

## Location Studio 2.0 Product FAQ

### **What is “Location Studio”?**

Location Studio is a location-enabling server deployed within the wireless operator's network. Location Studio simplifies the integration of multiple location-based applications, and maintains access, security, and privacy rules for each transaction. Location Studio is a single point of inter-connection for application developers providing access to all elements within the operator's network, including: location, billing, messaging, and subscriber directory infrastructure.

### **Why does a wireless operator need Location Studio?**

Location Studio delivers a lower-cost of LBS deployment through integration with internal operator infrastructure, including: location server, SMSC, WAP gateway, subscriber portal, customer care/activation system, billing systems, and operational support systems. Location Studio integrates with these elements **once**, so that individual LBS applications don't have to do so.

Location Studio's subscriber privacy features allow mobile subscribers to control which location-based services have access to their location. Advanced privacy controls allow subscribers to control how, when and under which circumstances specific location-based services can receive their location.

### **What can I do with Location Studio?**

Location Studio receives requests from applications using a single, unified Web-services API. In this way Location Studio abstracts underlying network services required to build and monetize Location-intelligent services. The standard services exposed through Location Studio are:

- Mobile terminal location query
- Two-way messaging (SMS and wap-push)
- Subscriber validation (identity and service authorization)
- Bill-on-behalf-of (BOBO) service

Additional service enablers may be added at the discretion of the network operator.

### **How are mobile handsets identified in requests to Location Studio?**

In live installations it is common practice for all transactions with Location Studio to use encrypted identifiers to identify the target mobile subscriber. This allows for secure, and private, transactions that protect the subscriber's privacy and anonymity – key for enabling location services!

Location Studio generates both persistent subscriber identifiers (PSIDs) and temporary subscriber identifiers (TSIDs). Which identifier is delivered to the application is established by the operator within the LSt Client Profile. With PSIDs the same identifier is used with each access of the application which allows the application to personalize the service for the subscriber (favorite places, buddy lists, ...). However, many services do not require this personalization and the subscriber

can remain completely anonymous when identified only with e TSID (which is uniquely generated with each access).

In some networks Location Studio can also accept requests with existing identifiers in common use (such as a WAP ID).

The mobile telephone number (MIN or MSISDN) is often used for testing and verification, however it is rarely used for commercial services.

#### **How do Location Studio privacy features affect location requests?**

Location Studio stores and processes subscriber-to-application privacy policies. The policies define which applications may request the location of a subscriber, and dictate how location is released. The privacy policies may affect the outcome of a location request by an application as follows:

- the location request may fail because a policy denies access to the subscribers location information by the application (subscriber established policy)
- the location request may fail because a policy denies the subscriber the right to use the application (operator established policy)
- the location request may be returned with a lower accuracy than requested because the subscriber does not wish to release information to the requested accuracy level

#### **Does a subscriber need to create a privacy policy for each application before they can be positioned?**

A privacy policy must exist before location is released. However, this policy does not need to be created by the subscriber directly. Default permissions may be put in place by the operator that define how location is released, and what a subscriber must do to "opt-in" to the service. Default permissions may be applied uniquely to each service, uniquely to common service of the same "type", or to all applications.

Location Studio also contains a first-time-through framework that allows detection for the first access of a service by a subscriber and redirection to simplified registration procedures to allow "opt-in" on the fly.

#### **Are Location Studio APIs based on open standards?**

Location Studio APIs are based on open industry standards, including those defined by the Location Interoperability Forum (LIF) and the Open Mobile Alliance (OMA). Location Studio supports the LIF Mobile Location Protocol version 3.0.0 which is delivered using XML over HTTP.

Location Studio also supports a full set of services using standards-based web-services which is based on SOAP and XML over HTTP. A WSDL file fully defines the Location Studio API and the WSDL may be used to generate a client-side library for most popular development environments (including Java, .Net and C++).

**Where do I get documentation and support to develop my application?**

Support for developing applications using Location Studio is provided at the Openwave develop website at the following URL:

[http://developer.openwave.com/prod\\_tech/locationstudio.html](http://developer.openwave.com/prod_tech/locationstudio.html).

From this site you can download the Location Studio SDK, developer guides, technical bulletins, and white papers. You can also request support by submitting email to [developer@openwave.com](mailto:developer@openwave.com), or you can participate in on-line forums moderated by Openwave developer support engineers.

**Is there a test server that I can use to verify my application?**

A test server is provided for verifying your application prior to connecting to a live operator network. The Openwave Location Studio test server is available for all registered application developers to use. Information on how to access this test server, and how to verify your applications, is available at the Location Studio support site.

**Will the test server allow me to locate any phone? Including my current phone?**

The Location Studio test server is a real working version of Location Studio. However, it is not connected to a live operator network and all back-end services are simulated. This includes location, messaging and billing services. A variety of locations may be retrieved from the test server, using a set of test subscriber identifiers, but it is not possible to position a live handset.