

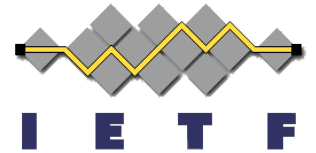
Trustworthy Location

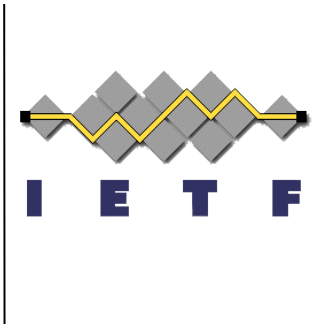
draft-ietf-ecrit-trustworthy-location-04

ECRIT WG

IETF 86

March 13, 2013

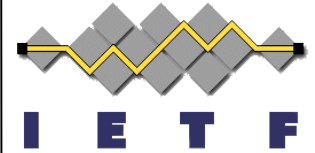




Issue Status

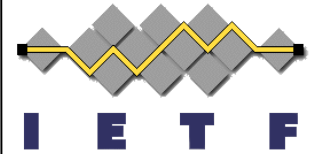
- Issue 4: Untrusted location and provider intent (closed)
 - Role of “location-based services”
- Issue 8: Solutions
 - The document should include solutions and recommendations.
- Issue 9: Definition of “trustworthy” (closed)
 - In practice, the ability to hold prank callers accountable is as (or more) important than location accuracy.
- Issue 10: Organization (closed)
 - Section 5 (Operational Considerations) needs to be re-organized to more clearly relate to Solutions and Security Considerations.
- Issue 12: Introduction
- Issue 13: Location Trust Assessment
- Issue 14: Security Considerations

Issue 4: Untrusted Location and Provider Intent

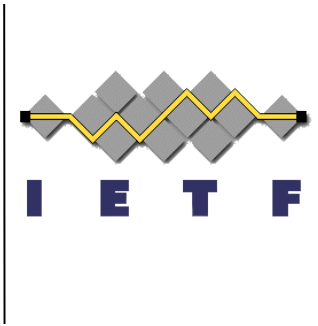


- Proposal: In Section 4, include two paragraphs relating to the source of the location information:
- “In practice, the source of the location data is important for location trust assessment. For example, location provided by a Location Information Server (LIS) whose administrator has an established history of meeting emergency location accuracy requirements (e.g. Phase II) may be considered more reliable than location information provided by a third party Location Service Provider (LSP) that disclaims use of location information for emergency purposes. However, even where an LSP does not attempt to meet the accuracy requirements for emergency location, it still may be able to provide information useful in assessing about how reliable location information is likely to be. For example, was location determined based on the nearest cell tower or 802.11 Access Point (AP), or was a triangulation method used? If based on cell tower or AP location data, was the information obtained from an authoritative source (e.g. the tower or AP owner) and when was the last time that the location of the tower or access point was verified? “

Issue 9: Definition of “Trustworthy”

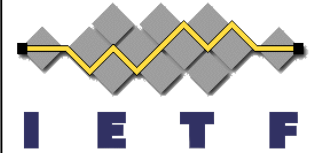


- Proposal: Add terminology section (1.1).
- "Trustworthy Location" is defined as location information that is inherently secure and reliable. For location to be trustworthy, it must have been securely obtained from a trusted source, and must also have been securely conveyed.
- "Location Trust Assessment" refers to the process by which the reliability of location information can be assessed. This topic is discussed in Section 4.



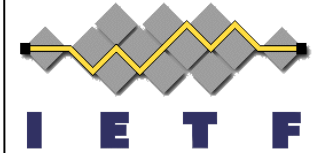
Issue 10: Organization

- Proposal: Delete Section 5 and integrate material within Section 3 (Solutions) and 4 (Location Trust Assessment). Proposed Table of contents:
 1. Introduction
 - 1.1. Terminology
 2. Threats
 - 2.1. Location Spoofing
 - 2.2. Identity Spoofing
 3. Solutions
 - 3.1. Signed Location by Value
 - 3.2. Location by Reference
 - 3.3. Proxy Adding Location
 4. Location Trust Assessment
 5. Security Considerations



Issue 8: Solutions

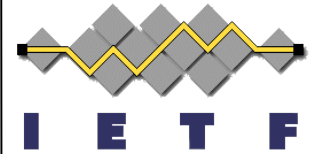
- Proposal: Revise Section 3 to cover three potential solutions: signed location by value (Section 3.1), location by reference (Section 3.2) and proxy added location (Section 3.3).
- Proposed Section 3 text entered in TRAC.



Issue 12: Introduction

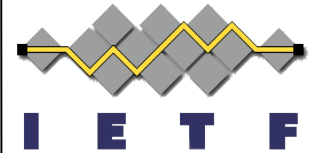
- Proposal: Add text relating to goals in Section 1:
- <http://www.ietf.org/mail-archive/web/ecrit/current/msg08385.html>
- “Ideally, a call taker at a PSAP should be put in the position to assess, in real-time, the level of trust that can be placed on the information provided within a call. This includes automated location conveyed along with the call and location information communicated by the caller, as well as identity information about the caller. Where real-time assessment is not possible, it is important to be able to determine the source of the call in a post-mortem, so as to be able to enforce accountability.”

Issue 13: Location Trust Assessment

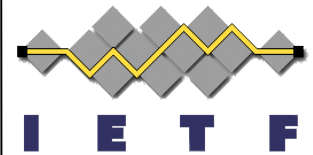


- Issue: Regardless of whether location is conveyed in a secure and reliable manner, questions will persist about the reliability of the location data. Therefore the document does need to provide guidance about how location trustworthiness can be assessed.
- Proposal: Add Section 4, discussing mechanisms for location trust assessment.
- Proposed resolution posted in TRAC.

Issue 14: Security Considerations



- Issue: The current ... document does not describe why this document is fundamentally different from previous threat analyses done in ECRIT and GEOPRIV.
- Proposal: Add the following text to Section 2:
- “While previous IETF documents have analyzed aspects of the security of emergency services or threats to geographic location privacy, those documents do not cover the threats arising from unreliable location information.... This document focuses on threats from attackers providing false location information within emergency calls.”



Next steps

- Feedback on proposed resolutions (today)
- Submission of the -05 “strawperson”:
- <http://internaut.com:8080/~baboba/ecrit/draft-ietf-ecrit-trustworthy-location-05.txt>

Feedback?

