Babel Information Model

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Outstanding comments (from Juliusz and Toke)

"Getting the words right: describing "endianness" of the (optional) Hello history, or "the most recent received Hello is represented by the leftmost bit", or "the most recent received Hello is in the Most Significant Bit position".

Add optional parameters for unicast Hellos into the neighbor table [I think I understand this now]

"babel-neighbor-ihu-interval: current IHU interval for this neighbor": We need to decide whether there is something useful to mention, and how to properly describe it. What I thought this parameter was, was the value used to initialize an IHU interval timer (the advertised value?), and not the current value.

current v4/v6 nexthop addresses used for routes announced over each interface; may be useful to include, since the mapping from addresses assigned to the interface is not always obvious, so may be useful to see what a particular implementation picked?

Open Issues

I think I can close these previously raised "issues", but want to pass them by the group one last time:

   1. babel-interfaces-obj: Juliusz:"This needs further discussion, I fear some of these are implementation details." [In the absence of discussion, the current model stands. Note that all but link-type and the neighbors sub-object are optional; if an implementation does not have any of the optional elements then it simply doesn't have them and that's fine.]

   2. Would it be useful to define some parameters for reporting statistics or logs? [2 logs are now included. If others are needed they need to be proposed.]

   3. Would it be useful to define some parameters specifically for security anomalies? [The 2 logs should be useful in identifying security anomalies. If more is needed, someone needs to propose.]

   4. I created a basic security model. It's useful for single (or no) active security mechanism (e.g., just HMAC, just DTLS, or neither); but not multiple active (both HMAC and DTLS -- which is not the same as HMAC of DTLS and would just mean that HMAC would be used on all unencrypted messages -- but right now the model doesn't allow for configuring HMAC of unencrypted messages for routers without DTLS, while DTLS is used if possible). OK?

Open Issues, continued

5. babel-external-cost may need more work. [if no comment, it will be left as is]

6. babel-hello-[mu]cast-history: the Hello history is formated as 16 bits, per A.1 of 6126bis. Is that a too implementation specific? [We also now have an optional-to-implement log of received messages, and I made these optional. So maybe this is ok?]

7. rxcost, txcost, cost: is it ok to model as integers, since 6126bis 2.1 says costs and metrics need not be integers. [I have them as integers unless someone insists on something else.]

8. Should babel link types have an IANA registry? [Right now, none is defined.]

9. For the security log, should it also log whether the credentials were considered ok? [Right now it doesn't and I think that's ok because if you log Hellos it was ok and if you don't it wasn't.]

Next steps

- produce updated revision to deal with items mentioned in these slides

- create a TR-181 data model

- start WGLC?