HERE Maps API - How to change map zoom level and center point

This article explains how to change map zoom level and map center.

Prerequisites

HERE Maps API supported web browser (basically any modern web browser)

Important note about maps credentials

Nokia provides several services options within the Maps API offering. The service is free to use, but you must obtain and use authentication and authorization credentials to use the services. Please read the Terms and Conditions and check the Pricing Plans page to decide which business model best fits your needs. Authentication requires unique Maps API credentials, namely an AppId and a token. You can get these credentials free for free following the instructions here

Implementation

You can change the parameters for the map view by passing them to your map instance (handled in the article "Add Maps To Any Web Page") that define the zoom level and center point for the map can be set to suit your purposes. The map will default in our example to Berlin, Germany but you can of course change the center to point to any other location on this planet.

Map centre

The centre of the map is defined by the `center` property and is defined by a `nokia.maps.geo.Coordinate`

```
Constructor detail:

The coordinate represents a geographical position. As most of the use cases currently do
not consider height information,
the altitude is defined as optional. If a corresponding type is already provided by the
platform the product must not implement this class.
new nokia.maps.geo.Coordinate(lat, lng, [alt, [skipValidation]])

Parameters:
{Number}     lat     //Latitude in degrees. -90 <= latitude <= 90. Values outside of
range throw an {{Icode| IllegalArgument}} error.
{Number}     lng     // Longitude in degrees. -180 <= longitude <= 180. Values outside
of range throw an {{Icode| IllegalArgument}} error.
{Number}     [alt]: undefined     // Altitude in meters.
{Boolean}     [skipValidation]: false     //If true, the validation of the latitude,
longitude and altitude values is skipped.
```

We will create a new `Coordinate`, but will leave out altitude, and we want the values to be validated, so we will leave the `skipValidation` to it's default value.

```
new nokia.maps.geo.Coordinate (lat, lng, [alt, [skipValidation]])
```

The coordinate represents a geographical position. Altitude is defined as optional. (For more details on this see the Maps API reference).

Note: There is an article about the The coordinate system and geocoordinates. You may want to check it out for more detailed information on the geocoordinate system used in HERE Maps and some generic information about the world coordinate system.

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In our example we will use the latitude and longitude values for the city of Düsseldorf, Germany : 51.233333°N, 6.783333°E These will be passed in the form `[51.233333, 6.783333]`. The latitude and longitude can be passed as a floating point number, i.e. `13.4` is just as valid as e.g. `13.456789`

ZoomLevel

The HERE Maps `ZoomLevel` is a number between the minimum and maximum zoom values and can be queried with the `minZoomLevel()` and `maxZoomLevel()` methods.

At the moment, the API offers zoom levels between 0 (zero) and 20. This is reflected by the UI Zoom Bar on the Map view. The zoom levels that the UI Zoom Bar uses are:

Level Name
14 Street
11 City
8 County
3 Country

How to request the min and max zoom levels of the current map:

```
map.minZoomLevel   // Could return for example "0" (zero)
map.maxZoomLevel   // Could return for example "20"
```

Example code

After setting up the same code as in the Add Maps To Any Web Page example, simply call the function defined below:

```
function setCenterAndZoom(map){
 map.set('zoomLevel', 10);
 map.set('center', [51.23, 6.78]);
}
```

When you have defined these, the map should open on Country level zoom, with the city of Düsseldorf, Germany in the middle of the map view.

A working example can be found at:

http://rawgithub.com/heremaps/examples/master/maps_api_for_javascript/simple-examples/map-set-center-and-zoom-level.html

Zoom level

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`zoomLevel` - The map zoom level is defined by this property

The `zoomLevel` is a number between minimum and maximum values and can be queried with the `minZoomLevel()` and `maxZoomLevel()` methods.

At the moment, the API offers zoom levels between 0 (zero) and 20. This is reflected by the UI component ZoomBar on the Map view. The zoom levels used by the UI map zoom component are:

```
Level Name
14 Street
11 City
8 County
3 Country
```

How to request the min and max zoom levels of the current map:

```
map.minZoomLevel   <-  Could return example "0" (zero)
map.maxZoomLevel   <-  Could return example "20"
```

For more on the HERE Maps API

Please check out the HERE Maps API full documentation and API reference here:

- HERE Maps API

You may also access the interactive API explorer

- API explorer

And additional examples on GitHub

- HERE Maps on Github

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