

## Pantheon Report

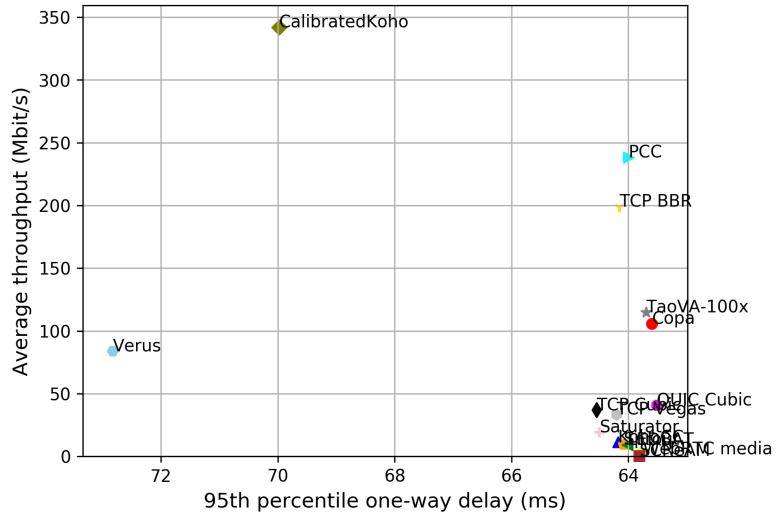
Generated at 2017-08-21 15:49:49 (UTC).  
Data path: GCE Tokyo Ethernet (*remote*) → GCE Iowa Ethernet (*local*).  
Repeated the test of 15 congestion control schemes 10 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

Increased UDP receive buffer to 16 MB (default) and 32 MB (max).  
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

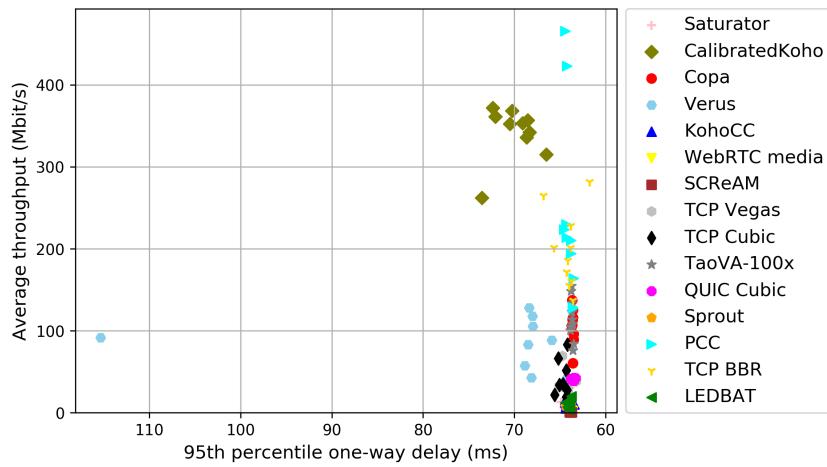
Git summary:

```
branch: master @ e43be7582298d552838afcfc6382342bf187fbbd6
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 @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2ef6e088d91066a9f023df375eee2665089ce
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 GCE Tokyo Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Tokyo Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme  
 3 flows with 10s interval between flows



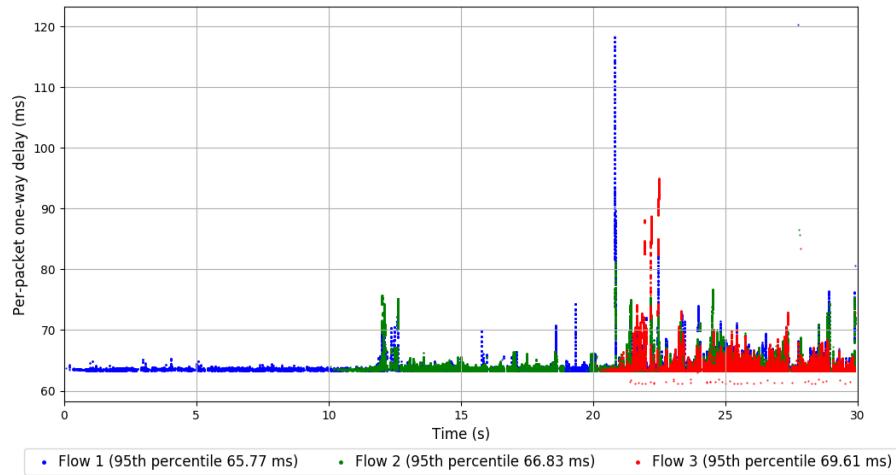
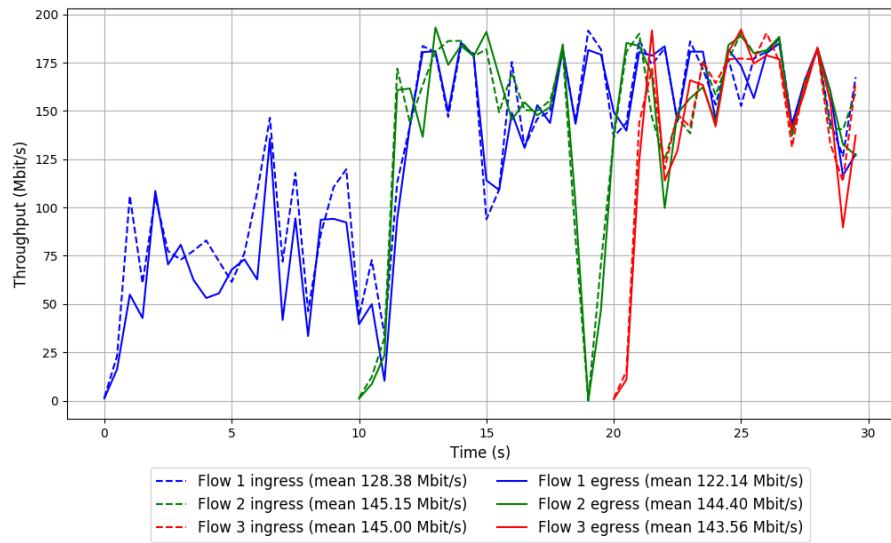
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	97.13	133.60	64.66	63.96	64.23	64.81	6.69	1.87	35.02
CalibratedKoho	10	236.95	133.63	54.27	70.78	68.53	65.96	0.86	12.85	32.60
Copa	9	71.76	41.76	50.81	63.58	63.61	63.66	9.92	1.28	11.47
TCP Cubic	10	23.97	15.69	7.65	64.31	64.70	64.04	2.35	4.08	9.05
KohoCC	10	6.06	5.03	5.67	64.09	64.15	64.17	29.74	40.22	35.02
LEDBAT	10	5.35	4.68	2.26	64.00	63.81	63.72	2.59	3.62	5.73
PCC	10	113.32	120.03	139.82	63.76	63.94	64.04	36.60	13.23	4.19
QUIC Cubic	10	0.05	44.05	35.28	63.51	63.46	63.09	0.00	0.62	1.02
Saturator	8	100.46	13.61	14.58	396.99	64.19	64.60	22.45	22.28	15.82
SCReAM	10	0.22	0.22	0.22	63.76	63.74	63.53	0.39	0.64	1.10
Sprout	10	4.71	5.11	4.21	64.06	64.01	64.05	8.38	6.92	10.89
TaoVA-100x	10	97.44	107.30	74.69	63.64	63.64	63.54	13.82	7.40	16.63
TCP Vegas	6	16.36	15.77	20.33	63.89	64.23	66.28	2.09	3.53	7.34
Verus	9	41.71	50.40	29.00	74.40	67.05	66.07	50.46	34.75	44.44
WebRTC media	10	0.35	1.46	0.37	63.90	63.65	63.80	0.05	0.97	2.78

