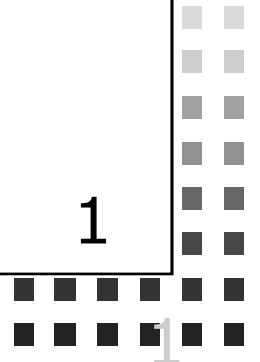
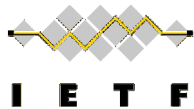


Babel Information Model

Barbara Stark
Mahesh Jethanandani
IETF 105, July 2019





Major Changes -05 to -07

- changed Link Type registry in IANA considerations to Link Properties [which will be made irrelevant by the next slide]
- changed direction of reference for HMAC and DTLS objects to be from interface to these objects
- provided DTLS certificate objects with a unique name
- changed received and calculated metric descriptions to make clear that it is ok to have both
- constrained interface reference to only IPv6 interfaces
- babel-dtls-enable and babel-hmac-enable moved to interfaces and made rw
- renamed babel-dtls and babel-hmac to babel-dtls-cert-sets and babel-hmac-key-sets and references to them from interfaces are babel-if-dtls-cert-sets and babel-if-hmac-key-sets
- <https://github.com/bhstark2/babel-information-model/issues/16> with nits [major of these was “The router-id value MUST NOT consist of all zeroes or all ones.”]
- <https://github.com/bhstark2/babel-information-model/issues/14> addressing parameters not allowed to be empty/null
- <https://github.com/bhstark2/babel-information-model/issues/18> on IANA link properties table [which will be made irrelevant by the next slide]

Issue #1: Link Properties

Proposed changes based on recent emails:

- 1. Delete IANA Considerations section. No request is being made of IANA (i.e., no registry for link properties or link types or any other such thing).**
- 2. Delete babel-supported-link-properties and babel-link-properties in all places**
- 3. Make babel-interface-metric-algorithm rw (so it can be updated by the management system)**
- 4. Add boolean rw babel-interface-split-horizon parameter: Indicates whether or not the split horizon optimization is used when calculating metrics on this interface. A value of true indicates split horizon optimization is used.**

[No changes for RTT; an RTT draft can propose info model updates needed to support it formally.]



Issue #2: “k-out-of-j” or “2-out-of-3”?

Replace the “k-out-of-j” enumeration for expression of algorithmic capabilities with “2-out-of-3”. If other variants are supported, they will need to be explicitly included in the enumeration.

Change:

`babel-metric-comp-algorithms`: List of supported cost computation algorithms. Possible values include “2-out-of-3”, and “ETX”.



Issue #3: Calculated and received metrics datatype

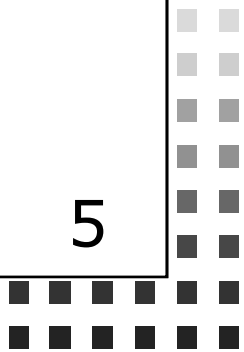
Problem: Some data modeling mechanisms (e.g., TR-181) model NULL as 0 (zero) for uint datatype.

Proposal: Change last sentence in description of these 2 parameters from:

“This is a 16-bit unsigned integer.”

to

“This is a 16-bit unsigned integer but may be represented by a data model as a signed integer for schemas that use 0 (zero) to represent NULL with unsigned integers, but use negative numbers to represent NULL with signed integers.”





Next steps

- **Post -08 draft with resolutions agreed on for issues in this presentation.**
- **Do one more quick WGLC on -08. ?**
- **If nothing pops up, move it on. ?**