



Angular http

GFT INTERNAL TRAINING

INNOVATE. TRANSFORM. DELIVER.

Example rest service

<https://restcountries.eu/rest/v2/name/ireland>

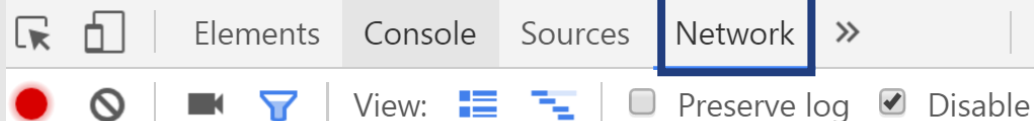


The screenshot shows a web browser window with the address bar displaying the URL <https://restcountries.eu/rest/v2/name/ireland>. The page content displays a JSON response from the REST Countries API for Ireland. The JSON object includes fields for name, top level domain, alpha2 and alpha3 codes, calling codes, capital, alt spellings, region, population, latitude and longitude, demonym, area, gini index, timezones, borders, native name, numeric code, currencies, languages, and translations.

```
[{"name": "Ireland", "topLevelDomain": [".ie"], "alpha2Code": "IE", "alpha3Code": "IRL", "callingCodes": ["353"], "capital": "Dublin", "altSpellings": ["IE", "Éire", "Republic of Ireland", "Poblacht na hÉireann"], "region": "Europe", "population": 6378000, "latlng": [53.0, -8.0], "demonym": "Irish", "area": 70273.0, "gini": 34.3, "timezones": ["UTC"], "borders": ["GBR"], "nativeName": "Éire", "numericCode": "372", "currencies": [{"code": "EUR", "name": "Euro", "symbol": "€"}], "languages": [{"iso639_1": "ga", "iso639_2": "gle", "name": "Irish", "nativeName": "Gaeilge"}, {"iso639_1": "en", "iso639_2": "eng", "name": "English", "nativeName": "English"}], "translations":
```

Inspecting data in Chrome DevTools

```
[{"name": "Spain", "topLevelDomain":  
[".es"], "alpha2Code": "ES", "alpha3Code": "ESP", "callingCodes":  
["34"], "capital": "Madrid", "altSpellings": ["ES", "Kingdom of  
Spain", "Reino de  
España"], "region": "Europe", "population": 46438422, "latlng":  
[40.0, -4.0], "demonym": "Spanish", "area": 505992.0, "gini": 34.7, "ti
```