```
Run 1: Statistics of TCP BBR

Start at: 2017-08-21 11:01:54
End at: 2017-08-21 11:02:24

# Below is generated by plot.py at 2017-08-21 15:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 265.05 Mbit/s
95th percentile per-packet one-way delay: 66.820 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 122.14 Mbit/s
95th percentile per-packet one-way delay: 65.774 ms
Loss rate: 5.25%
-- Flow 2:
Average throughput: 144.40 Mbit/s
95th percentile per-packet one-way delay: 66.832 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 143.56 Mbit/s
95th percentile per-packet one-way delay: 69.612 ms
Loss rate: 2.06%
```

## Run 1: Report of TCP BBR — Data Link



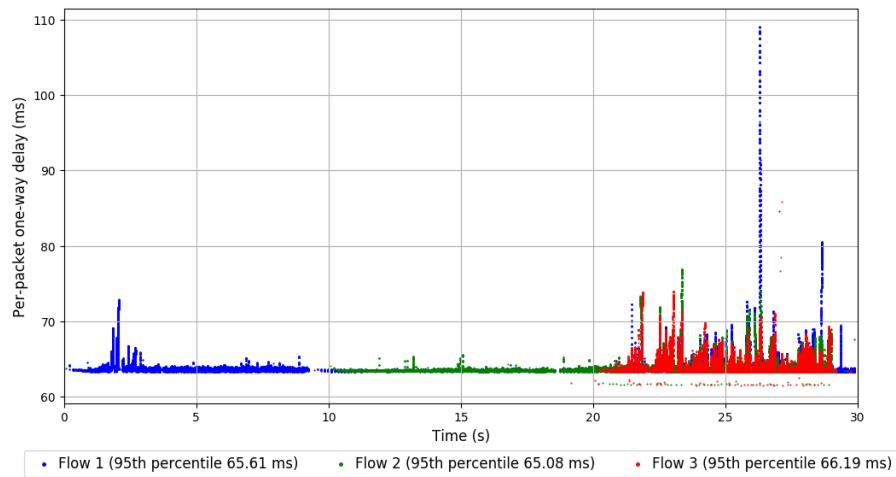
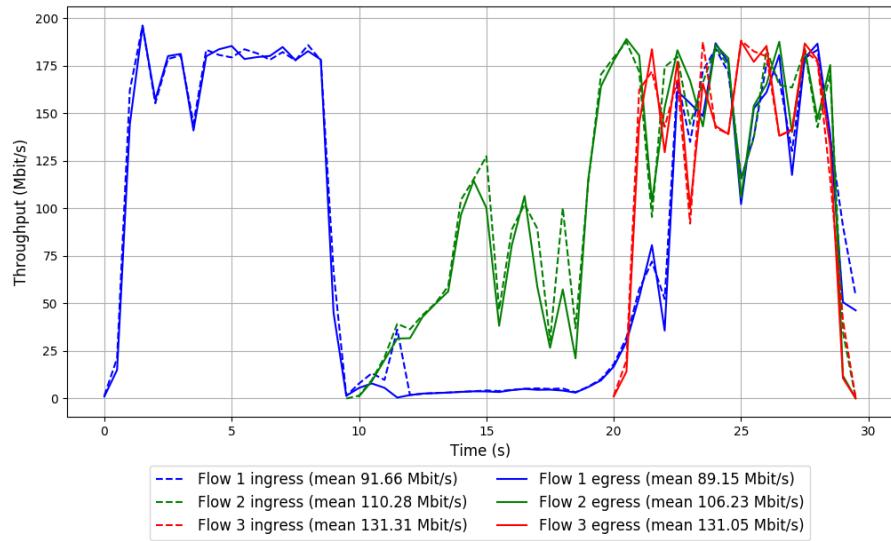
Run 2: Statistics of TCP BBR

Start at: 2017-08-21 11:13:46

End at: 2017-08-21 11:14:16

