Experiments Plan

Zhao Zongyi

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Exp #84491

- Use the simulator of HashFlow implemented in python.
- Set the memory size to be 1 MB, so it can accommodate around 55K flow records.
- Select 10 trace files from each of the four traces.
- Initiate 50K flows from each trace file.
- Increase the depth of HashFlow from 1 to 4.
- Count the packets processed by the simulator, i.e., the number of original packets plus the resubmitted packets.

Exp #84492

- Select a file from the CAIDA trace (equinix-nyc.dirA.20180315-125910.UTC.anon.pcap), extract the first 2.5 million packets, classify the TCP/UDP packets into flows, and then calculate the average size as well as the maximum size of the flows.
- Select a file from the HGC trace (20080415000.pcap), extract the first 2.5 million packets, classify the TCP/UDP packets into flows, and then calculate the average size as well as the maximum size of the flows.
- Calculate the average as well as maximum size of a file from China Telecom trace (nfcapd.201601022000).
- Calculate the average as well as maximum size of a file from Tsinghua campus trace (20140206-6).

Exp #84493

- Set the memory size to be 1MB.
- Increase the number of flows from 10K to 100K, in the step size of 10K.
- Use a trace file from CAIDA and HGC respectively.
- Use four versions of HashFlow. In the versions the number of buckets in the ancillary table is $0.25\times$, $0.5\times$, $1.0\times$, and $2\times$ respectively of the number of buckets in main table.
- Calculate the average relative error for flow size estimation.