

# What Is Geolocation AND HOW DOES IT WORK?

A geolocation system is an **information technology solution** that ascertains the location of an object in a physical (geo-spatial) or virtual (Internet) environment. Two different types of data may be collected—active user/device-based information and passive server-based lookup/data correlation—and then cross-referenced against each other to create the most accurate geolocation result.

Where is Main Street?

Delivered

I forget—where was this picture taken and when?

Delivered

Alert! Your credit card was used in Ohio—do you approve this transaction?

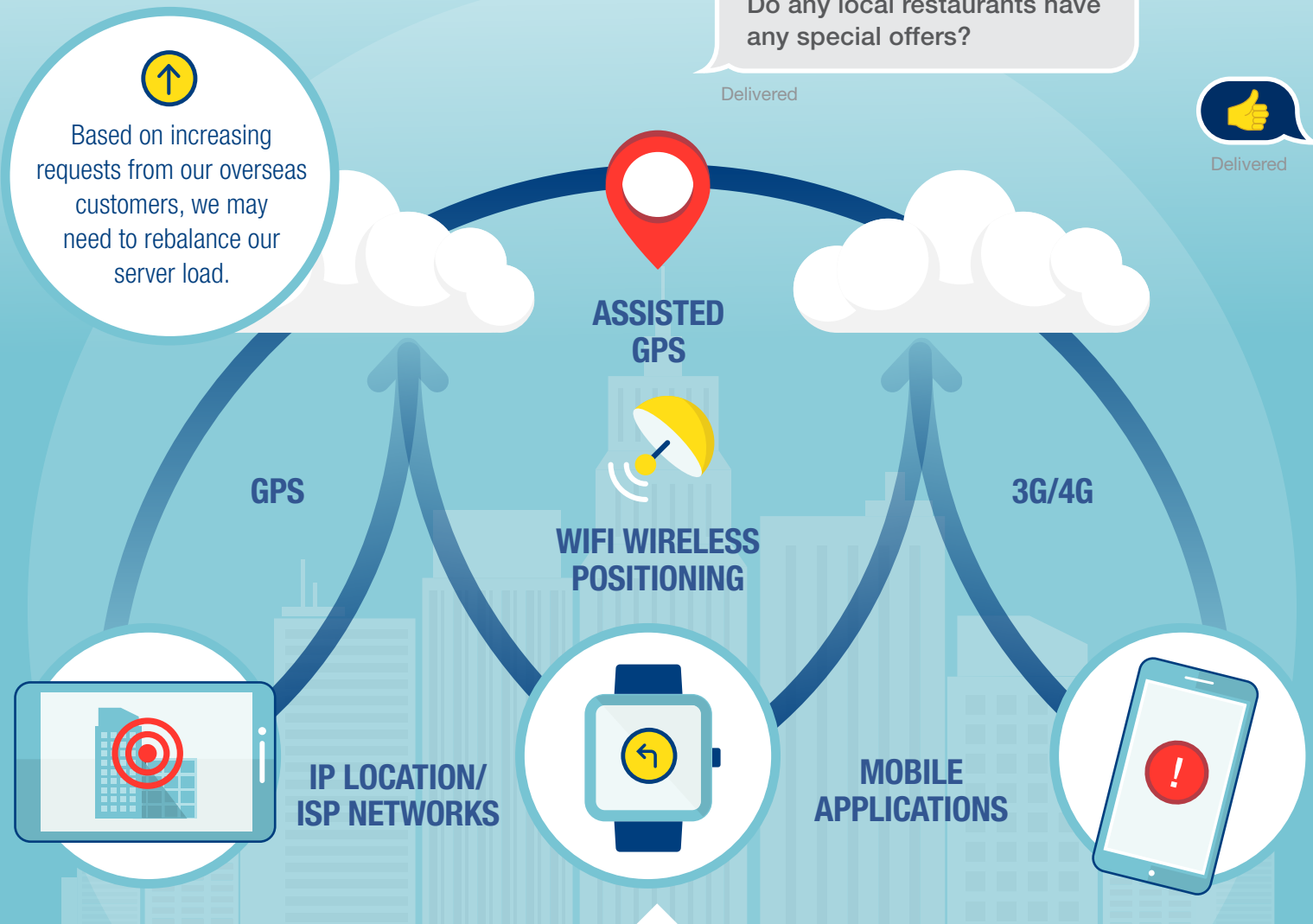
Delivered

Do any local restaurants have any special offers?

Delivered

Delivered

Delivered



The advent of GPS, WiFi, wireless mobile networks and IP location identification techniques has spawned a wide range of derivative technology applications driven by the benefits of geolocation. Geolocation data is generally used for three purposes:

- 1 **Geo-Referencing or Positioning:** finding physical location of object or person relative to a map
- 2 **Geo-Coding:** searching available types of objects and services listed by location
- 3 **Geo-Tagging:** embedding geographic data into an object's metadata for future reference

For more information from ISACA on geolocation, and the related privacy and security issues affecting practitioners in the industry, see [www.isaca.org/geolocation](http://www.isaca.org/geolocation).