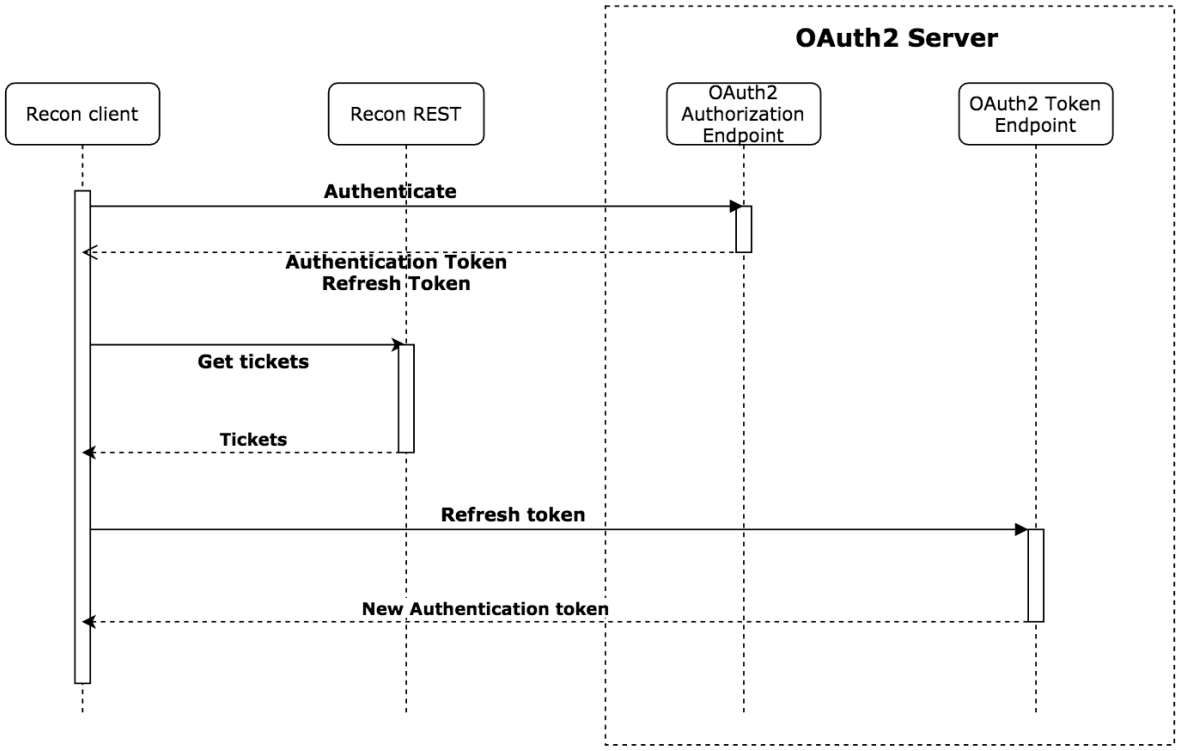
Recon rest api client integration guide

OAuth2 authentication flow
Recon REST api uses OAuth2 to authorize client requests. First, the client must obtain an authorization token from the token endpoint:

- Staging: https://staging.bwg.betradar.com/auth/realms/bwg_stg/protocol/opeopenid-connect/token
- Production: https://bwg.betradar.com/auth/realms/bwg_prod/protocol/openid-connect/token

The authentication parameters will be provided by Sportradar. The parameters are as follows:

- Client Id - ID of the OAuth2 client you are authorizing to
- Client secret - Unique secret key provided by Sportradar
- Username - Username with which you authenticate
- Password - Password with which you authenticate



Once authenticated, the OAuth2 server will return an Authentication token and a Refresh token. To use recon REST api, the authentication token must be sent as an Authorization header with the request.

The authentication token will expire after 5 minutes and must be refreshed periodically using the refresh token.
The token is refreshed on the token url

- Staging: https://staging.bwg.betradar.com/auth/realms/bwg_stg/protocol/openid-connect/token
- Production: https://bwg.betradar.com/auth/realms/bwg_prod/protocol/openid-connect/token

The refresh token expires in 1 hour. After that, a new set of tokens must be obtained. Every time a Refresh token is used, the server will respond with a new set of tokens.

