

OGC's OpenLS Initiative: Building a Foundation for Location Services

The Open Location Services Initiative (*OpenLS*) is devoted to the development of interface specifications that facilitate the use of *location* and other forms of spatial information in the wireless Internet environment. The purpose of the Initiative is to produce open specifications for interoperable location application services that will integrate spatial data and processing resources into telecommunications and Internet services infrastructure.

OpenLS brings the many companies and industries of the location services value chain together to build products and services that are based upon open specifications for location service interfaces and related protocols.

OpenLS consists of a series of rapid-paced, collaborative engineering testbeds and pilots that yield robust, end-to-end, multi-vendor location service solutions.

The goal of *OpenLS* is to accelerate the availability of robust location services that respond to diverse market needs.

Location Services will bring huge benefits to emergency response, public safety, public transportation, critical infrastructure protection and disaster management. Location services also offer huge potential for commerce involving people on the move, bringing convenience to consumers, helping businesses track assets, reducing miles traveled and helping buyers and sellers in the same vicinity to find each other.

The OpenLS Mission

OGC's *OpenLS* brings together key industry players to build and consolidate the standards infrastructure for these interoperating location-based software services. The *OpenLS* mission is to specify standard interfaces and protocols which developers can use to integrate geospatial data and geoprocessing resources into location services and telecommunications infrastructure and to demonstrate these capabilities for a wide variety of applications for consumers, businesses and governments. We call the resulting platform the *GeoMobility Server*.

Derived from other OGC specification activities, related IT standards, and the requirements of the *OpenLS* Sponsors, OGC's open architecture for location services will be based on interfaces and protocols that support "Core Services" including:

- Gateway Services that integrate *OpenLS* location application services with position determination equipment in the MPC/GMLC (the place in the network that manages the location of devices).
- Directory services for searching yellow pages, green pages, travel guides, and so on.
- Route determination services for navigation.
- Geocode (address to X,Y) and reverse geocode (X,Y to address) services.
- Map/feature display services.

Location Services will depend on consistent integration of location services across different providers, technology platforms, application domains, and national regions. In this value chain, many companies will do business together, providing complementary goods and services that result in value for end users. Companies in the value chain will include:

- Wireless carriers and Internet service providers who buy and use systems.

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- Companies providing location technology products.
- Platform developers whose middleware connects telecommunications service infrastructure LBS applications.
- Application developers providing applications.
- Data providers and consultants who provide location-based content.

But until spatial standards for Location Services are in place, the value chain will remain weak and will not grow to its full potential. Like the Internet, the World Wide Web, the global telephone network and fax machines, Location Services will depend on open, non-proprietary standards that work all around the world. Huge markets will form where countless vendors can build a rich profusion of commercial brands and proprietary products and services *on top of a standards infrastructure*.

Open access to abundant Location Services on the Web will not happen by accident. It will happen through an organized effort – the *OpenLS* Initiative. *OpenLS*'s main activity is a series of rapid-paced, collaborative engineering testbeds and pilots yielding candidate consensus standards that support robust, end-to-end, multi-vendor location service solutions. OGC provides a unique environment to specify, build, test, and evaluate prototypical location service capability. Testbed Sponsors and Participants create and learn what is necessary to confidently build commercial solutions for Location Services.

Meshing Spatial Standards with Communications Standards

To weave Location Services into the Internet, the Web, and wireless, OGC works closely with Location Interoperability Forum (LIF), MAGIC, ISO TC211 and TC/204, WAP Forum, IETF, AMI-C, and W3C. Specifications emerging from this work must cohere with those from telecommunications standards groups connecting wire and wireless voice systems and the Internet, groups such as Parlay, Third Generation Partnership Project (3GPP), 3GPP2, European Telecommunications Standards Institute (ETSI), and the Telecommunications Industry Association (TIA).

Become Part of the Solution!

OGC invites interested organizations to join the *OpenLS* Initiative as sponsors or participants. There is no better way to get up to speed, meet customers and partners, and get to know the competition. There is no better way to bring this powerful convergence of technologies to critical mass. Contact:

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