

Weather Web Application API Documentation

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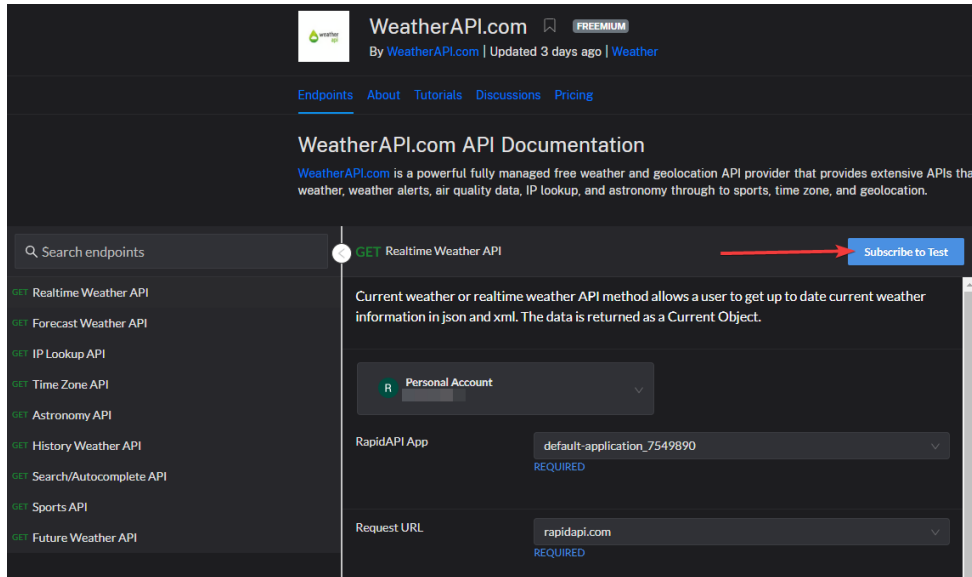
API Source

Name: WeatherAPI.com

URL: <https://rapidapi.com/weatherapi/api/weatherapi-com/>

API Key Generation Instructions:

- 1) Enter the URL link above
- 2) Click on “Subscribe to Test”



WeatherAPI.com **PREMIUM**
By WeatherAPI.com | Updated 3 days ago | Weather

Endpoints About Tutorials Discussions Pricing

WeatherAPI.com API Documentation

WeatherAPI.com is a powerful fully managed free weather and geolocation API provider that provides extensive APIs that provide weather, weather alerts, air quality data, IP lookup, and astronomy through to sports, time zone, and geolocation.

Search endpoints

- Realtime Weather API
- Forecast Weather API
- IP Lookup API
- Time Zone API
- Astronomy API
- History Weather API
- Search/Autocomplete API
- Sports API
- Future Weather API

GET Realtime Weather API [Subscribe to Test](#)

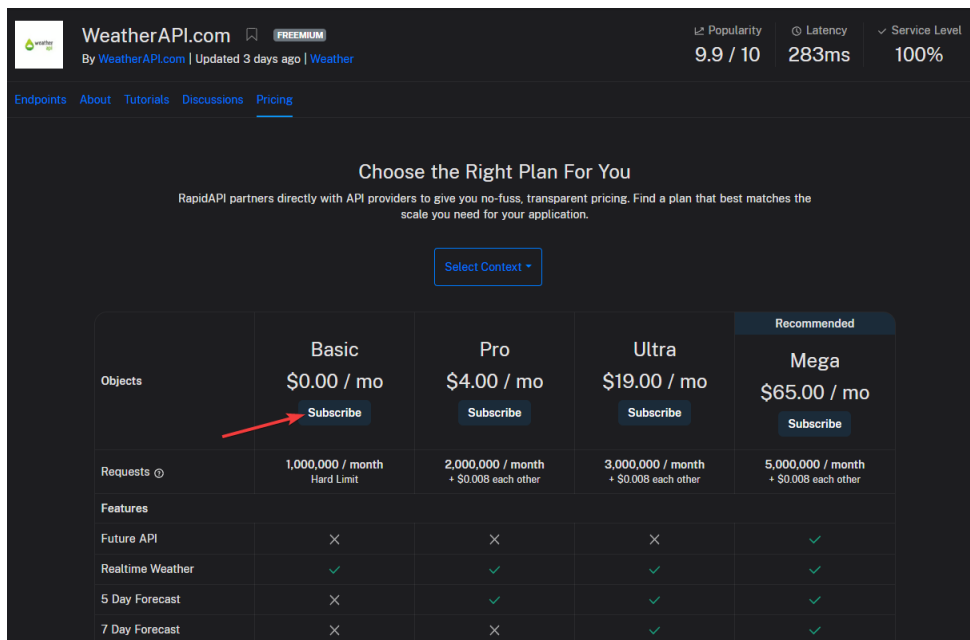
Current weather or realtime weather API method allows a user to get up to date current weather information in json and xml. The data is returned as a Current Object.