Get token http request / response example

Request:

```
POST/auth/realms/bwg_dev/protocol/openid-connect/token HTTP/1.1
Host: https://prestg.bwg.sportradar.ag
Content-Type: application/x-www-form-urlencoded

password=<pass>&grant_type=password&client_secret=<your super secret
secret>&client_id=recon_client&username=<username>
```

Response:

```
HTTP/1.1 200 OK
Server: nginx
Date: Wed, 01 Jul 2020 09:53:17 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Vary: Accept-Encoding
Strict-Transport-Security: max-age=15724800; includeSubDomains
Cache-Control: no-store
Set-Cookie: KC_RESTART=; Version=1; Expires=Thu, 01-Jan-
1970 00:00:10 GMT; Max-Age=0; Path=/auth/realms/bwg_dev/; HttpOnly
Pragma: no-cache

{
  "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJaQl
kxQUh0RDF6S194OTJrYklZS0FsOEpuUTZVd1pQck5YUlBoNmxJZWRvIn0.eyJqdGkiOiI4OWF
jNWExNi01YzU4LTQxZDUtOTY0MS0yNWM1ZmI4NTlhYWEiLCJleHAiOjE1OTM1OTc0OTcsIm5i
ZiI6MCwiaWF0IjoxNTkzNTk3MTk3LCJpc3MiOiJodHRwczovL3ByZXN0Zy5id2cuc3BvcnRyY
WRhci5hZy9hdXRoL3JlYWxtcy9id2dfZGV2IiwiYXVkIjoiYWNjb3VudCIsInN1YiI6IjIwMD
E3NTNjLTVkNzQtNGVkZS1iNjM4LWUxNTVjY2JjYzhlYyIsInR5cCI6IkJlYXJlciIsImF6cCI
6InJlY29uX2NsaWVudCIsImF1dGhfdGltZSI6MCwic2Vzc2lvbl9zdGF0ZSI6Ijk2NjNkMzU0
LTEyODQtNDI5My05MjEwLTlkNmUwODdmY2JlNyIsImFjciI6IjEiLCJyZWFsbV9hY2Nlc3MiO
nsicm9sZXMiOlsib2ZmbGluZV9hY2Nlc3MiLCJ1bWFfYXV0aG9yaXphdGlvbiJdfSwicmVzb3
VyY2VfYWNjZXNzIjp7InJlY29uX2NsaWVudCI6eyJyb2xlcyI6WyJyZWNvbl91c2VyIl19LCJ
hY2NvdW50Ijp7InJvbGVzIjpbIm1hbmFnZS1hY2NvdW50IiwibWFuYWdlLWFjY291bnQtbGlu
a3MiLCJ2aWV3LXByb2ZpbGUiXX19LCJzY29wZSI6ImVtYWlsIHByb2ZpbGUiLCJlbWFpbF92Z
XJpZmllZCI6ZmFsc2UsImJrSWQiOiIxMjIyNzUiLCJwcmVmZXJyZWRfdXNlcm5hbWUiOiJ0ZX
N0X3JlY29uMiJ9.MIgLJ2HRpD3A9lWEEVWUrB39xtJCi924BaKLBTt7XkI7oG1wRn1eZxOIvp
jPKebyAL-wOpYqIw5BH1jQ8uHCrnmoyiQY5N-
410F4Vmw0B2c5Acs5FOarIQoFbl5yMIfZ82d8yZoXsmnxgwfGdTVAS-
erYFtFuvPF4AEvJN6fhxqv0Gv7Q0-
NtprlkizLY_Onkk96eS1RGF7iFNxUPTtKQ7Abyr1gcb5d8hHWu2e2YITlLQIoAOhAcFb0pLUM
DsSZoVfe8UCTpQUzNaKEX_UNsj30k4XNYQQAeqQdoRf_B2ABEj9EAOGqe4RDMaqSdlTHUiGPd
n80iZNMWVTXpLnoWQ",
  "expires_in": 300,
  "refresh_expires_in": 3600,
```

```
  "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICI0O
GIxN2VhYS0zMWJjLTQ5ZGYtOTRkMy00NGJhM2EwNDgxZWMifQ.eyJqdGkiOiIyZGIzZDFhYS0
1NzVmLTRkY2YtYTlhMi02ZTNlMjIxN2Q3OGQiLCJleHAiOjE1OTM2MDA3OTcsIm5iZiI6MCwi
aWF0IjoxNTkzNTk3MTk3LCJpc3MiOiJodHRwczovL3ByZXN0Zy5id2cuc3BvcnRyYWRhci5hZ
y9hdXRoL3JlYWxtcy9id2dfZGV2IiwiYXVkIjoiaHR0cHM6Ly9wcmVzdGcuYndnLnNwb3J0cm
FkYXIuYWcvYXV0aC9yZWFsbXMvYndnX2RldiIsInN1YiI6IjIwMDE3NTNjLTVkNzQtNGVkZS1
iNjM4LWUxNTVjY2JjYzhlYyIsInR5cCI6IlJlZnJlc2giLCJhenAiOiJyZWNvbl9jbGllbnQi
LCJhdXRoX3RpbWUiOjAsInNlc3Npb25fc3RhdGUiOiI5NjYzZDM1NC0xMjg0LTQyOTMtOTIxM
C05ZDZlMDg3ZmNiZTciLCJyZWFsbV9hY2Nlc3MiOnsicm9sZXMiOlsib2ZmbGluZV9hY2Nlc3
MiLCJ1bWFfYXV0aG9yaXphdGlvbiJdfSwicmVzb3VyY2VfYWNjZXNzIjp7InJlY29uX2NsaWV
udCI6eyJyb2xlcyI6WyJyZWNvbl91c2VyIl19LCJhY2NvdW50Ijp7InJvbGVzIjpbIm1hbmFn
ZS1hY2NvdW50IiwibWFuYWdlLWFjY291bnQtbGlua3MiLCJ2aWV3LXByb2ZpbGUiXX19LCJzY
29wZSI6ImVtYWlsIHByb2ZpbGUifQ.839BqTurjGA9oSXXnSH-
hV1XDnluVp8rg3GGuQOWDhY",
  "token_type": "bearer",
  "not-before-policy": 1589289175,
  "session_state": "9663d354-1284-4293-9210-9d6e087fcbe7",
  "scope": "email profile"
}
```


