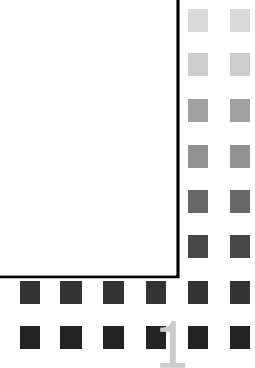
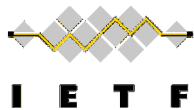




Babel Information Model

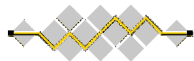
Barbara Stark
Mahesh Jethanandani
IETF 104, March 2019



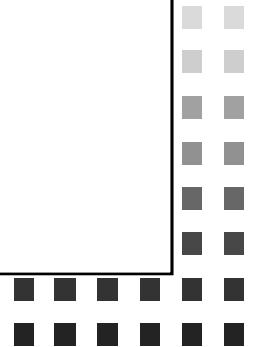


Status

In WGLC.



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Editor's Draft and TR-181 Data Model

... and issue discussion (between me and Mahesh), can be found at:

<https://github.com/bhstark2/babel-information-model>

Updated BBF TR-181 DM isn't there yet, but it was reviewed in BBF last week, and is in pretty good shape – I just ran out of time to sanitize for external view. Goal is to start “straw ballot” (like WGLC) in early May going to mid June (comments resolved in June at F2F).





Major Changes -04 to -05

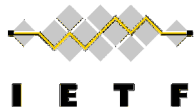
- **HMAC parameters and objects**
- **DTLS parameters and objects**
- **Statistics**
- **Message Log**
- **Other updates as agreed to from Bangkok and list discussions**

Issue #1: Link Type Registry

- Do we have the right names for these?
- Is it meaningful to describe what sorts of links it is used for, and how extensive should the list be?

The initial values in the "Babel Link Type" registry are:

Name	Used for Links Defined By	Reference
ethernet	[IEEE-802.3-2018]	(this doc)
other	to be used when no link type information available	(this doc)
tunnel	to be used for a tunneled interface over unknown physical link	(this doc)
wireless	[IEEE-802.11-2016]	(this doc)
exp-*	Reserved for Experimental Use	(this doc)





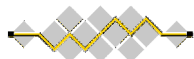
Issue #2: HMAC/DTLS interfaces modeling

**Should HMAC and DTLS entries be additive for
interfaces?**

or

**Should we change from referencing interfaces inside
DTLS/HMAC, to referencing DTLS/HMAC objects from
interfaces?**

**Need to consider global DTLS/HMAC parameters in
this decision (use of `cached_info` extension,
`server_certificate_type` extension, whether verification
of received packets is enabled (or should this be link-
specific?))**



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Issue #3: Name for DTLS cert and HMAC key

- **Add Name parameter to dtls-certs, like hmac-key has**
- **babel-hmac-key-name (and babel-dtls-cert-name, if added) should be rw**



Issue #4: DTLS and HMAC object unique keys

**Should we have unique keys identified
by the information model for these
objects, or leave that to the data model
to figure out?**



Issue #5: metric parameters

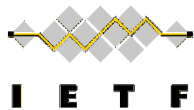
Does "Either babel-route-calculated-metric or babel-route-received-metric **MUST** be provided." mean that exactly one must be provided, or at least one (but having values for both is fine)?



Issue #6: interface-reference

From BBF discussion, I'd like to confirm the parameter definition:

Reference to an interface object as defined by the data model (e.g., YANG [RFC7950], BBF [TR-181]). Data model is assumed to allow for referencing of interface objects which may be at any layer (physical, Ethernet MAC, IP, tunneled IP, etc.). Referencing syntax will be specific to the data model. If there is no set of interface objects available, this should be a string that indicates the interface name used by the underlying operating system.





Next steps

- **Currently in WGLC.**
- **Please can we have additional review?**
- **Resolve issues and update info model, YANG and TR-181 data models.**
- **?**