Personal Account

RapidAPI App: default-application_7549890 REQUIRED

Request URL: rapidapi.com REQUIRED

- 3) Click on “Subscribe” under the Basic Plan



WeatherAPI.com **PREMIUM**
By WeatherAPI.com | Updated 3 days ago | Weather

Popularity: 9.9 / 10 Latency: 283ms Service Level: 100%

Endpoints About Tutorials Discussions Pricing

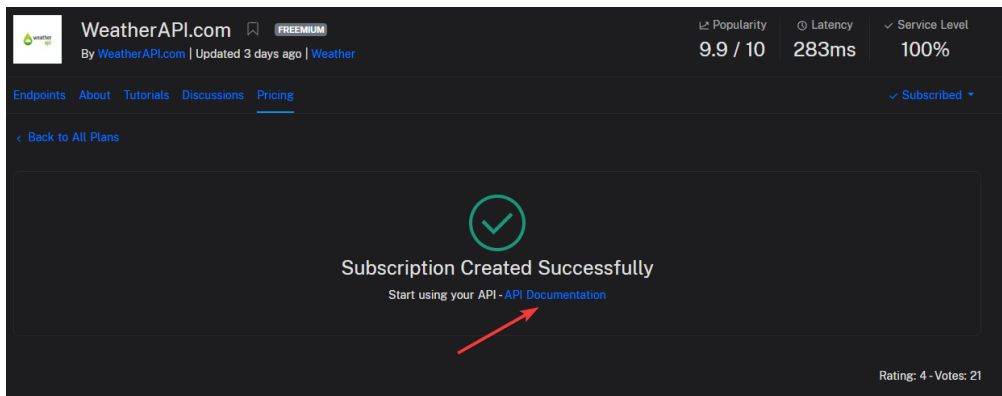
Choose the Right Plan For You

RapidAPI partners directly with API providers to give you no-fuss, transparent pricing. Find a plan that best matches the scale you need for your application.

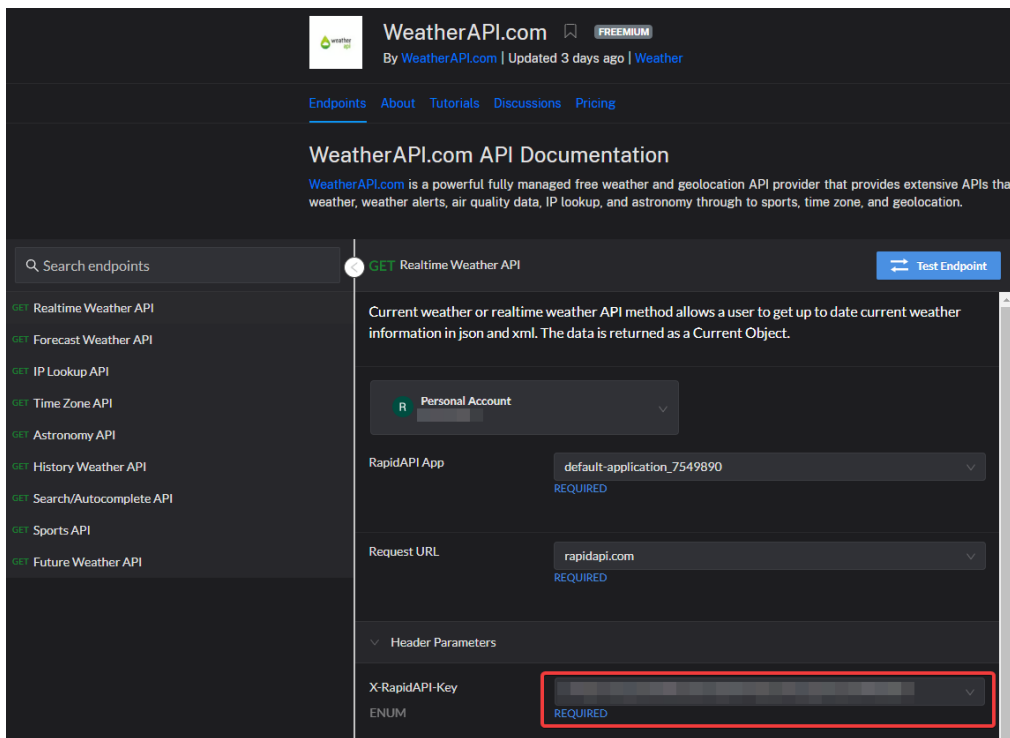
Select Context

	Basic	Pro	Ultra	Recommended Mega
Objects	\$0.00 / mo Subscribe	\$4.00 / mo Subscribe	\$19.00 / mo Subscribe	\$65.00 / mo Subscribe
Requests	1,000,000 / month Hard Limit	2,000,000 / month + \$0.008 each other	3,000,000 / month + \$0.008 each other	5,000,000 / month + \$0.008 each other
Features				
Future API	×	×	×	✓
Realtime Weather	✓	✓	✓	✓
5 Day Forecast	×	✓	✓	✓
7 Day Forecast	×	×	✓	✓

- 4) Upon successful subscription, click on “API Documentation” link



- 5) You'll be able to get your personal API Key from the field “X-RapidAPI-Key”. Copy this API Key for usage in this web application

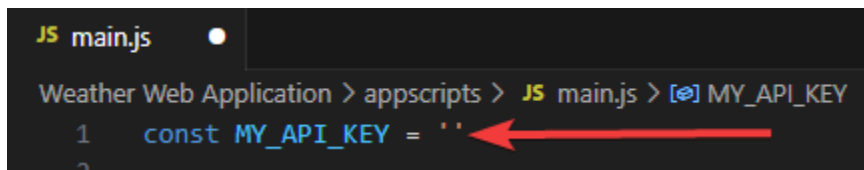


Introduction - Web Application

This is a single-page weather application, where users can retrieve information about the weather in specific countries.