```
# Below is generated by plot.py at 2017-08-21 15:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.30 Mbit/s
95th percentile per-packet one-way delay: 65.636 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 89.15 Mbit/s
95th percentile per-packet one-way delay: 65.615 ms
Loss rate: 3.11%
-- Flow 2:
Average throughput: 106.23 Mbit/s
95th percentile per-packet one-way delay: 65.076 ms
Loss rate: 4.29%
-- Flow 3:
Average throughput: 131.05 Mbit/s
95th percentile per-packet one-way delay: 66.185 ms
Loss rate: 1.48%
```

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



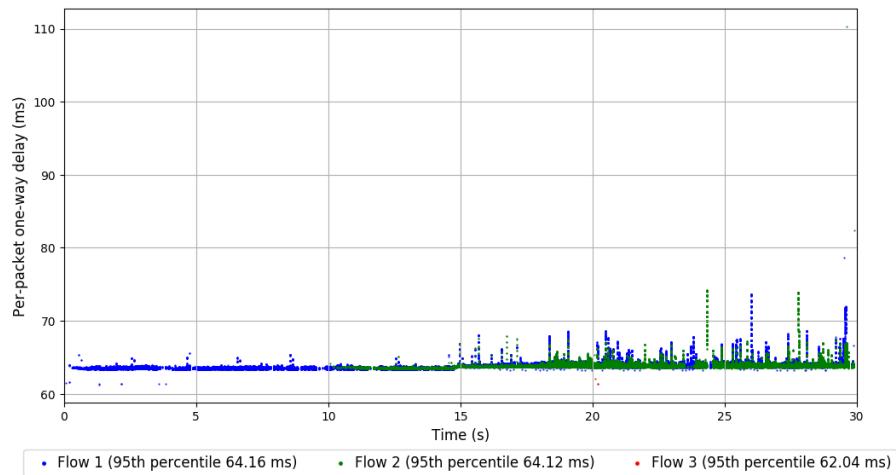
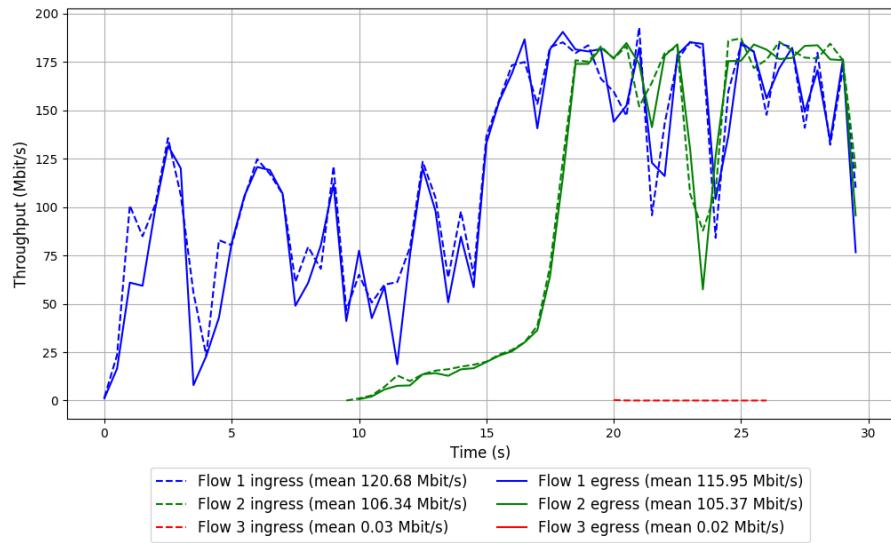
Run 3: Statistics of TCP BBR

Start at: 2017-08-21 11:25:40

End at: 2017-08-21 11:26:10

