

Weather Service API Documentation

Request Types

Authentication

POST: <https://hostname/api/weather/authenticate>

In the body of the request you need to include your username and password in JSON format like this:

```
{
  "Username": "John Doe",
  "Password": "12345678"
}
```

This request returns you a JSON Web Token (JWT) which you must include in every request to get authenticated.

Example response:

```
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiIxMjM0NTY3ODkwIiwibmFtZSI6IkpvaG4gRG9lIiwiaWF0IjoxNTE2MzIyMDQyLCJpcmlhIjoiPcmVIPbcZl9j7qFzXRAeSyhtuBnHQNMuLHsaG5l804A
```

In order to use the JWT when a request requires authentication add a header to the request with the following values:

Key	Value
Authorization	Bearer [Insert JWT here]

Weather Providers List

GET: <https://hostname/api/weather/providers>

NOTE: Authorization required. Check the authentication section.

This request returns you a list of all the activated providers so you can use the appropriate provider ID when sending weather requests.

Example response:

```
[
  {
    "id": 0,
    "name": "WeatherProvider1"
  },
  {
    "id": 1,
    "name": "WeatherProvider2"
  }
]
```

Weather

GET: <https://hostname/api/weather/{providerID},{latitude},{longitude}>

Example: GET <https://hostname/api/weather/0,51.528308,-0.3817765>

You can optionally specify the system of measurement by setting the “units” parameter in the URL like this:

GET <https://hostname/api/weather/0,51.528308,-0.3817765?units=metric>

The available options are “metric” and “imperial”. The default value is “metric”.

NOTE: Authorization required. Check the authentication section.

NOTES:

This request returns you the current weather data and the daily forecast.

You will receive the status 400: “Bad Request” if the provider you have specified has been disabled. It’s useful to use the `api/weather/providers` request in that case to find an alternative solution.

If you receive the status 503: “Service Unavailable”, then there’s most likely a problem with the weather provider. You can try again later or use a different weather provider temporarily.

It’s recommended to be consistent with one weather provider unless there’s an issue. However, in case you switch for whatever reason, you may receive a cached response from your previous provider if that response hasn’t expired.

Data explanation

General data:

expiration [string]

Unix UTC time when the response is removed from the server cache.

provider [string]

The name of the weather provider.

units [string]

The system of measurement.

cityName [string] [optional]

The name of the area chosen from the weather provider based on the coordinates given.

country [string] [optional]

The country detected from the weather provider.

coords.lat [double]

Latitude. It may be different than the one given in the URL.

coords.lon [double]

Longitude. It may be different than the one given in the URL.

Weather data:

now [forecasts]

current [optional]

date [int64]

UNIX Utc time.

temp [float] [optional]

Current temperature.

tempMin [float] [optional]

Lowest temperature of the day.

tempMax [float] [optional]

Highest temperature of the day.

humidity [int32] [optional] [%]

weatherType [string] [optional]

Can be used for icons.

weatherDescription [string] [optional]

Can be used as the weather summary.

cloudiness [int32] [optional] [%]

windSpeed [float] [optional]

windDeg [float] [optional]

The wind direction. 0 or 360 is North and 180 is South.

Example response:

```
{
  "expiration": "2019-08-21T09:32:42.2221862Z",
  "provider": "MyWeatherProvider",
  "units": "Metric",
  "cityName": "Greenford",
  "country": "GB",
  "coords": {
    "lat": 51.5287,
    "lon": -0.3551
  },
  "now": {
    "date": 1566378162,
    "temp": 17.21,
    "humidity": 72.0,
    "weatherType": "Clear",
    "weatherDescription": "clear sky",
    "cloudiness": 0,
    "windSpeed": 1.5,
    "windDeg": 220.0
  },
  "forecasts": [
    {
      "date": 1566388800,
      "tempMin": 13.0,
      "tempMax": 21.23,
      "humidity": 64.0,
      "weatherType": "Clouds",
      "weatherDescription": "broken clouds",
      "cloudiness": 79,
      "windSpeed": 3.65125,
      "windDeg": 223.095291
    },
    . . .
  ]
}
```