Refresh token http request / response example

Request:

```
POST/auth/realms/bwg_dev/protocol/openid-connect/token HTTP/1.1
Host: https://prestg.bwg.sportradar.ag
Content-Type: application/x-www-form-urlencoded

grant_type=refresh_token&client_secret=<your super secret
secret>&client_id=recon_client&refresh_token=eyJhbGciOiJIUzI1NiIsInR5cCIg
OiAiSldUIiwia2lkIiA6ICI0OGIxN2VhYS0zMWJjLTQ5ZGYtOTRkMy00NGJhM2EwNDgxZWMif
Q.eyJqdGkiOiIyZGIzZDFhYS01NzVmLTRkY2YtYTlhMi02ZTNlMjIxN2Q3OGQiLCJleHAiOjE
1OTM2MDA3OTcsIm5iZiI6MCwiaWF0IjoxNTkzNTk3MTk3LCJpc3MiOiJodHRwczovL3ByZXN0
Zy5id2cuc3BvcnRyYWRhci5hZy9hdXRoL3JlYWxtcy9id2dfZGV2IiwiYXVkIjoiaHR0cHM6L
y9wcmVzdGcuYndnLnNwb3J0cmFkYXIuYWcvYXV0aC9yZWFsbXMvYndnX2RldiIsInN1YiI6Ij
IwMDE3NTNjLTVkNzQtNGVkZS1iNjM4LWUxNTVjY2JjYzhlYyIsInR5cCI6IlJlZnJlc2giLCJ
henAiOiJyZWNvbl9jbGllbnQiLCJhdXRoX3RpbWUiOjAsInNlc3Npb25fc3RhdGUiOiI5NjYz
ZDM1NC0xMjg0LTQyOTMtOTIxMC05ZDZlMDg3ZmNiZTciLCJyZWFsbV9hY2Nlc3MiOnsicm9sZ
XMiOlsib2ZmbGluZV9hY2Nlc3MiLCJ1bWFfYXV0aG9yaXphdGlvbiJdfSwicmVzb3VyY2VfYW
NjZXNzIjp7InJlY29uX2NsaWVudCI6eyJyb2xlcyI6WyJyZWNvbl91c2VyIl19LCJhY2NvdW5
0Ijp7InJvbGVzIjpbIm1hbmFnZS1hY2NvdW50IiwibWFuYWdlLWFjY291bnQtbGlua3MiLCJ2
aWV3LXByb2ZpbGUiXX19LCJzY29wZSI6ImVtYWlsIHByb2ZpbGUifQ.839BqTurjGA9oSXXnS
H-hV1XDnluVp8rg3GGuQOWDhY
```

