

**Pantheon Summary** (Generated at Tue, 01 Aug 2017 06:04:08 +0000 with pantheon version 33c7b8d34ce04c76596315aa973f0b30d6129d55)

Repeated the test of 15 congestion control schemes 10 times.

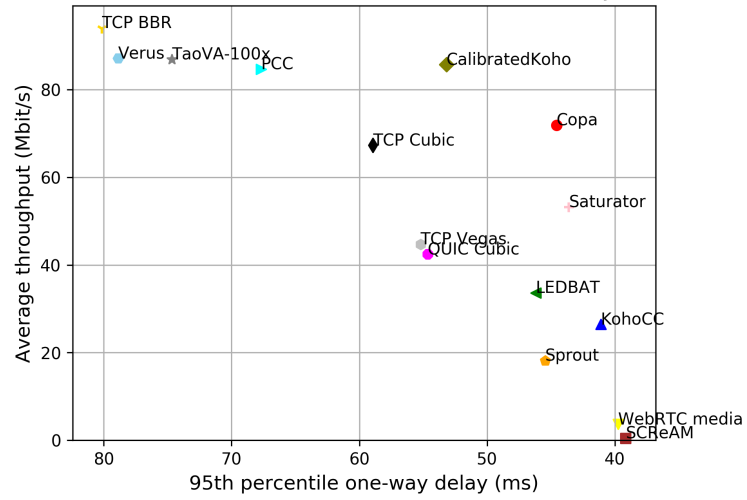
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

Data path: Mexico Ethernet (*remote*) → AWS California 2 Ethernet (*local*).

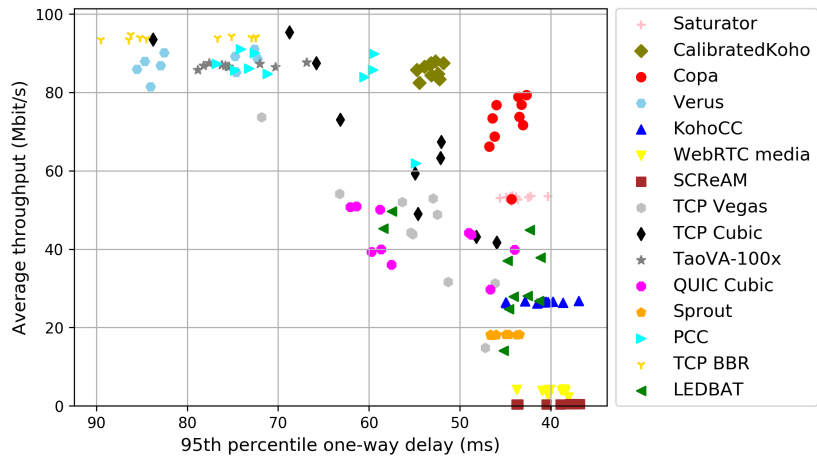
NTP offset measured against time.stanford.edu and has been applied to correct the timestamps in logs.

```
git branch: master @ 33c7b8d34ce04c76596315aa973f0b30d6129d55
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Mexico Ethernet to AWS California 2 Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Mexico Ethernet to AWS California 2 Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows





scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	57.34	40.25	29.83	75.97	77.69	81.76	0.36	0.66	1.46
CalibratedKoho	10	61.83	27.91	16.14	53.07	53.37	53.15	0.35	0.55	1.24
Copa	10	41.15	32.25	27.94	44.00	44.80	47.55	0.33	0.55	0.99
TCP Cubic	10	32.64	35.28	33.96	55.87	57.53	57.78	0.32	0.40	0.87
KohoCC	10	13.35	13.28	12.98	40.95	41.13	41.31	0.41	0.52	0.98
LEDBAT	10	19.98	15.57	10.12	45.96	45.12	45.73	0.38	0.63	1.66
PCC	10	58.18	28.76	22.38	64.29	68.72	68.40	0.42	0.68	1.20
QUIC Cubic	10	0.07	47.18	33.95	37.74	54.20	55.14	0.00	0.54	1.43
Saturator	10	26.71	26.74	26.25	43.13	43.48	44.86	0.38	0.55	1.07
SCReAM	10	0.21	0.22	0.22	39.10	38.83	39.08	0.29	0.46	0.92
Sprout	10	9.20	9.05	8.88	45.16	45.70	45.70	0.31	0.55	0.98
TaoVA-100x	10	51.57	37.83	30.58	67.44	73.99	75.19	0.41	0.68	1.43
TCP Vegas	10	24.22	19.37	22.50	52.72	54.10	52.47	0.38	0.48	0.83
Verus	10	51.43	38.88	30.44	77.97	73.82	77.66	0.39	0.52	1.46
WebRTC media	10	1.79	1.53	0.46	39.58	39.77	40.18	0.40	0.65	1.72

Run 1: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 02:00:33 +0000

End at: Tue, 01 Aug 2017 02:01:03 +0000

Local clock offset: 0.535 ms

Remote clock offset: -1.763 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 85.229 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 54.83 Mbit/s

95th percentile per-packet one-way delay: 85.500 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 47.14 Mbit/s

95th percentile per-packet one-way delay: 66.839 ms

Loss rate: 0.64%

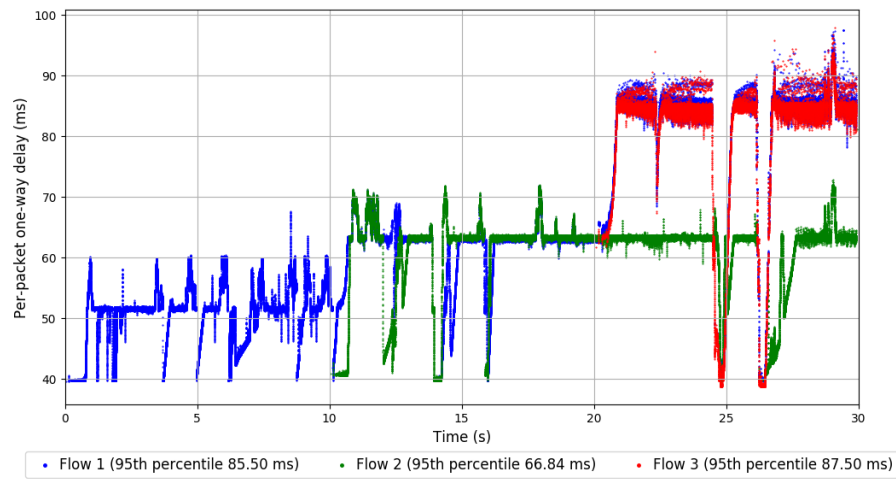
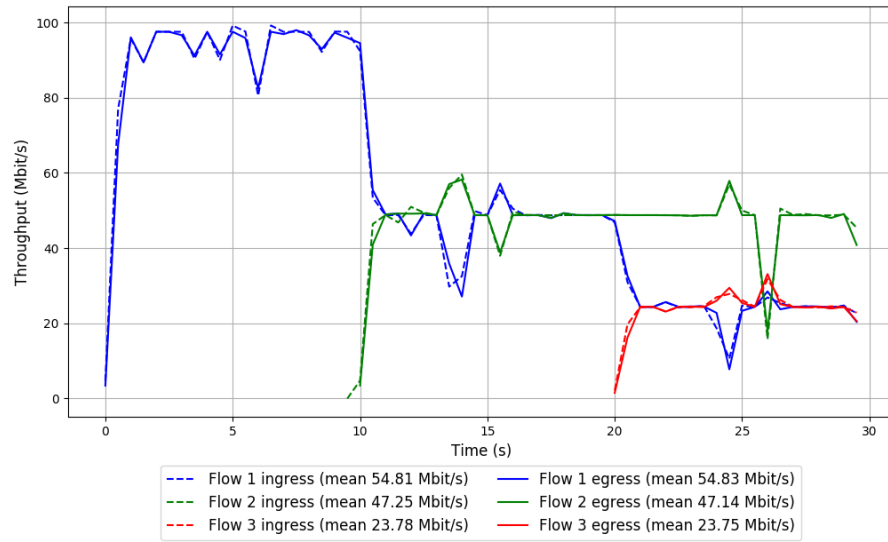
-- Flow 3:

Average throughput: 23.75 Mbit/s

95th percentile per-packet one-way delay: 87.497 ms

Loss rate: 1.42%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 02:21:37 +0000

End at: Tue, 01 Aug 2017 02:22:07 +0000

Local clock offset: 0.482 ms

Remote clock offset: -1.911 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 75.124 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 57.66 Mbit/s

95th percentile per-packet one-way delay: 74.142 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 39.66 Mbit/s

95th percentile per-packet one-way delay: 75.173 ms

Loss rate: 0.55%

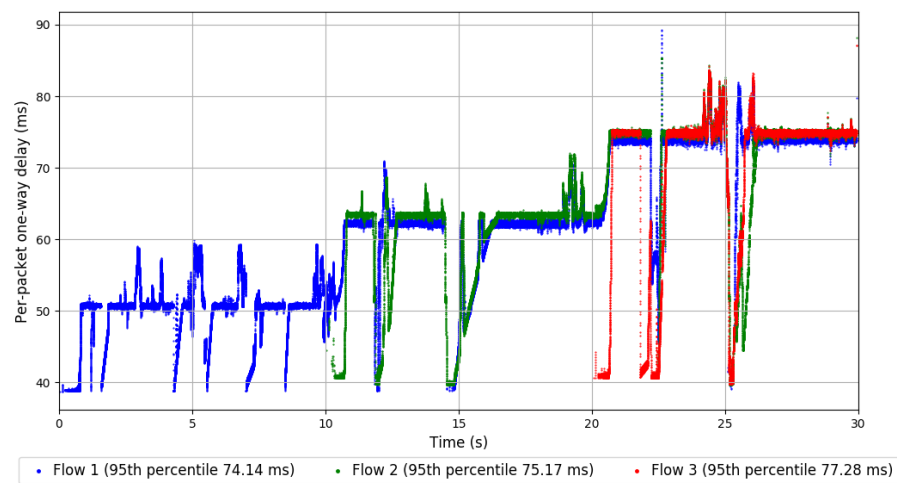
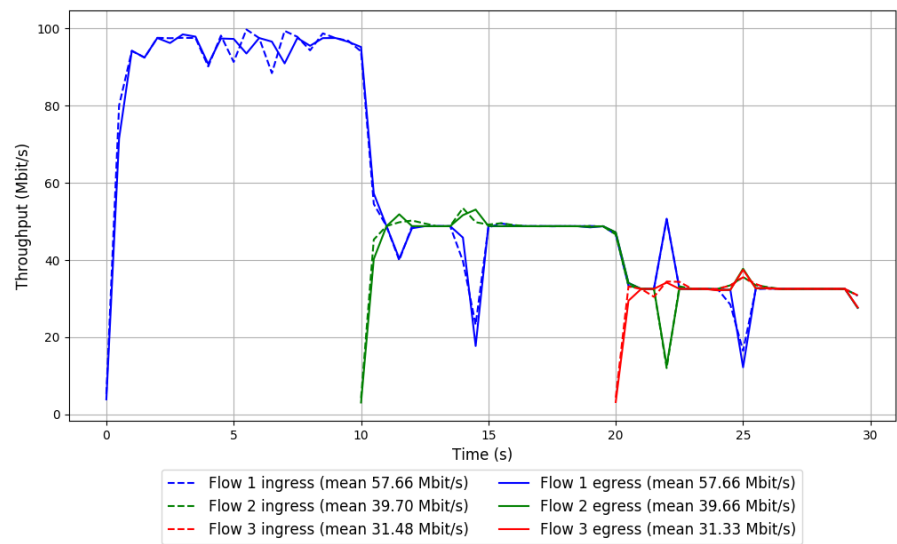
-- Flow 3:

Average throughput: 31.33 Mbit/s

95th percentile per-packet one-way delay: 77.281 ms

Loss rate: 1.35%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 02:42:36 +0000

End at: Tue, 01 Aug 2017 02:43:06 +0000

Local clock offset: 0.224 ms

Remote clock offset: -0.05 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:11 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.21 Mbit/s

95th percentile per-packet one-way delay: 72.445 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 57.34 Mbit/s

95th percentile per-packet one-way delay: 72.123 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 39.80 Mbit/s

95th percentile per-packet one-way delay: 72.757 ms

Loss rate: 0.59%

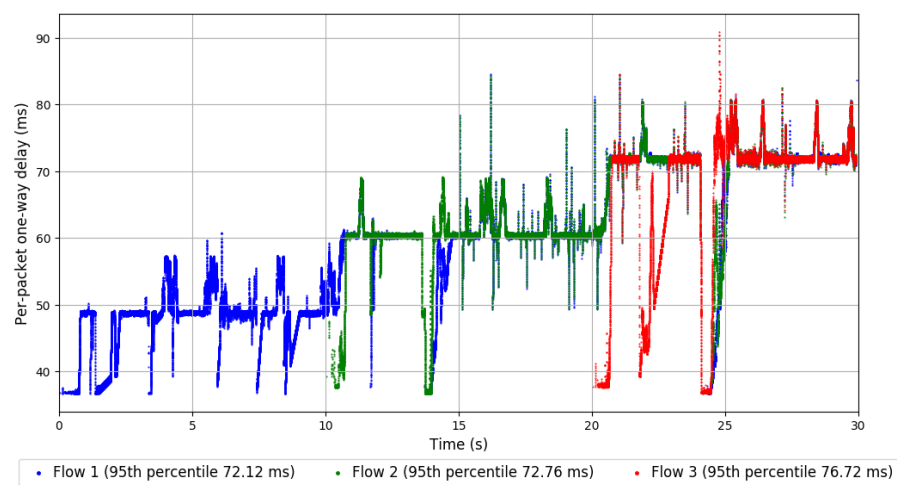
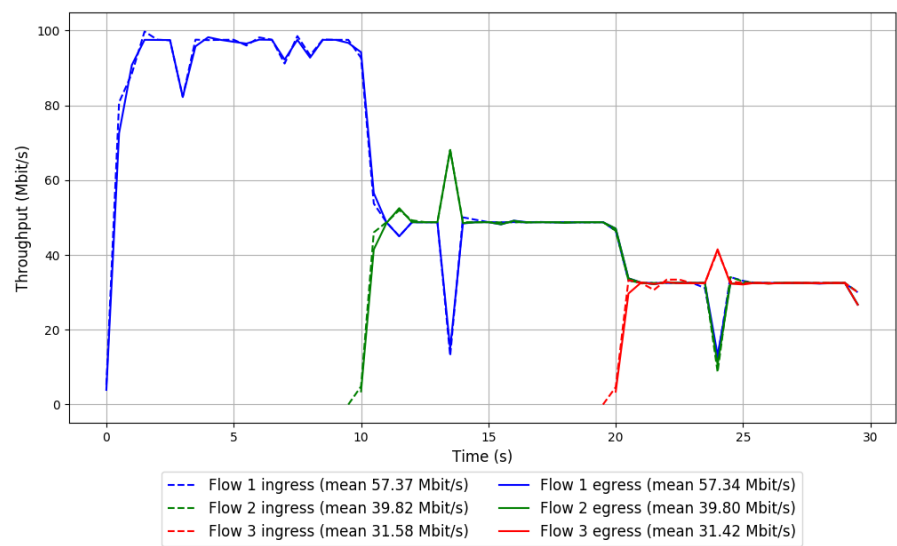
-- Flow 3:

Average throughput: 31.42 Mbit/s

95th percentile per-packet one-way delay: 76.724 ms

Loss rate: 1.38%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 03:03:53 +0000

End at: Tue, 01 Aug 2017 03:04:23 +0000

Local clock offset: 0.192 ms

Remote clock offset: 0.587 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.96 Mbit/s

95th percentile per-packet one-way delay: 72.924 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 57.24 Mbit/s

95th percentile per-packet one-way delay: 71.696 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 39.38 Mbit/s

95th percentile per-packet one-way delay: 73.774 ms

Loss rate: 0.65%

-- Flow 3:

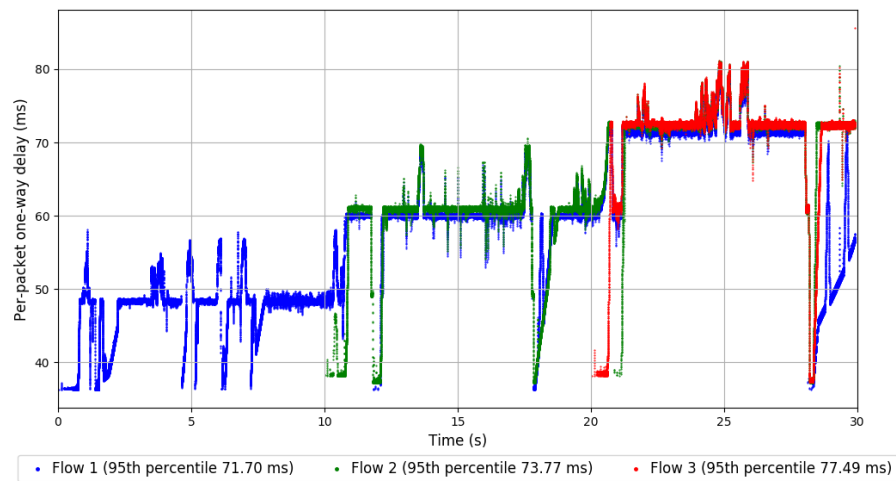
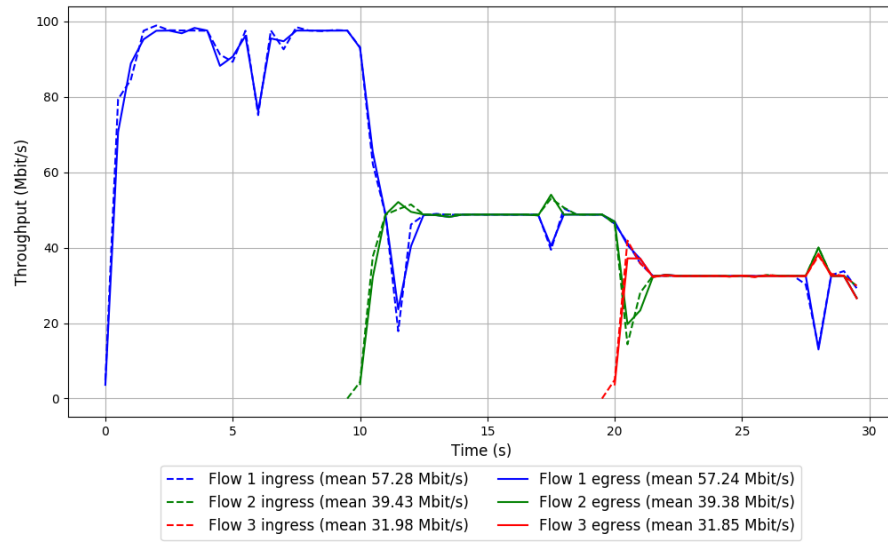
Average throughput: 31.85 Mbit/s

95th percentile per-packet one-way delay: 77.487 ms

Loss rate: 1.29%



# Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 03:24:56 +0000

End at: Tue, 01 Aug 2017 03:25:26 +0000

Local clock offset: 0.025 ms

Remote clock offset: -2.209 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:24 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 86.440 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 61.34 Mbit/s

95th percentile per-packet one-way delay: 68.237 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 36.03 Mbit/s

95th percentile per-packet one-way delay: 89.069 ms

Loss rate: 0.71%

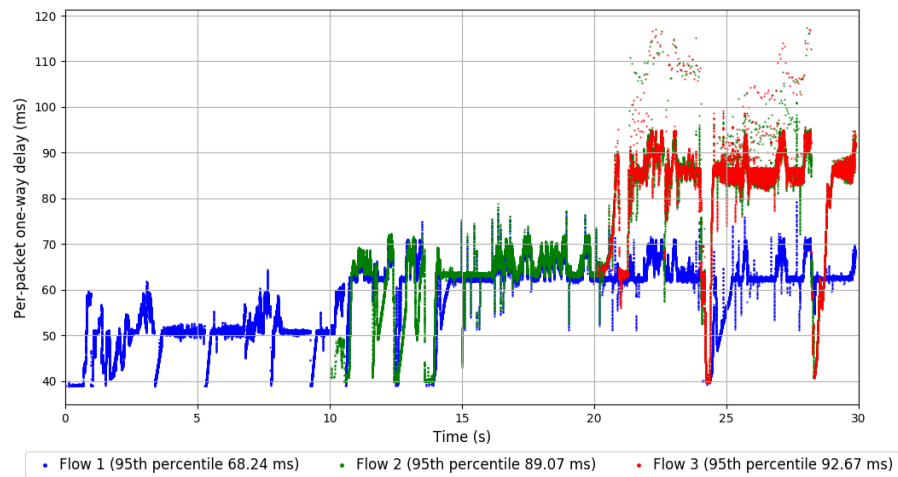
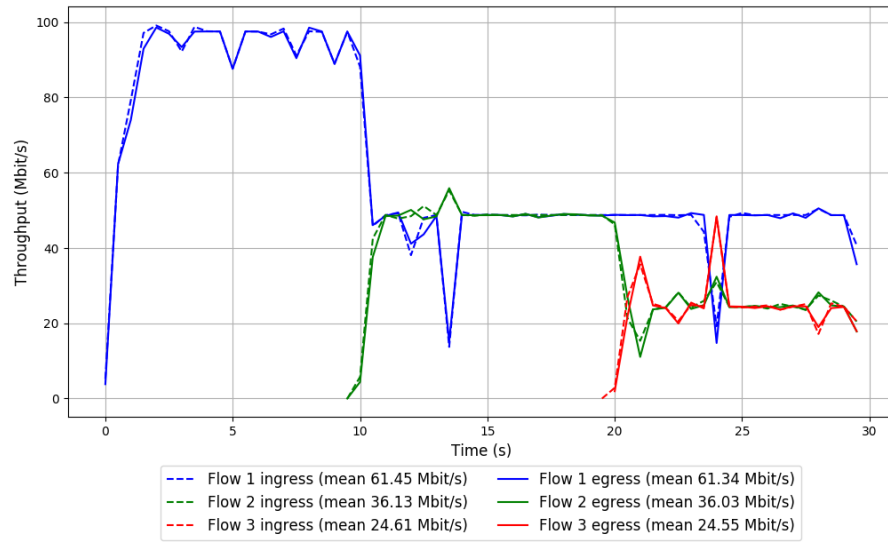
-- Flow 3:

Average throughput: 24.55 Mbit/s

95th percentile per-packet one-way delay: 92.674 ms

Loss rate: 1.59%

## Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 03:46:03 +0000

End at: Tue, 01 Aug 2017 03:46:33 +0000

Local clock offset: -0.139 ms

Remote clock offset: -2.352 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:30 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.69 Mbit/s

95th percentile per-packet one-way delay: 86.242 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 54.49 Mbit/s

95th percentile per-packet one-way delay: 86.153 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 37.67 Mbit/s

95th percentile per-packet one-way delay: 88.656 ms

Loss rate: 0.52%

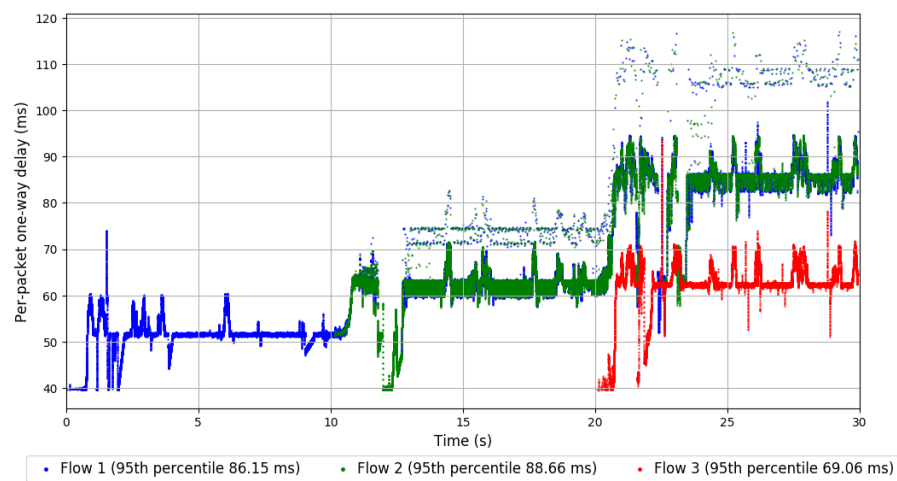
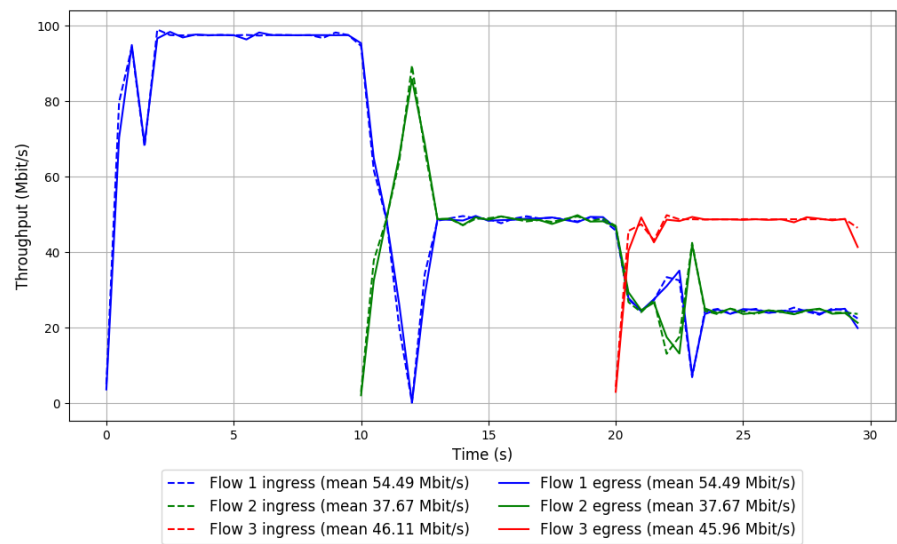
-- Flow 3:

Average throughput: 45.96 Mbit/s

95th percentile per-packet one-way delay: 69.056 ms

Loss rate: 1.31%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 04:07:19 +0000

End at: Tue, 01 Aug 2017 04:07:49 +0000

Local clock offset: -0.033 ms

Remote clock offset: -2.732 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:37 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.90 Mbit/s

95th percentile per-packet one-way delay: 76.661 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 57.34 Mbit/s

95th percentile per-packet one-way delay: 75.102 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 39.43 Mbit/s

95th percentile per-packet one-way delay: 77.572 ms

Loss rate: 0.59%

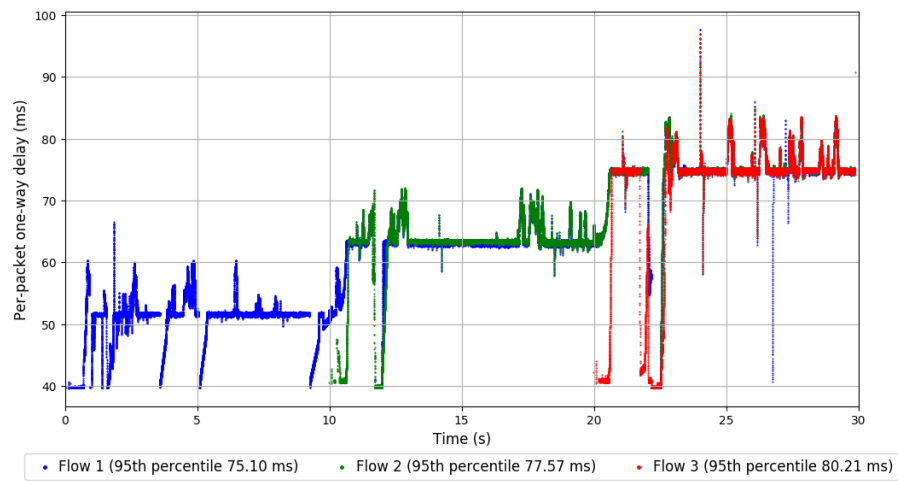
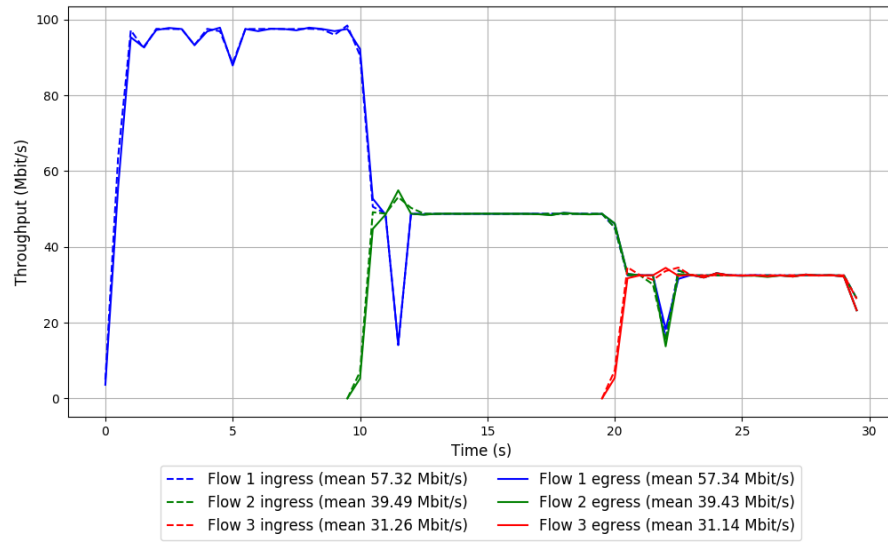
-- Flow 3:

Average throughput: 31.14 Mbit/s

95th percentile per-packet one-way delay: 80.209 ms

Loss rate: 1.42%

## Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 04:28:25 +0000

End at: Tue, 01 Aug 2017 04:28:55 +0000

Local clock offset: 0.164 ms

Remote clock offset: -0.839 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:42 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.68 Mbit/s

95th percentile per-packet one-way delay: 84.503 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 54.83 Mbit/s

95th percentile per-packet one-way delay: 84.463 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 46.75 Mbit/s

95th percentile per-packet one-way delay: 68.700 ms

Loss rate: 0.79%

-- Flow 3:

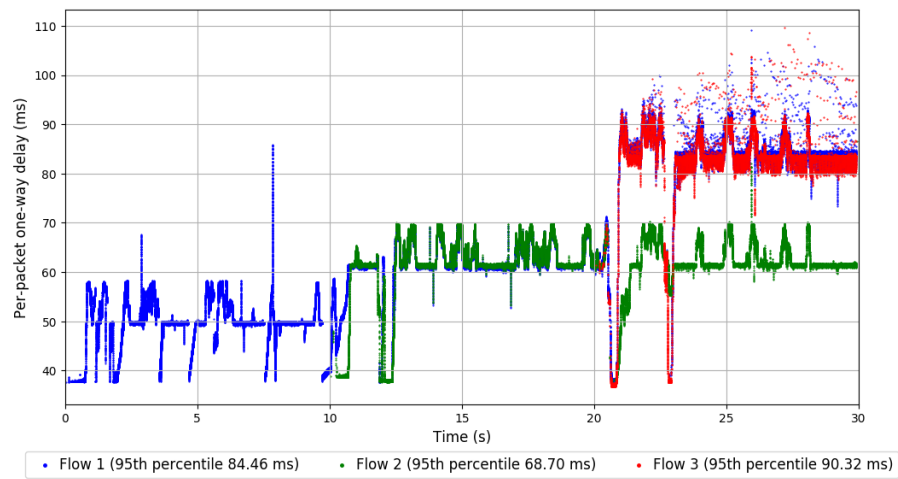
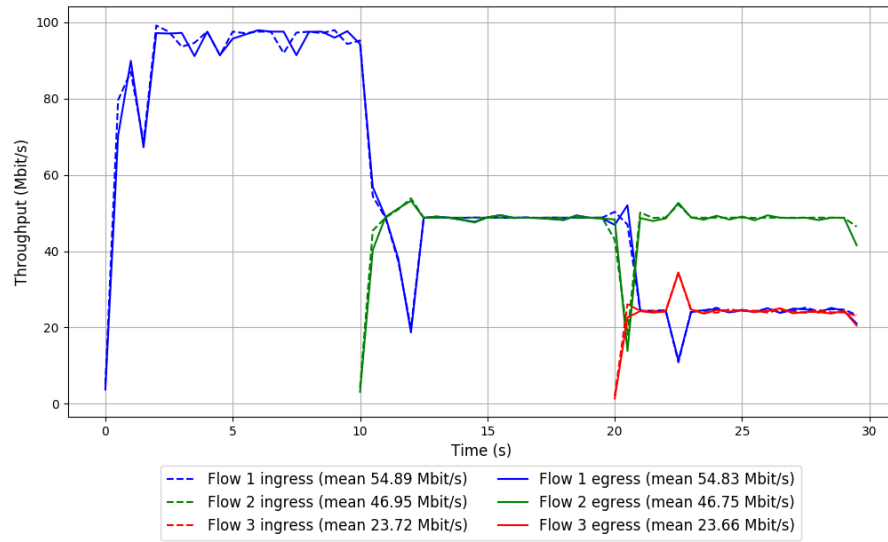
Average throughput: 23.66 Mbit/s

95th percentile per-packet one-way delay: 90.319 ms

Loss rate: 1.59%



## Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 04:49:57 +0000

End at: Tue, 01 Aug 2017 04:50:27 +0000

Local clock offset: 0.1 ms

Remote clock offset: -2.967 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:49 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 89.527 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 61.61 Mbit/s

95th percentile per-packet one-way delay: 69.905 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 91.706 ms

Loss rate: 0.99%

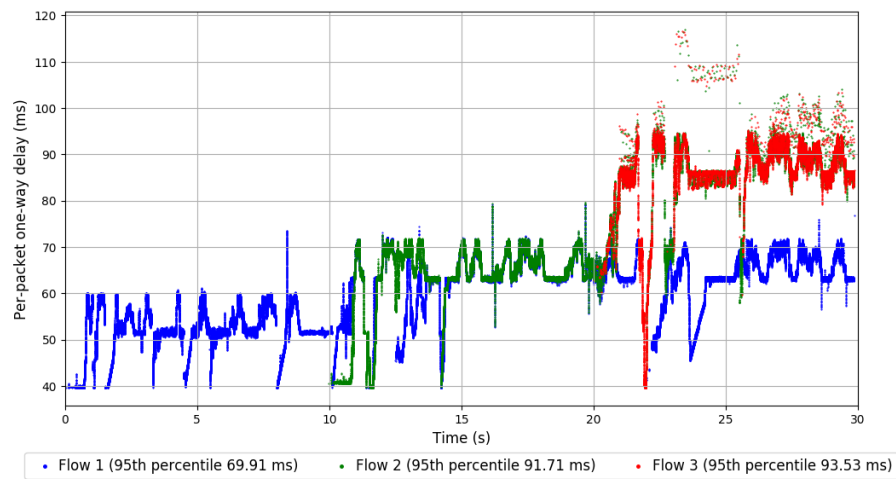
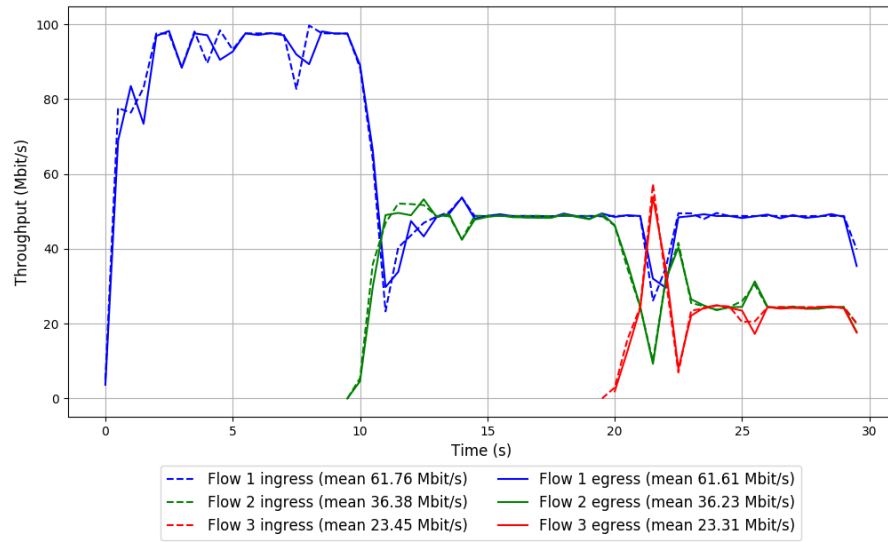
-- Flow 3:

Average throughput: 23.31 Mbit/s

95th percentile per-packet one-way delay: 93.528 ms

Loss rate: 1.94%

### Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: Tue, 01 Aug 2017 05:11:13 +0000

End at: Tue, 01 Aug 2017 05:11:43 +0000

Local clock offset: 0.162 ms

Remote clock offset: -0.506 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:53:55 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.96 Mbit/s

95th percentile per-packet one-way delay: 72.498 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 72.344 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 72.640 ms

Loss rate: 0.54%

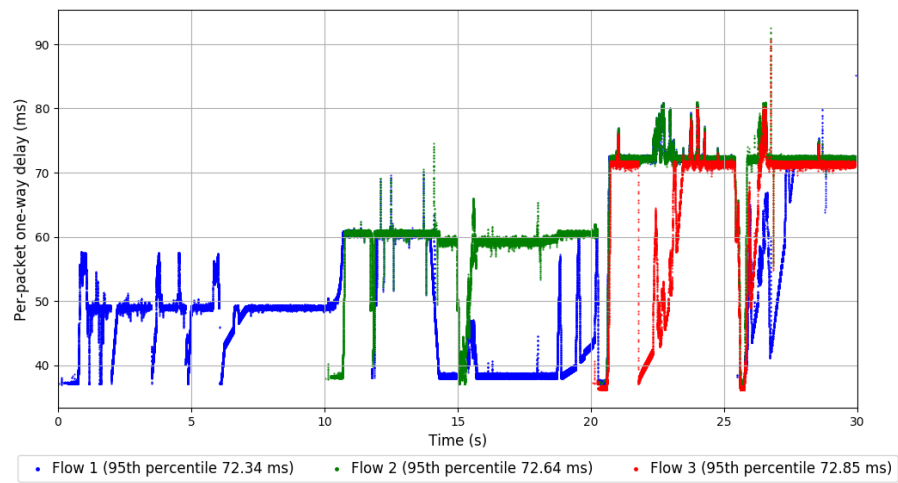
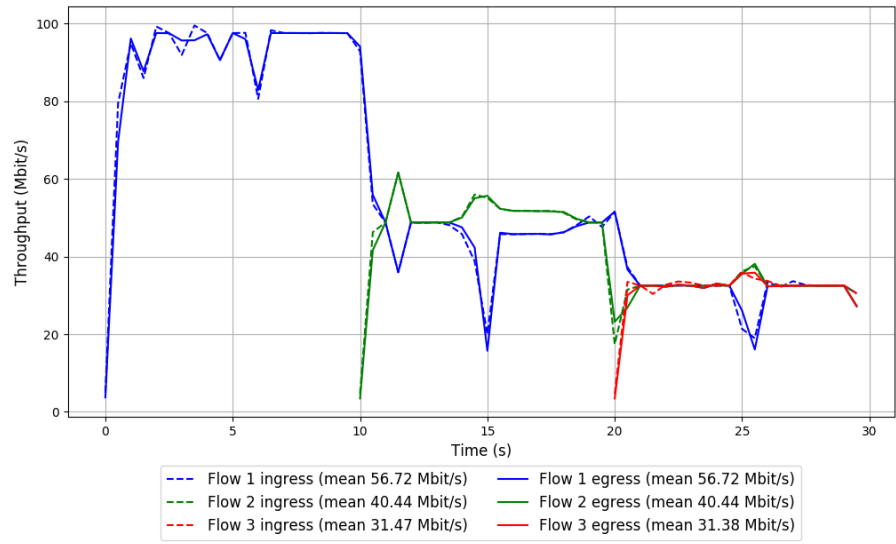
-- Flow 3:

Average throughput: 31.38 Mbit/s

95th percentile per-packet one-way delay: 72.846 ms

Loss rate: 1.35%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 01:59:00 +0000

End at: Tue, 01 Aug 2017 01:59:30 +0000

Local clock offset: 0.556 ms

Remote clock offset: 0.348 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:01 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.35 Mbit/s

95th percentile per-packet one-way delay: 52.256 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 57.56 Mbit/s

95th percentile per-packet one-way delay: 52.255 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 37.03 Mbit/s

95th percentile per-packet one-way delay: 52.172 ms

Loss rate: 0.81%

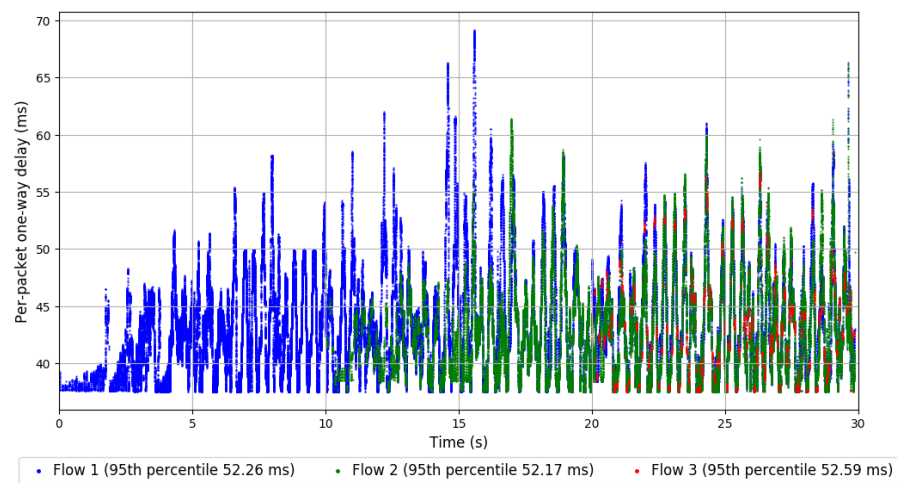
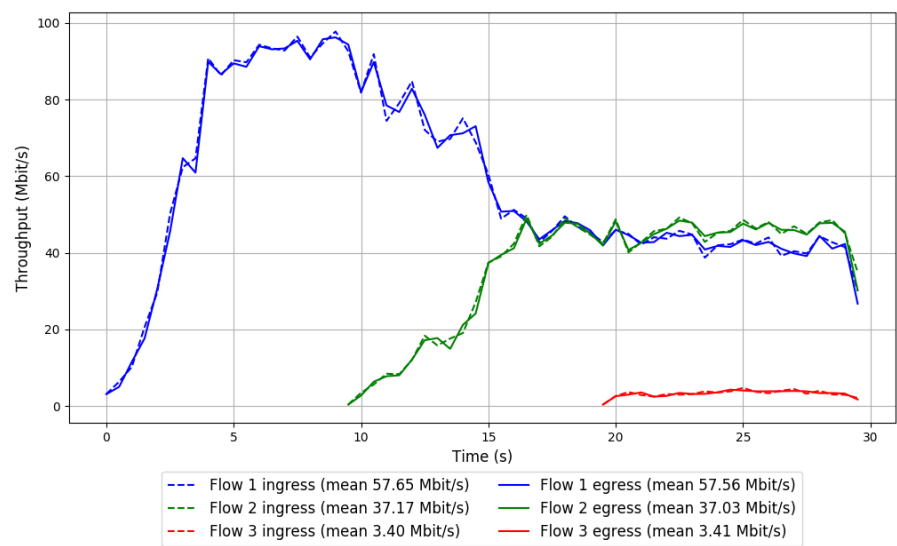
-- Flow 3:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 52.589 ms

Loss rate: 0.88%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 02:20:10 +0000

End at: Tue, 01 Aug 2017 02:20:40 +0000

Local clock offset: 0.471 ms

Remote clock offset: 0.078 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:07 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.97 Mbit/s

95th percentile per-packet one-way delay: 52.669 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 59.29 Mbit/s

95th percentile per-packet one-way delay: 52.520 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 41.99 Mbit/s

95th percentile per-packet one-way delay: 52.904 ms

Loss rate: 0.57%

-- Flow 3:

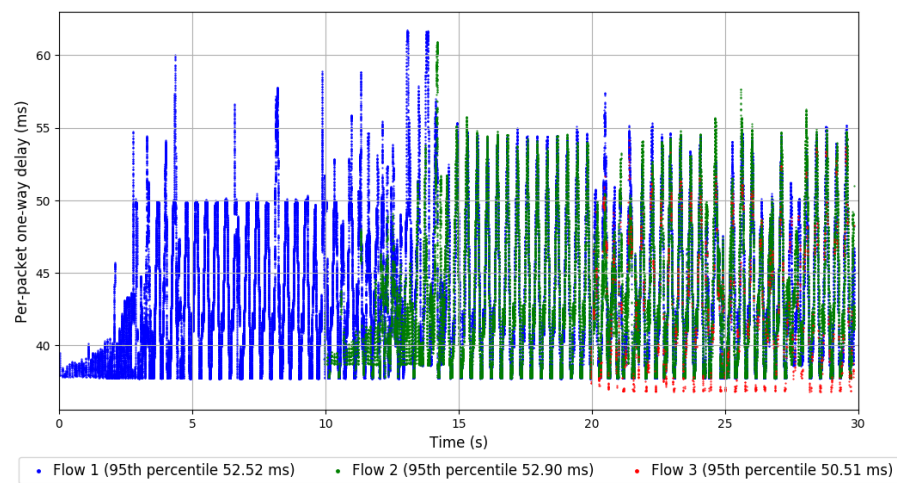
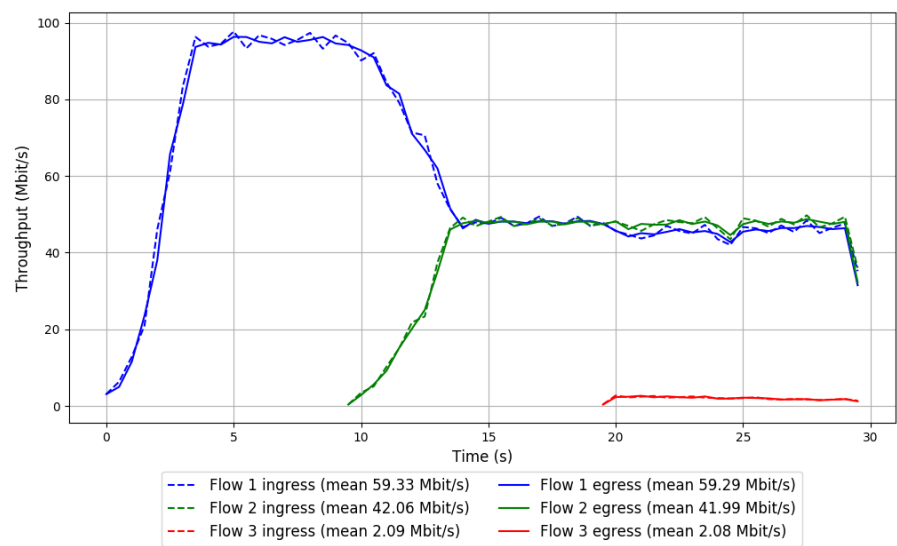
Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.87%



Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 02:41:10 +0000

End at: Tue, 01 Aug 2017 02:41:40 +0000

Local clock offset: 0.264 ms

Remote clock offset: -2.074 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:13 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.62 Mbit/s

95th percentile per-packet one-way delay: 53.905 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 74.23 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 52.834 ms

Loss rate: 0.19%

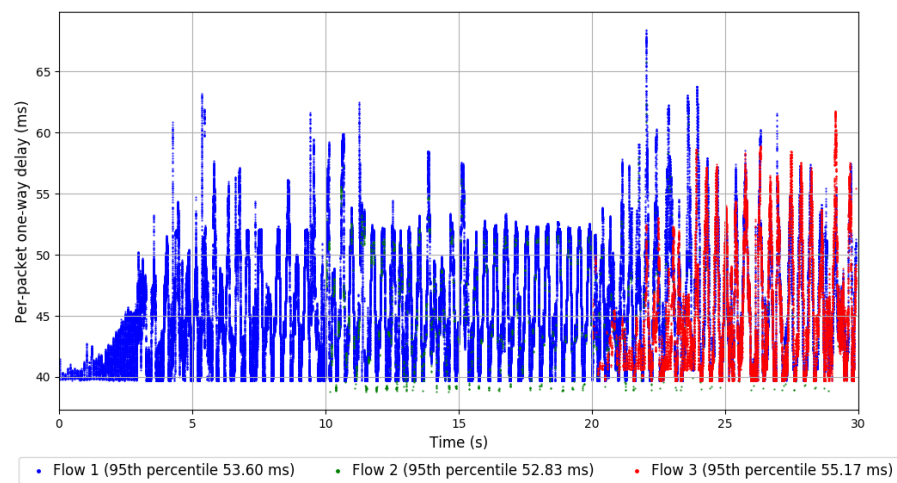
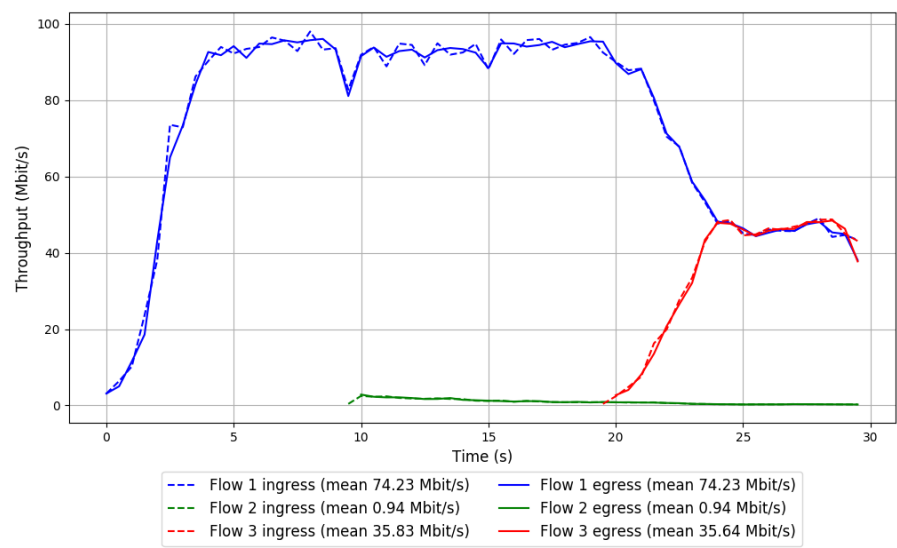
-- Flow 3:

Average throughput: 35.64 Mbit/s

95th percentile per-packet one-way delay: 55.167 ms

Loss rate: 1.36%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 03:02:25 +0000

End at: Tue, 01 Aug 2017 03:02:55 +0000

Local clock offset: 0.189 ms

Remote clock offset: -2.02 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:19 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.77 Mbit/s

95th percentile per-packet one-way delay: 54.716 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 58.67 Mbit/s

95th percentile per-packet one-way delay: 54.103 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 39.17 Mbit/s

95th percentile per-packet one-way delay: 55.537 ms

Loss rate: 0.62%

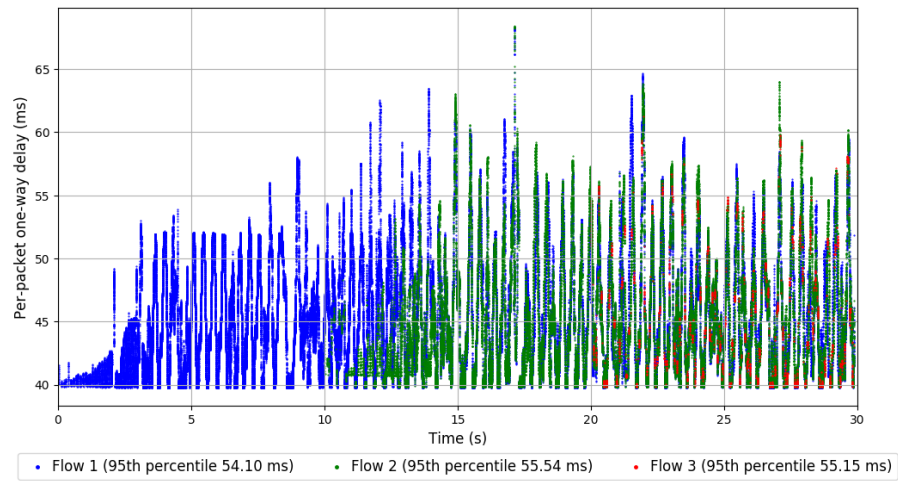
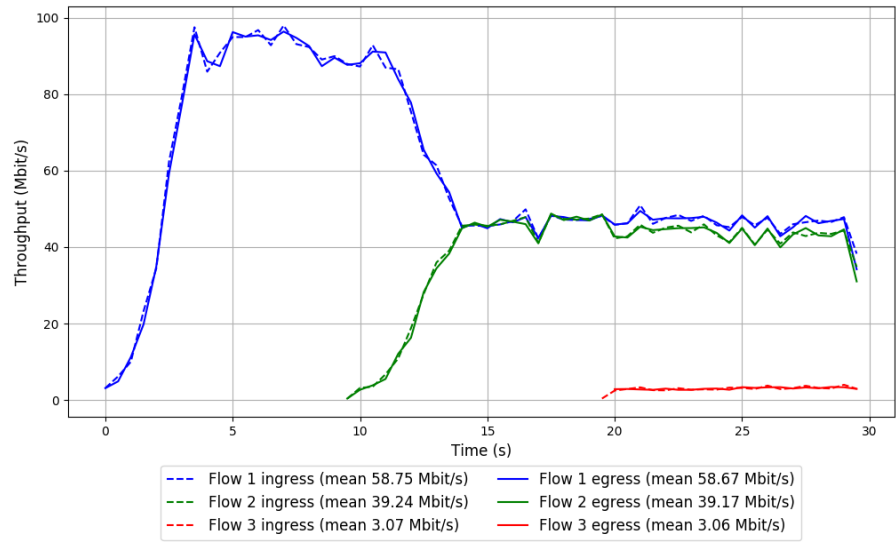
-- Flow 3:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 55.154 ms

Loss rate: 1.49%

# Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 03:23:29 +0000

End at: Tue, 01 Aug 2017 03:23:59 +0000

Local clock offset: 0.03 ms

Remote clock offset: 0.312 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:24 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 84.72 Mbit/s

95th percentile per-packet one-way delay: 52.391 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 55.53 Mbit/s

95th percentile per-packet one-way delay: 52.367 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 52.562 ms

Loss rate: 0.62%

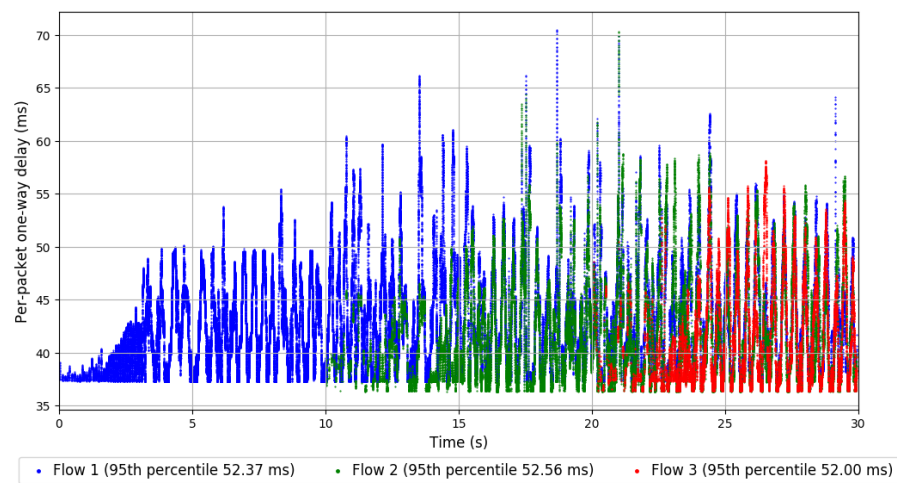
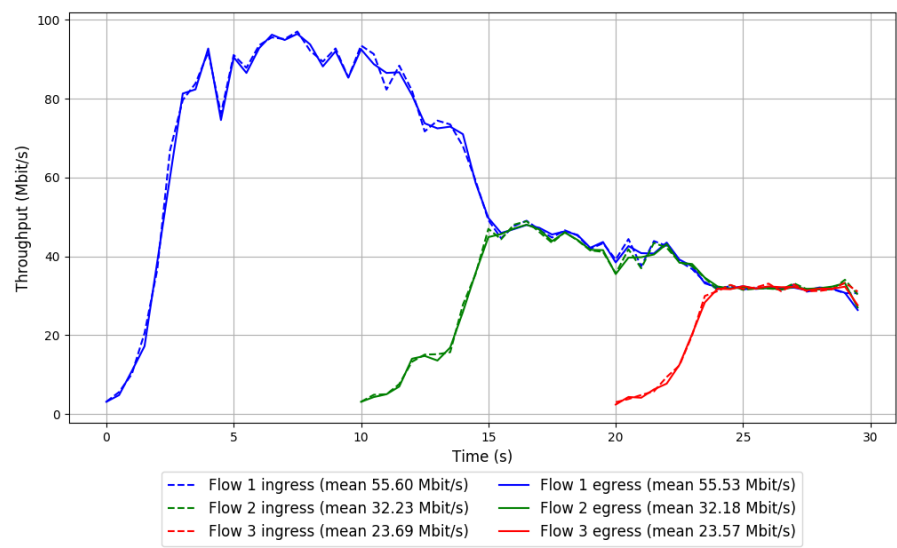
-- Flow 3:

Average throughput: 23.57 Mbit/s

95th percentile per-packet one-way delay: 51.999 ms

Loss rate: 1.46%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 03:44:36 +0000

End at: Tue, 01 Aug 2017 03:45:06 +0000

Local clock offset: -0.156 ms

Remote clock offset: -0.275 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:31 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.46 Mbit/s

95th percentile per-packet one-way delay: 53.183 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 55.37 Mbit/s

95th percentile per-packet one-way delay: 52.956 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 35.06 Mbit/s

95th percentile per-packet one-way delay: 53.769 ms

Loss rate: 0.52%

-- Flow 3:

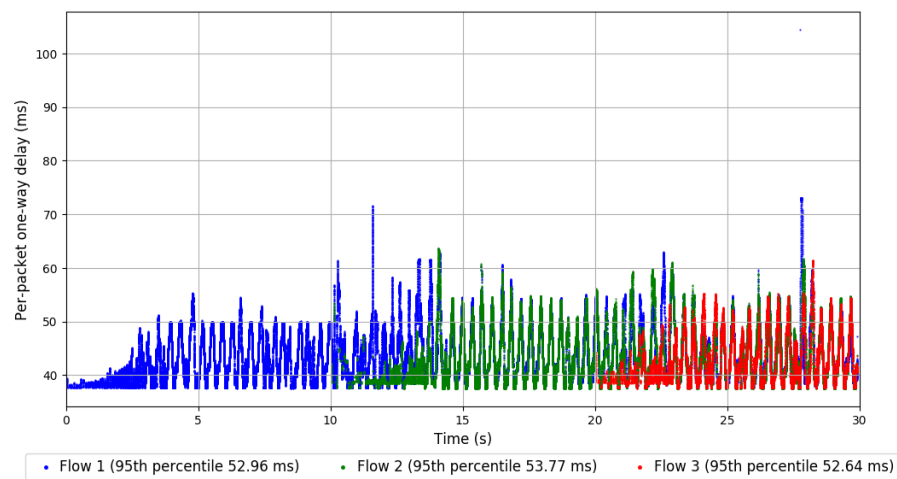
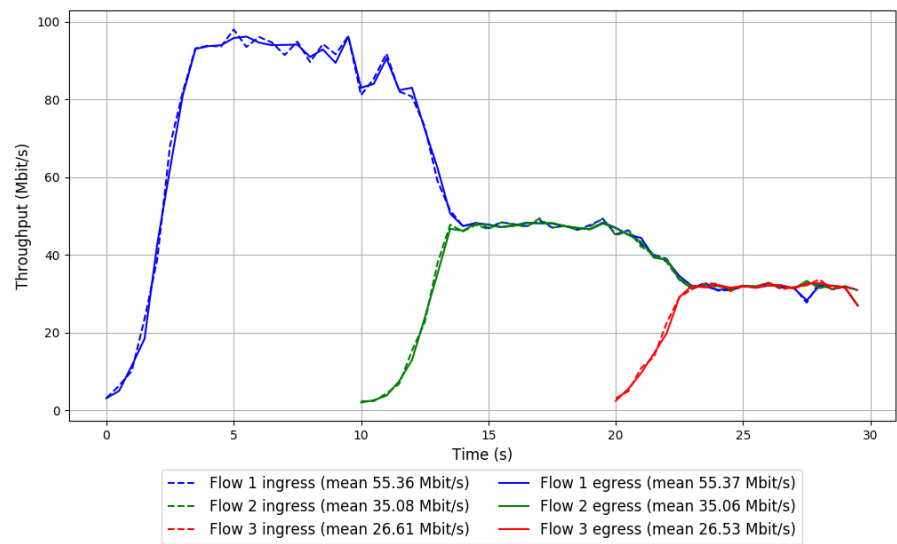
Average throughput: 26.53 Mbit/s

95th percentile per-packet one-way delay: 52.642 ms

Loss rate: 1.23%



Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 04:05:51 +0000

End at: Tue, 01 Aug 2017 04:06:21 +0000

Local clock offset: 0.076 ms

Remote clock offset: -0.709 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:36 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.17 Mbit/s

95th percentile per-packet one-way delay: 53.229 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 57.62 Mbit/s