```
# Below is generated by plot.py at 2017-08-21 15:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.95 Mbit/s
95th percentile per-packet one-way delay: 64.144 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 115.95 Mbit/s
95th percentile per-packet one-way delay: 64.156 ms
Loss rate: 4.32%
-- Flow 2:
Average throughput: 105.37 Mbit/s
95th percentile per-packet one-way delay: 64.121 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 62.040 ms
Loss rate: 98.73%
```

### Run 3: Report of TCP BBR — Data Link



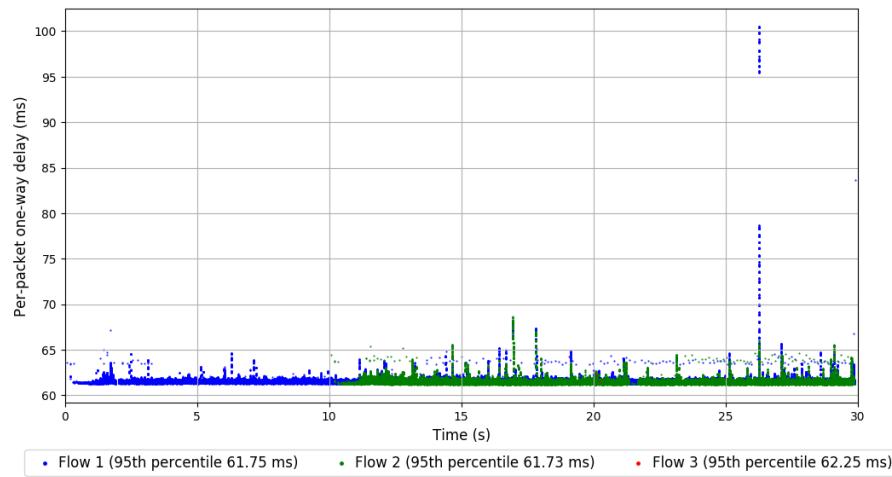
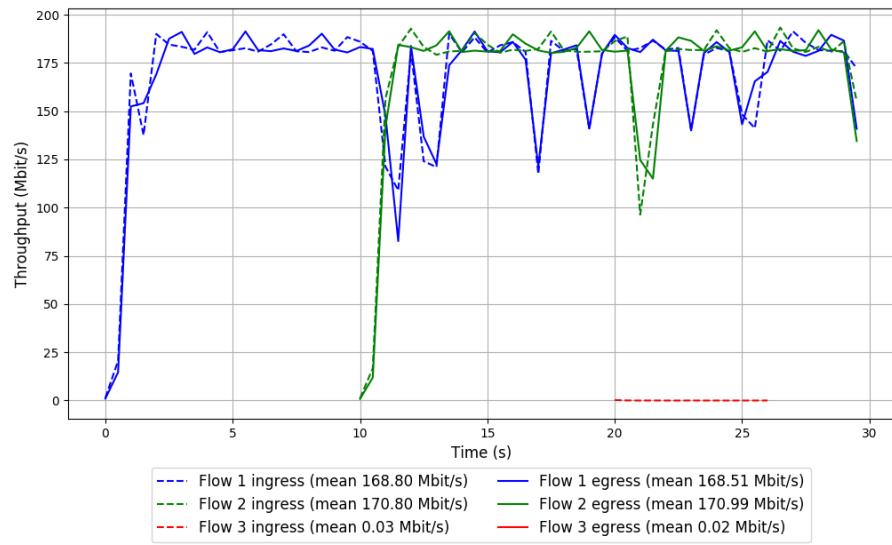
Run 4: Statistics of TCP BBR

Start at: 2017-08-21 11:37:31

End at: 2017-08-21 11:38:01

```
# Below is generated by plot.py at 2017-08-21 15:29:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.92 Mbit/s
95th percentile per-packet one-way delay: 61.744 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 168.51 Mbit/s
95th percentile per-packet one-way delay: 61.753 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 170.99 Mbit/s
95th percentile per-packet one-way delay: 61.728 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 62.249 ms
Loss rate: 98.73%
```

## Run 4: Report of TCP BBR — Data Link



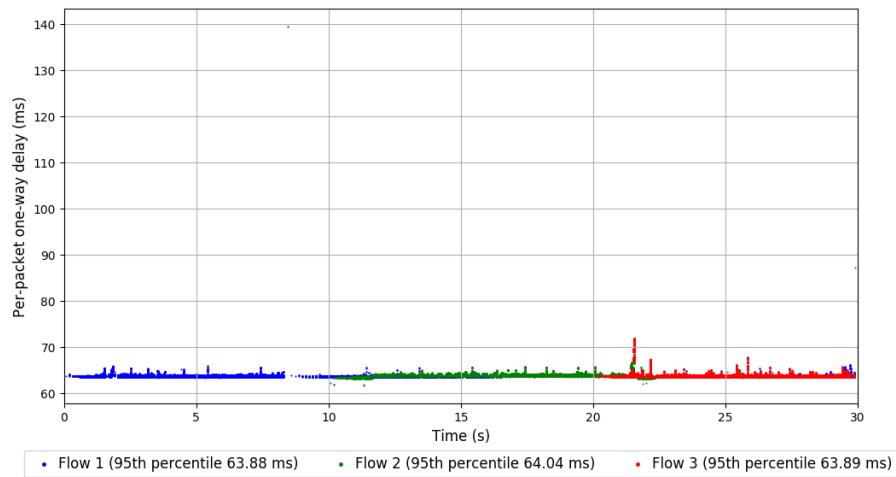
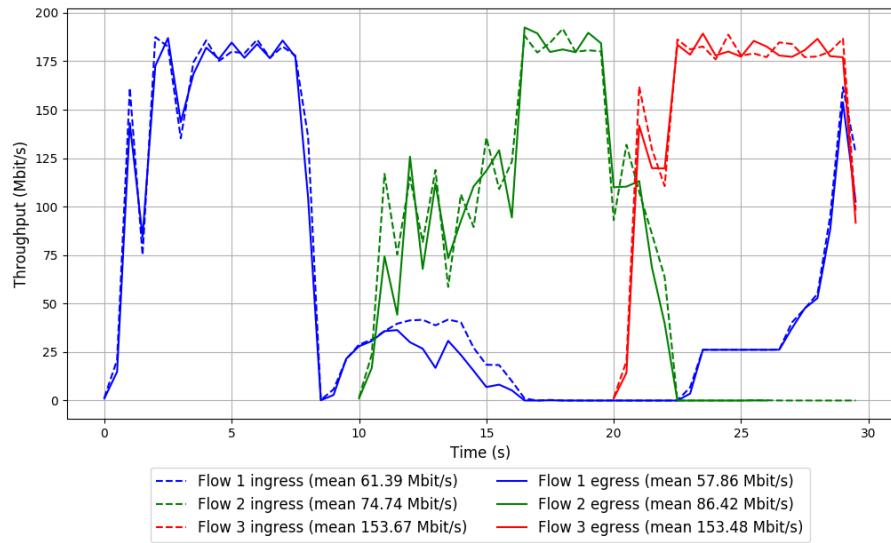
Run 5: Statistics of TCP BBR

Start at: 2017-08-21 11:49:13

End at: 2017-08-21 11:49:43

