OpenRoaming/MADINAS @IETF118Hackathon

IETF 118
4-5 November 2023
Prague, Czech Republic



OpenRoaming Federation

OPENROAMING
WIRELESS BROADBAND ALLIANCE

ONE GLOBAL
WI-FI NETWORK
Providing Automatic & Secure Wi-Fi
Everywhere to Everyone

CONNECT NOW

- A federation of Wi-Fi Access Providers and Identity Providers: draft-tomas-openroaming-00.txt
 - Dynamic identity provider discovery using DNS NAPTR/SRV
 - RadSec with PKI using WBA Private CA
 - Roaming Consortium Organizational Identifier (RCOI) triggered WFA Passpoint EAP authentication
- Hackathon aims:
 - Analyse the possible leakage of privacy information by a variety of OpenRoaming Identity Providers (IDPs) for a variety of different OpenRoaming Access Network Provider (ANP) use-cases

ROT (16. AP)

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IETF Hackathon – OpenRoaming/MADINAS

What we learned

- Logs of RADIUS exchanges with 10 OpenRoaming Identity Providers
 - Two IDPs have user explicit opt in with IDP to share email identity permanent user ID (email address) returned in CUI (#89) – same two IDPs use User-Name rewrite
 - CUI attribute returned by 9 IDPs, where CUI looks to be hash of account-ID
 - Single IDP does not return CUI, instead returns Class attribute containing hash of user identity (plus other fields)
 - EAP-AKA used with IMSI privacy protection with hashed EAP outer Identity from two different Cellular PLMN-IDs

Static CUI (#89)

IMSI in clear embedded in one instance of Class (#25)

Varying string in second instance of Class

Next steps:

- Discussion during MADINAS WG regarding follow on work on Thursday
- Hackathon testing of RADIUS CoA/RadSec, DNSSEC, RADIUS 1.1.

Wrap Up

Team members:

Bart Brinckman, Bruno Tomas, Carlos Bernardos, Fabian Mauchle, Juan-Carlos Zuinga, Karri Huhtanen, Heikki Vatiainen, Mark Grayson, Subir Das

First timers @ IETF/Hackathon:

Bart Brinckman, Bruno Tomas, Fabian Mauchle, Karri Huhtanen, Heikki Vatiainen, Mark Grayson, Subir Das

