

W3C Geolocation Working Group Status

May 29, 2014

Introduction

- Under initial charter of Geolocation Working Group, two specifications were developed (and productized)
 - Geolocation API
 - DeviceOrientation API
- 4 major browser vendors have adopted
 - Safari, IE, Firefox, Chrome
- Previous attempt at Geoloc.L2 spec abandoned
 - Main additional feature was reverse geocoding
 - Lack of developer interest

Areas of Concern for Privacy

- Exposing geolocation information to web applications has privacy concerns that are unique even among device API's
 - Safety issue: exposing permanent physical location (e.g. home address) to 3rd parties
 - Govt./legal issue: geotracking of individuals
- Limited ability for end users to control geolocation permissions for websites through browser UI (see [1])

Areas of Concern for Privacy

- Persisting permissions and informing end users about how location will be used not well-addressed in current specification (see [2])
 - This may be an area of broader concern for device API's exposed to the web

New Geolocation Working Group Charter

- Two main work items
 - Adding geofencing to Geolocation API
 - Leverage HW-based geofencing (as opposed to JS-based geofencing, which is possible with existing API)
 - Cleaning up DeviceOrientation specification
 - First version of spec resulted in poor interoperability between different browser implementations
- In addition, development of use cases and requirements for indoor location extensions to API

Geofencing: Sample Use Cases

- Alerts when points of interest are in the user's vicinity
- Asset tracking
- Mobile marketing
 - Advertisements related to geographical context

References

[1] Caceres, M. “Privacy of Geolocation Implementations.” W3C Workshop on Privacy for Advanced Web API’s. 2010.

<http://www.w3.org/2010/api-privacy-ws/papers/privacy-ws-21.pdf>.

[2] N. Doty et al. “Privacy Issues of the W3C Geolocation API.” UC Berkeley School of Information Report 2010-038. February 2010.

<http://arxiv.org/pdf/1003.1775.pdf>.