OwampTool

OWAMP (One-Way Active Measurement Tool)

OWAMP is a command line client application and a policy daemon used to determine one way latencies between hosts. It is an implementation of the OWAMP protocol (see references) that is currently going through the standardization process within the IPPM WG in the IETF.

With roundtrip-based measurements, it is hard to isolate the direction in which congestion is experienced. One-way measurements solve this problem and make the direction of congestion immediately apparent. Since traffic can be asymmetric at many sites that are primarily producers or consumers of data, this allows for more informative measurements. One-way measurements allow the user to better isolate the effects of specific parts of a network on the treatment of traffic.

The current OWAMP implementation (V3.1) supports IPv4 and IPv6.

Example using owping (OWAMP v3.1) on a linux host:

```
welti@atitlan:~$ owping ezmp3
Approximately 13.0 seconds until results available

--- owping statistics from [2001:620:0:114:21b:78ff:fe30:2974]:52887 to [ezmp3]:41530 ---
SID:    feae18e9cd32e3ee5806d0d490df41bd
first:  2009-02-03T16:40:31.678
last:   2009-02-03T16:40:40.894
100 sent, 0 lost (0.000%), 0 duplicates
one-way delay min/median/max = 2.4/2.5/3.39 ms, (err=0.43 ms)
one-way jitter = 0 ms (P95-P50)
TTL not reported
no reordering


--- owping statistics from [ezmp3]:41531 to [2001:620:0:114:21b:78ff:fe30:2974]:42315 ---
SID:    fe302974cd32e3ee7ea1a5004fddc6ff
first:  2009-02-03T16:40:31.479
last:   2009-02-03T16:40:40.685
100 sent, 0 lost (0.000%), 0 duplicates
one-way delay min/median/max = 1.99/2.1/2.06 ms, (err=0.43 ms)
one-way jitter = 0 ms (P95-P50)
TTL not reported
no reordering
```

References

- Internet2 Web page about OWAMP - http://e2epi.internet2.edu/owamp/

- OWAMP Cookbook - Unable to render embedded object: File (e2epi.internet2.edu/npw/binder-docs/owamp-cookbook.pdf) not found.

- RFC 4656, *A One-way Active Measurement Protocol (OWAMP)*, S. Shalunov, B. Teitelbaum, A. Karp, J. Boote, M. Zekauskas, September 2006

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