

# A One-way Delay Measurement Protocol

## draft-ietf-ippm-owdp-02.txt

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## Meta-

- It's necessary to produce a requirements document (in the works; Merike will tell more);
- Still need an outside security review.

```
diff -u *-01.txt *-02.txt
```

1. Introductory language changes (remove *bad words*; p. 1);
2. Explanation of relationship between control and test protocols (pp. 2–3);
3. Message boundary clarifications;
4. Modes is now wider (32 bits);
5. Type-P Descriptor (DSCP or PHB ID for now)\*;
6. Precision revamp (now part of timestamp)\*;
7. Partial session results retrieval\*;
8. Numerous clarifications and small fixes.

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\*Separate slide to follow explains this item in more detail.

## Type-P Descriptor

- You can ask for any; you have to advertize yours;
- Used in Request-Session and reported in Retrieve-Session output;
- 32-bit quantity, for now two bits describe how to interpret the rest;
- For now, two ways of specifying it: With a DSCP and with a PHB ID. (When shall we have globally meaningful service IDs?)

## The new per-packet precision

- Get rid of per-session precision;
- Specify precision per-packet (steal some space from time-stamp itself);
- Relatively coarse: specify to the nearest power of two (in seconds);
- Anything more specific would likely only apply to specific timestamping techniques;
- Still *circa*  $6 \times 10^{-8}$  s time resolution.

## Partial session results retrieval

- Might be useful for “continuous monitoring”;
- Client asks for a range of sequence numbers;
- Server returns what it has received *so far*;
- Old robust semantics for special values of range boundaries.

## Feature requests for draft-ietf-ippm-owdp-02.txt

- Non-Poisson inter-packet distribution
  - Can anyone come up with an elegant encoding of distributions of sufficient generality? (Send mail to the list and/or the authors.)
- Support for timestamps known *a posteriori*
  - Is it universally useful?
  - Can anyone come up with an approach that still lets one record extended periods of losses? (Send mail to the list and/or the authors.)
- TLV
  - Is “L” what’s missing?
  - Do we want to add it?