-encoded object in HTTP response message body. Note: UTF-8 encoding is assumed, if non-ASCII symbols are used.

For optimal performance, please configure HTTPS Keep-Alive of 120 seconds and enable SSL session caching.

2. One Wallet Protocol Implementation Test

In order to check if OW protocol implementation is correct there we provide OWClientTest, which you have received together with the test API setup details. When implementation for OW callback service is ready, please provide 2 user account IDs with currencies for our tests - this is a mandatory check point before going live. Please note you can also run the test on your side:

Make sure that you have installed Java on your PC

Please rename OWClientTest_vN.M.safext before usage to OWClientTest_vN.M.jar. You can also use any name for JAR, please use this name when you are going to run test util on command line. Hereinafter we use OWClientTest_v2.14.jar name for JAR file.

Launch example:

```
export OWTEST_READ_TIMEOUT=2000 (for Windows: set OWTEST_READ_TIMEOUT=2000, then
run it)
java -jar OWClientTest_v2.14.jar --host <CALLBACK_URL> --secret <HMAC_SECRET> --
users <USER_ID1>=<USER1_CURRENCY>[=EXTPARAM1]
<USER_ID2>=<USER2_CURRENCY>[=EXTPARAM2] ...
```

By running OWClientTest without params, you can get list of parameters that might be provided for.

```
$> java -jar ./OWClientTest_v2.14.jar
Missing required options: h, s, u
usage: OWClientTest
-g,--gamedesc <arg> Value for i_gamedesc
-ge,--game-extra <arg> Value for game_extra field
-h,--host <arg> Callback service URL
-m,--multiplier <arg> Multiplier for base amounts
-s,--secret <arg> HMAC secret
-scc,--skip-credit-cancel Option skips credit cancellation test case
-u,--users <arg> List of user account in format UserID=Currency[=ExtParam]
-ua,--user-agent <arg> Custom user agent
-z,--zero-credit Option enables callback with zero credit, that means lost bet
```

3. One Wallet Callback URL Prerequisites

To avoid any kind of traffic blocking because of prescriptions from the government authorities on both Fundist.ORG or Client's hosting providers sides, callback service should be a separate instance from the main casino website, including domain, IP and SSL certificate.

Example

Main casino website has domain www.superluckycasino.com² with IP address 112.34.78.90.

Recommended callback service settings:

- separate domain, like callback.route56services.com³, that is completely different from the casino domain,
- different IP address like 112.34.78.103,
- valid SSL certificate for callback service domain. Let's Encrypt free SSL certificate is allowed for use for callback service setup.

Optional points for better risk diversification:

- different domain registrars for main casino domain and callback service domain,
- different SSL certificate authorities for main casino and callback service certificates.

Client's callback endpoint should respond to HTTP calls with the following types: GET/HEAD/POST. GET/HEAD types are used for initial setup and monitoring. POST is used to send actual JSON callback messages.

In case endpoint is not available (domain has been expired, SSL certificate has been expired, etc) - it will be removed from configuration with notification over email and optionally over other communication channel agreed in advance.

HTTPS protocol (HTTP with SSL certificate) is allowed only when domain name is used with valid SSL certificate.

² <http://www.superluckycasino.com>

³ <http://callback.route56services.com>

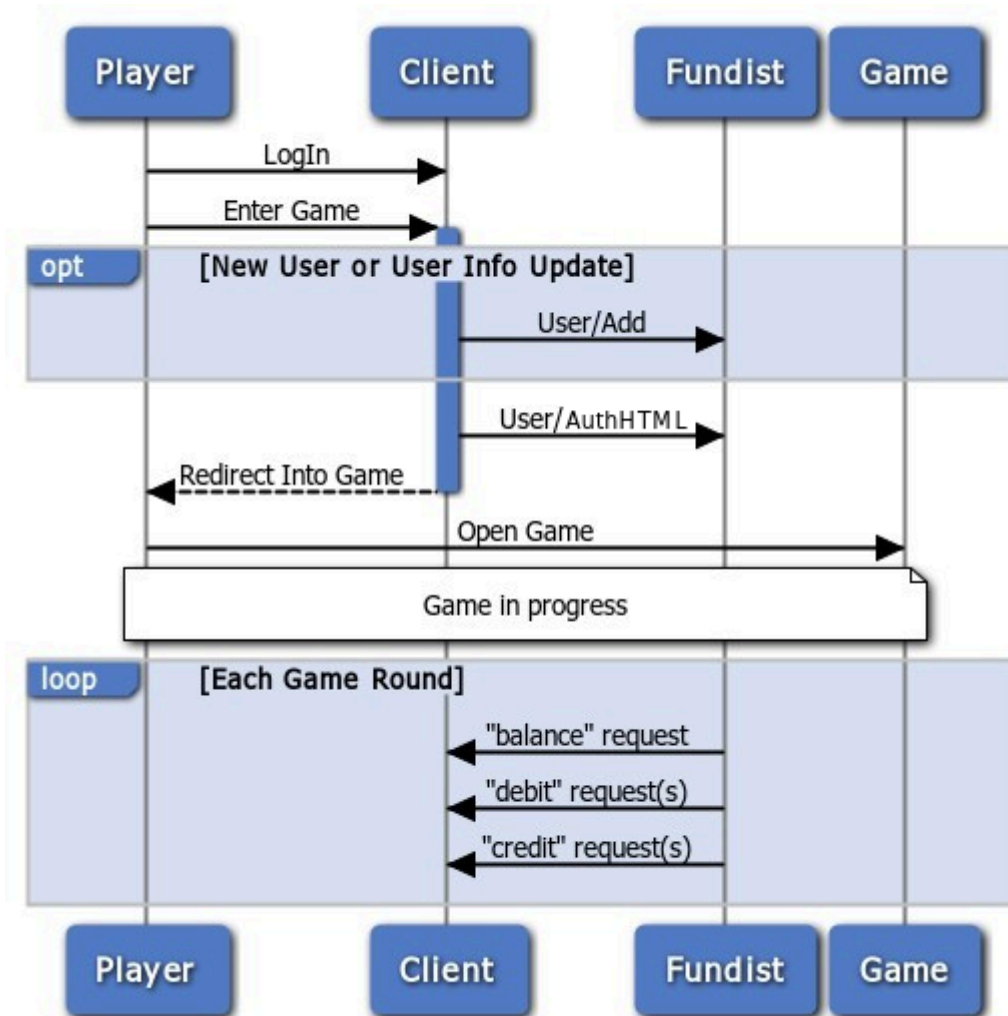
4. Holistic Picture

Player – user's web browser

Client – client system with own website

Fundist – eGamings financial system, hidden from Player

Game – one of game product implementations, visible to Player



5. Message Authentication

Every message (request and response) should have a special field **“hmac”**, which value is generated using HMAC1 with SHA-256 algorithm. HMAC input is generated as:

1. Sort message fields in case-sensitive ascending order.
2. Concatenate value of all fields into single string. In case value is not of plain type, but is an array (like "actions" for callback with type "roundinfo") - all subsequent JSON objects in array (in the same order as they are on JSON message) should be sorted by key, and values for each object concatenated recursively.
3. In hmac calculation all boolean values are formatted by our system as string: true = "1" and false = "". Parameter types are still boolean. Please note it in hmac validation for debit and credit requests.
4. Run HMAC with SHA-256 using secret key shared between Client's and Fundist.ORG system

Note: Client's system must explicitly whitelist all Fundist.ORG IP addresses. All other IPs must be rejected. Please contact eGamings support for actual list of outgoing IP addresses.

Example

```
{
  "bbb" : "Val1",
  "aaa" : "Val2",
  "hmac" : "...."
}
```

hmac = HMAC_SHA256("Val2Val1", SHA256("ASCII_Shared_Secret"))

Example with actions

```
{
  "bbb" : "Val1",
  "aaa" : "Val2",
  "actions": [
    {
      "timestamp":"tmstmp1",
      "actid":"ctd1",
      "type":"tp1",
      "i_actionid":"ctnd1",
      "amount": "mnt1",
    },
    {
      "timestamp":"tmstmp2",
```

```

        "actid":"ctd2",
        "type":"tp2",
        "i_actionid":"ctnd2",
        "amount": "mnt2",
    }
],
    "hmac" : "...."
}

hmac = HMAC_SHA256("Val2ctd1mnt1ctnd1tmstmp1tp1ctd2mnt2ctnd2tmstmp2tp2Val1",
    SHA256("ASCII_Shared_Secret"))

```

Important Notes on *hmac* Field

Hashed value of HMAC secret should be returned in binary format, and not textual.

In order to keep protocol message extension safe, we recommend NOT TO make field list fixed, so in case new fields are introduced, they are also included in generated hmac value.

The following HMAC secret key value is used for all examples
below: iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Code Samples for hmac Field Generation

Example in PHP

```

<?php
...
$ hmac_key = hash("sha256", $ hmac_secret, true);
ksort($ message);
unset($ message[' hmac']);

if (array_key_exists('actions', $ message)) {
    $ actions = $ message['actions'];
    $ action_value = array();

    foreach($ actions as &$ a) {
        ksort($ a);
        $ action_value[] = implode(' ', array_values($ a));
    }

    unset($ a);
    $ message['actions'] = implode(' ', $ action_value);
}

$ hmac_base = implode(' ', array_values($ message));
$ hmac = hash_hmac('sha256', $ hmac_base, $ hmac_key);
...
?>

```

Example in Java

```

...
final private synchronized String genHmac( String hmacSecret, JsonObject m ) throws E
xception
{
    SortedMap< String, JsonValue > kv = new TreeMap< String, JsonValue >();
    kv.putAll(m);
    final private Charset utf8_charset = Charset.forName( "UTF8" );

    // setup HMAC
    MessageDigest md = MessageDigest.getInstance( "SHA256" );
    md.update( hmacSecret.getBytes( utf8_charset ) );
    SecretKeySpec key = new SecretKeySpec( md.digest(), "HmacSHA256" );

    final private Mac mac_;
    mac_ = Mac.getInstance( "HmacSHA256" );
    mac_.init( key );

    // To make thread safe
    final Mac mac = mac_;

    for ( Map.Entry< String, JsonValue > v: kv.entrySet() )
    {
        if ( v.getKey().equals("hmac") ) continue;
        mac.update( v.getValue().toString().getBytes( utf8_charset ) );
    }

    return DatatypeConverter.printHexBinary( mac.doFinal() ).toLowerCase();
}
...

```

Example in CSharp

```

...
private static String genHmac(String secret_key, Dictionary<string, dynamic> message)
{
    SHA256 hash = new SHA256Managed();
    Byte[] hash_secret = hash.ComputeHash(Encoding.UTF8.GetBytes(secret_key));

    SortedDictionary<string, dynamic> sorted_message = new SortedDictionary<string,
dynamic>(message);

    String value = "";
    foreach (KeyValuePair<string, dynamic> kvp in sorted_message) {
        if (kvp.Key.Equals("hmac")) continue;
        value += kvp.Value;
    }
}

```

```

    }

    HMAC hmac = new HMACSHA256(hash_secret);
    byte[] hmac_byte = hmac.ComputeHash(Encoding.UTF8.GetBytes(value));
    String hmac_value = "";

    foreach (Byte b in hmac_byte) {
        hmac_value = String.Concat(hmac_value, b.ToString("x2"));
    }

    return hmac_value.ToLower();
}
...

