

Location IWG Proposal June, 2012 Andrew Ross

Eclipse Foundation, Inc.

Location



Location Working Group

The leading place for software components that are location aware, open source, and IP-clean.

Strong Interest

Interested organizations: IBM, Oracle, Autodesk, Pitney Bowes, ESRI, Intergraph, Nokia, Tomtom, Microsoft, Lockheed Martin, OpenGeo, DM Solutions, MapGears, Radiant Blue, Spatialytics, Actian, University of Toronto, Carleton University, Tecterra, World Bank, Ushahidi, and more.

Location Technology

Vector data



Raster data





eclipse

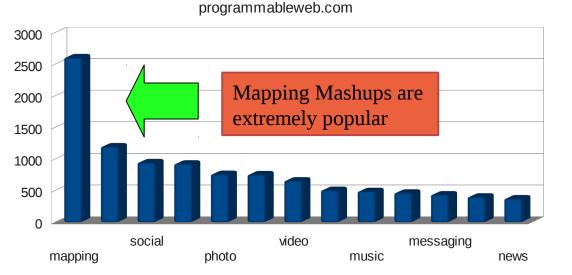
San Francisco Crime

Gulf of Mexico oil slick

Important trends

Use of location technology is growing and undergoing a shift from an asynchronous peripheral activity to a core business activity with real time demands. Machine generated data is spurring a massive increase in the rate data is generated.

Mashups by topic



Internet TV expectations NFC Payment GIS/Geospatial Industry Growth 2004-2011 Activity Streams Wireless Power Private Cloud Computing Growth Analysis - Software, Services, and Data Social Analytics Augmented Reality Group Buying Worldwide Revenue Estimates and Forecast Cloud Computing Gamification Media Tablet 3D Printing Virtual Assistants Image Recognition \$2,500 In-Memory Database Management Systems Context-Enriched Services Gesture Recognition 8-Year CAGR 9.7% Speech-to-Speech Translation Machine-to-Machine Communication 3 er rice: Internet of Things Natural Language Question Answering -\$2,000 Mesh Networks: Sensor Mobile Robots -Location-Aware Applications "Big Data" and Extreme Information Software Processing and Management Nilions USS) Speech Recognition - Services \$1,500 - Predictive Analytics Data Social TV Cloud/Web Platforms Mobile Application Stores Video Analytics for Customer Service \$1,000 Biometric Authentication Methods Computer-Brain Interface C Hosted Virtual Desktops Idea Management Quantum Computing QR/Color Code Virtual Worlds -Human Augmentation -\$500 Consumerization 3D Bioprinting - E-Book Readers As of July 2011 S Peak of 2004 2005 2006 2007 2008 2009 2010 2011 Technology Trough of Plateau of Inflated Slope of Enlightenment Disillusionment Trigger Productivity ©2010 Daratech, Inc., Cambridge, MA USA Expectations Ref.: GIS (1.6) 2011 DRAFT(060-175-070-135)-009bl time Years to mainstream adoption: obsolete Figure 1 O less than 2 years O 2 to 5 years 5 to 10 years ▲ more than 10 years 8 before plateau

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Five forces look at Location



Michael Porter's 5 forces model for competitive intensity



Historically

Dominated by a few large proprietary players eg. ESRI, Digital Globe, Navteq, etc.

Standards & technology change has led to disruption by entrants & new demand e.g. Google, Apple, Microsoft, OpenStreetMap @ the forefront of this.

Location IWG Goals



Make location technology mainstream & innovate to new areas

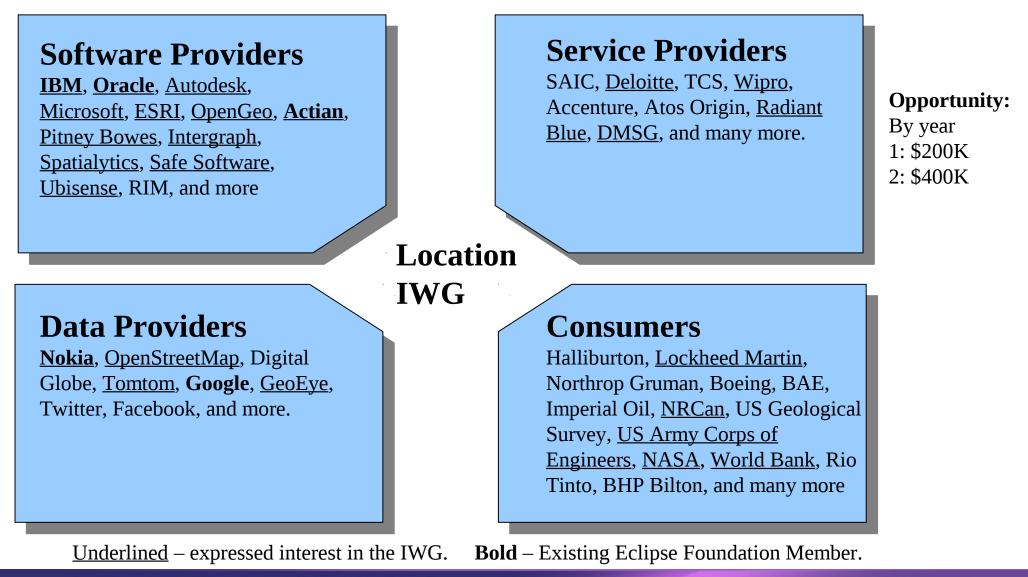
- Leverage Eclipse's established position in enterprise
- Consolidate and bolster open source location (aka. Geospatial) community

Areas of interest

- Processing massive data volume
- Shift from asynchronous to real time analysis
- Shift from peripheral view of location to business critical
- Model driven design i.e. BIM
- Stimulate industry competitiveness & innovation
- Share risk & cost to open new markets, reduce time to market
- Deliver a predictable platform of technologies annually

Location Industry Working Group

Goal: Develop an ecosystem for open source spatially aware components.