```
# Below is generated by plot.py at 2017-08-21 15:29:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.30 Mbit/s
95th percentile per-packet one-way delay: 63.991 ms
Loss rate: 4.04%
-- Flow 1:
Average throughput: 57.86 Mbit/s
95th percentile per-packet one-way delay: 63.875 ms
Loss rate: 6.16%
-- Flow 2:
Average throughput: 86.42 Mbit/s
95th percentile per-packet one-way delay: 64.040 ms
Loss rate: 4.23%
-- Flow 3:
Average throughput: 153.48 Mbit/s
95th percentile per-packet one-way delay: 63.886 ms
Loss rate: 1.32%
```

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



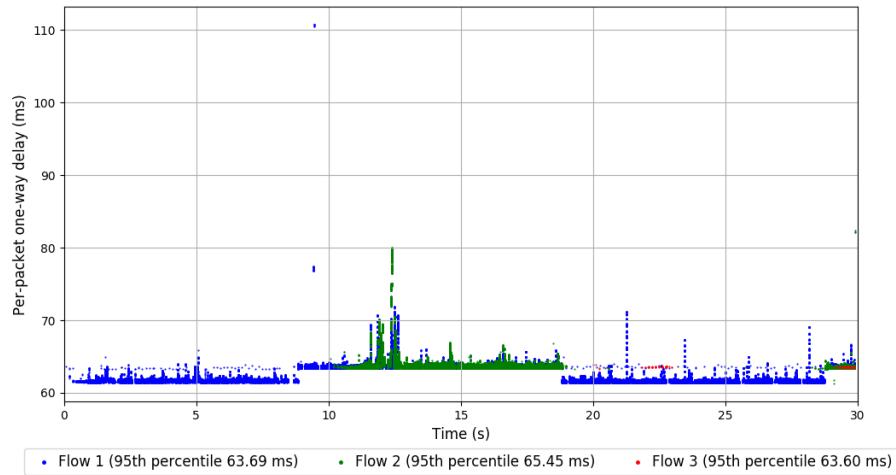
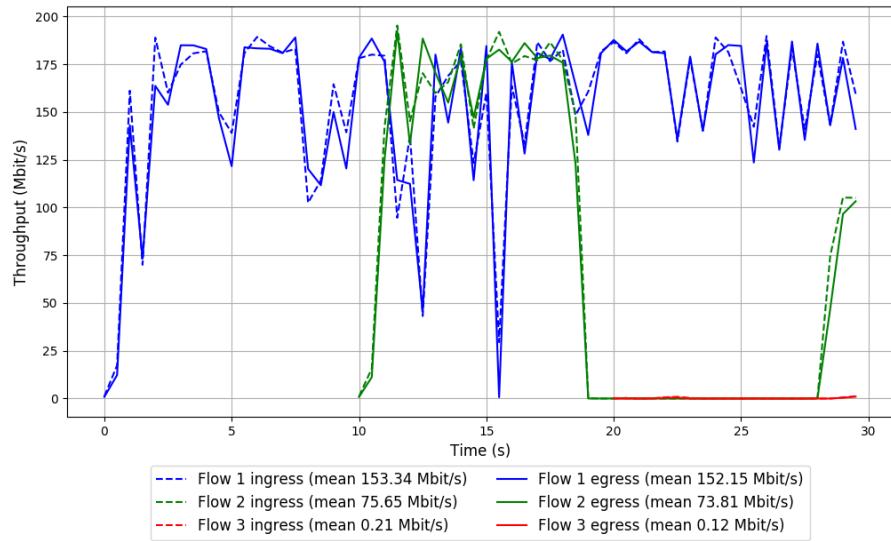
Run 6: Statistics of TCP BBR

Start at: 2017-08-21 12:00:56

End at: 2017-08-21 12:01:26

