

draft-ietf-homenet- hybrid-proxy-zeroconf-02

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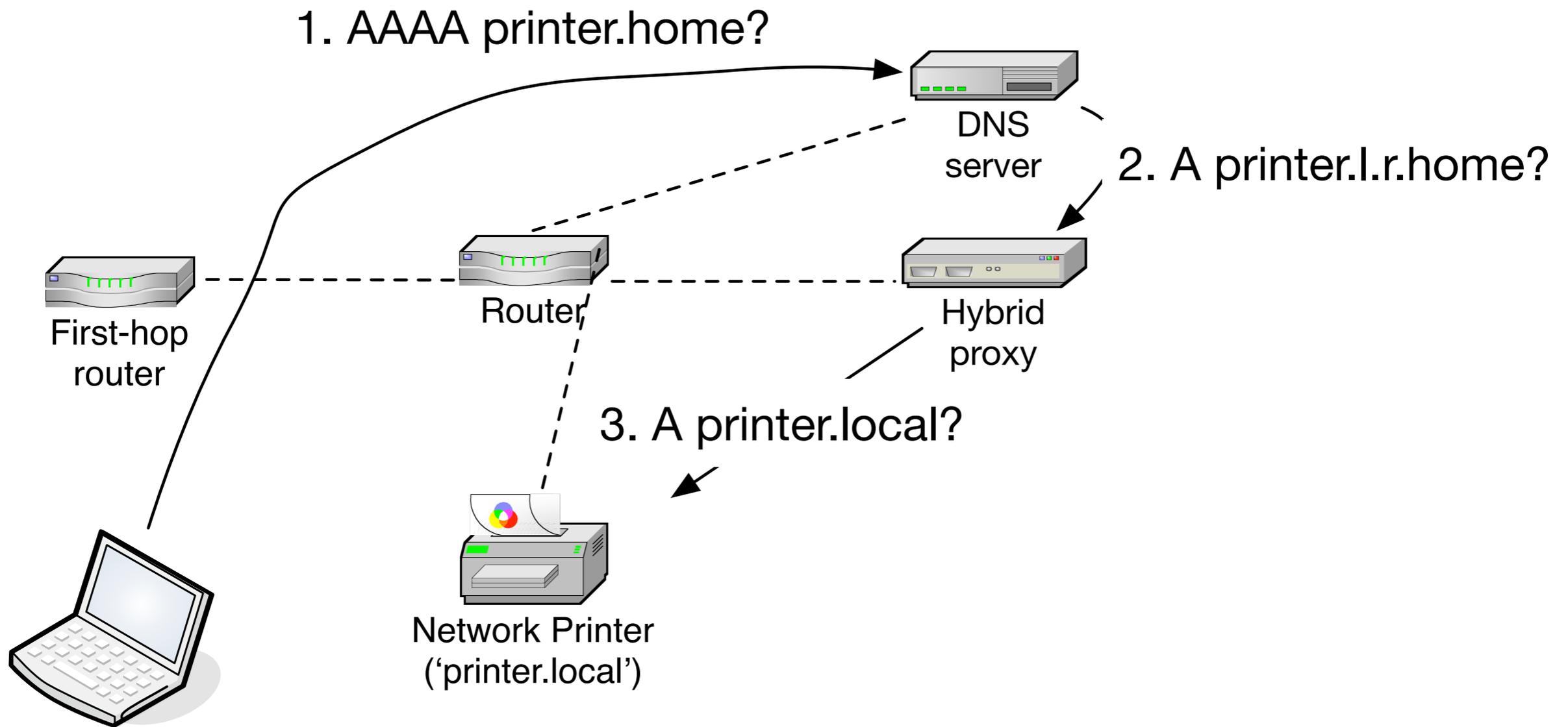
History

- Jun 2013: personal hybrid-proxy-ospf-00
 - Documented first implementation which used OSPFv3 AC TLVs
 - 3 defined TLVs date back to this document, and fundamentally behave the same way
- Feb 2014: personal hybrid-proxy-zeroconf-00
 - Generalized to describe algorithm and desired TLV features, but removed concrete TLV definitions
- Jun 2014: personal hybrid-proxy-zeroconf-01
 - Refer to HNCP as an alternative to using a routing protocol, minor review fixes
 - HNCP document contains concrete TLV definitions at this point
- Jan 2015: personal hybrid-proxy-zeroconf-02
 - Added legacy browse bit to DDZ TLV, minor review fixes
- Mar 2015: WG item hybrid-proxy-zeroconf-00
- Oct 2015: WG item hybrid-proxy-zeroconf-02
 - Added limited zone stitching