Response:

```
HTTP/1.1 200 OK
Server: nginx
```

Date: Wed, 01 Jul 2020 10:07:03 GMT
Content-Type: application/json
Transfer-Encoding: chunked
Connection: keep-alive
Vary: Accept-Encoding
Strict-Transport-Security: max-age=15724800; includeSubDomains
Cache-Control: no-store
Pragma: no-cache

{
  "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJaQl
kxQUh0RDF6S194OTJrYklZS0FsOEpuUTZVd1pQck5YUlBoNmxJZWRvIn0.eyJqdGkiOiI4ZjZ
kZjU4Zi0yOWRkLTRlNjYtYjY4OC04ZGZmY2M2Yjc1ODciLCJleHAiOjE1OTM1OTgzMjMsIm5i
ZiI6MCwiaWF0IjoxNTkzNTk4MDIzLCJpc3MiOiJodHRwczovL3ByZXN0Zy5id2cuc3BvcnRyY
WRhci5hZy9hdXRoL3JlYWxtcy9id2dfZGV2IiwiYXVkIjoiYWNjb3VudCIsInN1YiI6IjIwMD
E3NTNjLTVkNzQtNGVkZS1iNjM4LWUxNTVjY2JjYzhlYyIsInR5cCI6IkJlYXJlciIsImF6cCI
6InJlY29uX2NsaWVudCIsImF1dGhfdGltZSI6MCwic2Vzc2lvbl9zdGF0ZSI6Ijk2NjNkMzU0
LTEyODQtNDI5My05MjEwLTlkNmUwODdmY2JlNyIsImFjciI6IjEiLCJyZWFsbV9hY2Nlc3MiO
nsicm9sZXMiOlsib2ZmbGluZV9hY2Nlc3MiLCJ1bWFfYXV0aG9yaXphdGlvbiJdfSwicmVzb3
VyY2VfYWNjZXNzIjp7InJlY29uX2NsaWVudCI6eyJyb2xlcyI6WyJyZWNvbl91c2VyIl19LCJ
hY2NvdW50Ijp7InJvbGVzIjpbIm1hbmFnZS1hY2NvdW50IiwibWFuYWdlLWFjY291bnQtbGlu
a3MiLCJ2aWV3LXByb2ZpbGUiXX19LCJzY29wZSI6ImVtYWlsIHByb2ZpbGUiLCJlbWFpbF92Z
XJpZmllZCI6ZmFsc2UsImJrSWQiOiIxMjIyNzUiLCJwcmVmZXJyZWRfdXNlcm5hbWUiOiJ0ZX
N0X3JlY29uMiJ9.gY9mmY-
A7zlsBLTpa5zHVt8chEgkwvr4ZUTws1uLwdnuK18ti_2PvN0t9IumuVmHBAizrAQAA0UZT7R
BmtLOV2RtVLyAXhfuWgfkOURwJk58CbiczThiZf6iSi8_Ta4KxUhDjwMMkDBAjQ8WVW59GEm_
Z1XLccTm48yckDtNb9Ko3ZmtDHk0IeEM4L-
kLiLLiyU99cLpBz_lZd7buEBaeKQ1Xb_ssSiSLzSISSo6bF3pzPYzkryZOP82VnuKJdN09vMJ
TQ-QJZO-
77ncV8VoZGauVKeLaeHIeZzR2f_YAa23GG900OyQw7Pt7Rc1axPahbtJSRt8xiF9caQM6r6uQ
",
  "expires_in": 300,
  "refresh_expires_in": 3600,
  "refresh_token": "eyJhbGciOiJIUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICI0O
GIxN2VhYS0zMWJjLTQ5ZGYtOTRkMy00NGJhM2EwNDgxZWMifQ.eyJqdGkiOiI4NzhhMTIwYi1
hNmNkLTQ5OGUtODgxOS1hOTdiYjA4NjZmYjUiLCJleHAiOjE1OTM2MDE2MjMsIm5iZiI6MCwi
aWF0IjoxNTkzNTk4MDIzLCJpc3MiOiJodHRwczovL3ByZXN0Zy5id2cuc3BvcnRyYWRhci5hZ
y9hdXRoL3JlYWxtcy9id2dfZGV2IiwiYXVkIjoiaHR0cHM6Ly9wcmVzdGcuYndnLnNwb3J0cm
FkYXIuYWcvYXV0aC9yZWFsbXMvYndnX2RldiIsInN1YiI6IjIwMDE3NTNjLTVkNzQtNGVkZS1
iNjM4LWUxNTVjY2JjYzhlYyIsInR5cCI6IlJlZnJlc2giLCJhenAiOiJyZWNvbl9jbGllbnQi
LCJhdXRoX3RpbWUiOjAsInNlc3Npb25fc3RhdGUiOiI5NjYzZDM1NC0xMjg0LTQyOTMtOTIxM
C05ZDZlMDg3ZmNiZTciLCJyZWFsbV9hY2Nlc3MiOnsicm9sZXMiOlsib2ZmbGluZV9hY2Nlc3
MiLCJ1bWFfYXV0aG9yaXphdGlvbiJdfSwicmVzb3VyY2VfYWNjZXNzIjp7InJlY29uX2NsaWV
udCI6eyJyb2xlcyI6WyJyZWNvbl91c2VyIl19LCJhY2NvdW50Ijp7InJvbGVzIjpbIm1hbmFn
ZS1hY2NvdW50IiwibWFuYWdlLWFjY291bnQtbGlua3MiLCJ2aWV3LXByb2ZpbGUiXX19LCJzY

