Update on the LTP drafts

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LTP Overview

➲ Designed as a reliable deep-space conver-gence layer protocol for Bundling

➲ Characteristics :
- Stateful
- Has no negotiation/handshakes
- Does ARQ of data transmissions by soliciting selective acknowledgment reception reports

The Trilogy

➲ Document split up into 3 coherent, readable chunks now

- Motivation - draft-irtf-dtnrg-ltp-motivation-00.txt
- Specification – draft-irtf-dtnrg-ltp-02.txt
- Extensions - draft-irtf-dtnrg-ltp-extensions-00.txt

Recent Changes

➲ Added the notion of partial reliability to the block of data to be transmitted.

➲ Block split into a "red" block prefix and a "green" block suffix

- Red-part – segments transmitted reliably with the retransmission based recovery mechanism
- Green-part – segments sent out once on a best efforts basis

Recent Changes (contd.)

- ➲ A typical application data unit may com-prise
  - a header containing codec-s / metadata charac-terizing the following data
  - the actual data portion
- ➲ The red/green scheme provides a way to let the application get the headers across reli-ably, and the actual data on best-efforts ba-sis

Recent Changes (contd.)

⮒ Updated the state transition diagrams to be in sync with the notion of partial reliability

⮒ Support for LTP header/trailer extensions

⮒ Extensions proposed
- LTP Authentication
  - MAC, MAC of the Digital Signature, CRC equivalent
- Cookie Mechanism
  - To be robust against DoS attacks

Status Update

- ➲ Motivation, Specification documents seem relatively mature

- ➲ The extensions document is rather less mature and is likely to undergo changes

- ➲ Please give us your feedback on the drafts !!

Conclusion

- ➲ LTP web-page / mailing list
  http://irg.cs.ohiou.edu/ltp

- ➲ Questions ???