To get started with using the application for yourself:

- 1) Download the entire application from this repository
- 2) Open up main.js using your IDE at this file location 'Weather Web Application\appscripts'
- 3) Paste the API Key that you have obtained previously at [RapidAPI](#) between the two quotation marks for variable MY_API_KEY as shown below:

A screenshot of a code editor with a dark theme. The top bar shows 'JS main.js'. Below it, a breadcrumb trail reads 'Weather Web Application > appscripts > JS main.js > MY_API_KEY'. The code line '1 const MY_API_KEY = ''' is visible, with a red arrow pointing to the space between the two single quotes, indicating where to paste the API key.

```
JS main.js
Weather Web Application > appscripts > JS main.js > MY_API_KEY
1 const MY_API_KEY = ''
```

- 4) The weather application should now work as intended once you open it up in your browser

API Data Usage

Weather API Endpoints used in application:

1. Realtime Weather API
 - a. All data from this endpoint is collected and stored in the variable "currentCountryData". Some of the data in currentCountryData will be subsequently retrieved and used by the following javascript functions:
 - i. realtimeWeatherAPIResponse()
 - ii. weatherDataUpdate()
 - iii. countryDetailLoad()
 - iv. countryCurrentDate()
 - v. countryRewindDate()
2. Forecast Weather API
 - a. All data from this endpoint is collected and stored in the variable "currentForecastData". Some of the data in currentForecastData will be subsequently retrieved and used by the following javascript functions:
 - i. forecastWeatherAPIResponse()
 - ii. forecastUpdater()
3. IP Lookup API
 - a. All data from this endpoint is collected and stored in the variable "ipData". Some of the data in ipData will be subsequently retrieved and used by the following javascript functions:
 - i. countryDetailLoad()

4. History Weather API
 - a. All data from this endpoint is collected and stored in the variable "currentHistoryData". Some of the data in currentHistoryData will be subsequently retrieved and used by the following javascript functions:
 - i. historyWeatherAPIResponse()
 - ii. historyUpdater()

API Data used in Application Javascript Functions:

1. startupProcess()
 - a. 'ipData' data object (IP Lookup API)
 - b. 'currentCountryData' data object (Realtime Weather API)
2. appDataUpdater()
 - a. 'currentCountryData' data object (Realtime Weather API)
 - b. '.location' data object (Realtime Weather API)
3. countryDetailLoad()
 - a. '.city' data object (IP Lookup API)
 - b. '.country_name' data object (IP Lookup API)
 - c. '.localtime_epoch' data object (IP Lookup API)
 - d. '.tz_id' data object (IP Lookup API)
 - e. '.name' data object (Realtime Weather API)
 - f. '.country' data object (Realtime Weather API)
 - g. '.localtime_epoch' data object (Realtime Weather API)
 - h. '.tz_id' data object (Realtime Weather API)
4. dateProcessor()
 - a. Epoch data object passed from input API Source
 - b. Time Zone data object passed from input API Source
5. weatherDataUpdate()
 - a. '.current.condition.text' data object from input API Source
 - b. '.current.condition.icon' data object from input API Source
 - c. '.current.temp_c' data object from input API Source
 - d. '.current.humidity' data object from input API Source
 - e. '.current.gust_mph' data object from input API Source
 - f. '.current.wind_mph' data object from input API Source
6. countryCurrentDate()
 - a. 'currentCountryData.location.localtime' data object (Realtime Weather API)
7. countryRewindDate()
 - a. 'currentCountryData.location.localtime_epoch' data object (Realtime Weather API)
8. forecastUpdater()
 - a. currentForecastData variable (Forecast Weather API)
9. historyUpdater()
 - a. currentHistoryData variable (History Weather API)

10. iconBuilder()

- a. `'forecast.forecastday[array_num].day.condition.icon'` image object (Forecast Weather API & History Weather API)
- b. `'forecast.forecastday[array_num].date_epoch'` data object (Forecast Weather API & History Weather API)
- c. `'location.tz_id'` data object (Forecast Weather API & History Weather API)
- d. `'forecast.forecastday[array_num].day.avgtemp_c'` data object (Forecast Weather API & History Weather API)

Purpose of API choice

The WeatherAPI.com API was chosen for the purpose of this single-page application is largely due to its high request limits for their free basic plan. The application will be usable for a long period of time even while using a free API. The API also provides an extensive amount of data and endpoint options to allow for easier implementation.