

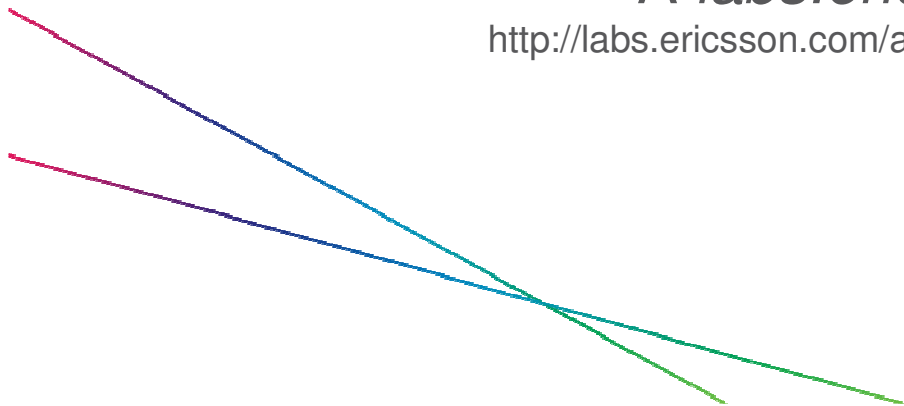


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INDOOR MAPS & POSITIONING

A labs.ericsson.com API

<http://labs.ericsson.com/apis/indoor-maps-and-positioning/>





INDOOR MAPS & POSITIONING

- › The Indoor Maps & Positioning APIs enable creation of indoor location-based services tailored to fit your needs
- › The **Map Studio** is a web-based map editor where you can create your own indoor maps
- › The **Android Map API** is used to build end-user services to download, render and interact with maps
- › With the **Indoor Positioning API** you can make use of existing Wi-Fi infrastructure to get accurate Wi-Fi-based indoor positioning

Map Studio

Editor and tools for map creation and management



Android Map API

API for creation of end-user services



Indoor Positioning API

Interface to available positioning





WHY INDOOR MAPS & POSITIONING?

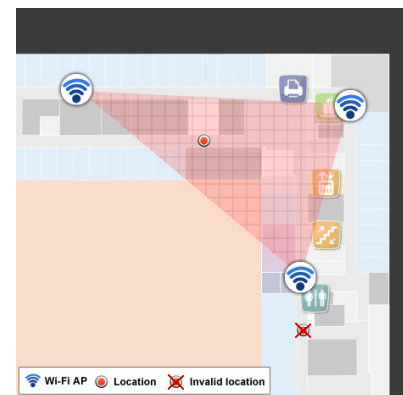


- › With the Indoor Map API, it is easy to create, manage and use your own interactive indoor maps
- › With the Indoor Map API, you can create your indoor maps with the style and colors you would like
- › The indoor maps can be used to create cool and user-friendly apps for any situation where an indoor map would be useful
- › With the Indoor Positioning API, it is easy to add Wi-Fi-based indoor positioning to the app where the indoor maps are used



MAIN FEATURES

- › Easy creation and management of interactive indoor mobile maps
- › Easy use of the indoor maps when building apps
- › Possibilities to chose map style and color or to use pre-made style sets
- › Easy to add Wi-Fi-based indoor positioning





ANDROID MAPS API

- › Show, interact with and navigate on your indoor map
- › Draw overlays with additional data on top of the map

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android">
    <com.ericsson.android.indoormaps.MapView
        android:id="@+id/indoor_map_view"
        android:layout_height="fill_parent"
        android:layout_width="fill_parent" />
</RelativeLayout>
```

```
setMapView((MapView) findViewById(R.id.indoor_map_view));
mMapController = getMapView().getMapController();
mMapController.setMap(MAP_ID, API_KEY, true);
mMapController.setStyle(STYLE_ID, API_KEY, true);
```



ANDROID POSITIONING API



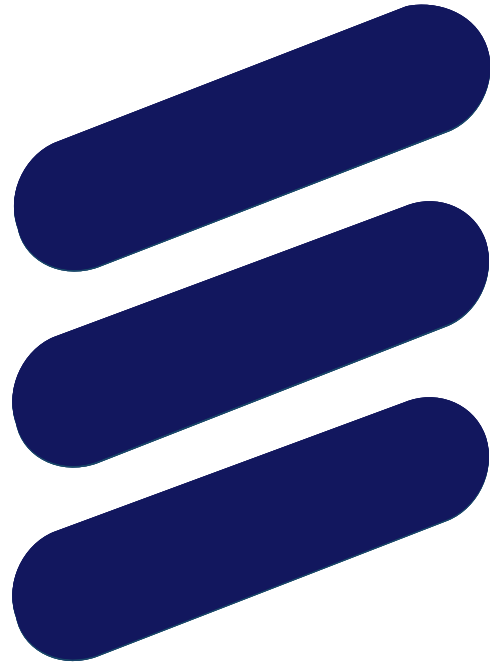
- › Wi-Fi based positioning
- › Upload Wi-Fi Access points, then locate yourself indoors

```
// Setup Indoor Location API and request a location
IndoorLocationProvider locationProvider = new IndoorLocationProvider();
// Setup up Listener for location callback IndoorLocationListener
locationListener = new IndoorLocationListener()
{
    @Override public void onIndoorLocation(double latitude, double
longitude, int buildingId, int floorId, int horizontalAccuracy) {
        //TODO something with location }
    @Override public void onError(IndoorLocationRequestStatus status,
String message) {
        //TODO handle error
    }
};
//Request location
locationProvider.requestIndoorLocation(locationListener, this, API_KEY);
```



EXAMPLE APPLICATIONS





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