
Flute revised

draft-draft-ietf-rmt-flute-revised-10

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Status

- several versions since previous IETF
 - **-08, -09 and -10 versions between 12/2009 and 01/2010**
 - Vincent with inputs from Mike, Toni and Rod
 - **goal is to finish addressing Magnus' comments (sent on 09/2009)**
 - **-07 to -10 diff:**
<http://tools.ietf.org/rfcdiff?url1=draft-ietf-rmt-flute-revised-07&difftype=--html&submit=Go%21&url2=draft-ietf-rmt-flute-revised-10>

Security considerations

- IETF'76: discussion on "minimum security requirements" (BCP 61 / RFC 3365)
 - said differently, which *mandatory to implement security (but not necessarily to use) solution?*
 - proposal is to stay aligned with ALC, i.e. "IPsec/ESP in transport mode"
 - provides:
 - per-packet security,
 - data origin authentication,
 - integrity verification, and
 - anti-replay

Timestamp/NTP considerations

- issue concerns FDT Instance expiration time:
 - "Handling of wraparound of the 32 bit time is outside the scope of NTP and FLUTE."
- solution:
 - use the "epoch" concept of NTPv4 to manage NTP timestamp wraparound
 - 1900-2036: epoch 0
 - 2036-2172: epoch 1, etc.

Erased FDT Instance considerations

● issue:

○FDT inst. flexibility makes their erasure problematic

- "Any FDT Instance can be equal to, a subset of, a superset of, or complement any other FDT Instance."

● solution:

○recommendations

- "It is RECOMMENDED that FDT Instances be managed in such a way that a receiver will be able to recover at least one FDT Instance describing a file [...] with as much or greater reliability as the receiver is able to receive enough packets [...] to recover the file."

○clarified that FDT inst. loss is not an erroneous situation

FDT Instance ID wraparound considerations

● issue:

- "Mandatory receiver behavior for handling FDT Instance ID wraparound [...] is outside the scope of this specification"

● solution:

○distinguish sender's behavior and receiver's behavior

○sender:

- if all IDs are used by non expired FDT Inst., there's little to do...

○receiver:

- if an ID wraparound takes place while the initial FDT Instance is non expired, return an ERROR
- otherwise FDT Instance ID wraparound MUST be supported

Finally...

- several corrections here and there...
 - ... and we upgraded some references as being "Normative"

- mid-February we received new comments from IANA, security directorate, and Gen-Art LC
 - a new I-D is expected
 - Mike/Mark/Thomas volunteered to manage this...