Homenet Architecture Principles document status

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Progress since Berlin

- The -10 version went through the IESG
  - Many DISCUSSes and COMMENTs
  - 85 points raised by 10 different ADs
  - Mainly resolved with fairly small edits
- Plus gen-art, opsdir, secdir, appsdir reviews
  - Good input received
  - Most addressed; appsdir comments more substantial
- The resulting edits led to the -11 version
  - Diffs can be seen at:
    http://tools.ietf.org/rfcdiff?url2=draft-ietf-homenet-arch-11.txt
- Still some open issues to be resolved for -12

Changes post IESG review

- The changes in -11 include:
  - Rephrased text about open source
  - Slight change to document title (added "Principles")
  - IPv6-only operation text has been pruned back
  - Added reference to RFC3002 on walled gardens
  - Expanded OAM text a little (but a little more needed)
  - Clarified between LLN and building automation
  - Added some text about entropy in devices
  - Deleted text about ULA master router election
- Many very small wording changes for clarity
- Clarified routing drafts will be taken to routing area

The open source text

- This drew comments from more than one AD

- The text now reads:

"The homenet unicast routing protocol should be based on a previously deployed protocol that has been shown to be reliable and robust, and that allows lightweight implementations. The availability of open source implementations is an important consideration."

The appsdir review

- The appsdir review was quite critical of the document, in particular for
    a) its name
    b) it not giving guidance from an application developer's point of view

- We have changed the name slightly
    - No strong view on the document name
- We propose a separate document on "application-oriented considerations for future IPv6 home networks" (or a similar title)
    - To include apps area authors

Open issues (1)

- Is document name appropriate?
  - Now: "IPv6 Home Networking Architecture Principles"
- Do we need more text in OAM section?
  - Originally OAM out of scope of the document
  - Will add some, e.g., about user seeing a list of routers
- Can a routing protocol run between homenet and ISP?
  - Position: document assumes not, focus is on internal net
- Definition of local trust anchor, and some comments related to DNSSEC
  - To be defined/answered in future naming document

Open issues (2)

- Should the text in 3.6 continue to punt the default allow/deny position to RFC 6092 (simple security)?
  - Currently it does – should this change?
- "Will security be sacrificed at the altar of zeroconf"
  - Not easy to answer… it is a trade-off
- Which multicast scope should be used in the homenet?
  - We had said 5, but only 3 can be automatically configured
- Do we keep 3.1.1 on reusing existing protocols?
  - Consensus currently is to keep
- Consider the one name space per ISP scenario?
  - Since we consider multihoming, then yes, in naming doc

Incremental deployment?

- The document says very little on incremental deployment
  - Ideally, all routers in the home network will be 'homenet' routers
- In practice, will see early deployment of (for example) hipnet routers (without an IGP)
  - See *draft-grundemann-homenet-hipnet-01*
  - This is happening now
- Need a clear path with interoperability through to an end position of all 'homenet' routers (with an IGP)
- Early draft on this topic:
  - See *draft-winters-homenet-sper-interaction-00*
  - Good discussion being had by a separate design team

Next steps?

- Aiming to resolve open issues asap
- Clear the AD DISCUSSes and COMMENTs, e.g.
  - Clarifying focus is around Layer 3
    - Layer 2 out of scope, assume IPv6 can run over any L2
  - And to avoid gratuitous subnetting on wireless
    - So devices avoid renumbering when moving in the home
    - But would be on different subnets for main/guest SSIDs
  - Getting there ☺
- Comments/questions?