```

Example in Nodejs

```

...
const crypto = require('crypto');

const base = Object.assign({}, requestBody);

delete base.hmac;

if ('actions' in base) {
    let actions = '';
    for (const action of base.actions) {
        Object.keys(action).sort().forEach(key => actions += action[key]);
    }

    base.actions = actions;
}

const hash = crypto.createHash('sha256');
const hmac = crypto.createHmac('sha256', hash.update(secretKey).digest('buffer'));

let hmacBase = '';
Object.keys(base).sort().forEach(key => hmacBase += base[key]);

const hmacString = hmac.update(hmacBase).digest('hex');
...

```

6. Number Format for *amount* and *balance* Fields.

Field values for amount and balance, must always have 2 digits after decimal point and at least one digit in integer part. Decimal point sign must always be a period (“.”). No other symbols are allowed. JSON field type - string.

Examples:

"0.00"

"0.01"

"1.00"

"2.19"

7. Message Types

7.1 Ping

This request is used to check Client's system availability.

Request params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (ping)	M
hmac	String	Hash generated from request params	M

Response params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
hmac	String	Hash generated from response params	M

Example:

Note: HMAC secret used in below example -
iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Example
<pre>Request: { "type": "ping",</pre>

```

    "hmac": "855c54693a59a28a1039328ac5a12e9bcfab9f906fc935313e3a76db6376c56"
  }
  Response:
  {
    "status": "OK",
    "hmac": "e969bada202f1735fedd074a5b1097e48080ef22d83fcbe74d86b0ceaa91bb63"
  }

```

7.2 Get Balance

Retrieve current available balance of specific user in Client's system.

Note: Fundist.ORG uses this information is only for in-game display and basic bet amount check.

Request params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (balance)	M
userid	String	User/AuthHTML Login parameter	M
currency	String	User/Add Currency parameter	M
i_extparam	String	External parameter, passed to User/AuthHTML	M
i_gamedesc	String	{SystemID}:{GameType}	M
game_extra	String	Additional game information, like PageCode for Evolution	O
hmac	String	Hash generated from request params	M

Response params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
balance	String	User balance in decimal format	M
hmac	String	Hash generated from response params	M

Example:

Note: HMAC secret used in below example -
iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Example
<pre> Request: { "type":"balance", "userid":"qauser_151238785931919_EUR", "currency":"EUR", "i_gamedesc":"998:roulette", "i_extparam":"TestExtParam123", "hmac":"173a74d4a43142426e05171465ef61668adeb14b1f9767e071296f3db994a299" } Response: { "status":"OK", "balance":"2.87", "hmac":"f2c90ef1954552707f160bd954e04b597cd22f6f60d61c3841ab9e272a9d4968" } </pre>

Response must contain extra "**balance**" field.

7.3 Debit from user account

Request params:

Note: Parameter "tid" sent as **Integer** in JSON by default. In case you would like TID to be sent as **String** in test and production environments, please inform integration team and they will add necessary setting to your project's API.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	Response status (debit)	M
tid	Integer/String	Unique Transaction ID (can never be duplicated) – alphanumeric maxlen 32	M
userid	String	User/AuthHTML Login parameter	M
currency	String	User/Add Currency parameter	M
amount	String	Amount that will be debited from user account	M
i_gameid	String	Game round ID. Can be used to identify related transactions (credit+debit) – alphanumeric maxlen 32, there could be: several bets и several wins could be in one round (with one game_id) of live games, no bets just win could be if it's a freespın, freeround or promo	M
i_extparam	String	External parameter, passed to User/AuthHTML	M
i_gamedesc	String	{SystemID}:{GameType} – alphanumeric maxlen 64	M
i_actionid	String	Game event reference ID (bet, win), technically can be duplicated among providers	M
round_start*	Boolean	Sent with first transaction of the round	O
round_ended*	Boolean	Marks that the round has ended	O

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
game_extra	String	Additional game information, like PageCode for Evolution	O
subtype	String	Used for transaction cancellation cases with “cancel” value or for specific games enter with “debit” value	O
hmac	String	Hash generated from request params	M
action_details*	String	Additional roundinfo information (bet/win round details, sidebets etc.)	O
bonus_buy	Boolean	Sent only as "true" for bonus_buy bets (does not come if the feature is disabled for the client)	O

*Overrides sending zero credits for losing bet. The param is disabled by default. For enabling contact Integration Team.

Response params:

Note: In response, parameter "tid" must be always sent as **String** in JSON.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
tid	String	Original request tid	M
balance	String	User balance	M
hmac	String	Hash generated from response params	M

Example:

Note: HMAC secret used in below example -
 iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Example

Request:

```
{
  "type": "debit",
  "userid": "qauser_151238785931919_EUR",
  "currency": "EUR",
  "tid": "1tid1566565638671",
  "amount": "2.87",
  "i_gameid": "1gm1566565638671",
  "i_gamedesc": "998:roulette",
  "i_actionid": "D11566565638920",
  "i_extparam": "TestExtParam123",
  "hmac": "3630609dad8806547985b6a88f49c0ed11101e064ac29c712e33a19f31da1d89"
}
```

Response:

```
{
  "status": "OK",
  "tid": "1tid1566565638671",
  "balance": "0.00",
  "hmac": "ad807d9e05ed238279766f33ec847b20e166fefae5e08d1237100f426bfc40d0"
}
```

1. Client's system must check, if request with the same "tid" has been performed before:
 - a. if any of essential fields ("type", "tid", "userid", "currency", "amount") mismatch: return error "Transaction parameter mismatch"
 - b. if yes and response is known, return original response.
 Note: "balance" field must contain current value, balance should not be debited by this transaction.
 - c. if yes and response is NOT known, fail with HTTP error "408 Request Timeout"
 - d. otherwise, continue
2. Client's system must check, if request with the same "i_gameid" and "i_actionid" has been performed before:

- a. if any of essential fields ("userid", "currency", "amount") mismatch:
return error "Transaction parameter mismatch"
Note: type field can be different for requests with "subtype": "cancel"
 - b. if yes and response is known, return original response.
Note: "balance" field must contain current value, balance should not be debited by this transaction.
 - c. if yes and response is NOT known, fail with HTTP error "408 Request Timeout"
 - d. otherwise, continue
3. Check if **currency** matches user balance currency
 - a. Respond with error, if not
 4. Perform in single DB transaction:
 - a. Check if user balance is greater or equal to requested **amount**
 - b. If the check is passed, decrease user balance by requested **amount**
 - c. If the check is NOT passed, fail with error
 - d. Store request and response in DB
 - e. Commit DB transaction
 5. Send response message
 - a. Response must contain extra "tid" field of original request and current "balance" field.

Note: Client system must additionally check i_gameid and i_actionid parameters on rollback handling to avoid rollback for the whole round instead of a single event.

7.4 Credit to user account

Request params:

Note: Parameter "tid" sent as **Integer** in JSON by default. In case you would like TID to be sent as **String** in test and production environments, please inform integration team and they will add necessary setting to your project's API.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (credit)	M
tid	Integer/String	Unique Transaction ID – alphanumeric maxlen 32	M
userid	String	User/AuthHTML Login parameter	M
currency	String	User/Add Currency parameter	M

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
amount	String	Amount that will be credited to user account	M
i_gameid	String	Game round ID. Can be used to identify related transactions – alphanumeric maxlen 32, there could be: several bets, several wins, no bets just win in one round	M
i_extparam	String	External parameter, passed to User/AuthHTML	M
i_rollback	String	Can be used to link related debit request.	O
i_gamedesc	String	{SystemID}:{GameType} – alphanumeric maxlen 64	M
i_actionid	String	Action reference number	M
i_reference_actionid*	String	i_actionid of the initiating bet - action reference number for bonus credit transactions	O
game_extra	String	PageCode for Evo or FREEROUNDS_XXX (marks freeround win where XXX – TID of Freeround/Add transaction)	O
subtype	String	Used for transaction cancellation cases with "cancel" value or for specific games exit with "credit" value	O
round_start*	Boolean	Sent with first transaction of the round	O
round_ended*	Boolean	Marks that the round has ended	O

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
jackpot_win	Integer	Possible value 1 - in case particular credit is connected with jackpot win, credit request will have extra parameter	O
hmac	String	Hash generated from request params	M
i_flag*	String	Promo award flag (tournament win, some award etc.), sent without debit	O
action_details*	String	Additional roundinfo information (bet/win round details, sidebets etc.)	O

*The param is disabled by default. For enabling contact Integration Team.

Response params:

Note: In response, parameter "tid" must be always sent as **String** in JSON.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
tid	String	Original request tid	M
balance	String	User balance	M
hmac	String	Hash generated from response params	M

Example:**Note:** HMAC secret used in below example -

iexoocaquaenogoob7xoosaingefoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Example

Request:

```
{
  "type": "credit",
  "userid": "qauser_151238785931919_EUR",
  "currency": "EUR",
  "tid": "1tid1566565638672",
  "amount": "3.00",
  "i_gameid": "1gm1566565638671",
  "i_gamedesc": "998:roulette",
  "i_actionid": "C11566565638920",
  "i_extparam": "TestExtParam123",
  "hmac": "66266a7c732b47f260087501a2e16327804d94ec0d7e15c36b812b26540298ef"
}
```

Response:

```
{
  "status": "OK",
  "tid": "1tid1566565638672",
  "balance": "3.00",
  "hmac": "834d81739bed3619df2abb958b0e918e712868b0792d38bd6db780a87a2b4947"
}
```

1. Client's system must check, if request with the same "tid" has been performed before:
 - a. if any of essential fields ("type", "tid", "userid", "currency", "amount") mismatch: return error "Transaction parameter mismatch"
 - b. if yes and response is known, return original response
Note: "balance" field must contain current value, balance should not be credited by this transaction.
 - c. if yes and response is NOT known, fail with HTTP error "408 Request Timeout"
 - d. otherwise, continue
2. Client's system must check, if request with the same "i_gameid" and 'i_actionid' has been performed before:
 - a. if any of essential fields ("userid", "currency", "amount") mismatch: return error "Transaction parameter mismatch"
Note: type field can be different for requests with "subtype": "cancel"

- b. if yes and response is known, return original response.
Note: "balance" field must contain current value, balance should not be credited by this transaction.
 - c. if yes and response is NOT known, fail with HTTP error "408 Request Timeout"
 - d. otherwise, continue
- 3. Check if **currency** matches user balance currency
 - a. Respond with error, if not
- 4. Perform in single DB transaction:
 - a. Increase user balance by requested **amount**
 - b. Store request and response in DB
 - c. Commit DB transaction
- 5. Send response message
 - a. Response must contain extra "tid" field of original request and current "balance" field.

Note: *Client system must additionally check i_gameid and i_actionid parameters on rollback handling to avoid rollback for the whole round instead of a single event.*

Optional feature: zero credit transactions can be turned on for your API, but please note that not all providers support this feature.

Optional feature: game_extra field is not sent by default, this could be enabled for your API.

7.5. Rollback handling

There are two types of rollback requests. Any rollback call should be performed for a single event related to the i_gameid and i_actionid parameters.

1. In case of slow responses, duplicate request might be sent for example for bet in a game. When duplicate request is identified, rollback call will be performed. Type of such call is credit. JSON message will contain i_rollback field, that will contain a tid of transaction, that should be rolled back and according player balance changes should be made.

Example:

- debit call is sent with tid=124, that is being processed with timeout and/or proper response is not served.
- debit call is sent with tid=124 for the same bet, this time request is processed quickly, correct response is served.
- credit call will be sent with tid=125, and i_rollback=124.

