A Near Term Solution for Home IP networking (HIPnet)

draft-grundemann-homenet-hipnet-01

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Common Principles Guide HIPnet

- Home networks will become more complex, home users will not
- Invoking a god box leads to religious wars
- New protocols bring new problems
- We have enough addresses
- Use IPv6, support IPv4
HIPnet Meets Current Needs with Existing Functionality

• IPv6 is being deployed today (thankfully)
• Home networks are growing today
• A solution is needed today (or sooner)
  – Based on RFC 6204/bis
• HIPnet works: running code
  – Built on OpenWRT
  – Updates to DHCP
  – (find me at Bits-N-Bytes tonight)
HIPnet Works with the Homenet Architecture

- **Self-Organizing:** Directionless Routers
  - No user interaction required for most use cases
- **Addressing:** Recursive Prefix Delegation
  - Uses existing protocol (DHCP-PD)
- **Routing:** Hierarchical Routing
  - No routing protocol required
- **Bonus:** Multiple Address Family Support
  - Uses IPv6 to configure IPv4

- Supports arbitrary topologies, multihoming, security, and service discovery...
  - Meets the principles of [draft-ietf-homenet-arch](https://tools.ietf.org/html/draft-ietf-homenet-arch)
HIPnet Creates a Logical Hierarchy from a Physically Arbitrary Network
Questions?

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