95th percentile per-packet one-way delay: 53.349 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 43.23 Mbit/s

95th percentile per-packet one-way delay: 53.003 ms

Loss rate: 0.54%

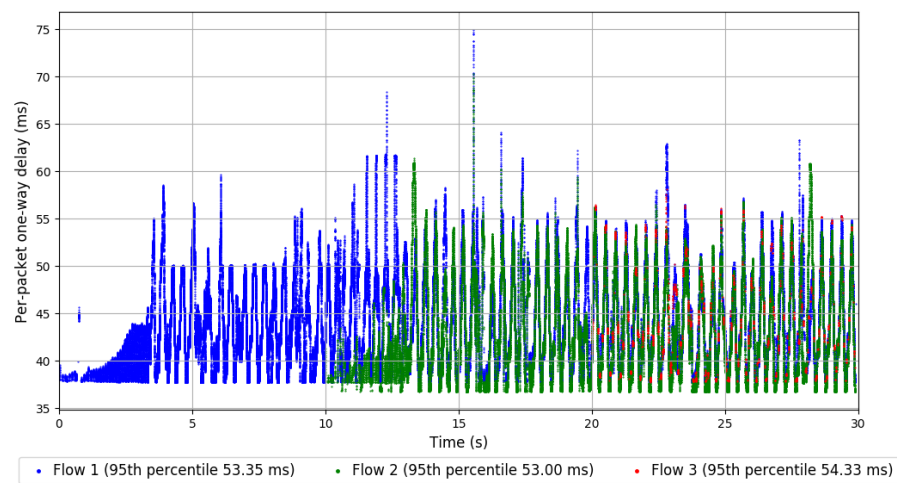
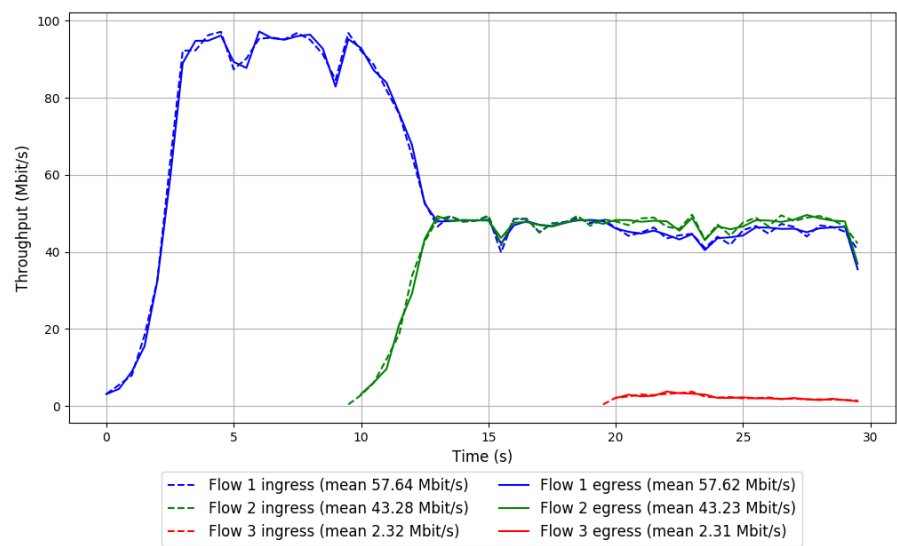
-- Flow 3:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 54.329 ms

Loss rate: 0.94%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 04:26:56 +0000

End at: Tue, 01 Aug 2017 04:27:26 +0000

Local clock offset: 0.045 ms

Remote clock offset: -2.956 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:43 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 84.37 Mbit/s

95th percentile per-packet one-way delay: 53.145 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 72.30 Mbit/s

95th percentile per-packet one-way delay: 53.153 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 53.735 ms

Loss rate: 0.31%

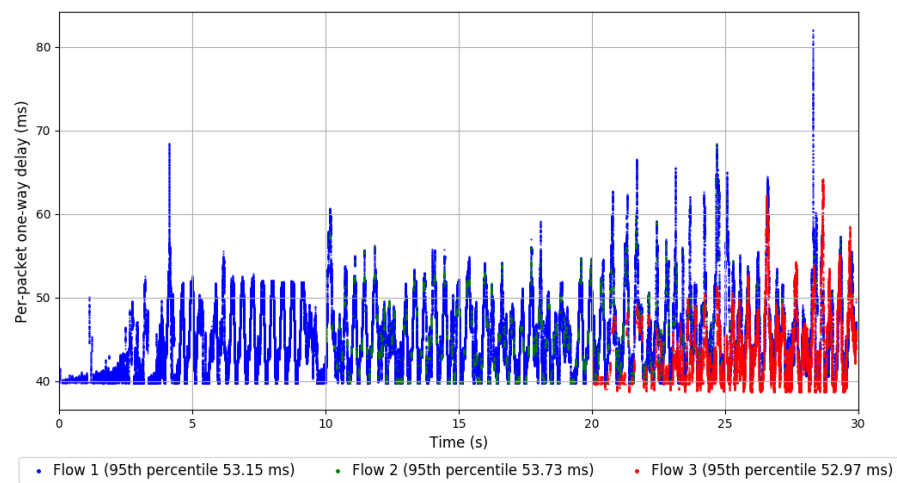
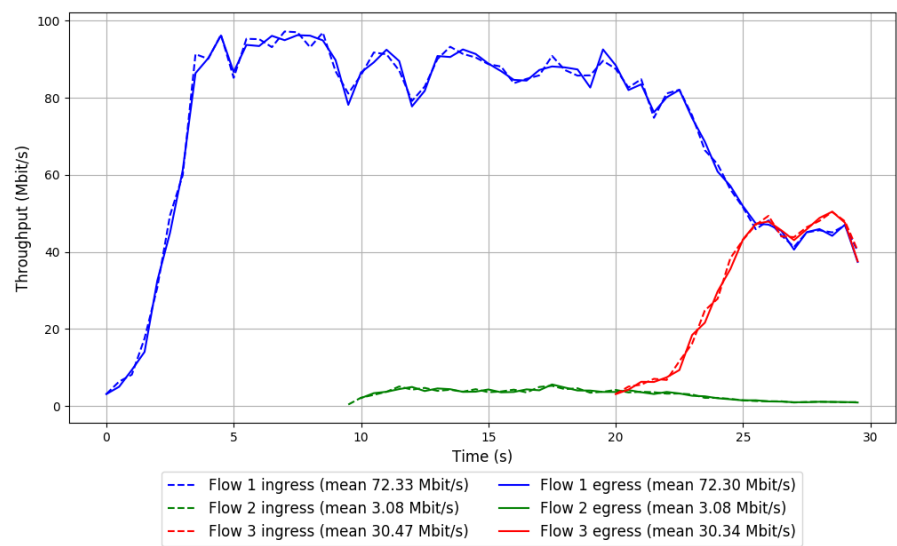
-- Flow 3:

Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 52.971 ms

Loss rate: 1.25%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 04:48:28 +0000

End at: Tue, 01 Aug 2017 04:48:58 +0000

Local clock offset: 0.198 ms

Remote clock offset: -2.89 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:47 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.49 Mbit/s

95th percentile per-packet one-way delay: 54.454 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 68.72 Mbit/s

95th percentile per-packet one-way delay: 54.404 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 55.626 ms

Loss rate: 0.73%

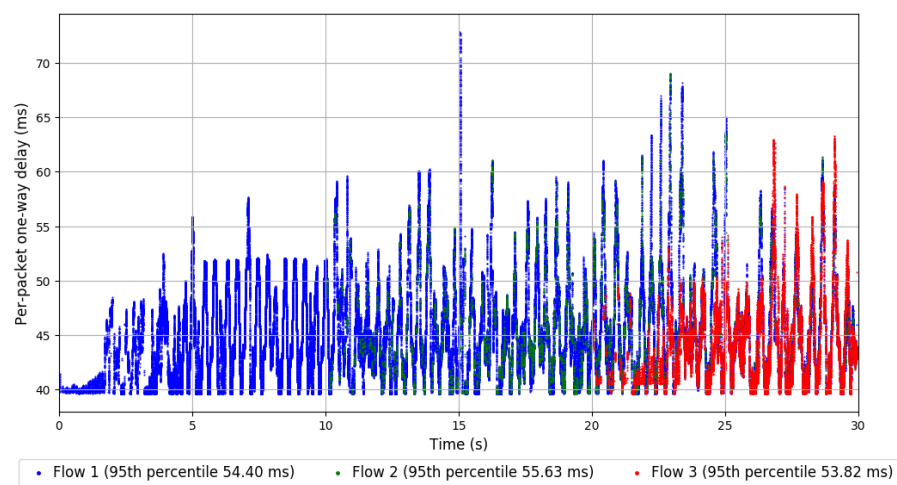
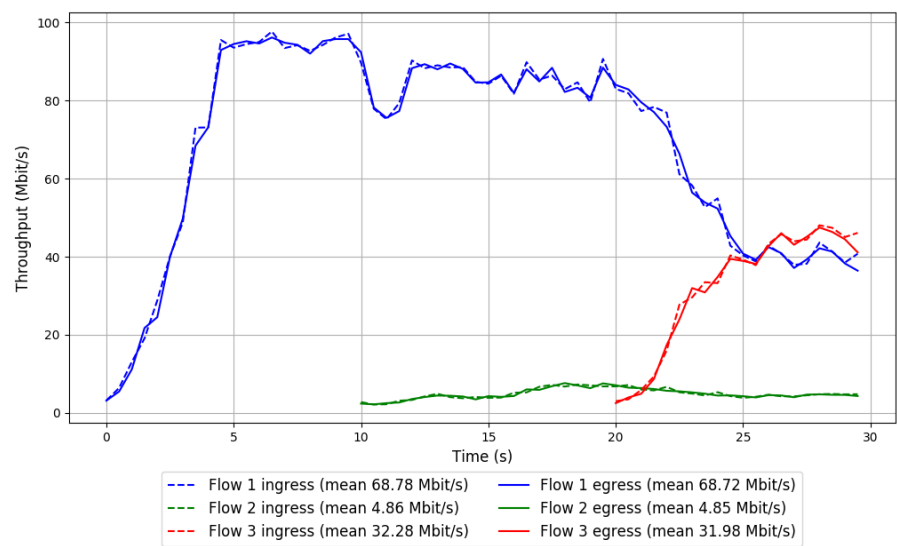
-- Flow 3:

Average throughput: 31.98 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 1.76%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: Tue, 01 Aug 2017 05:09:46 +0000

End at: Tue, 01 Aug 2017 05:10:16 +0000

Local clock offset: 0.16 ms

Remote clock offset: -0.966 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:54:55 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.50 Mbit/s

95th percentile per-packet one-way delay: 51.826 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 51.966 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 51.597 ms

Loss rate: 0.58%

-- Flow 3:

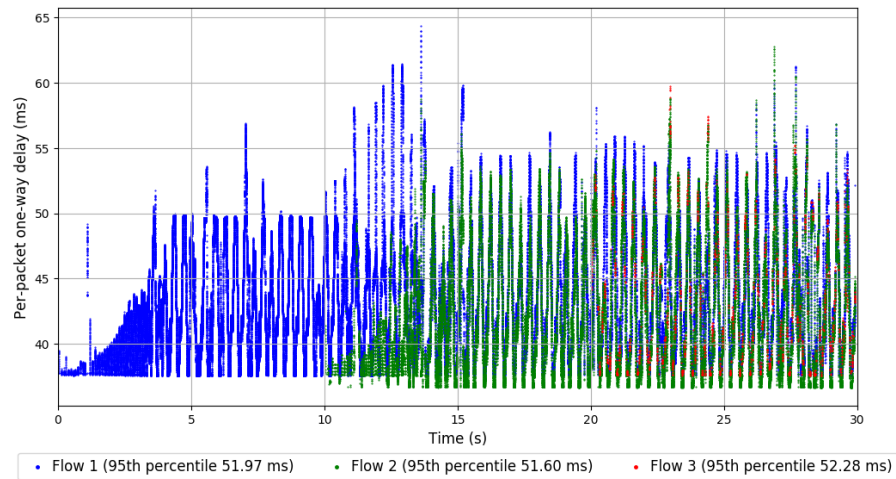
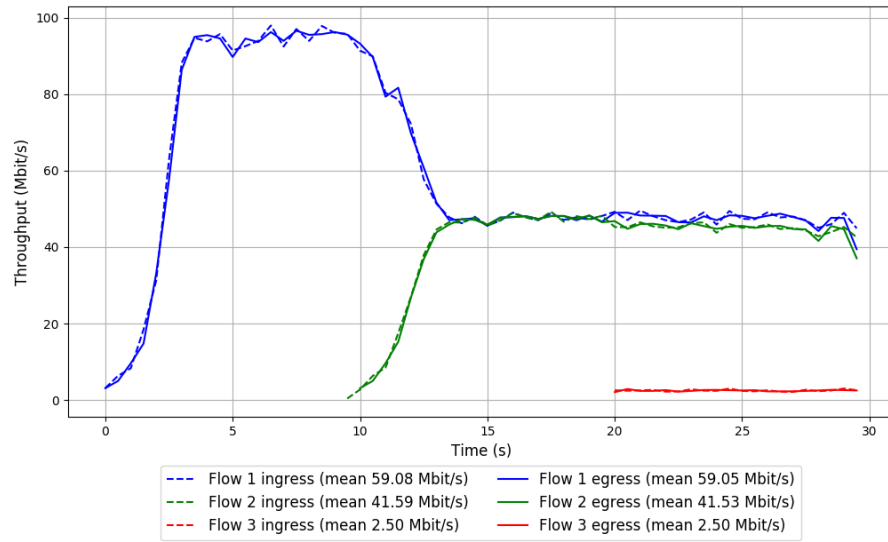
Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 52.279 ms

Loss rate: 1.16%



## Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: Tue, 01 Aug 2017 01:54:27 +0000

End at: Tue, 01 Aug 2017 01:54:57 +0000

Local clock offset: 0.575 ms

Remote clock offset: -1.711 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:03 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 66.18 Mbit/s

95th percentile per-packet one-way delay: 46.781 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 46.525 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 36.33 Mbit/s

95th percentile per-packet one-way delay: 46.985 ms

Loss rate: 0.52%

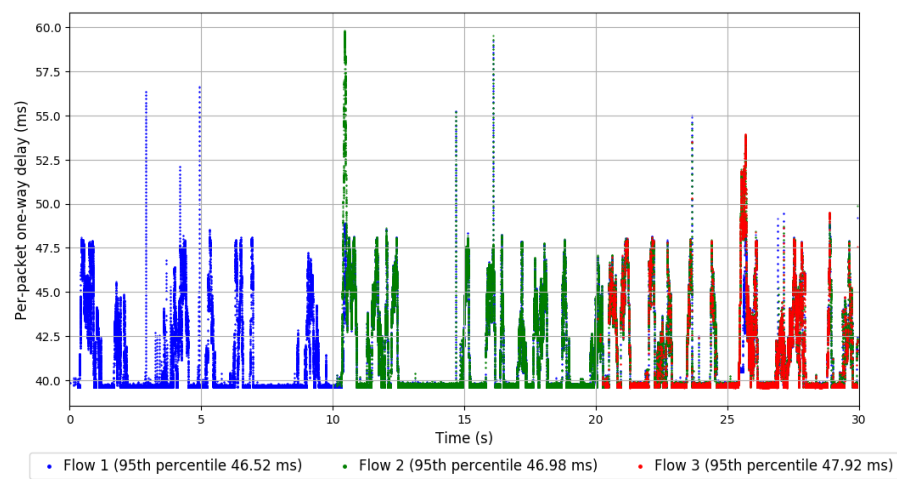
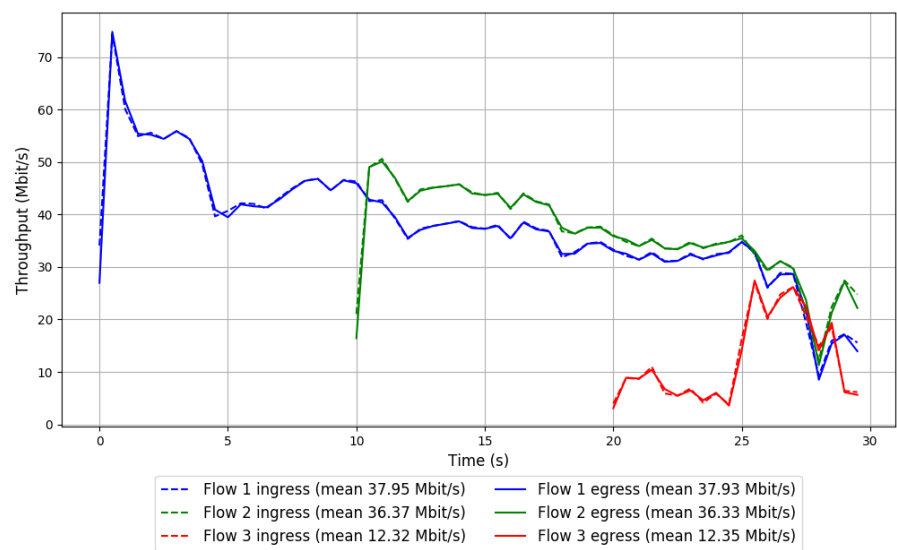
-- Flow 3:

Average throughput: 12.35 Mbit/s

95th percentile per-packet one-way delay: 47.924 ms

Loss rate: 0.56%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: Tue, 01 Aug 2017 02:15:55 +0000

End at: Tue, 01 Aug 2017 02:16:25 +0000

Local clock offset: 0.52 ms

Remote clock offset: -1.942 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:12 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 76.87 Mbit/s

95th percentile per-packet one-way delay: 43.231 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 48.54 Mbit/s

95th percentile per-packet one-way delay: 43.352 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 30.19 Mbit/s

95th percentile per-packet one-way delay: 42.590 ms

Loss rate: 0.50%

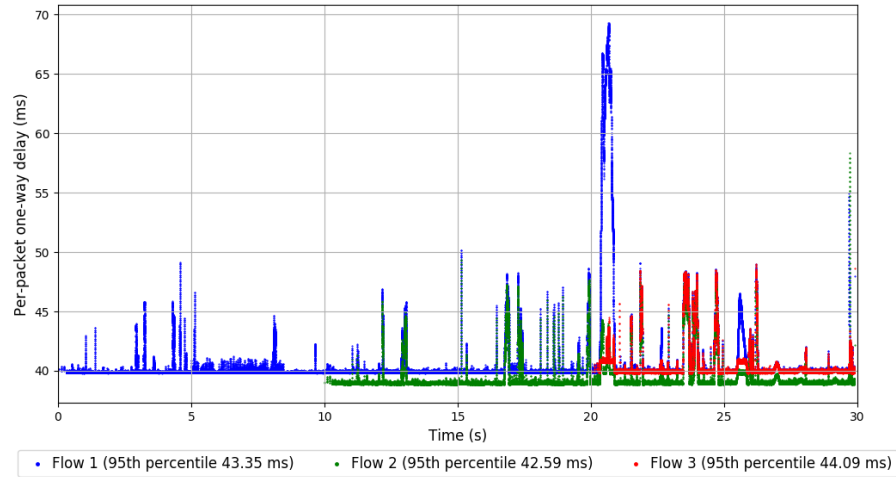
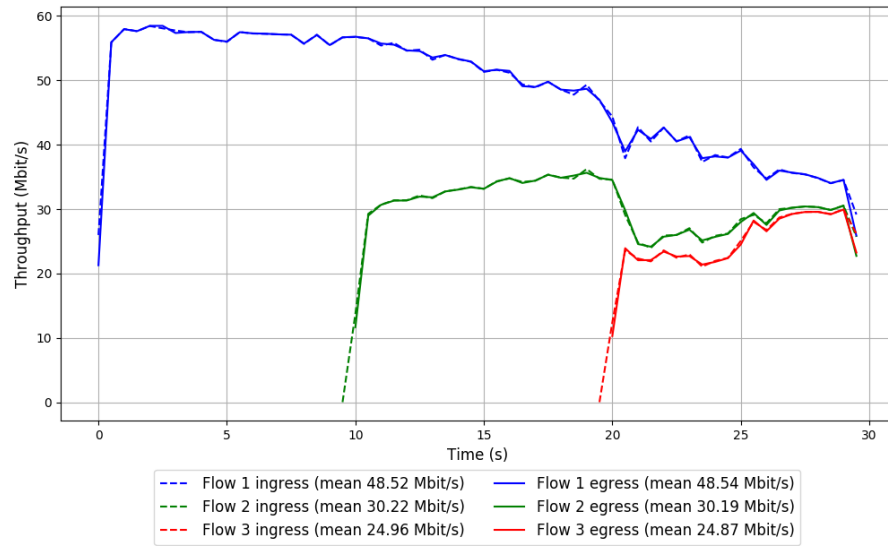
-- Flow 3:

Average throughput: 24.87 Mbit/s

95th percentile per-packet one-way delay: 44.090 ms

Loss rate: 1.16%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: Tue, 01 Aug 2017 02:36:55 +0000

End at: Tue, 01 Aug 2017 02:37:25 +0000

Local clock offset: 0.29 ms

Remote clock offset: 0.512 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:21 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 73.43 Mbit/s

95th percentile per-packet one-way delay: 46.398 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 40.50 Mbit/s

95th percentile per-packet one-way delay: 46.772 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 34.47 Mbit/s

95th percentile per-packet one-way delay: 44.746 ms

Loss rate: 0.68%

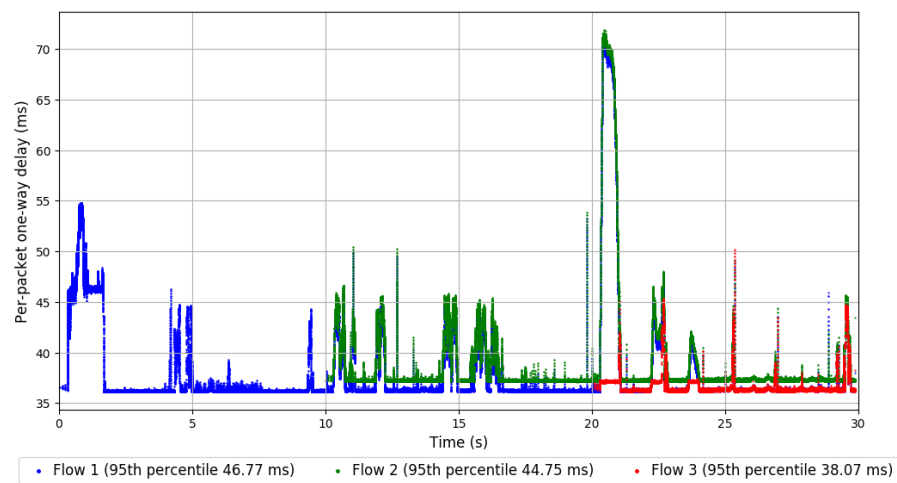
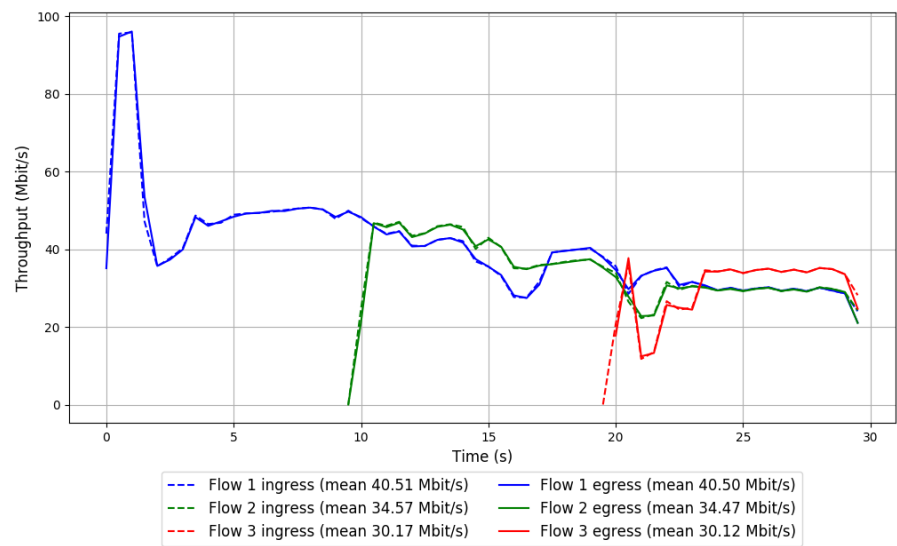
-- Flow 3:

Average throughput: 30.12 Mbit/s

95th percentile per-packet one-way delay: 38.067 ms

Loss rate: 1.01%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: Tue, 01 Aug 2017 02:58:06 +0000

End at: Tue, 01 Aug 2017 02:58:36 +0000

Local clock offset: 0.223 ms

Remote clock offset: 0.091 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 71.72 Mbit/s

95th percentile per-packet one-way delay: 43.053 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 41.73 Mbit/s

95th percentile per-packet one-way delay: 42.515 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 32.02 Mbit/s

95th percentile per-packet one-way delay: 43.687 ms

Loss rate: 0.53%

-- Flow 3:

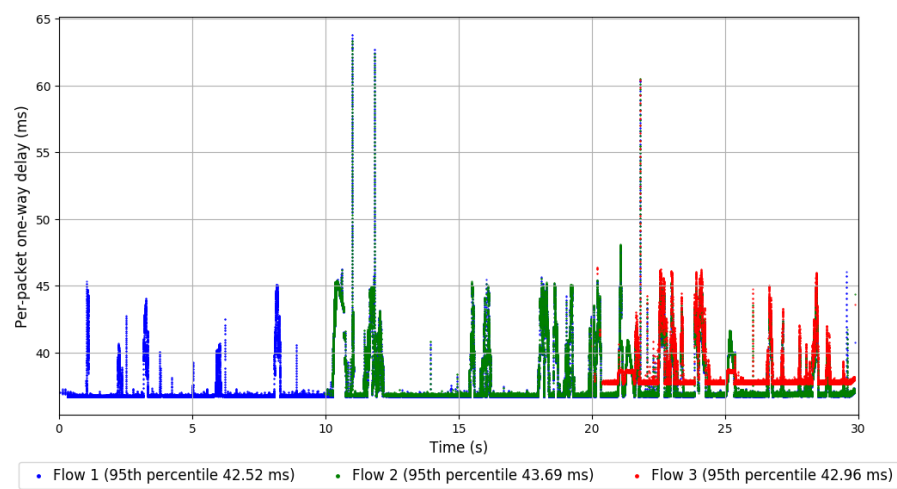
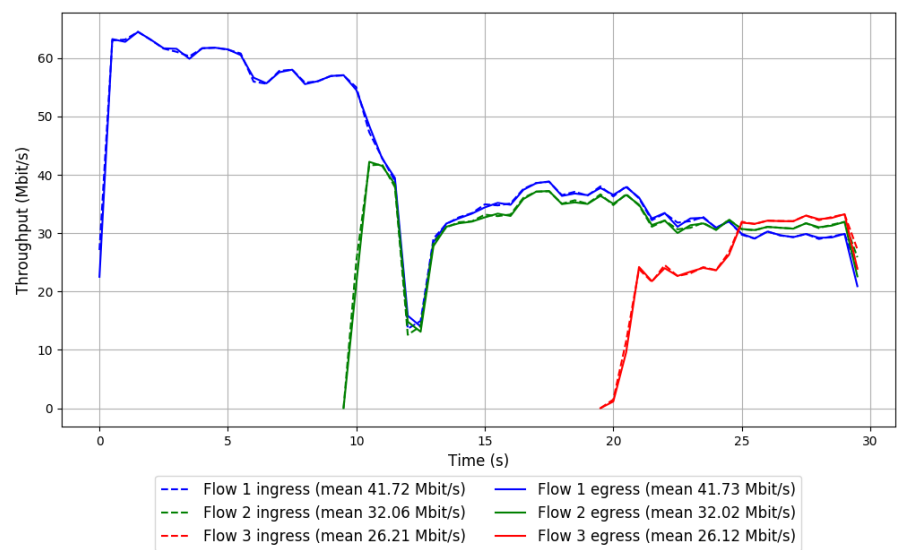
Average throughput: 26.12 Mbit/s

95th percentile per-packet one-way delay: 42.962 ms

Loss rate: 1.17%



Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: Tue, 01 Aug 2017 03:19:13 +0000

End at: Tue, 01 Aug 2017 03:19:43 +0000

Local clock offset: 0.083 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:34 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.75 Mbit/s

95th percentile per-packet one-way delay: 44.330 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 23.36 Mbit/s

95th percentile per-packet one-way delay: 43.511 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 30.08 Mbit/s

95th percentile per-packet one-way delay: 44.976 ms

Loss rate: 0.57%

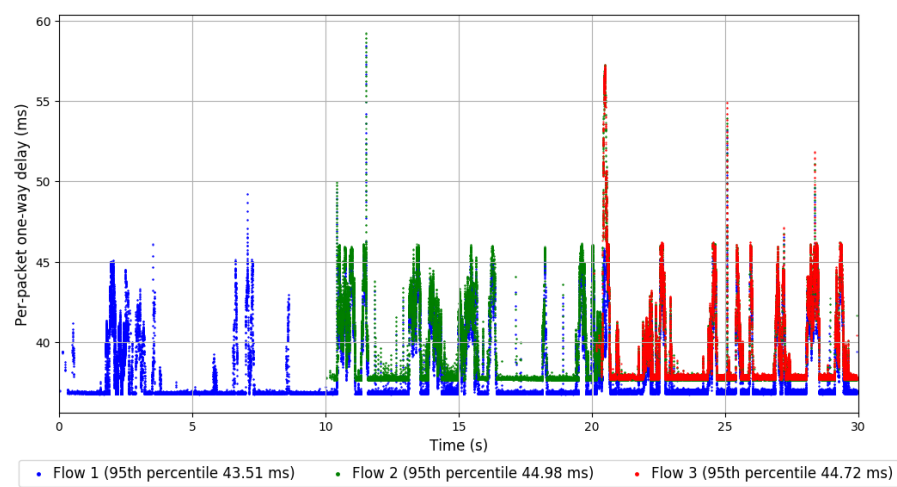
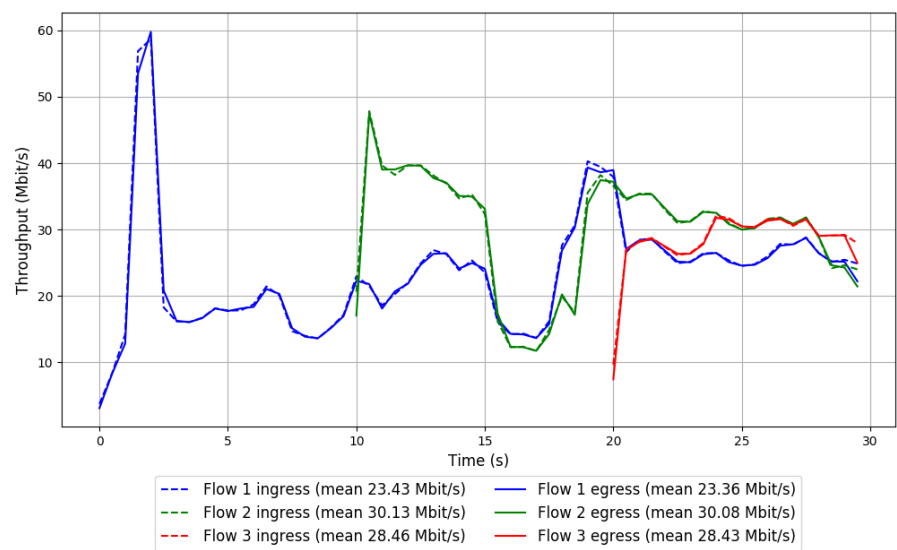
-- Flow 3:

Average throughput: 28.43 Mbit/s

95th percentile per-packet one-way delay: 44.717 ms

Loss rate: 1.05%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: Tue, 01 Aug 2017 03:40:20 +0000

End at: Tue, 01 Aug 2017 03:40:50 +0000

Local clock offset: -0.134 ms

Remote clock offset: -2.321 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:49 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 68.78 Mbit/s

95th percentile per-packet one-way delay: 46.180 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 38.99 Mbit/s

95th percentile per-packet one-way delay: 44.703 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 28.39 Mbit/s

95th percentile per-packet one-way delay: 46.562 ms

Loss rate: 0.64%

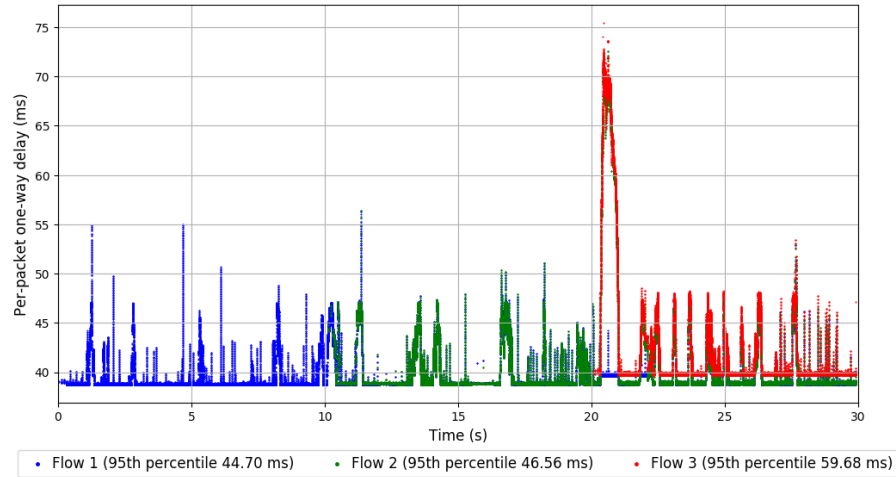
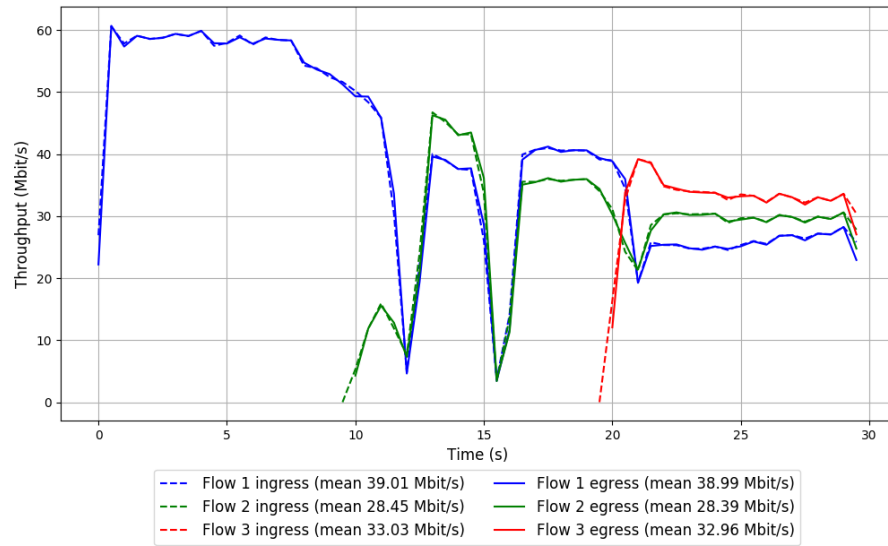
-- Flow 3:

Average throughput: 32.96 Mbit/s

95th percentile per-packet one-way delay: 59.676 ms

Loss rate: 1.04%

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: Tue, 01 Aug 2017 04:01:34 +0000

End at: Tue, 01 Aug 2017 04:02:04 +0000

Local clock offset: -0.039 ms

Remote clock offset: -0.619 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:55:52 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 73.80 Mbit/s

95th percentile per-packet one-way delay: 43.457 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 41.88 Mbit/s

95th percentile per-packet one-way delay: 42.784 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 32.64 Mbit/s

95th percentile per-packet one-way delay: 43.531 ms

Loss rate: 0.50%

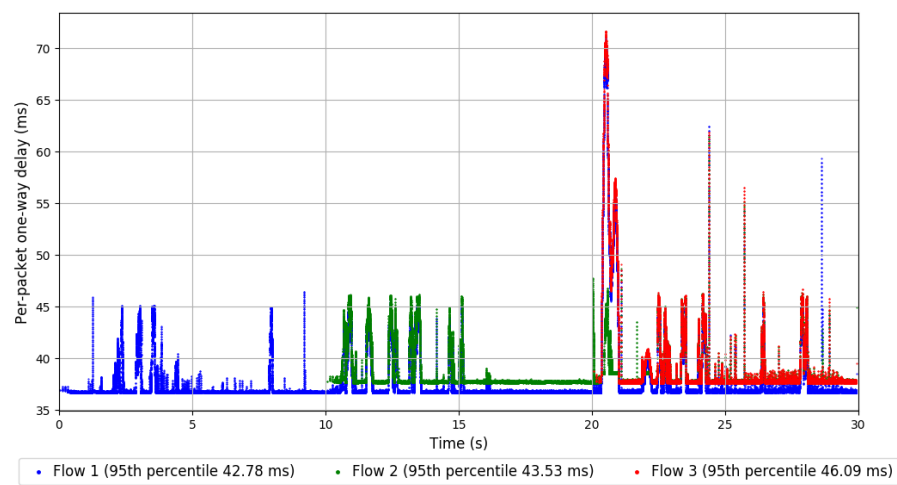
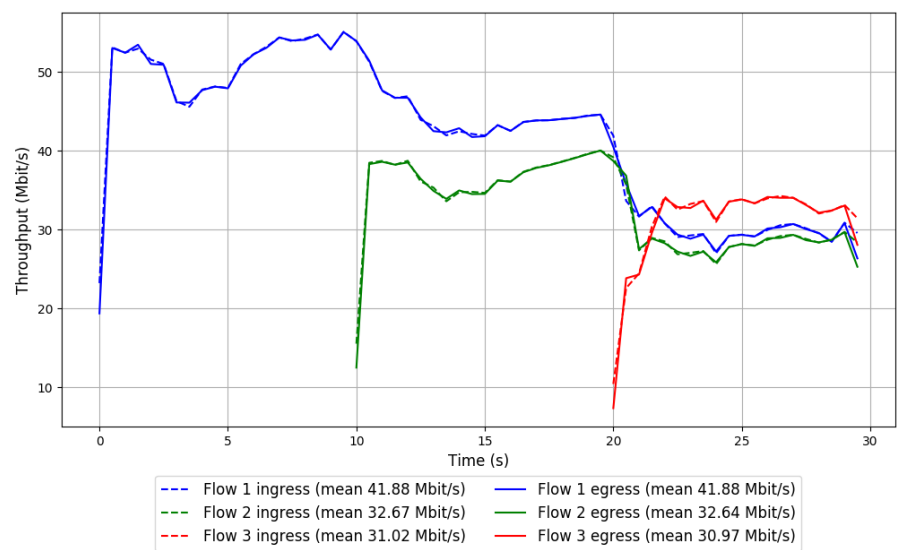
-- Flow 3:

Average throughput: 30.97 Mbit/s

95th percentile per-packet one-way delay: 46.085 ms

Loss rate: 1.02%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: Tue, 01 Aug 2017 04:22:40 +0000

End at: Tue, 01 Aug 2017 04:23:10 +0000

Local clock offset: 0.158 ms

Remote clock offset: -2.806 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:05 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 76.77 Mbit/s

95th percentile per-packet one-way delay: 45.964 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 44.01 Mbit/s

95th percentile per-packet one-way delay: 45.119 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 33.33 Mbit/s

95th percentile per-packet one-way delay: 45.963 ms

Loss rate: 0.56%

-- Flow 3:

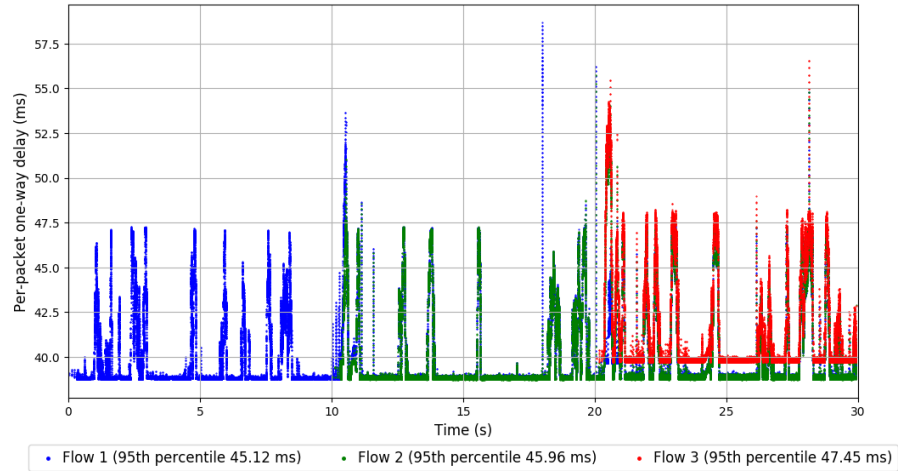
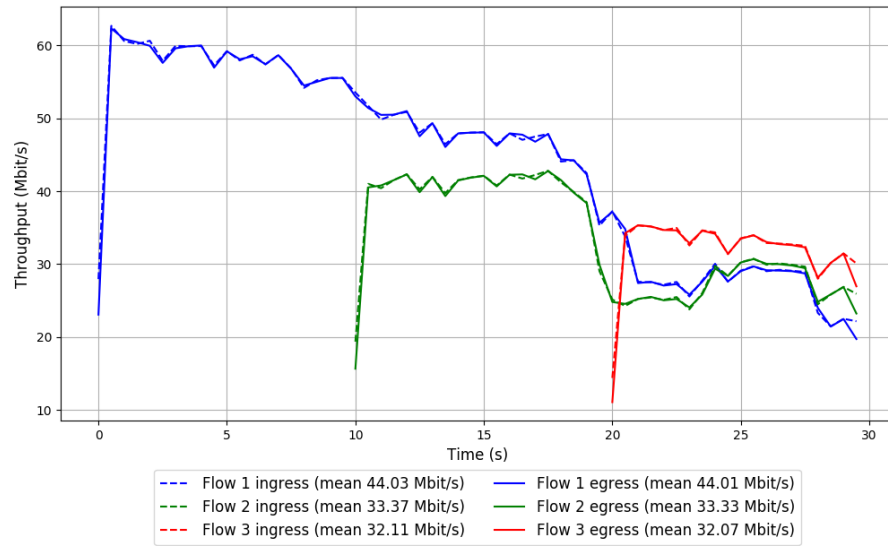
Average throughput: 32.07 Mbit/s

95th percentile per-packet one-way delay: 47.450 ms

Loss rate: 1.00%



## Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: Tue, 01 Aug 2017 04:44:07 +0000

End at: Tue, 01 Aug 2017 04:44:37 +0000

Local clock offset: 0.204 ms

Remote clock offset: -0.962 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:12 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 78.90 Mbit/s

95th percentile per-packet one-way delay: 43.596 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 44.57 Mbit/s

95th percentile per-packet one-way delay: 42.954 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 35.73 Mbit/s

95th percentile per-packet one-way delay: 44.114 ms

Loss rate: 0.48%

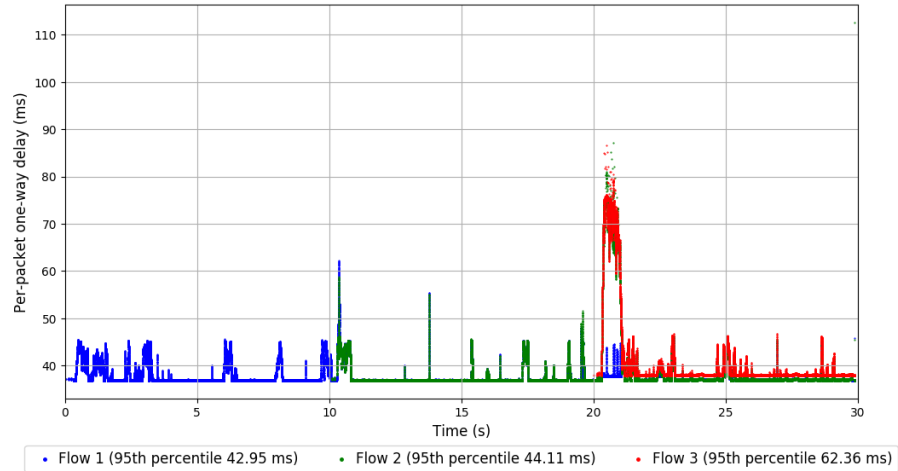
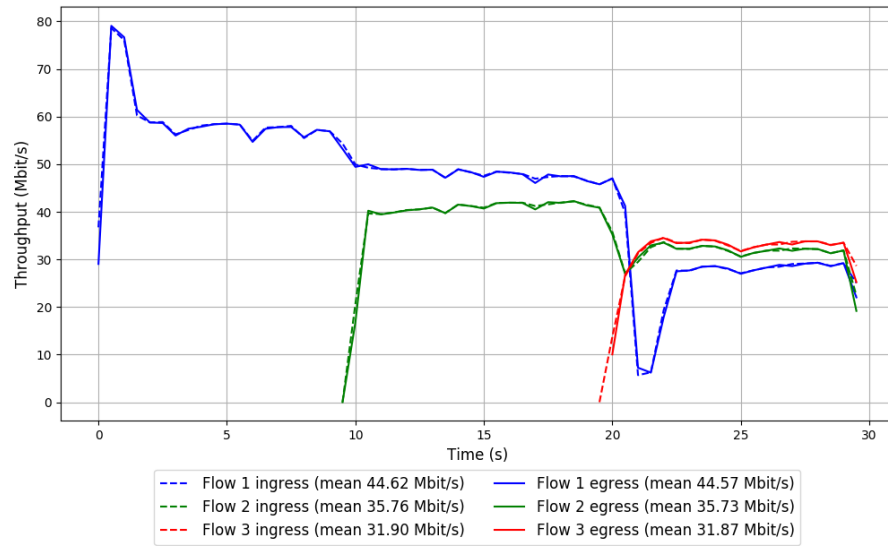
-- Flow 3:

Average throughput: 31.87 Mbit/s

95th percentile per-packet one-way delay: 62.358 ms

Loss rate: 0.99%

## Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: Tue, 01 Aug 2017 05:05:28 +0000

End at: Tue, 01 Aug 2017 05:05:58 +0000

Local clock offset: 0.251 ms

Remote clock offset: -0.965 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:25 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 79.32 Mbit/s

95th percentile per-packet one-way delay: 42.656 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 49.96 Mbit/s

95th percentile per-packet one-way delay: 41.746 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 29.35 Mbit/s

95th percentile per-packet one-way delay: 44.854 ms

Loss rate: 0.54%

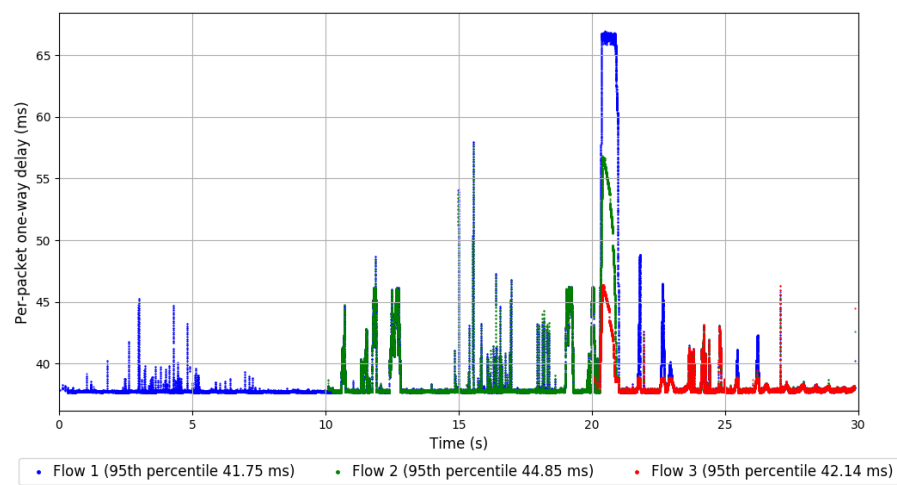
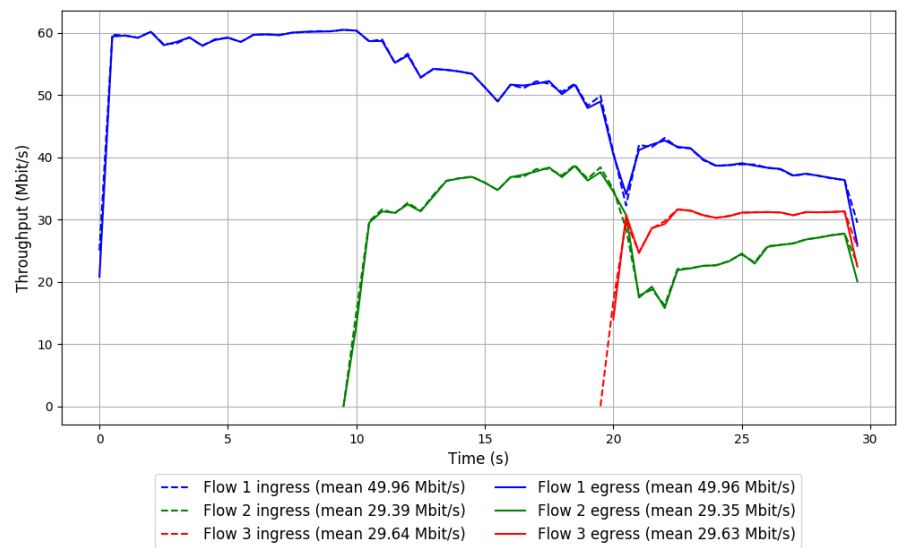
-- Flow 3:

Average throughput: 29.63 Mbit/s

95th percentile per-packet one-way delay: 42.136 ms

Loss rate: 0.94%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 01:53:02 +0000

End at: Tue, 01 Aug 2017 01:53:32 +0000

Local clock offset: 0.701 ms

Remote clock offset: 0.284 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:25 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.66 Mbit/s

95th percentile per-packet one-way delay: 45.929 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 13.80 Mbit/s

95th percentile per-packet one-way delay: 44.825 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 26.43 Mbit/s

95th percentile per-packet one-way delay: 49.950 ms

Loss rate: 0.30%

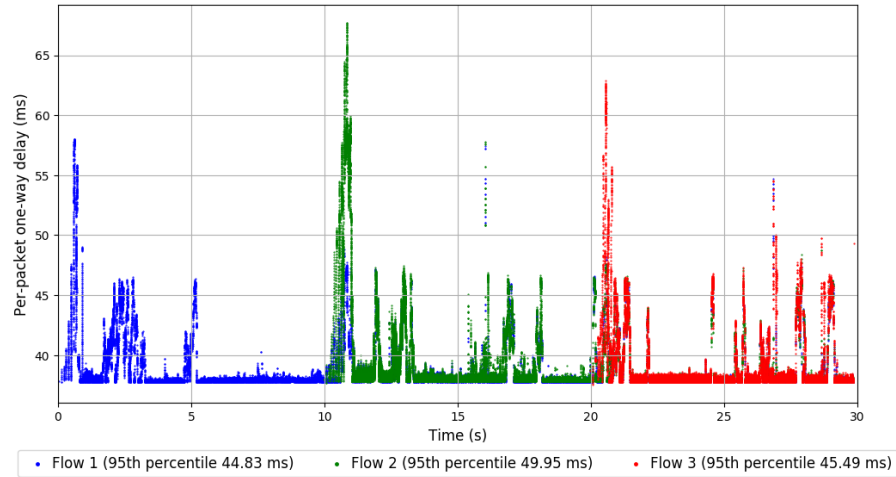
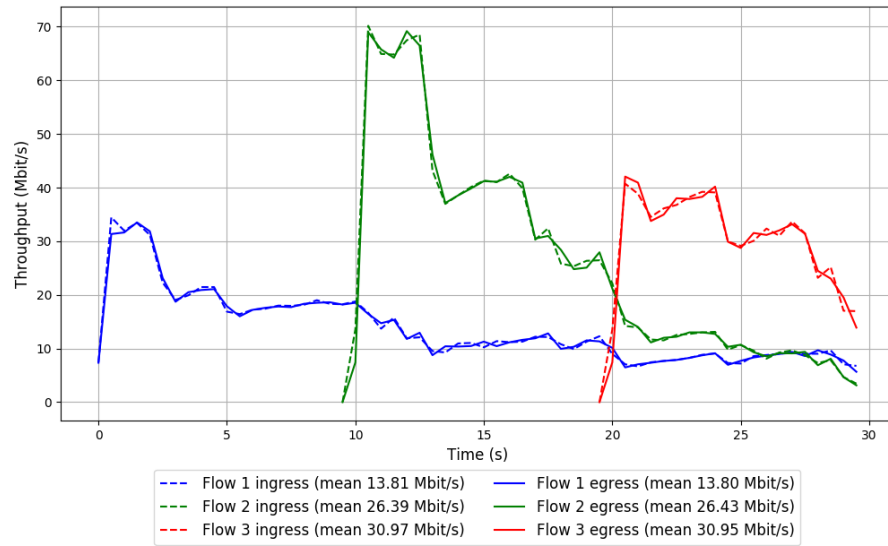
-- Flow 3:

Average throughput: 30.95 Mbit/s

95th percentile per-packet one-way delay: 45.488 ms

Loss rate: 0.78%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 02:14:29 +0000

End at: Tue, 01 Aug 2017 02:14:59 +0000

Local clock offset: 0.501 ms

Remote clock offset: 0.761 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:32 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.35 Mbit/s

95th percentile per-packet one-way delay: 68.742 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 56.97 Mbit/s

95th percentile per-packet one-way delay: 67.551 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 39.90 Mbit/s

95th percentile per-packet one-way delay: 69.336 ms

Loss rate: 0.52%

-- Flow 3:

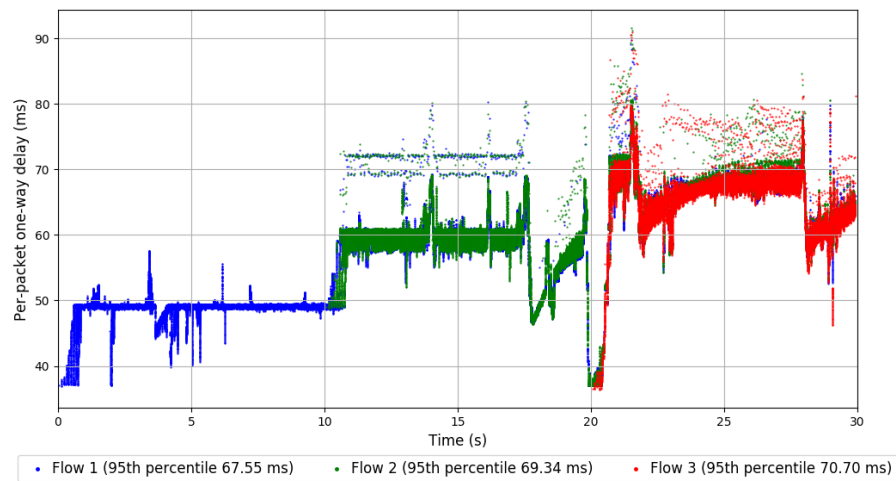
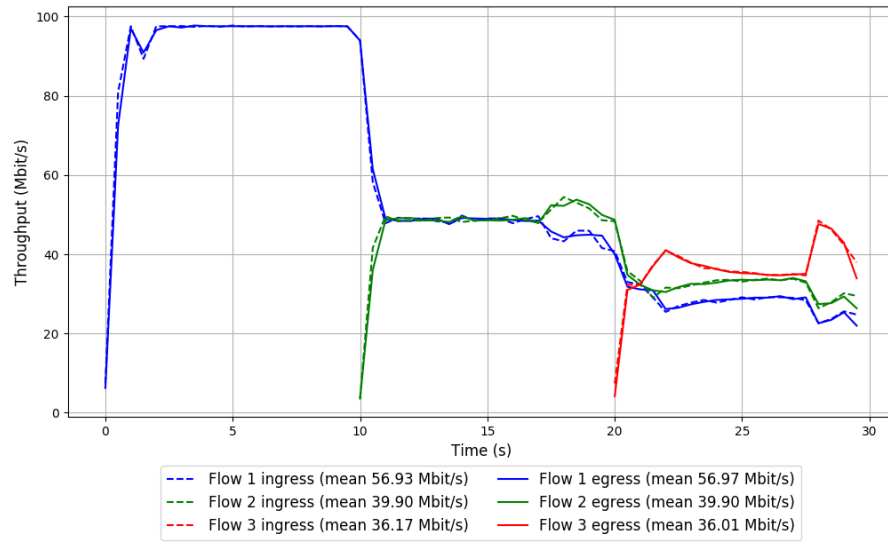
Average throughput: 36.01 Mbit/s

95th percentile per-packet one-way delay: 70.696 ms

Loss rate: 1.25%



## Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 02:35:33 +0000

End at: Tue, 01 Aug 2017 02:36:03 +0000

Local clock offset: 0.28 ms

Remote clock offset: 0.525 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:34 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.04 Mbit/s

95th percentile per-packet one-way delay: 54.600 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 40.611 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 39.27 Mbit/s

95th percentile per-packet one-way delay: 53.432 ms

Loss rate: 0.38%

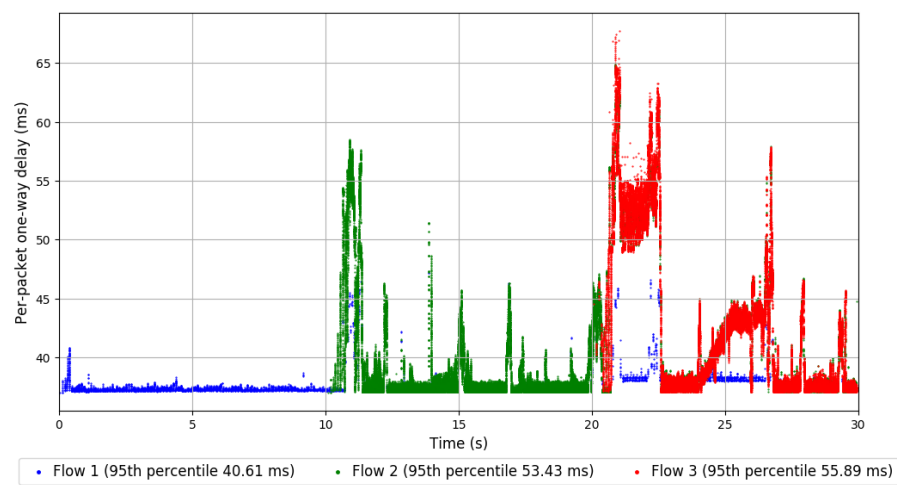
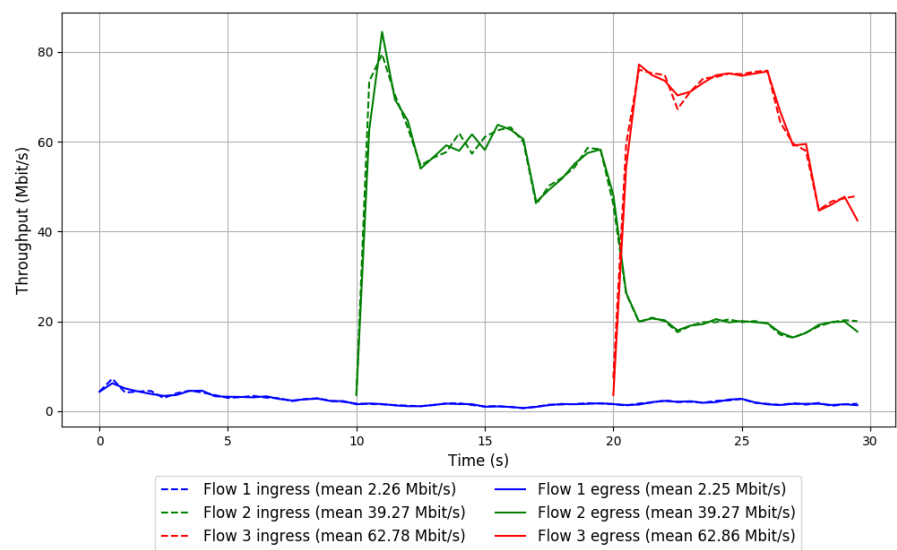
-- Flow 3:

Average throughput: 62.86 Mbit/s

95th percentile per-packet one-way delay: 55.890 ms

Loss rate: 0.83%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 02:56:40 +0000

End at: Tue, 01 Aug 2017 02:57:10 +0000

Local clock offset: 0.231 ms

Remote clock offset: -2.041 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:43 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 63.170 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 56.268 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 24.34 Mbit/s

95th percentile per-packet one-way delay: 65.449 ms

Loss rate: 0.41%

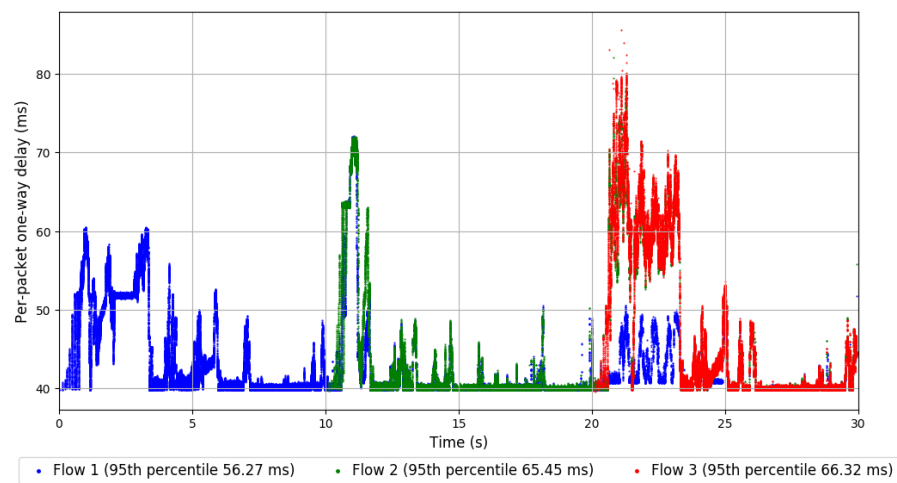
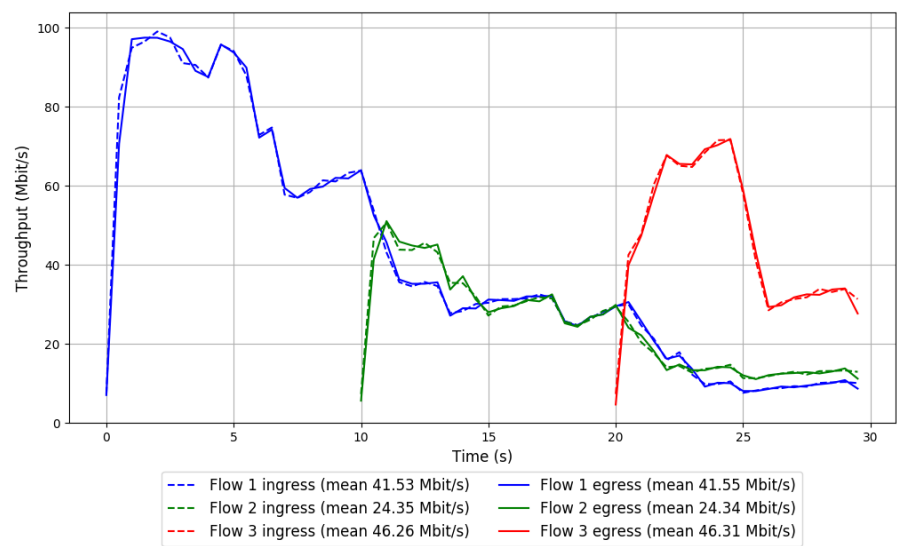
-- Flow 3:

Average throughput: 46.31 Mbit/s

95th percentile per-packet one-way delay: 66.323 ms

Loss rate: 0.79%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 03:17:49 +0000

End at: Tue, 01 Aug 2017 03:18:19 +0000

Local clock offset: 0.091 ms

Remote clock offset: 0.454 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:43 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 54.918 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 27.61 Mbit/s

95th percentile per-packet one-way delay: 50.701 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 28.91 Mbit/s

95th percentile per-packet one-way delay: 58.415 ms

Loss rate: 0.29%

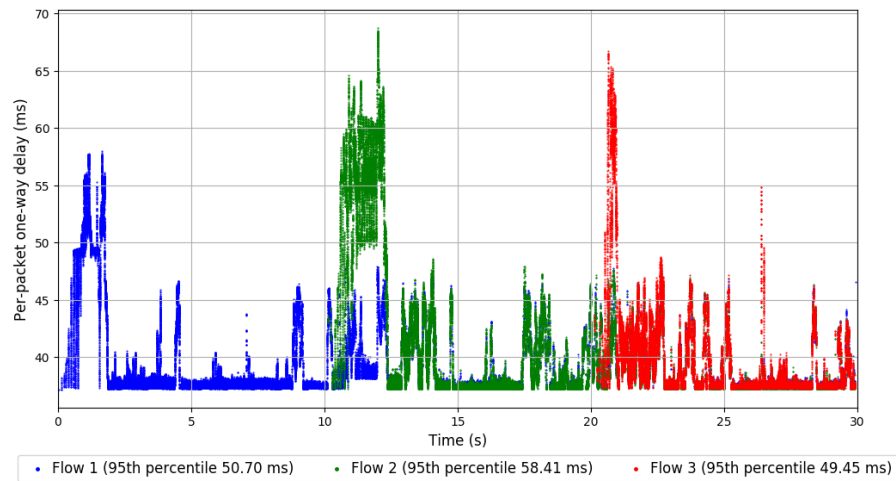
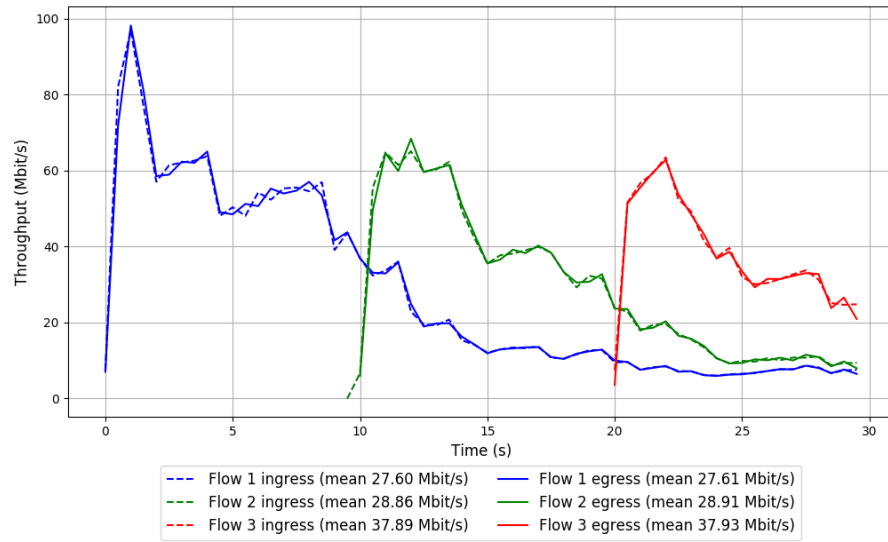
-- Flow 3:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 49.450 ms

