INVENTION DISCLOSURE

1. **Invention Title.**

DHCP Fingerprinting for Mobile Client Identity Tracking

2. **Invention Summary.**

Use DHCP fingerprinting to track identity of mobile clients.

3. **Invention Description**.

Client devices that use DHCP to attach to wireless hot spots (AP) do so in a manner that is unique to each type of device. This is true both for DHCPv4 and DHCPv6. In other words, there is a 'signature' that is created by the manner in which a device will uniquely request its own set of DHCP options. In fact, there is database of client devices that is currently being created and maintained for the purpose of identifying client devices (fingerbank.org). This invention idea is to use the DHCP fingerprint in conjunction with the MAC address of a device (for DHCPv4) or the DUID of a device (for DHCPv6) for the purpose managing mobile client devices on the network and for ensuring seamless mobility of these devices when moving from hot spot to hot spot (AP to AP).

Briefly outline the potential commercial value and customers of the invention.

This invention would be beneficial to customers because it would aid in things like identity management and the ability to connect rapidly to a service provider's network. It would also provide a mechanism for enabling seamless mobility to subscribers when moving from AP to AP.

4. **How is this invention different from existing products, processes, systems?**

There are several proprietary mechanisms for providing seamless mobility to mobile clients today. These are all vendor specific and I believe the demand is not great today for a more robust protocol. To the best of my knowledge, there is no one using DHCP fingerprinting for this purpose today.