



Flyzen API Integration Technical Specifications



SCOPE

The present document is the technical specifications of Flyzen's Aviation Carbon Emission engine API

Revision History

Date	Note	API V
6/6/2020	Creation	0.8.0
1/7/2020	Addition of Agent mode	0.8.1



DATASET

The following are the data used in calling the FZ API:

parameter	definition	default	example
flightcode	Alphanumerical string flight code	NA	<i>AZ800</i>
code_airp_dep	ICAO 3-letters airport code departure	NA	<i>FCO</i>
code_airp_arr	ICAO 3-letters airport code arrival	NA	<i>BNC</i>
code_aircraft	ICAO 3-alphanumerical aircraft code	NA	<i>73H</i>

API Return

parameter	definition	default	example
kgco2_pax	kg per pax	-	233

METHODS

fzgds

[http://\[host_server\]/flyzen/api/flight/fzgds/flightcode/code_airp_dep/code_airp_arr/code_aircraft/](http://[host_server]/flyzen/api/flight/fzgds/flightcode/code_airp_dep/code_airp_arr/code_aircraft/)

fzagent

[http://\[host_server\]/flyzen/api/flight/fzagent/flightcode/](http://[host_server]/flyzen/api/flight/fzagent/flightcode/)



CALLING API | Sample Code

PHP | SAMPLE

Request:

```
$ch = curl_init();  
curl_setopt($ch, CURLOPT_URL, "[API URL]");  
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);  
curl_setopt($ch, CURLOPT_HTTPAUTH, CURLAUTH_ANY);  
curl_setopt($ch, CURLOPT_USERPWD, "[USERNAME]:[PASSWORD]");  
$result = curl_exec ($ch);  
curl_close ($ch);
```

This is the PHP code for authentication. Client-code to replace the API URL, USERNAME, and PASSWORD with assigned account parameters

Sample:

```
$ch = curl_init();  
curl_setopt($ch, CURLOPT_URL, "http://ec2-54-69-66-137.us-  
west-2.compute.amazonaws.com/flyzen/api/flight/fzgds/ms791/CAI/fco/73h  
");  
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);  
curl_setopt($ch, CURLOPT_HTTPAUTH, CURLAUTH_ANY);  
curl_setopt($ch, CURLOPT_USERPWD, "hamid:fzPass");  
$result = curl_exec ($ch);  
curl_close ($ch);
```

Return:

JSON string kgco2_pax, carrying value of CO2 emissions per passenger (in kg)

Result:

```
{"kgco2_pax": "233.00029"}
```



Javascript | SAMPLE

Request:

```
var xhttp = new XMLHttpRequest();
xhttp.open("GET", "[API URL]", false);
xhttp.setRequestHeader("Content-type", "application/json");
xhttp.setRequestHeader("Authorization", "Basic [BASE64 ENCRYPT]");
xhttp.send();
var response = JSON.parse(xhttp.responseText);
```

This is the Javascript code for authentication. Client-code to replace the API URL, USERNAME, and PASSWORD with assigned account parameters, and replacing BASE64 ENCRYPT with a Base64 encryption type of text include "USERNAME:PASSWORD" separated with a colon (using a javascript function for encoding authorisation like this `btoa("USERNAME:PASSWORD")`)

Sample:

```
var xhttp = new XMLHttpRequest();
xhttp.open("GET", "http://ec2-54-69-66-137.us-west-2.compute.amazonaws.com/flyzen/api/flight/fzgds/ms791/CAI/fco/73h", false);
xhttp.setRequestHeader("Content-type", "application/json");
xhttp.setRequestHeader("Authorization", "Basic "+btoa("hamid:fzPass"));
xhttp.send();
var response = JSON.parse(xhttp.responseText);
```

Return:

```
{"kgco2_pax": "233.00029"}
```