Loss rate: 0.80%

## Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 03:38:56 +0000

End at: Tue, 01 Aug 2017 03:39:26 +0000

Local clock offset: -0.146 ms

Remote clock offset: -2.265 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:50 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 67.42 Mbit/s

95th percentile per-packet one-way delay: 52.061 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 29.32 Mbit/s

95th percentile per-packet one-way delay: 53.132 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 44.32 Mbit/s

95th percentile per-packet one-way delay: 52.604 ms

Loss rate: 0.39%

-- Flow 3:

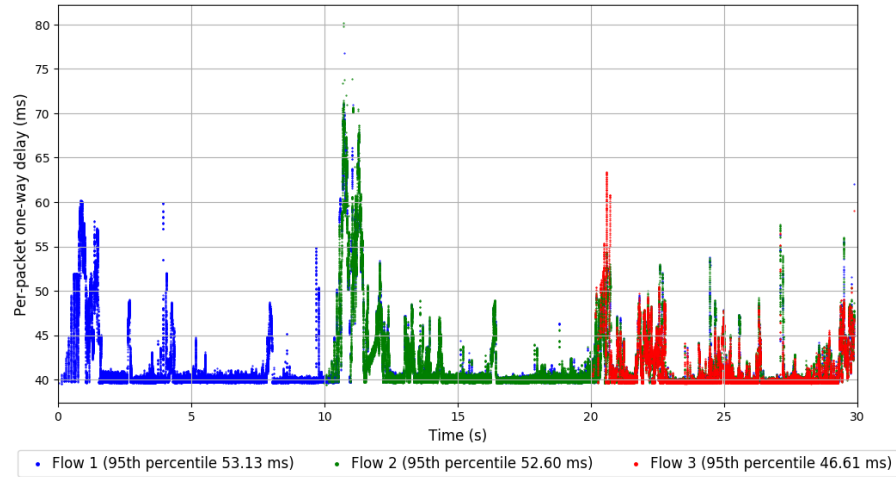
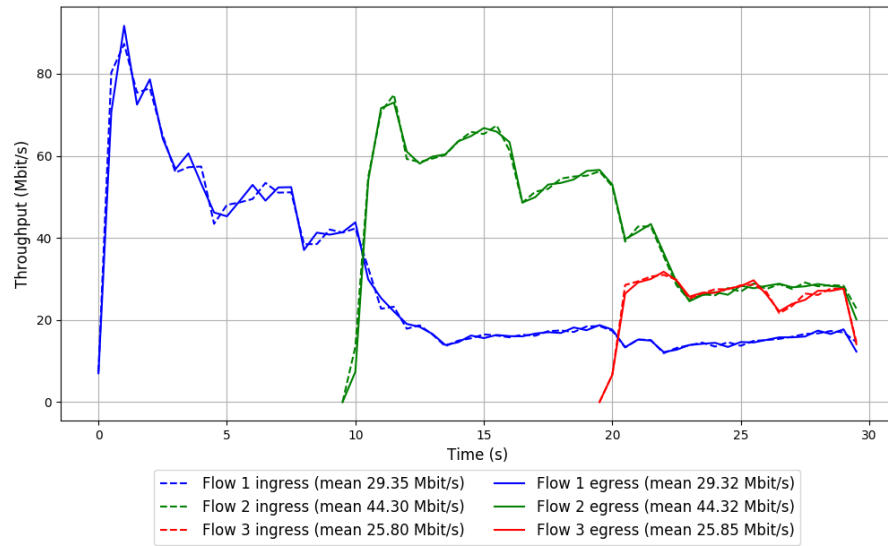
Average throughput: 25.85 Mbit/s

95th percentile per-packet one-way delay: 46.614 ms

Loss rate: 0.52%



## Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 04:00:00 +0000

End at: Tue, 01 Aug 2017 04:00:31 +0000

Local clock offset: 0.013 ms

Remote clock offset: -0.098 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:56:55 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.51 Mbit/s

95th percentile per-packet one-way delay: 83.784 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 54.14 Mbit/s

95th percentile per-packet one-way delay: 83.699 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 47.62 Mbit/s

95th percentile per-packet one-way delay: 62.785 ms

Loss rate: 0.50%

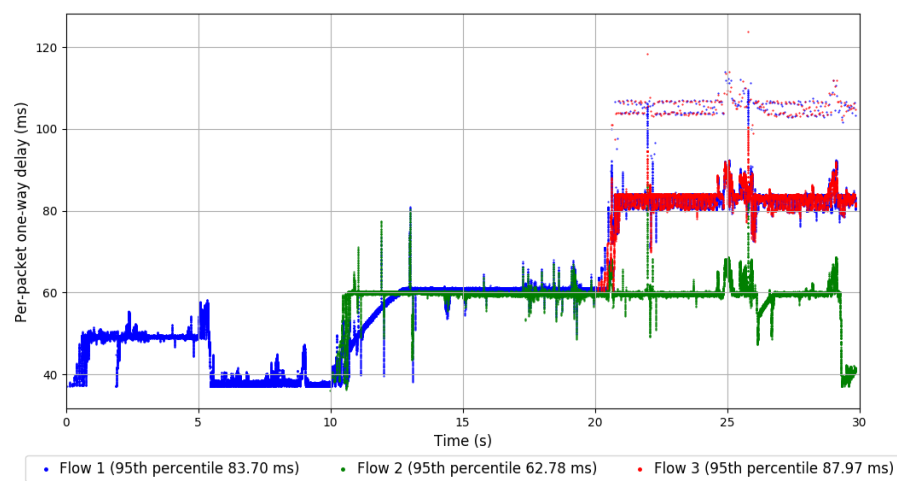
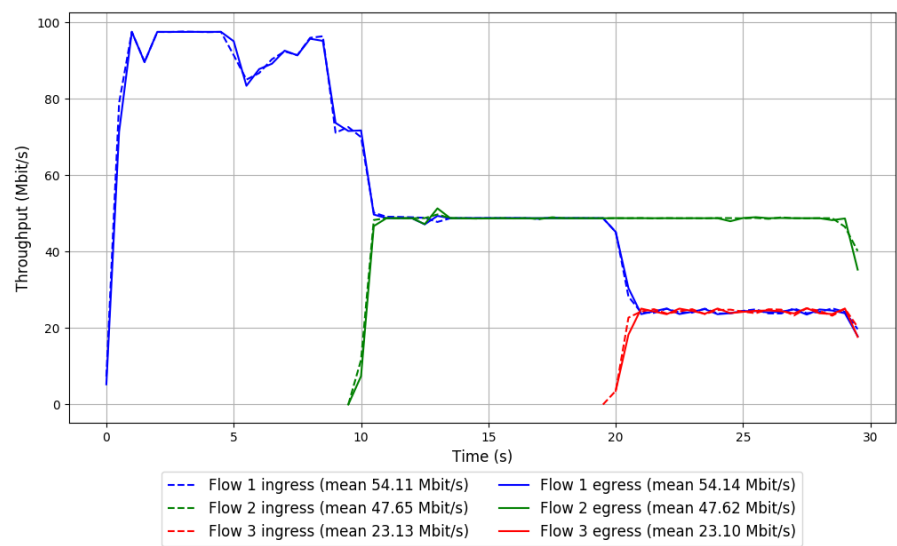
-- Flow 3:

Average throughput: 23.10 Mbit/s

95th percentile per-packet one-way delay: 87.966 ms

Loss rate: 1.49%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 04:21:17 +0000

End at: Tue, 01 Aug 2017 04:21:47 +0000

Local clock offset: 0.06 ms

Remote clock offset: -2.89 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:00 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 63.23 Mbit/s

95th percentile per-packet one-way delay: 52.146 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 26.02 Mbit/s

95th percentile per-packet one-way delay: 48.332 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 36.63 Mbit/s

95th percentile per-packet one-way delay: 51.629 ms

Loss rate: 0.30%

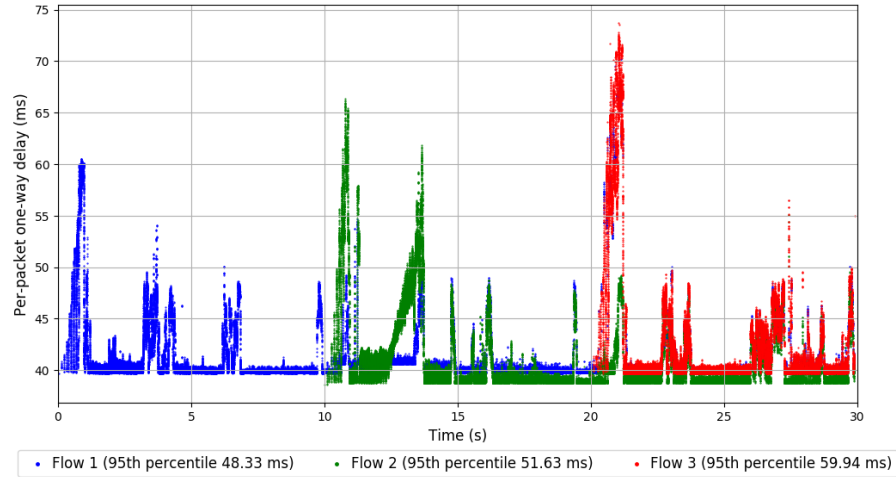
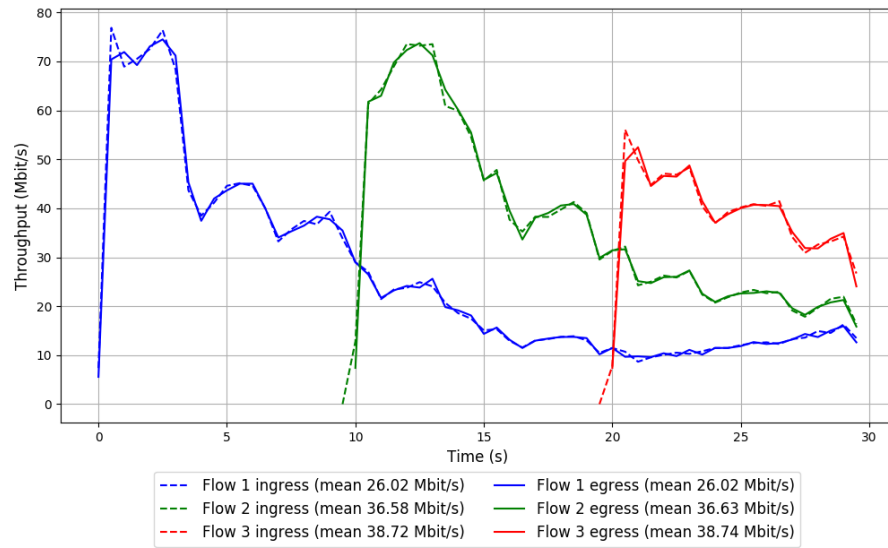
-- Flow 3:

Average throughput: 38.74 Mbit/s

95th percentile per-packet one-way delay: 59.940 ms

Loss rate: 0.70%

# Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 04:42:45 +0000

End at: Tue, 01 Aug 2017 04:43:15 +0000

Local clock offset: 0.19 ms

Remote clock offset: -0.362 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:02 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.14 Mbit/s

95th percentile per-packet one-way delay: 48.192 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 19.59 Mbit/s

95th percentile per-packet one-way delay: 48.554 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 18.56 Mbit/s

95th percentile per-packet one-way delay: 44.514 ms

Loss rate: 0.28%

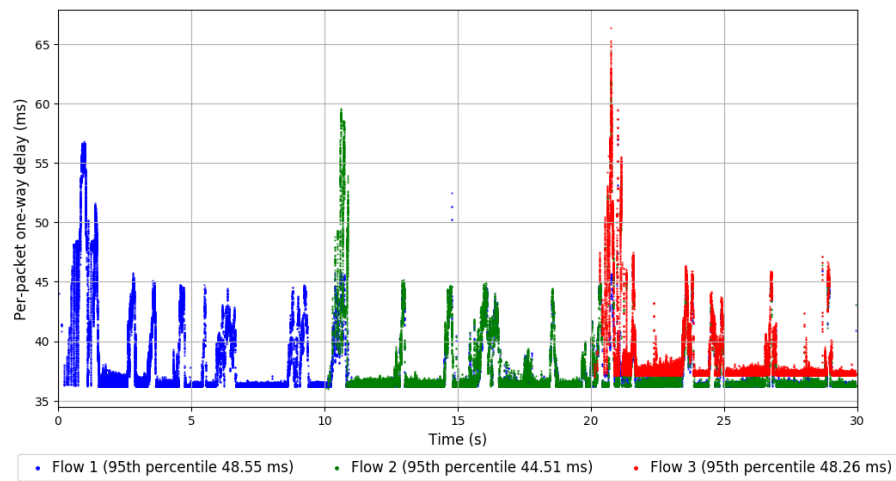
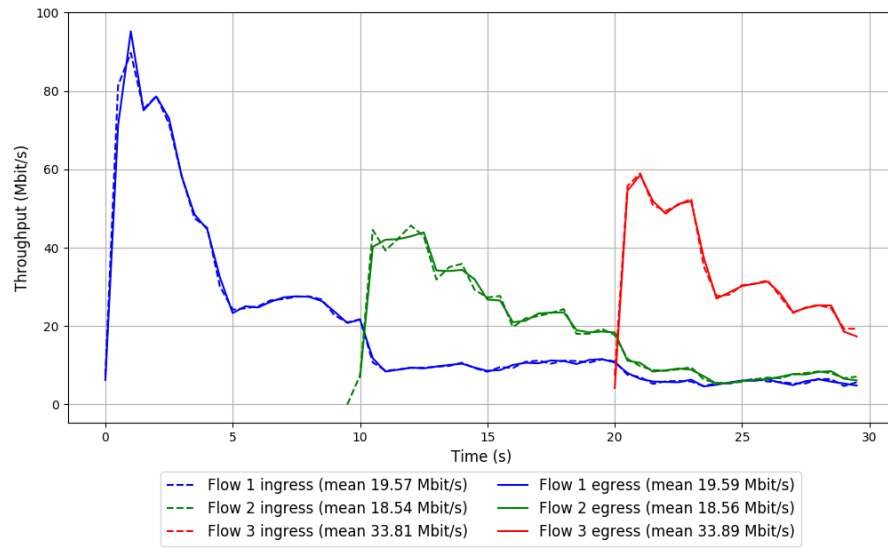
-- Flow 3:

Average throughput: 33.89 Mbit/s

95th percentile per-packet one-way delay: 48.263 ms

Loss rate: 0.67%

### Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: Tue, 01 Aug 2017 05:04:01 +0000

End at: Tue, 01 Aug 2017 05:04:31 +0000

Local clock offset: 0.144 ms

Remote clock offset: -3.086 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:13 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.53 Mbit/s

95th percentile per-packet one-way delay: 65.815 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 55.12 Mbit/s

95th percentile per-packet one-way delay: 65.031 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 46.81 Mbit/s

95th percentile per-packet one-way delay: 67.203 ms

Loss rate: 0.61%

-- Flow 3:

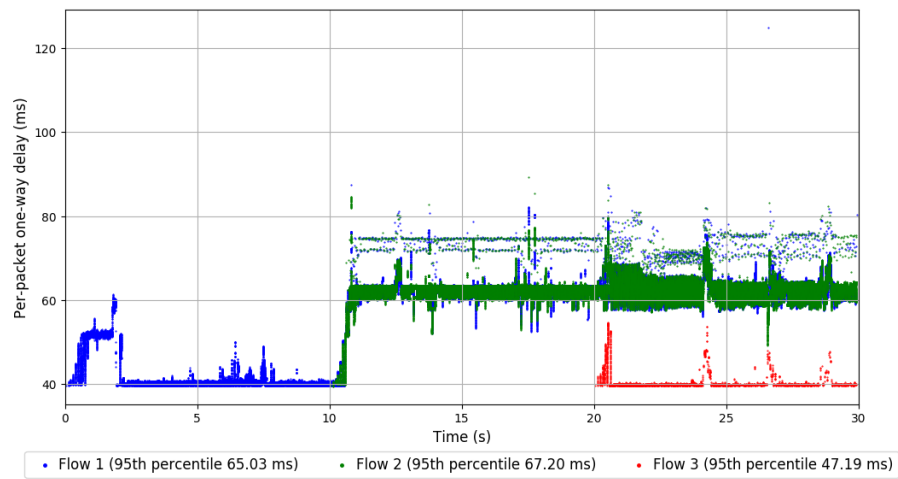
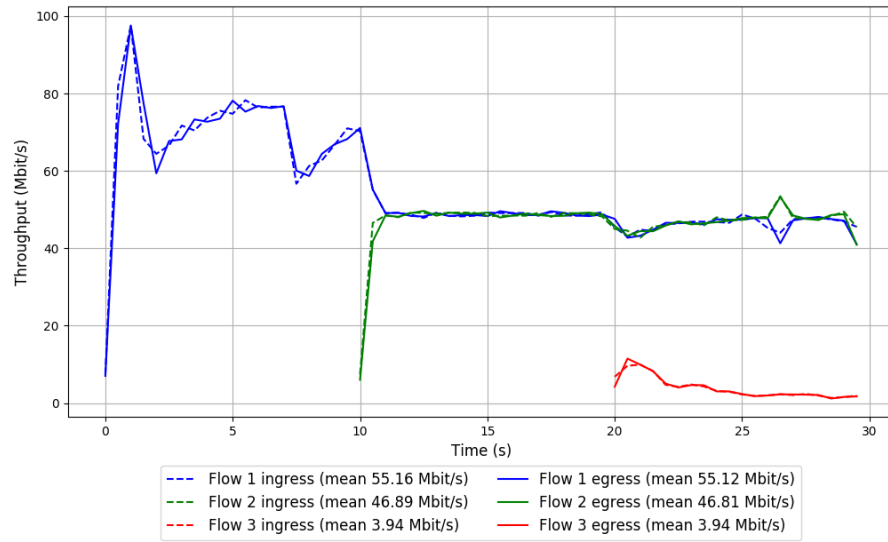
Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 47.185 ms

Loss rate: 0.86%



## Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 01:46:01 +0000

End at: Tue, 01 Aug 2017 01:46:31 +0000

Local clock offset: 0.793 ms

Remote clock offset: -1.498 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:13 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.41 Mbit/s

95th percentile per-packet one-way delay: 44.955 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 13.37 Mbit/s

95th percentile per-packet one-way delay: 44.512 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 45.609 ms

Loss rate: 0.61%

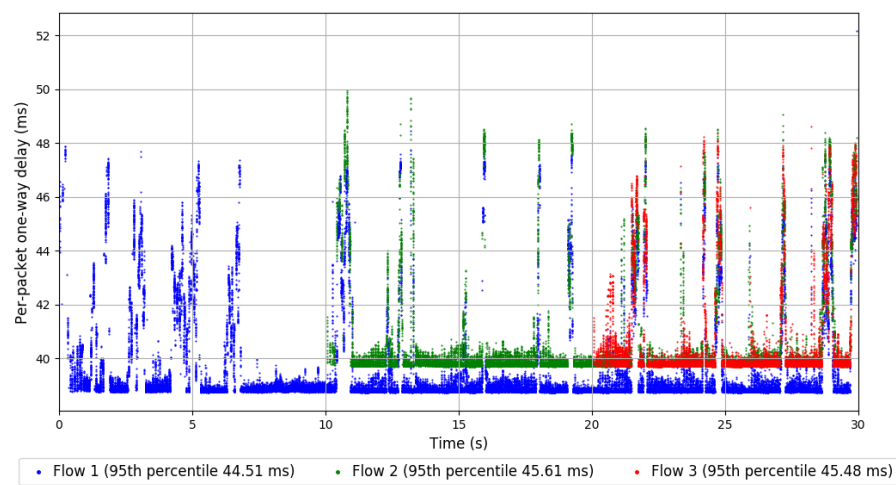
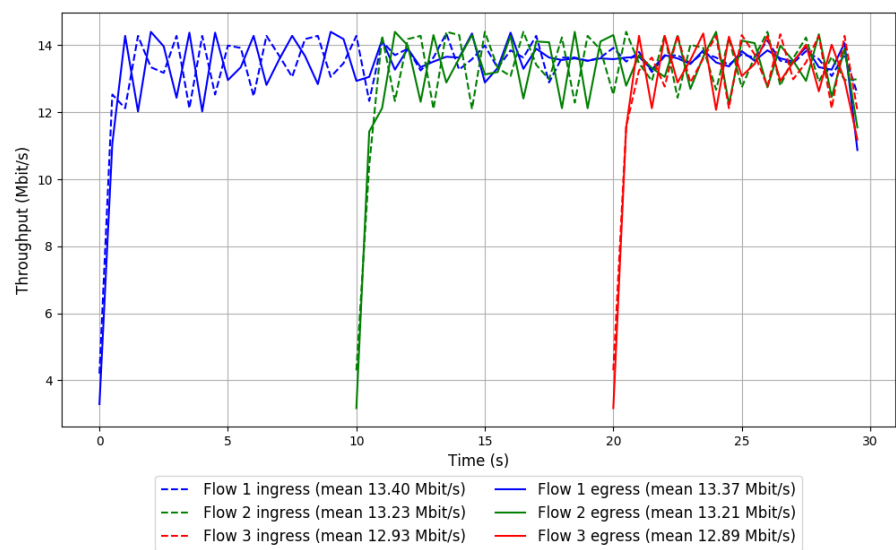
-- Flow 3:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 45.482 ms

Loss rate: 0.97%

Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 02:07:33 +0000

End at: Tue, 01 Aug 2017 02:08:03 +0000

Local clock offset: 0.474 ms

Remote clock offset: 0.212 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:13 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.36 Mbit/s

95th percentile per-packet one-way delay: 38.669 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 13.28 Mbit/s

95th percentile per-packet one-way delay: 38.503 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 13.23 Mbit/s

95th percentile per-packet one-way delay: 38.774 ms

Loss rate: 0.46%

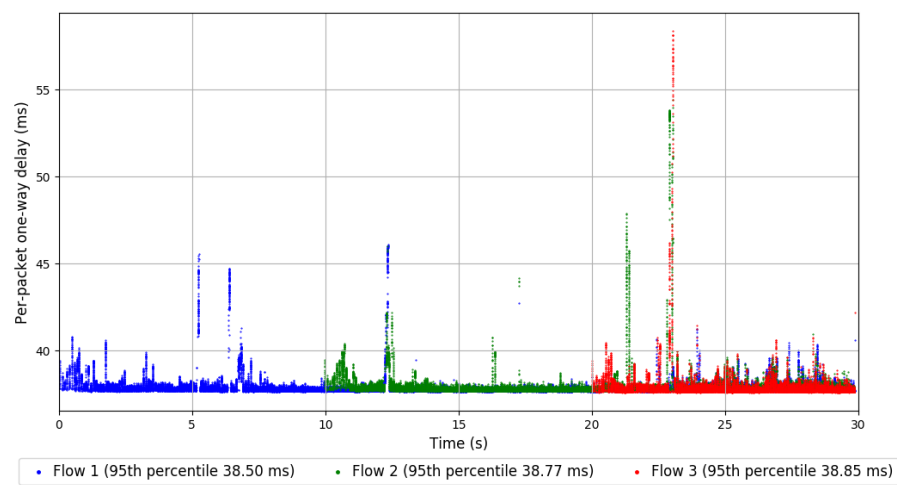
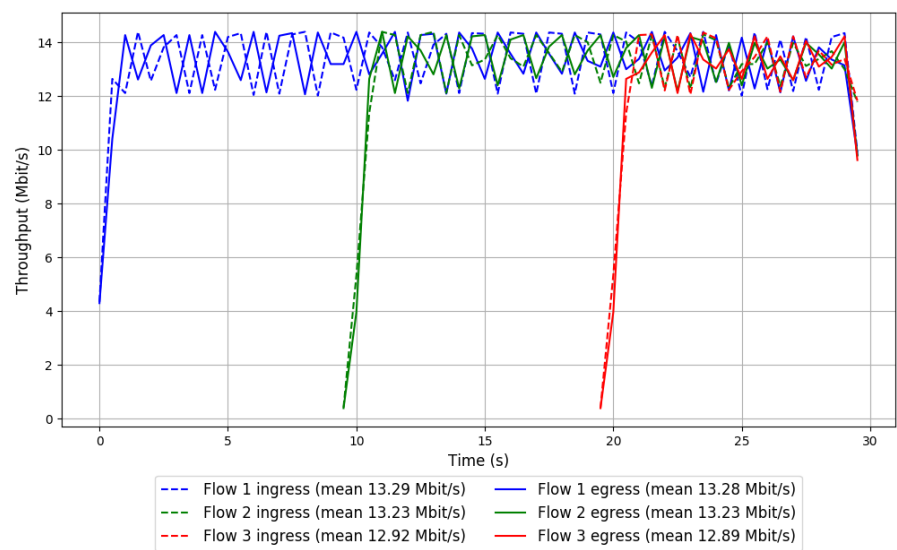
-- Flow 3:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 38.852 ms

Loss rate: 0.92%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 02:28:35 +0000

End at: Tue, 01 Aug 2017 02:29:05 +0000

Local clock offset: 0.424 ms

Remote clock offset: -2.092 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:15 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.57 Mbit/s

95th percentile per-packet one-way delay: 40.529 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 13.33 Mbit/s

95th percentile per-packet one-way delay: 40.734 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 13.38 Mbit/s

95th percentile per-packet one-way delay: 39.938 ms

Loss rate: 0.49%

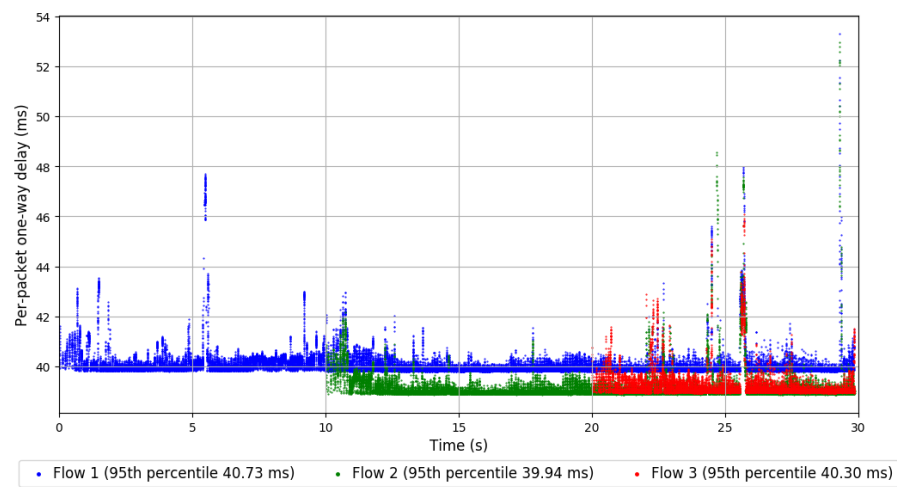
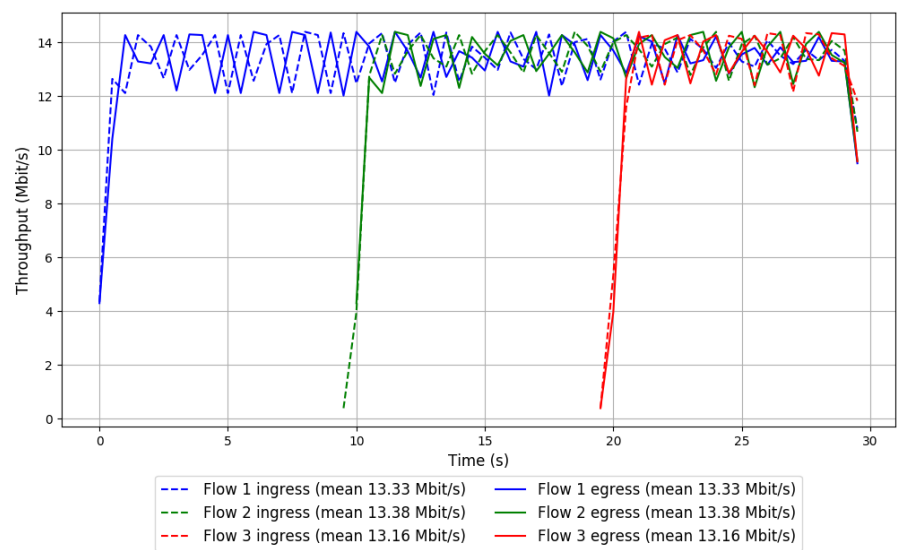
-- Flow 3:

Average throughput: 13.16 Mbit/s

95th percentile per-packet one-way delay: 40.299 ms

Loss rate: 0.92%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 02:49:36 +0000

End at: Tue, 01 Aug 2017 02:50:06 +0000

Local clock offset: 0.171 ms

Remote clock offset: -2.005 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:18 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.39 Mbit/s

95th percentile per-packet one-way delay: 40.691 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 13.33 Mbit/s

95th percentile per-packet one-way delay: 40.835 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 40.399 ms

Loss rate: 0.45%

-- Flow 3:

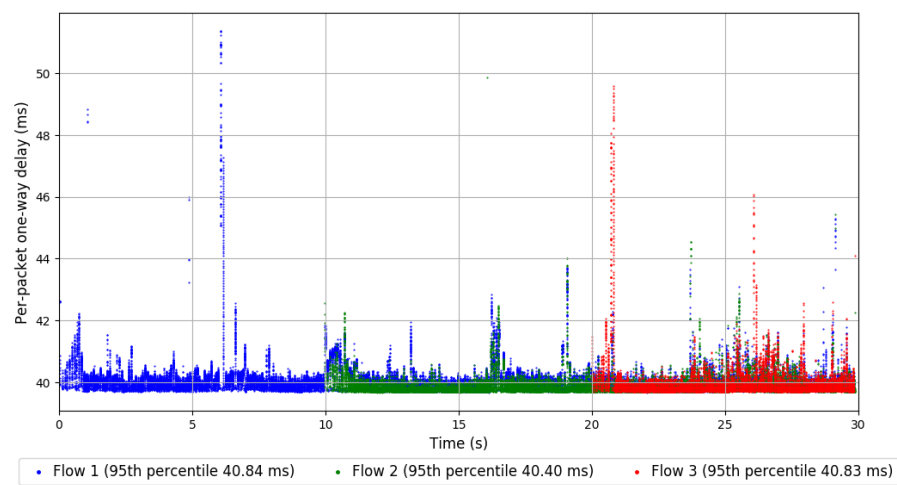
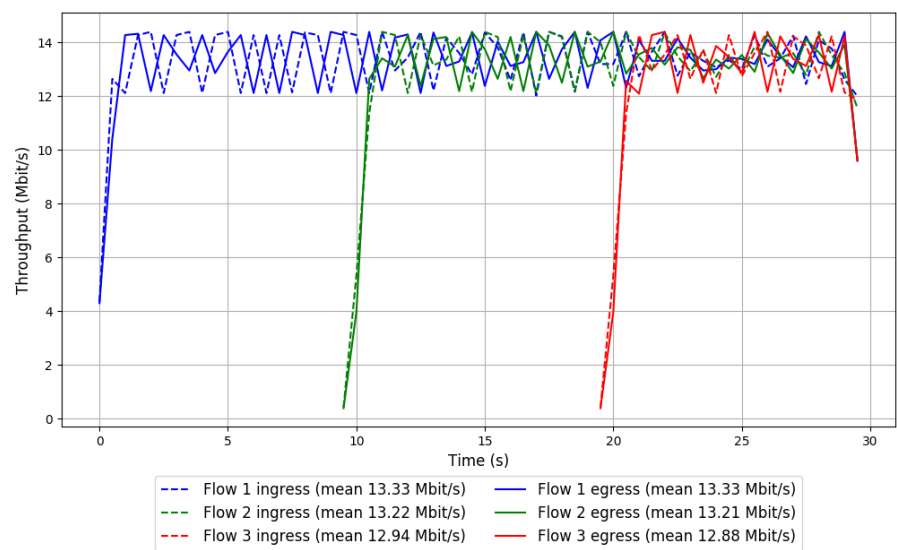
Average throughput: 12.88 Mbit/s

95th percentile per-packet one-way delay: 40.830 ms

Loss rate: 0.99%



Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 03:10:51 +0000

End at: Tue, 01 Aug 2017 03:11:21 +0000

Local clock offset: 0.01 ms

Remote clock offset: 0.488 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:20 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.12 Mbit/s

95th percentile per-packet one-way delay: 41.505 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 13.15 Mbit/s

95th percentile per-packet one-way delay: 41.333 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 13.20 Mbit/s

95th percentile per-packet one-way delay: 41.416 ms

Loss rate: 0.50%

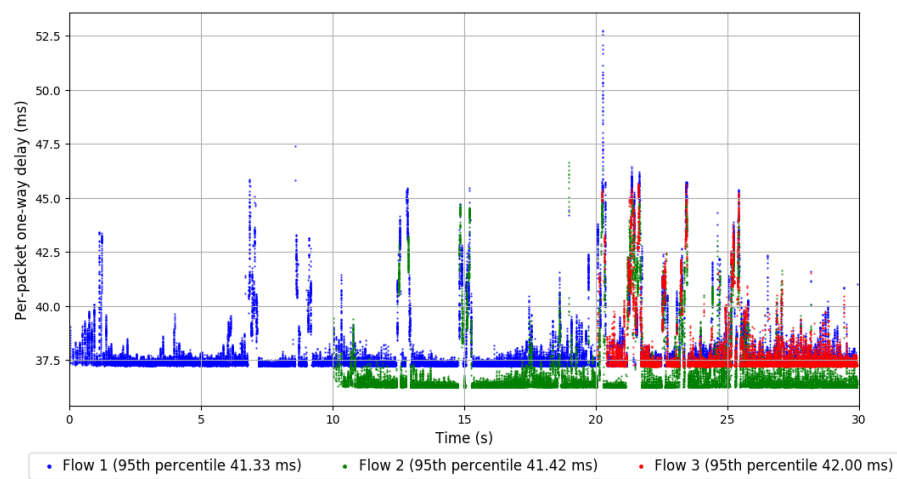
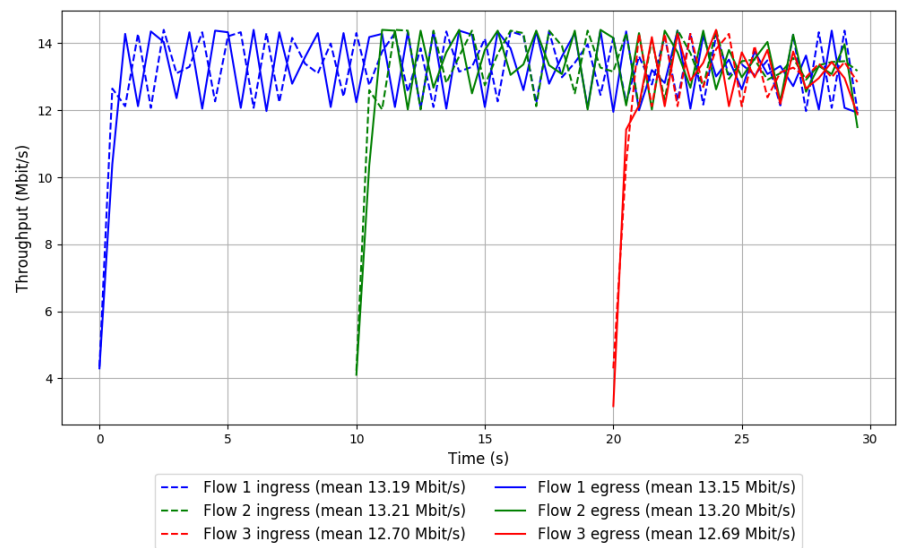
-- Flow 3:

Average throughput: 12.69 Mbit/s

95th percentile per-packet one-way delay: 41.997 ms

Loss rate: 1.01%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 03:31:57 +0000

End at: Tue, 01 Aug 2017 03:32:27 +0000

Local clock offset: -0.103 ms

Remote clock offset: -2.208 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:23 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.27 Mbit/s

95th percentile per-packet one-way delay: 44.874 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 13.24 Mbit/s

95th percentile per-packet one-way delay: 44.618 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 45.174 ms

Loss rate: 0.62%

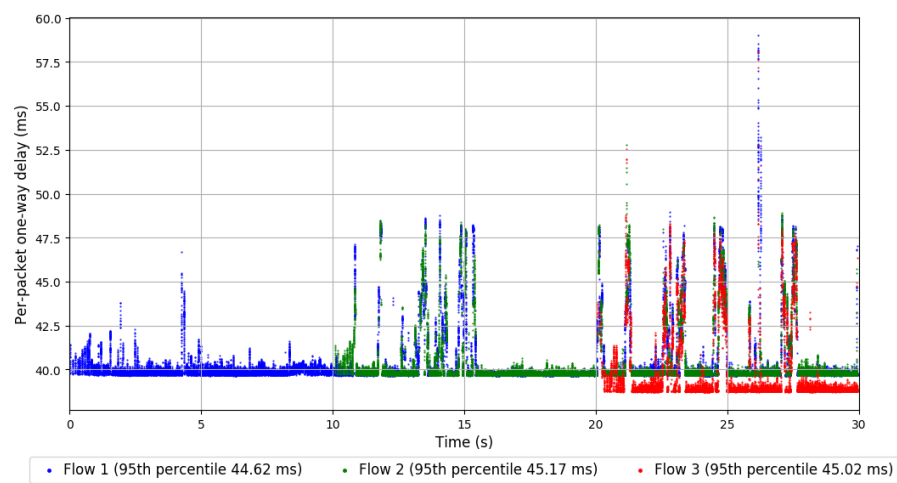
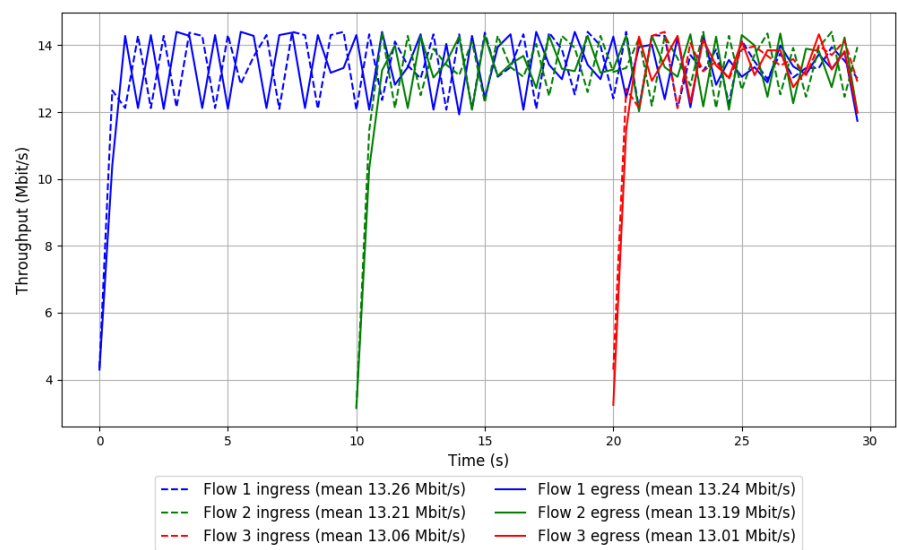
-- Flow 3:

Average throughput: 13.01 Mbit/s

95th percentile per-packet one-way delay: 45.019 ms

Loss rate: 1.19%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 03:53:00 +0000

End at: Tue, 01 Aug 2017 03:53:30 +0000

Local clock offset: -0.107 ms

Remote clock offset: -2.428 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:25 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.53 Mbit/s

95th percentile per-packet one-way delay: 40.318 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 13.46 Mbit/s

95th percentile per-packet one-way delay: 39.816 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 40.439 ms

Loss rate: 0.45%

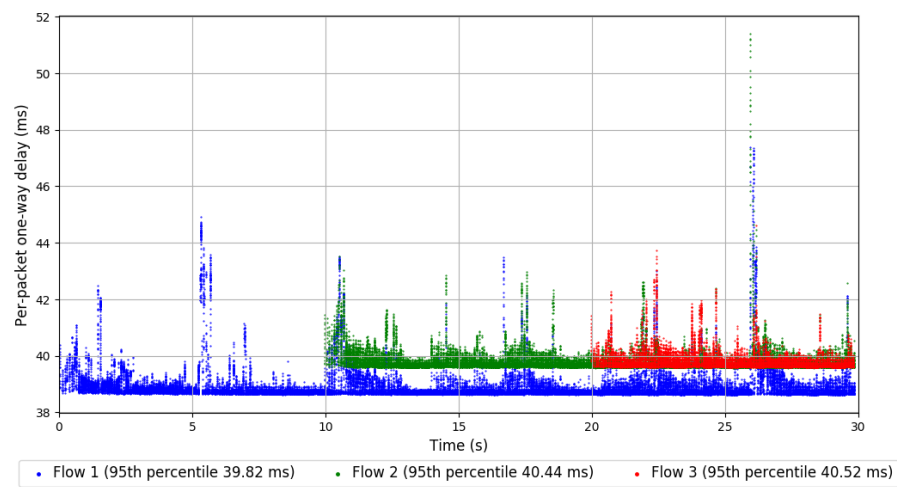
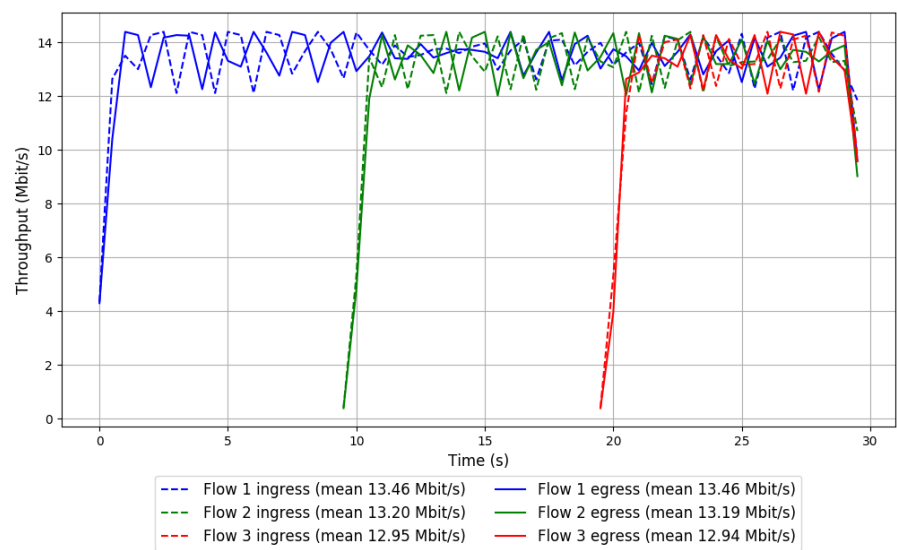
-- Flow 3:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 40.521 ms

Loss rate: 0.93%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 04:14:18 +0000

End at: Tue, 01 Aug 2017 04:14:48 +0000

Local clock offset: 0.139 ms

Remote clock offset: -2.841 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:27 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.70 Mbit/s

95th percentile per-packet one-way delay: 42.817 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 13.52 Mbit/s

95th percentile per-packet one-way delay: 42.545 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 13.26 Mbit/s

95th percentile per-packet one-way delay: 43.529 ms

Loss rate: 0.61%

-- Flow 3:

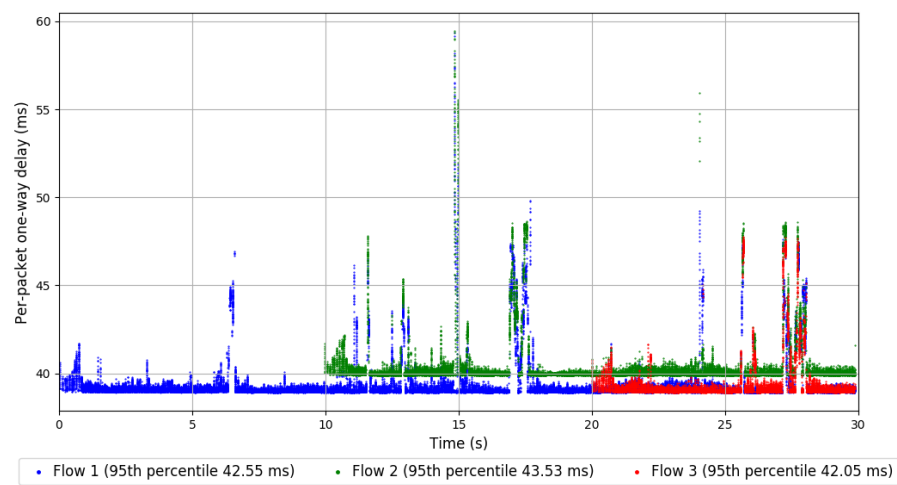
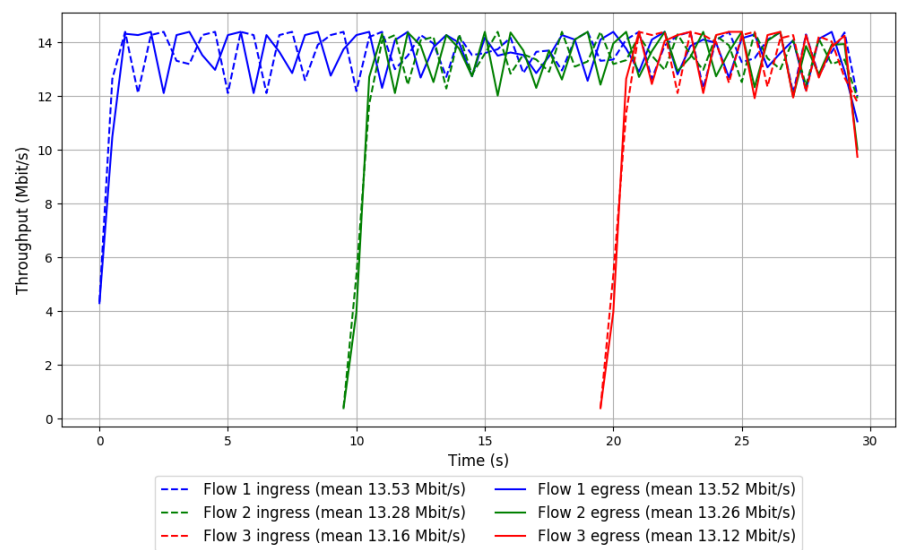
Average throughput: 13.12 Mbit/s

95th percentile per-packet one-way delay: 42.049 ms

Loss rate: 1.04%



Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 04:35:36 +0000

End at: Tue, 01 Aug 2017 04:36:06 +0000

Local clock offset: 0.121 ms

Remote clock offset: -0.446 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:29 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.64 Mbit/s

95th percentile per-packet one-way delay: 39.770 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 39.701 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 13.50 Mbit/s

95th percentile per-packet one-way delay: 39.243 ms

Loss rate: 0.51%

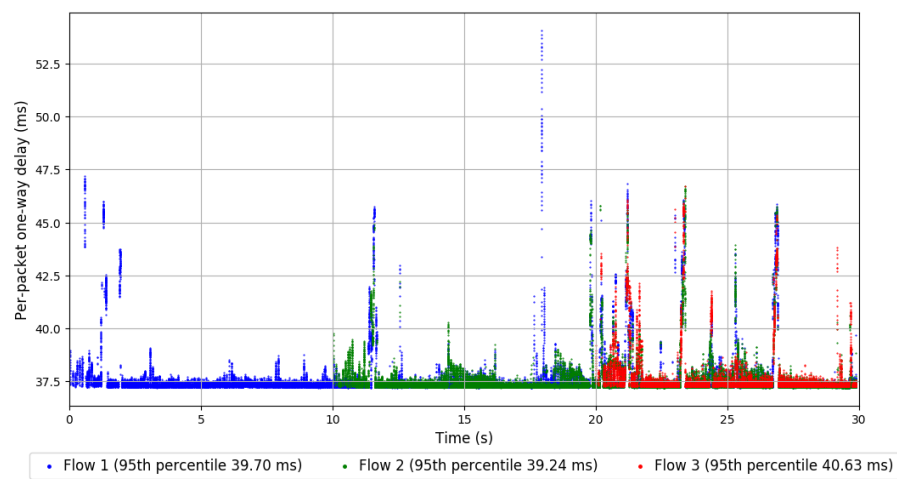
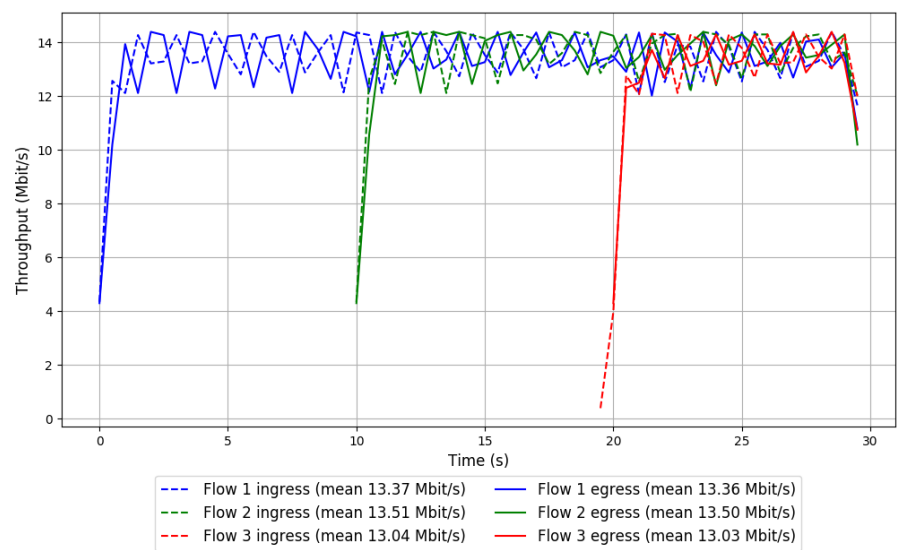
-- Flow 3:

Average throughput: 13.03 Mbit/s

95th percentile per-packet one-way delay: 40.632 ms

Loss rate: 0.94%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: Tue, 01 Aug 2017 04:56:59 +0000

End at: Tue, 01 Aug 2017 04:57:29 +0000

Local clock offset: 0.126 ms

Remote clock offset: -0.428 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.80 Mbit/s

95th percentile per-packet one-way delay: 36.920 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 13.47 Mbit/s

95th percentile per-packet one-way delay: 36.938 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 13.47 Mbit/s

95th percentile per-packet one-way delay: 36.823 ms

Loss rate: 0.46%

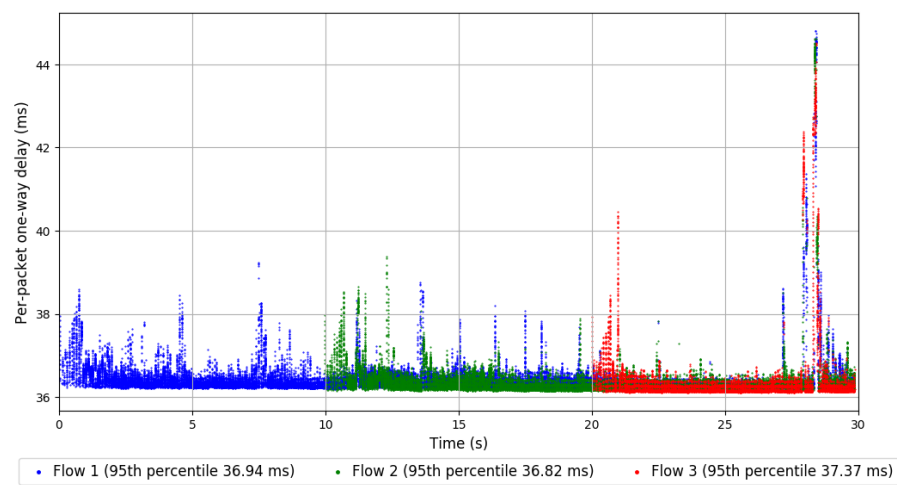
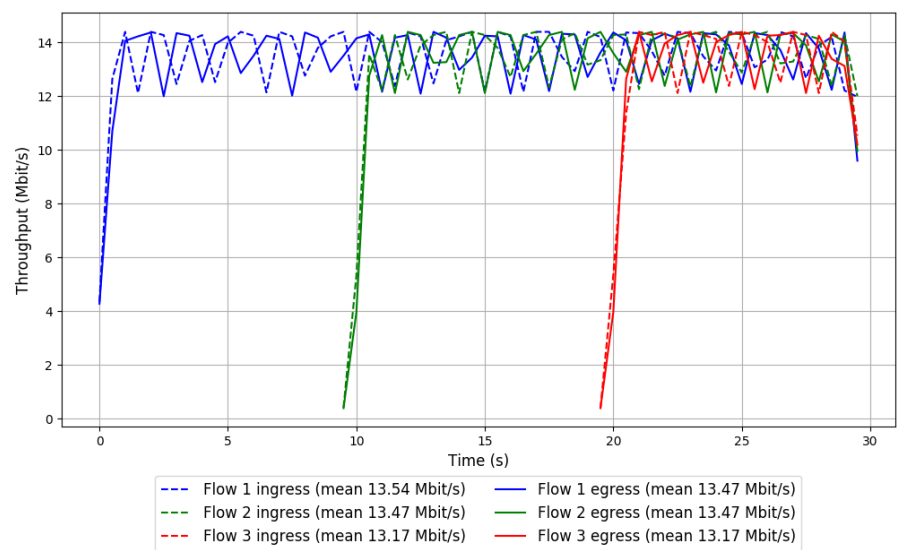
-- Flow 3:

Average throughput: 13.17 Mbit/s

95th percentile per-packet one-way delay: 37.371 ms

Loss rate: 0.91%

Run 10: Report of KohoCC — Data Link



Run 1: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 01:48:47 +0000

End at: Tue, 01 Aug 2017 01:49:17 +0000

Local clock offset: 0.735 ms

Remote clock offset: 0.384 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.05 Mbit/s

95th percentile per-packet one-way delay: 45.188 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 6.90 Mbit/s

95th percentile per-packet one-way delay: 44.774 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 45.587 ms

Loss rate: 0.83%

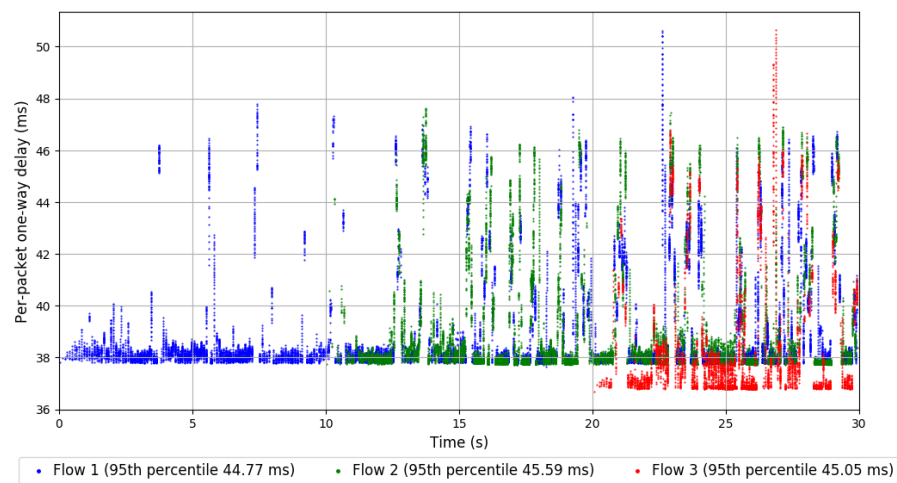
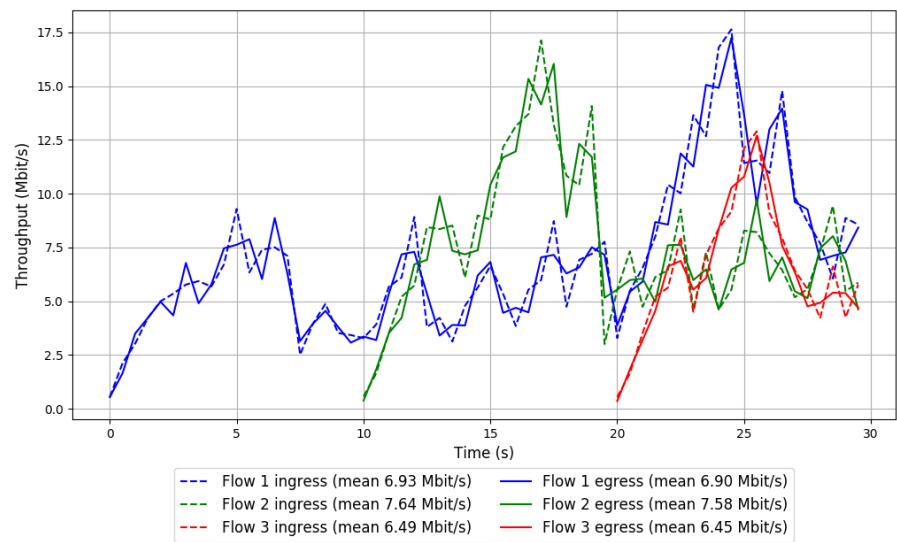
-- Flow 3:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 45.049 ms

Loss rate: 1.46%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 02:10:18 +0000

End at: Tue, 01 Aug 2017 02:10:48 +0000

Local clock offset: 0.467 ms

Remote clock offset: -1.787 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:39 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.93 Mbit/s

95th percentile per-packet one-way delay: 42.318 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 28.40 Mbit/s

95th percentile per-packet one-way delay: 41.934 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 19.26 Mbit/s

95th percentile per-packet one-way delay: 43.176 ms

Loss rate: 0.67%

-- Flow 3:

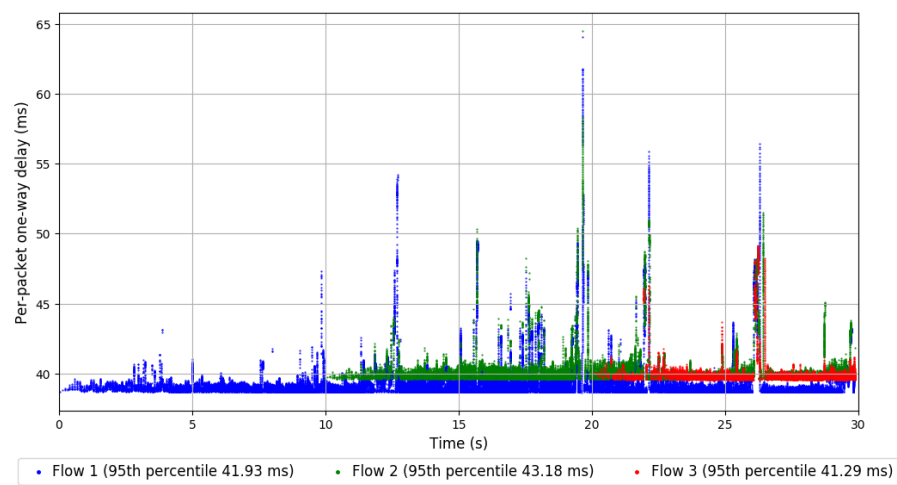
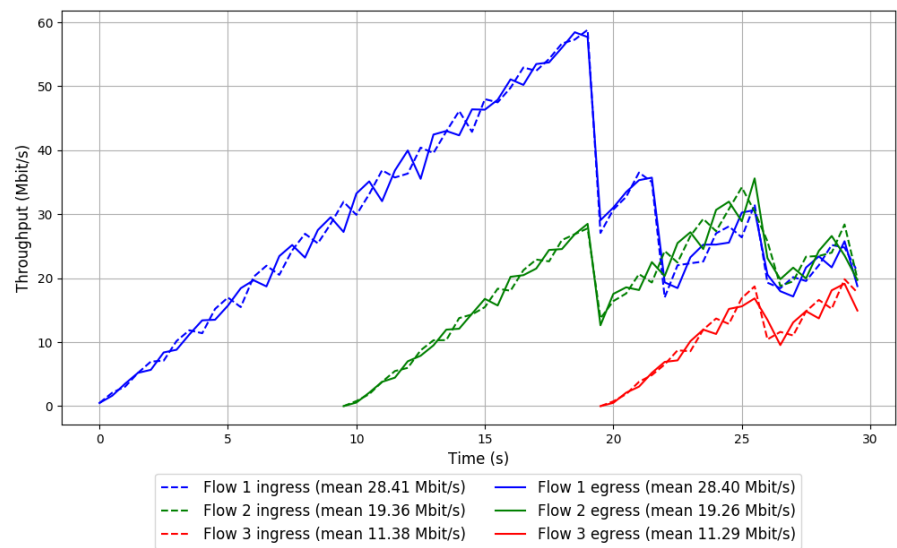
Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 41.294 ms

Loss rate: 1.64%



Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 02:31:20 +0000

End at: Tue, 01 Aug 2017 02:31:50 +0000

Local clock offset: 0.418 ms

Remote clock offset: -2.02 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:39 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 37.08 Mbit/s

95th percentile per-packet one-way delay: 44.767 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 25.56 Mbit/s

95th percentile per-packet one-way delay: 44.835 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 12.87 Mbit/s

95th percentile per-packet one-way delay: 44.585 ms

Loss rate: 0.64%

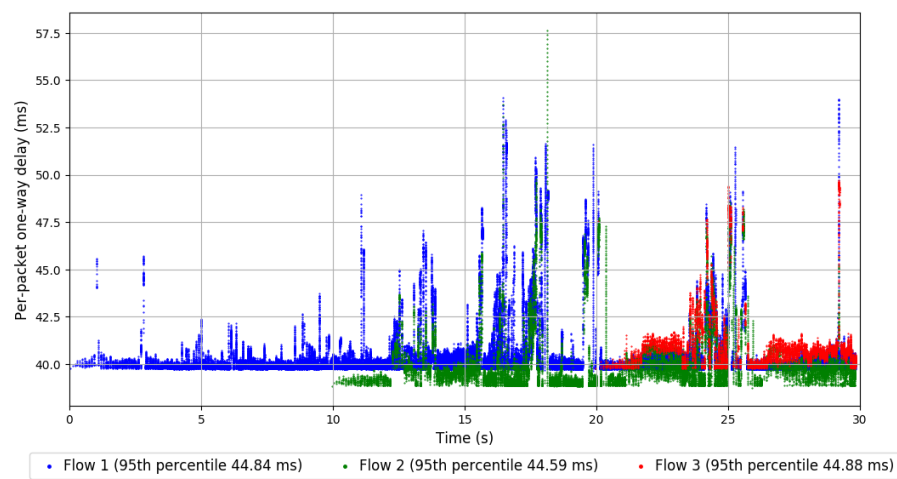
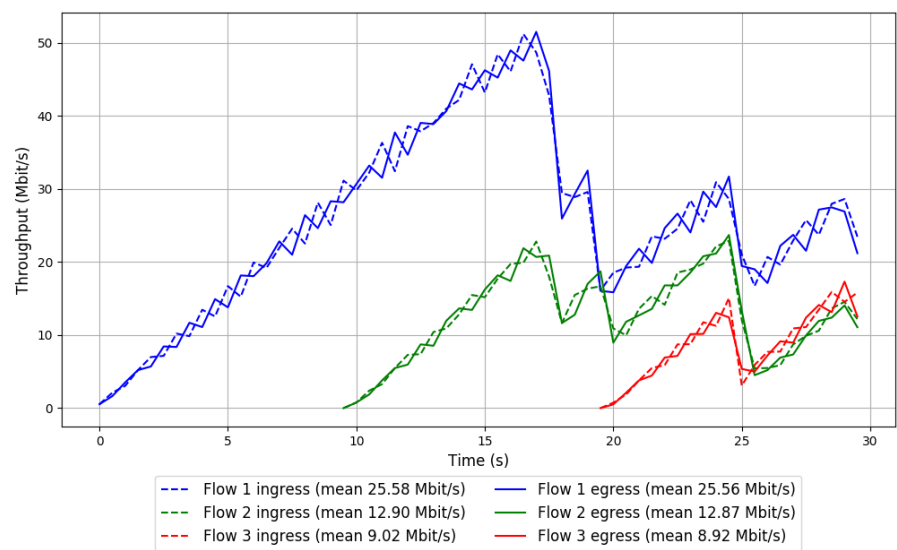
-- Flow 3:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 44.876 ms

Loss rate: 2.01%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 02:52:23 +0000

End at: Tue, 01 Aug 2017 02:52:53 +0000

Local clock offset: 0.168 ms

Remote clock offset: -2.102 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:44 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 27.93 Mbit/s

