

Perenso Trade Show REST API

Authentication Overview

Access to the Perenso REST API is granted to applications that can successfully retrieve an OAUTH 2.0 Access token and Refresh token from our authentication server.

Authentication Server URL: https://tradeshow.perenso.net/auth/

Use the OAuth 2.0 Client Credentials grant type to authenticate with the REST API. As described here, Client Credentials - OAuth 2.0 Simplified, send a http POST message to our Authentication URL. You will need to specify 3-4 pieces of information in the POST request.

1. grant_type – the grant type specifies the authentication grant flow you will use, and it should go in the body of the POST message with the following format:

grant_type=client_credentials

2. scope – the scope indicates the type of resource you are requesting access to. The value 100214 means you are requesting access to the REST API. It also goes in the body and is combined with other data using an ampersand (&). It has the format:

scope=100214

3. client_id – the client id is the show id for the show you are hosting. It will be provided to you by Perenso Show Support. This data can be specified in either the body of the request or base64-encoded into the authorization header with the client_secret. See the next section for an explanation of how to do this. If it is included in the body, combine it with the other data using an ampersand (&). It has the format:

client id=SHOWID

4. client_secret – the client secret is an encoded value that is essentially a password that authenticates access to the show's API. It is generated by our systems and provided to you by Perenso Show Support. This data can be specified in either the body of the request or base64-encoded into the authorization header with the client_id. If it is included in the body combine it with the other data using an ampersand(&). It has the format:

client_secret=API_SECRET



Authentication Examples

In summary, there are two http message formats the authentication will take: the authentication header approach or the message body approach.

Example Format

HTTP_METHOD url

Http-Header: value

Http-Header: value

http message body

Authentication Header Example

POST https://tradeshow.perenso.net/auth/oauth/token

Content-Type: application/x-www-form-urlencoded

Authorization: Basic SHOWID: API SECRET

grant_type=client_credentials

Notes: The underlined portion is base-64 encoded using a tool such as https://base64encode.org. Scope is not required (inferred by our systems) when using the authentication header approach.

Message Body Example

POST https://tradeshow.perenso.net/auth/oauth/token

Content-Type: application/x-www-form-urlencoded

grant_type=client_credentials&client_id=SHOWID&client_secret=SECRET&scope=100214

Notes: The scope is required when using the message body approach.



Using an Access Token for API Requests

Once you have sent the http request as described above, you will receive a response in JSON format that contains an access token, the token type, seconds until expiration, and a refresh token. It is described fully here:

https://www.oauth.com/oauth2-servers/access-tokens/access-token-response/

The access token that's returned will be good for approximately 5 minutes before it stops working, at which point you can use the refresh token to get a new access token as described in

https://www.oauth.com/oauth2-servers/making-authenticated-requests/refreshing-an-access-token/

Refresh Token Example

POST https://tradeshow.perenso.net/auth/oauth/token

Content-Type: application/x-www-form-urlencoded

grant_type=refresh_token&refresh_token=REFRESH_TOKEN&client_id=SHOWID&client_secret=SECRET

All subsequent calls to the API must include the OAUTH 2.0 access token in the http authorization header. The "Bearer" authentication scheme is used to send the access token as shown below in the example.

API Call Example

GET https://tsapi.perenso.net/Customer

Authorization: Bearer ACCESS_TOKEN



REST API Documentation

The documentation for accessing, updating, and importing new data using the REST API is hosted in an interactive website that allows you test out API requests. Obtain an access token using the instructions above and click the Authorize button on the documentation page. A dialog will pop up where you can enter your access token. Then you can use the different sections to make a request by clicking "Try it out". The header indicates the resource type, e.g. Customer. The order of each type of request you can make against a resource type such as a customer is:

- 1. Get a list of customers (GET)
- 2. Create a new customer (POST)
- 3. Update a customer (PUT)
- 4. Get a single customer (GET)
- 5. Delete a single customer (DELETE)

Each resource has an "id" that uniquely identifies it and is used to retrieve, update, or delete it. You can retrieve the id from the response returned when you create it or from the response returned from getting a list of that resource.

Access the documentation website at https://tsapi.perenso.net/docs



Custom Exports

Per request, Perenso may make available custom exports that allow the user to query data that's not available through the API. In the Exports section of the API documentation, there are two API calls, "Get available exports" and "Run custom export". Before running a custom export, the "Get available exports" method must be called to gather the necessary information to make a "Run custom export" call. Here is an example of the output from "Get available exports."

Get Available Exports

```
[
    "id": "739da9",
    "name": "Vendors",
    "parameters": []
  },
    "id": "79aag9",
    "name": "Get API Customers",
    "parameters": [
      {
        "name": "Cursor",
        "dataType": "Integer",
        "description": "Index of the current set of paged customers"
      },
        "name": "Limit",
        "dataType": "Integer",
        "description": "Number of customers to return per export"
    ]
  },
    "id": "j96479",
    "name": "Get Available Booths for Login",
    "parameters": []
  }
]
```

If there are no parameters defined for an export, such as Vendors in this example, then you only need the id to make the "Run Custom Export" call, as shown in the example following.



Run Custom Export (No Parameters)

```
POST https://tsapi.perenso.net/Export/739da9
Authorization: Bearer {token}
```

When no parameter are required, then the body of the POST API call should be empty. However, in the "Get API Customers" example, two parameters are required: Cursor and Limit. The "Get Available Exports" example shows that these are both integers. The example below illustrates how to perform this method.

Run Custom Export (With Parameters)

```
POST https://tsapi.perenso.net/Export/79aag9
```

```
Authorization: Bearer {token}
{
    "Cursor": 1,
    "Limit": 15
}
```

Since Cursor and Limit are integer types, 1 and 15 must not have quotes, see the following reference for accepted value formats for each data type.

Data Type Reference

```
"Integer": 1,
   "Text": "text",
   "DateTime": "2022-10-31T09:00:002",
   "Boolean": true
}
```