BPbis Gen-ART last call review

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BPbis Review and Response

- draft-ietf-dtn-bpbis-17 has been reviewed by Stewart Bryant, the assigned Gen-ART reviewer.
- The following slides list the points raised in the review and the proposed responses.

21 November 2017



RFC 5050

It is not clear what the status of this RFC will be relative to RFC5050. If it modifies the status of RFC5050 it needs to make this clear in the boilerplate, Abstract and Introduction.

Add the following text to the Introduction and Abstract.

The Internet Research Task Force is advised that this document is an update of the protocol described in RFC 5050, reflecting lessons learned, but it does not obsolete RFC 5050.



CRCs

I am surprised that in these more modern times something stronger than a CRC is not used, for example a crypto hash. Particularly given the harsh environment that this is targeting.

Add the following text to 4.1.1.

Note that more robust protection of BP data integrity, as needed, may be provided by means of Block Integrity Blocks as defined in the Bundle Security Protocol [BPSEC]).

21 November 2017

Manifest block

Given that manifest is not defined yet this seems out of place in an ST text.

Remove all mention of Manifest block.



DTN Time

This section needs to be checked by a time expert. The argument in this section seems long and will become dated. Surely all you need to say is that you need a monotonically increasing time system such as TAI or UNIX time(), and out of software convenience you choose the latter. A lot of the text in this section is not really normative and perhaps belongs in a non-normative appendix.

Reduce 4.1.6 to just the following:

A DTN time is an unsigned integer indicating the number of seconds that haves elapsed since the start of the year 2000 on the Coordinated Universal Time (UTC) scale [UTC]. Each DTN time SHALL be represented as a CBOR unsigned integer item.

Anticipated blocks

This (reservation of block number 13) should really be handled through an IANA registry. It seems strange to have text that is semi-definitive about anticipated features in a proposed standard. Same for types 14 and 15. They should not be in ST text until they are standard.

Remove all mention of blocks not yet defined.



Security

Is there a definition of the bundle in bundle protocol?

Add the following note in the Security section.

Bundle-in-bundle encapsulation is a current research topic.

The material that follows seems to be defining protocol which is unusual in a security section. I would be better to define protocol in the body of the text or simply point to a definition in another document.

Remove all text in Security section following "...distribution of public keys, a current research topic".

IANA considerations (1 of 3)

The namespaces do not seem to be identified.

Change "registry" to "namespace" throughout section 10?

IANA considerations (2 of 3)

The IANA reference for new allocations ought to be to this RFC.

Change references to "RFC to be" where needed.

IANA considerations (3 of 3)

Given that this is a Standards Document I am surprised that references to RFC5050 are not replaced with references to this RFC. Does this indicate that RFC5050 is expected to remain a current protocol? If so we are in the odd position of a ST text relying on definitions in an Experimental text. This is something that the IESG needs to consider.

(Don't know how to address this.)

Bundle Processing Control Flags

I am surprised that [the registration policy] (or some part of it) is not changed to one of the more difficult critera, such as Standards Action.

Change registration policy request to the following.

The registration policy for this namespace is changed to "Standards Action". Given the limited number of bits available, the allocation should only be granted for a standards-track RFC approved by the IESG.

Also I am surprised that there are no private use or experimental allocations.

Should we revise this (existing) registry?

Normative references (1 of 3)

I am not sure what this [BPSEC] points to but I think it is RFC6257 which is experimental and hence is a downref. This needs the proper ref and the downref addressing.

Current reference is correct.

Normative references (2 of 3)

I am not sure what the policy is WRT having a normative ref to an IEEE paper. Information on CRC32C is more accessibly found in RFC3385.

Change reference; now refers to RFC3385.

Normative references (3 of 3)

I am sure this [EPOCH] is a fine document but again I am not sure if you can point to it as normative.

Remove reference (was previously needed for DTN time discussion).

Bpbis adapted from RFC5050

Is it simply adapted? What is the relative standing of the two? As far as I can see this Standard relies on definitions provided by that RFC.

(See above for clarifying language added to Introduction and Abstract.)

CDDL expression

What is the licence position for the code that follows?

Per Magnus: This is not code, it is CDDL so it is format description, comparable to ABNF. As it is submitted under BCP 78 and IETF TPL so I don't see any formal issues with it.

More on namespaces

- (10.2) This is normally expressed as a request for IANA to take an action on a namespace.
- (10.4) Again no namespace specified.
- (10.6) In which namespace?

Change "registry" to "namespace" throughout section 10?

URI Scheme Types registry

I am surprised that in an 8bit field there are not more reserved values that require more considered action to release.

(What should we do about this?)

For additional information

That [reference to DTNRG website] does not seem right for a PS document.

Remove reference.

"Contraindicated"

contraindicated is a very erudite word, but I wonder how many of the readers, particularly those who are not native English speakers will understand it. Perhaps a simpler word might me used. If not then it ought to be defined in the text.

Insert the following text after "contraindicated" Step 2 of 5.4:

(that is, rendered inadvisable)