95th percentile per-packet one-way delay: 44.089 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 15.73 Mbit/s

95th percentile per-packet one-way delay: 43.809 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 13.74 Mbit/s

95th percentile per-packet one-way delay: 44.261 ms

Loss rate: 0.98%

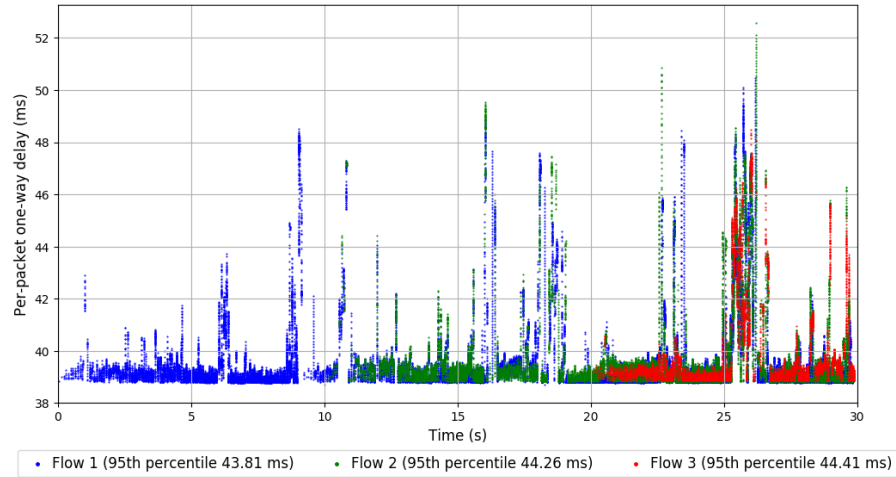
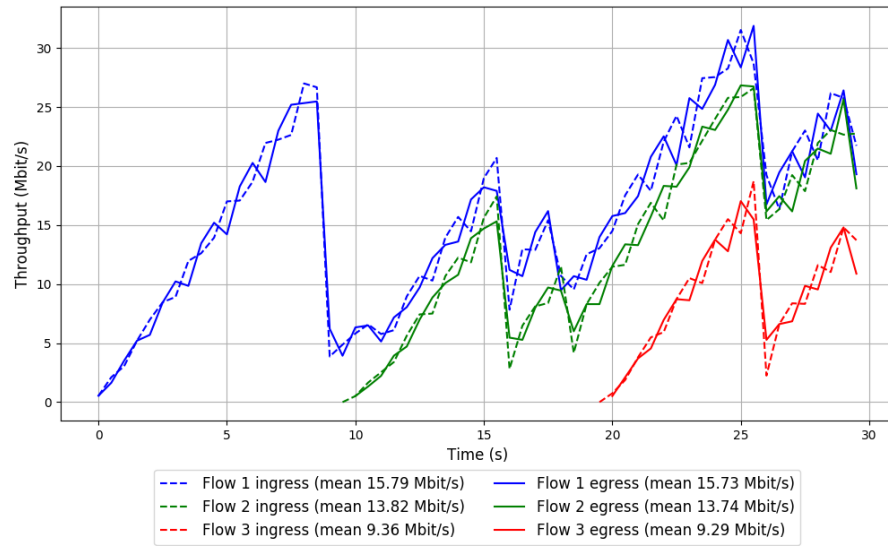
-- Flow 3:

Average throughput: 9.29 Mbit/s

95th percentile per-packet one-way delay: 44.411 ms

Loss rate: 1.64%

#### Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 03:13:37 +0000

End at: Tue, 01 Aug 2017 03:14:07 +0000

Local clock offset: 0.03 ms

Remote clock offset: -1.932 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:44 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 24.72 Mbit/s

95th percentile per-packet one-way delay: 44.610 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 15.98 Mbit/s

95th percentile per-packet one-way delay: 44.406 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 8.91 Mbit/s

95th percentile per-packet one-way delay: 45.231 ms

Loss rate: 1.04%

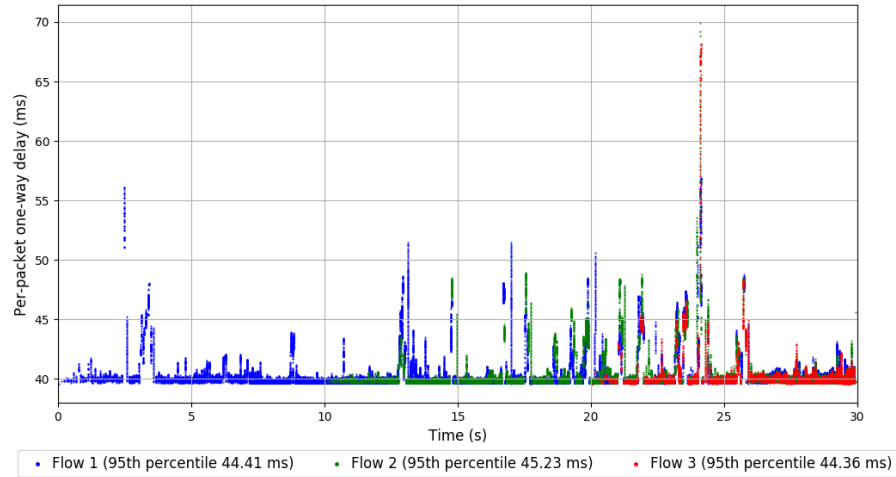
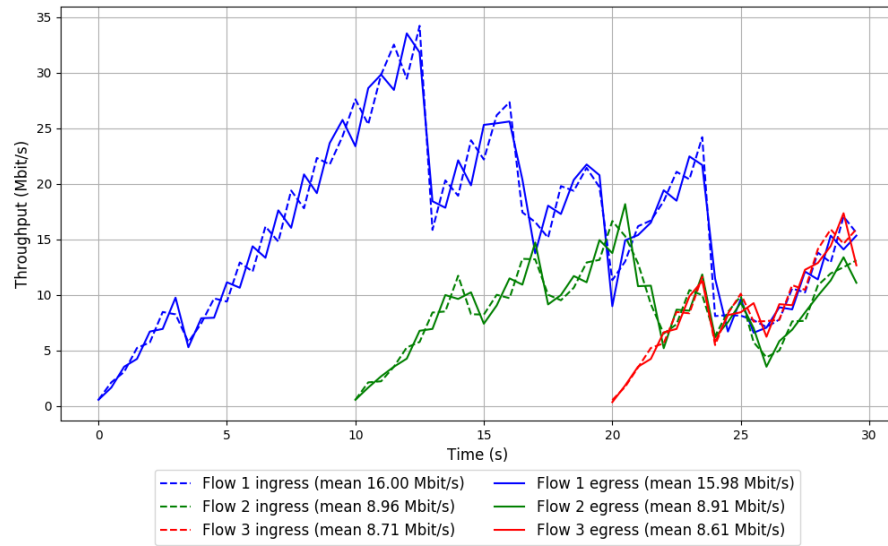
-- Flow 3:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 44.360 ms

Loss rate: 2.01%

# Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 03:34:43 +0000

End at: Tue, 01 Aug 2017 03:35:13 +0000

Local clock offset: -0.043 ms

Remote clock offset: -0.127 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:47 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 28.04 Mbit/s

95th percentile per-packet one-way delay: 42.572 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 16.90 Mbit/s

95th percentile per-packet one-way delay: 41.438 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 12.26 Mbit/s

95th percentile per-packet one-way delay: 43.505 ms

Loss rate: 0.45%

-- Flow 3:

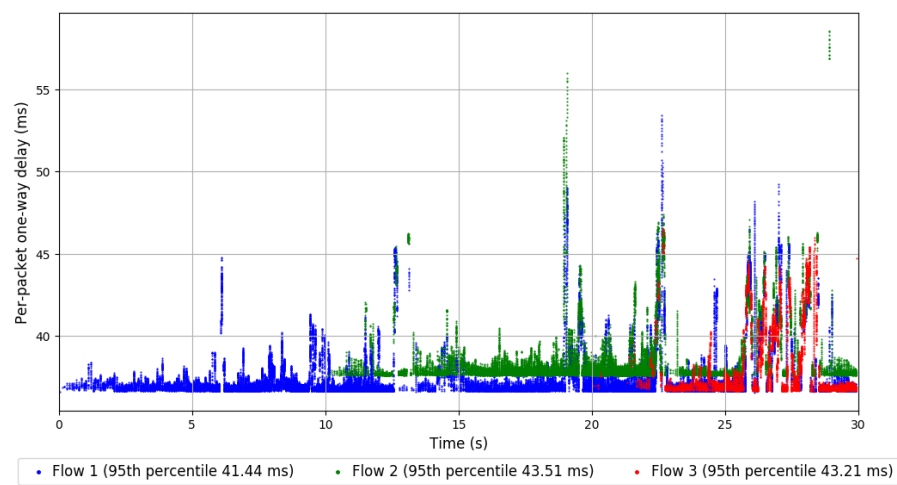
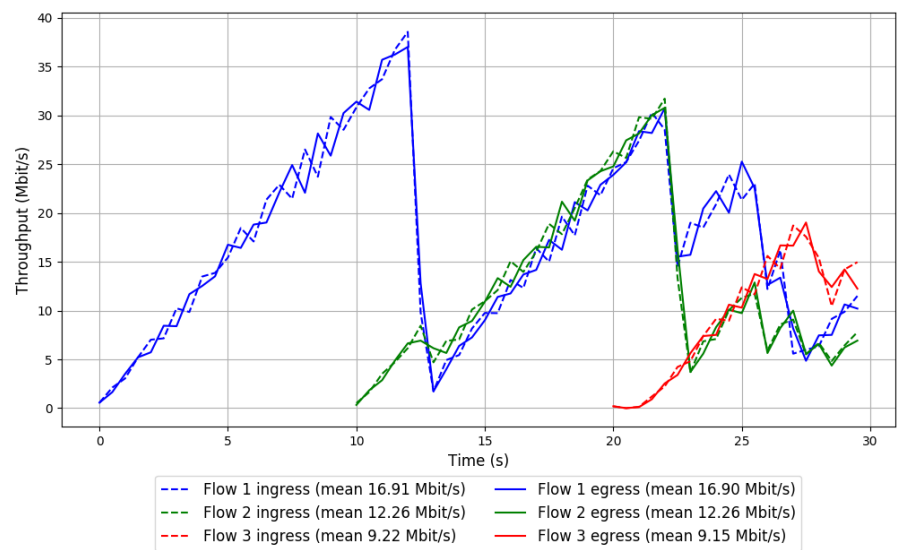
Average throughput: 9.15 Mbit/s

95th percentile per-packet one-way delay: 43.214 ms

Loss rate: 1.51%



Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 03:55:46 +0000

End at: Tue, 01 Aug 2017 03:56:16 +0000

Local clock offset: -0.114 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:49 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 37.83 Mbit/s

95th percentile per-packet one-way delay: 41.134 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 19.28 Mbit/s

95th percentile per-packet one-way delay: 40.477 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 20.53 Mbit/s

95th percentile per-packet one-way delay: 41.217 ms

Loss rate: 0.34%

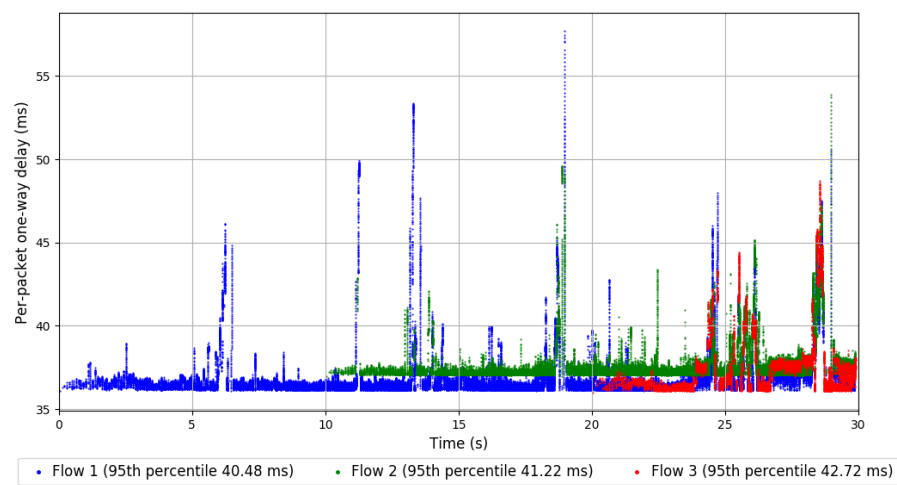
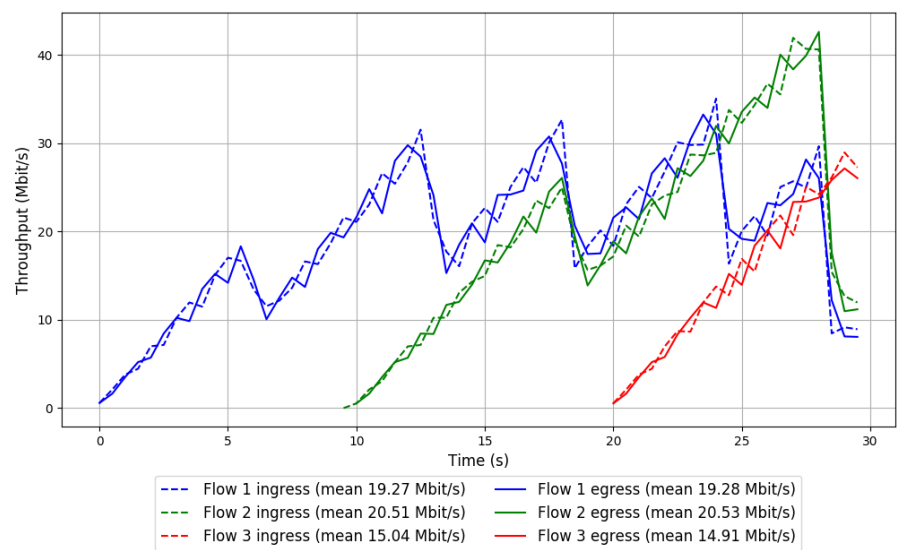
-- Flow 3:

Average throughput: 14.91 Mbit/s

95th percentile per-packet one-way delay: 42.722 ms

Loss rate: 1.79%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 04:17:05 +0000

End at: Tue, 01 Aug 2017 04:17:35 +0000

Local clock offset: 0.039 ms

Remote clock offset: -0.31 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:52 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.83 Mbit/s

95th percentile per-packet one-way delay: 41.295 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 14.39 Mbit/s

95th percentile per-packet one-way delay: 41.007 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 14.06 Mbit/s

95th percentile per-packet one-way delay: 41.269 ms

Loss rate: 0.52%

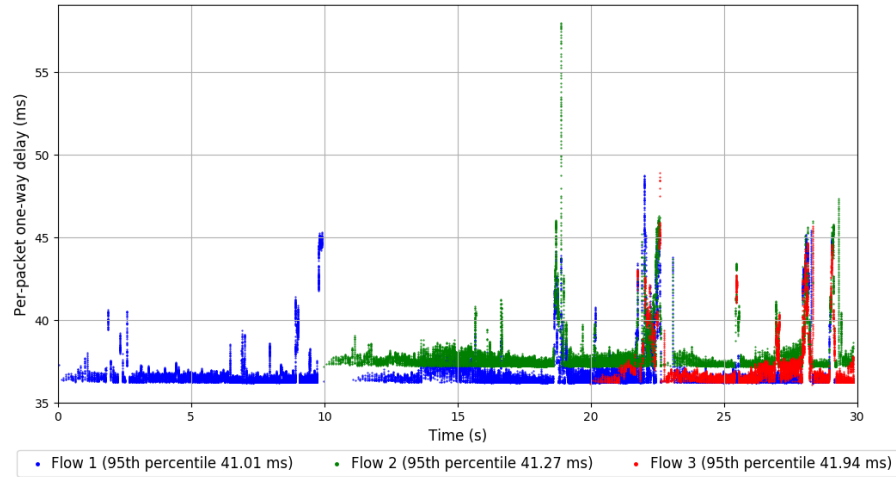
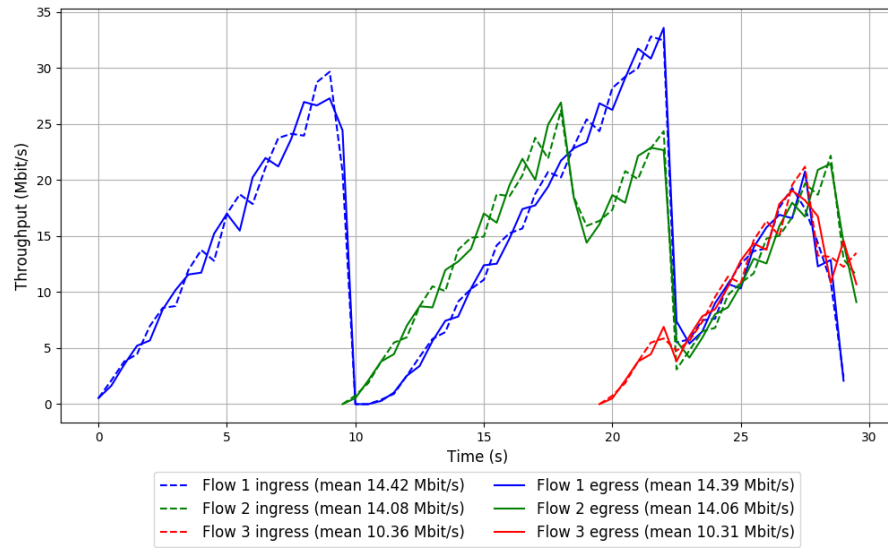
-- Flow 3:

Average throughput: 10.31 Mbit/s

95th percentile per-packet one-way delay: 41.935 ms

Loss rate: 1.39%

## Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 04:38:23 +0000

End at: Tue, 01 Aug 2017 04:38:53 +0000

Local clock offset: 0.181 ms

Remote clock offset: -0.374 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:56 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 58.437 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 23.60 Mbit/s

95th percentile per-packet one-way delay: 59.652 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 27.00 Mbit/s

95th percentile per-packet one-way delay: 43.798 ms

Loss rate: 0.19%

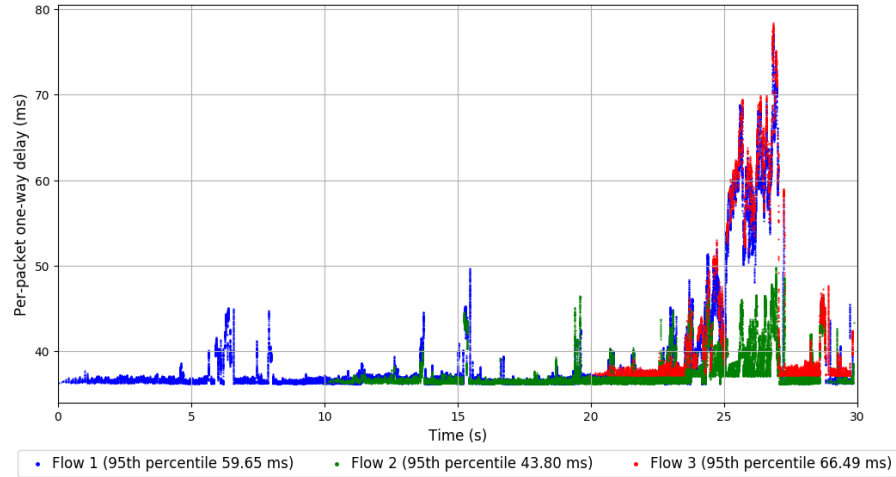
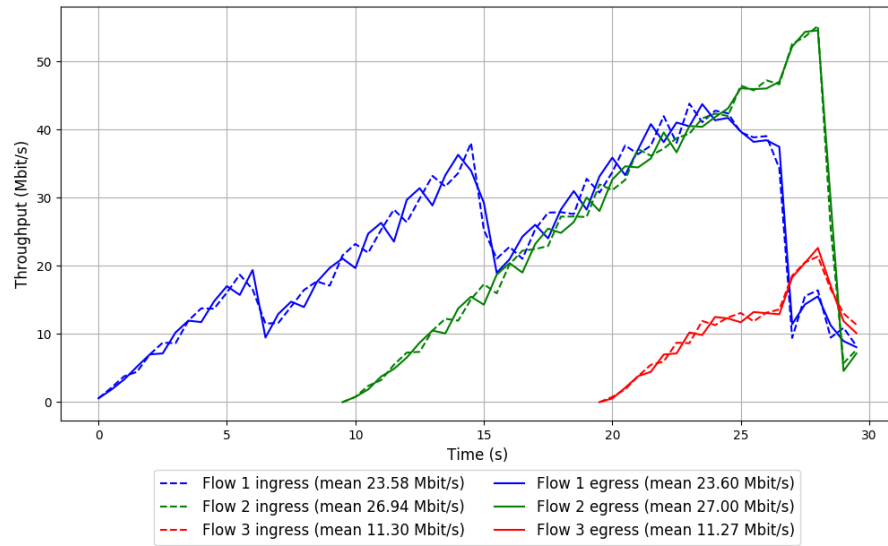
-- Flow 3:

Average throughput: 11.27 Mbit/s

95th percentile per-packet one-way delay: 66.487 ms

Loss rate: 1.19%

## Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: Tue, 01 Aug 2017 04:59:46 +0000

End at: Tue, 01 Aug 2017 05:00:16 +0000

Local clock offset: 0.203 ms

Remote clock offset: -3.102 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:57:59 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.67 Mbit/s

95th percentile per-packet one-way delay: 57.499 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 33.10 Mbit/s

95th percentile per-packet one-way delay: 57.282 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 19.51 Mbit/s

95th percentile per-packet one-way delay: 58.561 ms

Loss rate: 0.65%

-- Flow 3:

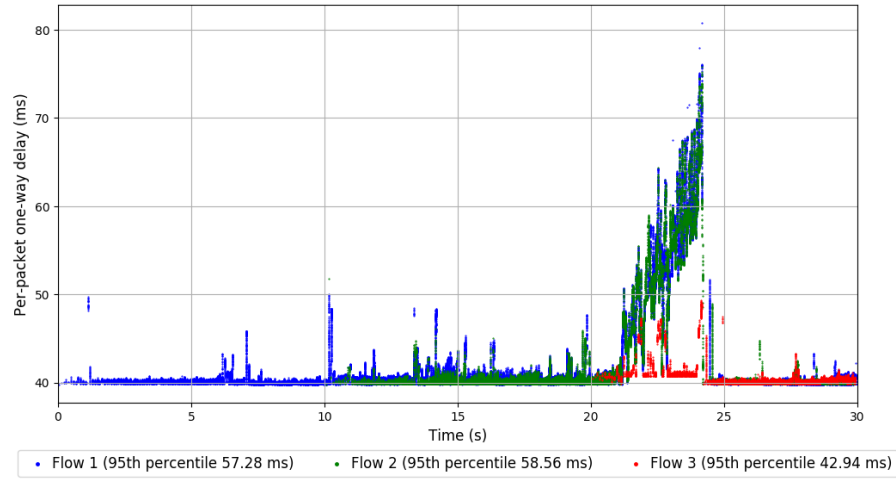
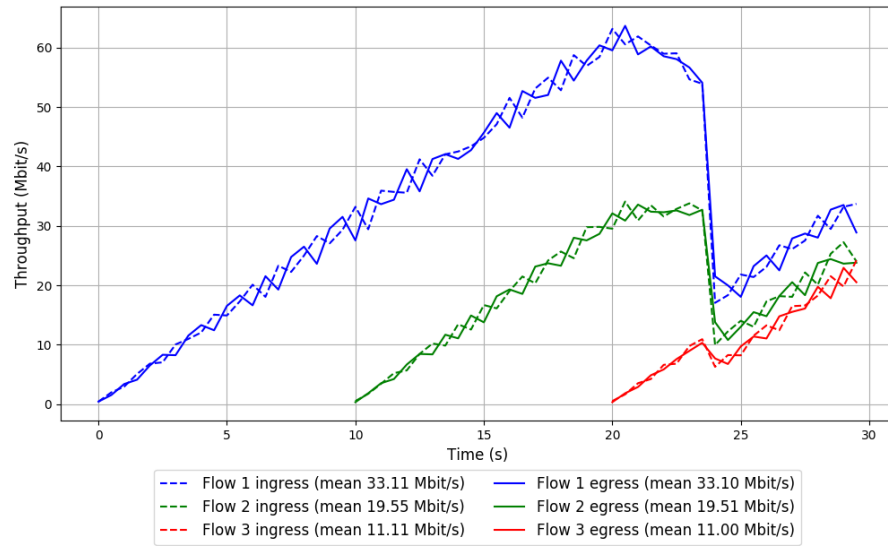
Average throughput: 11.00 Mbit/s

95th percentile per-packet one-way delay: 42.941 ms

Loss rate: 1.93%



# Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: Tue, 01 Aug 2017 01:47:24 +0000

End at: Tue, 01 Aug 2017 01:47:54 +0000

Local clock offset: 0.662 ms

Remote clock offset: -1.632 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:05 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 61.90 Mbit/s

95th percentile per-packet one-way delay: 54.853 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 33.90 Mbit/s

95th percentile per-packet one-way delay: 47.170 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 63.619 ms

Loss rate: 0.91%

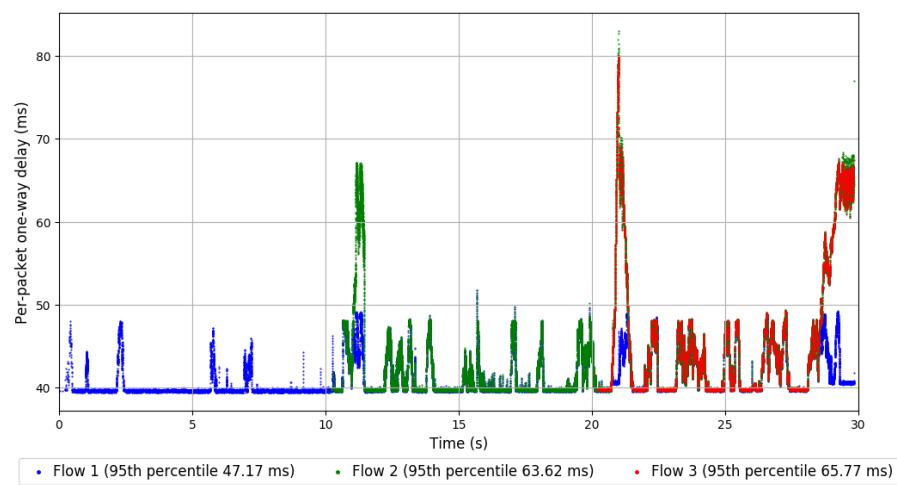
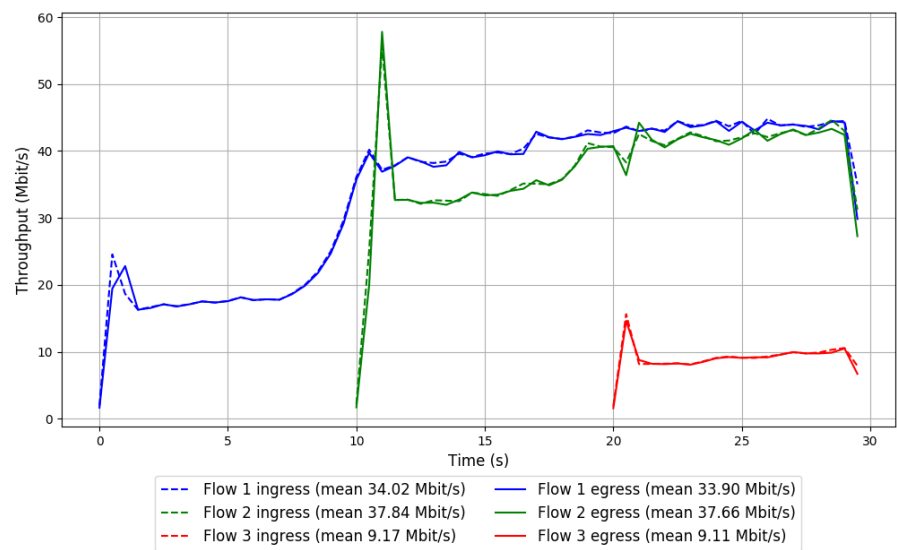
-- Flow 3:

Average throughput: 9.11 Mbit/s

95th percentile per-packet one-way delay: 65.774 ms

Loss rate: 1.60%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: Tue, 01 Aug 2017 02:08:55 +0000

End at: Tue, 01 Aug 2017 02:09:25 +0000

Local clock offset: 0.547 ms

Remote clock offset: 0.648 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:11 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.83 Mbit/s

95th percentile per-packet one-way delay: 59.477 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 65.84 Mbit/s

95th percentile per-packet one-way delay: 58.990 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 60.146 ms

Loss rate: 0.54%

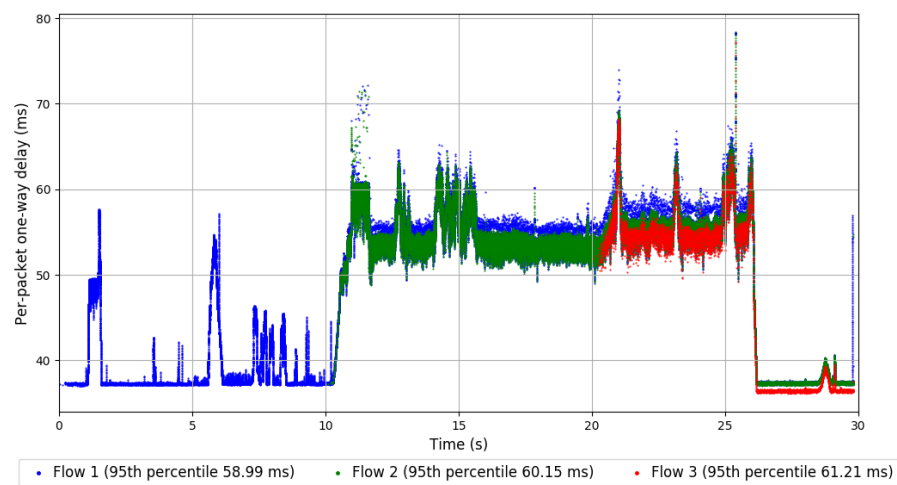
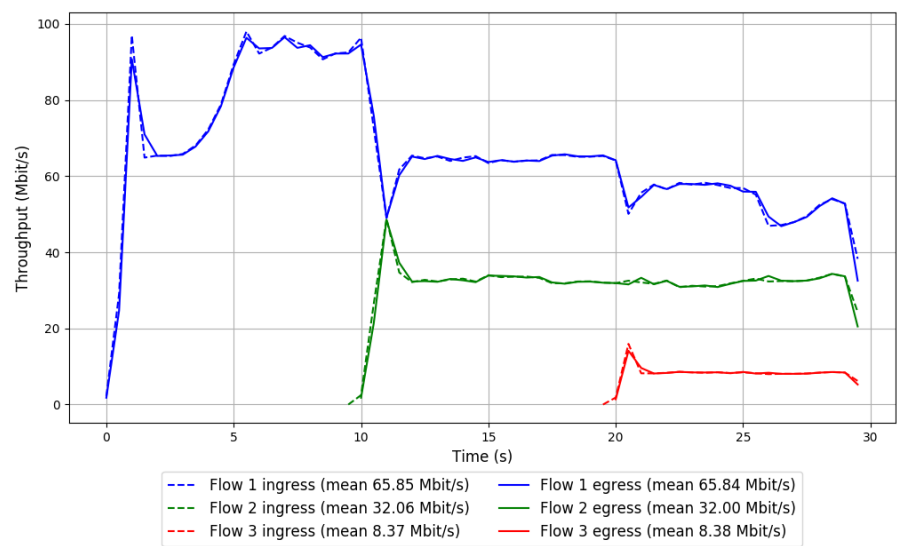
-- Flow 3:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 61.209 ms

Loss rate: 0.94%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: Tue, 01 Aug 2017 02:29:56 +0000

End at: Tue, 01 Aug 2017 02:30:26 +0000

Local clock offset: 0.427 ms

Remote clock offset: 0.525 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:16 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 84.76 Mbit/s

95th percentile per-packet one-way delay: 71.144 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 53.38 Mbit/s

95th percentile per-packet one-way delay: 70.309 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 32.30 Mbit/s

95th percentile per-packet one-way delay: 71.387 ms

Loss rate: 0.71%

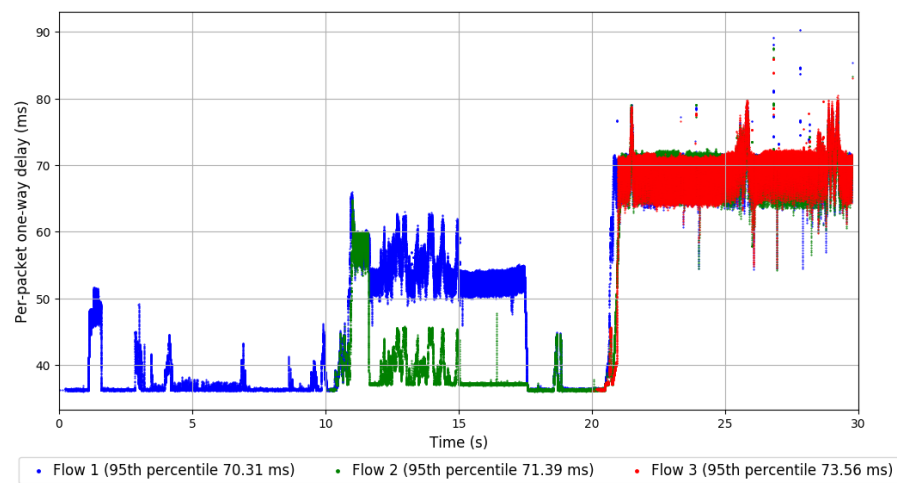
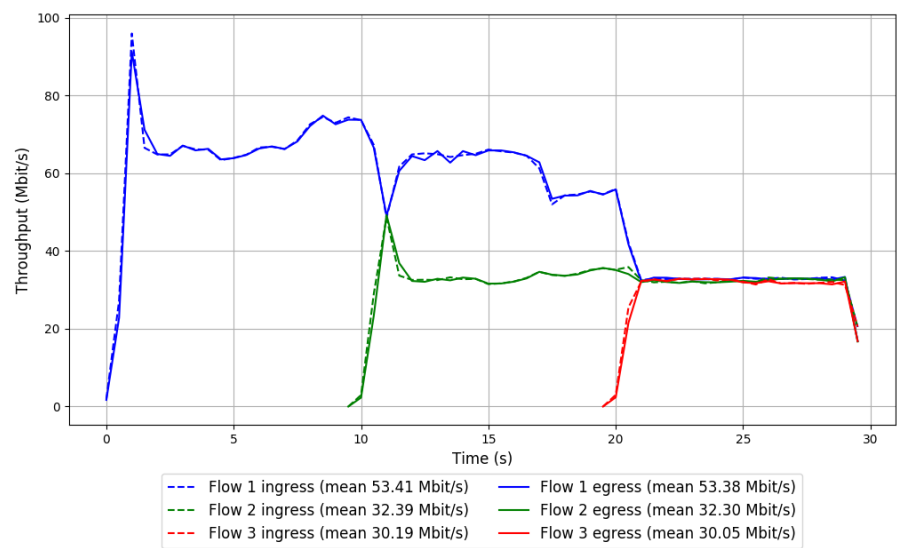
-- Flow 3:

Average throughput: 30.05 Mbit/s

95th percentile per-packet one-way delay: 73.562 ms

Loss rate: 1.36%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: Tue, 01 Aug 2017 02:50:58 +0000

End at: Tue, 01 Aug 2017 02:51:28 +0000

Local clock offset: 0.28 ms

Remote clock offset: -2.015 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:23 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.74 Mbit/s

95th percentile per-packet one-way delay: 59.587 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 73.62 Mbit/s

95th percentile per-packet one-way delay: 59.152 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 47.975 ms

Loss rate: 0.59%

-- Flow 3:

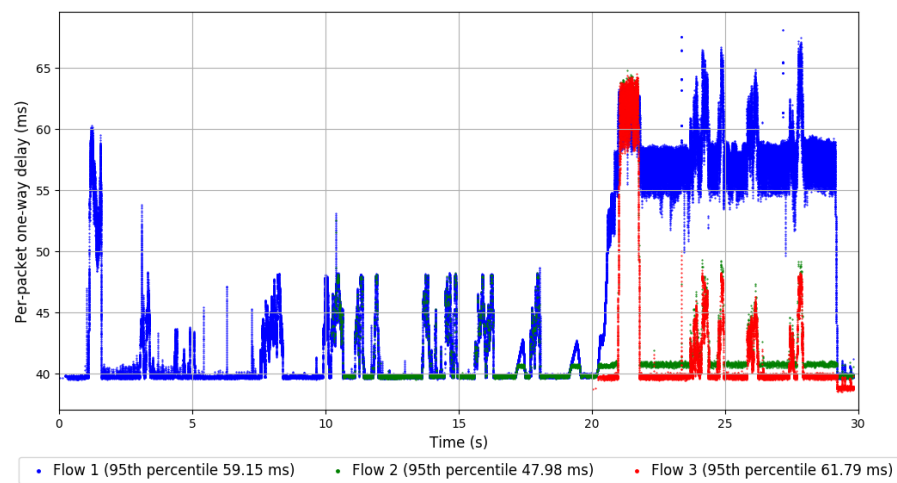
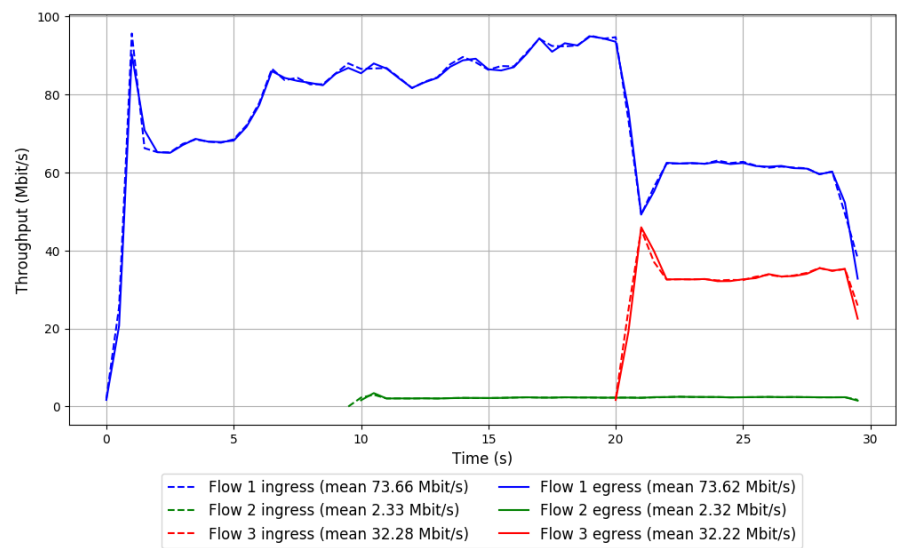
Average throughput: 32.22 Mbit/s

95th percentile per-packet one-way delay: 61.789 ms

Loss rate: 1.07%



Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: Tue, 01 Aug 2017 03:12:13 +0000

End at: Tue, 01 Aug 2017 03:12:43 +0000

Local clock offset: 0.117 ms

Remote clock offset: 0.084 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:28 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.65 Mbit/s

95th percentile per-packet one-way delay: 74.738 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 31.19 Mbit/s

95th percentile per-packet one-way delay: 77.520 ms

Loss rate: 0.67%

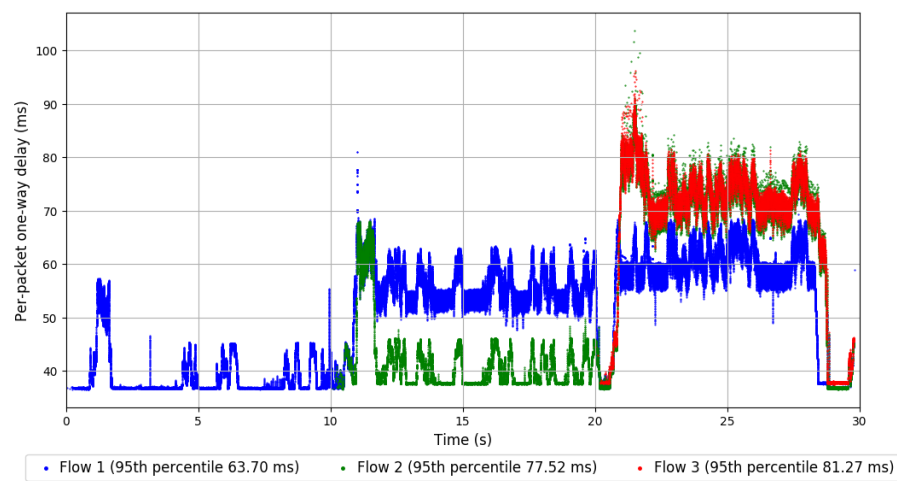
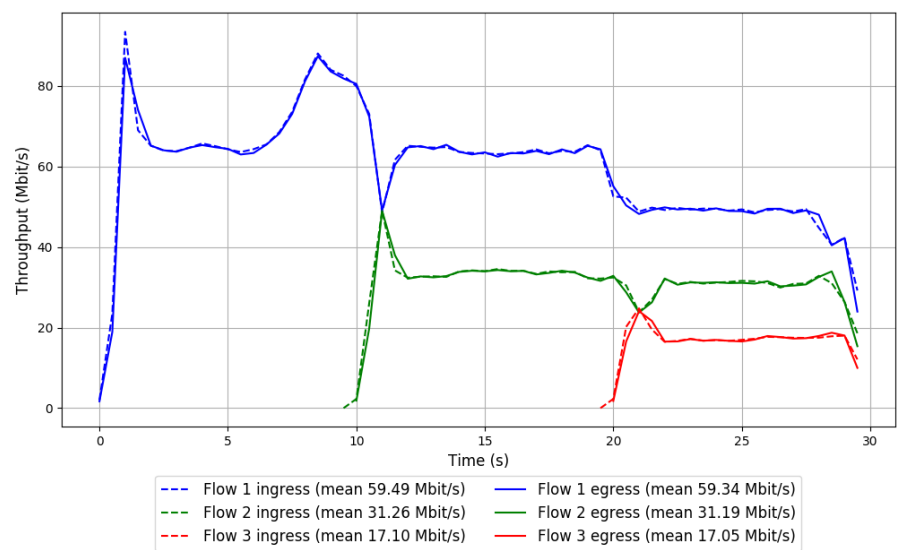
-- Flow 3:

Average throughput: 17.05 Mbit/s

95th percentile per-packet one-way delay: 81.273 ms

Loss rate: 1.26%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: Tue, 01 Aug 2017 03:33:19 +0000

End at: Tue, 01 Aug 2017 03:33:49 +0000

Local clock offset: -0.103 ms

Remote clock offset: -0.175 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:34 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.97 Mbit/s

95th percentile per-packet one-way delay: 60.524 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 60.369 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 16.72 Mbit/s

95th percentile per-packet one-way delay: 61.750 ms

Loss rate: 0.73%

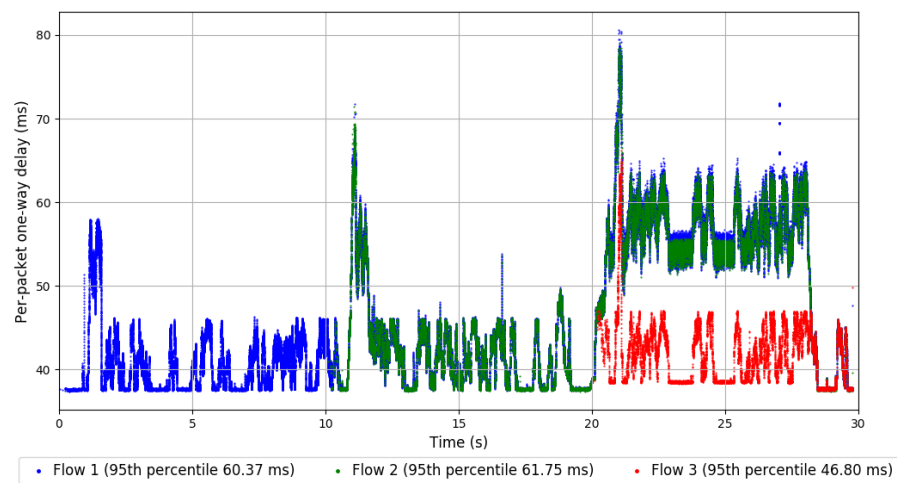
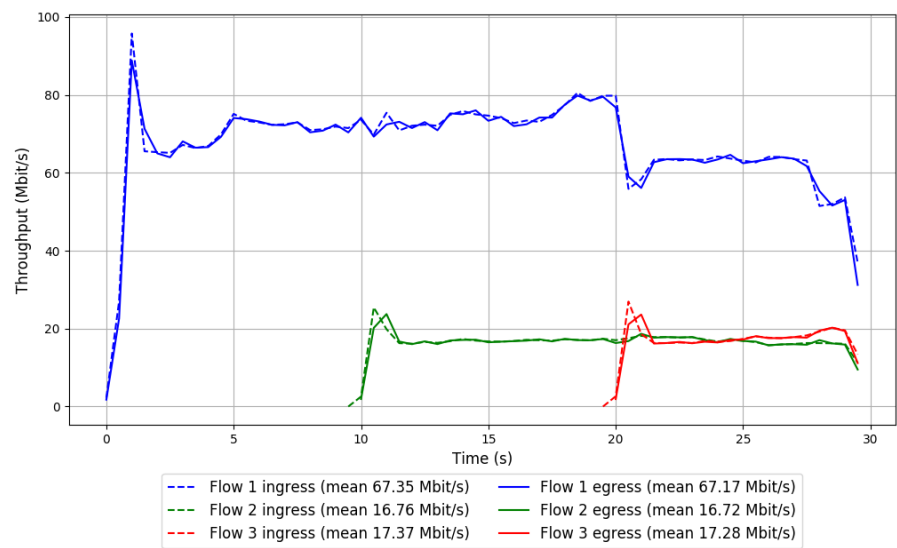
-- Flow 3:

Average throughput: 17.28 Mbit/s

95th percentile per-packet one-way delay: 46.799 ms

Loss rate: 1.36%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: Tue, 01 Aug 2017 03:54:22 +0000

End at: Tue, 01 Aug 2017 03:54:52 +0000

Local clock offset: -0.099 ms

Remote clock offset: -2.44 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:41 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.08 Mbit/s

95th percentile per-packet one-way delay: 73.218 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 59.08 Mbit/s

95th percentile per-packet one-way delay: 63.064 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 32.80 Mbit/s

95th percentile per-packet one-way delay: 77.858 ms

Loss rate: 0.55%

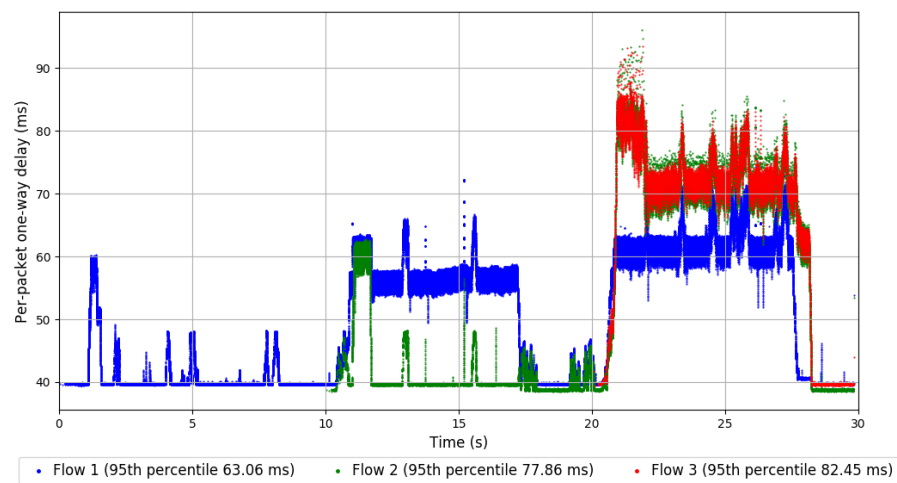
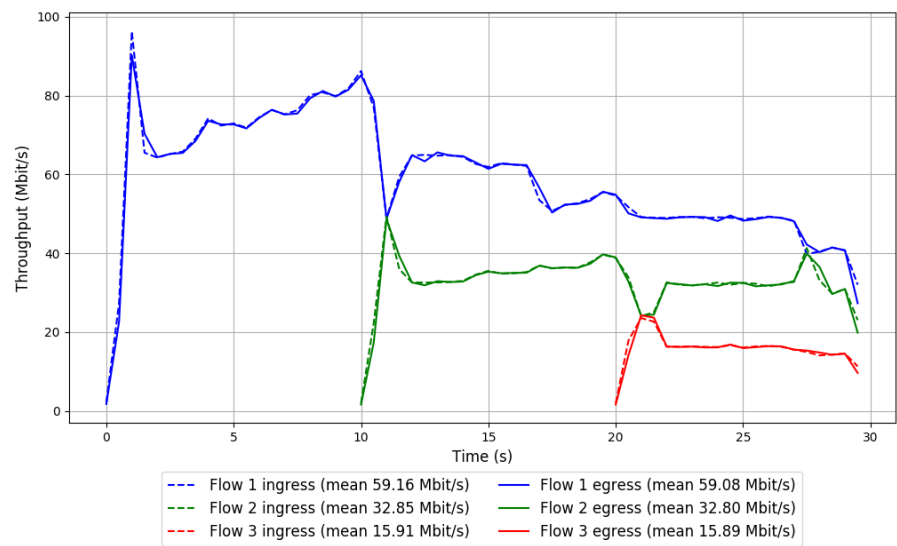
-- Flow 3:

Average throughput: 15.89 Mbit/s

95th percentile per-packet one-way delay: 82.447 ms

Loss rate: 1.08%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: Tue, 01 Aug 2017 04:15:40 +0000

End at: Tue, 01 Aug 2017 04:16:10 +0000

Local clock offset: -0.0 ms

Remote clock offset: -0.588 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:47 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.09 Mbit/s

95th percentile per-packet one-way delay: 72.565 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 57.92 Mbit/s

95th percentile per-packet one-way delay: 71.537 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 33.96 Mbit/s

95th percentile per-packet one-way delay: 73.217 ms

Loss rate: 0.78%

-- Flow 3:

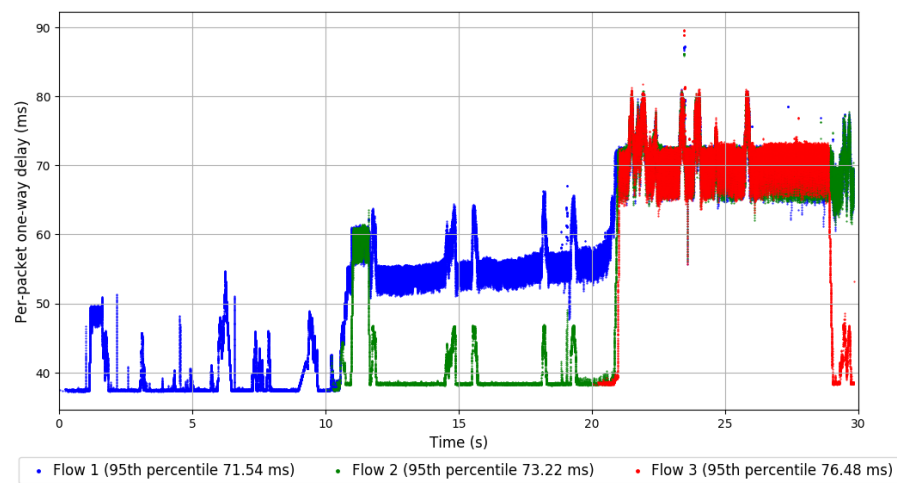
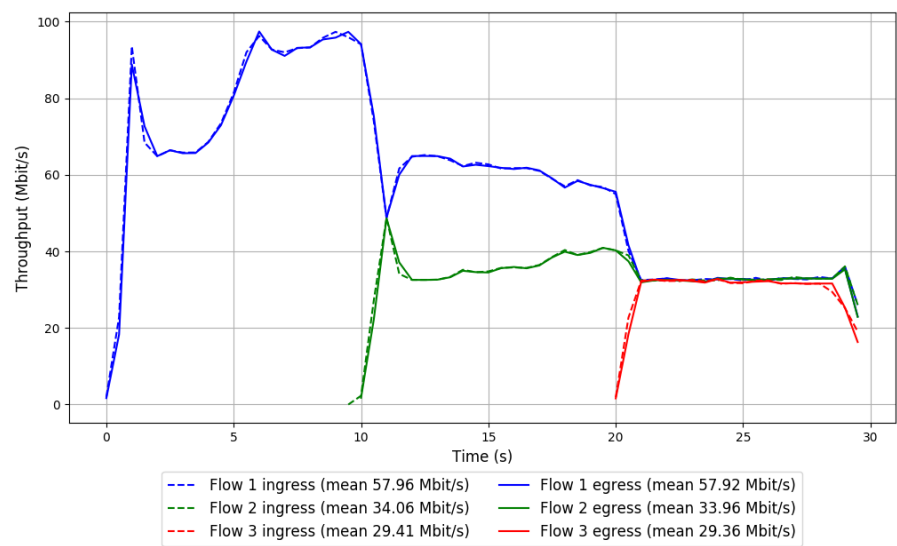
Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 76.485 ms

Loss rate: 0.95%



Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: Tue, 01 Aug 2017 04:36:58 +0000

End at: Tue, 01 Aug 2017 04:37:28 +0000

Local clock offset: 0.118 ms

Remote clock offset: -0.457 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:58:53 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.29 Mbit/s

95th percentile per-packet one-way delay: 76.743 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 54.86 Mbit/s

95th percentile per-packet one-way delay: 75.952 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 31.50 Mbit/s

95th percentile per-packet one-way delay: 78.931 ms

Loss rate: 0.67%

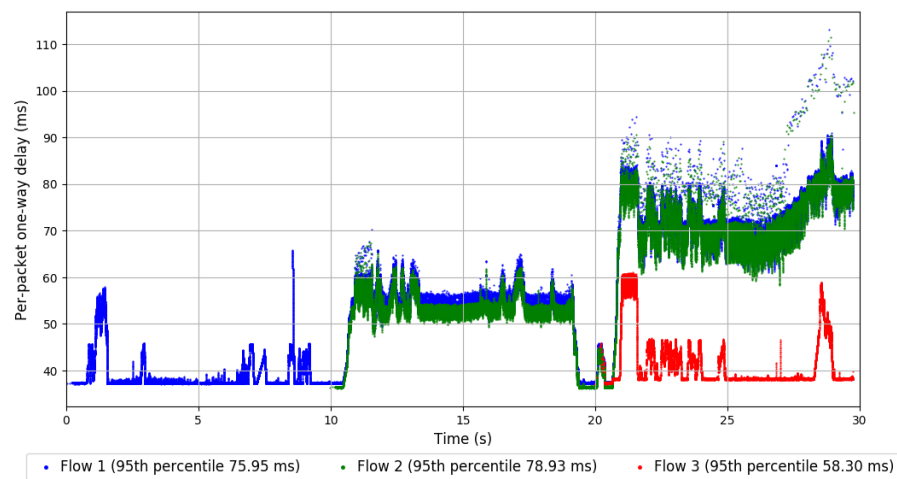
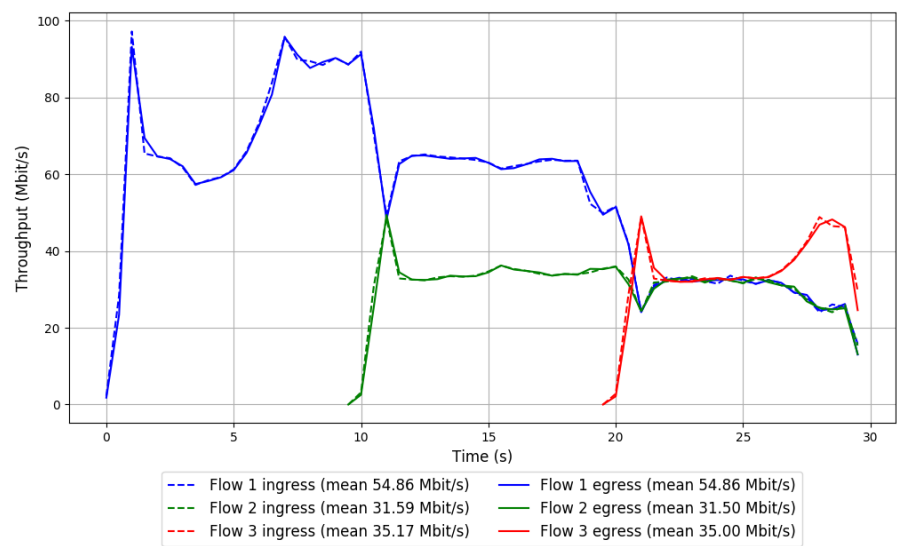
-- Flow 3:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 58.296 ms

Loss rate: 1.37%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: Tue, 01 Aug 2017 04:58:21 +0000

End at: Tue, 01 Aug 2017 04:58:51 +0000

Local clock offset: 0.205 ms

Remote clock offset: -2.93 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:01 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.11 Mbit/s

95th percentile per-packet one-way delay: 74.110 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 56.71 Mbit/s

95th percentile per-packet one-way delay: 72.694 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 37.12 Mbit/s

95th percentile per-packet one-way delay: 74.835 ms

Loss rate: 0.64%

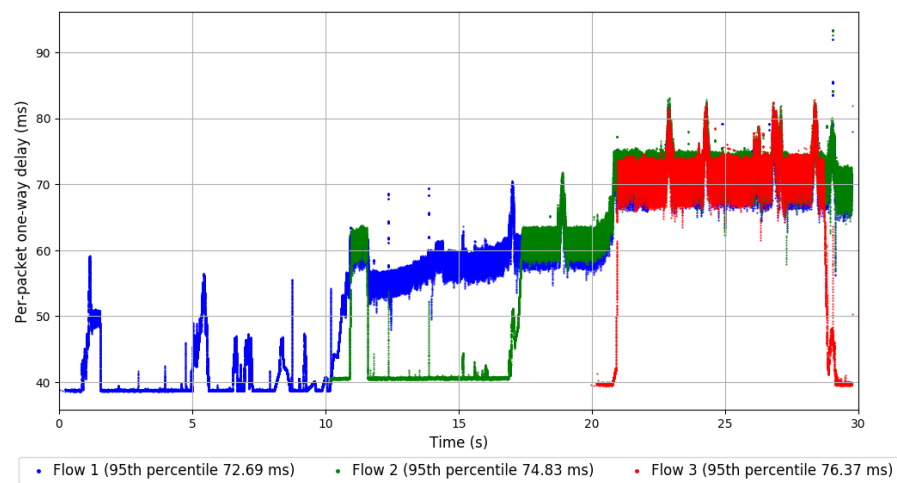
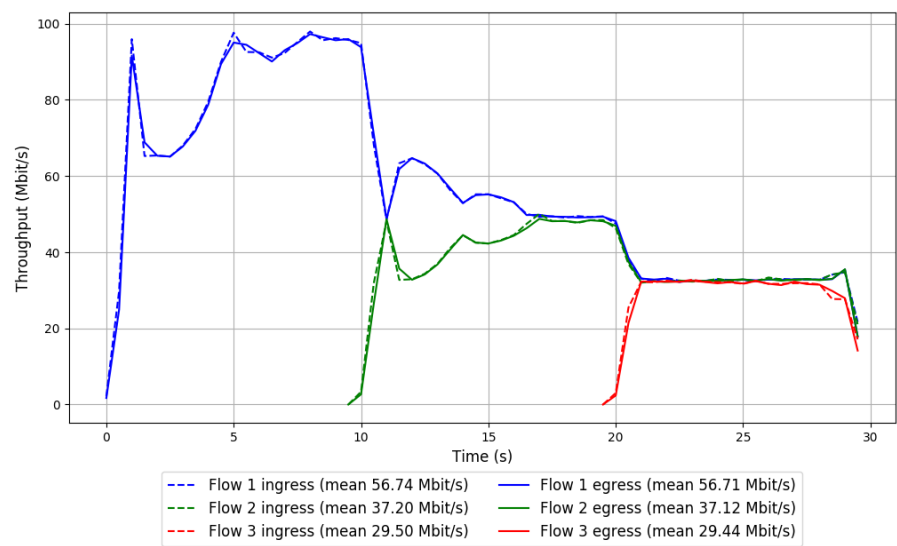
-- Flow 3:

Average throughput: 29.44 Mbit/s

95th percentile per-packet one-way delay: 76.366 ms

Loss rate: 1.03%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 02:02:01 +0000

End at: Tue, 01 Aug 2017 02:02:31 +0000

Local clock offset: 0.618 ms

Remote clock offset: 0.189 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:01 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.13 Mbit/s

95th percentile per-packet one-way delay: 49.035 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 38.184 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.33 Mbit/s

95th percentile per-packet one-way delay: 49.052 ms

Loss rate: 0.69%

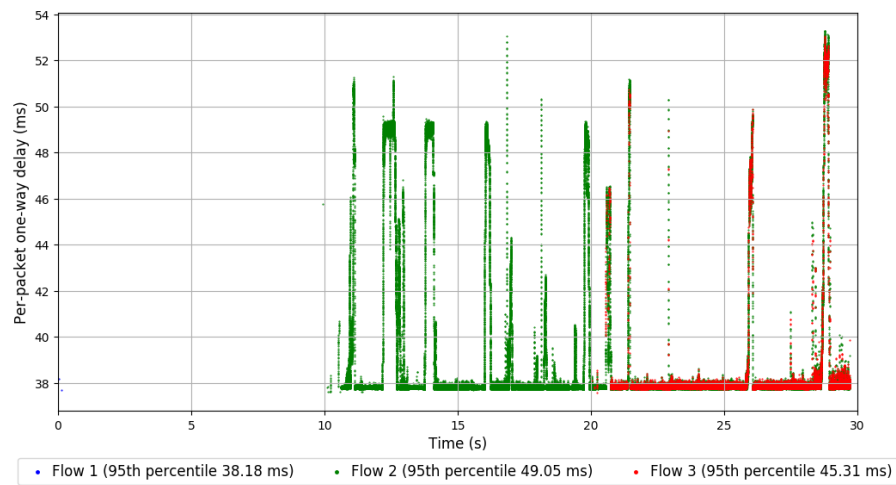
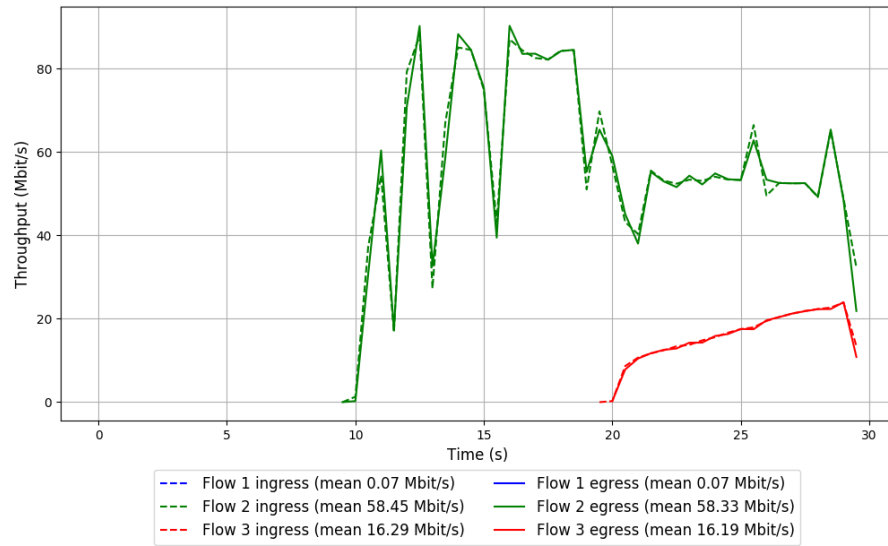
-- Flow 3:

Average throughput: 16.19 Mbit/s

95th percentile per-packet one-way delay: 45.312 ms

Loss rate: 1.48%

# Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 02:23:03 +0000

End at: Tue, 01 Aug 2017 02:23:33 +0000

Local clock offset: 0.361 ms

Remote clock offset: 0.516 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:07 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.09 Mbit/s

95th percentile per-packet one-way delay: 58.773 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 37.546 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.93 Mbit/s

95th percentile per-packet one-way delay: 58.469 ms

Loss rate: 0.38%

-- Flow 3:

