

## **HERE Map Rendering**

# Highly customizable graphics and real-time map data that accurately reflect the world

HERE Location Services enable map display for over 200 countries and territories around the world. They provide access to accurate, comprehensive and highly interactive maps, in a variety of traditional and specialized views. They're also available with different zoom levels and display options, thanks to map imaging, and map and vector tiling technologies. Enable visualization, interaction and styling of HERE Map Rendering. Use custom map data for multiple screens, devices, and platforms.

Map Rendering enables map visualization via a variety of rendering technologies: client side, with HERE or third-party rendering libraries utilizing vector tiles, or through pre-rendered map tiles or images. In addition, our mapping capability allows for a fluid interaction with the map, while panning/zooming across various views at varying resolutions. This means your users can better understand and interact with the world. It enables the display of various elements such as polygons, labels, images and other objects. And for those customers in need of deep levels of map customization at the client side, it provides easy ways to configure the look and feel of your map by changing its color, icon size, width, length and removing/adding objects such as buildings, land features and roads.

### **Key industry use cases**

- → Fleet and Supply Chain: Use maps as a canvas to analyze data from drivers for behavior analysis and compliance management
- → Automotive Augments user experience while driving, or outside a vehicle's environment, with visual cues
- → Infrastructural Planning: Gain geospatial insights into the road network, traffic flow and other elements, to manage infrastructure



### **Advanced Customization Capabilities**

Enable users to customize map appearance by importing, styling and displaying data towards specific customer use cases or brand guidelines.



#### Global and local UI

Discover high-quality maps with worldwide coverage in over 200 countries, native to fit your application's look and feel



### **Real-time Map Data**

Access contextual and intuitive map displays powered by unique map attributes, with millions of real-time updates across the globe.



### Fleet Map Style & Truck Attributes

Gain visibility over your supply chain, fleets and assets and reduce costs of delays with precise and global truck maps

### **HERE Map Rendering Services**



**Vector tile API** 



**Raster tile API** 



Map tile API (on maintenance)



Map image API (on maintenance)



Vector Data in encoded tiles with geometries (such as points and lines) that define polygons, labels (including road names or city names), and other kinds of data that are passed to a client renderer to create a map.

The successor to the Map Tile API, which inherits its best features, brings new map styles and datasets (e.g., Japan), complements the consistent map styling across HERE SDKs, and even more features to come.

Raster-graphics map tile images, rendered on HERE side with user specified map scheme, geoposition, zoom level, resolution and format. Pre-rendered map images with user-defined dimensions, optimized for desktop and mobile devices including the ability to overlay content.

Includes Truck specific roads and attributes such as road signs with legal, physical and HAZMAT restrictions.



Premium data layers that include Truck and Toll related road attributes and links, as well as Truck specific POI Categories to enable map rendering for T&L use cases utilizing new Logistics Map Style.\*

New Logistics Map Style\* with more visualization of more relevant content such as Transportation Infrastructure POIs Logistics Map Style: A specific map style tailored to enhance the visualization of logistics-related use cases such as Fleet Management and Asset Tracking applications. The style highlights relevant content such as industrial landuse areas, national borders, truck toll roads, highway exits and rail-roads whilst reducing the visibility of less relevant map elements.



Provide tiles with Congestion and Environmental zones.



Enables Client-side interactive map rendering and map object identification with unlimited customized map styles on the fly. Supports HERE Style Editor for convenient styling.

Server-side rendered map tiles, that use the HERE defined styles, day and night mode views, background map and label-only views, etc.

Fits both high- and low-performance client devices.

Add user location markers, route polyline with waypoints, road signs, heat maps and statistical graphs over a map image. Support scale bars, proximity circles and picture-in picture.



Hill shading and contour lines.\*\*

Terrain Map View with hill shading.

Supports building footprints for 3D extrusion with Maps API for JS.

Base, Satellite and Hybrid (Satellite view with roads & Labels) map views.



Supports Multiple languages and allows Map Rendering for different geo-political borders.



Offers Global Coverage and continuous map updates from HERE Platform.

<sup>\*</sup> Planned in Q2 2023

<sup>\*\*</sup> Planned in 2H 2023

### **Web SDK Map Rendering Services**

### **Maps API for JavaScript**

- → Access to variety of location features so customers can easily integrate vector tile, map tile, geocoder, traffic, routing, data hub, interactive map, public transit and indoor maps into applications
- Build web applications with feature-rich, interactive HERE Maps at their center
- Supports various types of map objects: markers, Geo-Shapes and overlays
- → Offers pre-built features such as
  - customizable User Interface (UI) elements: pan, zoom in/out, scale etc.
  - capabilities to edit and interact with HERE and customer map content through Event System
  - Rich format support for KML, GeoJSON and WKT (Well Known Text) data sets
- Supports clustering of large data sets on top of the map
- → Allows display of heat maps as map overlays: value- and density-based
- → Consolidates all back-end capabilities of HERE Platform into one single API



### Coverage

Discover high-quality maps with worldwide coverage in over 200 countries



### **HERE Map Style Editor**

Use this tool to customize colors, roads, labels and much more in your HERE Map with the simplest interface and intuitive WYSIWYG editor.

#### **About HERE Technologies**

HERE has been a pioneer in mapping and location technology for almost 40 years. Today, HERE's location platform is recognized as the most complete in the industry, powering location-based products, services and custom maps for organizations and enterprises across the globe. From autonomous driving and seamless logistics to new mobility experiences, HERE allows its partners and customers to innovate while retaining control over their data and safeguarding privacy. Find out how HERE is moving the world forward at here.com.