Important. Rollback cancels a transaction with exact tid in i_rollback flag, not a round itself, thus, operator must not credit a player. Player should be credited only if amount of rollbacks = amount of transactions within one round.

Example:

- 3 debit calls are sent with tid=123, that are being processed with timeout and/or proper response is not served.

- 3 rollbacks are sent for these debit calls => player should be credited.

Request params:

Note: Parameter "**tid**" sent as **Integer** in JSON by default. In case you would like TID to be sent as **String** in test and production environments, please inform integration team and they will add necessary setting to your project's API.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (debit or credit)	M
tid	Integer/String	Unique Transaction ID – alphanumeric maxlen 32	M
userid	String	User/AuthHTML Login parameter	M
currency	String	User/Add Currency parameter	M
amount	String	Decimal number, 2 digits after decimal sign	M
i_gameid	String	Game round ID. Can be used to identify related transactions – alphanumeric maxlen 32	M
i_extparam	String	External parameter, passed to User/AuthHTML	M
i_rollback	String	Can be used to link related debit request	M
i_gamedesc	String	{SystemID}:{GameType}	M
i_actionid	String	Action reference number	M
hmac	String	Hash generated from request params	M

Response params:

Note: In response, parameter "tid" must be always sent as **String** in JSON.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
tid	String	Original request tid	M
balance	String	User balance	M
hmac	String	Hash generated from response params	M

Example:

Note: HMAC secret used in below example -
iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Example
<pre> Debit Request: { "type":"debit", "userid":"qauser_151238785931919_EUR", "currency":"EUR", "tid":"1tid1566565638688", "amount":"0.03", "i_gameid":"1gm1566565638674", "i_gamedesc":"998:roulette", "i_actionid":"D11566565645651", "i_extparam":"TestExtParam123", "hmac":"4321ddfd27f6d72cd2804834429a3111b4f7ad236d3f55aa4dce46f4fb215fa9" } Response: { "status":"OK", "tid":"1tid1566565638688", "balance":"2.87", </pre>

```

    "hmac":"9b5a8a86996ceb3364c463d2abbb3c32958dd8e46f73a00a24a17f2523d152a0"
  }

  Credit with rollback
  Request:
  {
    "type":"credit",
    "userid":"qauser_151238787931919_EUR",
    "currency":"EUR",
    "tid":"2tid1566565638688",
    "amount":"0.03",
    "i_gameid":"lgm1566565638674",
    "i_gamedesc":"998:roulette",
    "i_actionid":"C21566565645651",
    "i_extparam":"TestExtParam123",
    "i_rollback":"1tid1566565638688",
    "hmac":"a63c659f6fdc710a0c17e391d5a8eca0ad975034ee2e5979057d42a02091dd99"
  }
  Response:
  {
    "status":"OK",
    "balance":"2.90",
    "hmac":"d02d6aa4d6c0ee500c80186364de0393a4213775f7667359bcbcd90794925433"
  }

```

2. In case of slow responses game server might refuse bet settlement or winning for some reason and send cancellation request. Type of such request also might be debit or credit. JSON message will contain "subtype" field with value "cancel".

If rollback with subtype cancel is received - player should be credited.

Request example:

Note: Parameter "tid" sent as **Integer** in JSON by default. In case you would like TID to be sent as **String** in test and production environments, please inform integration team and they will add necessary setting to your project's API.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (debit or credit)	M
tid	Integer/String	Unique Transaction ID – alphanumeric maxlen 32	M
userid	String	User/AuthHTML Login parameter	M
currency	String	User/Add Currency parameter	M

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
amount	String	Decimal number, 2 digits after decimal sign	M
i_gameid	String	Game round ID. Can be used to identify related transactions – alphanumeric maxlen 32	M
i_extparam	String	External parameter, passed to User/AuthHTML	M
i_gamedesc	String	{SystemID}:{GameType}	M
i_actionid	String	Action reference number	M
subtype	String	Used for transaction cancellation cases with "cancel" value	M
hmac	String	Hash generated from request params	M

Response params:

Note: In response, parameter "tid" must be always sent as **String** in JSON.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
tid	String	Original request tid	M
balance	String	User balance	M
hmac	String	Hash generated from response params	M

Example:

Note: HMAC secret used in below example -
 iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Example

```
Debit
Request:
{
  "type": "debit",
  "userid": "qauser_151238785931919_EUR",
  "currency": "EUR",
  "tid": "1tid1566565638694",
  "amount": "0.25",
  "i_gameid": "1gm1566565638674",
  "i_gamedesc": "998:roulette",
  "i_actionid": "D11566565645654",
  "i_extparam": "TestExtParam123",
  "hmac": "6b48a65e7f0cba1991df002f852e4c75b70da1565254c8cbf3eddb993d7765b5"
}
Response:
{
  "status": "OK",
  "tid": "1tid1566565638694",
  "balance": "2.50",
  "hmac": "0ba3811977f974d8dd65187b9801a4f5b6f10c8ecbd6d54eda23d99e908af3c1"
}

Debit cancellation
Request:
{
  "type": "credit",
  "userid": "qauser_151238785931919_EUR",
  "currency": "EUR",
  "tid": "1tid1566565638695",
  "amount": "0.25",
  "i_gameid": "1gm1566565638674",
  "i_gamedesc": "998:roulette",
  "subtype": "cancel",
  "i_actionid": "D11566565645654",
  "i_extparam": "TestExtParam123",
  "hmac": "563c5e7aa25e35132f30d559671b1766d5a639b35eef4b2ecc854cbf73df97d9"
}
Response:
{
  "status": "OK",
  "tid": "1tid1566565638695",
  "balance": "2.75",
```



```

    "hmac": "7a9e9b42429df4400f2573517abf372efa843e6ecb7bb51fbc05919dd4db563f"
  }

```

7.6 Round Info

Provide real-time round information after round is over (game name, user, activity, ext_param). Useful for bonus & loyalty analytics.

This request is re-sent until Client system responds with successful reply.

Note: This is a configurable option for backward compatibility purposes.

Request params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (roundinfo)	M
gameid	String	Unique Game ID	M
userid	String	User/AuthHTML Login parameter	M
actions	Array	List of game actions	M
i_gamedesc	String	{SystemID}:{GameType}	M
hmac	String	Hash generated from request params	M

Actions params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
actid	String	Unique Action ID	M

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	Action type (bet or win)	M
amount	String	Action amount	M
timestamp	String	YYYYMMDD hh:mm:ss	M

Response params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
hmac	String	Hash generated from response params	M

Example for "type": "bet":

Note: HMAC secret used in below example -
iexoocaquaenogoob7xoosaingefoh9ighoh4eevoshaiNaN2gahHieYaix7iem

Request JSON message
<pre>Request: { "type": "roundinfo", "gameid": "15963851167", "userid": "qauser_151238785931919_EUR", "actions": [{ "actid": "20445259420", "type": "bet", "amount": "10.00", "timestamp": "2019-09-04 14:06:26" }] }</pre>

```

    ],
    "i_gamedesc": "998:roulette",
    "hmac": "4dec9cd5a3f96cb83dff6104e841386d32e82b555de278c609ed1cfef0544be1"
  }
  Response:
  {
    "status": "OK",
    "hmac": "e969bada202f1735fedd074a5b1097e48080ef22d83fcbe74d86b0ceaa91bb63"
  }

```

Example for "type": "win":

Note: HMAC secret used in below example -

f1qbgjhpys2nnld5x2dkuvh0o903sm9bc8101ds28qn1phqgp0ety357ylv06lx

Request JSON message

```

Request:
{
  "type": "roundinfo",
  "gameid": "143998497000",
  "userid": "sample_login",
  "actions": [
    {
      "actid": "186613617096",
      "type": "bet",
      "amount": "18.00",
      "timestamp": "2024-08-06 05:18:25",
      "i_actionid": "88144819923"
    },
    {
      "actid": "186613638500",
      "type": "win",
      "amount": "36.00",
      "timestamp": "2024-08-06 05:18:39",
      "i_actionid": "88144827797"
    }
  ],
  "i_gamedesc": "997:sample_game",
  "i_extparam": "sample_ext_param",
  "game_extra": "",
  "ext_gameid": "GGI_1119_1747366_M_460",
  "hmac": "6ef23d44f958f72439d6051164c8c38214d82c997052a4e90b2dfe6ae0b05e02"
}
Response:
{

```

```

    "status": "OK",
    "hmac": "f37b3cf411cfa609bc591a4000e2831deac5883e493be4149ed203969974d46e"
  }

```

7.7 Win in the promotion

Note: This information is relevant in case you have promotion module enabled.

Provide real-time win result information after promotion ends.

This request is re-sent until Client system responds with successful reply.

Request params:

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
type	String	External action (credit)	M
tid	Integer/String	Unique Transaction ID – alphanumeric maxlen 32	M
userid	String	User/AuthHTML Login parameter	M
currency	String	User/Add Currency parameter	M
amount	String	Amount that will be credited to user account	M
subtype	String	External subtype (promotion)	M
i_bonusid	String	Promotion ID	M
i_bonusdesc	String	{SystemID}:{PromotionName}	M
hmac	String	Hash generated from request params	M

Response params:

Note: In response, parameter "tid" must be always sent as **String** in JSON.

Parameter name	Parameter type (JSON)	Description	Mandatory/Optional
status	String	Response status (OK)	M
tid	String	Original request tid	M
balance	String	User balance	M
hmac	String	Hash generated from response params	M

Example:

Request JSON message
<pre> Request: { "subtype":"promotion", "i_bonusid":"2433", "i_bonusdesc":"2783: promo test", "type":"credit", "tid":"64010", "userid":"837", "currency":"EUR", "amount":"111.00", "hmac":"306d729637b9fc7aa57dd1cfbe88516f78b6609c87ea8005976bf3b15425eddf" } Response: { "status":"OK", "tid":"64010", "balance":"211.00", "hmac":"306d729637b9fc7aa57dd1cfbe88516f78b6609c87ea8005976bf3b15425eddf" } </pre>

8. Response to Callback Request

8.1 Successful response

Simple response

```
{
  "status": "OK"
  "hmac": "..."}
}
```

Extended response

```
{
  "error": "<specific_error_code>",
  "balance": "...",
  "hmac": "..."}
}
```

Note: Only HTTP code 200 is assumed as positive, for all other HTTP response codes, even with JSON message, that contains {"status": "OK", ...} backend assumes, that request has failed and no positive response is received.

8.2. Error response

Response JSON message

```
{
  "error": "<specific_error_code>",
  "balance": "...",
  "hmac": "..."}
}
```

Several specific error codes could be passed into a game in reply to one wallet debit callback. Licensee endpoint should reply with JSON message {"error": "<specific_code>", "balance": "...", "hmac": "...} as described below.

Value for “error” field (<specific_code>)	Message, displayed for player
INSUFFICIENT_FUNDS	You do not have sufficient funds to place this bet.
SESSION_EXPIRED	There has been a problem with the Live Casino. User authentication failed or your session may be expired, please close the browser and try again.
TURNOVER_LIMIT_EXCEEDED	This bet amount would exceed your personal limit within the specified period of time.
SESSION_TIME_LIMIT_EXCEEDED	Your play time exceeds your personal limit of time that may be played in a session.
BET_LIMIT_EXCEEDED	This bet amount would exceed your personal limit within the specified period of time.
LOSS_LIMIT_EXCEEDED	This bet amount would exceed your personal limit within the specified period of time.