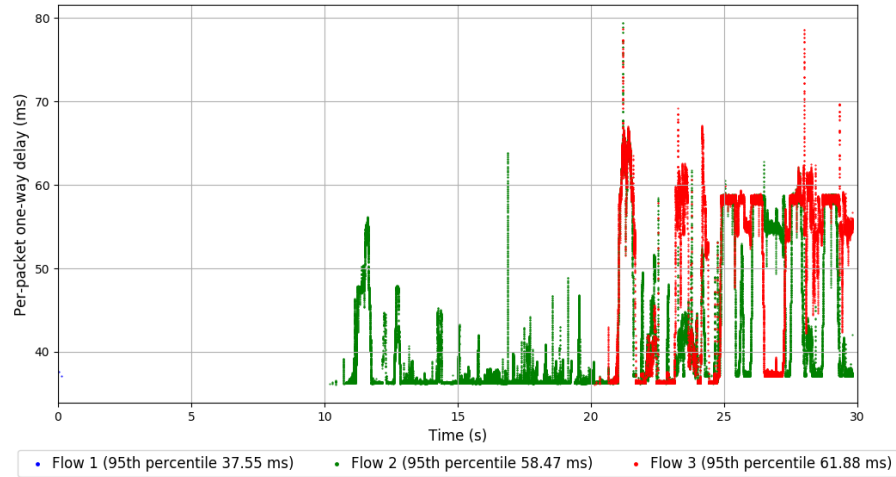
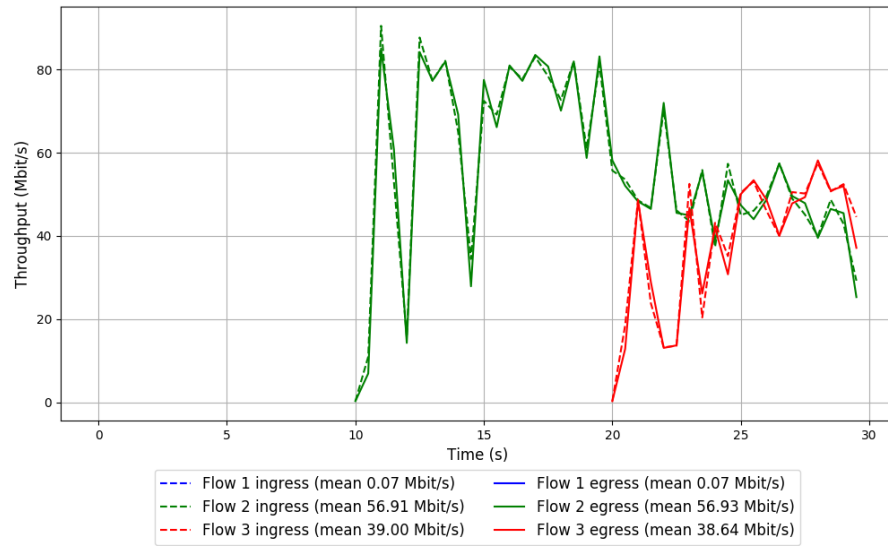
Average throughput: 38.64 Mbit/s

95th percentile per-packet one-way delay: 61.883 ms

Loss rate: 1.91%



## Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 02:44:02 +0000

End at: Tue, 01 Aug 2017 02:44:32 +0000

Local clock offset: 0.246 ms

Remote clock offset: -0.034 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:08 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.98 Mbit/s

95th percentile per-packet one-way delay: 61.407 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 36.913 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.78 Mbit/s

95th percentile per-packet one-way delay: 59.493 ms

Loss rate: 0.44%

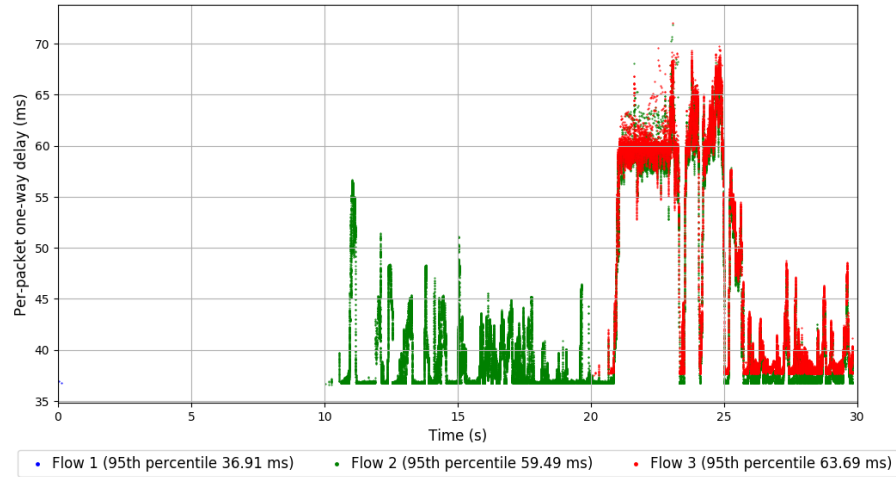
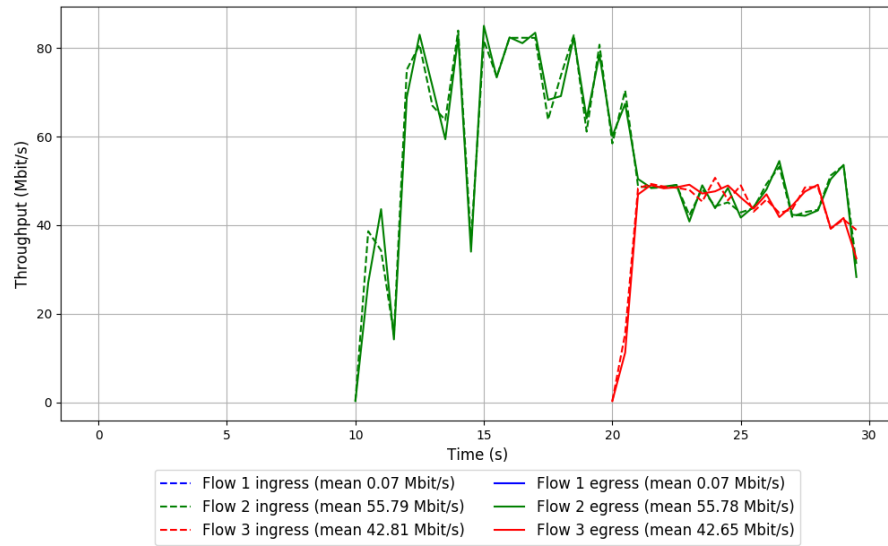
-- Flow 3:

Average throughput: 42.65 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 1.25%

### Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 03:05:19 +0000

End at: Tue, 01 Aug 2017 03:05:49 +0000

Local clock offset: 0.162 ms

Remote clock offset: -1.939 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:15 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 50.75 Mbit/s

95th percentile per-packet one-way delay: 62.041 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 38.848 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 61.095 ms

Loss rate: 0.40%

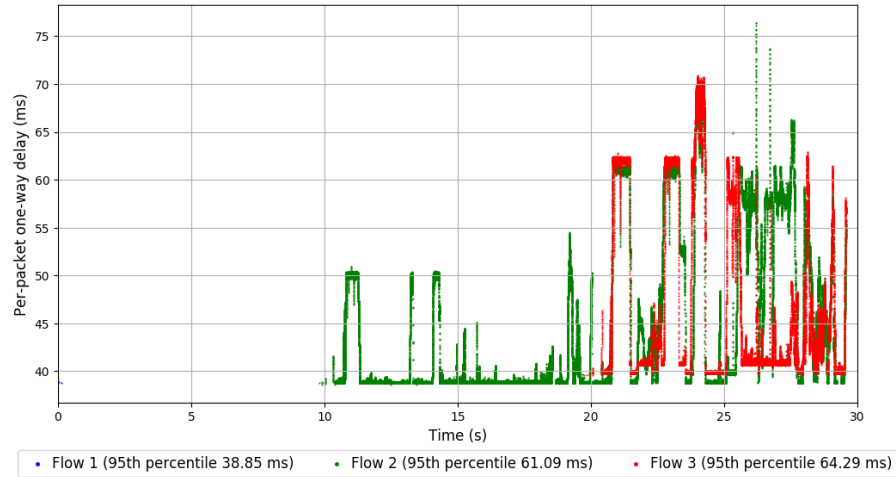
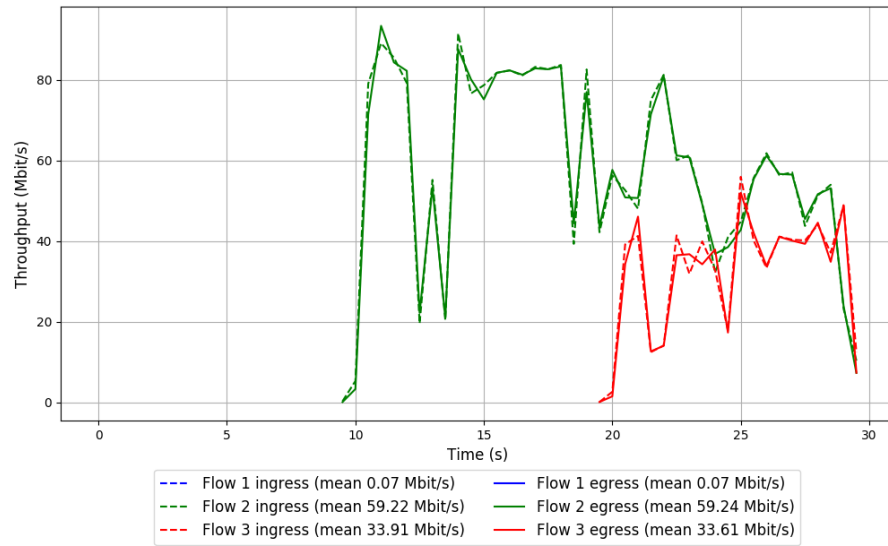
-- Flow 3:

Average throughput: 33.61 Mbit/s

95th percentile per-packet one-way delay: 64.286 ms

Loss rate: 1.75%

#### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 03:26:23 +0000

End at: Tue, 01 Aug 2017 03:26:53 +0000

Local clock offset: -0.076 ms

Remote clock offset: -2.142 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:15 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 36.00 Mbit/s

95th percentile per-packet one-way delay: 57.518 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 38.809 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.54 Mbit/s

95th percentile per-packet one-way delay: 56.483 ms

Loss rate: 0.82%

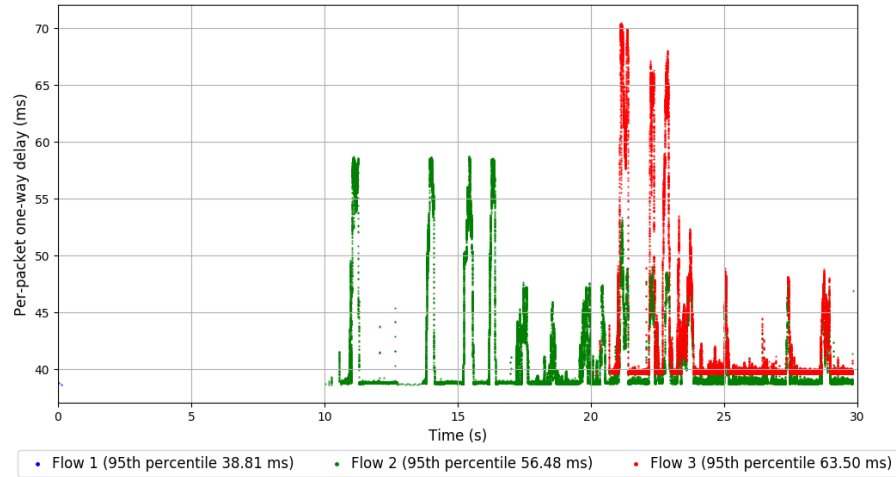
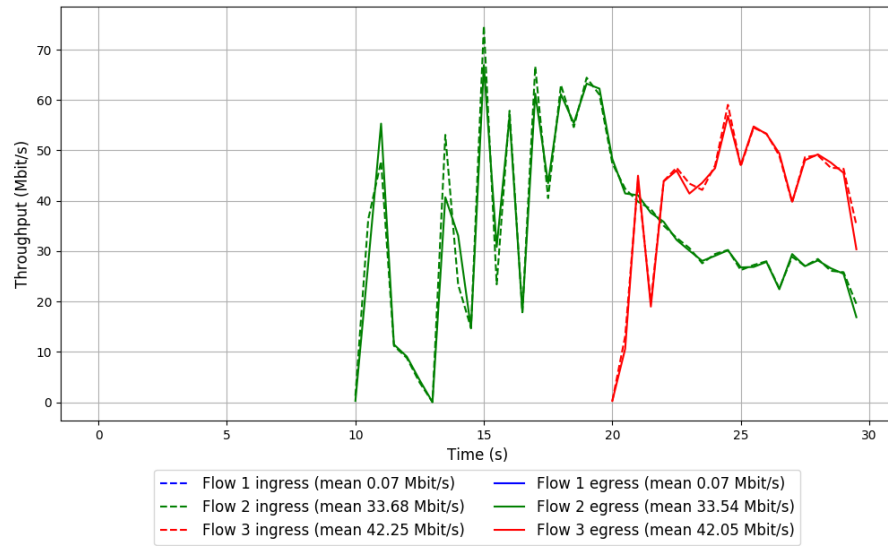
-- Flow 3:

Average throughput: 42.05 Mbit/s

95th percentile per-packet one-way delay: 63.502 ms

Loss rate: 1.26%

## Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 03:47:29 +0000

End at: Tue, 01 Aug 2017 03:47:59 +0000

Local clock offset: -0.1 ms

Remote clock offset: 0.024 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:19 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.31 Mbit/s

95th percentile per-packet one-way delay: 59.716 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 37.354 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.77 Mbit/s

95th percentile per-packet one-way delay: 59.636 ms

Loss rate: 0.56%

-- Flow 3:

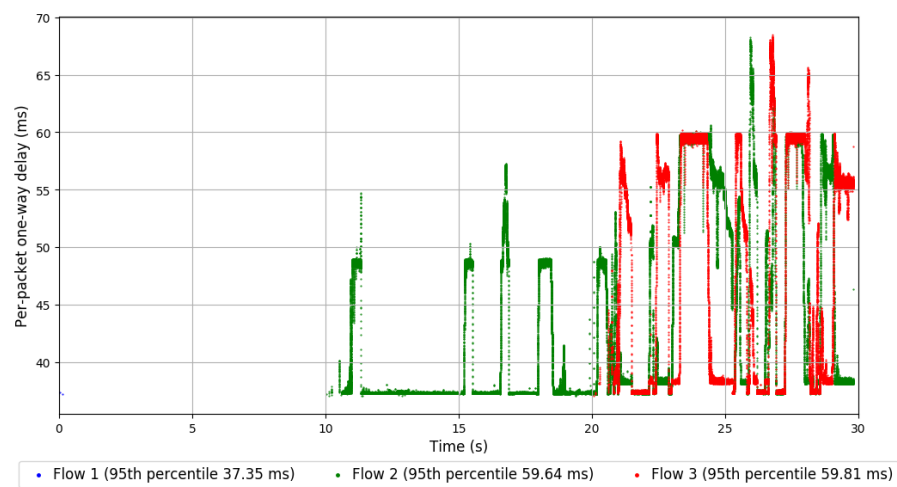
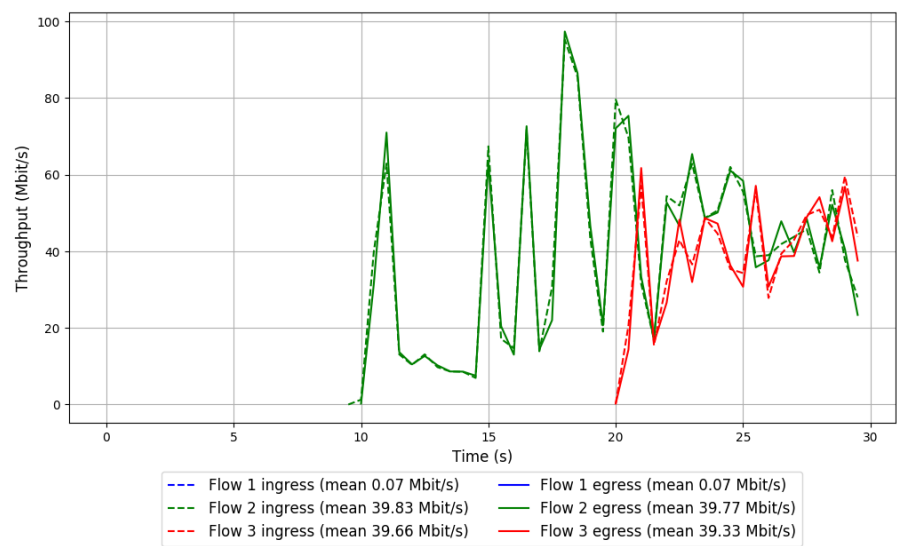
Average throughput: 39.33 Mbit/s

95th percentile per-packet one-way delay: 59.812 ms

Loss rate: 1.80%



Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 04:08:45 +0000

End at: Tue, 01 Aug 2017 04:09:15 +0000

Local clock offset: -0.002 ms

Remote clock offset: -0.696 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:22 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.75 Mbit/s

95th percentile per-packet one-way delay: 48.732 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 37.694 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.26 Mbit/s

95th percentile per-packet one-way delay: 48.915 ms

Loss rate: 0.48%

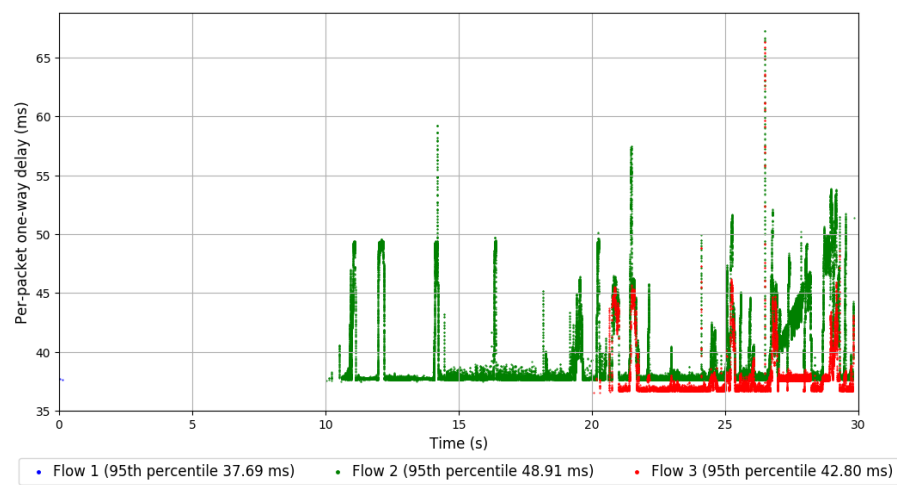
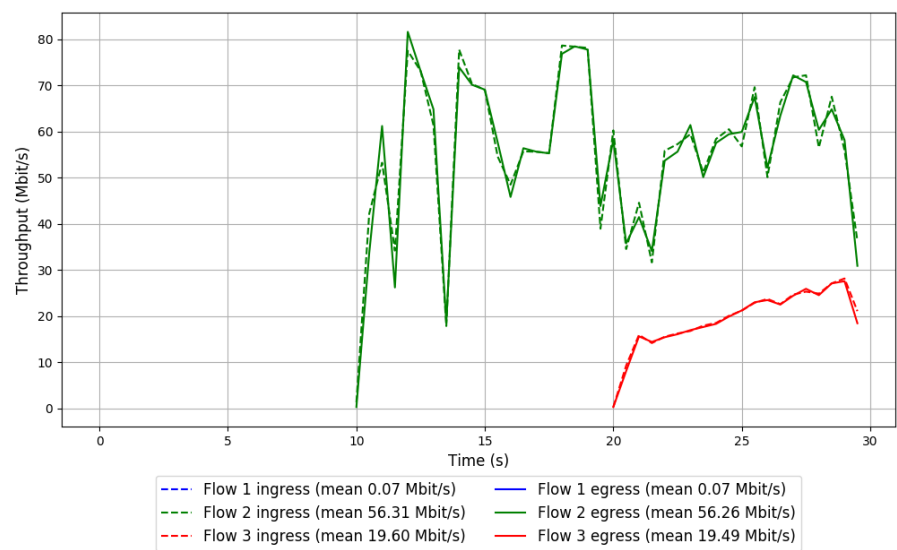
-- Flow 3:

Average throughput: 19.49 Mbit/s

95th percentile per-packet one-way delay: 42.802 ms

Loss rate: 1.39%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 04:29:57 +0000

End at: Tue, 01 Aug 2017 04:30:27 +0000

Local clock offset: 0.08 ms

Remote clock offset: -0.802 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:26 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.84 Mbit/s

95th percentile per-packet one-way delay: 43.953 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 36.745 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.17 Mbit/s

95th percentile per-packet one-way delay: 44.121 ms

Loss rate: 0.49%

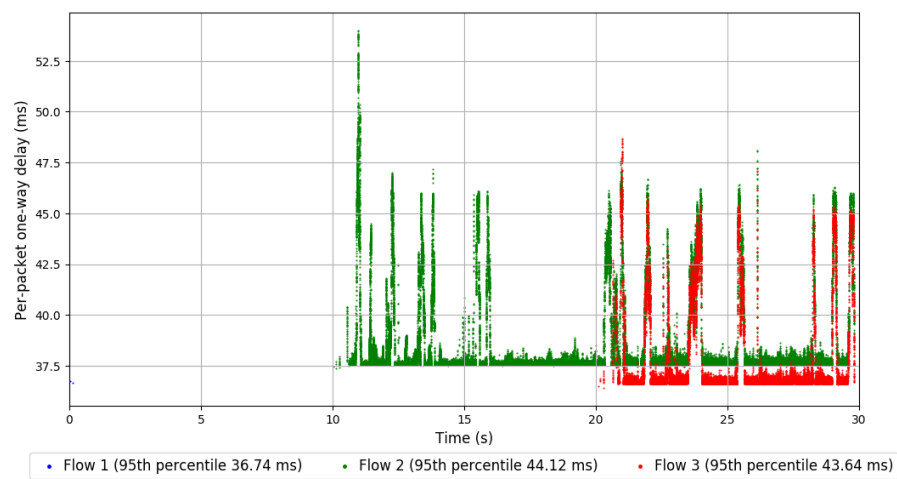
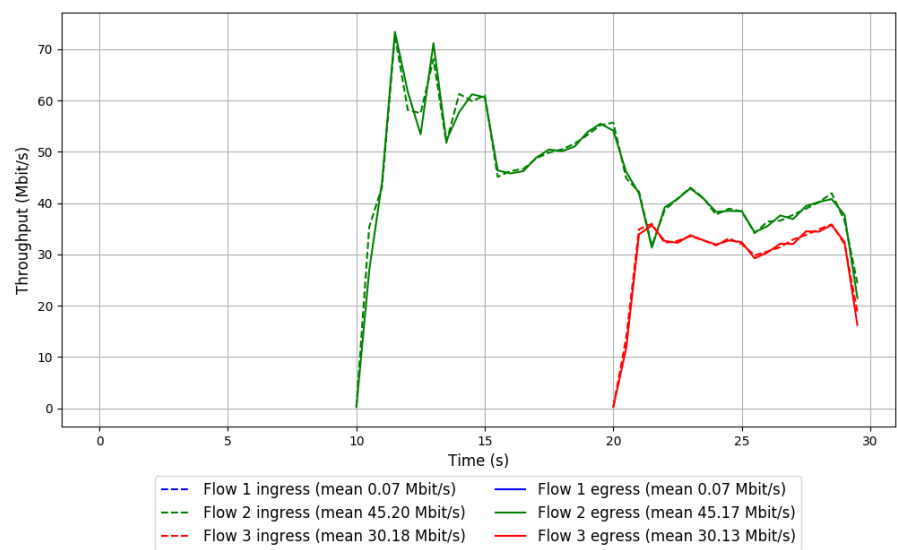
-- Flow 3:

Average throughput: 30.13 Mbit/s

95th percentile per-packet one-way delay: 43.640 ms

Loss rate: 1.03%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 04:51:27 +0000

End at: Tue, 01 Aug 2017 04:51:57 +0000

Local clock offset: 0.11 ms

Remote clock offset: -3.053 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:28 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 29.71 Mbit/s

95th percentile per-packet one-way delay: 46.666 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 38.899 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 46.123 ms

Loss rate: 0.49%

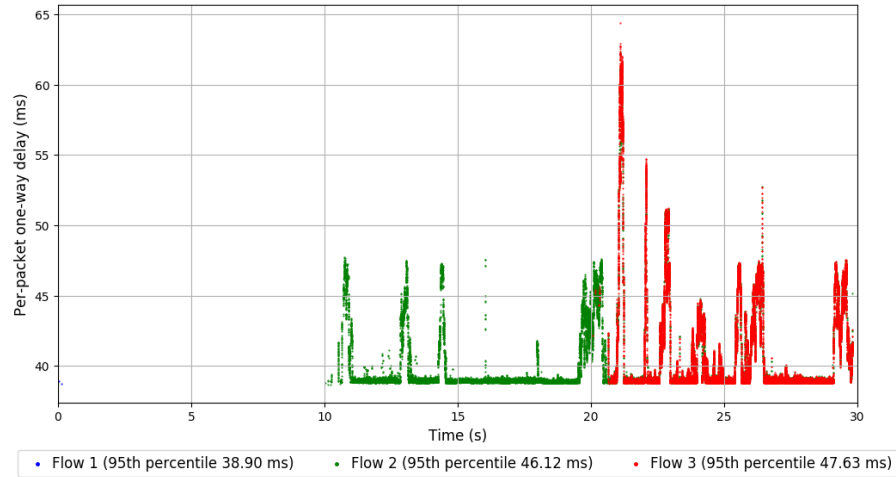
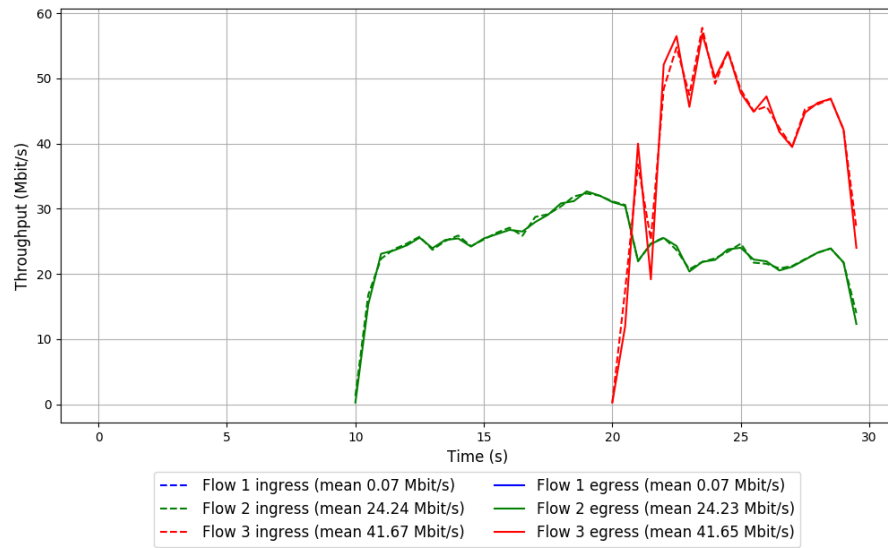
-- Flow 3:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 47.635 ms

Loss rate: 0.97%

### Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: Tue, 01 Aug 2017 05:12:39 +0000

End at: Tue, 01 Aug 2017 05:13:09 +0000

Local clock offset: 0.279 ms

Remote clock offset: -0.508 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:31 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.94 Mbit/s

95th percentile per-packet one-way delay: 58.659 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 36.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.53 Mbit/s

95th percentile per-packet one-way delay: 58.580 ms

Loss rate: 0.67%

-- Flow 3:

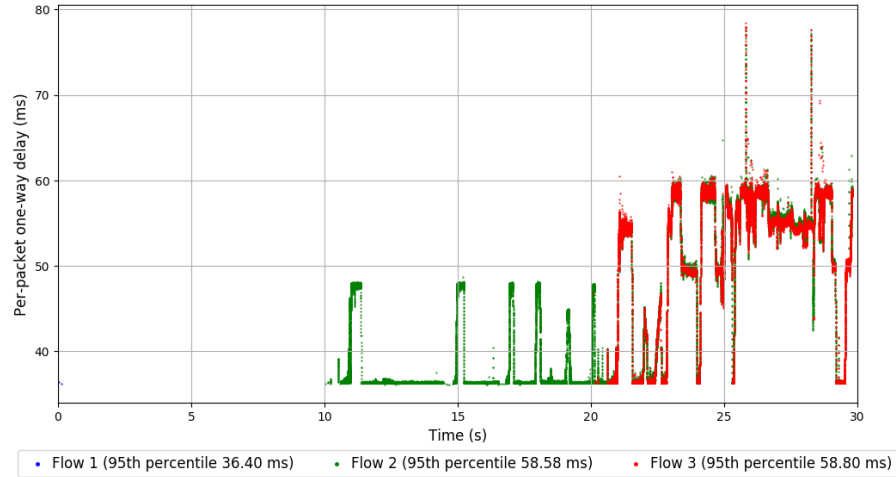
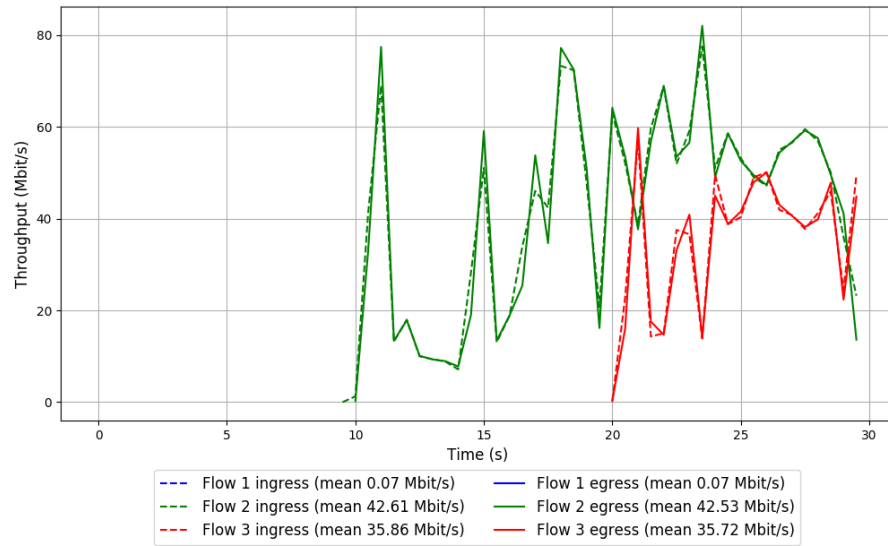
Average throughput: 35.72 Mbit/s

95th percentile per-packet one-way delay: 58.804 ms

Loss rate: 1.49%



# Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: Tue, 01 Aug 2017 01:44:33 +0000

End at: Tue, 01 Aug 2017 01:45:03 +0000

Local clock offset: 0.683 ms

Remote clock offset: 0.921 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:35 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.23 Mbit/s

95th percentile per-packet one-way delay: 44.366 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 26.27 Mbit/s

95th percentile per-packet one-way delay: 44.452 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 26.35 Mbit/s

95th percentile per-packet one-way delay: 43.801 ms

Loss rate: 0.59%

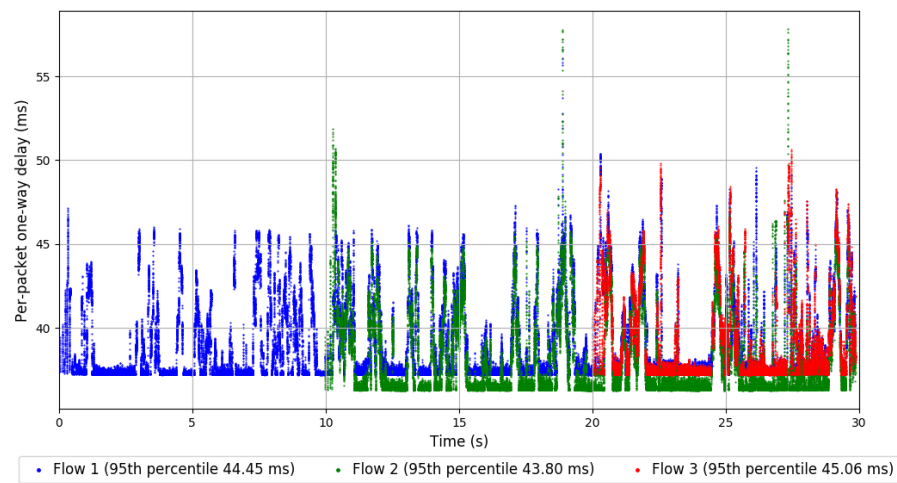
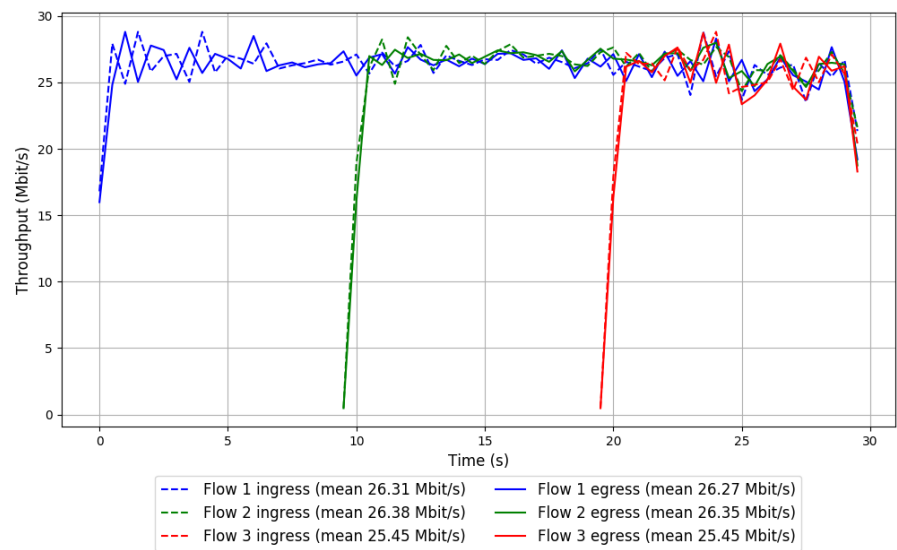
-- Flow 3:

Average throughput: 25.45 Mbit/s

95th percentile per-packet one-way delay: 45.060 ms

Loss rate: 0.94%

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: Tue, 01 Aug 2017 02:06:09 +0000

End at: Tue, 01 Aug 2017 02:06:39 +0000

Local clock offset: 0.583 ms

Remote clock offset: -1.695 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:39 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 44.223 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 27.11 Mbit/s

95th percentile per-packet one-way delay: 43.084 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 26.61 Mbit/s

95th percentile per-packet one-way delay: 44.834 ms

Loss rate: 0.51%

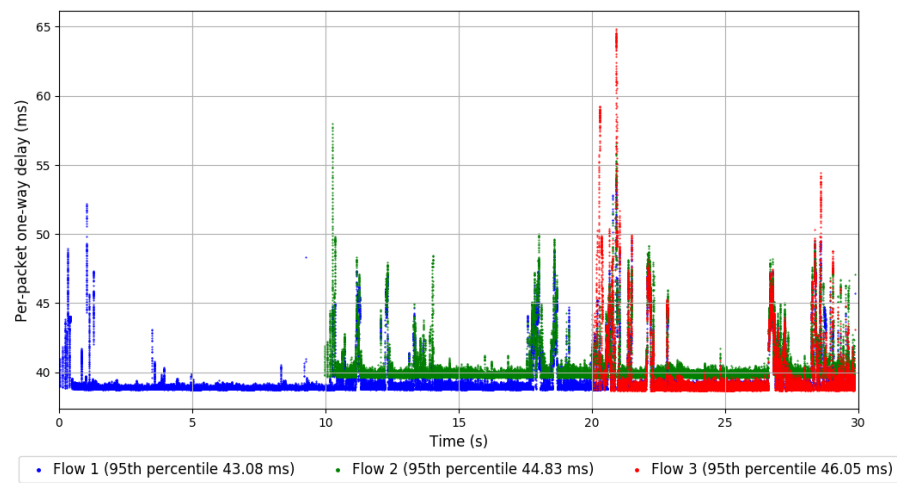
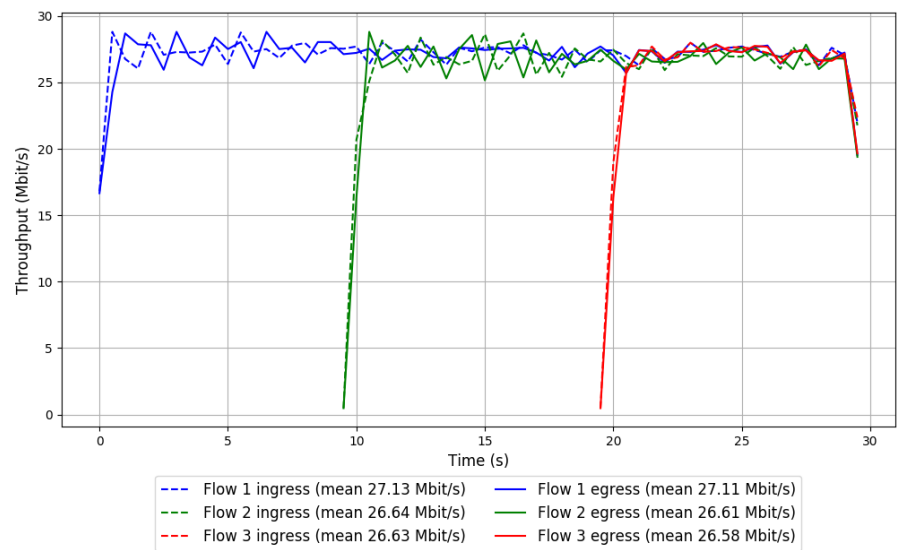
-- Flow 3:

Average throughput: 26.58 Mbit/s

95th percentile per-packet one-way delay: 46.050 ms

Loss rate: 0.99%

Run 2: Report of Saturator — Data Link



Run 3: Statistics of Saturator

Start at: Tue, 01 Aug 2017 02:27:10 +0000

End at: Tue, 01 Aug 2017 02:27:40 +0000

Local clock offset: 0.36 ms

Remote clock offset: 0.047 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:43 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.44 Mbit/s

95th percentile per-packet one-way delay: 44.443 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 26.88 Mbit/s

95th percentile per-packet one-way delay: 43.585 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 26.60 Mbit/s

95th percentile per-packet one-way delay: 44.136 ms

Loss rate: 0.51%

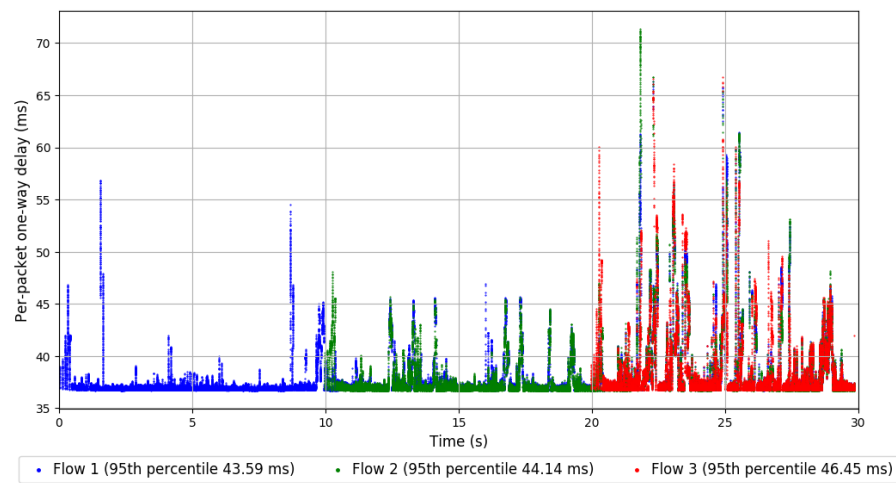
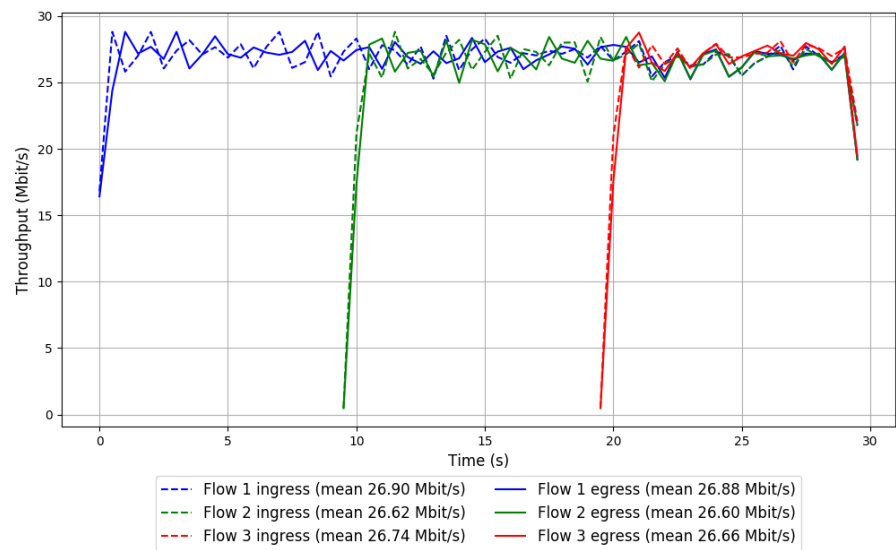
-- Flow 3:

Average throughput: 26.66 Mbit/s

95th percentile per-packet one-way delay: 46.455 ms

Loss rate: 1.17%

Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: Tue, 01 Aug 2017 02:48:10 +0000

End at: Tue, 01 Aug 2017 02:48:40 +0000

Local clock offset: 0.226 ms

Remote clock offset: -2.042 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:47 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.57 Mbit/s

95th percentile per-packet one-way delay: 42.209 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 26.82 Mbit/s

95th percentile per-packet one-way delay: 41.784 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 27.04 Mbit/s

95th percentile per-packet one-way delay: 42.024 ms

Loss rate: 0.52%

-- Flow 3:

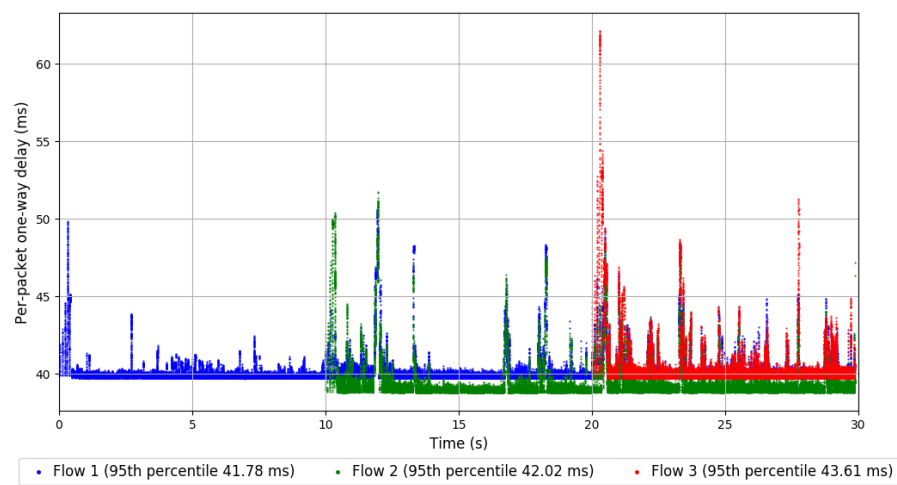
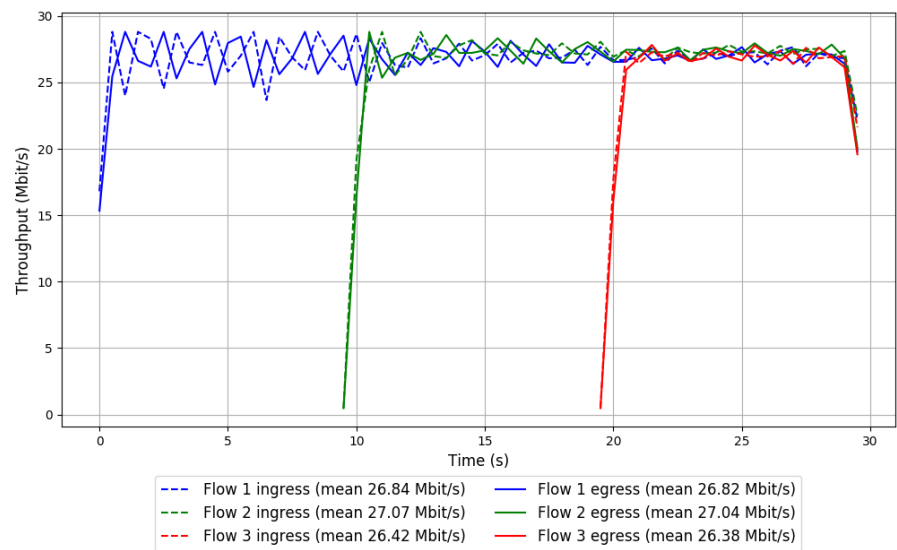
Average throughput: 26.38 Mbit/s

95th percentile per-packet one-way delay: 43.609 ms

Loss rate: 0.96%



Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: Tue, 01 Aug 2017 03:09:26 +0000

End at: Tue, 01 Aug 2017 03:09:56 +0000

Local clock offset: 0.035 ms

Remote clock offset: 0.497 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:51 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.22 Mbit/s

95th percentile per-packet one-way delay: 42.463 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 26.83 Mbit/s

95th percentile per-packet one-way delay: 41.536 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 26.73 Mbit/s

95th percentile per-packet one-way delay: 42.527 ms

Loss rate: 0.62%

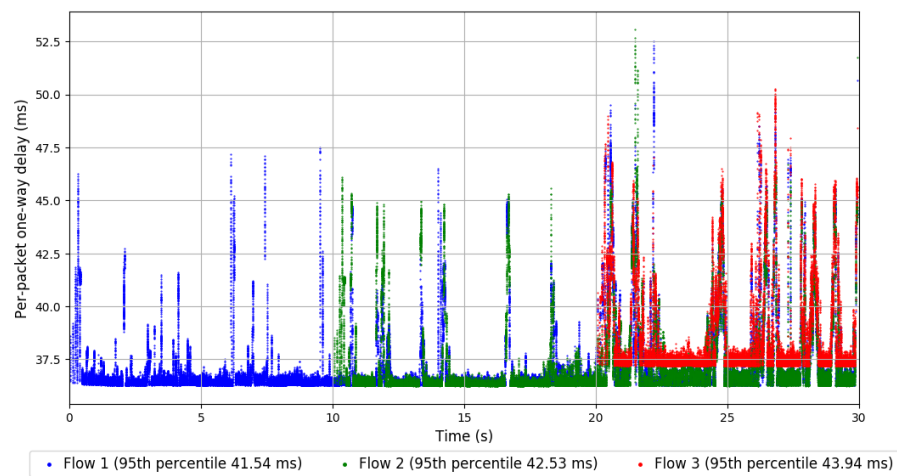
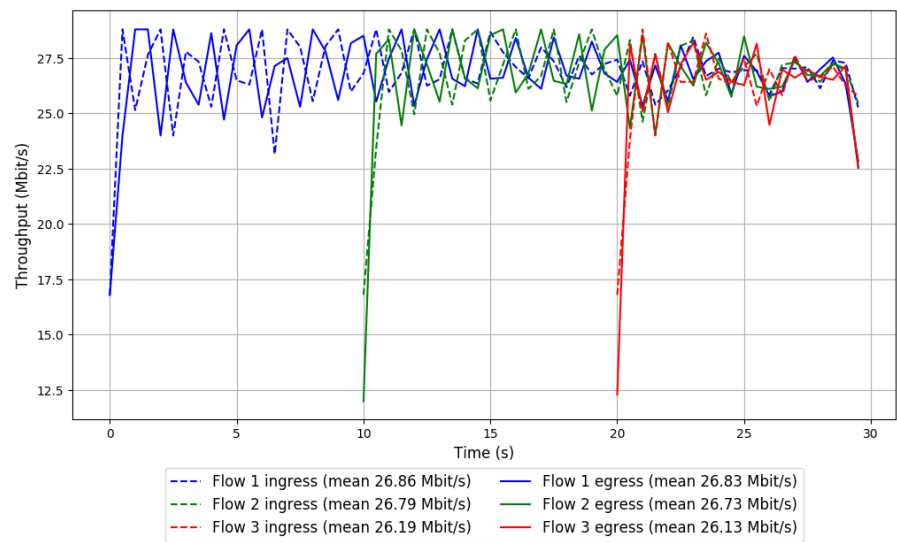
-- Flow 3:

Average throughput: 26.13 Mbit/s

95th percentile per-packet one-way delay: 43.940 ms

Loss rate: 1.08%

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: Tue, 01 Aug 2017 03:30:32 +0000

End at: Tue, 01 Aug 2017 03:31:02 +0000

Local clock offset: -0.026 ms

Remote clock offset: 0.36 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:55 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.66 Mbit/s

95th percentile per-packet one-way delay: 43.615 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 26.23 Mbit/s

95th percentile per-packet one-way delay: 43.279 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 26.75 Mbit/s

95th percentile per-packet one-way delay: 43.507 ms

Loss rate: 0.55%

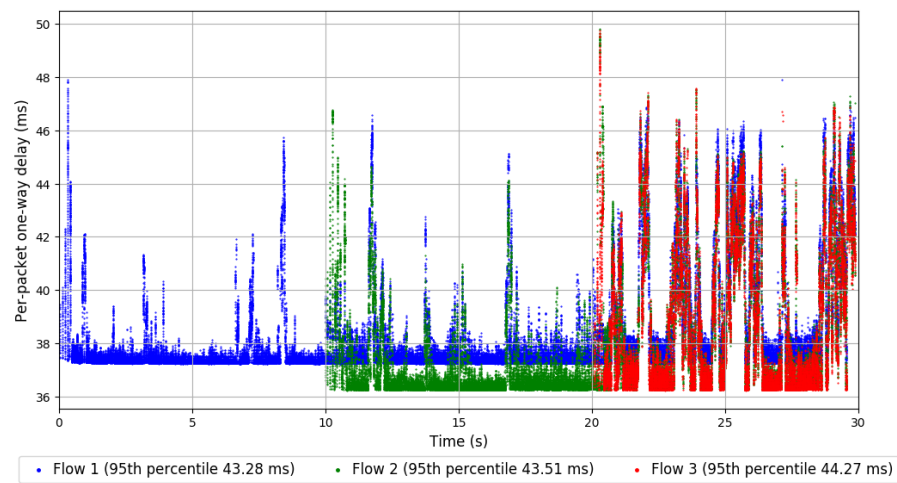
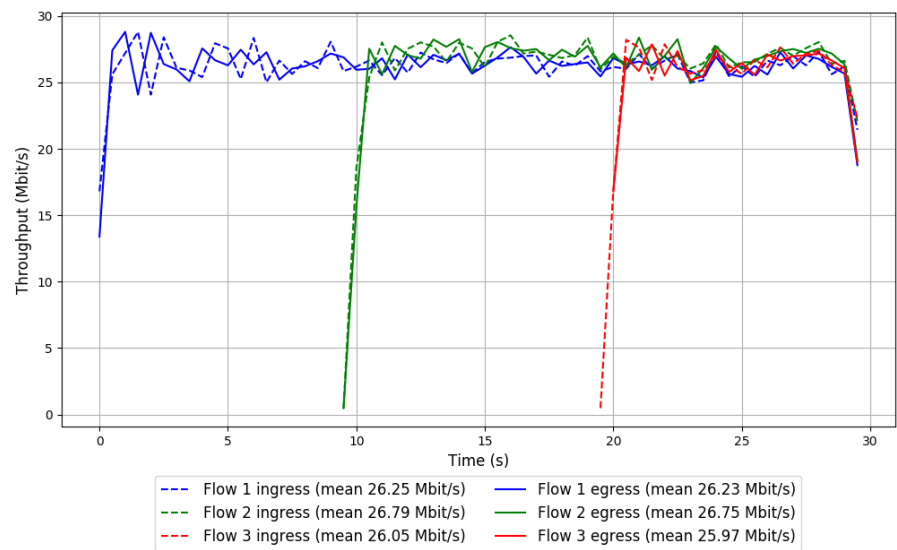
-- Flow 3:

Average throughput: 25.97 Mbit/s

95th percentile per-packet one-way delay: 44.265 ms

Loss rate: 1.12%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: Tue, 01 Aug 2017 03:51:35 +0000

End at: Tue, 01 Aug 2017 03:52:05 +0000

Local clock offset: -0.129 ms

Remote clock offset: -2.5 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 05:59:59 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.40 Mbit/s

95th percentile per-packet one-way delay: 43.829 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 26.68 Mbit/s

95th percentile per-packet one-way delay: 43.756 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 26.87 Mbit/s

95th percentile per-packet one-way delay: 43.490 ms

Loss rate: 0.57%

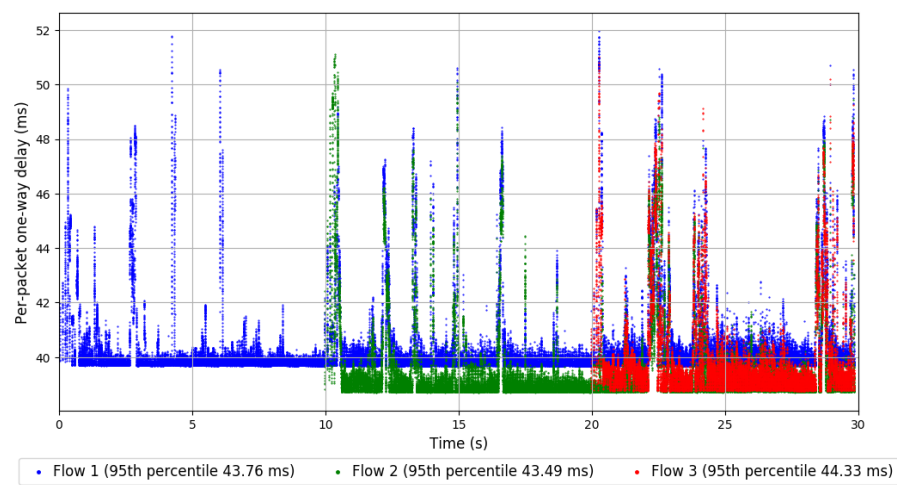
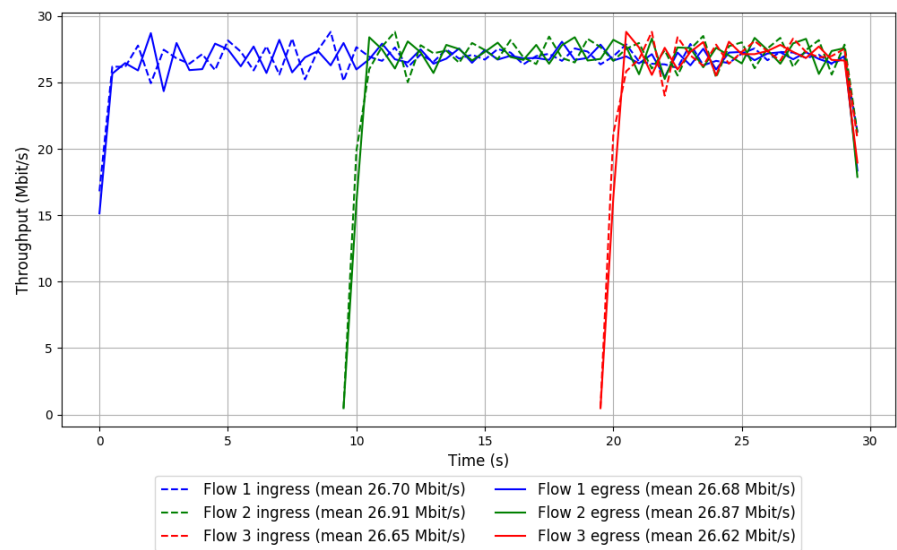
-- Flow 3:

Average throughput: 26.62 Mbit/s

95th percentile per-packet one-way delay: 44.328 ms

Loss rate: 0.98%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: Tue, 01 Aug 2017 04:12:53 +0000

End at: Tue, 01 Aug 2017 04:13:23 +0000

Local clock offset: 0.117 ms

Remote clock offset: -2.651 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:03 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.27 Mbit/s

95th percentile per-packet one-way delay: 44.874 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 26.84 Mbit/s

95th percentile per-packet one-way delay: 44.264 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 26.70 Mbit/s

95th percentile per-packet one-way delay: 45.484 ms

Loss rate: 0.56%

-- Flow 3:

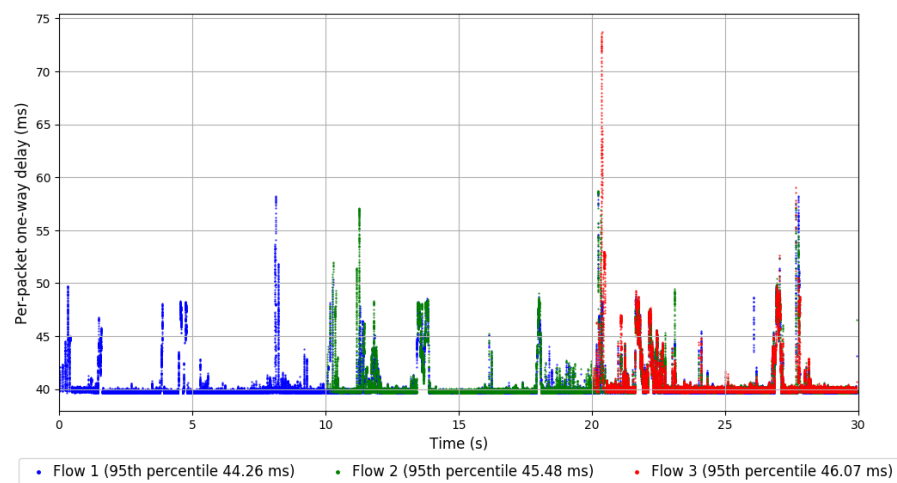
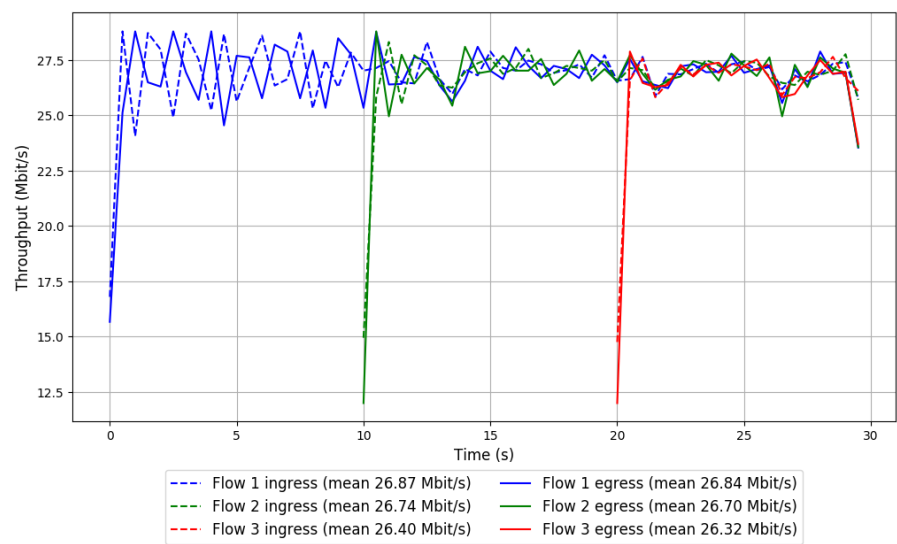
Average throughput: 26.32 Mbit/s

95th percentile per-packet one-way delay: 46.068 ms

Loss rate: 1.03%



Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: Tue, 01 Aug 2017 04:34:09 +0000

End at: Tue, 01 Aug 2017 04:34:39 +0000

Local clock offset: 0.178 ms

Remote clock offset: -2.909 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:06 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.04 Mbit/s

95th percentile per-packet one-way delay: 45.607 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 26.60 Mbit/s

95th percentile per-packet one-way delay: 45.593 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 26.79 Mbit/s

95th percentile per-packet one-way delay: 44.842 ms

Loss rate: 0.59%

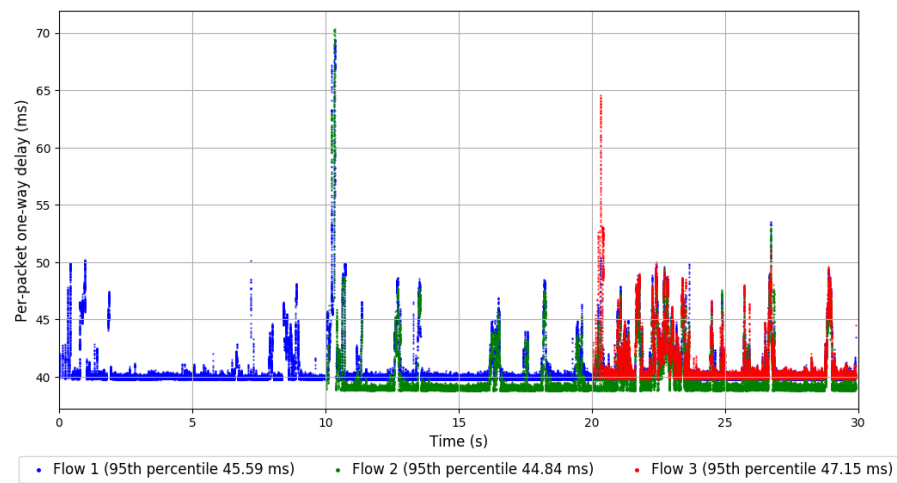
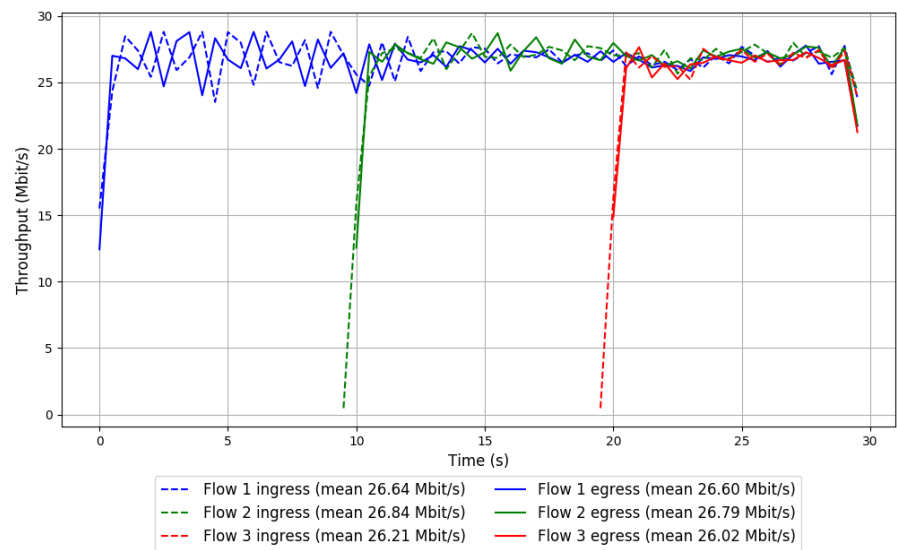
-- Flow 3:

Average throughput: 26.02 Mbit/s

95th percentile per-packet one-way delay: 47.153 ms

Loss rate: 1.55%

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: Tue, 01 Aug 2017 04:55:33 +0000

End at: Tue, 01 Aug 2017 04:56:03 +0000

Local clock offset: 0.135 ms

Remote clock offset: -0.336 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.48 Mbit/s

95th percentile per-packet one-way delay: 40.310 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 26.79 Mbit/s

95th percentile per-packet one-way delay: 39.918 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 26.97 Mbit/s

95th percentile per-packet one-way delay: 40.141 ms

Loss rate: 0.45%

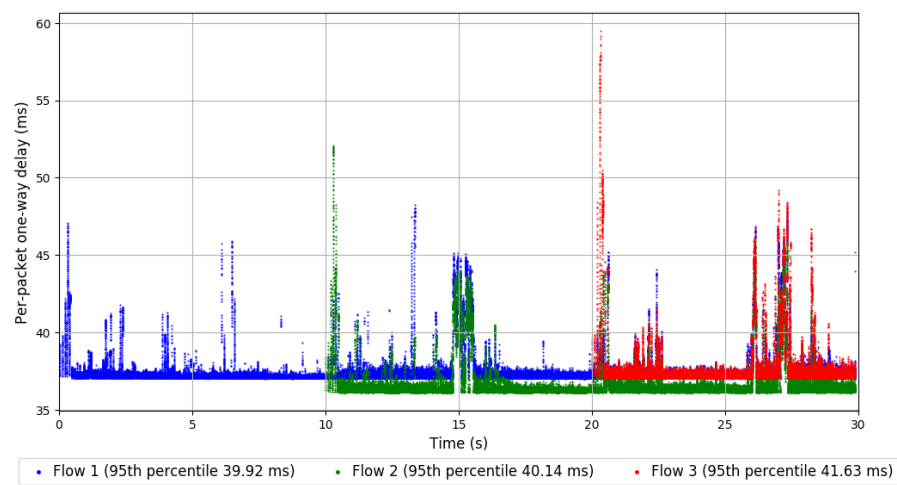
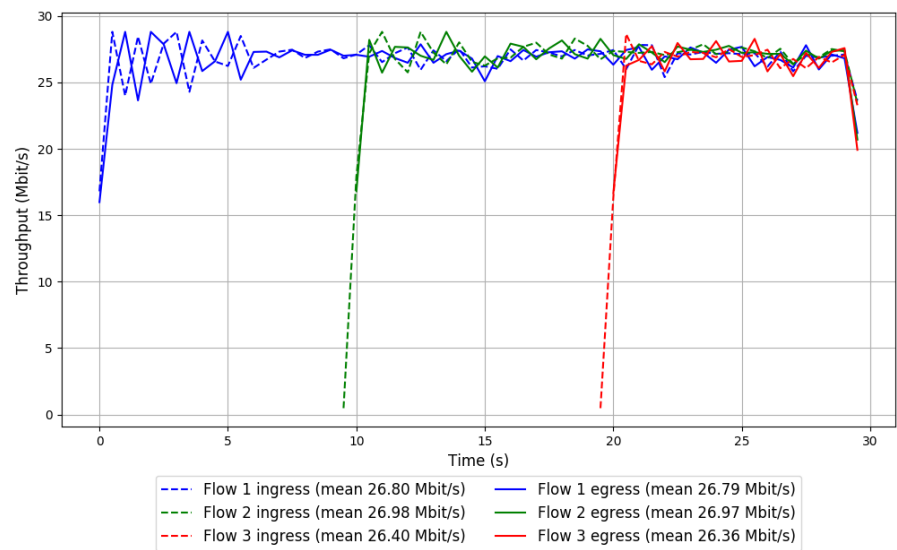
-- Flow 3:

Average throughput: 26.36 Mbit/s

95th percentile per-packet one-way delay: 41.633 ms

Loss rate: 0.93%

Run 10: Report of Saturator — Data Link



Run 1: Statistics of SCReAM

Start at: Tue, 01 Aug 2017 01:51:43 +0000

End at: Tue, 01 Aug 2017 01:52:13 +0000

