

Indoor

HERE Venue maps and Indoor Positioning for Android and iOS

Venues with 3D floor plans

Indoor routing

Mobile-centric indoor positioning



The Indoor component, part of the HERE Mobile SDK for Business, provides access to services that enable indoor positioning capabilities within a given venue or space. It leverages signals from Wi-Fi access points and/or Bluetooth Low Energy (BLE) Beacons (both Eddystone and iBeacon standards supported) to provide a 'blue dot' indoors. HERE Indoor Positioning technology delivers an accuracy of 3 to 4 meters based on Wi-Fi alone, and 2 to 3 meters based on BLE beacons*. Through its comprehensive toolkit it provides everything needed from surveying a venue's radio environment to managing the radio data collected and enabling indoor positioning.

After a venue's radio map is uploaded to the cloud, it becomes available to mobile devices, and once downloaded, the radio map may be used in both online and offline modes to support those cases when an internet connection is not available (for example, if the user is traveling). Utilizing HERE 3D Venue Maps allows for providing precise information about a user's location at all times, regardless of the floor they are on or the area they are in inside a building.

*Depending on the density of the infrastructure

Indoor

Feature Highlights

HERE Indoor Positioning operates in full offline mode on mobile devices, as the location, calculation and scanning of Wi-Fi access points or beacons do not require online connectivity. Providing access to a comprehensive and easy-to-use toolbox for surveying indoor radio environments and managing collected radio data, HERE Indoor Positioning can detect the floor a user is located with up to 95% accuracy. For those applications that want to provide a complete outdoor-to-indoor experience, HERE Indoor Positioning integrates seamlessly with other HERE Mobile SDK services such as outdoor Maps, Directions and Geocoding.

Feature List

Indoor positioning

- Position source (e.g. indoor engine)
- Positioning technology (e.g. ble)
- Location estimate and uncertainty values
- Floor index
- Building ID and Name
- Timestamp
- Speed and heading

Indoor routing

- Outdoor-to-indoor routes (e.g. from home to a shop inside a mall)
- Indoor-to-indoor routes within the same venue (e.g. from a shop to another shop inside the same mall)
- Route instructions to a place within the venue
- Routes rendered inside 3D buildings

Indoor Radio Mapper

- Collect and manage WiFi/ Bluetooth radio data
- View and access private or public HERE Venue Maps for collection and positioning testing
- Upload and access image-based (jpg, bmp, png, gif) custom indoor maps

Venue maps (2D & 3D)

- Indoor maps for over 14,000 locations in over 75 countries
- Indoor places information (e.g. stores, offices)
- Venue access points (e.g. entrances, exits)
- Venue connectors (e.g. staircases, hallways)
- Public and private (customer requested) venues
- PNG image tile overlays or JSON models

Venue Maps Admin Tool

- Add/Update/Delete POI information (e.g. store name, phone number, etc)
- Upload floor plans to convert into venue maps
- Manage application access permission for public and private venues

About HERE Mobile SDK for Business

Only HERE Mobile SDK for Business delivers a sophisticated set of native capabilities to power the creation of innovative indoor location-centric applications and services. Similar to the HERE Platform for Business, the Mobile SDK leverages a rich and robust portfolio of HERE Map Data that is highly accurate and which allows for the fast creation of differentiated experiences. The customer can also use HERE Network Positioning to power outdoor location also in a full offline mode. Today, leading organizations around the world use HERE Platform and Mobile SDK for Business in hundreds of customer applications and support core business processes such as fleet management, telematics, geomarketing, business intelligence, field force optimization and more.