HERE Maps API - How to calculate a route between two points

This article explains how to geo-code two locations and show the route between them using HERE Maps (providing that a valid route can be found).

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

In this example we will define two `waypoints` for the `route`; the geographical location of Berlin, Germany to the one of Paris, France. To be able to use routing we need to initialize a new `nokia.maps.routing.Manager`. We will cast the `waypoints` to it with some additional parameters. We want the `shortest` route with `car` and no toll roads with `avoidTollroad`, plus having the `trafficMode` set to `default`.

Example code

This example has all the required HTML and JavaScript code to perform the routing between Berlin, Germany and Paris, France. Remember to add in your own AppId and Token.

Note: In order to use routing services, the `with` parameter of the script element's `src` attribute must be set to `?with=all`

```
function makeRouteRequest(){
 var waypoints = new nokia.maps.routing.WaypointParameterList();

 waypoints.addCoordinate(
  new nokia.maps.geo.Coordinate(52.500556, 13.398889));  // Berlin, Germany
 waypoints.addCoordinate(
  new nokia.maps.geo.Coordinate(48.856667, 2.350833));   // Paris, France

 var modes = [{
  type: "shortest",
  transportModes: ["car"],
  options: "avoidTollroad",
  trafficMode: "default"
 }];

 router = new nokia.maps.routing.Manager();
 router.addObserver("state", onRouteCalculated);
 router.calculateRoute(waypoints, modes);
}
```

```
function onRouteCalculated(observedRouter, key, value){
 if (value == "finished") {
```


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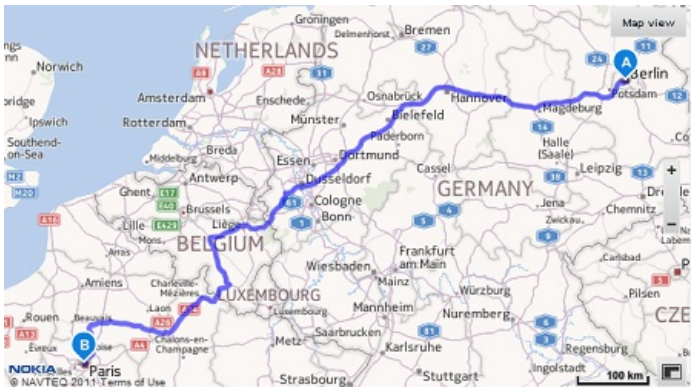
```
    var routes = observedRouter.getRoutes();

    //create the default map representation of a route
    var mapRoute =
     new nokia.maps.routing.component.RouteResultSet(
      routes[0]).container; //first option found
    map.objects.add(mapRoute);

    //Zoom to the bounding box of the route
    map.zoomTo(mapRoute.getBoundingBox(), false, "default");
   } else if(value == "failed") {
    alert("The routing request failed.");
   }
  }
```



A working example can be found at:

http://heremaps.github.io/examples/examples.html#routing-from-a-to-b

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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