Local clock offset: 0.721 ms

Remote clock offset: -1.742 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 43.776 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 43.483 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 43.958 ms

Loss rate: 0.43%

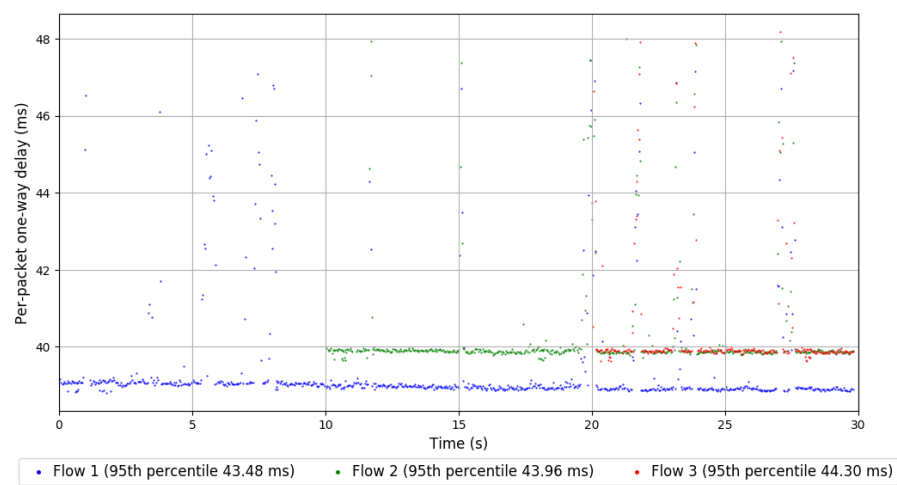
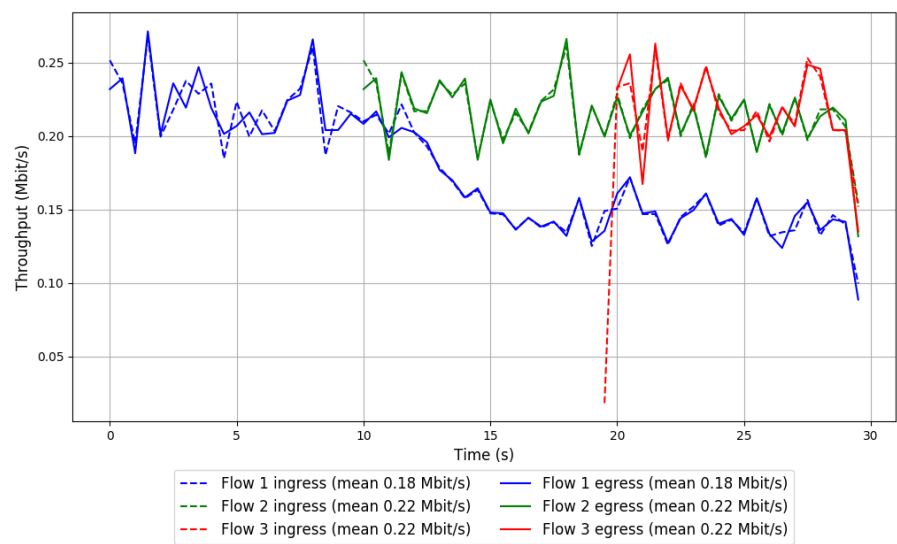
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 44.299 ms

Loss rate: 0.76%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: Tue, 01 Aug 2017 02:13:10 +0000

End at: Tue, 01 Aug 2017 02:13:40 +0000

Local clock offset: 0.508 ms

Remote clock offset: 0.117 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 37.905 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.933 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.846 ms

Loss rate: 0.43%

-- Flow 3:

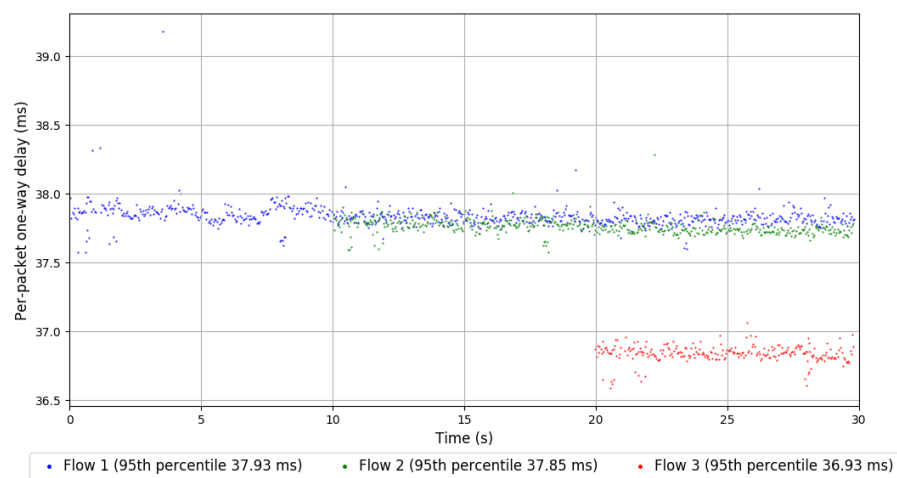
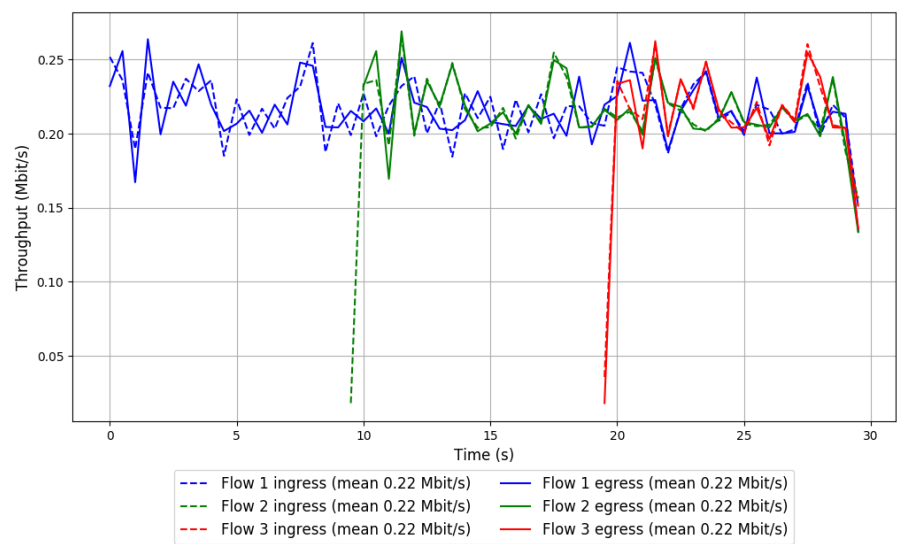
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.928 ms

Loss rate: 0.74%



Run 2: Report of SCRaM — Data Link



Run 3: Statistics of SCReAM

Start at: Tue, 01 Aug 2017 02:34:13 +0000

End at: Tue, 01 Aug 2017 02:34:43 +0000

Local clock offset: 0.302 ms

Remote clock offset: -2.12 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 38.912 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 38.921 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 38.904 ms

Loss rate: 0.73%

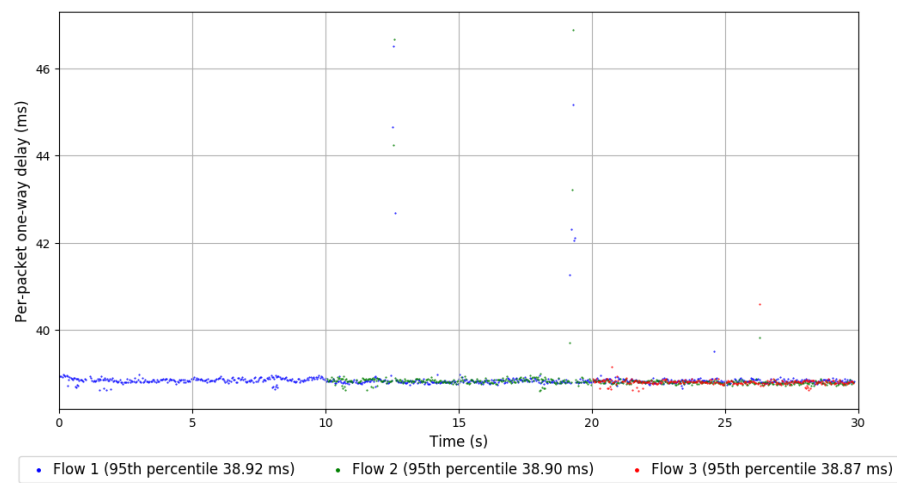
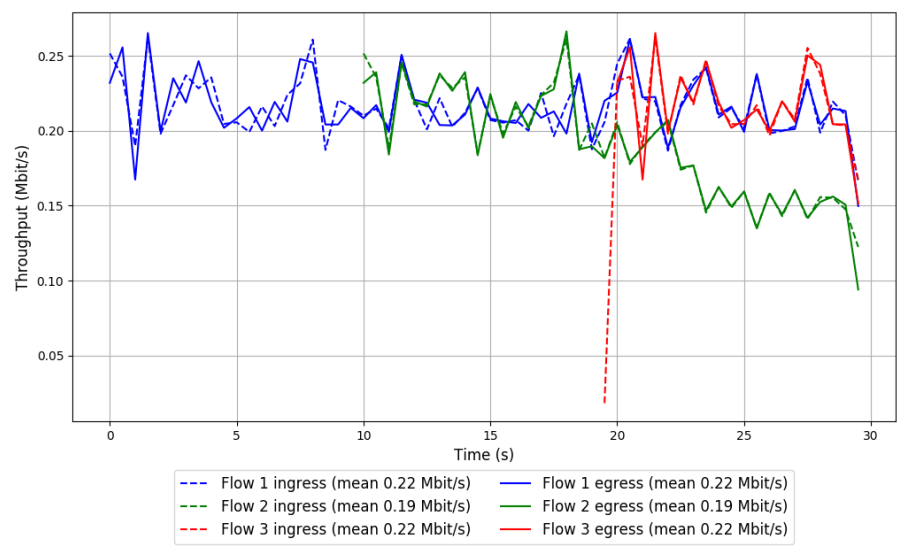
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 38.868 ms

Loss rate: 0.73%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: Tue, 01 Aug 2017 02:55:21 +0000

End at: Tue, 01 Aug 2017 02:55:51 +0000

Local clock offset: 0.167 ms

Remote clock offset: 0.564 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 37.246 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.259 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.217 ms

Loss rate: 0.43%

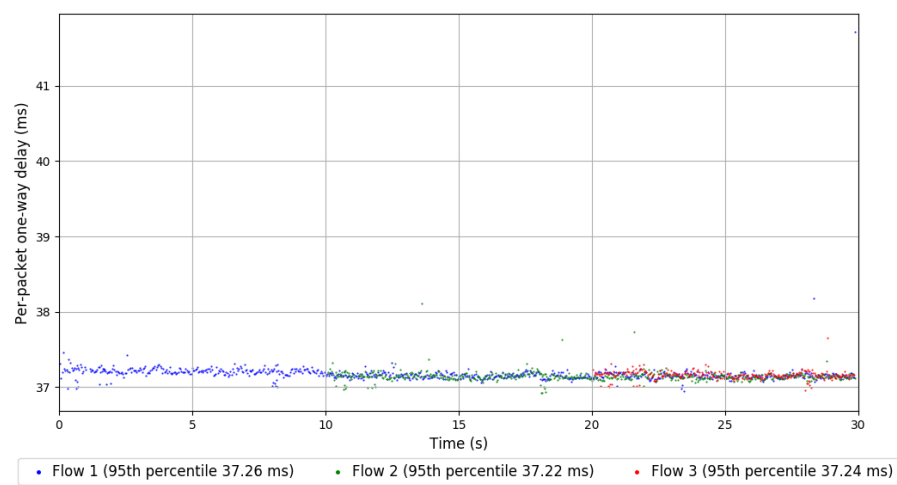
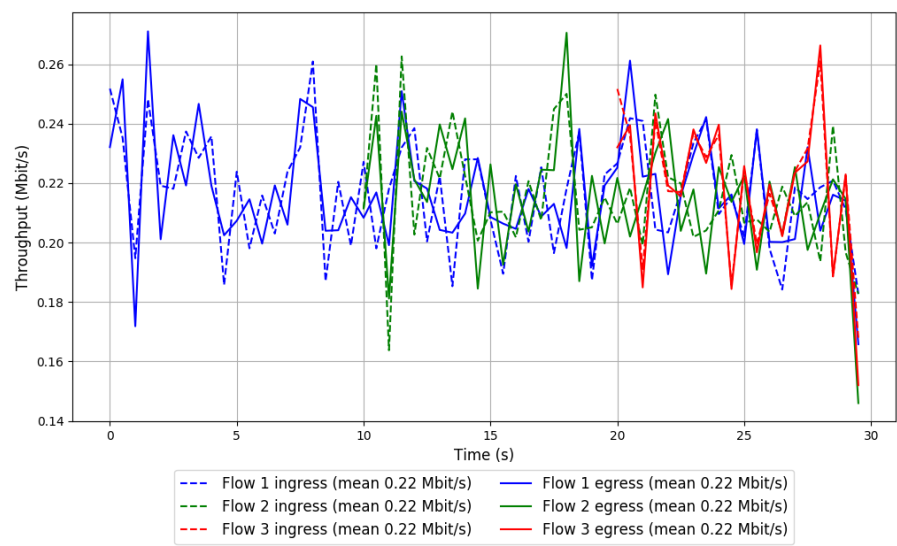
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.238 ms

Loss rate: 0.74%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: Tue, 01 Aug 2017 03:16:30 +0000

End at: Tue, 01 Aug 2017 03:17:00 +0000

Local clock offset: 0.079 ms

Remote clock offset: 0.072 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 37.777 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.745 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.893 ms

Loss rate: 0.43%

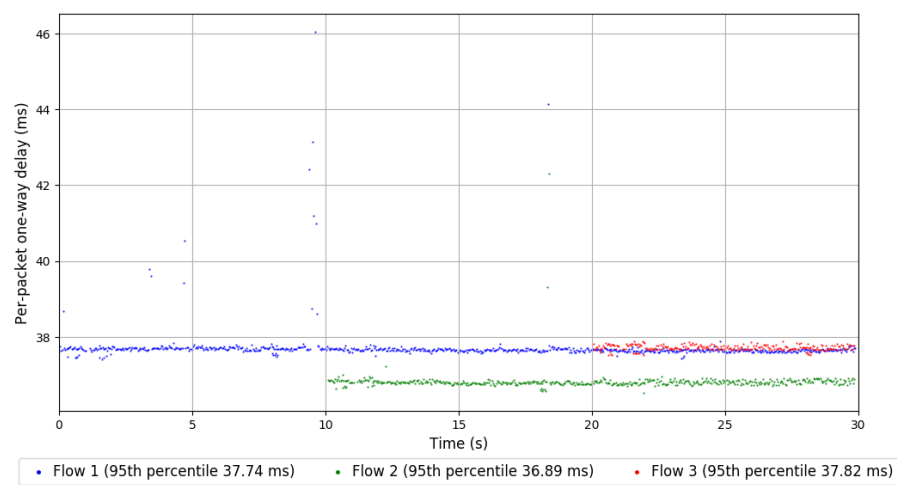
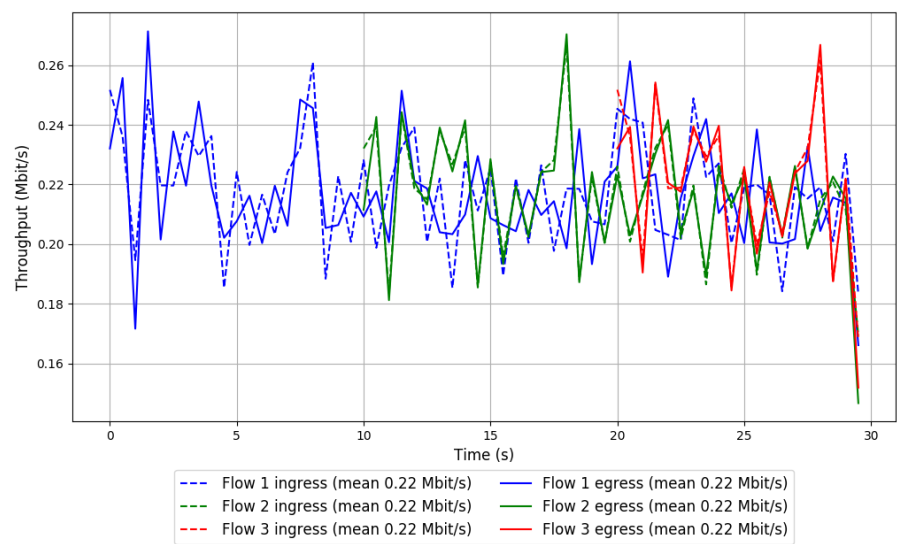
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.823 ms

Loss rate: 0.74%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: Tue, 01 Aug 2017 03:37:36 +0000

End at: Tue, 01 Aug 2017 03:38:06 +0000

Local clock offset: -0.131 ms

Remote clock offset: 0.366 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 37.139 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.163 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.218 ms

Loss rate: 0.43%

-- Flow 3:

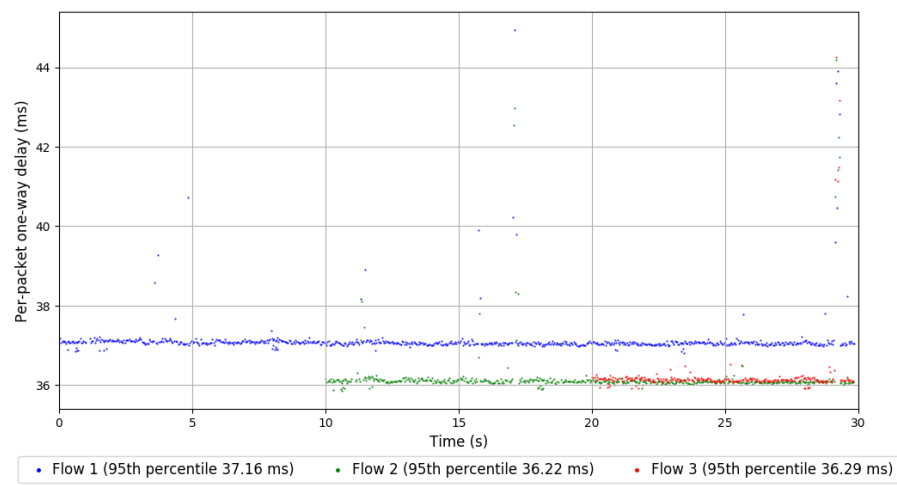
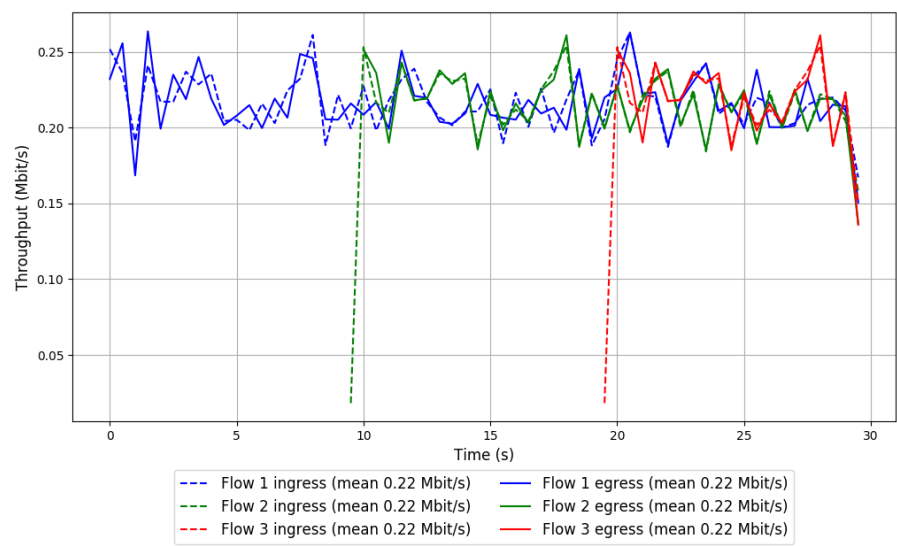
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.291 ms

Loss rate: 0.74%



Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: Tue, 01 Aug 2017 03:58:41 +0000

End at: Tue, 01 Aug 2017 03:59:11 +0000

Local clock offset: -0.056 ms

Remote clock offset: -0.506 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 36.813 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.808 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.820 ms

Loss rate: 0.42%

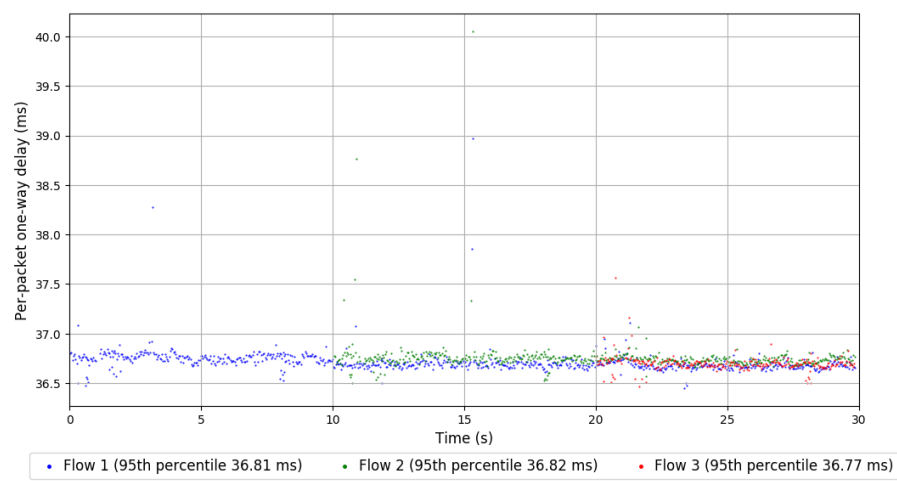
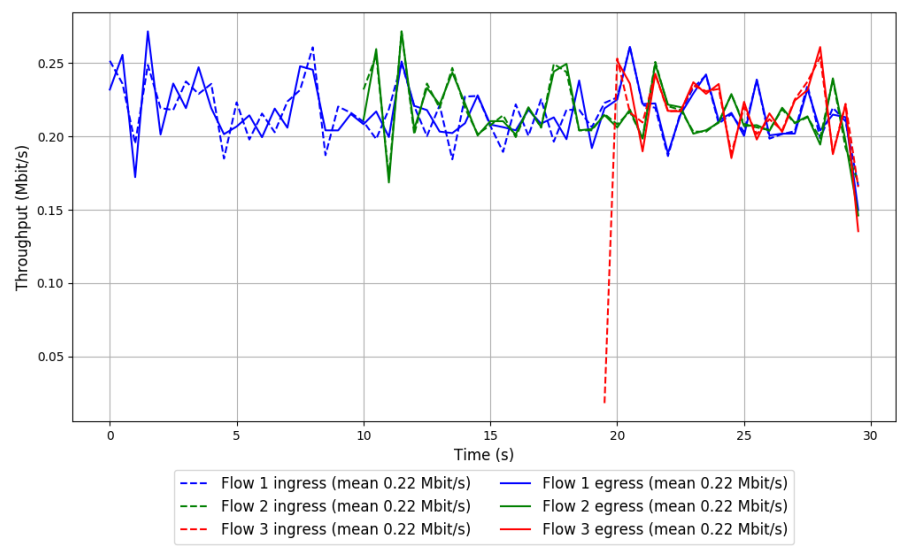
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.769 ms

Loss rate: 1.08%

Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SReAM

Start at: Tue, 01 Aug 2017 04:19:57 +0000

End at: Tue, 01 Aug 2017 04:20:27 +0000

Local clock offset: 0.068 ms

Remote clock offset: -2.748 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 40.467 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 40.237 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 40.470 ms

Loss rate: 0.43%

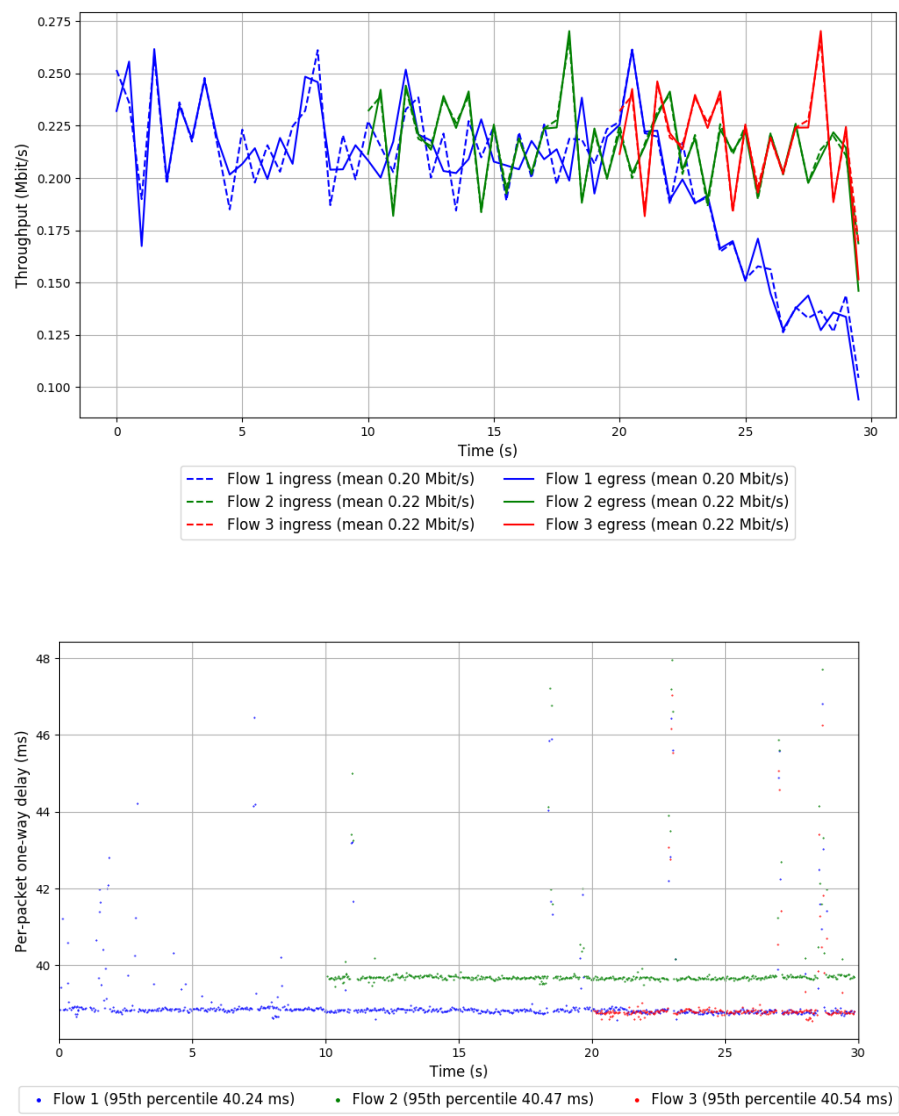
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 40.536 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: Tue, 01 Aug 2017 04:41:25 +0000

End at: Tue, 01 Aug 2017 04:41:55 +0000

Local clock offset: 0.216 ms

Remote clock offset: -2.975 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:17 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 43.585 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 43.585 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 43.070 ms

Loss rate: 0.42%

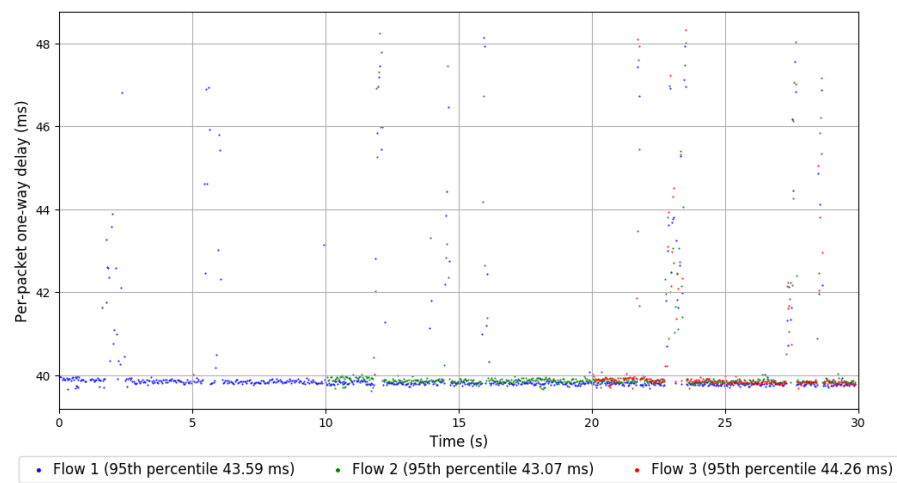
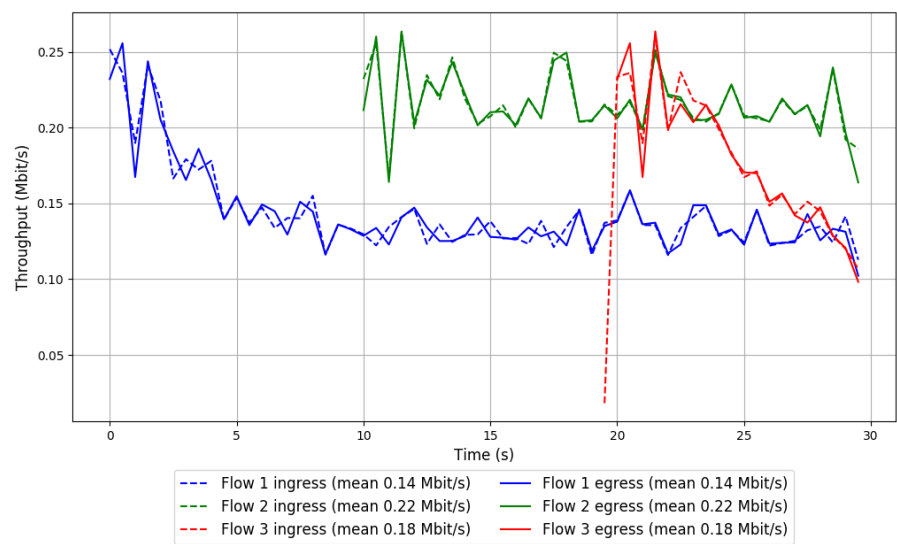
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 44.257 ms

Loss rate: 1.82%

Run 9: Report of SCSReAM — Data Link



Run 10: Statistics of SCReAM

Start at: Tue, 01 Aug 2017 05:02:42 +0000

End at: Tue, 01 Aug 2017 05:03:12 +0000

Local clock offset: 0.225 ms

Remote clock offset: -0.994 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:18 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 37.858 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.874 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.894 ms

Loss rate: 0.43%

-- Flow 3:

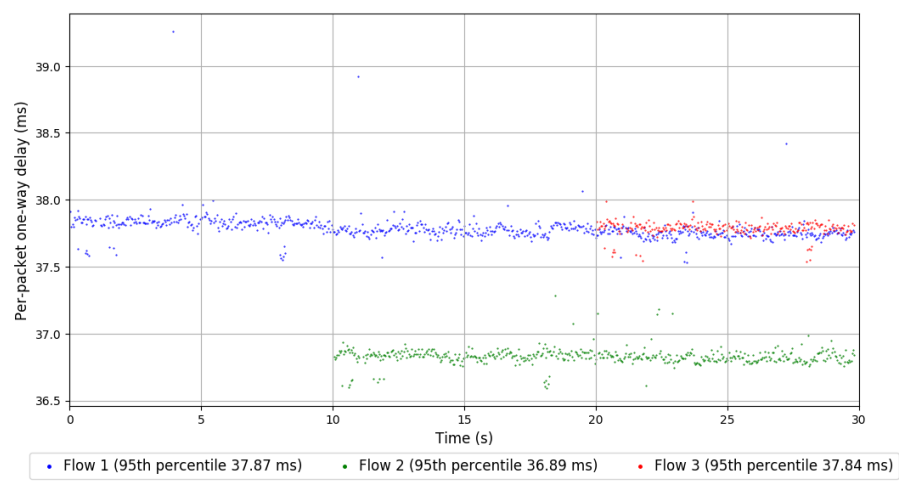
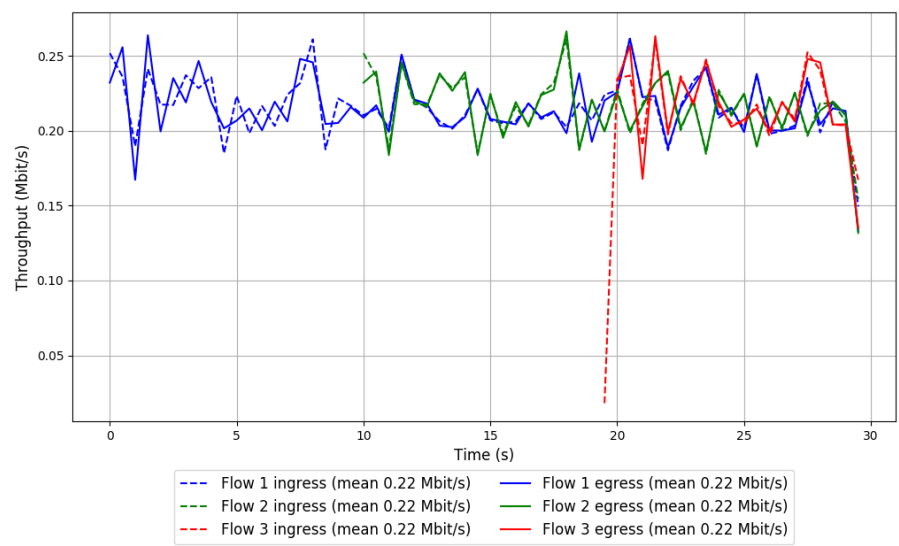
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.840 ms

Loss rate: 1.10%



Run 10: Report of SCReAM — Data Link



Run 1: Statistics of Sprout

Start at: Tue, 01 Aug 2017 02:03:25 +0000

End at: Tue, 01 Aug 2017 02:03:55 +0000

Local clock offset: 0.585 ms

Remote clock offset: -1.867 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:19 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.11 Mbit/s

95th percentile per-packet one-way delay: 46.073 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 46.053 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 9.02 Mbit/s

95th percentile per-packet one-way delay: 46.324 ms

Loss rate: 0.52%

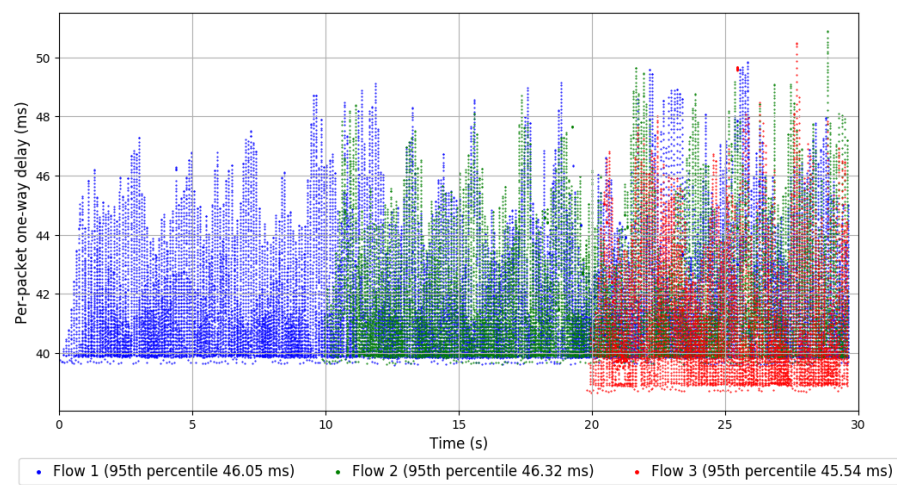
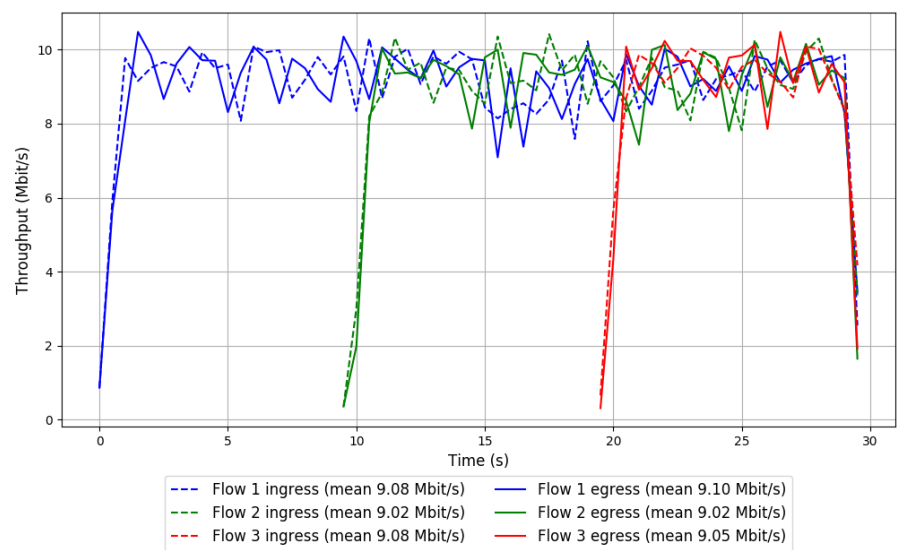
-- Flow 3:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 45.541 ms

Loss rate: 1.25%

Run 1: Report of Sprout — Data Link



## Run 2: Statistics of Sprout

Start at: Tue, 01 Aug 2017 02:24:26 +0000

End at: Tue, 01 Aug 2017 02:24:56 +0000

Local clock offset: 0.472 ms

Remote clock offset: 0.586 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:22 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.07 Mbit/s

95th percentile per-packet one-way delay: 43.743 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 9.11 Mbit/s

95th percentile per-packet one-way delay: 43.792 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 43.472 ms

Loss rate: 0.53%

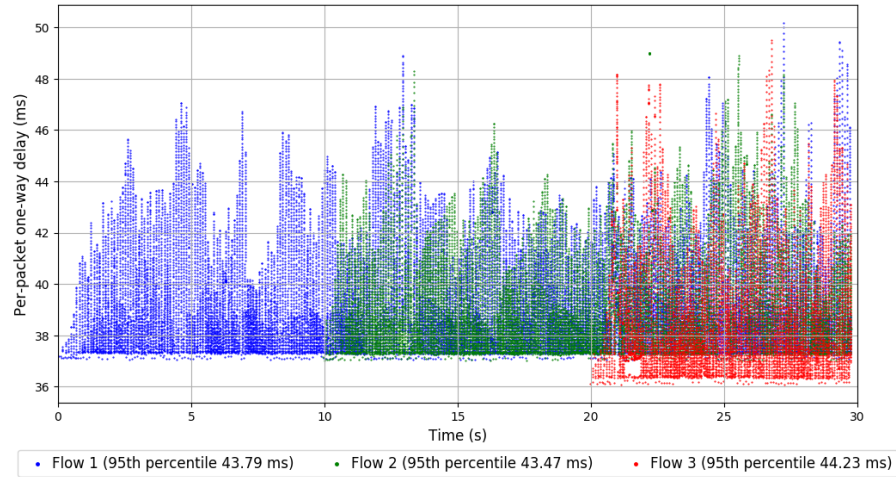
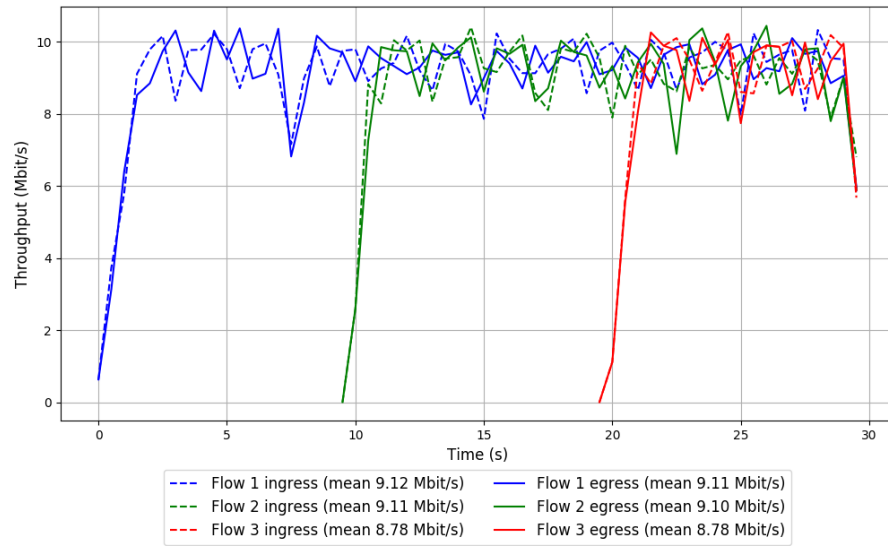
-- Flow 3:

Average throughput: 8.78 Mbit/s

95th percentile per-packet one-way delay: 44.228 ms

Loss rate: 0.84%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: Tue, 01 Aug 2017 02:45:26 +0000

End at: Tue, 01 Aug 2017 02:45:56 +0000

Local clock offset: 0.319 ms

Remote clock offset: -1.998 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:22 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.22 Mbit/s

95th percentile per-packet one-way delay: 46.032 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 9.30 Mbit/s

95th percentile per-packet one-way delay: 45.433 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 9.01 Mbit/s

95th percentile per-packet one-way delay: 46.191 ms

Loss rate: 0.56%

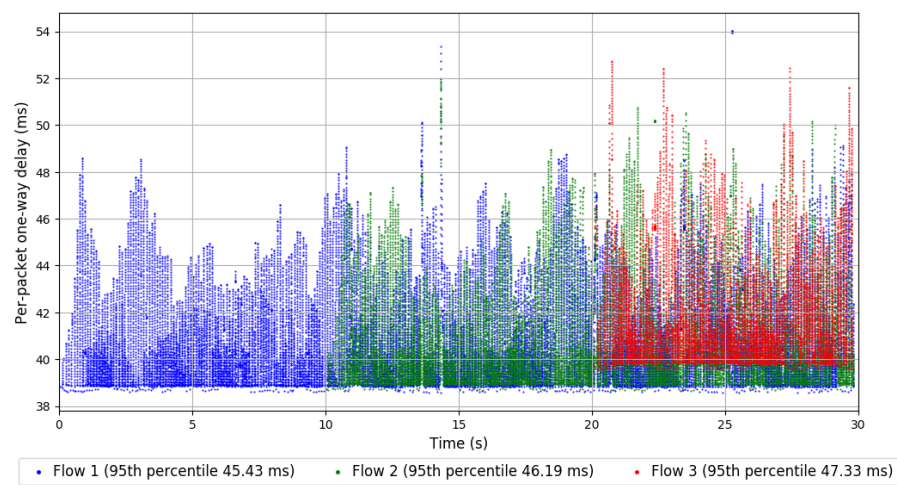
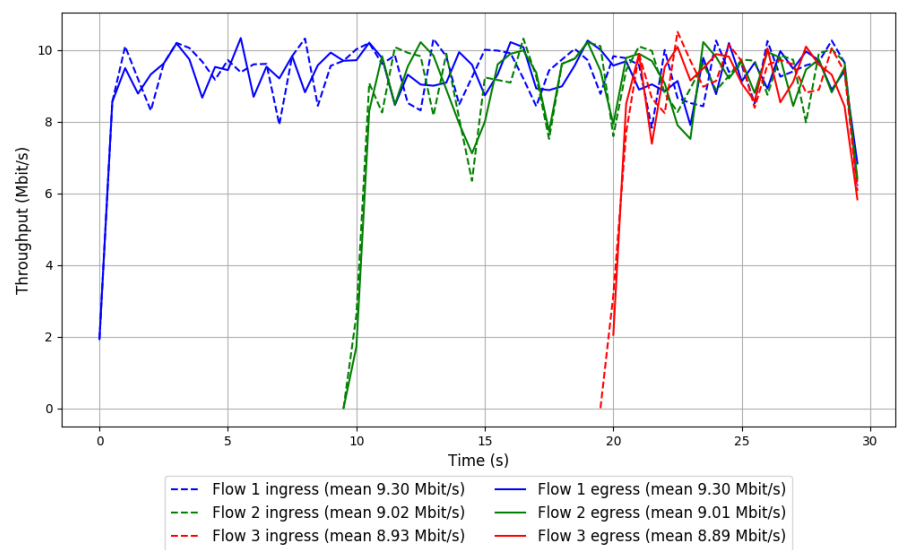
-- Flow 3:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 47.331 ms

Loss rate: 1.09%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: Tue, 01 Aug 2017 03:06:43 +0000

End at: Tue, 01 Aug 2017 03:07:13 +0000

Local clock offset: 0.171 ms

Remote clock offset: -2.041 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:24 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.03 Mbit/s

95th percentile per-packet one-way delay: 46.634 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 9.24 Mbit/s

95th percentile per-packet one-way delay: 46.590 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 46.846 ms

Loss rate: 0.72%

-- Flow 3:

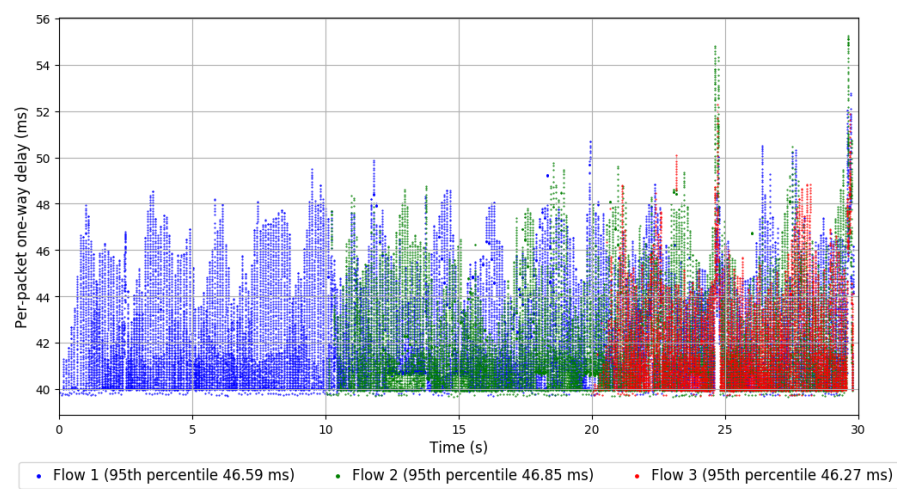
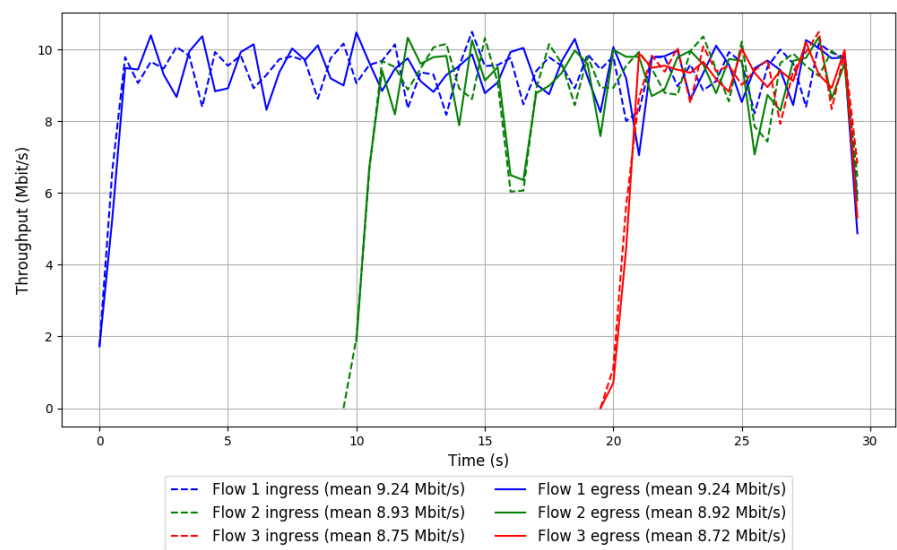
Average throughput: 8.72 Mbit/s

95th percentile per-packet one-way delay: 46.266 ms

Loss rate: 1.16%



Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: Tue, 01 Aug 2017 03:27:51 +0000

End at: Tue, 01 Aug 2017 03:28:21 +0000

Local clock offset: -0.107 ms

Remote clock offset: -2.14 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:26 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.22 Mbit/s

95th percentile per-packet one-way delay: 46.650 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 9.19 Mbit/s

95th percentile per-packet one-way delay: 46.516 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 9.11 Mbit/s

95th percentile per-packet one-way delay: 46.594 ms

Loss rate: 0.55%

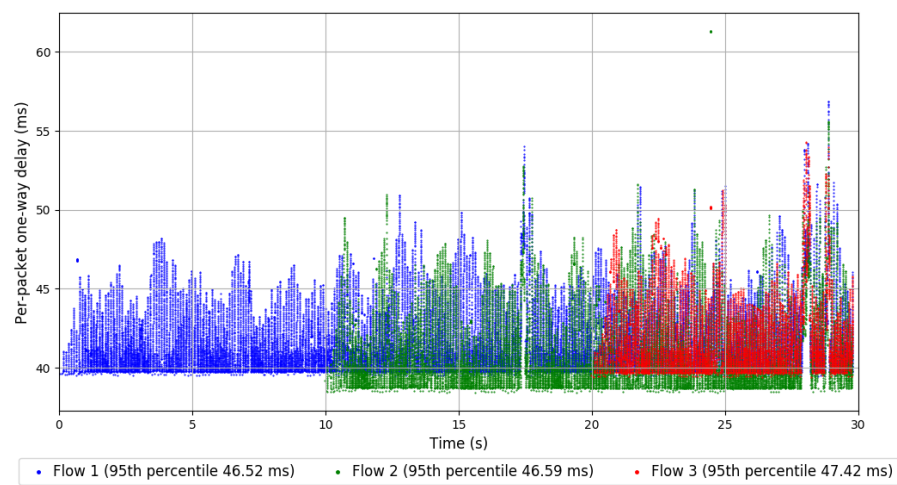
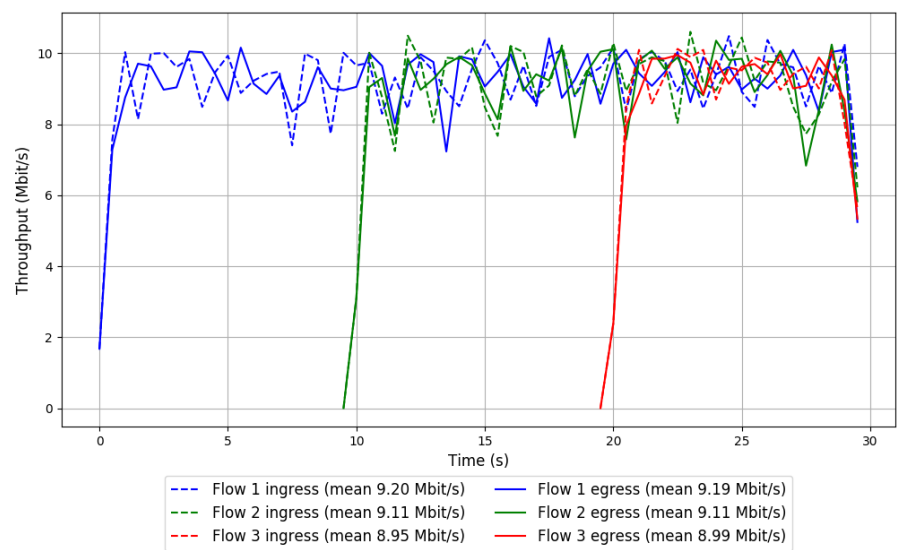
-- Flow 3:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 47.416 ms

Loss rate: 0.43%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: Tue, 01 Aug 2017 03:48:51 +0000

End at: Tue, 01 Aug 2017 03:49:21 +0000

Local clock offset: -0.059 ms

Remote clock offset: -0.268 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:28 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.19 Mbit/s

95th percentile per-packet one-way delay: 44.589 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 9.09 Mbit/s

95th percentile per-packet one-way delay: 44.050 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 9.18 Mbit/s

95th percentile per-packet one-way delay: 44.925 ms

Loss rate: 0.49%

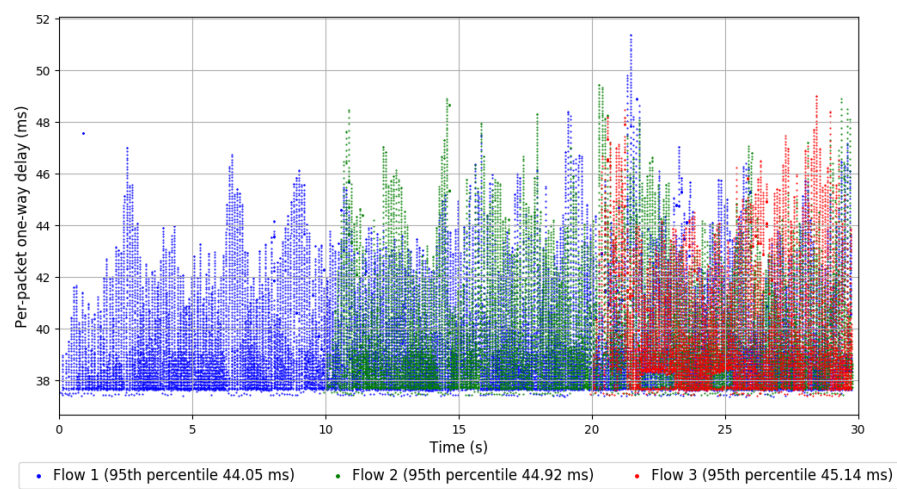
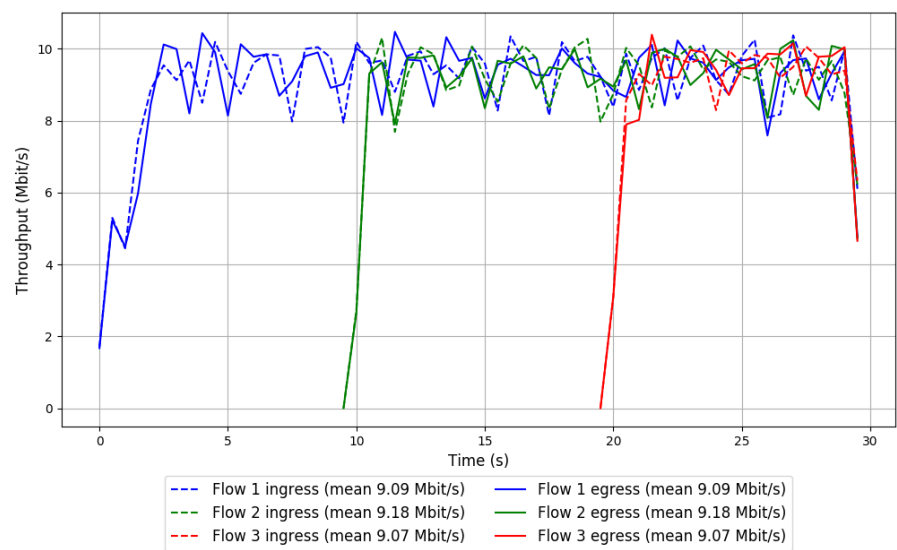
-- Flow 3:

Average throughput: 9.07 Mbit/s

95th percentile per-packet one-way delay: 45.140 ms

Loss rate: 1.21%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: Tue, 01 Aug 2017 04:10:09 +0000

End at: Tue, 01 Aug 2017 04:10:39 +0000

Local clock offset: -0.006 ms

Remote clock offset: -2.742 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:30 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 17.97 Mbit/s

95th percentile per-packet one-way delay: 46.447 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 46.180 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 46.871 ms

Loss rate: 0.31%

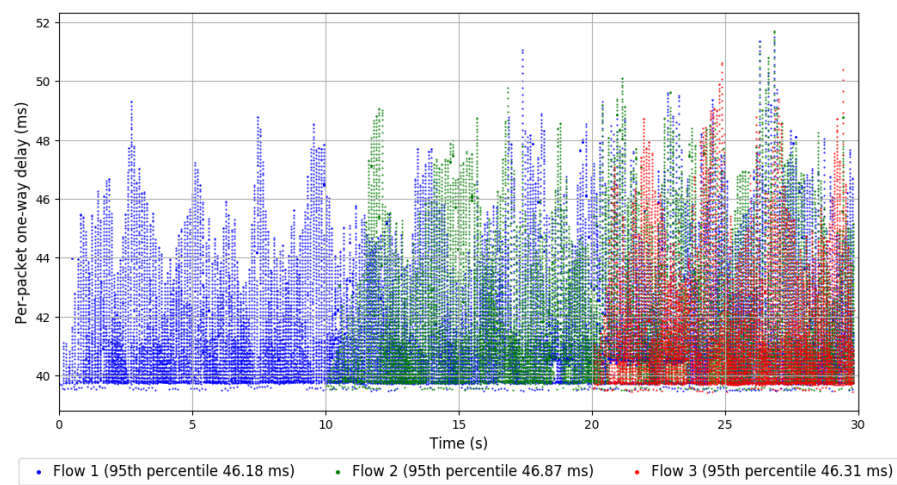
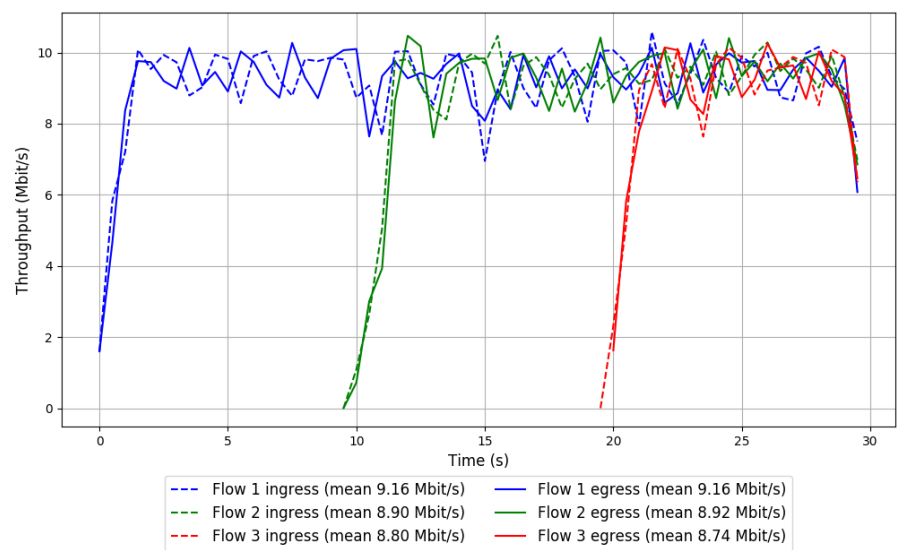
-- Flow 3:

Average throughput: 8.74 Mbit/s

95th percentile per-packet one-way delay: 46.311 ms

Loss rate: 1.06%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: Tue, 01 Aug 2017 04:31:22 +0000

End at: Tue, 01 Aug 2017 04:31:52 +0000

Local clock offset: 0.102 ms

Remote clock offset: -0.879 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.24 Mbit/s

95th percentile per-packet one-way delay: 44.969 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 44.184 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 9.09 Mbit/s

95th percentile per-packet one-way delay: 45.593 ms

Loss rate: 0.66%

-- Flow 3:

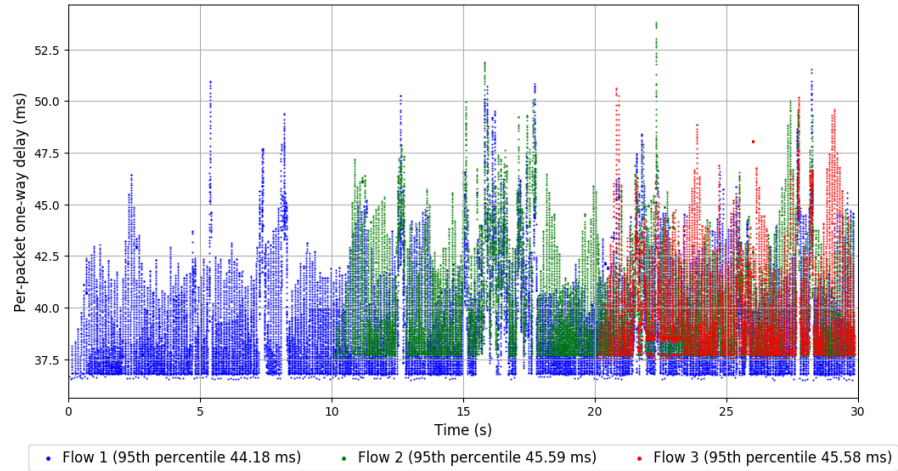
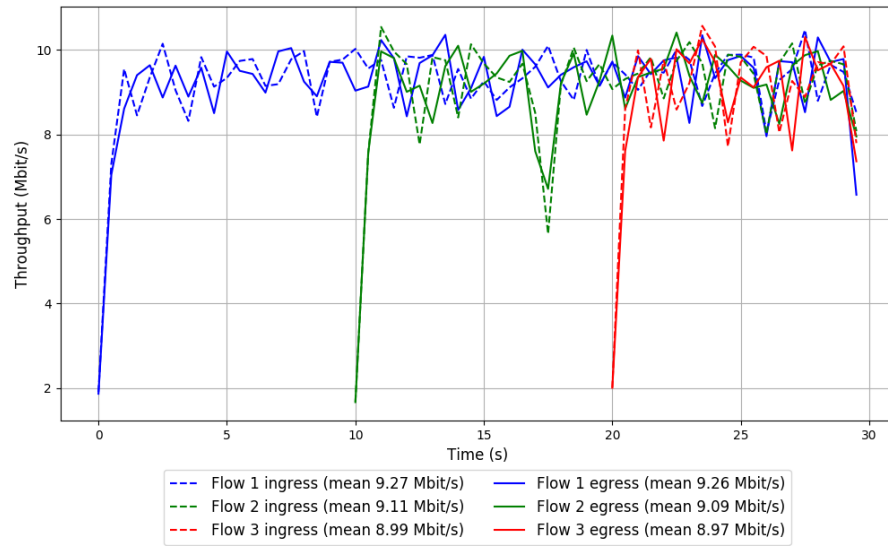
Average throughput: 8.97 Mbit/s

95th percentile per-packet one-way delay: 45.581 ms

Loss rate: 1.00%



# Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: Tue, 01 Aug 2017 04:52:49 +0000

End at: Tue, 01 Aug 2017 04:53:19 +0000

Local clock offset: 0.212 ms

Remote clock offset: -0.986 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:34 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.08 Mbit/s

95th percentile per-packet one-way delay: 45.995 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 9.29 Mbit/s

95th percentile per-packet one-way delay: 45.683 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 8.96 Mbit/s

95th percentile per-packet one-way delay: 46.191 ms

Loss rate: 0.67%

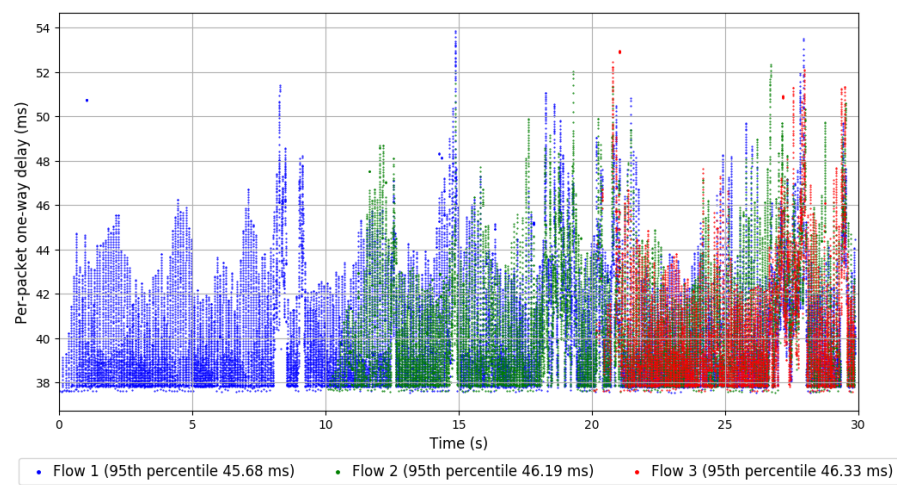
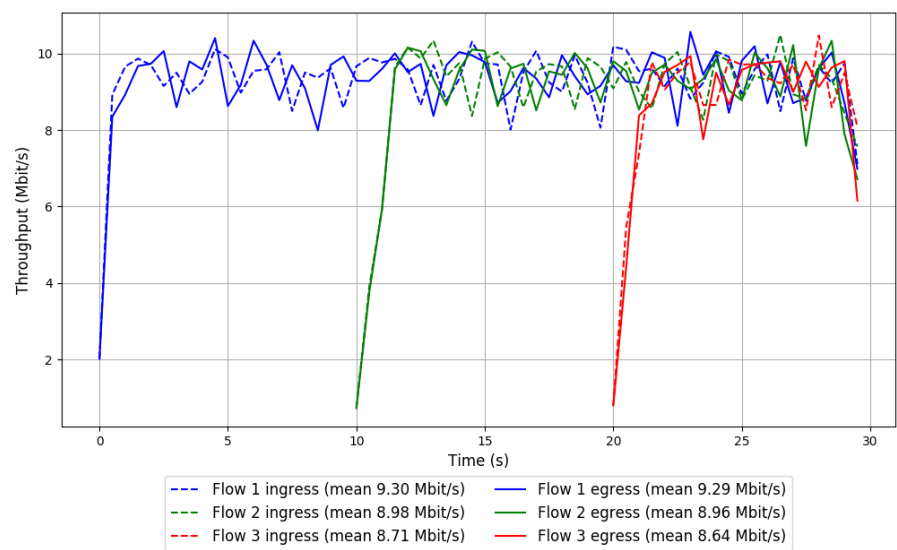
-- Flow 3:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 46.334 ms

Loss rate: 1.22%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: Tue, 01 Aug 2017 05:14:01 +0000

End at: Tue, 01 Aug 2017 05:14:31 +0000

Local clock offset: 0.262 ms

Remote clock offset: -0.529 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:36 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 18.24 Mbit/s

95th percentile per-packet one-way delay: 43.429 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 9.23 Mbit/s

95th percentile per-packet one-way delay: 43.107 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 9.18 Mbit/s

95th percentile per-packet one-way delay: 44.012 ms

Loss rate: 0.53%

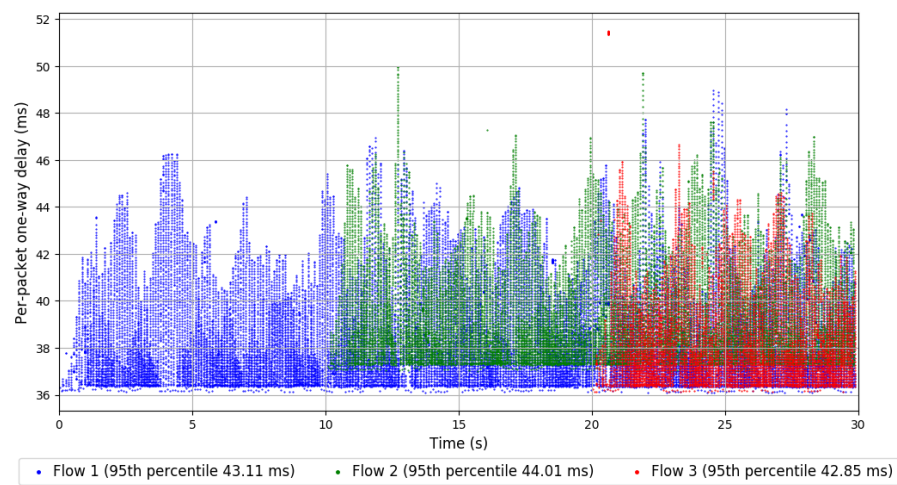
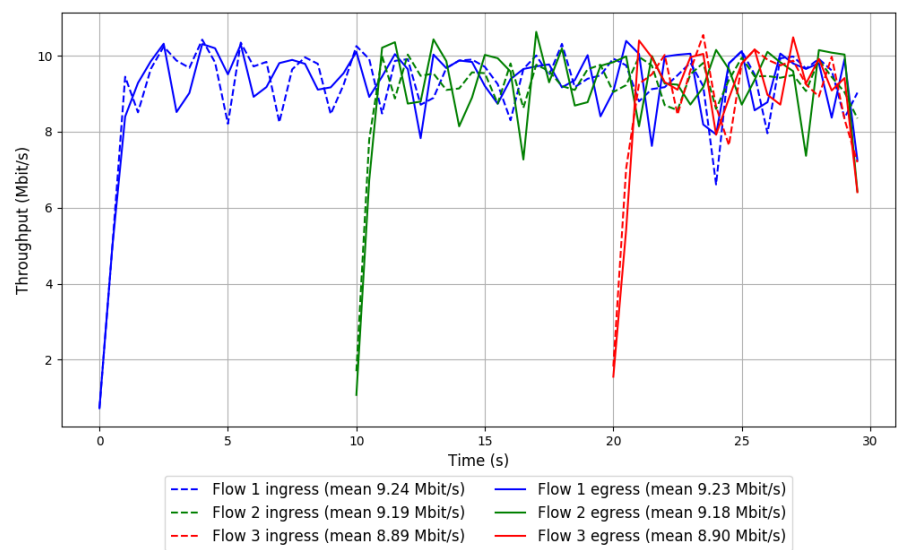
-- Flow 3:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 42.850 ms

Loss rate: 0.52%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 01:50:08 +0000

End at: Tue, 01 Aug 2017 01:50:38 +0000

Local clock offset: 0.634 ms

Remote clock offset: 0.438 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:53 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.73 Mbit/s

95th percentile per-packet one-way delay: 78.830 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 54.30 Mbit/s

95th percentile per-packet one-way delay: 63.144 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 35.37 Mbit/s

95th percentile per-packet one-way delay: 80.466 ms

Loss rate: 0.67%

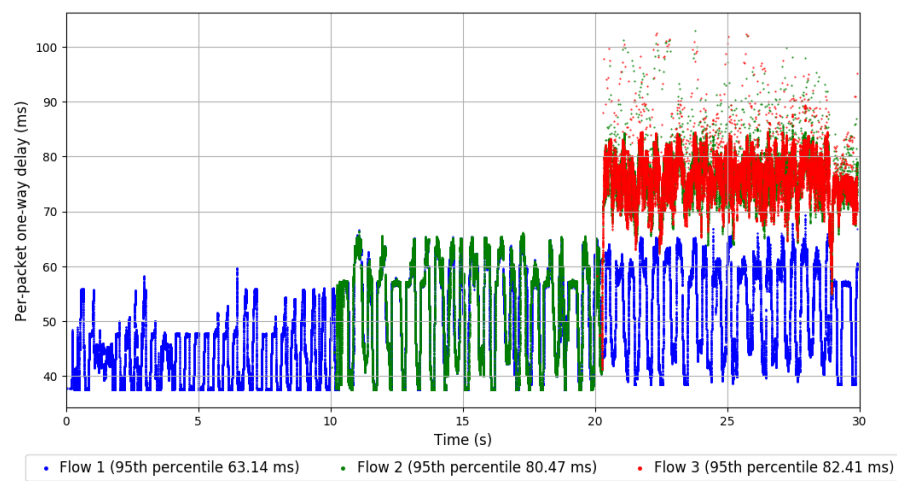
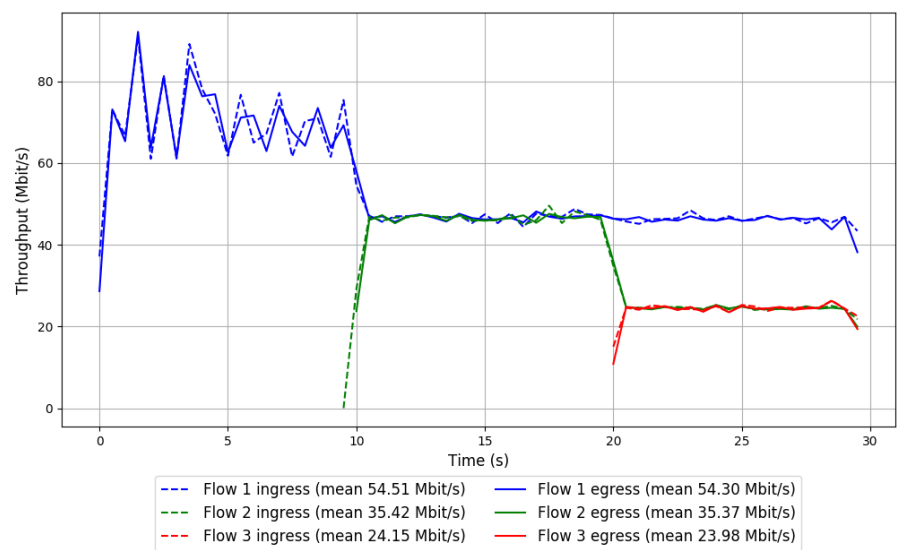
-- Flow 3:

Average throughput: 23.98 Mbit/s

95th percentile per-packet one-way delay: 82.407 ms

Loss rate: 1.75%

Run 1: Report of TaoVA-100x — Data Link



Run 2: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 02:11:41 +0000

End at: Tue, 01 Aug 2017 02:12:11 +0000

Local clock offset: 0.441 ms