```
# Below is generated by plot.py at 2017-08-21 15:29:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 201.26 Mbit/s
95th percentile per-packet one-way delay: 63.838 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 152.15 Mbit/s
95th percentile per-packet one-way delay: 63.686 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 73.81 Mbit/s
95th percentile per-packet one-way delay: 65.451 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 63.597 ms
Loss rate: 40.54%
```

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



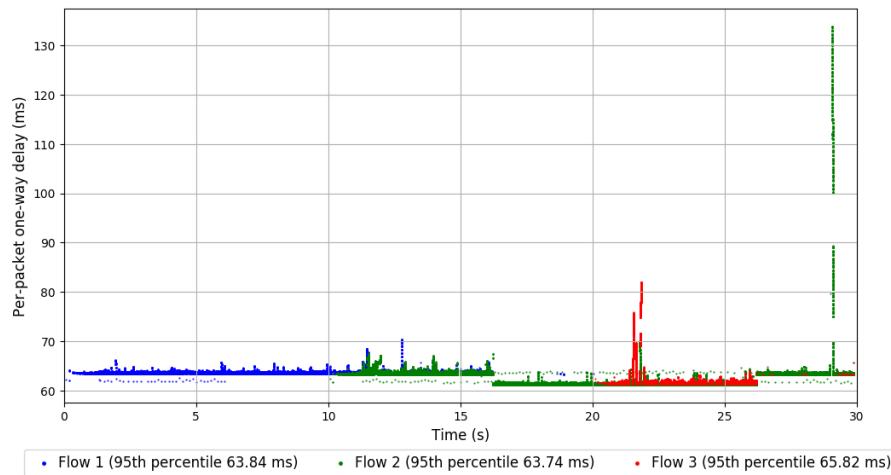
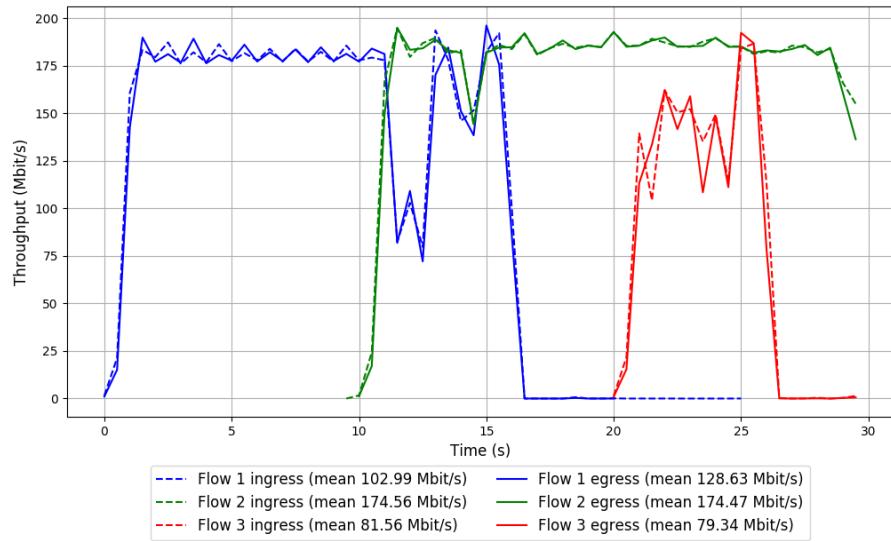
Run 7: Statistics of TCP BBR

Start at: 2017-08-21 12:12:39

End at: 2017-08-21 12:13:09

```
# Below is generated by plot.py at 2017-08-21 15:30:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.25 Mbit/s
95th percentile per-packet one-way delay: 63.819 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 128.63 Mbit/s
95th percentile per-packet one-way delay: 63.841 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 174.47 Mbit/s
95th percentile per-packet one-way delay: 63.736 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 79.34 Mbit/s
95th percentile per-packet one-way delay: 65.820 ms
Loss rate: 3.95%
```

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



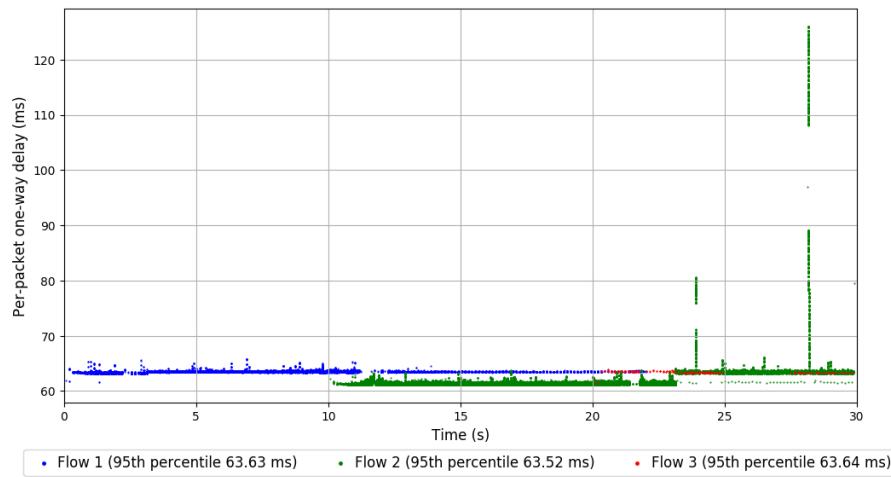
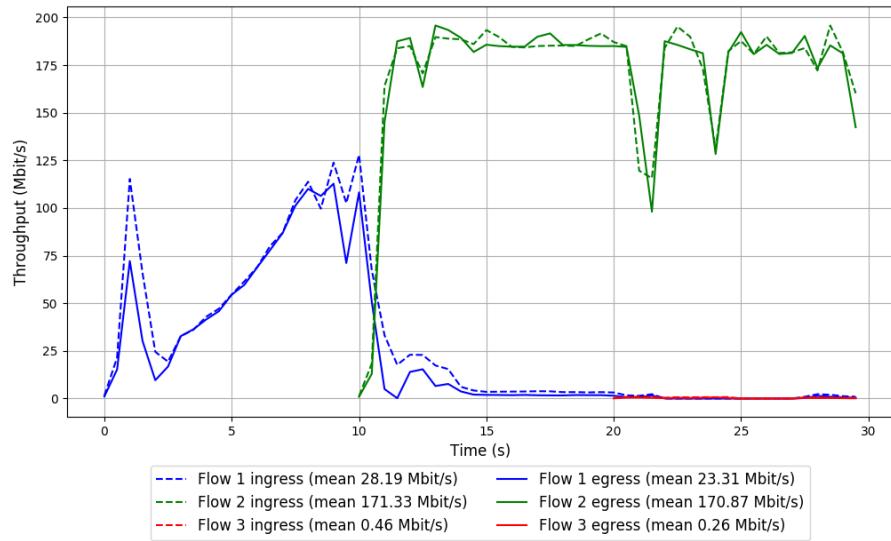
Run 8: Statistics of TCP BBR

Start at: 2017-08-21 12:24:22

End at: 2017-08-21 12:24:52

