

Analytics API Architecture

Request / Response Format

JSON is used for the request and response format. JSON is a lightweight and portable format that maintains human-readability.

When making POST or PUT requests, the request parameters MUST be JSON-encoded and placed in the request body. When making GET requests, the request parameters MUST be JSON-encoded, then URI-encoded and placed directly in the query string.

Clients should expect JSON-encoded responses for every request, even those that result in an error.

ON THIS PAGE

- Request / Response Format
- HTTP Method
- Date / Time Format
- Ellipses ("..."s)
- GET Methods and Query Strings

HTTP Method

Each method defines the HTTP method required depending on what the usage is. For example, if the method were used to simply get data, the HTTP method would be GET. If the method is used to delete data it uses DELETE.

Date / Time Format

The date and time MUST be expressed in RFC 3339 format: YYYY-MM-DDThh:mm:ssZ

- All times must be in the UTC time zone and indicated with a "Z". This is done to mitigate issues regarding Daylight Saving Time (DST).
- No fractional seconds are allowed.
- See section 5.6 of [Date and Time on the Internet: Timestamps](#) for more information.

Ellipses ("..."s)

Whenever an ellipsis ("...") appears in the JSON body, treat it as a placeholder for additional instances of the data that immediately precedes it.

GET Methods and Query Strings

The GET methods outlined in this document will use query strings, not JSON bodies, when making a request to a URL. This requires the user to convert JSON into a URL-encoded query string. Here's an example:

```
{
  "tags" :
  {
    "any" :
    [
      "Zelda",
      "Link"
    ]
  }
}
```

Minified fragment (using http://bigaqua.org/minify_json.html).

```
{ "tags" : { "any" : [ "Zelda" , "Link" ] } }
```

URL-encoded, minified fragment (using <http://www.url-encode-decode.com/>):

```
%7B%3Ftags%3F%3A%7B%3Fany%3F%3A%5B%3FZelda%3F%2C%3FLink%3F%5D%7D%7D
```

This URL-encoded, minified fragment is the query string. In order to compose a request, a "?" is appended to the end of the request URL, then the URL-encoded, minified fragment is added after that:

```
http://localhost:8080/v1.0/events?%7B%3Ftags%3F%3A%7B%3Fany%3F%3A%5B%3FZelda%3F%2C%3FLink%3F%5D%7D%7D
```