29wZSI6ImVtYWlsIHByb2ZpbGUifQ.n6ZoFdxWOYVNjc1V73y0JgQn35g9ZJ7GQ7oHTa7cikk
",
  "token_type": "bearer",
  "not-before-policy": 1589289175,
  "session_state": "9663d354-1284-4293-9210-9d6e087fcbe7",
  "scope": "email profile"
}

Recon REST endpoints

Recon rest api defines the following endpoints:

- /bookmaker/{bkId}/tickets

The tickets endpoint can be used to query a list of tickets, depending on the query parameters:

- bkId - Your unique brand Id, provided by Sportradar. Required
- dateFrom - Start date of the query. Required
- dateTo - End date of the query. Required
- userId - Query only tickets for specified userId. Optional
- productType - Query only tickets for the specified product type. Optional. Valid product type values are "VF, VFL, VFC, VFEC, VFLM, VFNC, VFWC, VFAS, VFCC, VTI, VBI, VBL, VHC, VDR, MIXED"
- ticketStatus - Query only tickets that contain the specified ticket statuses. Valid ticket statuses are defined in the rest definition. Optional
- pageIndex - Page index of the returned tickets. For example, page 1 has tickets 1-100, page 2 tickets 101-200, etc. Optional. Default = 1
- limit - Limit the number of tickets to receive. Min 1, Max 100. Optional. Default = 100

Tickets endpoint with specified ticket ID. Fetch the specific ticket from recon API

- /bookmaker/{bkId}/tickets/{ticketId}

This endpoint only has two path parameters:

- bkId - Your unique brand Id, provided by Sportradar. Required
- ticketId - Id of the ticket you wish to fetch. Required