In other cases you can send any human readable description, for example "error":"<specific_error_code>| Human readable description". However in this case there is going to be some general error in game frame.

9. Test Scenarios

Note: In OW test, parameter **"tid"** will be sent as **longint**. If you would like parameter **"tid"** to be sent as **string**, please add additional parameter **--string-tid=y**

OWClientTest is performing standard test cases in 2 runs. All test cases are titled in square brackets. HMAC secret, used for these examples: iexoocaquaenogoob7xoosaingeofoh9ighoh4eevoshaiNaN2gahHieYaix7iem

```

===== RUN #1 =====
---- Request:ping ----
> Sent:{"type":"ping","hmac":"855c54693a59a28a1039328ac5a12e9bcfab9f906fc935313e3a76db6376c56"}
> Recv:{"status":"OK","hmac":"e969bada202f1735fedd074a5b1097e48080ef22d83fcbe74d86b0ceaa91bb63"}
> Time spent: 316ms

[ Preparing balance amount of 3.00 ]
---- Request:balance ----
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb782e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"0.00","hmac":"0bd08d27163259d9bdb7f06f5453070813ad8802f5d48659996241ea090d0db"}
> Time spent: 85ms
---- Request:credit ----
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"3.00","tid":"11746800056666","i_gameid":"1gm1746800056665","i_gamedesc":"998:roulette","i_actionid":"C11746800057115","i_extparam":"TestExtParam123","hmac":"8c1da73d69ba09e77cc8d08318e610c63ece2f4c42eb842f6fa29e5b934590ad"}
> Recv:{"status":"OK","tid":"11746800056666","balance":"3.00","hmac":"985031dd4d39d3cc6ce9d4cc5c17bc3fafda595610fa281aacf315b7d1ad35bb"}
> Time spent: 155ms

---- Request:balance ----
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8a0cf8a743fcaf9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"0.00","hmac":"0bd08d27163259d9bdb7f06f5453070813ad8802f5d48659996241ea090d0db"}
> Time spent: 80ms
---- Request:credit ----
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"3.00","tid":"21746800056666","i_gameid":"2gm1746800056665","i_gamedesc":"998:roulette","i_actionid":"C21746800057115","i_extparam":"TestExtParam123","hmac":"88c61088e86e0717b75569e62af9a3ea29b93355b8bd9ec3a739ee9c381e2d51"}
> Recv:{"status":"OK","tid":"21746800056666","balance":"3.00","hmac":"e7945b3651a8b44985a91f81706a8b52f007764272a92ea9aa34dfef89509eee"}
> Time spent: 158ms

```


---- Request:balance ----

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78
2e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"3.00","hmac":"109ac35e2dc899706c75e1e3647075588012e6
13c0ebd4af86b5841d58b7adc8"}
> Time spent: 80ms
```

---- Request:balance ----

```
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fcfa9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"3.00","hmac":"109ac35e2dc899706c75e1e3647075588012e6
13c0ebd4af86b5841d58b7adc8"}
> Time spent: 81ms
```

[Debit 30.00 (balance x10), error excepted]

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"30.00","ti
d":"11746800056667","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_action
id":"D11746800057116","i_extparam":"TestExtParam123","hmac":"616a001477a379e1615c9019
65afb7973e9aae67bd165bc97632c60b4dcfa84f"}
> Recv:{"error":"INSUFFICIENT_FUNDS","balance":"3.00","hmac":"0c93c01e36573104c0fd847
941329082800106fad53baf7da775453d5c733000"}
> Time spent: 143ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"30.00","ti
d":"21746800056667","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_action
id":"D21746800057116","i_extparam":"TestExtParam123","hmac":"1291ae6f59b7de137ead01e3
a822c2eb096cabd4fb0e36124a9f3a36dfa60e38"}
> Recv:{"error":"INSUFFICIENT_FUNDS","balance":"3.00","hmac":"0c93c01e36573104c0fd847
941329082800106fad53baf7da775453d5c733000"}
> Time spent: 146ms
```

[Debit 0.10]

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid
":"11746800056668","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D11746800057117","i_extparam":"TestExtParam123","hmac":"bfe569d84a5eaf0a2976b8cd
cf846512960b50b4f78ef7189db2824465dbc80"}
> Recv:{"status":"OK","tid":"11746800056668","balance":"2.90","hmac":"855109c45c40a8aad
aabbf1e718d7d1b887c454ec0baf26c52a6560220bc6891"}
> Time spent: 196ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid
":"21746800056668","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actioni
```

```
d":"D21746800057117","i_extparam":"TestExtParam123","hmac":"5e9c9b03f307877260eea1714
2accf0703f56cf031879be6273896f574ff0cfa"}
> Recv:{"status":"OK","tid":21746800056668,"balance":"2.90","hmac":"33e93d595c3eae12a
e15cace8641cc49eee8892944dfe18be3e7e933d7cddf3e"}
> Time spent: 190ms
```

```
[ Debit 0.10 (repeat) ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid
":11746800056668,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D11746800057117","i_extparam":"TestExtParam123","hmac":"bfe569d84a5eaf0a2976b8cd
cf846512960b50b4f78ef7189db2824465dbc80"}
> Recv:{"status":"OK","tid":11746800056668,"balance":"2.90","hmac":"855109c45c40a8aad
aabbf1e718d7d1b887c454ec0baf26c52a6560220bc6891"}
> Time spent: 107ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid
":21746800056668,"i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D21746800057117","i_extparam":"TestExtParam123","hmac":"5e9c9b03f307877260eea1714
2accf0703f56cf031879be6273896f574ff0cfa"}
> Recv:{"status":"OK","tid":21746800056668,"balance":"2.90","hmac":"33e93d595c3eae12a
e15cace8641cc49eee8892944dfe18be3e7e933d7cddf3e"}
> Time spent: 101ms
```

```
[ Debit 0.10 (repeat with new tid and the same game_id + i_actionid) ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid
":11746800056669,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D11746800057117","i_extparam":"TestExtParam123","hmac":"93bfb6411c7311ba08477b6a4
bf27f87437192e503e2b11f875b603783725831"}
> Recv:{"status":"OK","tid":11746800056669,"balance":"2.90","hmac":"b1574062e69d3eba6
60c23a417b4a6296029b0044e0088049e556923d1066d1f"}
> Time spent: 110ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid
":21746800056669,"i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D21746800057117","i_extparam":"TestExtParam123","hmac":"6091bf83a76a383dfc70eb768
407c30fe0e99e50484b65b580b30fe822560662"}
> Recv:{"status":"OK","tid":21746800056669,"balance":"2.90","hmac":"3c677652a83514a76
93647c84fea2fbc874c312a9f2240df00baaa632f3f0856"}
> Time spent: 117ms
```

```
[ Debit 0.10 (one more repeat with new tid and the same game_id + i_actionid) ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid
":11746800056670,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actioni
```

```
d":{"D11746800057117","i_extparam":"TestExtParam123","hmac":"0a273ee037f110289d4d7fef77476ff62176bd329cf6d74d7238de59b1d6ac54"}
```

```
> Recv:{"status":"OK","tid":11746800056670,"balance":"2.90","hmac":"32b4ff7187fc4df7970e7dee5ed24582ed4f3e52c0541e34d20fd0b3abda5ac0"}
```

```
> Time spent: 128ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid":21746800056670,"i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"D21746800057117","i_extparam":"TestExtParam123","hmac":"b8bd1748f51700a9a2c5f163d7a603ab4135119fd3797a93d8f93d15e75d156c"}
```

```
> Recv:{"status":"OK","tid":21746800056670,"balance":"2.90","hmac":"0e3b6b448c23e5b0aab08d28eda5893b1ce9365448e1cda4fd992b5e40a11bf5"}
```

```
> Time spent: 120ms
```

```
[ Debit another amount + same tid ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid":11746800056670,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"D11746800057117","i_extparam":"TestExtParam123","hmac":"e23a5586a1d9663a1ee7a2c9b72f2d7b324e55840794f88fb16ac37173ac2bf5"}
```

```
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04387403056428f550901ed99ba4d8583da1ef61252"}
```

```
> Time spent: 93ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":21746800056670,"i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"D21746800057117","i_extparam":"TestExtParam123","hmac":"60c3a10462b3a6085c66f5c0afac6594d20262fffc6b00c8f36453267b3b43e2f"}
```

```
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04387403056428f550901ed99ba4d8583da1ef61252"}
```

```
> Time spent: 99ms
```

```
[ Debit other amount + other tid ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid":11746800056671,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"D11746800057118","i_extparam":"TestExtParam123","hmac":"2d56d3ed0d72644e5ce7e1ca06c0f7695d02ff1e35fc07b8975c6f3be11aa79e"}
```

```
> Recv:{"status":"OK","tid":11746800056671,"balance":"2.85","hmac":"4fe834a0d66bb2adb076ed738a468c9a356c2640ee0b8fede7bb2aa2e1842792"}
```

```
> Time spent: 132ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":21746800056671,"i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"D21746800057118","i_extparam":"TestExtParam123","hmac":"a31ce4b8e641f82d4e7a7c5f72641087823a8d759f433f54a5597131a54921cc"}
```

```
> Recv:{"status":"OK","tid":21746800056671,"balance":"2.85","hmac":"9c3ffb390c287c0e8a6cce415ccb496eba4a95f3fd9bd567a95c87546d79b5ae"}
```

```
> Time spent: 132ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb782e5112e07293c22a3b8800b8dfa2"}
```

```
> Recv:{"status":"OK","balance":"2.85","hmac":"c67d55b9674481e444bd011932d6af6dbc093bea9189dbadb9e4de0f54e25776"}
```

```
> Time spent: 86ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8a0cf8a743fc9f9f11d1c03b7d323"}
```

```
> Recv:{"status":"OK","balance":"2.85","hmac":"c67d55b9674481e444bd011932d6af6dbc093bea9189dbadb9e4de0f54e25776"}
```

```
> Time spent: 87ms
```

```
[ Credit + debit tid (fail) ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid":"11746800056671","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C11746800057118","i_extparam":"TestExtParam123","hmac":"e6226ec6e90ee9fd75c3248869555bc4741ccbff0a26f4c607c2c7553ed88694"}
```

```
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04387403056428f550901ed99ba4d8583da1ef61252"}
```

```
> Time spent: 112ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":"21746800056671","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C21746800057118","i_extparam":"TestExtParam123","hmac":"c3c4de835caf45a754af1c80aa4b208eb1f51f28d235bb3485090da01aa1c849"}
```

```
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04387403056428f550901ed99ba4d8583da1ef61252"}
```

```
> Time spent: 108ms
```

```
[ Bet cancel by sending Credit + new tid with i_rollback ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid":"11746800056672","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_rollback":"11746800056671","i_actionid":"C11746800057118","i_extparam":"TestExtParam123","hmac":"b64e13e8b28af10a7ecc3e96ec2bb123b8856ca2af7518be9cc27f3167e909f3"}
```

```
> Recv:{"status":"OK","tid":"11746800056672","balance":"2.90","hmac":"e0b943f1ef04ca541f0fd62b40b1b7bb10d7b702376978a83c170c3262df2a75"}
```

```
> Time spent: 116ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":"21746800056672","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_rollback":"11746800056672","i_actionid":"C21746800057118","i_extparam":"TestExtParam123","hmac":"c3c4de835caf45a754af1c80aa4b208eb1f51f28d235bb3485090da01aa1c849"}
```

