# Geography

## Responsibilities

The geography component is responsible to hold geographic information, like a list of countries, and for each country a hierarchy of divisions (state, region, province, city, village…).

It will allow to centralize those information, so we will avoid duplicates, typing mistakes, and it will ease functionalities like searching contacts or student.. in a specific geographic area.

Ideally, this database will be populated from official sources (like geonames.org or gadm.org).

However, those data are not always accurate, may not match what PN users will expect, and are not so easy to utilize as is.

So a simpler solution is to provide an interface, where the user can enter those information him/herself. Then, those official sources may be displayed, and the user can reuse them or part of them, so the data entry will be faster.

## Data



A country is identified by its ISO code (2-letter). A country may be under another country (sovereign).

Each country may be divided into administrative divisions. Several levels of divisions can be specified, each level is provided with a name (local name and English name) through CountryDivision.

The name of a specific country or administrative division can be provided in different languages.

Each country or administrative division may have its geographic location through latitude and longitude, that may help integration to a map provider, or to provide functionalities like ‘around this city’.

## Functionalities

The geography component provides services to retrieve and search countries and administrative divisions.

It also provides pages/part of pages to allow specifying a geographic location (which can be used to enter a postal address, or to search for something attached to a specific geographic area…).

Finally, the component provides functionalities to edit the data.