Remote clock offset: -1.832 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:00:57 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.47 Mbit/s

95th percentile per-packet one-way delay: 77.584 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 55.82 Mbit/s

95th percentile per-packet one-way delay: 60.212 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 35.72 Mbit/s

95th percentile per-packet one-way delay: 78.314 ms

Loss rate: 0.67%

-- Flow 3:

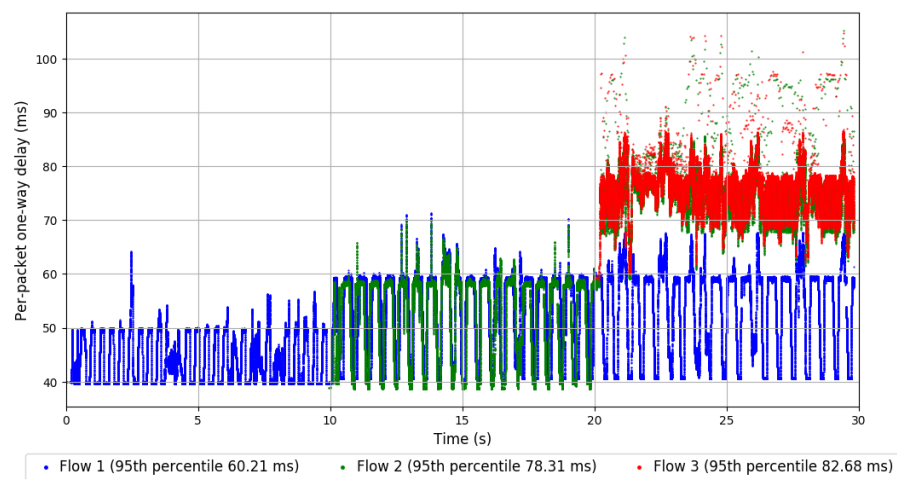
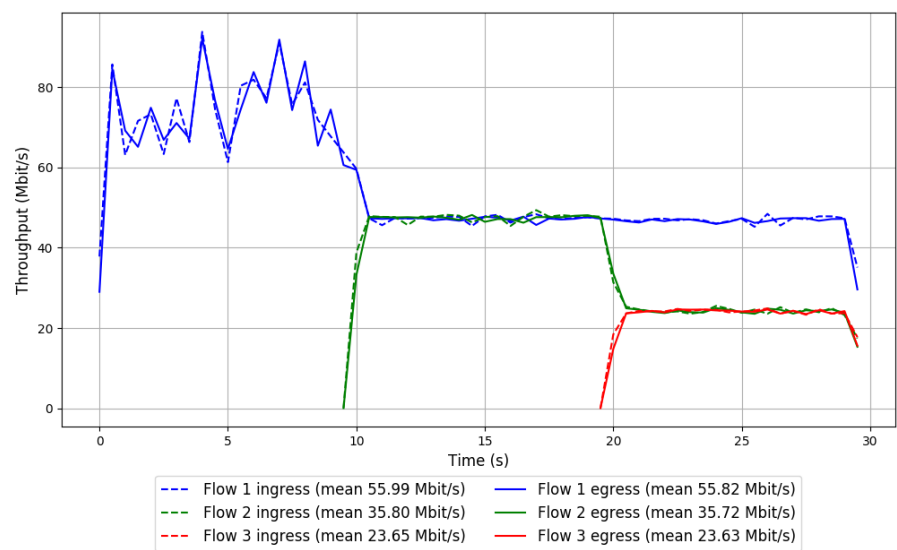
Average throughput: 23.63 Mbit/s

95th percentile per-packet one-way delay: 82.676 ms

Loss rate: 1.25%



Run 2: Report of TaoVA-100x — Data Link



Run 3: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 02:32:43 +0000

End at: Tue, 01 Aug 2017 02:33:13 +0000

Local clock offset: 0.342 ms

Remote clock offset: -1.967 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:01:14 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 70.309 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 50.12 Mbit/s

95th percentile per-packet one-way delay: 67.819 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 39.12 Mbit/s

95th percentile per-packet one-way delay: 70.893 ms

Loss rate: 0.69%

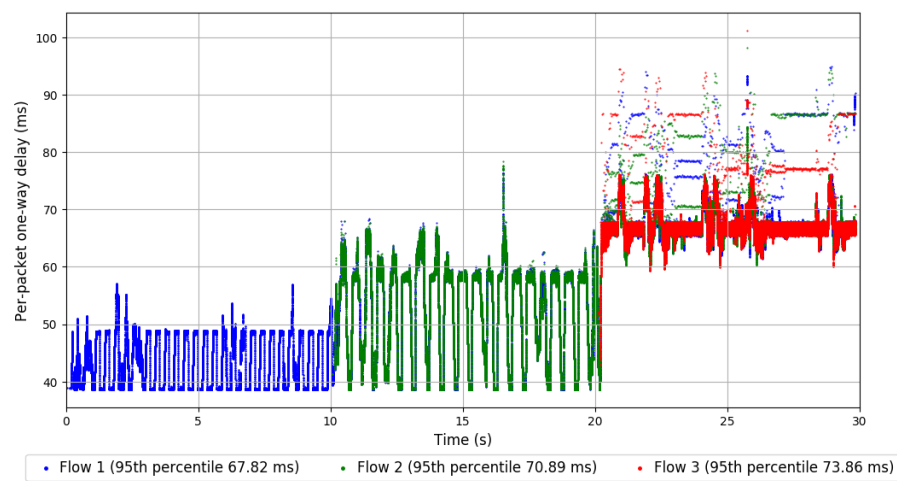
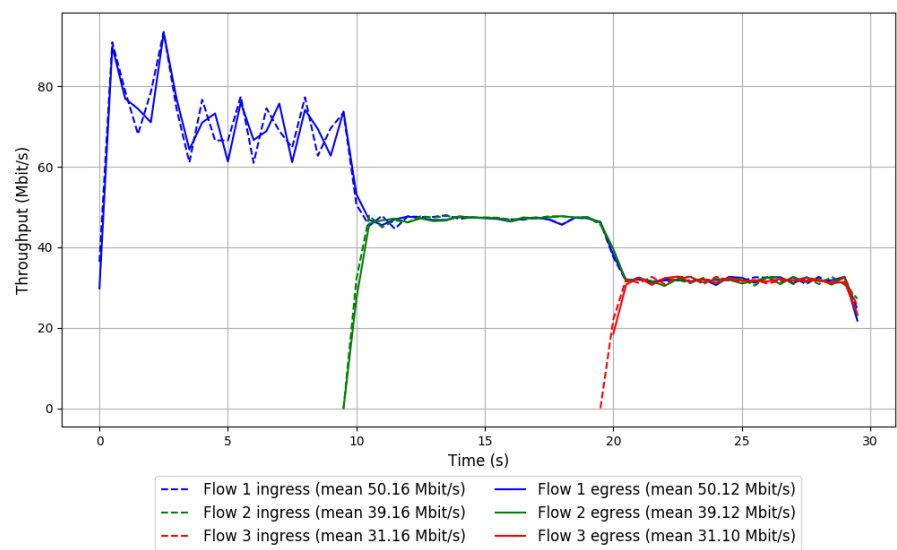
-- Flow 3:

Average throughput: 31.10 Mbit/s

95th percentile per-packet one-way delay: 73.864 ms

Loss rate: 1.38%

Run 3: Report of TaoVA-100x — Data Link



Run 4: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 02:53:45 +0000

End at: Tue, 01 Aug 2017 02:54:15 +0000

Local clock offset: 0.181 ms

Remote clock offset: -1.928 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:01:18 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.30 Mbit/s

95th percentile per-packet one-way delay: 72.046 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 50.88 Mbit/s

95th percentile per-packet one-way delay: 70.157 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 39.23 Mbit/s

95th percentile per-packet one-way delay: 72.397 ms

Loss rate: 0.63%

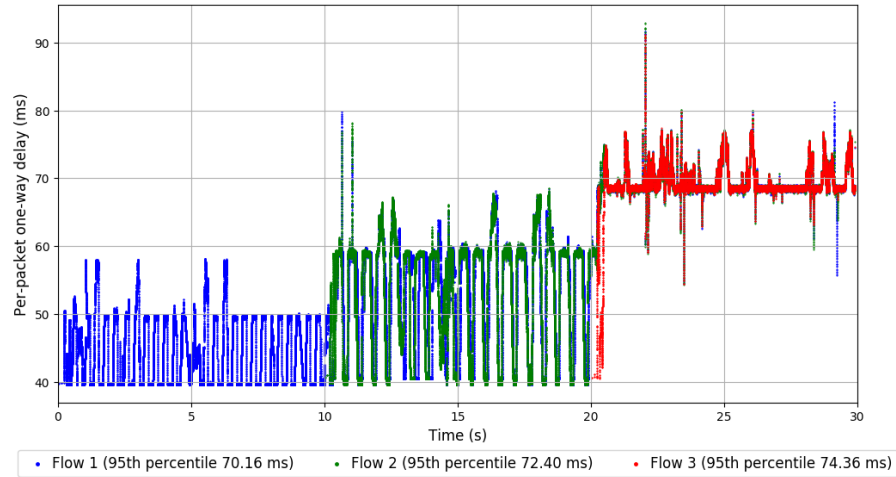
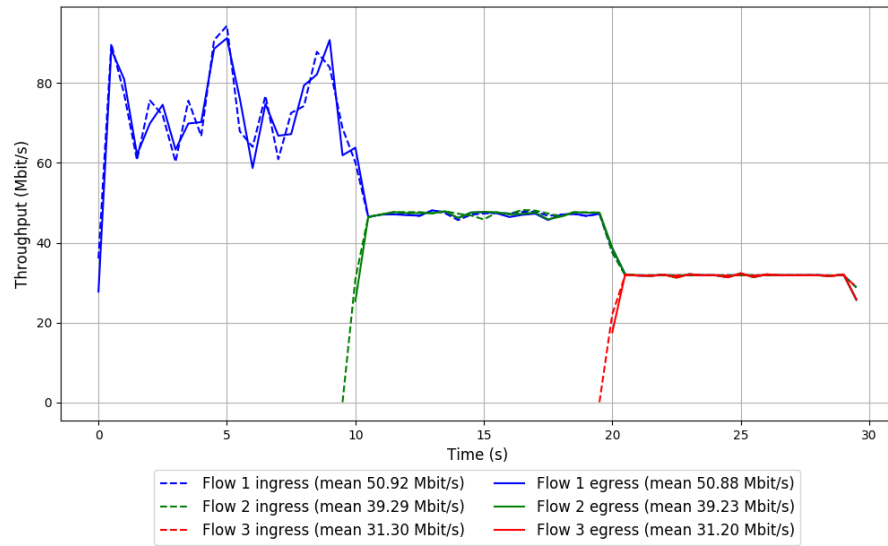
-- Flow 3:

Average throughput: 31.20 Mbit/s

95th percentile per-packet one-way delay: 74.355 ms

Loss rate: 1.31%

# Run 4: Report of TaoVA-100x — Data Link



Run 5: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 03:14:59 +0000

End at: Tue, 01 Aug 2017 03:15:29 +0000

Local clock offset: 0.012 ms

Remote clock offset: 0.073 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:01:36 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.07 Mbit/s

95th percentile per-packet one-way delay: 76.201 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 47.34 Mbit/s

95th percentile per-packet one-way delay: 75.355 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 36.97 Mbit/s

95th percentile per-packet one-way delay: 78.627 ms

Loss rate: 0.83%

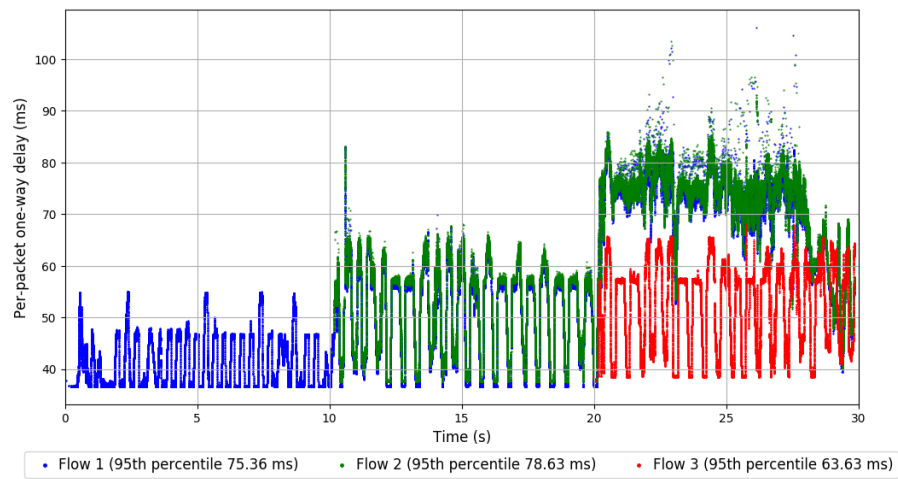
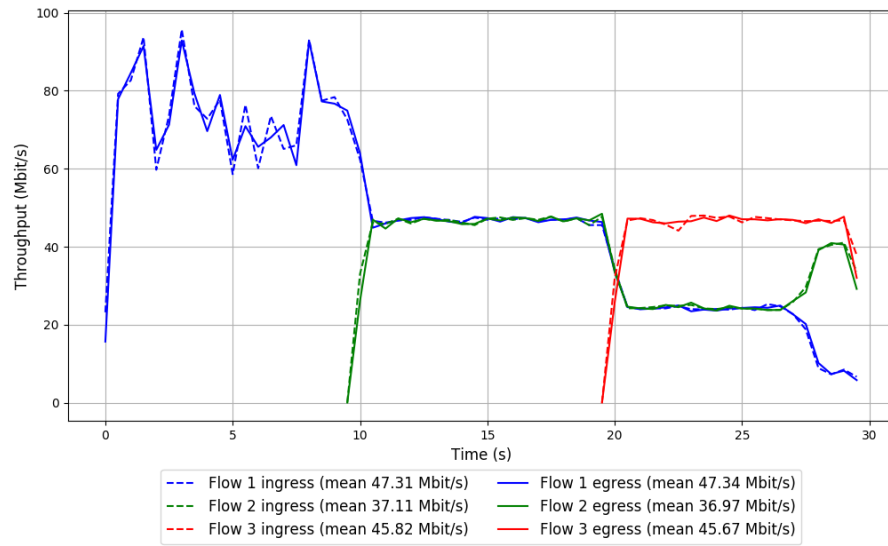
-- Flow 3:

Average throughput: 45.67 Mbit/s

95th percentile per-packet one-way delay: 63.630 ms

Loss rate: 1.32%

## Run 5: Report of TaoVA-100x — Data Link



Run 6: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 03:36:05 +0000

End at: Tue, 01 Aug 2017 03:36:35 +0000

Local clock offset: -0.019 ms

Remote clock offset: -2.345 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:01:39 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.83 Mbit/s

95th percentile per-packet one-way delay: 78.198 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 55.38 Mbit/s

95th percentile per-packet one-way delay: 63.209 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 35.53 Mbit/s

95th percentile per-packet one-way delay: 79.227 ms

Loss rate: 0.70%

-- Flow 3:

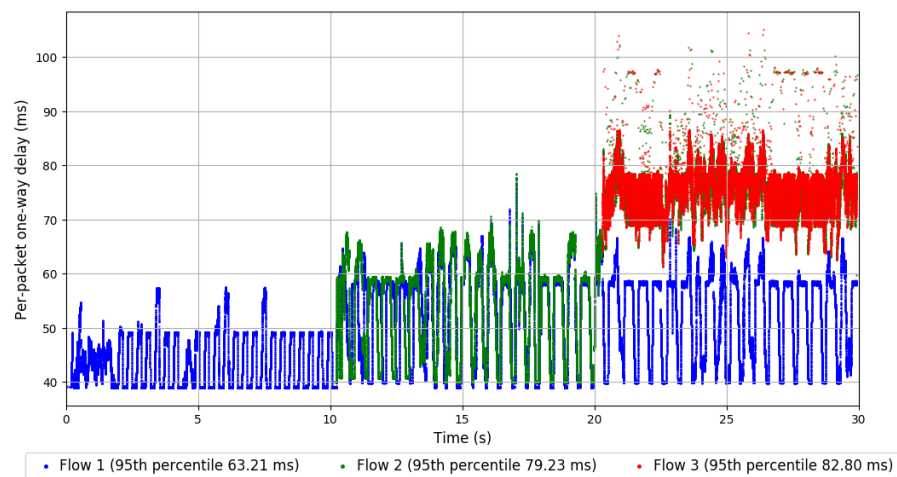
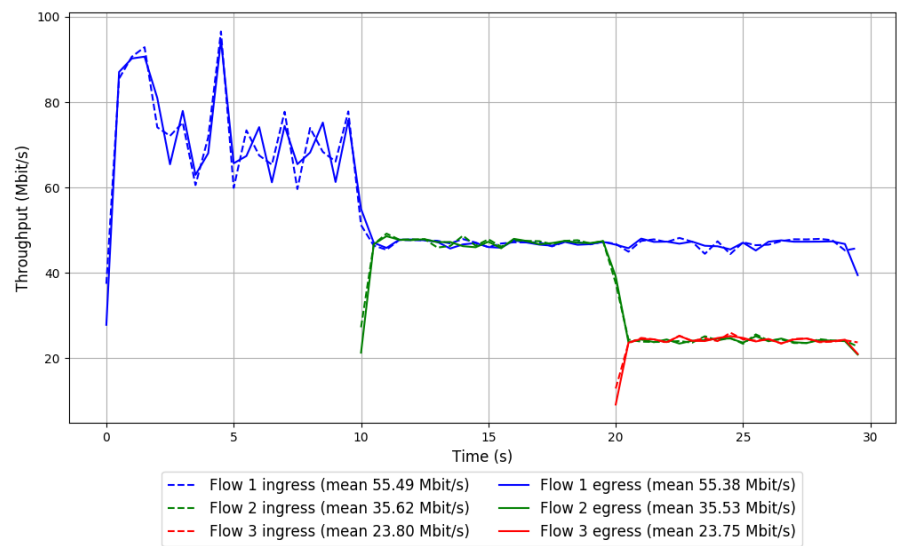
Average throughput: 23.75 Mbit/s

95th percentile per-packet one-way delay: 82.803 ms

Loss rate: 1.43%



Run 6: Report of TaoVA-100x — Data Link



Run 7: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 03:57:10 +0000

End at: Tue, 01 Aug 2017 03:57:40 +0000

Local clock offset: -0.075 ms

Remote clock offset: -0.572 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:01:57 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.71 Mbit/s

95th percentile per-packet one-way delay: 66.857 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 51.27 Mbit/s

95th percentile per-packet one-way delay: 66.723 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 39.22 Mbit/s

95th percentile per-packet one-way delay: 66.769 ms

Loss rate: 0.51%

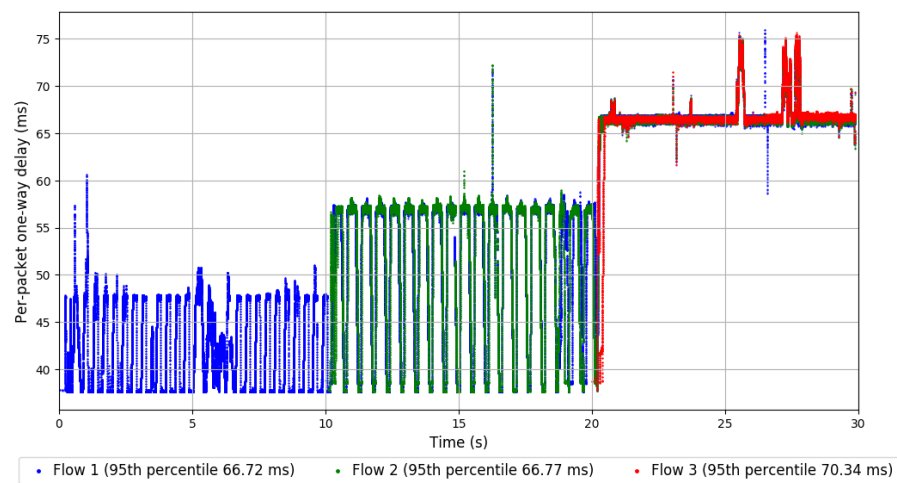
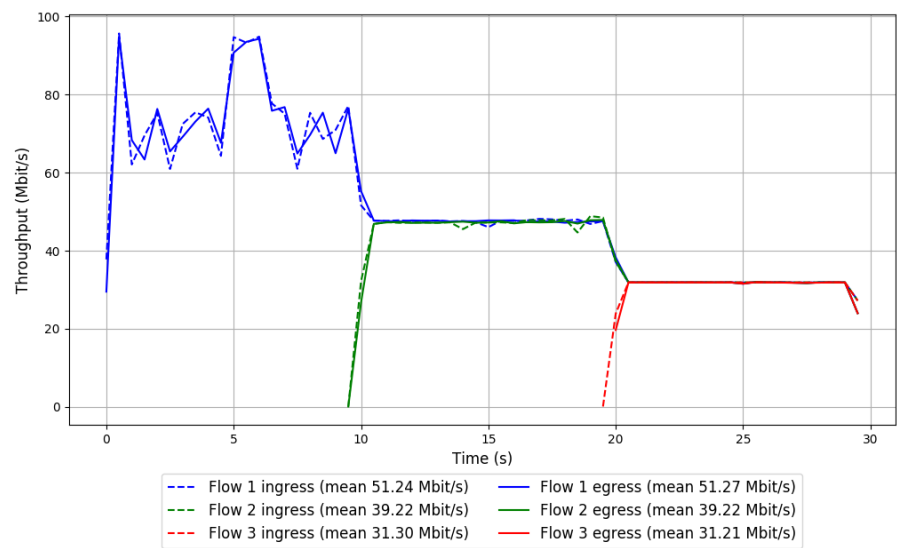
-- Flow 3:

Average throughput: 31.21 Mbit/s

95th percentile per-packet one-way delay: 70.344 ms

Loss rate: 1.27%

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 04:18:27 +0000

End at: Tue, 01 Aug 2017 04:18:57 +0000

Local clock offset: 0.054 ms

Remote clock offset: -0.297 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:01 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.59 Mbit/s

95th percentile per-packet one-way delay: 75.528 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 47.84 Mbit/s

95th percentile per-packet one-way delay: 75.423 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 35.42 Mbit/s

95th percentile per-packet one-way delay: 76.373 ms

Loss rate: 0.66%

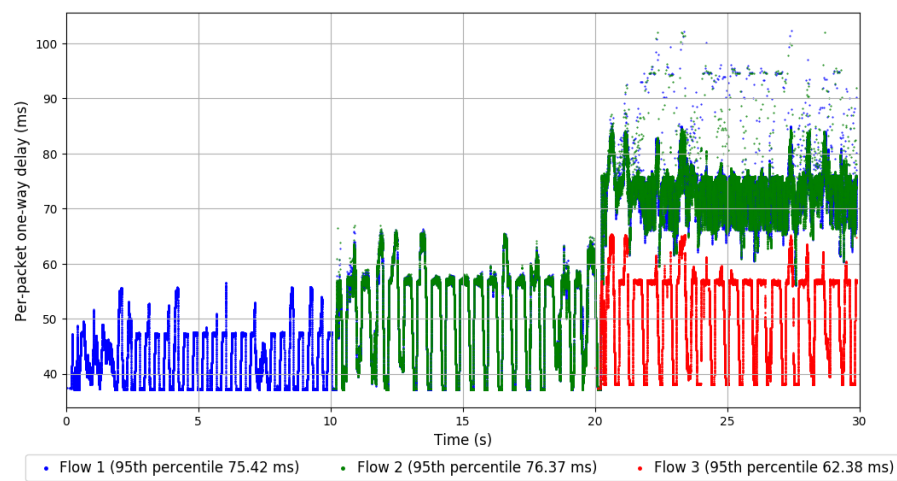
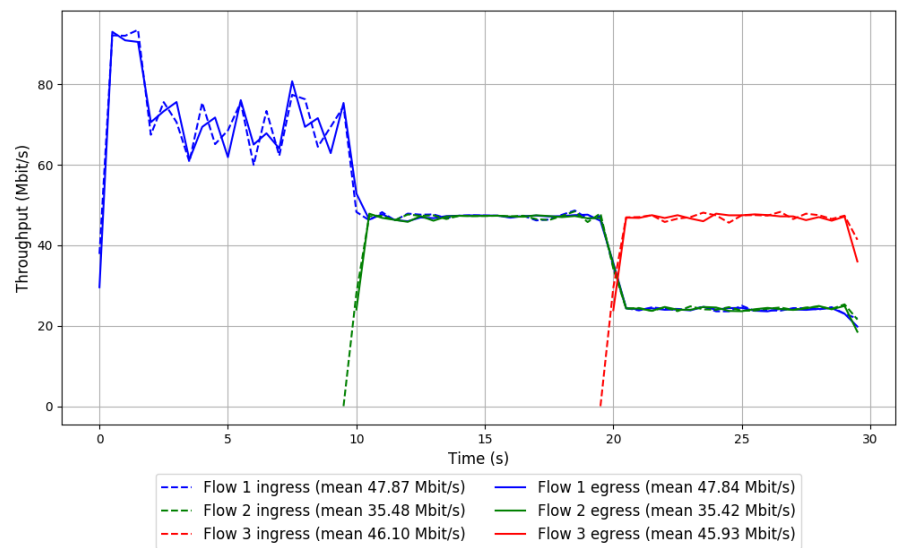
-- Flow 3:

Average throughput: 45.93 Mbit/s

95th percentile per-packet one-way delay: 62.375 ms

Loss rate: 1.37%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 04:39:49 +0000

End at: Tue, 01 Aug 2017 04:40:19 +0000

Local clock offset: 0.104 ms

Remote clock offset: -0.827 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:19 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.88 Mbit/s

95th percentile per-packet one-way delay: 75.805 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 47.63 Mbit/s

95th percentile per-packet one-way delay: 75.535 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 46.29 Mbit/s

95th percentile per-packet one-way delay: 61.129 ms

Loss rate: 0.99%

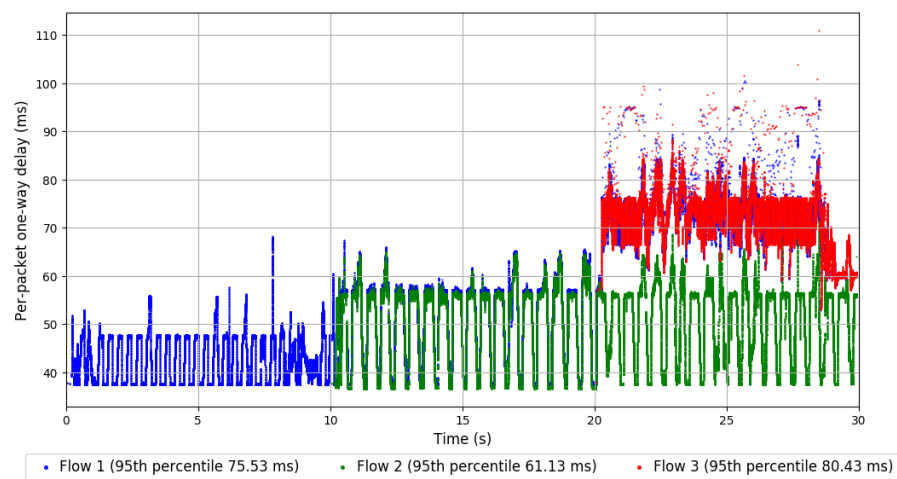
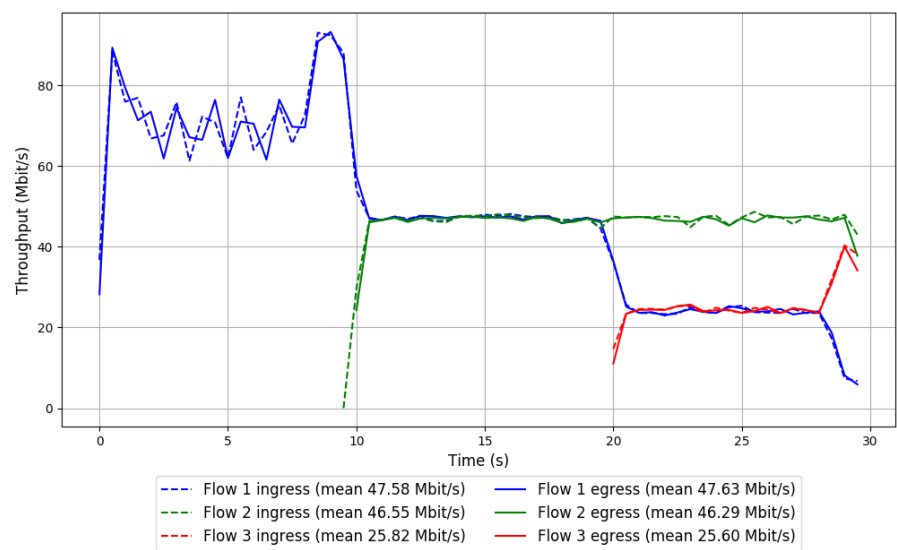
-- Flow 3:

Average throughput: 25.60 Mbit/s

95th percentile per-packet one-way delay: 80.426 ms

Loss rate: 1.83%

Run 9: Report of TaoVA-100x — Data Link



Run 10: Statistics of TaoVA-100x

Start at: Tue, 01 Aug 2017 05:01:11 +0000

End at: Tue, 01 Aug 2017 05:01:41 +0000

Local clock offset: 0.111 ms

Remote clock offset: -0.533 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:23 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.61 Mbit/s

95th percentile per-packet one-way delay: 75.425 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 55.16 Mbit/s

95th percentile per-packet one-way delay: 56.845 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 35.44 Mbit/s

95th percentile per-packet one-way delay: 75.708 ms

Loss rate: 0.45%

-- Flow 3:

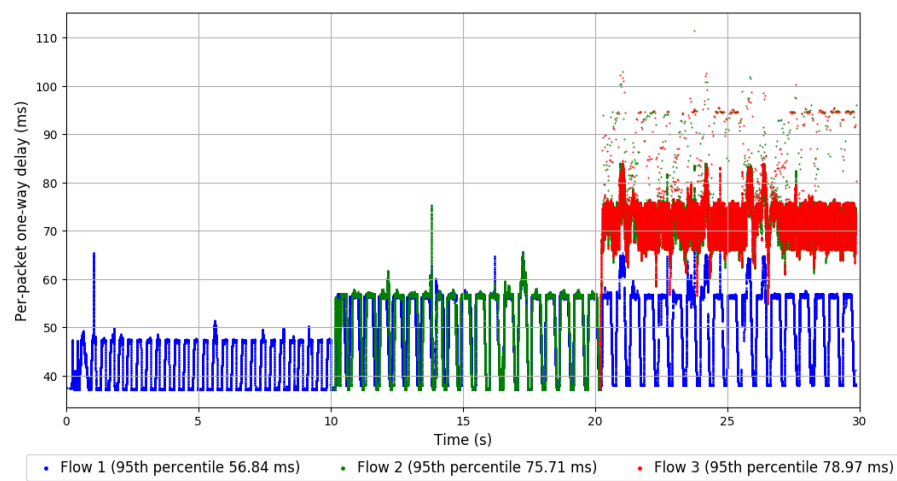
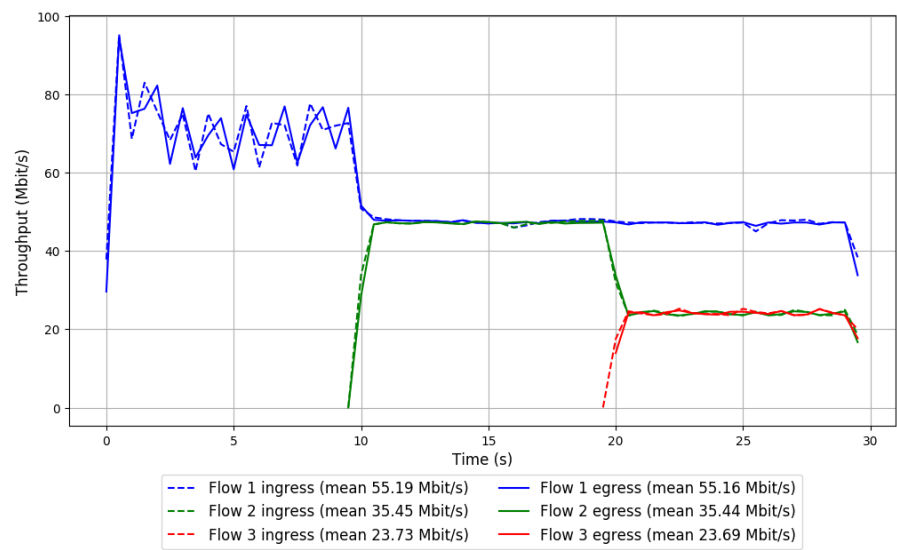
Average throughput: 23.69 Mbit/s

95th percentile per-packet one-way delay: 78.973 ms

Loss rate: 1.36%



Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 01:43:11 +0000

End at: Tue, 01 Aug 2017 01:43:41 +0000

Local clock offset: 0.703 ms

Remote clock offset: 1.057 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:23 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 14.78 Mbit/s

95th percentile per-packet one-way delay: 47.210 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 45.724 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 49.069 ms

Loss rate: 0.89%

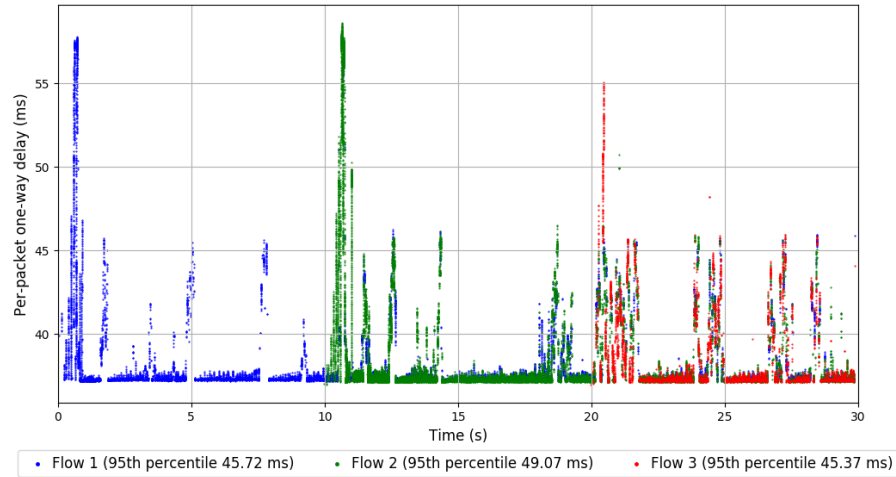
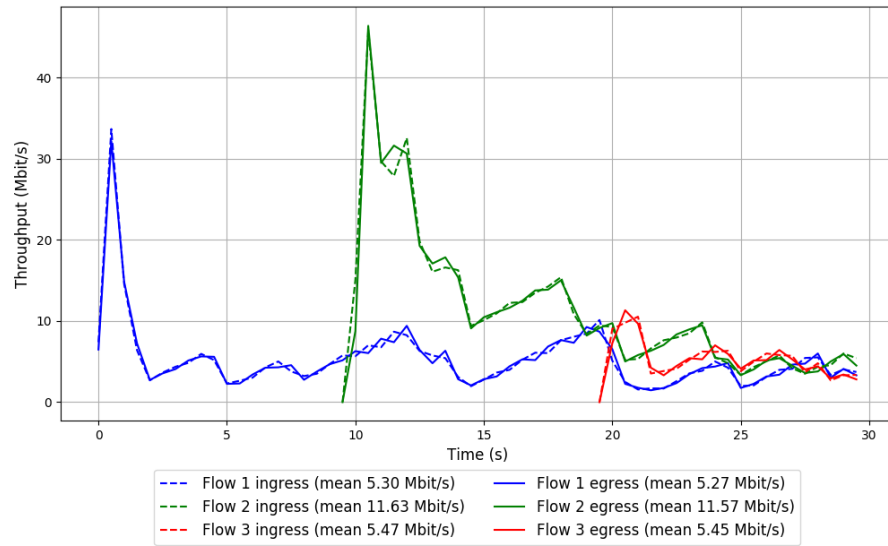
-- Flow 3:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 45.367 ms

Loss rate: 1.21%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 02:04:45 +0000

End at: Tue, 01 Aug 2017 02:05:15 +0000

Local clock offset: 0.491 ms

Remote clock offset: 0.219 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 73.71 Mbit/s

95th percentile per-packet one-way delay: 71.841 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 37.57 Mbit/s

95th percentile per-packet one-way delay: 69.424 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 38.32 Mbit/s

95th percentile per-packet one-way delay: 75.130 ms

Loss rate: 0.39%

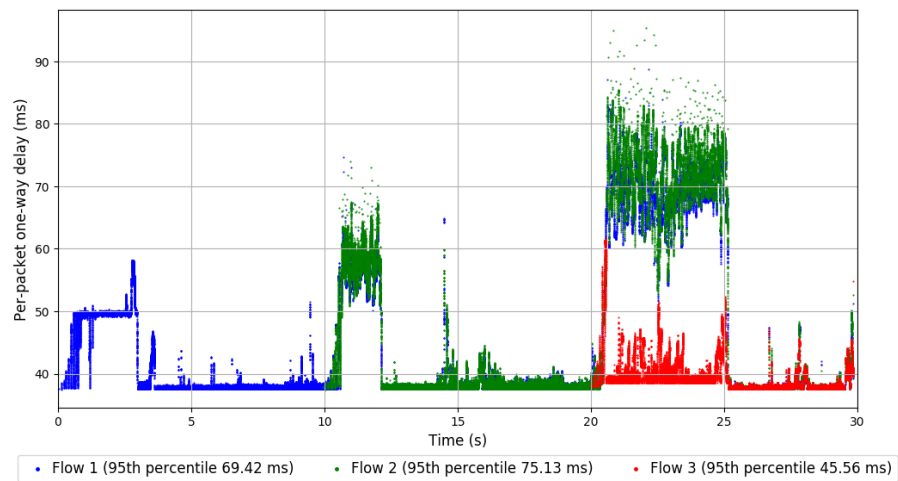
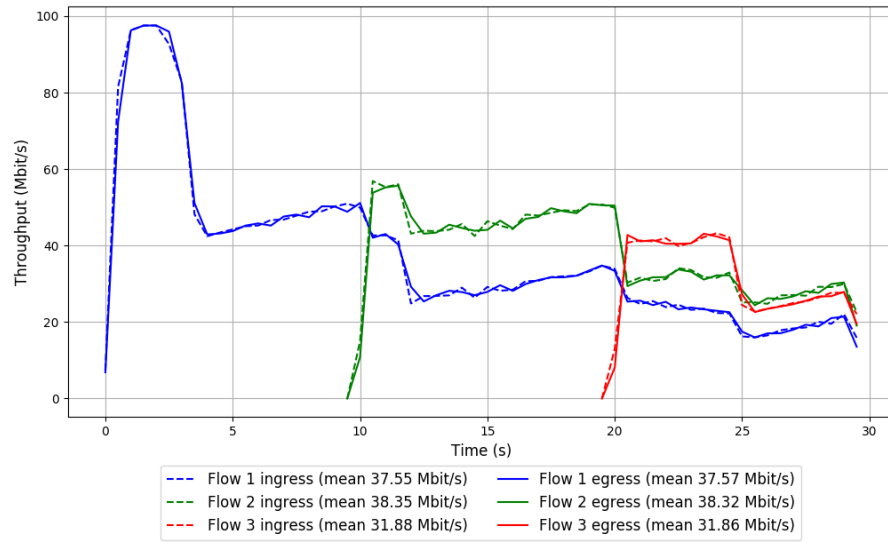
-- Flow 3:

Average throughput: 31.86 Mbit/s

95th percentile per-packet one-way delay: 45.561 ms

Loss rate: 0.79%

## Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 02:25:47 +0000

End at: Tue, 01 Aug 2017 02:26:17 +0000

Local clock offset: 0.356 ms

Remote clock offset: 0.089 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.97 Mbit/s

95th percentile per-packet one-way delay: 52.972 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 40.24 Mbit/s

95th percentile per-packet one-way delay: 51.648 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 43.245 ms

Loss rate: 0.56%

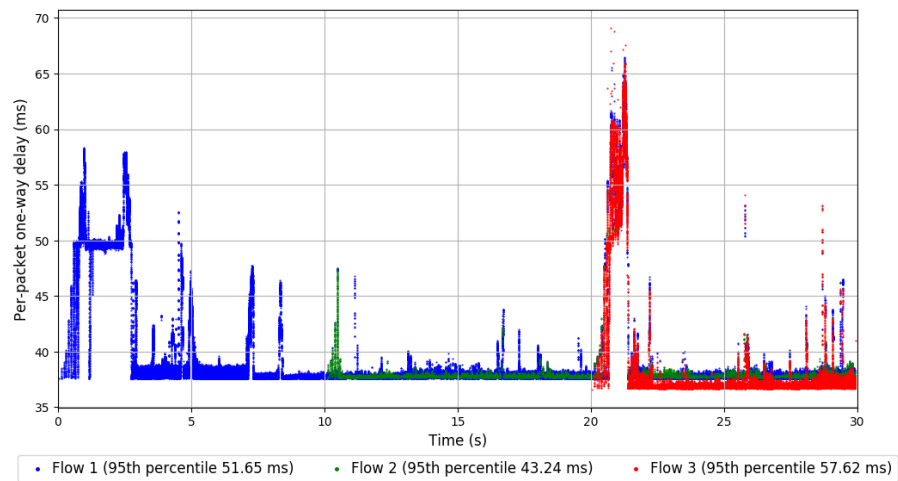
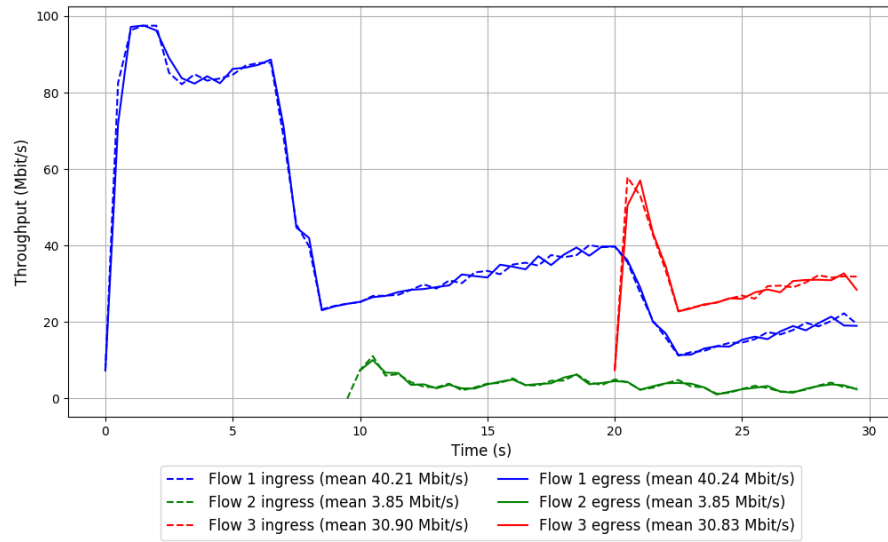
-- Flow 3:

Average throughput: 30.83 Mbit/s

95th percentile per-packet one-way delay: 57.624 ms

Loss rate: 0.95%

### Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 02:46:46 +0000

End at: Tue, 01 Aug 2017 02:47:16 +0000

Local clock offset: 0.187 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:37 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 48.81 Mbit/s

95th percentile per-packet one-way delay: 52.495 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 27.09 Mbit/s

95th percentile per-packet one-way delay: 53.472 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 25.53 Mbit/s

95th percentile per-packet one-way delay: 46.219 ms

Loss rate: 0.61%

-- Flow 3:

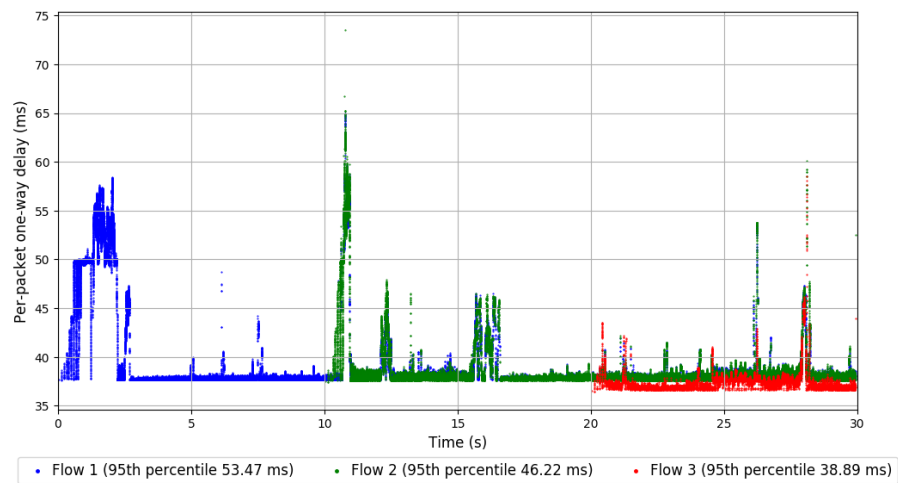
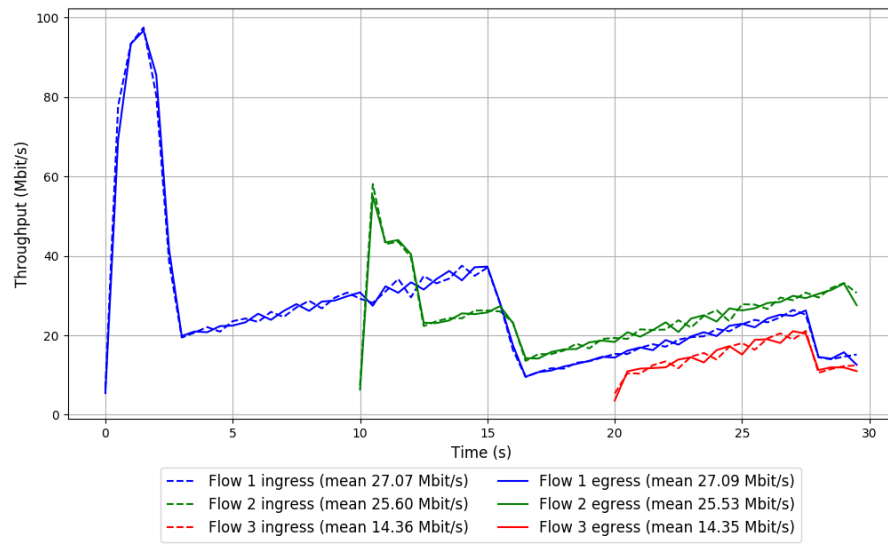
Average throughput: 14.35 Mbit/s

95th percentile per-packet one-way delay: 38.887 ms

Loss rate: 0.85%



#### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 03:08:03 +0000

End at: Tue, 01 Aug 2017 03:08:33 +0000

Local clock offset: 0.141 ms

Remote clock offset: -1.878 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:41 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.30 Mbit/s

95th percentile per-packet one-way delay: 55.417 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 33.39 Mbit/s

95th percentile per-packet one-way delay: 52.682 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 54.978 ms

Loss rate: 0.29%

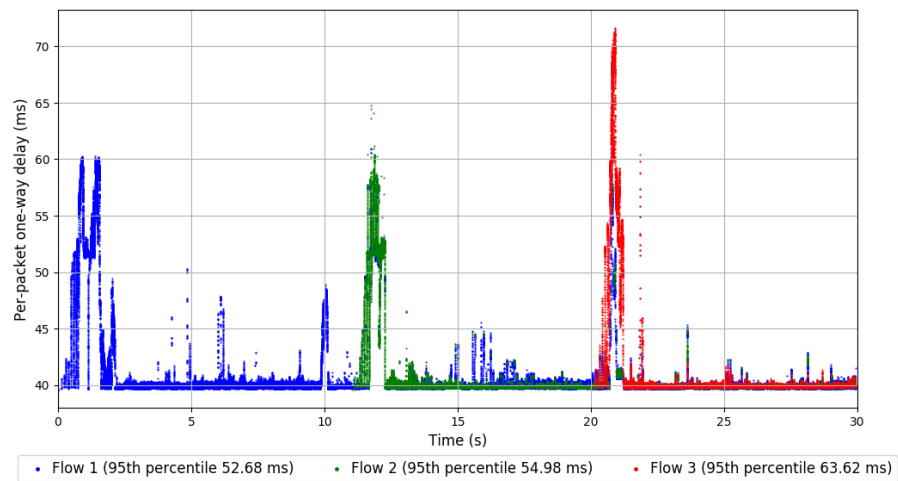
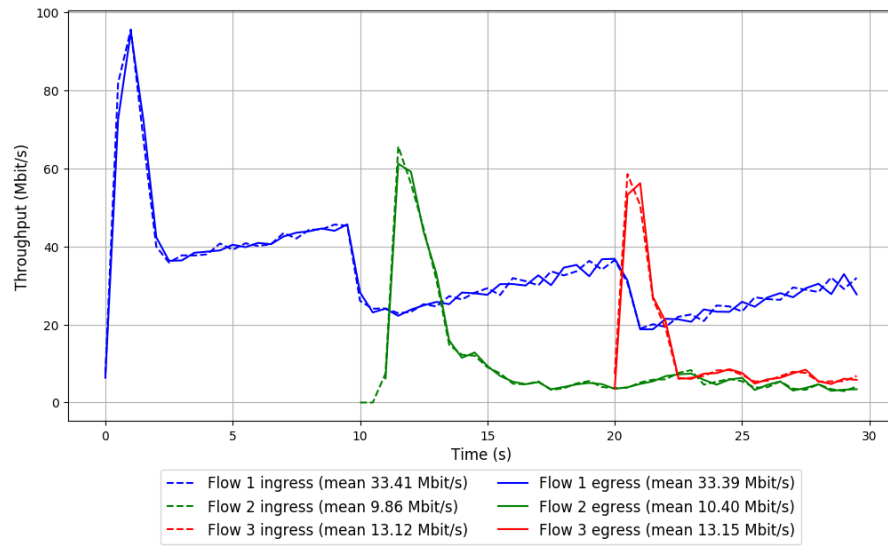
-- Flow 3:

Average throughput: 13.15 Mbit/s

95th percentile per-packet one-way delay: 63.622 ms

Loss rate: 0.64%

### Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 03:29:11 +0000

End at: Tue, 01 Aug 2017 03:29:41 +0000

Local clock offset: -0.089 ms

Remote clock offset: 0.365 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:42 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 31.64 Mbit/s

95th percentile per-packet one-way delay: 51.284 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 15.81 Mbit/s

95th percentile per-packet one-way delay: 49.024 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 19.90 Mbit/s

95th percentile per-packet one-way delay: 53.694 ms

Loss rate: 0.58%

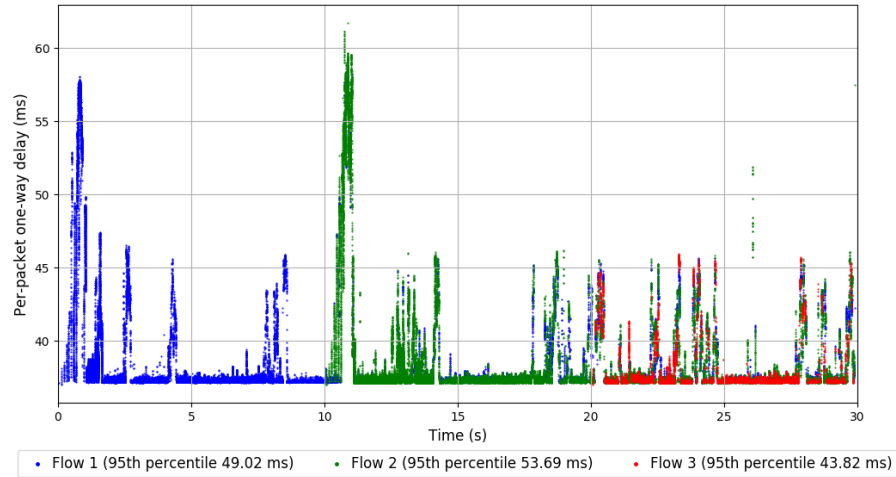
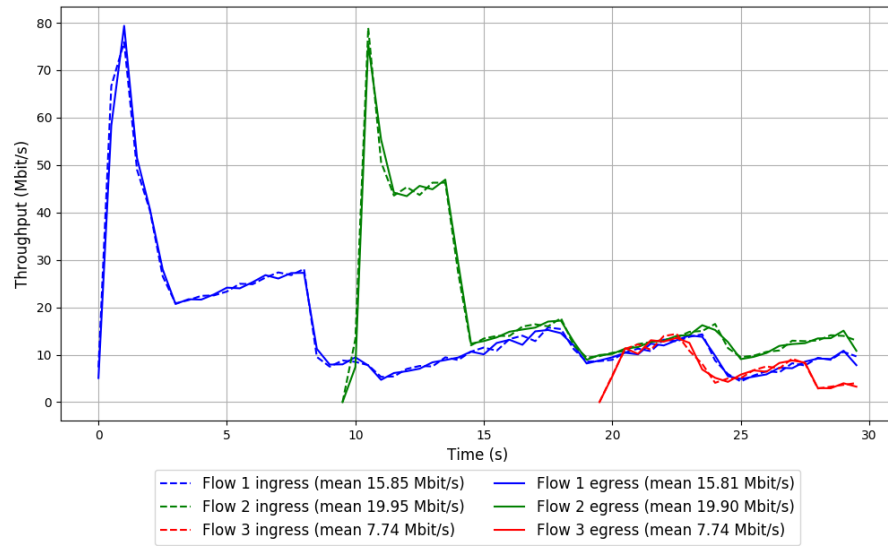
-- Flow 3:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 43.824 ms

Loss rate: 0.87%

## Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 03:50:12 +0000

End at: Tue, 01 Aug 2017 03:50:42 +0000

Local clock offset: -0.115 ms

Remote clock offset: -2.364 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:48 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 52.03 Mbit/s

95th percentile per-packet one-way delay: 56.331 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 26.86 Mbit/s

95th percentile per-packet one-way delay: 51.739 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 20.10 Mbit/s

95th percentile per-packet one-way delay: 57.319 ms

Loss rate: 0.51%

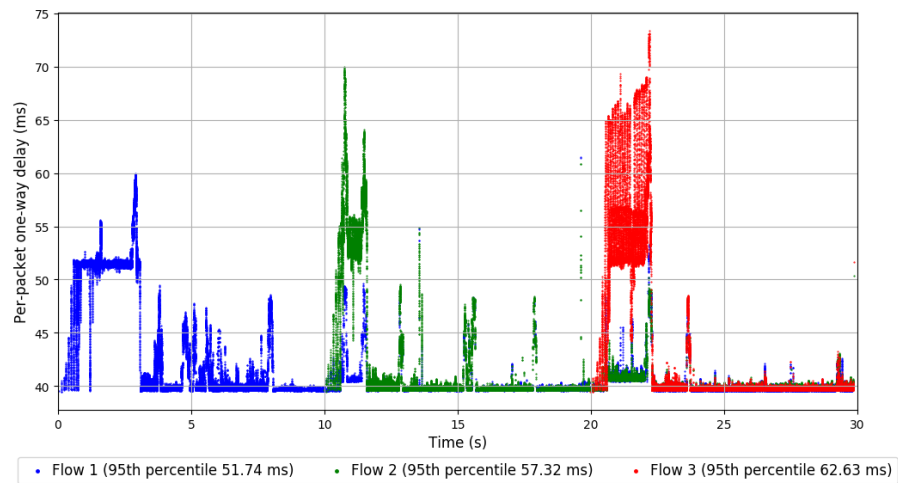
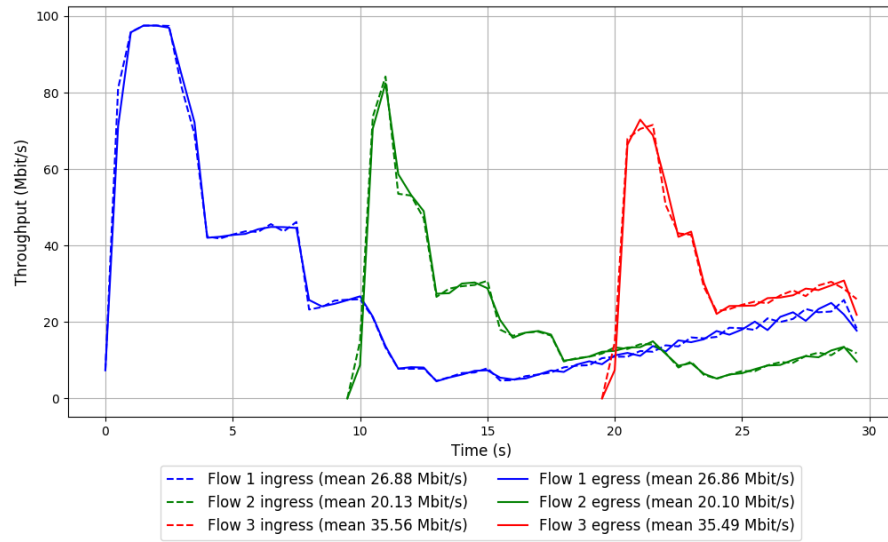
-- Flow 3:

Average throughput: 35.49 Mbit/s

95th percentile per-packet one-way delay: 62.626 ms

Loss rate: 0.90%

# Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 04:11:30 +0000

End at: Tue, 01 Aug 2017 04:12:00 +0000

Local clock offset: 0.023 ms

Remote clock offset: -2.697 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:50 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 54.18 Mbit/s

95th percentile per-packet one-way delay: 63.240 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 51.650 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 23.74 Mbit/s

95th percentile per-packet one-way delay: 60.969 ms

Loss rate: 0.17%

-- Flow 3:

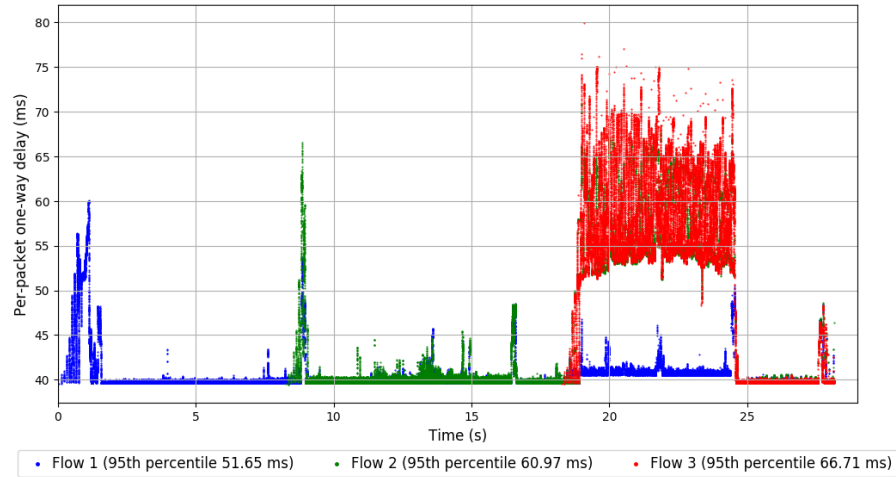
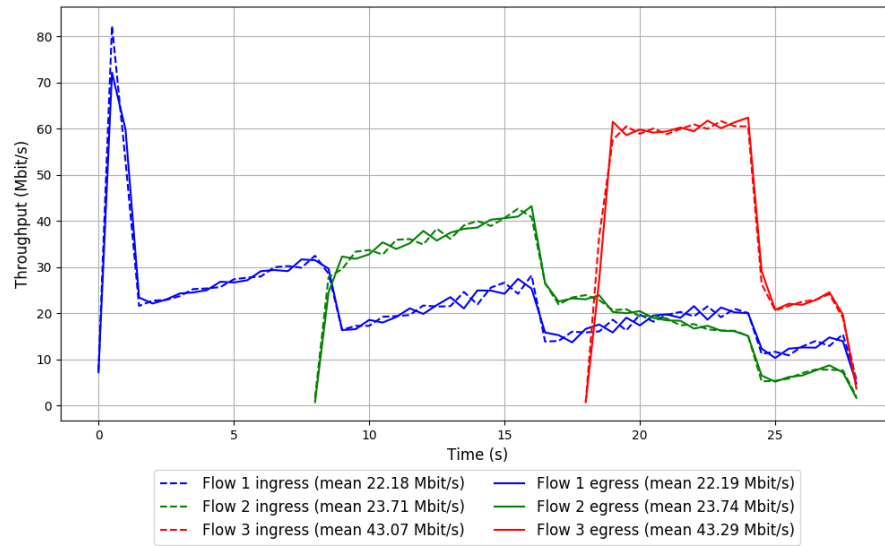
Average throughput: 43.29 Mbit/s

95th percentile per-packet one-way delay: 66.710 ms

Loss rate: 0.32%



# Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 04:32:43 +0000

End at: Tue, 01 Aug 2017 04:33:13 +0000

Local clock offset: 0.069 ms

Remote clock offset: -0.729 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:53 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 31.26 Mbit/s

95th percentile per-packet one-way delay: 46.140 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 19.18 Mbit/s

95th percentile per-packet one-way delay: 50.179 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 13.79 Mbit/s

95th percentile per-packet one-way delay: 45.014 ms

Loss rate: 0.47%

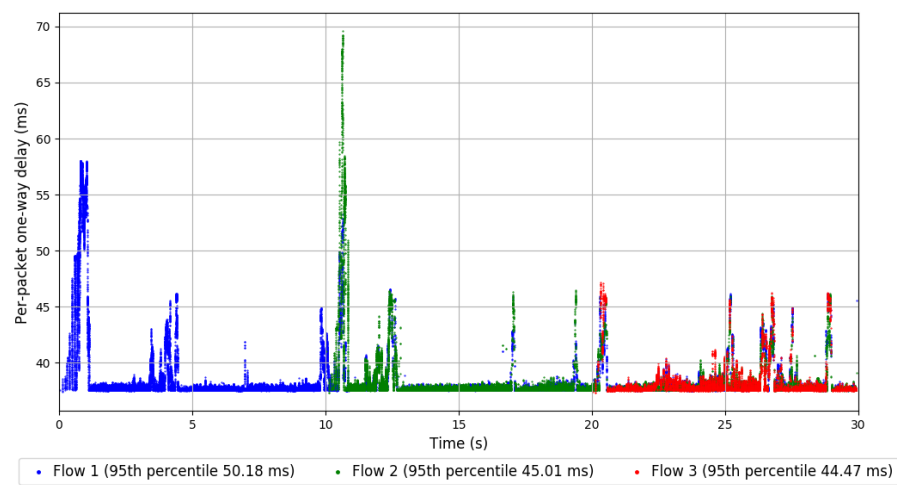
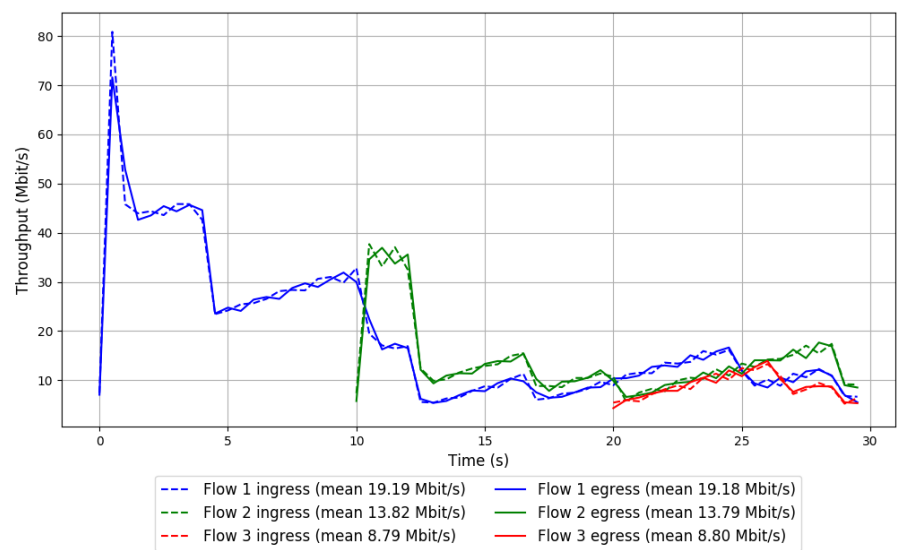
-- Flow 3:

Average throughput: 8.80 Mbit/s

95th percentile per-packet one-way delay: 44.472 ms

Loss rate: 0.82%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: Tue, 01 Aug 2017 04:54:10 +0000

End at: Tue, 01 Aug 2017 04:54:40 +0000

Local clock offset: 0.195 ms