```

ck":21746800056671,"i_actionid":"C21746800057118","i_extparam":"TestExtParam123","hmac":
"d1b2c805ead7d7bcf8b9e27db880cf22e8afac7e58bea1ef39643883c3f1008c"}
> Recv:{"status":"OK","tid":21746800056672,"balance":"2.90","hmac":"326dbcd5b616be53c
22c9f36634b00e51b27f9527c8ae05b8037b7b93bf99ad2"}
> Time spent: 113ms

---- Request:balance ----
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78
2e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"2.90","hmac":"d02d6aa4d6c0ee500c80186364de0393a42137
75f7667359bcbcd90794925433"}
> Time spent: 72ms

---- Request:balance ----
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fcaf9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"2.90","hmac":"d02d6aa4d6c0ee500c80186364de0393a42137
75f7667359bcbcd90794925433"}
> Time spent: 72ms

[ Credit 0.50 (for debit of 0.10) ]
---- Request:credit ----
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","ti
d":11746800056673,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_action
id":"C11746800057117","i_extparam":"TestExtParam123","hmac":"8b04ec44f6fb0849cac9ff41
98666f69072ae64444bb39e99eed186308007296"}
> Recv:{"status":"OK","tid":11746800056673,"balance":"3.40","hmac":"839a0404516e933ca
8424362fb3e0f22b1eb53064b56a21620cf60903ca999e3"}
> Time spent: 128ms

---- Request:credit ----
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","ti
d":21746800056673,"i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_action
id":"C21746800057117","i_extparam":"TestExtParam123","hmac":"0b2e5630bd70055cda25e194
8d1677977bb28a7e379e92f591d00147ceb3dcd9"}
> Recv:{"status":"OK","tid":21746800056673,"balance":"3.40","hmac":"99cae707d00c59afd
286497e89acb6de8bde12b2e8f95837fb81b168950f9c7e"}
> Time spent: 121ms

[ Credit 0.50 (repeat) ]
---- Request:credit ----
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","ti
d":11746800056673,"i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_action
id":"C11746800057117","i_extparam":"TestExtParam123","hmac":"8b04ec44f6fb0849cac9ff41
98666f69072ae64444bb39e99eed186308007296"}
> Recv:{"status":"OK","tid":11746800056673,"balance":"3.40","hmac":"839a0404516e933ca
8424362fb3e0f22b1eb53064b56a21620cf60903ca999e3"}
> Time spent: 92ms

```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":"21746800056673","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C21746800057117","i_extparam":"TestExtParam123","hmac":"0b2e5630bd70055cda25e1948d1677977bb28a7e379e92f591d00147ceb3dcd9"}
> Recv:{"status":"OK","tid":"21746800056673","balance":"3.40","hmac":"99cae707d00c59afd286497e89acb6de8bde12b2e8f95837fb81b168950f9c7e"}
> Time spent: 88ms
```

[Credit 0.50 + wrong user ID]

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"62447203ee621f","currency":"EUR","amount":"0.50","tid":"11746800056673","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C11746800057117","i_extparam":"TestExtParam123","hmac":"c749ca4e6a2422adbad2601dee98d9715b0cdf4d055916d5e69bec79b8cb24d2"}
> Recv:{"error":"Invalid userid","hmac":"8d0093157cd4af2a6cb5a5a92fe97ba611e7beab8ed28e1c1397006bfbfd8975"}
> Time spent: 72ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851f","currency":"USD","amount":"0.50","tid":"21746800056673","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C21746800057117","i_extparam":"TestExtParam123","hmac":"656a2011042c0b420dbb607216f0fc31eb3d7aec74c5314ea410547435020f27"}
> Recv:{"error":"Invalid userid","hmac":"8d0093157cd4af2a6cb5a5a92fe97ba611e7beab8ed28e1c1397006bfbfd8975"}
> Time spent: 77ms
```

[Credit 0.50 + wrong currency]

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"USD","amount":"0.50","tid":"11746800056673","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C11746800057117","i_extparam":"TestExtParam123","hmac":"636a3ea07235cc22a139b795c7dd5911a8c1960b281512ae240f813b98c3e450"}
> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}
> Time spent: 69ms
```

---- Request:balance ----

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"USD","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"8486bd562aa3c900a9e2e4d525c06e0cdaaa98b9a94ade0eceb176b67a880d97"}
> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}
> Time spent: 74ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"EUR","amount":"0.50","tid":"21746800056673","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C21746800057117","i_extparam":"TestExtParam123","hmac":"3d6518c9fd732770cf8a62ffc22573dae3204b42e3280f990e3ab534ee03ffcb"}
> Recv:{"status":"OK","tid":"21746800056673","balance":"3.40","hmac":"99cae707d00c59afd286497e89acb6de8bde12b2e8f95837fb81b168950f9c7e"}
> Time spent: 88ms
```



```
> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}
> Time spent: 77ms
---- Request:balance ----
> Sent:{"type":"balance","userid":"6244721467851","currency":"EUR","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"3af28a226c617fa1ae5b3f7ca6738875e328415bef14278974214f98d885e6a5"}
> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}
> Time spent: 82ms
```

[Credit 0.51 (same TID) + wrong amount]

```
---- Request:credit ----
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.51","tid":"11746800056673","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C11746800057117","i_extparam":"TestExtParam123","hmac":"00ebc3cef56ddc465bab0d712894c0cdcb5c70b80c76ea619e20aaa6267ae99a"}
> Recv:{"error":"Transaction Failed","balance":"3.40","hmac":"55c7a53d511f487bce468254b668df76a89ed6950dbe7376ab48cde7eef05b04"}
> Time spent: 94ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.51","tid":"21746800056673","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C21746800057117","i_extparam":"TestExtParam123","hmac":"9be7780fbc19da4b17be48474332e7315be92bf923a27a06b7f82b633456908d"}
> Recv:{"error":"Transaction Failed","balance":"3.40","hmac":"55c7a53d511f487bce468254b668df76a89ed6950dbe7376ab48cde7eef05b04"}
> Time spent: 96ms
```

[Credit 0.50 (for debit of 0.10) with new tid, i_gameid and i_actionid - are the same]

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":"11746800056674","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C11746800057117","i_extparam":"TestExtParam123","hmac":"7ab5c0eb9c0f1a90ed2458545060af2310275370c689323b0249c17f7e5e083e"}
> Recv:{"status":"OK","tid":"11746800056674","balance":"3.40","hmac":"cd6c8b154b0f617a4b79b72873cd91b9b5091a6e3eedac7adb585363cbb64b1f"}
> Time spent: 133ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":"21746800056674","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actionid":"C21746800057117","i_extparam":"TestExtParam123","hmac":"c0550716981776ded4a88e6278918e75e691d37edbb83d26d71d8a330acb9bdc"}
> Recv:{"status":"OK","tid":"21746800056674","balance":"3.40","hmac":"eeedeaf51baaeaddce360827249428cd197a26e160a088a1dbd79804c10a50c5"}
> Time spent: 134ms
```

---- Request:balance ----

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78
2e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"3.40","hmac":"4215661ba7df5542753befdbe7c1c0bfbed46a
3d9356298c3fa9e58ff1903889"}
> Time spent: 84ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fcfa9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"3.40","hmac":"4215661ba7df5542753befdbe7c1c0bfbed46a
3d9356298c3fa9e58ff1903889"}
> Time spent: 86ms
```

```
[ Debit 0.15 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.15","tid
":"11746800056675","i_gameid":"1gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D11746800057119","i_extparam":"TestExtParam123","hmac":"35a05494396db730d0352a4e0
0432d5a59a8a7b59ff13c1711474d17d65f2dcf"}
> Recv:{"status":"OK","tid":"11746800056675","balance":"3.25","hmac":"a713b68313d1490e5
496c22679558b0d5e600a3061ce1ddb3663f5f2a65c0f1e"}
> Time spent: 133ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.15","tid
":"21746800056675","i_gameid":"2gm1746800056666","i_gamedesc":"998:roulette","i_actioni
d":"D21746800057119","i_extparam":"TestExtParam123","hmac":"4d2e0397cc16a7ff91e37475a
f02fdb5a2a2968b18bd76f11de0122e6ce7e786"}
> Recv:{"status":"OK","tid":"21746800056675","balance":"3.25","hmac":"f92b54c6cadadb496
d6e664b8e6997c10429afeb744bacab896f4c5d17156868"}
> Time spent: 128ms
```

```
[ Debit 0.50 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid
":"11746800056676","i_gameid":"1gm1746800056667","i_gamedesc":"998:roulette","i_actioni
d":"D11746800057120","i_extparam":"TestExtParam123","hmac":"037cbdd88b1b1155420d25f4f
1d8125a7d8ae6dcaafd5863dce86ba2ef9c1b07"}
> Recv:{"status":"OK","tid":"11746800056676","balance":"2.75","hmac":"5a21c1307380059dc
82f7d9df4de0544052fc0f0dae40d46a7d8d51b9cc6a659"}
> Time spent: 125ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.50","tid
":"21746800056676","i_gameid":"2gm1746800056667","i_gamedesc":"998:roulette","i_actioni
d":"D21746800057120","i_extparam":"TestExtParam123","hmac":"ac19483c5423a57032a7a8874
fa3ad97369646c74dfe036f76bce04086a46e86"}
> Recv:{"status":"OK","tid":"21746800056676","balance":"2.75","hmac":"46943dcc8e257b058
2dd48031cafadec44d8b4591f5c7eeaf70c2fe931d49a1c"}
> Time spent: 125ms
```



```
> Time spent: 131ms
```

```
[ Credit -0.50 (wrong amount) ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"-0.50","tid":"11746800056677","i_gameid":"1gm1746800056667","i_gamedesc":"998:roulette","i_actionid":"C11746800057120","i_extparam":"TestExtParam123","hmac":"7bfc2c04bad78f9837d002cb7565ae017308c7a2dc0285d5eac17ad91fcebcbf6"}
```

```
> Recv:{"error":"Invalid parameters","hmac":"b73765c580d9699bb58079d2f33378c4e9aa36dedc241ac76abc1a0f859c9c52"}
```

```
> Time spent: 71ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"-0.50","tid":"21746800056677","i_gameid":"2gm1746800056667","i_gamedesc":"998:roulette","i_actionid":"C21746800057120","i_extparam":"TestExtParam123","hmac":"1c384bc9956e84b80f16c5833659f47201311a78b2c2ba49fac0c115a9fffb20e"}
```

```
> Recv:{"error":"Invalid parameters","hmac":"b73765c580d9699bb58079d2f33378c4e9aa36dedc241ac76abc1a0f859c9c52"}
```

```
> Time spent: 75ms
```

```
[ Debit 0.25 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.25","tid":"11746800056678","i_gameid":"1gm1746800056668","i_gamedesc":"998:roulette","i_actionid":"D11746800057121","i_extparam":"TestExtParam123","hmac":"bd998059f791f6898950c543102945806a327ad51993ad99f3ae92d24cb6735a"}
```

```
> Recv:{"status":"OK","tid":"11746800056678","balance":"2.50","hmac":"18faa076c240fddacfeed0bcf0b8b38fc5f3eb67875c9a55cc81b6a4d0146a85"}
```

```
> Time spent: 125ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.25","tid":"21746800056678","i_gameid":"2gm1746800056668","i_gamedesc":"998:roulette","i_actionid":"D21746800057121","i_extparam":"TestExtParam123","hmac":"e13cb18e9ef4a22c890f2a48f448910a9a855b4fa97a9feb08c56e6d4cc9d404"}
```

