homenet in hackathon

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Background

- IETF homenet WG deals with zero-configuration routed IPv6 home networks
- Essentially, make routed IPv6 home work better than bridged NATted IPv4 home network
- Notable components:
  - Prefix assignment using delegated prefix from ISP (/RFC1918 one for NATted IPv4 access)
  - Service discovery (DNS-SD + hybrid proxy + distributed PCP for firewall traversal)
  - Zero-configuration source-specific routing (Babel)

Getting started

- http://www.homewrt.org
  - Provides information on how to set up OpenWrt routing running the homenet-specific parts; on version front, Chaos Chalmer (15.05) release is slightly incompatible with the trunk (bleeding edge version)
- http://www.pps.univ-paris-diderot.fr/~jch/software/homenet/
  - Some OpenWrt and generic Linux information

What to do?

- Probably most valuable option given limited time and unfamiliarity with the code: TEST!
  - Get a device or get a VM, play with it and report issues
  - For ideas on device to use, see http://wiki.openwrt.org/toh/start
- Contribute documentation
  - Updates to www.homewrt.org would be nice ; so would be e.g. blog posts
- Contribute code/automated tests to one of the daemons
  - https://github.com/sbyx/ohybridproxy/
    - RFC-correct negative response handling and DNS64 support would be nice to have ..
  - https://github.com/sbyx/hnetd
    - 'issues' lists some things that could be worked on - e.g. NAT64 support, DNCP/HNCP conformance test suite
    - **'the new thing': MIF PVDs via DNS draft (draft-stenberg-mif-mpvd-dns-00):**
      - **=> requires changes in DNS server, host, and optionally DNS/DHCP*/RA servers in the middle)**