Proposed DTN WG Charter Items

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26 July 2019

This research was carried out at the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration. Government sponsorship acknowledged.

Bundle-in-bundle Encapsulation

- New locus of custody transfer feature removed from bpbis.
  - Makes BIBE a reliable CL protocol that operates over disrupted links.
- New locus of security-source/security-destination feature removed from bpsec.
- Provides straightforward method of:
  - Defending against traffic analysis, regardless of convergence-layer capabilities.
  - Temporarily substituting network operator's processing parameter values for values asserted by the source application: priority, TTL, etc.
  - Implementing source path routing. (Which makes source authentication even more important.)
- Initial draft (draft-ietf-dtn-bibect-01) posted in January.

Quality of Service Extension Block

- Class of service has been removed from bpbis.
- Application-asserted class of service has obvious weaknesses, but it is mandatory for some deployments in closed networks.
- “Data label” (previously known as “flow label”) should normally also be present in QoS extension block.
- 3-tuple of data label, source node, and destination node can be used by network operator to select priority, overriding the class of service as necessary.
- Other QoS features TBD.
- No IETF draft yet, but draft-irtf-dtnrf-ecos-05 could be a starting point.

Security Key Distribution

- Not yet a problem, as networks are small, privately managed, closed. But must be solved if DTN is to scale up.
- Delay-tolerant public key infrastructure has been prototyped in ION and documented in draft-templin-dtn-dtnskmreq-00.
- Is that the right approach? What would be better?