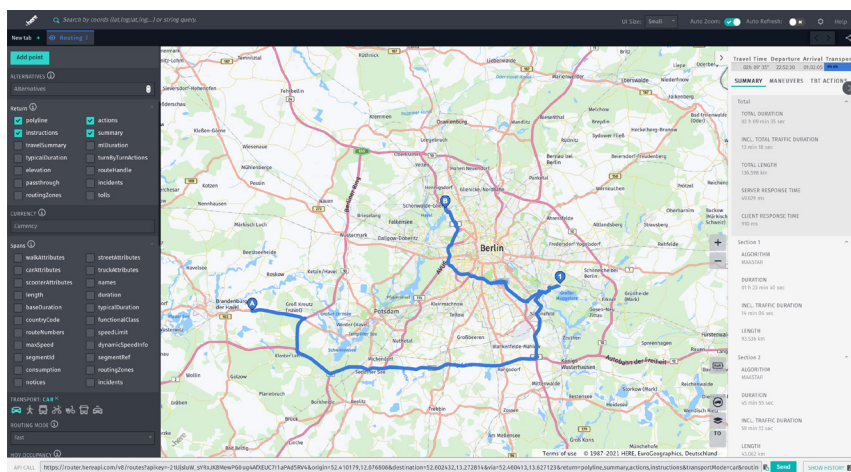


HERE Routing

Ensuring Safety and compliance with always-accurate routes

HERE Routing is a collection of RESTful APIs that provide access to advanced routing algorithms with unique capabilities, building on the highly accurate, enterprise-grade HERE map. It creates connected journeys for fleets, passengers and businesses, by providing accurate ETAs. These ETAs take into account real-time congestion and incidents, receiving information on the areas of reach and customizing routes to fit specific business needs.



Key industry use cases

- **Automotive:** Optimize operations and journey planning for on-demand and scheduled mobility
- **Fleet & Supply Chain:** Enhance safety by analyzing driver behavior, based on speed limits, hazardous road conditions and rest time
- **Public Safety:** Provide a faster response time by dispatching the correct emergency vehicle with the optimal route to the destination



Supports multiple modes of transportation

Choose from different modes of transportation - car, truck, EV, pedestrian, two-wheeler - to optimize a rich set of HERE map data attributes.



100+ customization parameters

A variety of routing options considers the likes of toll roads, motorways, ferries, stairs or park paths, as well as route selections for the fastest/shortest option.



Diverse Routing Services family

A full range of unique and competitive services supports largest matrix, longest isoline, optimal waypoint sequencing and precise route matching.

Product features

Largest number of options for routing between points: Fastest/shortest

- Car, pedestrian, truck and two-wheeler modes
- Avoid road types (eg highways, toll roads, unpaved roads, bridges, tunnels and more)
- Avoid areas (eg environmental zone, congestion zones, custom bounding box)
- Pedestrian options (avoid stairs and parks)
- Support for drag and drop interfaces
- Itinerary warnings (eg country/state border crossing, toll road/booth, seasonal closure, restricted turn)
- Full-time awareness considering seasonal closures, reversible lanes, time-restricted maneuvers, etc.
- Stopovers and via points along a route
- HOV routing (US only)

Route directions

- Instructions in over 108 languages
- Maneuver descriptions (structured, descriptive)
- Distance and driving time to destination
- Dynamic ETA based on multiple static and/or dynamic data
- Map reference and side of street

Truck routing

- Support for all physical and legal restrictions, including hazardous goods
- Truck speed profiles
- Avoid U-Turns and difficult maneuvers
- Adjusted road hierarchy

Two-wheeler routing

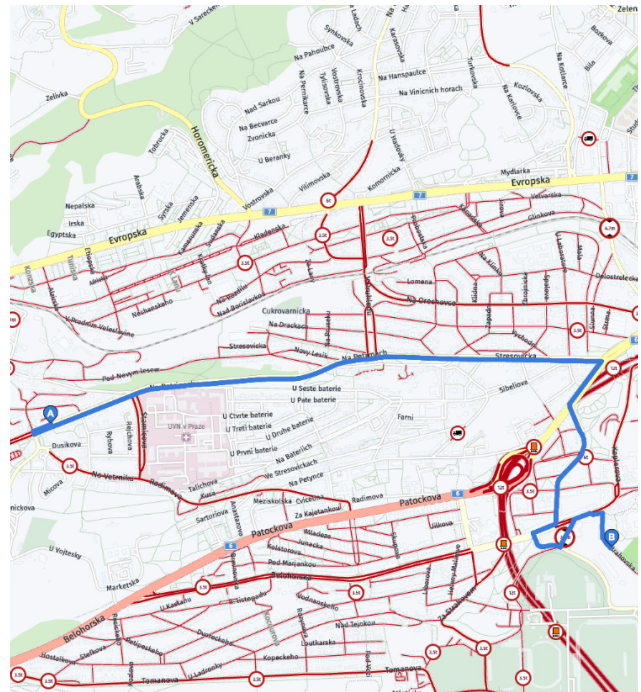
- Support for maneuver restrictions
- Two-wheeler optimized ETA calculations
- Avoid environmental zone

Traffic-enabled routing

- Traffic-aware routes based on real-time and/or historical traffic data
- Time-aware routes based on time of day, time of the year (seasonal roads, lane configuration changes, etc.)
- Incident-aware routes based on traffic accidents, construction, etc.

EV routing

- Consumption model calculation considering speed, ascent, descent, time penalty, auxiliary consumption, acceleration, deceleration
- Extended consumption model calculation considering traffic and speed information
- Range map for reachable area based on current charge
- Multi-stop routing including charging stations stops



Services

Matrix routing

- Support for several routing options: pedestrian, car (shortest/fastest) and truck
- Considers real time and historical traffic
- Multi-route request
- Matrix size: from 1x1 to 10,000x10,000.

Isoline Routing

- Support for several routing options: pedestrian, car (shortest/fastest) and truck
- Area of reach based on time and distance, or consumption model
- Considers real-time and historical traffic

Waypoint Sequencing

- Determines optimal sequence for up to 150 given waypoints
- Considers parameters for vehicle type, truck attributes, departure time and day, and historical traffic data
- Considers parameters per waypoint: commercial value and capacity for freight, required loading time and incremental value

Route Matching GPS Traces

- Gives access to a robust set of tools that enable accurate and sensible utilization of massive GPS trace data, by matching it to the road network
- Detects illegal usage of road network for cars, trucks and other vehicle types and provides warnings on illegal access, turns, one-ways, vehicle weight violations and more
- Returns routes mapped to the HERE road network and optional requested roads attributes
- Supports post-analysis and near real-time usage
- Considers typical inaccuracies of GPS traces



Coverage

Truck Routing is based on a comprehensive coverage of HERE Truck Attributes.

Truck Restrictions and Warning. Available in 76 countries worldwide.

Environmental zones help to avoid specific areas and provide an alert if the destination prohibits certain vehicle types. Available almost everywhere globally.

Commercial Vehicle Regulations includes country or lower admin-specific commercial vehicles rules and regulations in a machine-readable format. Available in 69 countries globally.

About HERE

HERE, a location data and technology platform, moves people, businesses and cities forward by harnessing the power of location. By leveraging our open platform, we empower our customers to achieve better outcomes – from helping a city manage its infrastructure or a business optimize its assets to guiding drivers to their destination safely. To learn more about HERE, including our new generation of cloud-based location platform services, visit <http://360.here.com> and www.here.com.