```
> Recv:{"status":"OK","tid":"21746800056678","balance":"2.50","hmac":"5ce6371b28c951ca765ac0899562b983f2a7fcd0cc2f740b8473f2749a217ea9"}
```

```
> Time spent: 132ms
```

```
[ Debit cancellation 0.25 ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.25","tid":"11746800056679","i_gameid":"1gm1746800056668","i_gamedesc":"998:roulette","subtype":"cancel","i_actionid":"D11746800057121","i_extparam":"TestExtParam123","hmac":"3105b4c327217bd4cd0d6680faf2b7178d4e285b7e226cf014d45a27e4b67b7f"}
```

```
> Recv:{"status":"OK","tid":"11746800056679","balance":"2.75","hmac":"121f225731b7921f66e0a90deb81195758efc8507bb8d679a7b035cd71d68a6a"}
```

```
> Time spent: 151ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.25","tid":21746800056679,"i_gameid":"2gm1746800056668","i_gamedesc":"998:roulette","subtype":"cancel","i_actionid":"D21746800057121","i_extparam":"TestExtParam123","hmac":"366dec277ae91e43764479c404619e112bed9c98851f04d93a14f6143ac21c86"}
> Recv:{"status":"OK","tid":21746800056679,"balance":"2.75","hmac":"16ad3044cd920b027425edc02152150a5a1f18f571d12192321e309aa7a15505"}
> Time spent: 152ms
```

[Debit 0.25]

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.25","tid":11746800056680,"i_gameid":"1gm1746800056669","i_gamedesc":"998:roulette","i_actionid":"D11746800057122","i_extparam":"TestExtParam123","hmac":"1ae146e81bd857881ce3370dfccc468e8b35525f98070d141af35ca58e306127"}
> Recv:{"status":"OK","tid":11746800056680,"balance":"2.50","hmac":"df9f05c5aa1f846435bfd41ac39789d4d3d1cbd36bc769bbf679f69d6999d2c3"}
> Time spent: 143ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.25","tid":21746800056680,"i_gameid":"2gm1746800056669","i_gamedesc":"998:roulette","i_actionid":"D21746800057122","i_extparam":"TestExtParam123","hmac":"dd36579df44e6a21b4f734561f8739c8a00ddd92859bd19e3add31b6a5a21949"}
> Recv:{"status":"OK","tid":21746800056680,"balance":"2.50","hmac":"f349c66b562cda8e4c0a9605cbfa37ca1001fd8f0d1d57bf7be96800f6341a17"}
> Time spent: 146ms
```

[Credit 0.50]

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":11746800056681,"i_gameid":"1gm1746800056669","i_gamedesc":"998:roulette","i_actionid":"C11746800057122","i_extparam":"TestExtParam123","hmac":"e74c13ddced5340c135ad3368f812f491d29e4fe30bf710cd9f2f04b903c34f2"}
> Recv:{"status":"OK","tid":11746800056681,"balance":"3.00","hmac":"f402c9a3d1f63e5e65192ba50b4a22b8c3f12827fe33f4f1a468615a6ef83b10"}
> Time spent: 137ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":21746800056681,"i_gameid":"2gm1746800056669","i_gamedesc":"998:roulette","i_actionid":"C21746800057122","i_extparam":"TestExtParam123","hmac":"a296d1a5a0dafd85441b5199ae34ae15a23842631aa9f27b5f862a870a1de657"}
> Recv:{"status":"OK","tid":21746800056681,"balance":"3.00","hmac":"592e47517638852649c83c0b3305bf4cc3c3412b69e1d87a2ae54908372cecdf"}
> Time spent: 150ms
```

[Credit cancellation 0.50]

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":
":11746800056682","i_gameid":"1gm1746800056669","i_gamedesc":"998:roulette","subtype":
"cancel","i_actionid":"C11746800057122","i_extparam":"TestExtParam123","hmac":"3c6c73
653f94fccc34a8f4bbf01a51591b3b6ea96aa792fa81ec8321ecb1fb23"}
> Recv:{"status":"OK","tid":11746800056682,"balance":"2.50","hmac":"6681270d6efa24e4d
f3721e671a6c0d81e5af77ceadfecb749158e6ce18beaa5"}
> Time spent: 149ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":
":21746800056682","i_gameid":"2gm1746800056669","i_gamedesc":"998:roulette","subtype":
"cancel","i_actionid":"C21746800057122","i_extparam":"TestExtParam123","hmac":"88f217
50a354164ef6d73b14a6a484d1fdc23bb77793fc601a645c19cbd056b3"}
> Recv:{"status":"OK","tid":21746800056682,"balance":"2.50","hmac":"5c3a86246a3744daf
3cc9aace7e7990d2f951bb023cdeca8f961693216c55729"}
> Time spent: 134ms
```

```
===== RUN #2 =====
```

```
---- Request:ping ----
```

```
> Sent:{"type":"ping","hmac":"855c54693a59a28a1039328ac5a12e9bcfab9f906fc935313e3a76
db6376c56"}
> Recv:{"status":"OK","hmac":"e969bada202f1735fedd074a5b1097e48080ef22d83fcbe74d86b0c
eaa91bb63"}
> Time spent: 67ms
```

```
[ Preparing balance amount of 3.00 ]
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78
2e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"2.50","hmac":"b390053b9c0fbf614c2783adb559ed93bf19b3
ed7bf79dc6a5dc97269954a475"}
> Time spent: 87ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"2.50","tid":
":11746800056683","i_gameid":"1gm1746800056670","i_gamedesc":"998:roulette","i_actioni
d":"D11746800064110","i_extparam":"TestExtParam123","hmac":"8b4bacf8d5a4d0b0114489a96
6046068d178b568ba5656e4f8717387f0a1f943"}
> Recv:{"status":"OK","tid":11746800056683,"balance":"0.00","hmac":"40290c20f667ff0ac
b2c7496b1ead3d6e284440281b057fb475db8294b34432e"}
> Time spent: 145ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"3.00","ti
d":11746800056684,"i_gameid":"1gm1746800056670","i_gamedesc":"998:roulette","i_action
id":"C11746800064110","i_extparam":"TestExtParam123","hmac":"de6bb28924e74f9f394b4714
e8fbf0435596e1967acbfa4890e5b36606fc2bf7"}
> Recv:{"status":"OK","tid":11746800056684,"balance":"3.00","hmac":"c12fa02357ddb1d04
022bbcdal4ea796ea6997324b3c34f45ecf590a8903f250"}
> Time spent: 143ms
```

```
---- Request:balance ----
```

```

> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fcaf9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"2.50","hmac":"b390053b9c0fbf614c2783adb559ed93bf19b3
ed7bf79dc6a5dc97269954a475"}
> Time spent: 91ms
---- Request:debit ----
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"2.50","tid
":21746800056683,"i_gameid":"2gm1746800056670","i_gamedesc":"998:roulette","i_actioni
d":"D21746800064110","i_extparam":"TestExtParam123","hmac":"9949c05e0d3cb09d206cb7aaa
1ee44e74856e570edf86974ec8fb3b44a6fadca"}
> Recv:{"status":"OK","tid":21746800056683,"balance":"0.00","hmac":"5b1f15e44b15e4f60
f2d7bd8380d3b3b51a4053ee0e147d7b80b1d45e0903767"}
> Time spent: 147ms
---- Request:credit ----
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"3.00","ti
d":21746800056684,"i_gameid":"2gm1746800056670","i_gamedesc":"998:roulette","i_action
id":"C21746800064110","i_extparam":"TestExtParam123","hmac":"92a1330cff311f5374078797
aacb4db2db4f3c281636c178e60ff0e2c1e67c5b"}
> Recv:{"status":"OK","tid":21746800056684,"balance":"3.00","hmac":"85ee5d71f84bd5b4a
45f617612c4c1a1e771d78a86a25d5fde9679e083e26fb8"}
> Time spent: 145ms

---- Request:balance ----
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78
2e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"3.00","hmac":"109ac35e2dc899706c75e1e3647075588012e6
13c0ebd4af86b5841d58b7adc8"}
> Time spent: 79ms

---- Request:balance ----
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fcaf9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"3.00","hmac":"109ac35e2dc899706c75e1e3647075588012e6
13c0ebd4af86b5841d58b7adc8"}
> Time spent: 83ms

[ Debit 30.00 (balance x10), error excepted ]
---- Request:debit ----
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"30.00","ti
d":11746800056685,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_action
id":"D11746800064111","i_extparam":"TestExtParam123","hmac":"26bd6e97d573fd9c4f462a6b
2e9b015ff4ee164e51b4856175b6dab5bf0afd65"}
> Recv:{"error":"INSUFFICIENT_FUNDS","balance":"3.00","hmac":"0c93c01e36573104c0fd847
941329082800106fad53baf7da775453d5c733000"}
> Time spent: 102ms

---- Request:debit ----

```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"30.00","tid":21746800056685,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"D21746800064111","i_extparam":"TestExtParam123","hmac":"12dbd8fbedbb16873bb3542596174e33f7cbda65e1c68651b157fb9d991d9e48"}
> Recv:{"error":"INSUFFICIENT_FUNDS","balance":"3.00","hmac":"0c93c01e36573104c0fd847941329082800106fad53baf7da775453d5c733000"}
> Time spent: 104ms
```

```
[ Debit 0.10 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid":11746800056686,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"D11746800064112","i_extparam":"TestExtParam123","hmac":"3e8947f2cb04560b74e7b3433910e130db534d5cbba2687b9c8e82126eb38d15"}
> Recv:{"status":"OK","tid":11746800056686,"balance":"2.90","hmac":"33d0d51a57e8763af7f61e4606532b21a4ad61dfe36692c0a35321ad682c9d69"}
> Time spent: 142ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid":21746800056686,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"D21746800064112","i_extparam":"TestExtParam123","hmac":"f3771ad09603ce94f7a03d887ec3b7cb98a9877d8ec276eea51cc0e1b9601a21"}
> Recv:{"status":"OK","tid":21746800056686,"balance":"2.90","hmac":"956a05acf7fff5d9103c14a69b18d345157ac1556082e2d63561afa04c46ec82"}
> Time spent: 142ms
```

```
[ Debit 0.10 (repeat) ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid":11746800056686,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"D11746800064112","i_extparam":"TestExtParam123","hmac":"3e8947f2cb04560b74e7b3433910e130db534d5cbba2687b9c8e82126eb38d15"}
> Recv:{"status":"OK","tid":11746800056686,"balance":"2.90","hmac":"33d0d51a57e8763af7f61e4606532b21a4ad61dfe36692c0a35321ad682c9d69"}
> Time spent: 92ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid":21746800056686,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"D21746800064112","i_extparam":"TestExtParam123","hmac":"f3771ad09603ce94f7a03d887ec3b7cb98a9877d8ec276eea51cc0e1b9601a21"}
> Recv:{"status":"OK","tid":21746800056686,"balance":"2.90","hmac":"956a05acf7fff5d9103c14a69b18d345157ac1556082e2d63561afa04c46ec82"}
> Time spent: 90ms
```

