

WBA Wi-Fi Device Identities Working Group



The scope of the Wi-Fi Device Identities Work Group:

- Generate a White Paper that:
 - Define common use cases that have been making use of the device MAC Address
 - Identify cases where a device identity is needed or required, including the life time of the identity
 - Identify alternative methods that make the use of MAC address as a device identifier unnecessary
 - Analyse and document currently available possible solutions
 - Recommend technologies and standards to suit various requirements
 - Examine gaps in identified solutions
 - Suggested situations the solutions could be applied to.
- Liaise the completed paper with other Standards bodies

Work Group Summary



- The working group was formed and started on 2021-02-23
- Work moved to outlining the White Paper starting with defining initial use cases
 - These were liaised to the MADINAS group
- Work moved to discover and analyse various current solutions
 - Identifying solutions and how that could be used to address the defined use cases
- Work concluded with the final White Paper on 2022-02-24
- The White Paper was liaised to MADINAS on 2022-03-09

Summary of Findings



- Network operator have the need to identify either devices or users in higher layer network and applications functions
- Devices may need to be associated to users
- Privacy of the devices and users is paramount
- Over the years the MAC address has been used for various network functions included access control, troubleshooting, and law enforcement.
- Specific technologies, such as device fingerprinting, have been developed in an attempt to address device identification, but have their own restrictions
- Based on device implementation of RCM, network access may not be impacted during the same session
- RCM does address privacy and helps prevents spoofing
- While there are many different technologies available, none were found to address all user cases. Several solutions used in combination could cover most use cases; however, there could be conflicts between various solutions



Questions