Draft MADINAS Use Cases document

Jerome Henry March 2022

https://datatracker.ietf.org/doc/draft-ietf-madinas-use-cases/01/

Goal is to help define use cases for RCM, by triaging contributing elements:

- User vs. devices, personal vs. shared service devices
- Who is "they"? actors involved in network operations
 - Network functional entities (802.11 entities [APs, WLCs], switches, routers, 802.1X/DHCP services and more)
 - Human-related entities (OTA observers, wireless network operators, network access providers, OTWi/OTWe observers)

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Goal is to help define use cases for RCM, by triaging contributing elements:

- "Trust" variable (full trust, vs. selective trust, vs. zero trust)
- Environments (individual residential settings, managed residential settings, public guest networks, enterprise, with BYOD or MDM)
- Network entities that track the MAC today (L2 infra, 802.1X/DHCP services, routers, policy engines)
- Current assumptions on RCM

Since draft henry 3:

- draft-ietf-madinas-use-cases-00 ports the draft to MADINAS ownership
- draft 01 addresses all comments received since previous F2F

Continued input and feedback is welcome

Proposed steps:

- Survey the current standards that use MAC address as a device identifier in the protocol. Make recommendation to the working groups to remove the dependency.
- Identify a secure mechanism to authenticate and exchange network identity to the device.
- Identify a secure mechanism to inform the device about the type of network the device is connecting to like 'public Wi-Fi', 'enterprise', 'home' (e.g. using 802.11 table 9-66?), allowing the user to select the device identity (or identities) accordingly.
- Identify a secure mechanism for the network to request device identity. Upon successful authentication,
 the network may provide the device a temporary network-based marker to use the network services.
- Identify a secure mechanism for the device to notify the network prior to updating the MAC address.
- Identify a secure mechanism for network elements to share the device identity where applicable

Proposed steps:

- Survey the current standards that use MAC address as a device identifier in the protocol.
 - What RFCs and protocols should we look into? DHCP, EAP, RADIUS, others?
 - Outside of IETF specifications? IEEE, WBA, WFA, others?
- Make recommendation to the working groups to remove the dependency.