```
# Below is generated by plot.py at 2017-08-21 15:30:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 136.95 Mbit/s
95th percentile per-packet one-way delay: 63.570 ms
Loss rate: 4.11%
-- Flow 1:
Average throughput: 23.31 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 17.71%
-- Flow 2:
Average throughput: 170.87 Mbit/s
95th percentile per-packet one-way delay: 63.524 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 63.636 ms
Loss rate: 43.33%
```

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



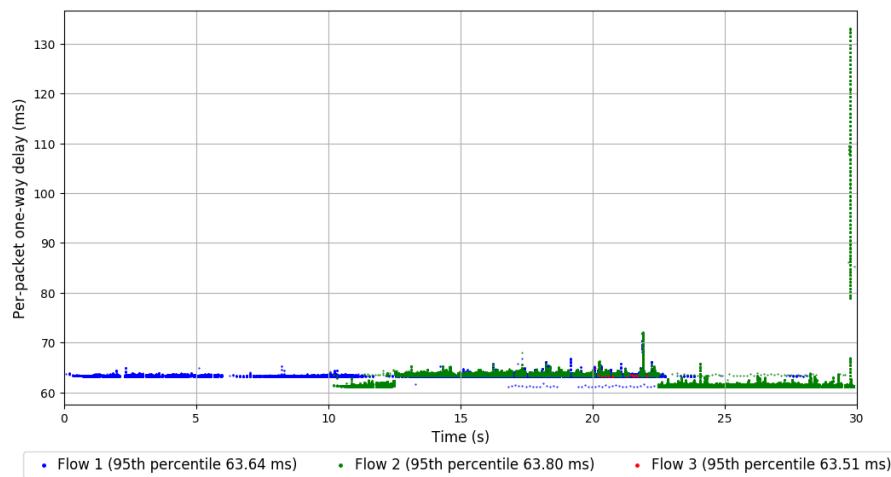
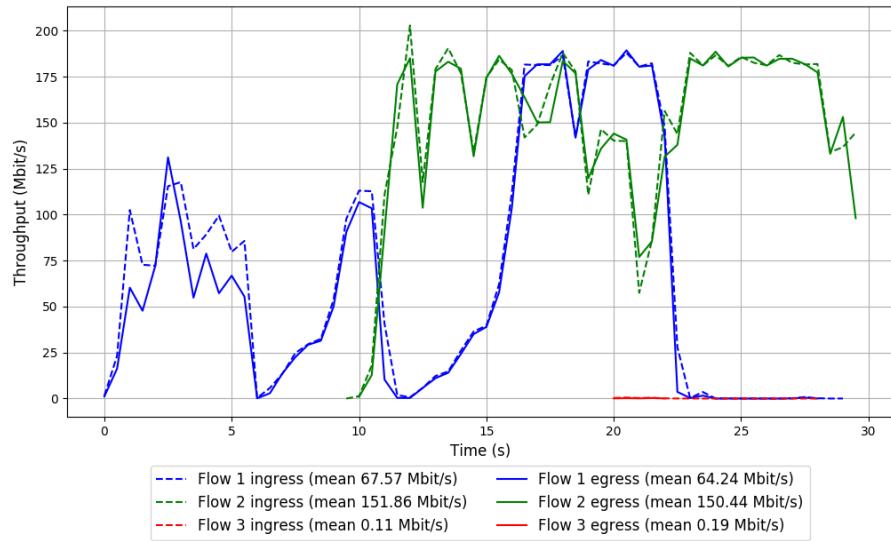
Run 9: Statistics of TCP BBR

Start at: 2017-08-21 12:36:02

End at: 2017-08-21 12:36:32