Filter

☐ Regex ☐ Hide data URLs

All | XHR | JS | CSS | Img | Media | Font | Doc | WS | Manifest | Other

20 ms

40 ms

60 ms

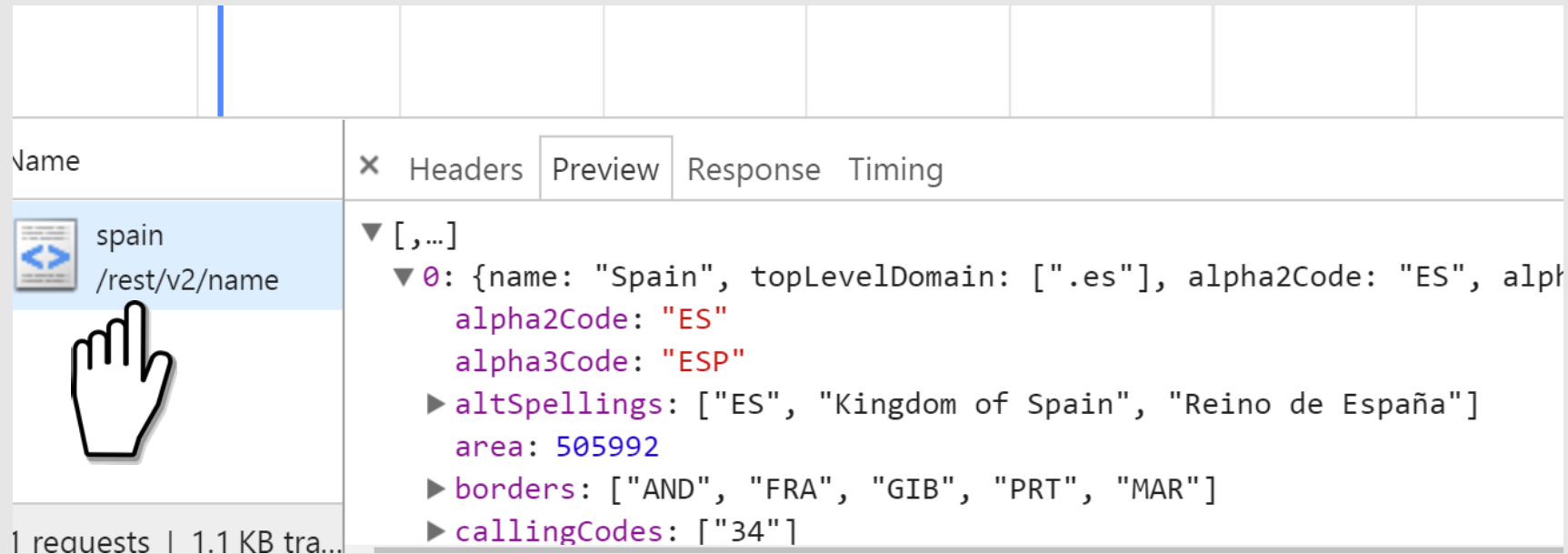
80 ms

100 ms

Recording network activity...

Perform a request or hit **F5** to record the reload.

Inspecting data in Chrome DevTools



The screenshot shows the Chrome DevTools Network tab. A request to 'spain /rest/v2/name' is selected. The 'Preview' tab is active, displaying the response data in a structured format. A hand icon points to the selected request.

1 requests | 1.1 KB tra...

Name

✕ Headers Preview Response Timing

spain /rest/v2/name

▼ [,...]

- ▼ 0: {name: "Spain", topLevelDomain: [".es"], alpha2Code: "ES", alpha2Code: "ES", alpha3Code: "ESP", altSpellings: ["ES", "Kingdom of Spain", "Reino de España"], area: 505992, borders: ["AND", "FRA", "GIB", "PRT", "MAR"], callingCodes: ["34"]}

hands on (angular app using http)

Enter a country

Find the capital

Enter a country

italy

Find the capital

Rome

```
export class CountriesComponent {  
  
  countryName: string;  
  capital: string;  
  
  constructor(private countriesService: RESTCountriesService) { };  
  
  showCapital(){  
    this.countriesService.getCountry(this.countryName)  
      .subscribe( data => this.capital = data[0].capital );  
  }  
}
```

- **Angular Http client** communicates with the server using a HTTP request/response protocol
- Http client is one of a family of services in the Angular HTTP library
- include HttpClientModule in the imports for the root NgModule allow access HTTP services from anywhere in the application

```
import { HttpClientModule } from '@angular/common/http'
```

```
@NgModule({  
  imports: [ BrowserModule,  
            FormsModule,  
            HttpClientModule  
  ],  
})
```

Works with Angular 6 or greater

restcountries.service.ts

```
import { Injectable } from '@angular/core';  
import { HttpClient } from '@angular/common/http';  
import { Observable } from 'rxjs';
```

```
@Injectable()
```

```
export class RESTCountriesService {  
  BASEURI = "https://restcountries.eu/rest/v2"  
  constructor( private http:HttpClient) { }
```

```
  getCountry( countryName: string ): Observable<any> {  
    return this.http  
      .get(`${this.BASEURI}/name/${countryName}`)  
  }  
}
```

due to its asynchronous nature, the HTTP request is usually placed in services

Works with Angular 6 or greater

Version Angular 2,4,5

```
import { HttpClientModule } from '@angular/http';
```

```
@NgModule({  
  declarations: [  
    AppComponent,  
    CountriesComponent  
  ],  
  imports: [  
    BrowserModule,  
    FormsModule,  
    HttpClientModule  
  ],  
})
```

```
import { Injectable } from '@angular/core';
import { Http } from '@angular/http';
import { Observable } from 'rxjs/Observable';
import 'rxjs/add/operator/map';
@Injectable()
export class RESTCountriesService {
  BASEURI = "https://restcountries.eu/rest/v2";
  constructor( private http:Http) { }

  getCountry( countryName: string ): Observable<any> {
    return this.http
      .get(` ${this.BASEURI}/name/${countryName}` )
      .map((response) => response.json())
  }
}
```

restcountries.service.ts

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Shaping the future of digital business

GFT Internal Technical Training

Eduardo García Ibaseta

eduardo.garcia-ibaseta@gft.com
+34 935 639476

GFT IT Consulting, S.L.

Av. Alcalde Barnils, 69-71

08174 Sant Cugat del Vallès (BARCELONA)