GNSS Geofencing

All u-blox GNSS modules include support for Geofencing.

Introduction

This feature is often overlooked by application developers, but adept usage of geofences can yield huge benefits to the user and environment.

What is a Geofence?

A geofence is a combination of reference point and radius of a circle, sphere or any specific zonal shape defined by the user. The GNSS module can determine if it is inside or outside of the perimeter, and if the module traverses the fence boundary.

Practical usage

There are potentially many applications for tracking and safety applications, but the classic scenario that could benefit by using geofences, is the monitoring and tracking of vehicles or goods in transit.

For example, the coordinates of a home location can be set by the application, with an appropriate radius that, if crossed, the equipment can raise an alert to the owner or operator so that corrective action can be taken for the recovery of the item.

A more subtle usage could be to provide an alert for the imminent arrival of goods in transit.

An in-bound crossing of a geofence could trigger notification of imminent arrival. The alert could then instigate the opening of automatic gates at a secure community, or aid factory “lean” just in time delivery to line.

The impact of advance notification of arrival of equipment could have benefits for the environment and aid the receiver and their appropriate response.

We are seeing more and more applications deploying this feature for security and safety applications, please contact us if you have any questions