Get ticket request example

Request:

```
GET /recon-api/bookmakers/122275/tickets/5ec3af98fab47d000b889488
Host: https://prestg.bwg.sportradar.ag
Accept: application/json
Content-Type: application/json
Authorization: Bearer
```

eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIiA6ICJaQlkxQUh0RDF6S194OTJrY
klZS0FsOEpuUTZVd1pQck5YUlBoNmxJZWRvIn0.eyJqdGkiOiI3NjAyZDJlOS0wYjY2LTRkOD
MtOWJiNC0zZjAyMTc5NzA5MzMiLCJleHAiOjE1OTM1OTk0NDksIm5iZiI6MCwiaWF0IjoxNTk
zNTk5MTQ5LCJpc3MiOiJodHRwczovL3ByZXN0Zy5id2cuc3BvcnRyYWRhci5hZy9hdXRoL3Jl
YWxtcy9id2dfZGV2IiwiYXVkIjoiYWNjb3VudCIsInN1YiI6IjIwMDE3NTNjLTVkNzQtNGVkZ
S1iNjM4LWUxNTVjY2JjYzhlYyIsInR5cCI6IkJlYXJlciIsImF6cCI6InJlY29uX2NsaWVudC
IsImF1dGhfdGltZSI6MCwic2Vzc2lvbl9zdGF0ZSI6IjIzMTUyNjA0LWU4MGEtNDY2My1hMzZ
hLWM2YTRlMGZkMzViYSIsImFjciI6IjEiLCJyZWFsbV9hY2Nlc3MiOnsicm9sZXMiOlsib2Zm
bGluZV9hY2Nlc3MiLCJ1bWFfYXV0aG9yaXphdGlvbiJdfSwicmVzb3VyY2VfYWNjZXNzIjp7I
nJlY29uX2NsaWVudCI6eyJyb2xlcyI6WyJyZWNvbl91c2VyIl19LCJhY2NvdW50Ijp7InJvbG
VzIjpbIm1hbmFnZS1hY2NvdW50IiwibWFuYWdlLWFjY291bnQtbGlua3MiLCJ2aWV3LXByb2Z

pbGUiXX19LCJzY29wZSI6ImVtYWlsIHByb2ZpbGUiLCJlbWFpbF92ZXJpZmllZCI6ZmFsc2Us
ImJrSWQiOiIxMjIyNzUiLCJwcmVmZXJyZWRfdXNlcm5hbWUiOiJ0ZXN0X3JlY29uMiJ9.NuSM
zYddxou32lRwOJHTBkDR58QQ4msyln_sW_VuvmgU6ouSrDci0CL7NUGWqVa6dMgH-
6JL81SU8UKPLgJiniHpUVIJADmc3xLZfj-lp7LMxHbZo-
8V20ZKyXeE2Xu0891UtiLtA1sqJQOjfQ0-
eFrmdUjXqelVX5dbSSTFso0KvWEgRnMqNlAdBYn_y_5xLzOeaWry3Pjf5Thi3Q0rtMIcXcbct
Nol6na2vUK-2GNxObKAXwPQzb-qFYecFnpl5BYGgE5aWXT06-
bFxyyLqtKEl00w2rV3xromspYNZeLLE2uDmP8ljq_Jddf_-bNuK4SZkAJbkHHRi9Qmt4chGg

Response:

```
HTTP/1.1 200
Cache-Control: private
Expires: Thu, 01 Jan 1970 00:00:00 GMT
Set-Cookie: JSESSIONID=4C1D6D6ADACC0A2EBD666046B1F8F9E0; Path=/; HttpOnly
X-Content-Type-Options: nosniff
X-XSS-Protection: 1; mode=block
X-Frame-Options: DENY
Content-Type: application/json;charset=UTF-8
Transfer-Encoding: chunked
Date: Wed, 01 Jul 2020 10:26:18 GMT

{<Ticket.json>}
```

Recon REST will return a list or a single ticket depending on the endpoint. The response ticket is defined in the .json and .yaml files. Example of a ticket is provided in a separate file.