```
[ Debit 0.10 (repeat with new tid and the same game_id + i_actionid) ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid":
":11746800056687","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D11746800064112","i_extparam":"TestExtParam123","hmac":"64a0a9fd93783ff2ca1c480e5
fe692cd75cb41318e354719b9bf5f542b57f9e8"}
> Recv:{"status":"OK","tid":11746800056687,"balance":"2.90","hmac":"47e4dc9469d930b51
52ceef31725821a1b666a9181e7247d982b1268fffd9b09"}
> Time spent: 113ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid":
":21746800056687","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D21746800064112","i_extparam":"TestExtParam123","hmac":"345fc670fd9b4266d08997466
3c8e2ad42ac3a1d74c4a45ffea9702ca0e22819"}
> Recv:{"status":"OK","tid":21746800056687,"balance":"2.90","hmac":"f557e4ad0afdc79a
7535572ae5bcaf260a50ea4e8a15a755efb5a608b53bc37"}
> Time spent: 108ms
```

[Debit 0.10 (one more repeat with new tid and the same game_id + i_actionid)]

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.10","tid":
":11746800056688","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D11746800064112","i_extparam":"TestExtParam123","hmac":"9a5f960ce83d5c5c1bd17afd2
a5966776fb723ce85c7c32a683b6ac5fd2a3273"}
> Recv:{"status":"OK","tid":11746800056688,"balance":"2.90","hmac":"d93019f47b5398845
cf85f3593d17e41b99df42003336c0fe53f839d89c8077a"}
> Time spent: 110ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.10","tid":
":21746800056688","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D21746800064112","i_extparam":"TestExtParam123","hmac":"93e63fd65a25f107cd7499f67
5b9971c0f4c6c7e89dfdbcl8523491637baa986"}
> Recv:{"status":"OK","tid":21746800056688,"balance":"2.90","hmac":"ff2bd812dd6e04e8a
6b189b844331f61f873cd5230bd29e8264106f2dd50b8b1"}
> Time spent: 118ms
```

[Debit another amount + same tid]

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid":
":11746800056688","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D11746800064112","i_extparam":"TestExtParam123","hmac":"e231bed1933fc34469a2adb27
c48b747d46ff496423fb10bb3fb734f183adb40"}
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04
387403056428f550901ed99ba4d8583da1ef61252"}
> Time spent: 84ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":
":21746800056688","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actioni
```



```
d":"D21746800064112","i_extparam":"TestExtParam123","hmac":"b0f3b1adf3e6289449595daef
281e3dfad7f5e66158e6d29bebe20b39c61af9d"}
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04
387403056428f550901ed99ba4d8583da1ef61252"}
> Time spent: 83ms
```

```
[ Debit other amount + other tid ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid
":11746800056689,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D11746800064113","i_extparam":"TestExtParam123","hmac":"d799695f87b2800c5c6ba9aba
0b79dbf903b7b3dfef52816076cbd368385b1a2"}
> Recv:{"status":"OK","tid":11746800056689,"balance":"2.85","hmac":"fc354ca4c274164ba
de4739c997183222683516d3ebba32f226c6ac1c3157286"}
> Time spent: 120ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.05","tid
":21746800056689,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actioni
d":"D21746800064113","i_extparam":"TestExtParam123","hmac":"faa4cb4b1f86b653886ed8f1d
ae512fb5d299ec936c0a13b09ea2170bfe1182f"}
> Recv:{"status":"OK","tid":21746800056689,"balance":"2.85","hmac":"828d68ea8f4387586
9267063e6c8341cd513910290841892f8d5dc4723cc0ef5"}
> Time spent: 116ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78
2e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"2.85","hmac":"c67d55b9674481e444bd011932d6af6dbc093b
ea9189dbadb9e4de0f54e25776"}
> Time spent: 74ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fcaf9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"2.85","hmac":"c67d55b9674481e444bd011932d6af6dbc093b
ea9189dbadb9e4de0f54e25776"}
> Time spent: 79ms
```

```
[ Credit + debit tid (fail) ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.05","ti
d":11746800056689,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_action
id":"C11746800064113","i_extparam":"TestExtParam123","hmac":"cca2a2a6efd1dd2690cfb327
e15436d7312502246e3d24f1c14b70774978a0c6"}
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04
387403056428f550901ed99ba4d8583da1ef61252"}
> Time spent: 130ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":21746800056689,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064113","i_extparam":"TestExtParam123","hmac":"4fd42259ce95440d1246fc9585336423494602863759a075e9f3e1b44b827134"}
> Recv:{"error":"Transaction Failed","balance":"2.90","hmac":"759e1564bbac113f0b7cf04387403056428f550901ed99ba4d8583da1ef61252"}
> Time spent: 129ms
```

[Bet cancel by sending Credit + **new** tid with i_rollback]

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.05","tid":11746800056690,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_rollback":11746800056689,"i_actionid":"C11746800064113","i_extparam":"TestExtParam123","hmac":"60bb85f666b6ef98d5fe1c67c025c24eebb09ef7292841f652ce89637f36c4eb"}
> Recv:{"status":"OK","tid":11746800056690,"balance":"2.90","hmac":"fede4a4eeb571b54e8576c60909adcc372ee4b8f0d4f11984dcb7154aaac35be"}
> Time spent: 113ms
```

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.05","tid":21746800056690,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_rollback":21746800056689,"i_actionid":"C21746800064113","i_extparam":"TestExtParam123","hmac":"8b1dd437ab164c84472102159f1e02cc98a6a9952067ccb2b5370de97a561b02"}
> Recv:{"status":"OK","tid":21746800056690,"balance":"2.90","hmac":"be16b66a1bf2e6d8300e4891874bb8f1fab0ae4d50dd9dfc7e0920025de28ee2"}
> Time spent: 124ms
```

---- Request:balance ----

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb782e5112e07293c22a3b8800b8dfa2"}
> Recv:{"status":"OK","balance":"2.90","hmac":"d02d6aa4d6c0ee500c80186364de0393a4213775f7667359bcbcd90794925433"}
> Time spent: 82ms
```

---- Request:balance ----

```
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8a0cf8a743fcaf9f11d1c03b7d323"}
> Recv:{"status":"OK","balance":"2.90","hmac":"d02d6aa4d6c0ee500c80186364de0393a4213775f7667359bcbcd90794925433"}
> Time spent: 75ms
```

[Credit 0.50 (**for** debit of 0.10)]

---- Request:credit ----

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":11746800056691,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C11746800064112","i_extparam":"TestExtParam123","hmac":"5b832f1794b3674438d0febf9a184e0dbe1c6e13191abf6f46d7f56897ef28a2"}
> Recv:{"status":"OK","tid":11746800056691,"balance":"2.90","hmac":"d02d6aa4d6c0ee500c80186364de0393a4213775f7667359bcbcd90794925433"}
> Time spent: 75ms
```



```
> Recv:{"status":"OK","tid":11746800056691,"balance":"3.40","hmac":"8017fdd65c568f40d2bd5dea0f232c531ef36372633e9af472663d4a77a77a76"}
> Time spent: 138ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":21746800056691,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064112","i_extparam":"TestExtParam123","hmac":"b8281a63254cef3608829cc6fb1697563ed7a6dd698c01842bfd59e5c9865c75"}
> Recv:{"status":"OK","tid":21746800056691,"balance":"3.40","hmac":"e7a6b7871b231359ca953545d785ccb855f2fc8a40ddb6d583fffee9ae738f0f"}
> Time spent: 130ms
```

```
[ Credit 0.50 (repeat) ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":11746800056691,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C11746800064112","i_extparam":"TestExtParam123","hmac":"5b832f1794b3674438d0febf9a184e0dbe1c6e13191abf6f46d7f56897ef28a2"}
> Recv:{"status":"OK","tid":11746800056691,"balance":"3.40","hmac":"8017fdd65c568f40d2bd5dea0f232c531ef36372633e9af472663d4a77a77a76"}
> Time spent: 92ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":21746800056691,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064112","i_extparam":"TestExtParam123","hmac":"b8281a63254cef3608829cc6fb1697563ed7a6dd698c01842bfd59e5c9865c75"}
> Recv:{"status":"OK","tid":21746800056691,"balance":"3.40","hmac":"e7a6b7871b231359ca953545d785ccb855f2fc8a40ddb6d583fffee9ae738f0f"}
> Time spent: 87ms
```

```
[ Credit 0.50 + wrong user ID ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621f","currency":"EUR","amount":"0.50","tid":11746800056691,"i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C11746800064112","i_extparam":"TestExtParam123","hmac":"3f8ccd94849a442a7a2ca8aba4a7787a7abf1788d706a5ca22d22f000695b958"}
> Recv:{"error":"Invalid userid","hmac":"8d0093157cd4af2a6cb5a5a92fe97ba611e7beab8ed28e1c1397006bfbfd8975"}
> Time spent: 70ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851f","currency":"USD","amount":"0.50","tid":21746800056691,"i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064112","i_extparam":"TestExtParam123","hmac":"4f5d6af98b62b60ca7549f22a271ba111337f29a06a5ee886c5d79e17f64dd08"}
> Recv:{"error":"Invalid userid","hmac":"8d0093157cd4af2a6cb5a5a92fe97ba611e7beab8ed28e1c1397006bfbfd8975"}
> Time spent: 72ms
```

[Credit 0.50 + wrong currency]

---- Request:credit ----

> Sent:{"type":"credit","userid":"62447203ee621","currency":"USD","amount":"0.50","tid":"11746800056691","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C11746800064112","i_extparam":"TestExtParam123","hmac":"3ff405d71c73def4847097dc9fdda992a95dc977348caaf30dd09d0cec0459a7"}

> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}

> Time spent: 75ms

---- Request:balance ----

> Sent:{"type":"balance","userid":"62447203ee621","currency":"USD","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"8486bd562aa3c900a9e2e4d525c06e0cdaaa98b9a94ade0eceb176b67a880d97"}

> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}

> Time spent: 73ms

---- Request:credit ----

> Sent:{"type":"credit","userid":"6244721467851","currency":"EUR","amount":"0.50","tid":"21746800056691","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064112","i_extparam":"TestExtParam123","hmac":"d6eebdf867eba433e406da22f9b66f7c58c3d03495b6a742ed5ee6b07c9abc66"}

> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}

> Time spent: 69ms

---- Request:balance ----

> Sent:{"type":"balance","userid":"6244721467851","currency":"EUR","i_gamedesc":"998:roulette","i_extparam":"TestExtParam123","hmac":"3af28a226c617fa1ae5b3f7ca6738875e328415bef14278974214f98d885e6a5"}

> Recv:{"error":"Invalid currency","hmac":"370f66d7e0db3abcd96a055643bfca4ffee3cd74616bc7264aa74a0ebb24180e"}

> Time spent: 69ms

[Credit 0.51 (same TID) + wrong amount]

---- Request:credit ----

> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.51","tid":"11746800056691","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C11746800064112","i_extparam":"TestExtParam123","hmac":"f7696484df42d5642dfcc9610e2e24e849ef1034af8dde4a112406b40b5543bc"}

> Recv:{"error":"Transaction Failed","balance":"3.40","hmac":"55c7a53d511f487bce468254b668df76a89ed6950dbe7376ab48cde7eef05b04"}

> Time spent: 81ms

---- Request:credit ----

> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.51","tid":"21746800056691","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064112","i_extparam":"TestExtParam123","hmac":"7dbea90383a0945dfc9dd21438c5c06247b62a2490e28753df8a10bc5093cf3f"}

> Recv:{"error":"Transaction Failed","balance":"3.40","hmac":"55c7a53d511f487bce468254b668df76a89ed6950dbe7376ab48cde7eef05b04"}

> Time spent: 88ms

```
[ Credit 0.50 (for debit of 0.10) with new tid, i_gameid and i_actionid - are the same ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":"11746800056692","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C11746800064112","i_extparam":"TestExtParam123","hmac":"7c94b5a0476eab3637ce3adb44f8c0ec0738c0c8ae1d6fbde5d8c61b759b9778"}
```

