

# Weather API V1 - Detailed Design

Document Control Information

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## 1 API Description

Weather API V1 is an API that provides geo information and weather details for a city.

## 2 API Specifications

At high level, Weather API V1 resource structure is outlined below

Resources	Verb	URI
geo	GET	/data/v1/geo
geo	GET	/data/v1/geo/{country}/cities
weather	GET	/data/v1/weather?country=Australia&city=Melbourne

### 2.1 RAML

A Contract-first design approach is followed and employs RAML for API definition.

A Mock endpoint with hardcoded response are available below for the consumers to verify the connectivity and response message structure.

<https://anypoint.mulesoft.com/mocking/api/v1/links/1c074054-8082-4c17-be88-7ab937568057/geo>

<https://anypoint.mulesoft.com/mocking/api/v1/links/1c074054-8082-4c17-be88-7ab937568057/geo/Australia/cities>

<https://anypoint.mulesoft.com/mocking/api/v1/links/1c074054-8082-4c17-be88-7ab937568057/weather?country=Australia&city=Melb>

## 3 GET GEO DETAILS

### 3.1 API Specification

GET /data/v1/geo	
Description	Retrieve list of countries along with countryCode
200 Status Code	API responds successfully with data retrieved from Mock Service
404 Status Code	Resource Not found
405 Status Code	Method Not Allowed
400 Status Code	Bad Request
500 Status Code	Any other business or technical error
Sample Response	<pre>[   {     "Country": "Australia",     "Code": "AUD"   },   ]</pre>

	<pre>{   "Country": "India",   "Code": "IN" }</pre>
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4 GET CITIES BY COUNTRY NAME

4.1 API Specification

GET data/v1/geo/{country}/cities	
Description	Retrieve list of cities for a country
URI Parameters	<b>country:</b> type: string Country Name e.g. Australia
200 Status Code	API responds successfully with data retrieved from Mock Service
404 Status Code	Resource Not found
405 Status Code	Method Not Allowed
400 Status Code	Bad Request
500 Status Code	Any other business or technical error
Sample Response	<pre>[   {     "Country": "Australia",     "City": "Melbourne"   },   {     "Country": "Australia",     "City": "Sydney"   } ]</pre>

## 5 GET WEATHER DETAILS

### 5.1 API Specification

GET /data/v1/weather	
Description	Retrieves weather details
Query Parameters	<b>country:</b> <i>type:</i> string Country Name e.g. Australia  <b>city:</b> <i>type:</i> string City Name e.g. Melbourne
200 Status Code	API responds successfully with data retrieved from Mock Service
404 Status Code	Resource Not found
405 Status Code	Method Not Allowed
400 Status Code	Bad Request
500 Status Code	Any other business or technical error
Sample Response	<pre>{   "Location": "Melbourne",   "Time": "11 AM",   "Wind Speed": "15 km per hour",   "Visibility": "10 km",   "SkyConditions": "sunny",   "Temperature": 18,   "DewPoint": "2 C",   "RelativeHumidity": 35,   "Status": "Normal" }</pre>

## 6 BACKEND URLs

Get Weather : <http://localhost:8000/mockGlobalWeatherSoap12>

Get City by Country Name : <http://localhost:8088/mockGlobalWeatherSoap>







