About draft-homenet-babel-profile
REQ5

27 March 2017
Technical but consensual draft. Two parts:

1. mandated parameters for Babel in Homenet
   e.g. use metric 96 for a GbE link;
   e.g. MUST IPv6, SHOULD IPv4.

2. interactions between HNCP and Babel
   e.g. if you announce an ext. IPv6 prefix over HNCP
   then you announce a source-specific default route
   over Babel.

The requirements are (meant to be):

- specific enough to ensure interoperability;
- general enough to allow both hnetd and shncpd.
This was meant to be a technical but consensual draft:
- -00 was a complete draft, but with a few TBD left (published 8 July 2016, discussed in Berlin);
- -01 was meant to be the final document (published 2 December 2016).
Things go wrong: REQ5

REQ5: a Homenet implementation of Babel
MUST implement HMAC-based authentication [...] and MUST enable and require authentication when instructed to do so by HNCP.
REQ5: a Homenet implementation of Babel MUST implement HMAC-based authentication […] and MUST enable and require authentication when instructed to do so by HNCP.

This has two issues:
- **not precise enough** to ensure interoperability;
- **nobody** has any plans to **implement** it.

This was raised:
- **in private with the chairs** and Markus Stenberg;
- **on the mailing list**
  (detailed mail dated 4 January 2017).
REQ5 is not precise enough

In order to implement REQ5:
- need a consensus mechanism to decide whether a given link uses authentication;
- need a consensus mechanism to agree on a shared key for a given link.

We must:
- define a consensus algorithm;
- define the packet format;
- provide a reference implementation.
Nobody intends to implement REQ5

The Homenet working group has a proud tradition of working code.

Everything that the WG does has been implemented:
- at least once (source-specific routing);
- most often twice (core of HNCP, prefix assignment);
- sometimes thrice or more (Babel).

I do not wish to be the editor of a document that contains a requirement that nobody has any plans to implement.
Suggestions

How do we get out of this impasse? Suggestions:

1. delegate authentication to a lower layer, remove REQ5 from draft-homenet-babel-profile.

2. find someone who volunteers to:
   - define suitable algorithms;
   - define the packet format;
   - provide a reference implementation.
   (I volunteer to help, but not to do the work.)

3. pick a new editor
   (I expect to remain as co-author).

4. Other ideas?
Suggestions

How do we get out of this impasse? Suggestions:

1. delegate authentication to a lower layer, remove REQ5 from draft-homenet-babel-profile.
2. find someone who volunteers to:
   - define suitable algorithms;
   - define the packet format;
   - provide a reference implementation.
   (I volunteer to help, but not to do the work.)
3. pick a new editor
   (I expect to remain as co-author).
4. Other ideas?

Please tell me what to do.