```
> Recv:{"status":"OK","tid":11746800056692,"balance":"3.40","hmac":"d98d77f1ee4f0331a8675d37fcc8a8e6de3f4aa7e82885b069bc7c9c7e6f04948"}
```

```
> Time spent: 139ms
```

```
----- Request:credit -----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":"21746800056692","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"C21746800064112","i_extparam":"TestExtParam123","hmac":"91200a893d758ca61e2833de87b2e9294775c39f12bf76467af0a2484a562168"}
```

```
> Recv:{"status":"OK","tid":21746800056692,"balance":"3.40","hmac":"4f11705eb854560e4cc68b078dcac2858d94fb92b773446a544d5f51f45a97ab"}
```

```
> Time spent: 131ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"62447203ee621","currency":"EUR","i_gamedesc":"998: roulette","i_extparam":"TestExtParam123","hmac":"c62ae1ff243b0369fd6c5d5a263447f4cb78 2e5112e07293c22a3b8800b8dfa2"}
```

```
> Recv:{"status":"OK","balance":"3.40","hmac":"4215661ba7df5542753befdbe7c1c0bfbed46a3d9356298c3fa9e58ff1903889"}
```

```
> Time spent: 89ms
```

```
---- Request:balance ----
```

```
> Sent:{"type":"balance","userid":"6244721467851","currency":"USD","i_gamedesc":"998:
roulette","i_extparam":"TestExtParam123","hmac":"2a91dbde95a9d4dde92eca75dd8e7428d0a8
a0cf8a743fc9f11d1c03b7d323"}
```

```
> Recv:{"status":"OK","balance":"3.40","hmac":"4215661ba7df5542753befdbe7c1c0bfbed46a3d9356298c3fa9e58ff1903889"}
```

```
> Time spent: 81ms
```

```
[ Debit 0.15 ]
```

```

----- Request:debit -----

```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.15","tid":"11746800056693","i_gameid":"1gm1746800056671","i_gamedesc":"998:roulette","i_actionid":"D11746800064114","i_extparam":"TestExtParam123","hmac":"668435ec412c4e270720a11e2b50ae96196ef65113adcd3a9e3ea207e2971e45"}
```

```
> Recv:{"status":"OK","tid":11746800056693,"balance":"3.25","hmac":"09afe0e3c64f0023cd79f6cbc06dfe3c659ba5ba5baa183cb6e5614cd11eb712"}
```

```
> Time spent: 134ms
```

---- Request:debit ----

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.15","tid":"21746800056693","i_gameid":"2gm1746800056671","i_gamedesc":"998:roulette","i_actioni
```

```
d":"D21746800064114","i_extparam":"TestExtParam123","hmac":"abe8476dcbb7b4b3548178b56f18fdcdf16c5b6149ad64fec199a30c91141001"}
```

```
> Recv:{"status":"OK","tid":21746800056693,"balance":"3.25","hmac":"817e2fbb320edc07f8d93d379b8ee2586eff5722377b0c66d9fc178328bc6997"}
```

```
> Time spent: 146ms
```

```
[ Debit 0.50 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":11746800056694,"i_gameid":"1gm1746800056672","i_gamedesc":"998:roulette","i_actionid":"D11746800064115","i_extparam":"TestExtParam123","hmac":"dad69e8fb1f843983c75bc7939997adedc112e4dede90e99e7d52f8deb5eb76a"}
```

```
> Recv:{"status":"OK","tid":11746800056694,"balance":"2.75","hmac":"2c1c83f2b7ae2f434a9b95c3548a62dc781e0374887d385eb34f350f8e850716"}
```

```
> Time spent: 147ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":21746800056694,"i_gameid":"2gm1746800056672","i_gamedesc":"998:roulette","i_actionid":"D21746800064115","i_extparam":"TestExtParam123","hmac":"7120e9b5652c146db569f4fb0ecc3e375984c5c2a1cbcc8a98d80645ddcbfde3"}
```

```
> Recv:{"status":"OK","tid":21746800056694,"balance":"2.75","hmac":"15481734b869bb675655920cb11cce4c4138bad1d4f5c26c7873b5500964f0d6"}
```

```
> Time spent: 145ms
```

```
[ Credit -0.50 (wrong amount) ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"-0.50","tid":11746800056695,"i_gameid":"1gm1746800056672","i_gamedesc":"998:roulette","i_actionid":"C11746800064115","i_extparam":"TestExtParam123","hmac":"671e0e249c4d4ebe0144317e13d9c3f9bdee6ce71799b34f3b7461f9f09f50d9"}
```

```
> Recv:{"error":"Invalid parameters","hmac":"b73765c580d9699bb58079d2f33378c4e9aa36dedc241ac76abc1a0f859c9c52"}
```

```
> Time spent: 74ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"-0.50","tid":21746800056695,"i_gameid":"2gm1746800056672","i_gamedesc":"998:roulette","i_actionid":"C21746800064115","i_extparam":"TestExtParam123","hmac":"263be5d0f7a3c16138a22c7971b9cde3ccaa7cf4516ba384842c067f63390459"}
```

```
> Recv:{"error":"Invalid parameters","hmac":"b73765c580d9699bb58079d2f33378c4e9aa36dedc241ac76abc1a0f859c9c52"}
```

```
> Time spent: 80ms
```

```
[ Debit 0.25 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.25","tid":11746800056696,"i_gameid":"1gm1746800056673","i_gamedesc":"998:roulette","i_actionid":"D11746800064115","i_extparam":"TestExtParam123","hmac":"dad69e8fb1f843983c75bc7939997adedc112e4dede90e99e7d52f8deb5eb76a"}
```

```
d":"D11746800064116","i_extparam":"TestExtParam123","hmac":"bef13595f366742b8fdcf1ec48005d2218ff98a2be1f9b38101146cbacb8a93b"}
```

```
> Recv:{"status":"OK","tid":11746800056696,"balance":"2.50","hmac":"b18ae519c6ba541e6b7a88a54a0a2734f0e2f77206302becd518a69b74c1acd1"}
```

```
> Time spent: 141ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.25","tid":21746800056696,"i_gameid":"2gm1746800056673","i_gamedesc":"998:roulette","i_actionid":"D21746800064116","i_extparam":"TestExtParam123","hmac":"e420559102652dc878311ff65988c4048162a0332f8b2065fa0e298675483889"}
```

```
> Recv:{"status":"OK","tid":21746800056696,"balance":"2.50","hmac":"2d3b5a3928b015f8969a2b634de72314bed6a70a3559fb8d486f1058b51bbf52"}
```

```
> Time spent: 133ms
```

```
[ Debit cancellation 0.25 ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.25","tid":11746800056697,"i_gameid":"1gm1746800056673","i_gamedesc":"998:roulette","subtype":"cancel","i_actionid":"D11746800064116","i_extparam":"TestExtParam123","hmac":"d929cbce5bcf08ab712f3fd59306d4df73459eaff01c1387a6bd697d2abc1990"}
```

```
> Recv:{"status":"OK","tid":11746800056697,"balance":"2.75","hmac":"bacecf43f3ff7632a5e544f29f4d93f401cc94dbb6414ee2d6397abe037f110e"}
```

```
> Time spent: 139ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.25","tid":21746800056697,"i_gameid":"2gm1746800056673","i_gamedesc":"998:roulette","subtype":"cancel","i_actionid":"D21746800064116","i_extparam":"TestExtParam123","hmac":"73270d9f813e0545b3f766e5992641e5109ae05f9cbf2512adc12ae0887edc27"}
```

```
> Recv:{"status":"OK","tid":21746800056697,"balance":"2.75","hmac":"b15846a475570bd058c7b5d6611f165b76ae9ed00a9a3407374705f0b8b3dede"}
```

```
> Time spent: 142ms
```

```
[ Debit 0.25 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.25","tid":11746800056698,"i_gameid":"1gm1746800056674","i_gamedesc":"998:roulette","i_actionid":"D11746800064117","i_extparam":"TestExtParam123","hmac":"f8bddb3719d2001ab23c9b784340a2db2a70115340fc68caad957fb124116703"}
```

```
> Recv:{"status":"OK","tid":11746800056698,"balance":"2.50","hmac":"377835295a210abbe cb114762c4f6b8434ace66f8cae9514f3cd821aa93c9d2e"}
```

```
> Time spent: 184ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.25","tid":21746800056698,"i_gameid":"2gm1746800056674","i_gamedesc":"998:roulette","i_actionid":"D21746800064117","i_extparam":"TestExtParam123","hmac":"e0397af9ef0b10eed9ad3570e24480a3633a089dfe05137c167c73b2db563a6e"}
```

```
> Recv:{"status":"OK","tid":21746800056698,"balance":"2.50","hmac":"a71fdc4351609f1157adb8948bdc9d9416f7b5b6a933a1454381b47b8d04c91"}
```

```
> Time spent: 153ms
```

```
[ Credit 0.50 ]
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":"11746800056699","i_gameid":"1gm1746800056674","i_gamedesc":"998:roulette","i_actionid":"C11746800064117","i_extparam":"TestExtParam123","hmac":"4680c57ecf3b961bea897976876c72010fc2cc1153e4802631b386b0085c97"}
```

```
> Recv:{"status":"OK","tid":"11746800056699","balance":"3.00","hmac":"84aa9d4f326b96fec a0b78ed26a3713959a96d2941e1f36bc7ebb66835c3a705"}
```

```
> Time spent: 152ms
```

```
---- Request:credit ----
```

```
> Sent:{"type":"credit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":"21746800056699","i_gameid":"2gm1746800056674","i_gamedesc":"998:roulette","i_actionid":"C21746800064117","i_extparam":"TestExtParam123","hmac":"c629225faec3d0fe495e10a793c988e552b91ab778c3274ee440f83ab4611204"}
```

```
> Recv:{"status":"OK","tid":"21746800056699","balance":"3.00","hmac":"fcdca4622fef298ed fa638985ad8d44f3f863125ac128c43e79fc249ecc5a127"}
```

```
> Time spent: 153ms
```

```
[ Credit cancellation 0.50 ]
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"62447203ee621","currency":"EUR","amount":"0.50","tid":"11746800056700","i_gameid":"1gm1746800056674","i_gamedesc":"998:roulette","subtype":"cancel","i_actionid":"C11746800064117","i_extparam":"TestExtParam123","hmac":"5989b6c2877487a7b1e02c3cd6bf53e0e744b781a77f27866f98816f16393894"}
```

```
> Recv:{"status":"OK","tid":"11746800056700","balance":"2.50","hmac":"b4ff41b5e04f27678 b718f63631fclb3e88fda6a99bbb81f16b0fa40ffe89117"}
```

```
> Time spent: 147ms
```

```
---- Request:debit ----
```

```
> Sent:{"type":"debit","userid":"6244721467851","currency":"USD","amount":"0.50","tid":"21746800056700","i_gameid":"2gm1746800056674","i_gamedesc":"998:roulette","subtype":"cancel","i_actionid":"C21746800064117","i_extparam":"TestExtParam123","hmac":"39b63f4f8abd0c103b78bfaf02949721453d30c5299fc8f9de9274edd94ebb3"}
```

```
> Recv:{"status":"OK","tid":"21746800056700","balance":"2.50","hmac":"92033f3731e4a376d 7a94255c2bdfc6ca7dc1da5c62e144e650431ea3675bb0e"}
```

```
> Time spent: 126ms
```

```
=====
```

```
===== OK =====
```