DHCPv6 Issues
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Mac vs DUID
DUID vs MAC

- 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
What DUIDs do right

- 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
Where DUIDs don’t work...

- 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
The addressing wars...

- **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
Still not standardized

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