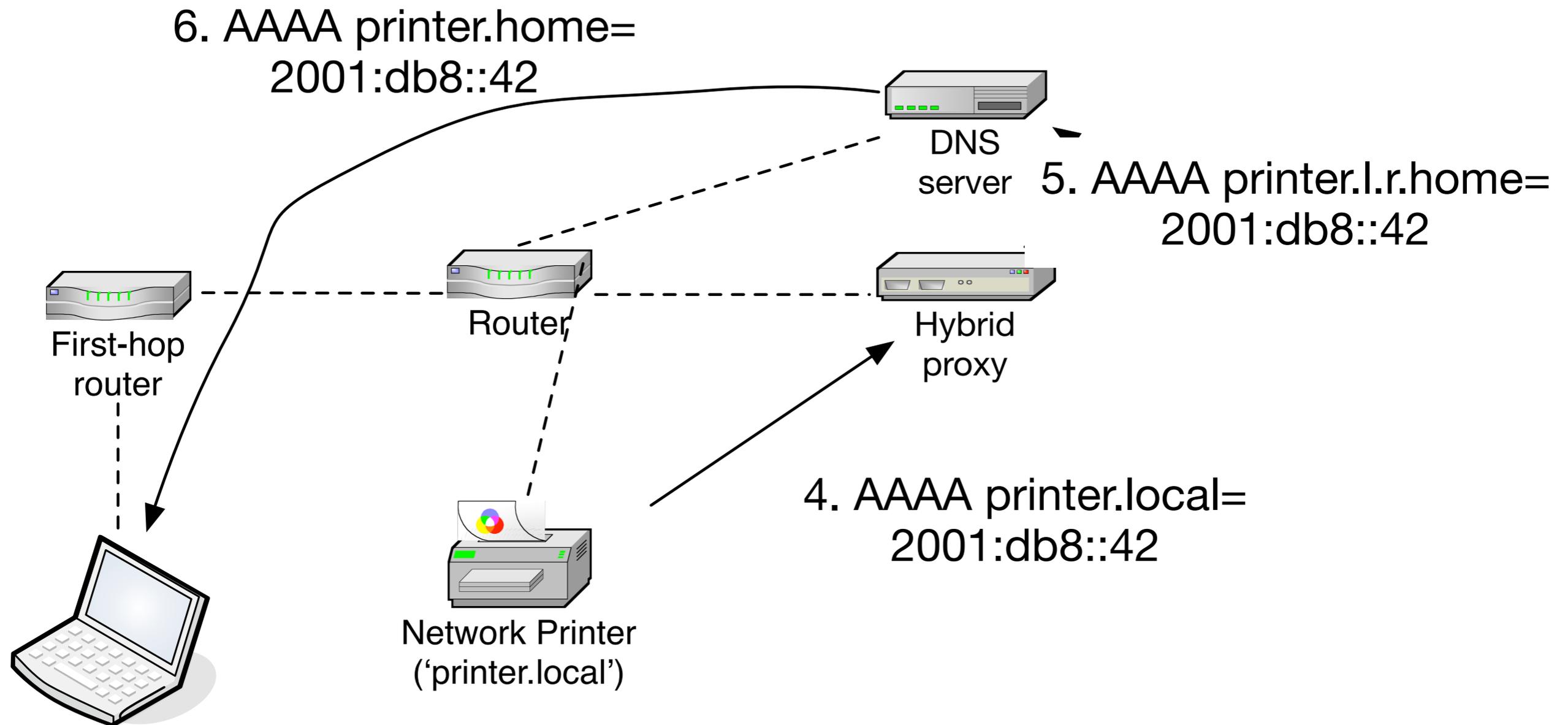
Zone stitching problem statement

- Current HNCP host naming scheme:
 - Client provides hostname via DHCP(v6) or mDNS
 - Router makes the hostname accessible via DNS as `<hostname>.<routerlink>.<router>.<domain>`
- Problems:
 - the `<routerlink>.<router>.<domain>` is not 'friendly'
 - User may want to type just `<hostname>.<domain>`
 - A number of people would argue having to type `hostname=failure` in service discovery..

Zone stitching (1/2)



Zone stitching (2/2)



Zone stitching disclaimers

- As 1 DNS request multiplies to N to address the covered links, it will not scale to large networks
 - Correct solution there is to DNS update the records that matter to a single zone
- How to handle multiple results is unclear
 - Answer with first one?
 - Answer with all? (with some of the addresses pointing at different hosts..)
- Currently aimed at only A/AAAA records; the hybrid proxy draft aims to be more generic
- Still solves a real problem (mine): `ssh <hostname>.home :)`

Implementation status

- The draft is implemented and available as open source code
 - <http://github.com/sbyx/hnetd/> for the HNCP TLV bits
 - <https://github.com/sbyx/ohybridproxy>
 - hybrid proxy binary 'ohybridproxy'
 - new 'zonestitcher' binary introduced in -02; integrated also with hnetd trunk version
- OpenWrt instructions <http://www.homewrt.org/>

Questions?