Location IWG: Steering Committee Fees (Proposed)



Annual Revenue	Annual Steering Committee Dues
>\$250M	\$30,000
>\$100M <= \$250M	\$25,000
>\$50M <= \$100M	\$20,000
> \$10M <= \$50M	\$15,000
< \$10M	\$10,000

• Location **Steering Committee** dues are incremental to Eclipse Foundation membership dues. Must be Solutions member or higher.

• Eclipse Foundation Strategic members paying \$250K annual receive Steering Committee rights for no added cost.

Location IWG: Participant Fees (Proposed)



Annual Revenue	Annual Participant Dues
>\$250M	\$10,000
>\$100M <= \$250M	\$7,500
>\$50M <= \$100M	\$3,500
> \$10M <= \$50M	\$2,250
< \$10M	\$1,000
< \$1M & <10 employees	\$500

• Location **Participant** dues are incremental to Eclipse Foundation membership dues. Must be Solutions member or higher.

• Eclipse Foundation Strategic members paying >=\$100K annually receive participant rights for no added cost.

Key Existing components



iva			
	1.7M	25/89	LGPL
iva	165K	3	LGPL
iva	324K	23/39	LGPL (=> EPL)
/C++	64K	11/20	MIT
/C++	841K	24/46	MIT
++	137K	5/17	LGPL
	266K	19/51	MIT
avascript		43/52	BSD
1 1 //	va va C++ C++	va 165K va 324K C++ 64K C++ 841K ++ 137K 266K vascript 140K	va 165K 3 va 324K 23/39 C++ 64K 11/20 C++ 841K 24/46 + 137K 5/17 266K 19/51

LGPL software, re-licensing

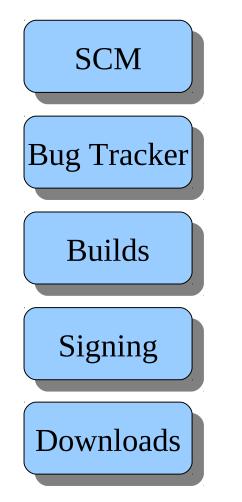


Outcomes from meeting in Washington D.C. May 23, 2012:
1) EPL is the default/recommended license for Location
2) Convince strategic existing LGPL projects to re-license. This will take time & require value to the projects.
3) A forward looking focus on strategic technology is the priority.

Multiple long-time OSGeo board members & founders are endorsing this IWG. e.g. Dave McIlhagga (DM Solutions), Geoff Zeiss (Autodesk), Chris Holmes (OpenGeo), Mark Lukas (Radiant Blue), Daniel Morisette (MapGears), Michael Gerlek, and more.

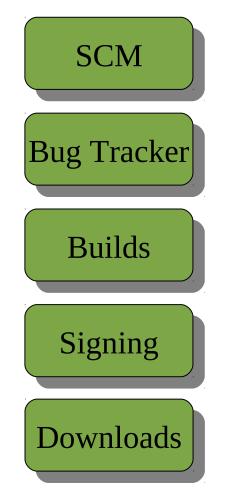
Infrastructure

Eclipse Forge (Public via. eclipse.org)





Location Forge (Public via. TBN.org)





Core team leading the efforts

Tentative **Co-chairs:**

OPENGEO Autodesk











Call to Action

Support the creation of a separate forge for Location technologies and approve use of LGPL, BSD, MIT licenses in this separate forge by approving the following:



RESOLVED, the Board approves the creation of information technology (IT) infrastructure for the Location IWG forge. Such IT infrastructure will be hosted and supported by the Eclipse Foundation

RESOLVED, The Board unanimously approves the use of the following licenses for projects hosted by the Location Industry Working Group. Such projects must be clearly identified as separate and distinct from Eclipse Foundation projects, hosted on a web property other than eclipse.org, and not using the org.eclipse namespace.

- MIT 1.
- 2. BSD (including the Eclipse Distribution License)

RESOLVED, The Board unanimously approves the use of the GNU Lesser General Public License (LGPL) for third-party components distributed by projects hosted by the Location Industry Working Group. Such projects must be clearly identified as separate and distinct from Eclipse Foundation projects, hosted on a web property other than eclipse.org, and not using the org.eclipse namespace.

RESOLVED, that the Executive Director of the Corporation is hereby authorized and empowered, for and on behalf of the Corporation, to retain such advisers, to execute and deliver such documents, papers or instruments and to do or cause to be done any and all such other acts and things as he may deem necessary, appropriate or desirable in connection with establishing the Location Industry Working Group as described in the presentation made to the Board on this day and attached to the minutes of the meeting as Exhibit L, and the taking of any such action shall be conclusive evidence of the approval thereof by this Board of Directors.

Thank you



Next meeting is June 19th. Contact Andrew to get involved.

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Back up



Location Terminology



Vector data – points, lines, polygons, etc. representing reality Raster data – pictures, visible light and other spectrum WFS standard – Web Feature Service – Vector data WCS standard – Web Coverage Service - Pictures WMS standard – Web Map Service – Rendered maps WKB - Well known binary WKT - Well known text

