



DHCPv6 Issues

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Mac vs DUID

- **Mac address as ID is flawed:**
 - Not always unique
 - Can be altered
 - Multi-interface hosts confuse things
- **But it's what most of the eyeballs on the Internet are ID'ed by currently**
- **DUID (DHCP Unique Identifier) is the replacement in IPv6**

- **One DUID per DHCP server or client**
- **One Identity Association (IA) per network interface on a host**
- **A host can DHCP for all interfaces via DUID/IA as unique key**

- **Anyone using mac address for identification or filtering**
- **Anyone trying to correlate IPv4 and IPv6 to the same machine/user**
- **Persistent storage of DUID may cause surprises**



RA vs DHCPv6

- **RAs**

- RDNS (RFC 6106) support inconsistent
- Only prefixes, default route, RDNS
- Can't do complex configs/options

- **DHCPv6**

- No default route
- Usually not on link local, more complex
- Requires RA to set O/M bits



Unresolved

- **Prefix Delegation**
- **/etc/resolv.conf and multiple DHCP leases**
- **Multiple default routes**
- **OS implementations of RFC 6724**



Thank you!