# Weather Forecast API

## Introduction

The Weather Forecast API allows developers to access weather information for various locations. It provides current weather data and a 7-day forecast for the specified location.

## Base URL

```

https://api.weatherforecast.com/v1

```

All API endpoints are relative to this base URL.

## Authentication

To use the Weather Forecast API, you need to obtain an API key by signing up on our website. The API key should be included in the request headers for authentication.

```http

GET /weather?location=New%20York HTTP/1.1

Host: api.weatherforecast.com

Authorization: API\_KEY YOUR\_API\_KEY

```

## Endpoints

### Get Current Weather

Retrieves the current weather data for a specific location.

```http

GET /weather?location={location}

```

\*\*Parameters:\*\*

- `location` (required): The name of the location you want to get the weather for. It should be URL-encoded.

\*\*Example Request:\*\*

```http

GET /weather?location=New%20York HTTP/1.1

Host: api.weatherforecast.com

Authorization: API\_KEY YOUR\_API\_KEY

```

\*\*Example Response:\*\*

```json

{

"location": "New York",

"temperature": 28.5,

"humidity": 60,

"description": "Partly cloudy",

"wind\_speed": 12.5,

"wind\_direction": "NE"

}

```

### Get 7-Day Forecast

Retrieves the 7-day weather forecast for a specific location.

```http

GET /forecast?location={location}

```

\*\*Parameters:\*\*

- `location` (required): The name of the location you want to get the forecast for. It should be URL-encoded.

\*\*Example Request:\*\*

```http

GET /forecast?location=New%20York HTTP/1.1

Host: api.weatherforecast.com

Authorization: API\_KEY YOUR\_API\_KEY

```

\*\*Example Response:\*\*

```json

{

"location": "New York",

"forecast": [

{

"date": "2023-08-05",

"temperature": {

"min": 25,

"max": 32

},

"description": "Partly cloudy"

},

{

"date": "2023-08-06",

"temperature": {

"min": 24,

"max": 31

},

"description": "Sunny"

},

// ... (data for the next 5 days)

]

}

```

## Error Handling

The Weather Forecast API will return appropriate HTTP status codes for different scenarios. If an error occurs, the response will include an error message with a description.

Example error response:

```json

{

"error": "Location not found"

}

```

## Rate Limiting

The API enforces rate limiting to prevent abuse. The default rate limit is 1000 requests per day per API key. If you exceed the limit, you will receive a `429 Too Many Requests` response.

## Conclusion

This document provides an overview of the Weather Forecast API, including the endpoints, parameters, and example requests/responses. Start using the API to get weather data for your applications now! If you have any questions or need further assistance, please contact our support team at support@weatherforecast.com.