Remote clock offset: -2.906 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:02:56 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.76 Mbit/s

95th percentile per-packet one-way delay: 55.218 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 14.59 Mbit/s

95th percentile per-packet one-way delay: 51.634 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 26.46 Mbit/s

95th percentile per-packet one-way delay: 55.406 ms

Loss rate: 0.30%

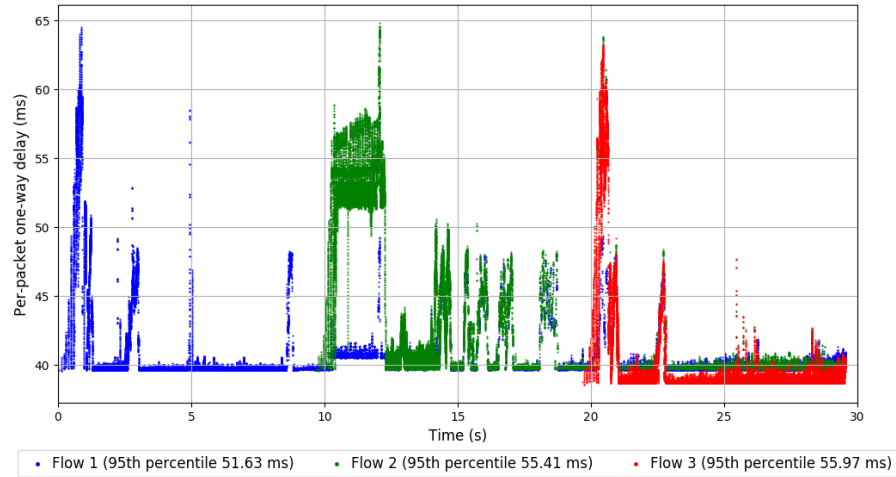
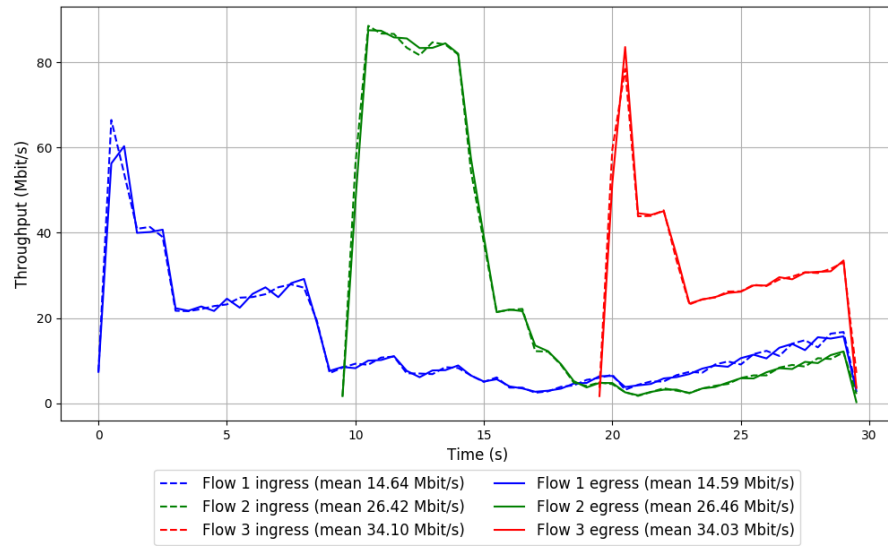
-- Flow 3:

Average throughput: 34.03 Mbit/s

95th percentile per-packet one-way delay: 55.974 ms

Loss rate: 0.95%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: Tue, 01 Aug 2017 01:57:22 +0000

End at: Tue, 01 Aug 2017 01:57:52 +0000

Local clock offset: 0.664 ms

Remote clock offset: 0.718 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:03 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.92 Mbit/s

95th percentile per-packet one-way delay: 85.532 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 51.48 Mbit/s

95th percentile per-packet one-way delay: 84.176 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 30.47 Mbit/s

95th percentile per-packet one-way delay: 88.945 ms

Loss rate: 0.85%

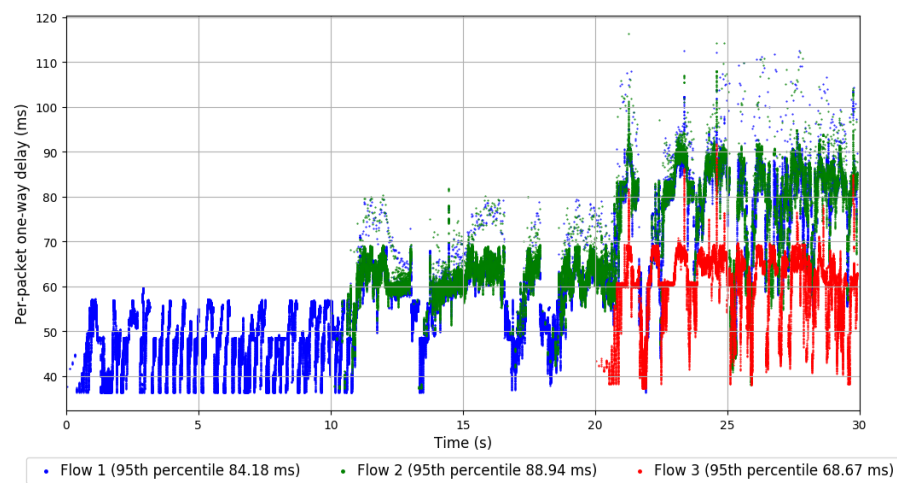
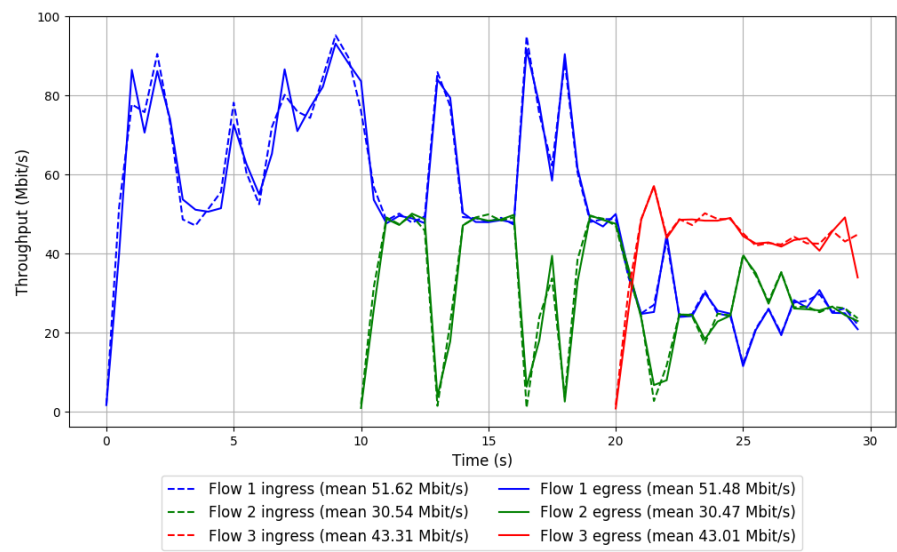
-- Flow 3:

Average throughput: 43.01 Mbit/s

95th percentile per-packet one-way delay: 68.671 ms

Loss rate: 1.63%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: Tue, 01 Aug 2017 02:18:43 +0000

End at: Tue, 01 Aug 2017 02:19:13 +0000

Local clock offset: 0.498 ms

Remote clock offset: -1.923 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:08 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 74.660 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 73.666 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 36.99 Mbit/s

95th percentile per-packet one-way delay: 74.714 ms

Loss rate: 0.08%

-- Flow 3:

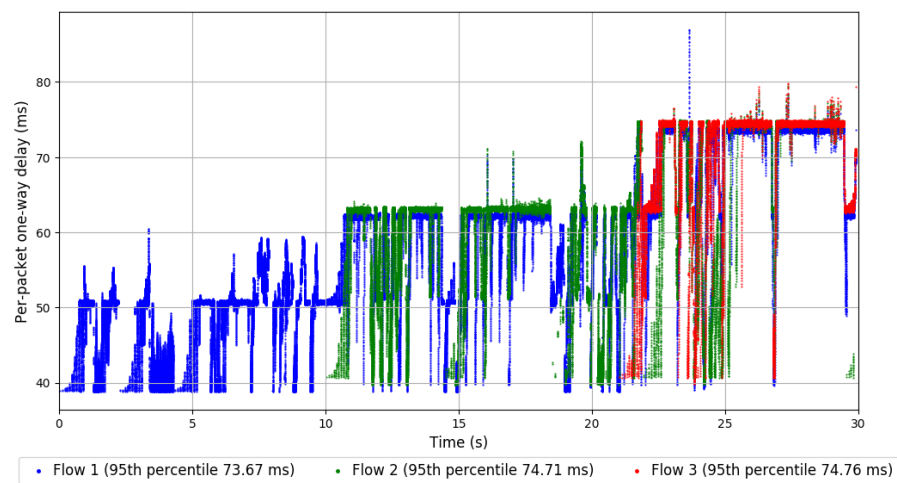
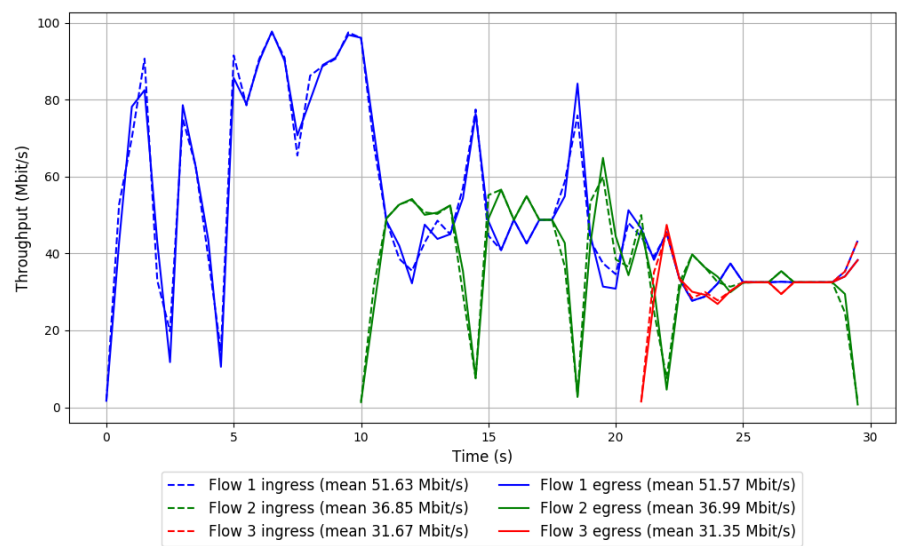
Average throughput: 31.35 Mbit/s

95th percentile per-packet one-way delay: 74.764 ms

Loss rate: 1.98%



Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: Tue, 01 Aug 2017 02:39:43 +0000

End at: Tue, 01 Aug 2017 02:40:13 +0000

Local clock offset: 0.364 ms

Remote clock offset: -2.035 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:15 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.20 Mbit/s

95th percentile per-packet one-way delay: 74.752 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 53.82 Mbit/s

95th percentile per-packet one-way delay: 73.638 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 37.88 Mbit/s

95th percentile per-packet one-way delay: 75.021 ms

Loss rate: 0.21%

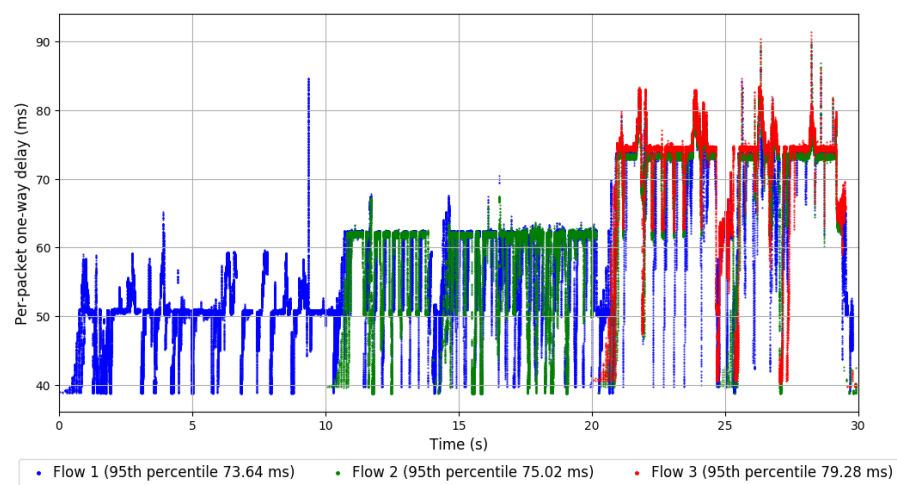
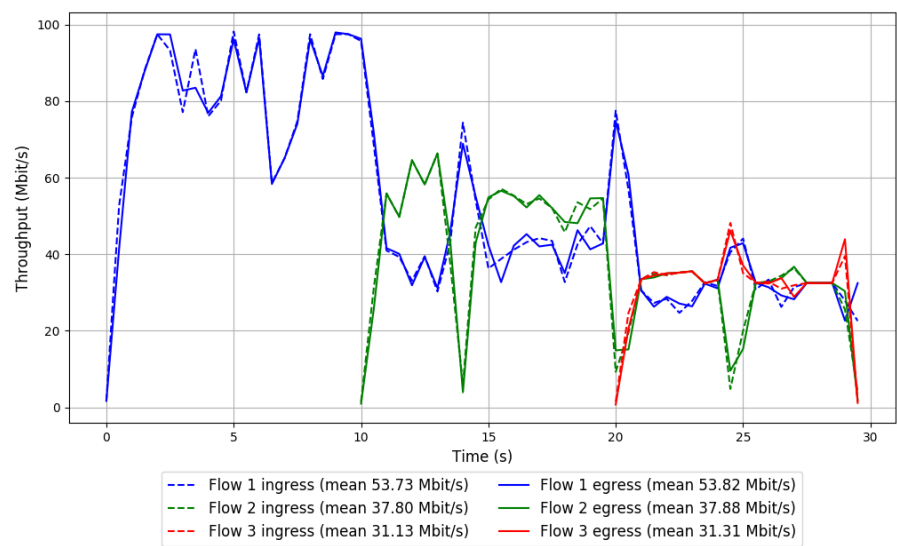
-- Flow 3:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 79.279 ms

Loss rate: 0.32%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: Tue, 01 Aug 2017 03:00:56 +0000

End at: Tue, 01 Aug 2017 03:01:26 +0000

Local clock offset: 0.211 ms

Remote clock offset: 0.096 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:21 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.03 Mbit/s

95th percentile per-packet one-way delay: 72.612 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 54.24 Mbit/s

95th percentile per-packet one-way delay: 72.465 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 41.05 Mbit/s

95th percentile per-packet one-way delay: 71.685 ms

Loss rate: 0.58%

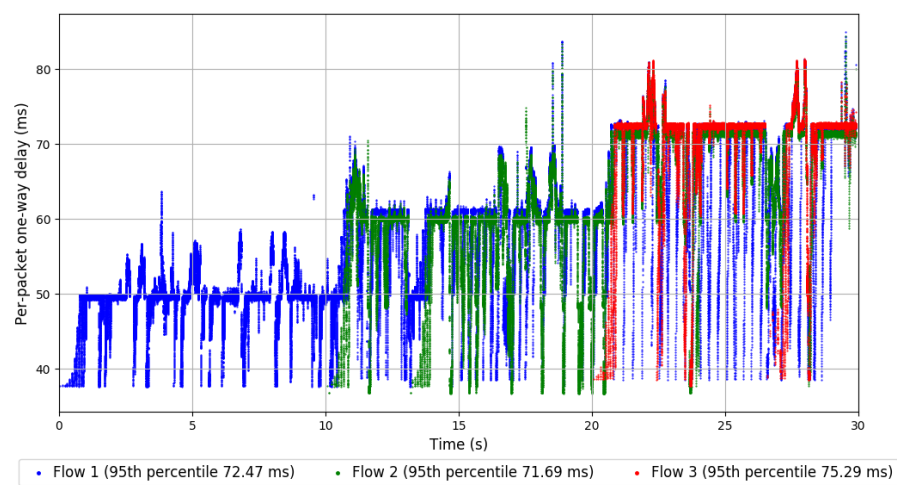
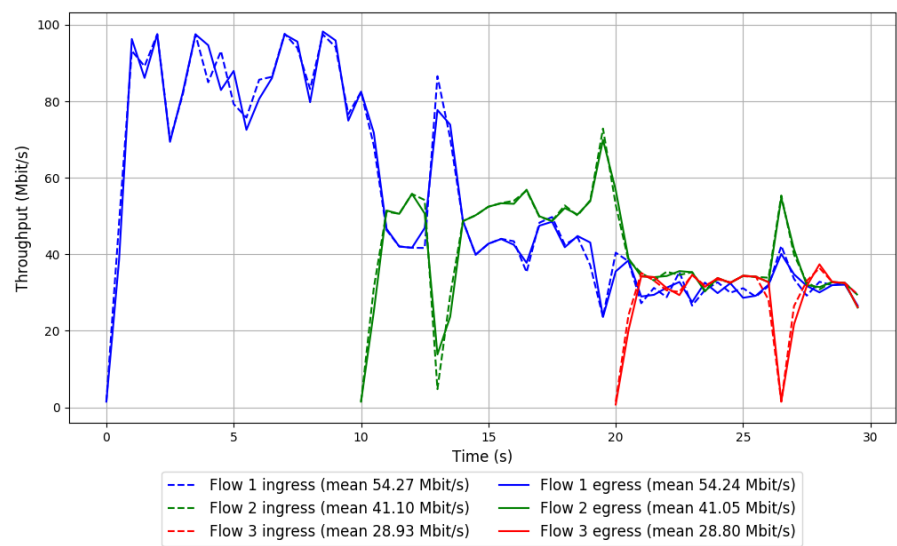
-- Flow 3:

Average throughput: 28.80 Mbit/s

95th percentile per-packet one-way delay: 75.293 ms

Loss rate: 1.48%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: Tue, 01 Aug 2017 03:22:00 +0000

End at: Tue, 01 Aug 2017 03:22:30 +0000

Local clock offset: 0.048 ms

Remote clock offset: -0.06 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:27 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.92 Mbit/s

95th percentile per-packet one-way delay: 84.686 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 51.09 Mbit/s

95th percentile per-packet one-way delay: 83.981 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 46.18 Mbit/s

95th percentile per-packet one-way delay: 67.674 ms

Loss rate: 0.91%

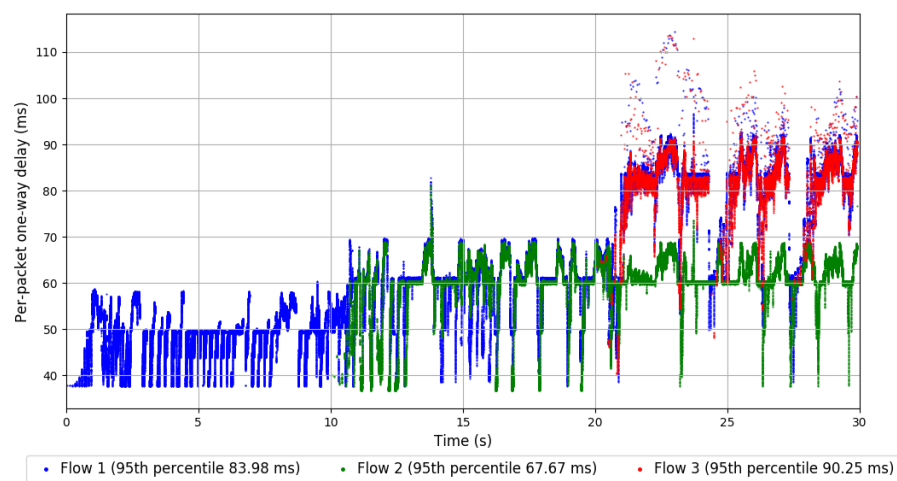
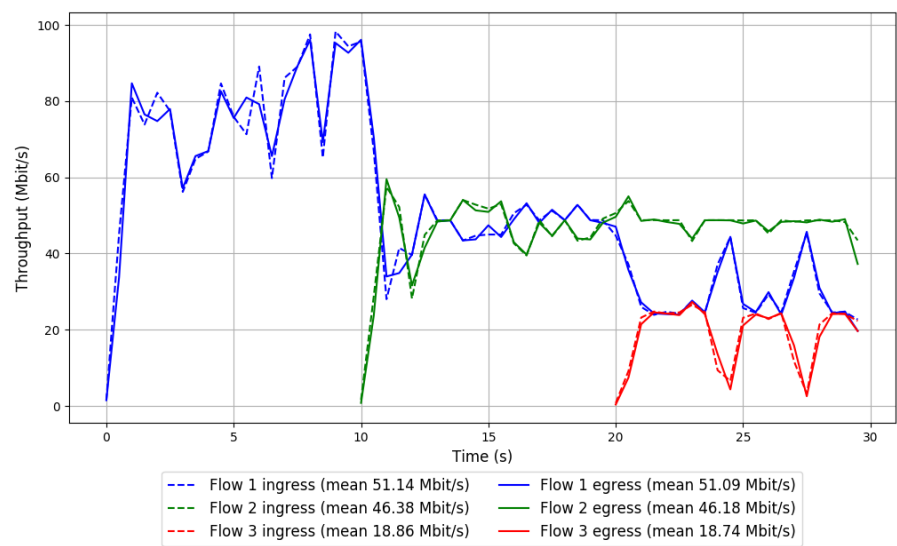
-- Flow 3:

Average throughput: 18.74 Mbit/s

95th percentile per-packet one-way delay: 90.254 ms

Loss rate: 1.97%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: Tue, 01 Aug 2017 03:43:08 +0000

End at: Tue, 01 Aug 2017 03:43:38 +0000

Local clock offset: -0.139 ms

Remote clock offset: 0.09 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:33 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.18 Mbit/s

95th percentile per-packet one-way delay: 82.557 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 50.61 Mbit/s

95th percentile per-packet one-way delay: 81.992 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 46.82 Mbit/s

95th percentile per-packet one-way delay: 65.472 ms

Loss rate: 0.67%

-- Flow 3:

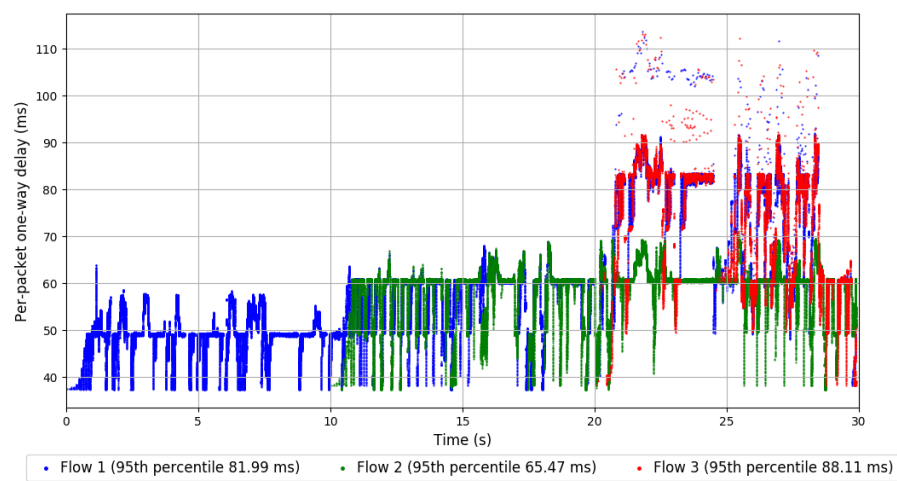
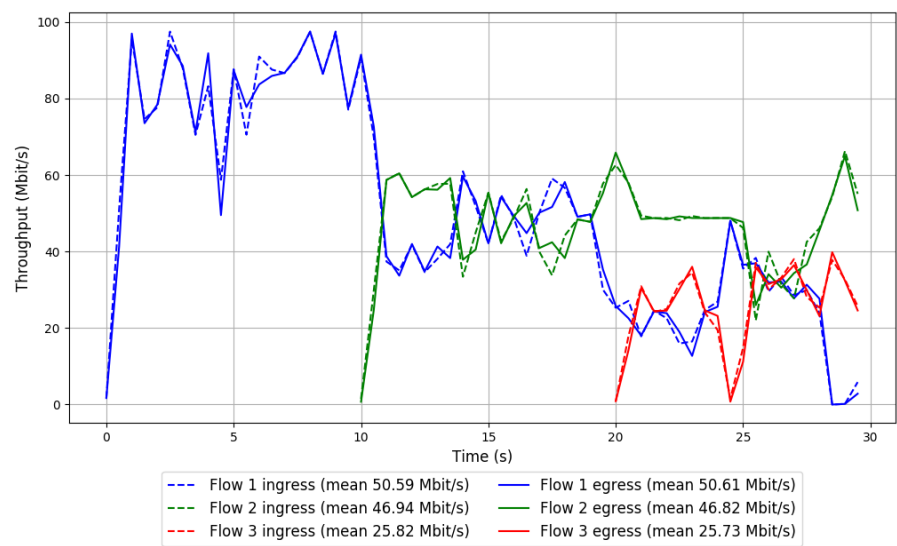
Average throughput: 25.73 Mbit/s

95th percentile per-packet one-way delay: 88.109 ms

Loss rate: 1.19%



Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: Tue, 01 Aug 2017 04:04:23 +0000

End at: Tue, 01 Aug 2017 04:04:53 +0000

Local clock offset: -0.024 ms

Remote clock offset: -0.177 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:40 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.87 Mbit/s

95th percentile per-packet one-way delay: 82.954 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 48.22 Mbit/s

95th percentile per-packet one-way delay: 82.863 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 45.53 Mbit/s

95th percentile per-packet one-way delay: 61.224 ms

Loss rate: 0.63%

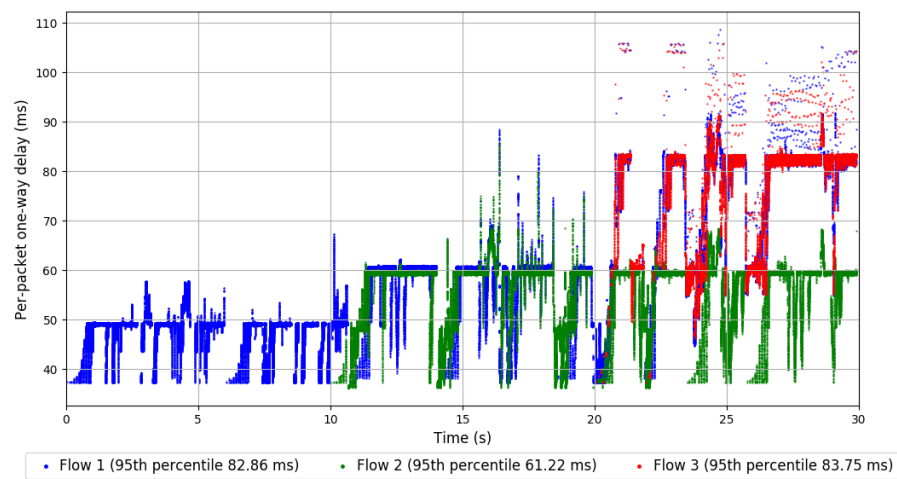
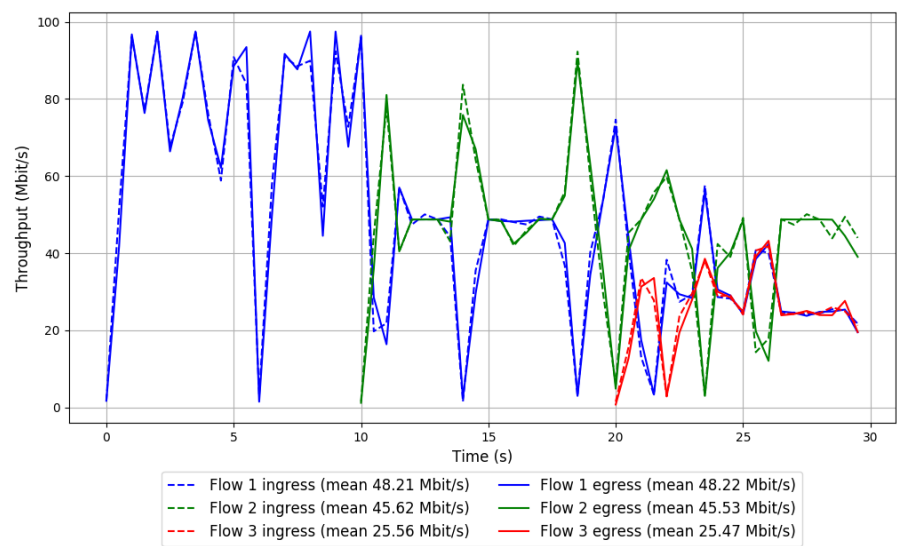
-- Flow 3:

Average throughput: 25.47 Mbit/s

95th percentile per-packet one-way delay: 83.751 ms

Loss rate: 1.10%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: Tue, 01 Aug 2017 04:25:28 +0000

End at: Tue, 01 Aug 2017 04:25:58 +0000

Local clock offset: 0.152 ms

Remote clock offset: -0.759 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:46 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 72.271 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 60.82 Mbit/s

95th percentile per-packet one-way delay: 68.988 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 31.60 Mbit/s

95th percentile per-packet one-way delay: 73.429 ms

Loss rate: 0.21%

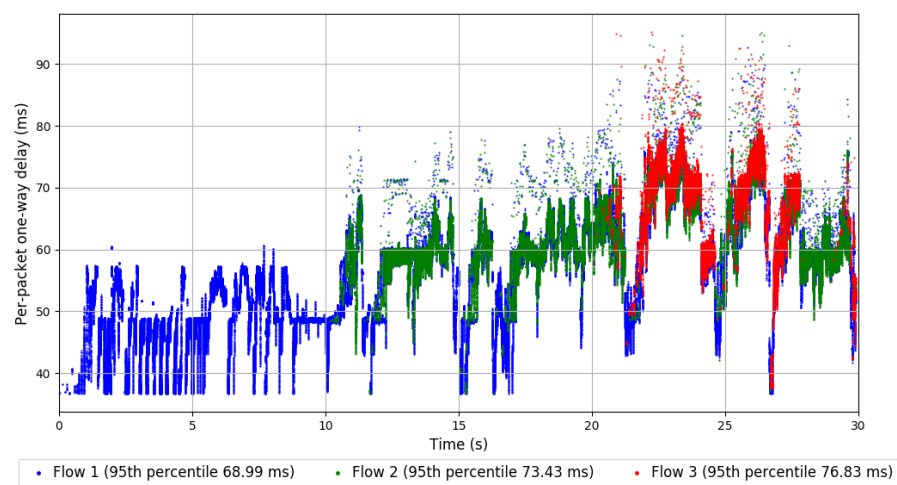
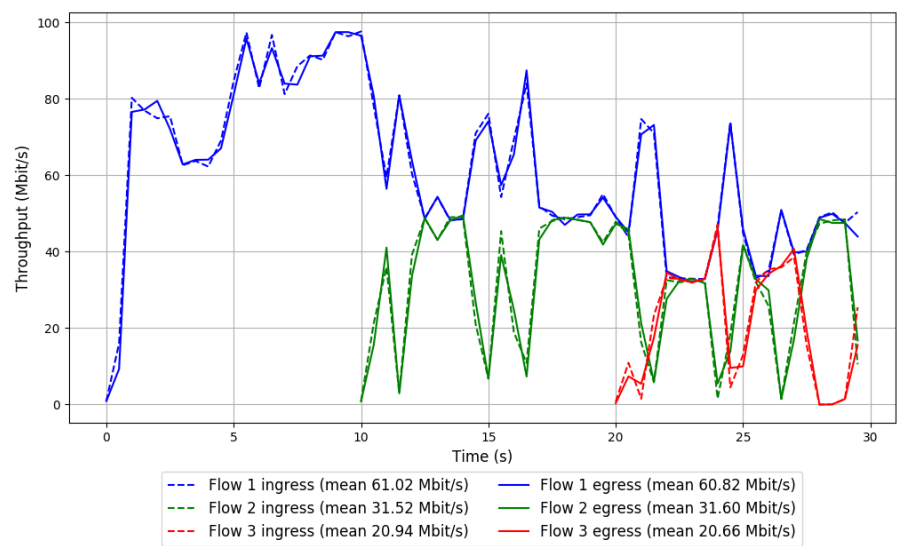
-- Flow 3:

Average throughput: 20.66 Mbit/s

95th percentile per-packet one-way delay: 76.835 ms

Loss rate: 2.49%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: Tue, 01 Aug 2017 04:46:59 +0000

End at: Tue, 01 Aug 2017 04:47:29 +0000

Local clock offset: 0.214 ms

Remote clock offset: -2.998 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:03:52 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.15 Mbit/s

95th percentile per-packet one-way delay: 74.644 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 48.04 Mbit/s

95th percentile per-packet one-way delay: 74.377 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 38.33 Mbit/s

95th percentile per-packet one-way delay: 74.732 ms

Loss rate: 0.58%

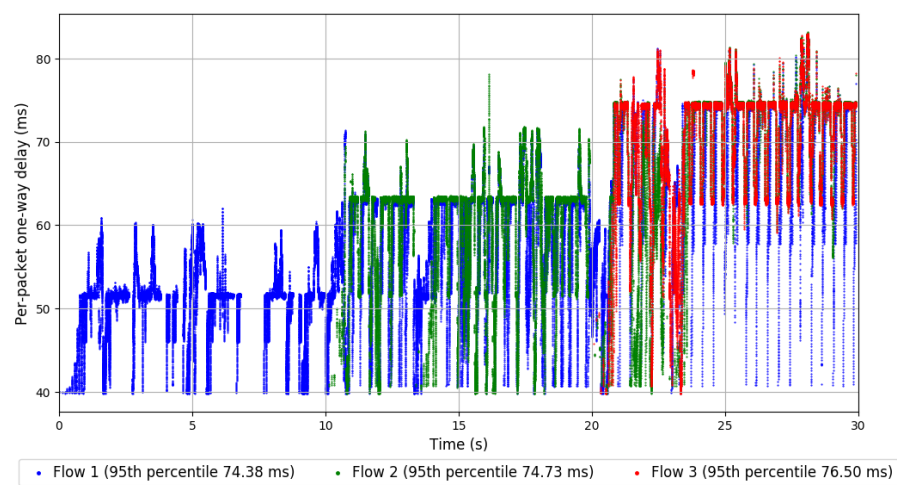
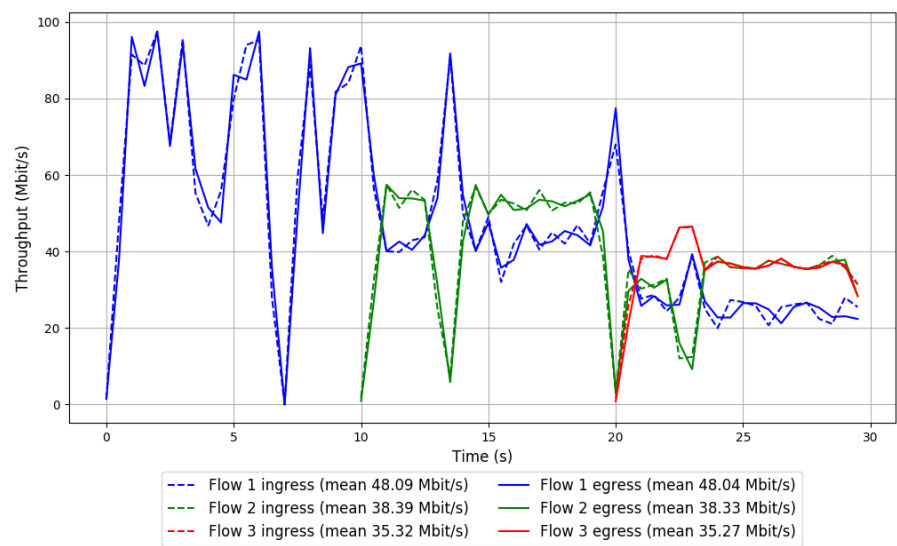
-- Flow 3:

Average throughput: 35.27 Mbit/s

95th percentile per-packet one-way delay: 76.504 ms

Loss rate: 1.19%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: Tue, 01 Aug 2017 05:08:19 +0000

End at: Tue, 01 Aug 2017 05:08:49 +0000

Local clock offset: 0.163 ms

Remote clock offset: -2.974 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 81.47 Mbit/s

95th percentile per-packet one-way delay: 84.061 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 44.41 Mbit/s

95th percentile per-packet one-way delay: 83.565 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 33.95 Mbit/s

95th percentile per-packet one-way delay: 85.278 ms

Loss rate: 0.48%

-- Flow 3:

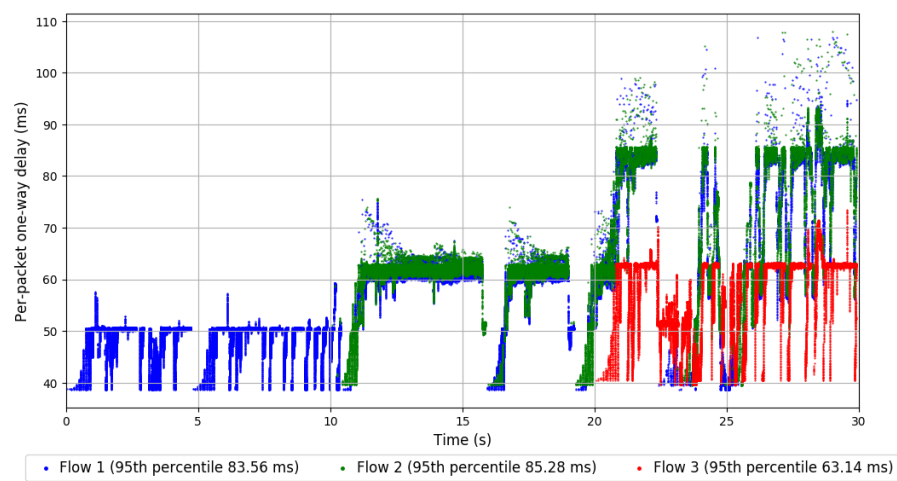
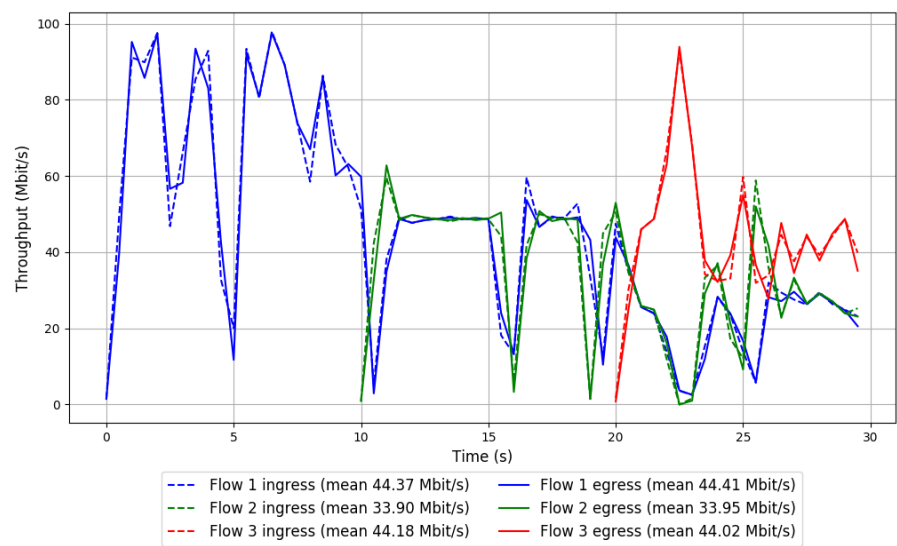
Average throughput: 44.02 Mbit/s

95th percentile per-packet one-way delay: 63.137 ms

Loss rate: 1.26%



Run 10: Report of Verus — Data Link



Run 1: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 01:56:01 +0000

End at: Tue, 01 Aug 2017 01:56:31 +0000

Local clock offset: 0.576 ms

Remote clock offset: -1.681 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 43.727 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 43.658 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 43.137 ms

Loss rate: 0.73%

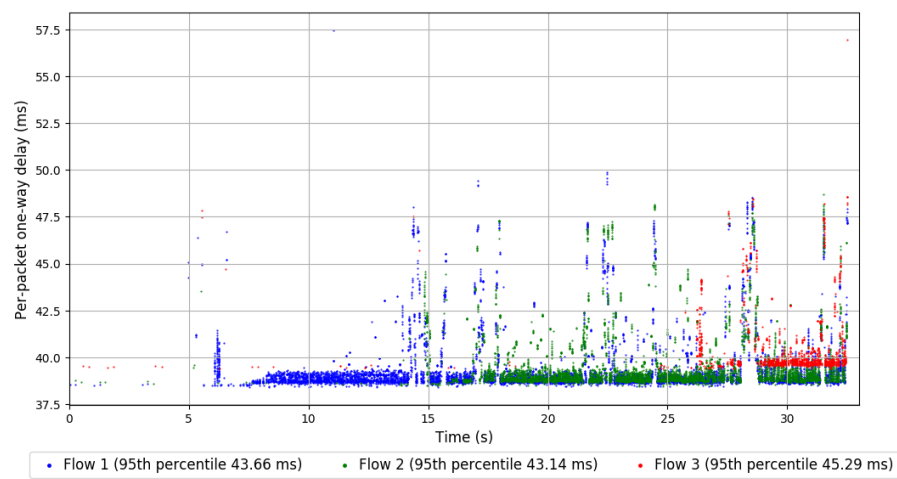
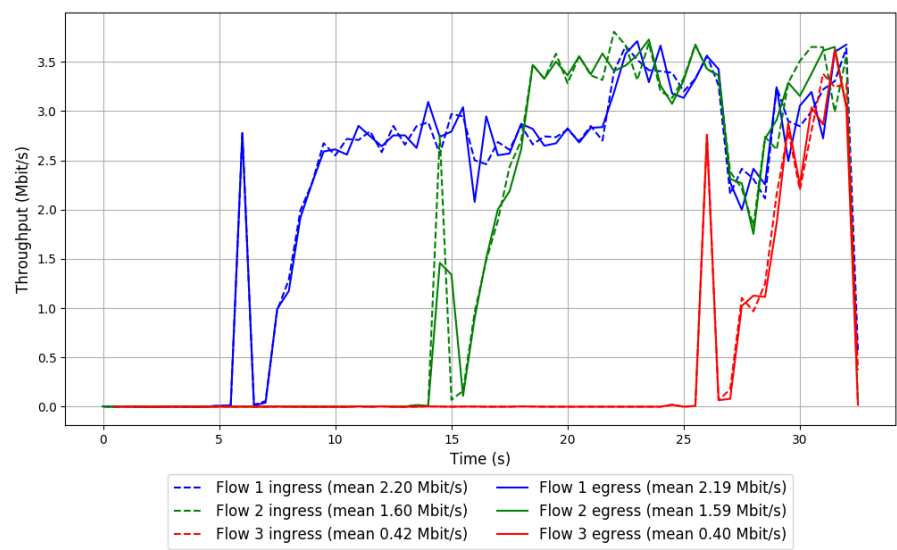
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 45.286 ms

Loss rate: 3.04%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 02:17:23 +0000

End at: Tue, 01 Aug 2017 02:17:53 +0000

Local clock offset: 0.5 ms

Remote clock offset: 0.675 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 38.079 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 38.609 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 37.321 ms

Loss rate: 0.69%

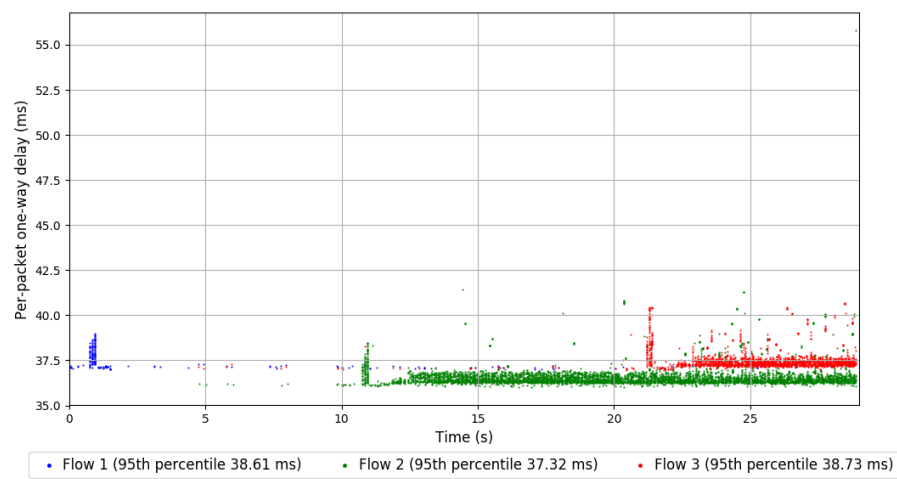
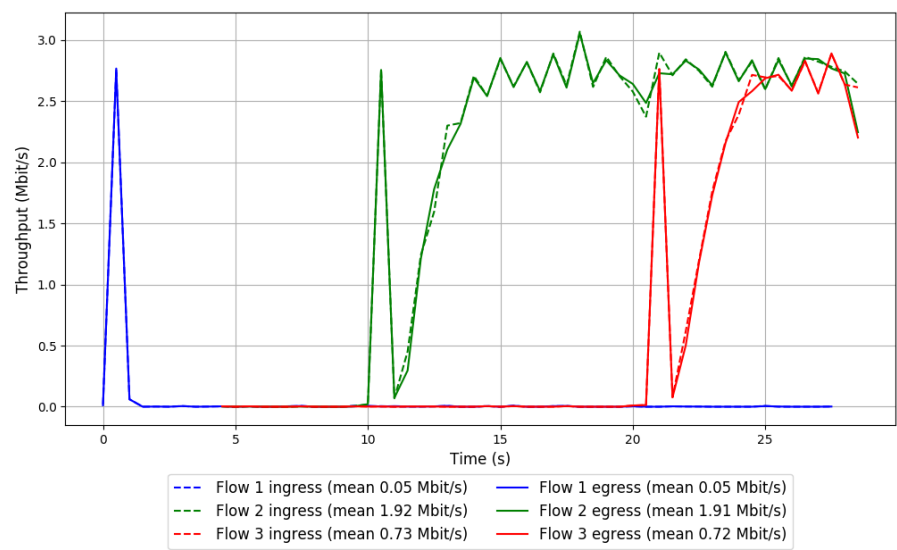
-- Flow 3:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 38.731 ms

Loss rate: 1.76%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 02:38:24 +0000

End at: Tue, 01 Aug 2017 02:38:54 +0000

Local clock offset: 0.261 ms

Remote clock offset: 0.08 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 40.258 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 40.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 40.813 ms

Loss rate: 0.52%

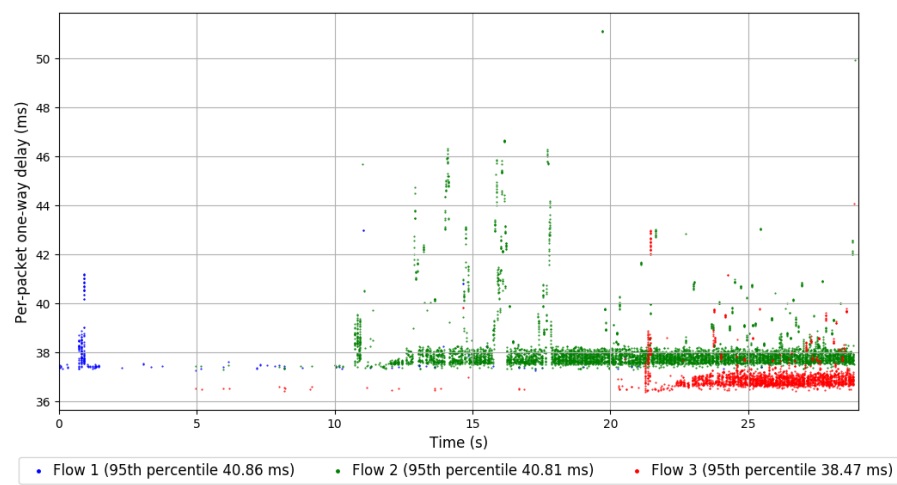
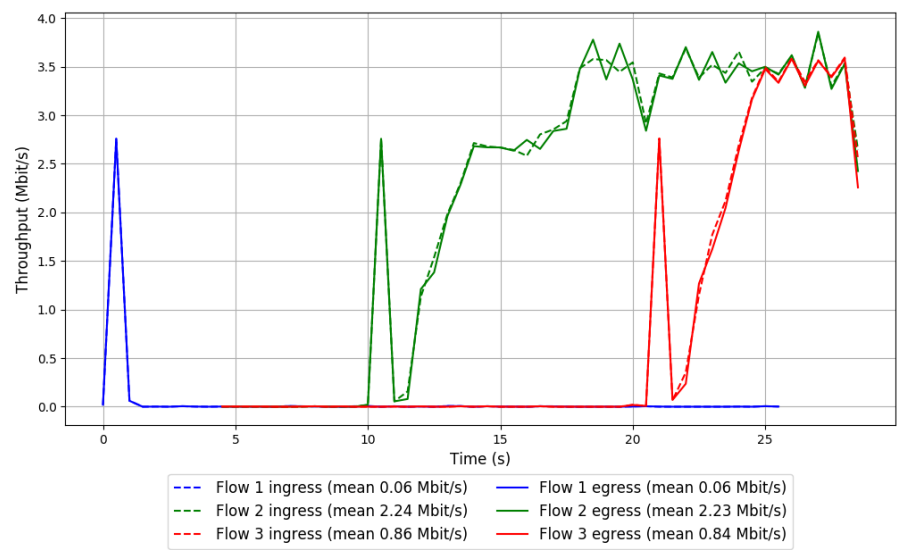
-- Flow 3:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 38.472 ms

Loss rate: 1.70%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 02:59:36 +0000

End at: Tue, 01 Aug 2017 03:00:06 +0000

Local clock offset: 0.226 ms

Remote clock offset: -1.981 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 40.950 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 39.996 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 41.280 ms

Loss rate: 0.49%

-- Flow 3:

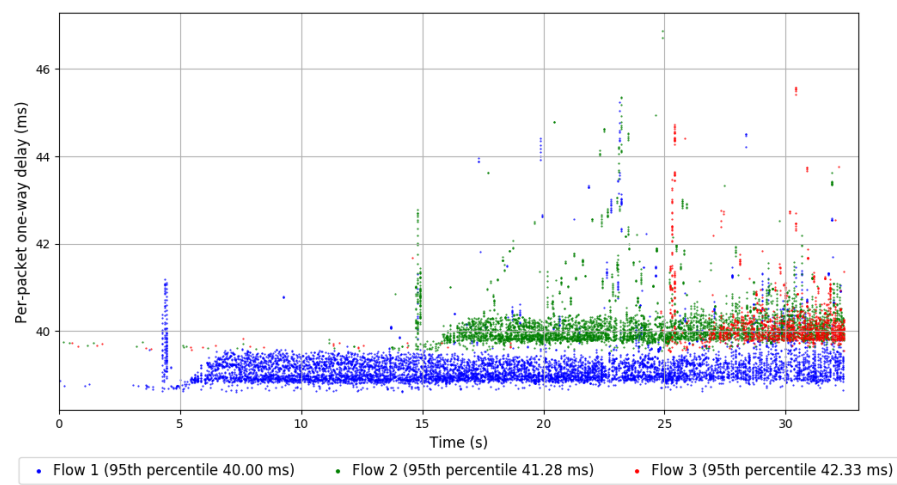
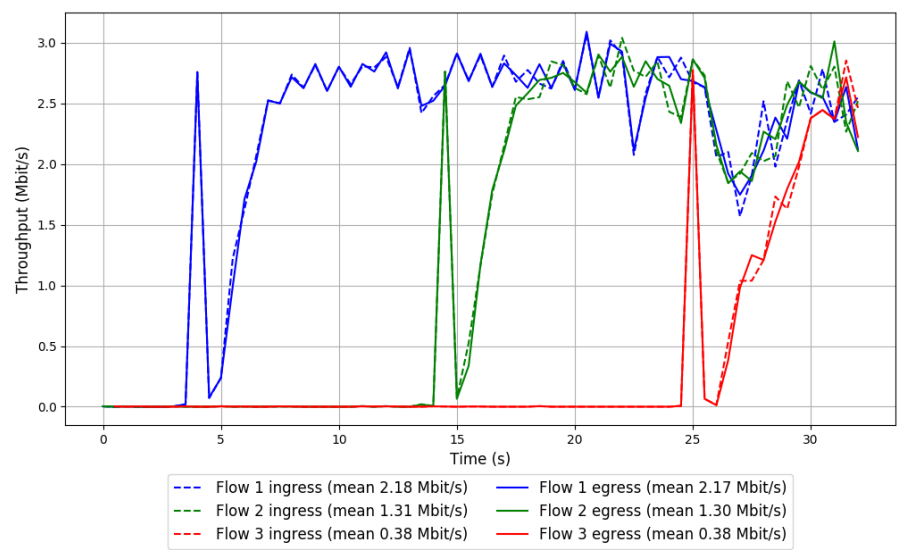
Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 42.333 ms

Loss rate: 1.54%



Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 03:20:40 +0000

End at: Tue, 01 Aug 2017 03:21:10 +0000

Local clock offset: 0.06 ms

Remote clock offset: 0.442 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 40.233 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 40.039 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 39.962 ms

Loss rate: 0.46%

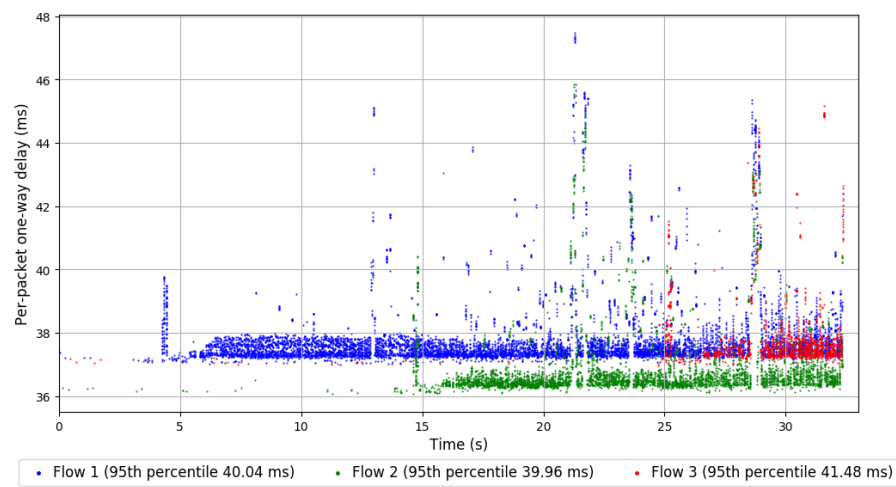
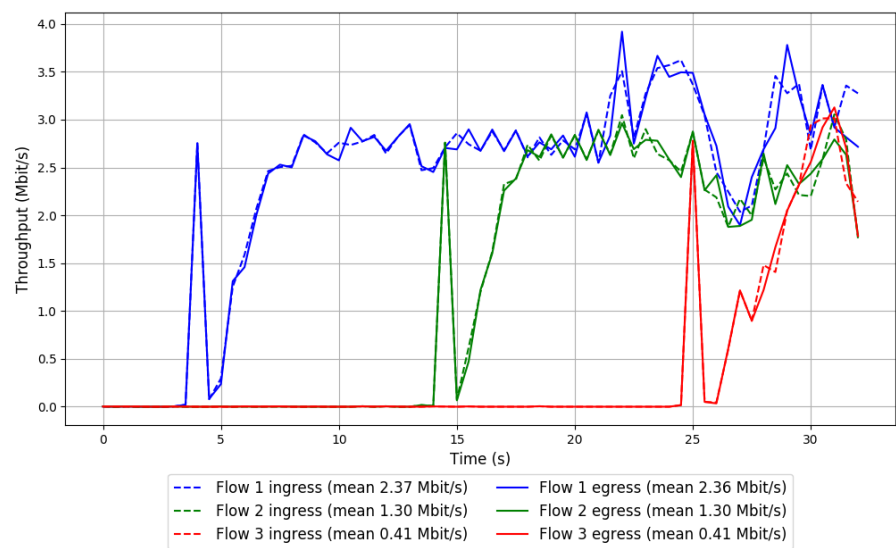
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 41.475 ms

Loss rate: 1.36%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 03:41:49 +0000

End at: Tue, 01 Aug 2017 03:42:19 +0000

Local clock offset: -0.165 ms

Remote clock offset: -0.224 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 38.801 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 38.610 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 38.838 ms

Loss rate: 0.39%

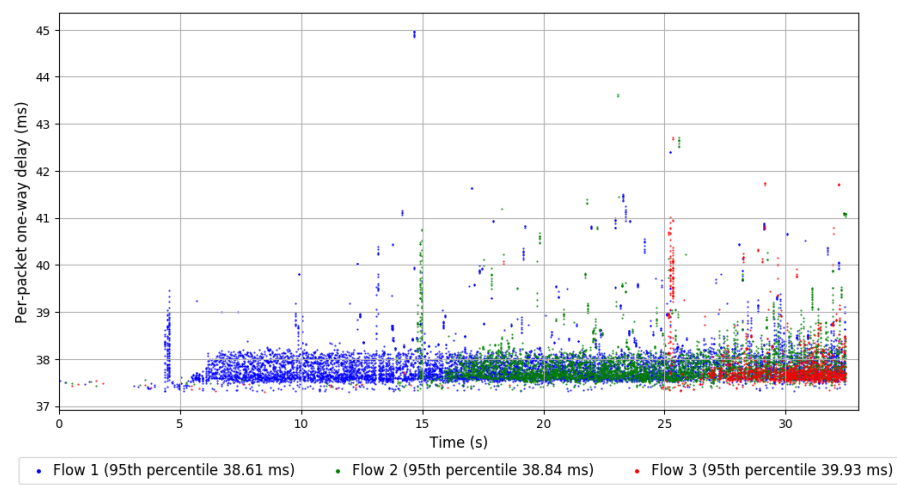
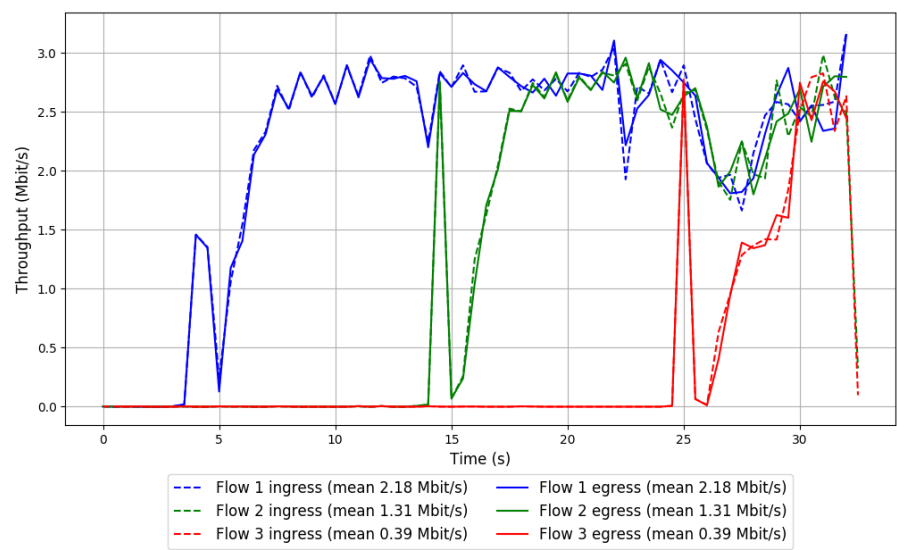
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 39.930 ms

Loss rate: 1.54%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 04:03:03 +0000

End at: Tue, 01 Aug 2017 04:03:33 +0000

Local clock offset: -0.047 ms

Remote clock offset: -0.115 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 38.577 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 38.551 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 38.803 ms

Loss rate: 0.98%

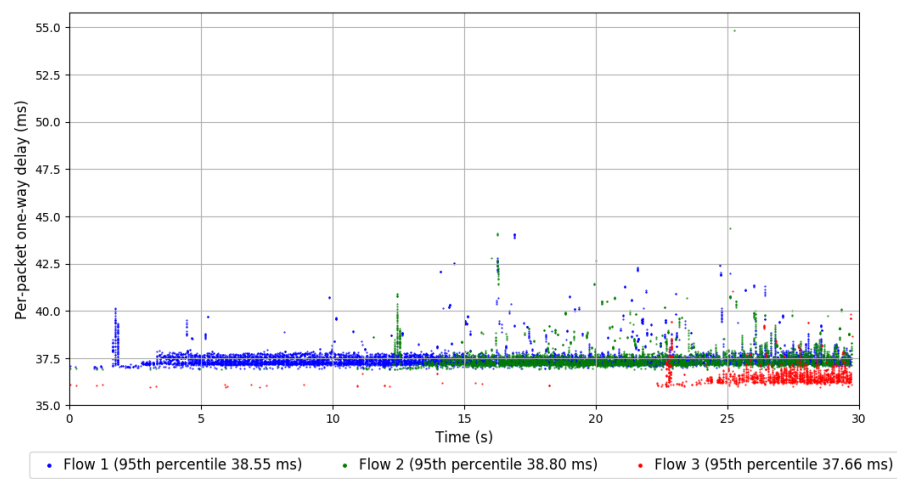
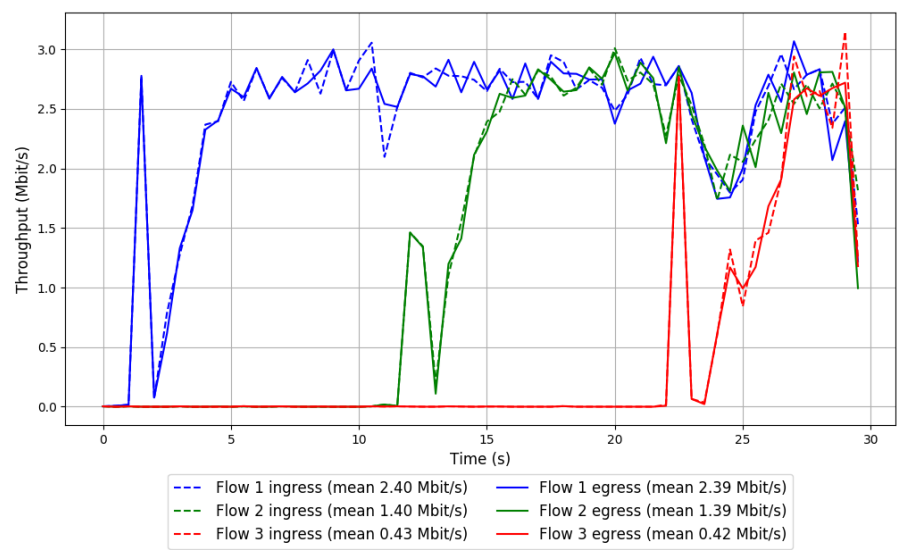
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 37.663 ms

Loss rate: 1.96%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 04:24:08 +0000

End at: Tue, 01 Aug 2017 04:24:38 +0000

Local clock offset: 0.16 ms

Remote clock offset: -0.797 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:04 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 40.102 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 39.481 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 40.901 ms

Loss rate: 1.08%

-- Flow 3:

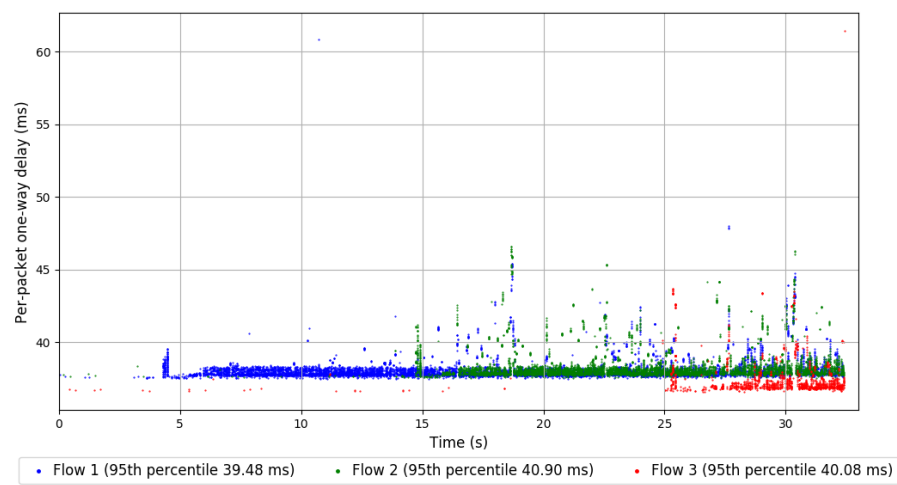
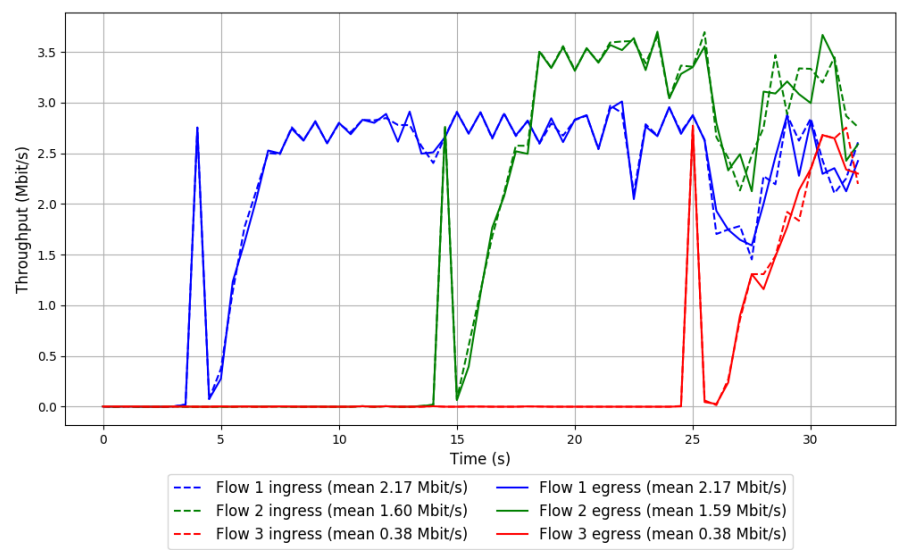
Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 40.080 ms

Loss rate: 1.28%



Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 04:45:39 +0000

End at: Tue, 01 Aug 2017 04:46:09 +0000

Local clock offset: 0.22 ms

Remote clock offset: -0.336 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:05 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 38.405 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 37.596 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 38.698 ms

Loss rate: 0.37%

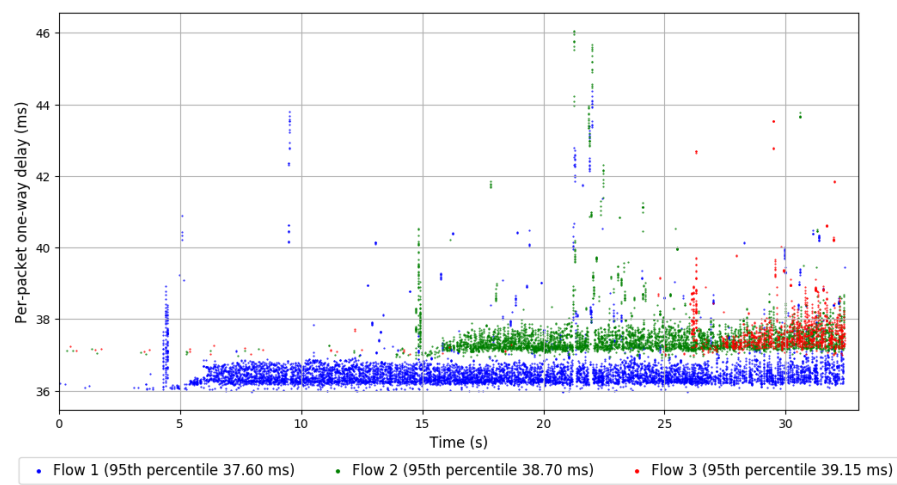
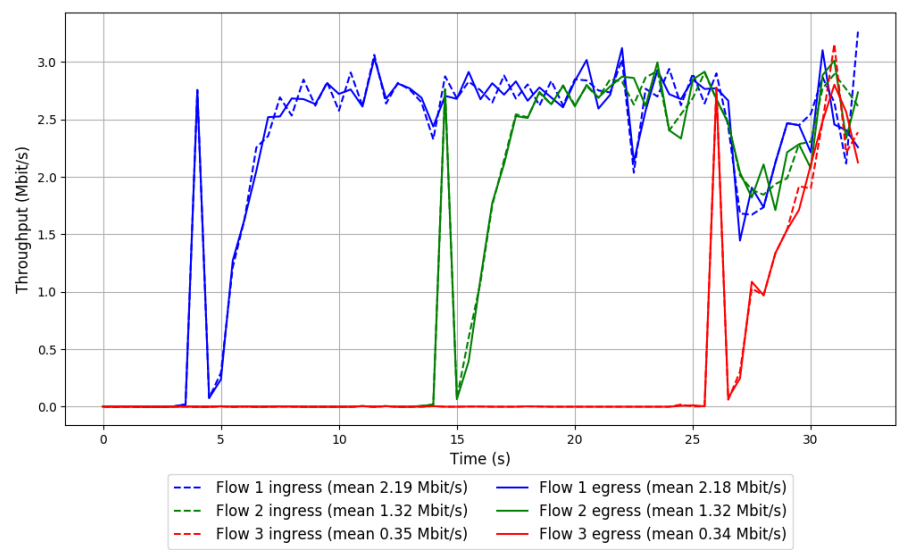
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 39.147 ms

Loss rate: 1.19%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: Tue, 01 Aug 2017 05:06:59 +0000

End at: Tue, 01 Aug 2017 05:07:29 +0000

Local clock offset: 0.167 ms

Remote clock offset: -0.494 ms

# Below is generated by plot.py at Tue, 01 Aug 2017 06:04:06 +0000

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 38.381 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 38.436 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 37.927 ms

Loss rate: 0.80%

-- Flow 3:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 38.718 ms

Loss rate: 1.87%

Run 10: Report of WebRTC media — Data Link