```
# Below is generated by plot.py at 2017-08-21 15:30:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.44 Mbit/s
95th percentile per-packet one-way delay: 63.759 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 64.24 Mbit/s
95th percentile per-packet one-way delay: 63.637 ms
Loss rate: 8.25%
-- Flow 2:
Average throughput: 150.44 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 63.509 ms
Loss rate: 57.95%
```

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



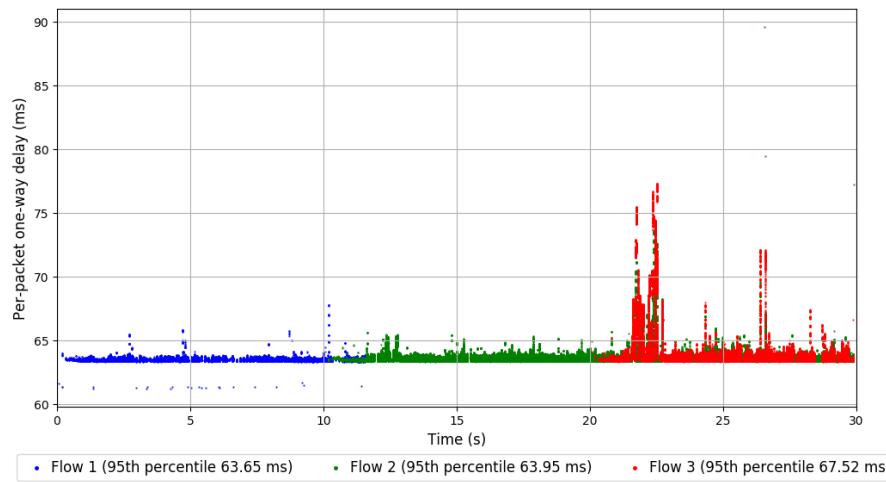
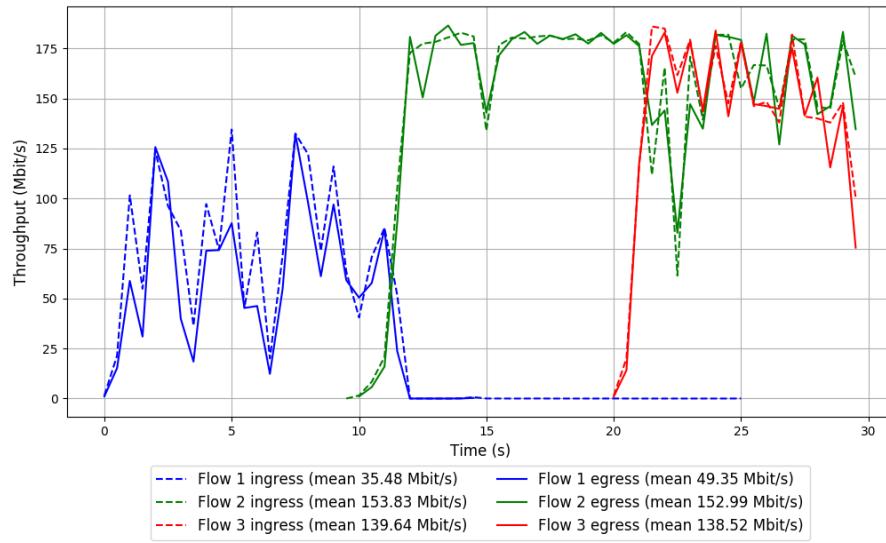
Run 10: Statistics of TCP BBR

Start at: 2017-08-21 12:47:36

End at: 2017-08-21 12:48:06

```
# Below is generated by plot.py at 2017-08-21 15:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.68 Mbit/s
95th percentile per-packet one-way delay: 64.261 ms
Loss rate: 4.43%
-- Flow 1:
Average throughput: 49.35 Mbit/s
95th percentile per-packet one-way delay: 63.653 ms
Loss rate: 19.22%
-- Flow 2:
Average throughput: 152.99 Mbit/s
95th percentile per-packet one-way delay: 63.951 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 138.52 Mbit/s
95th percentile per-packet one-way delay: 67.519 ms
Loss rate: 2.14%
```

Run 10: Report of TCP BBR — Data Link

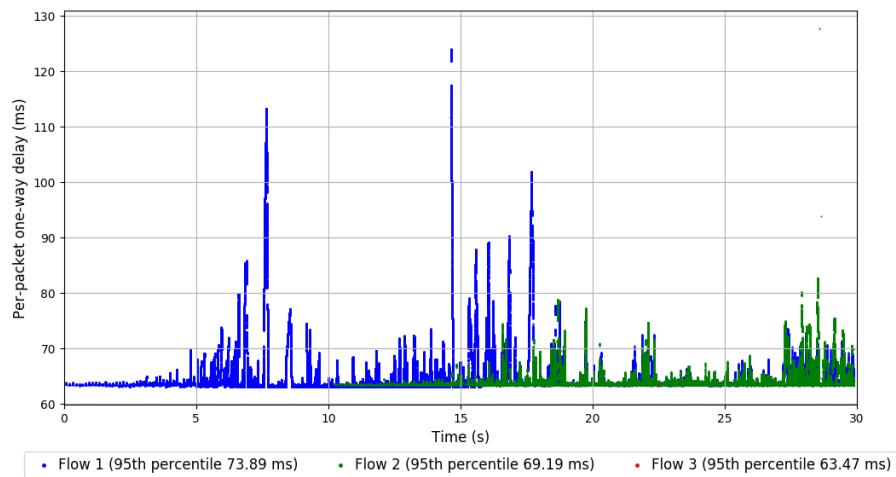
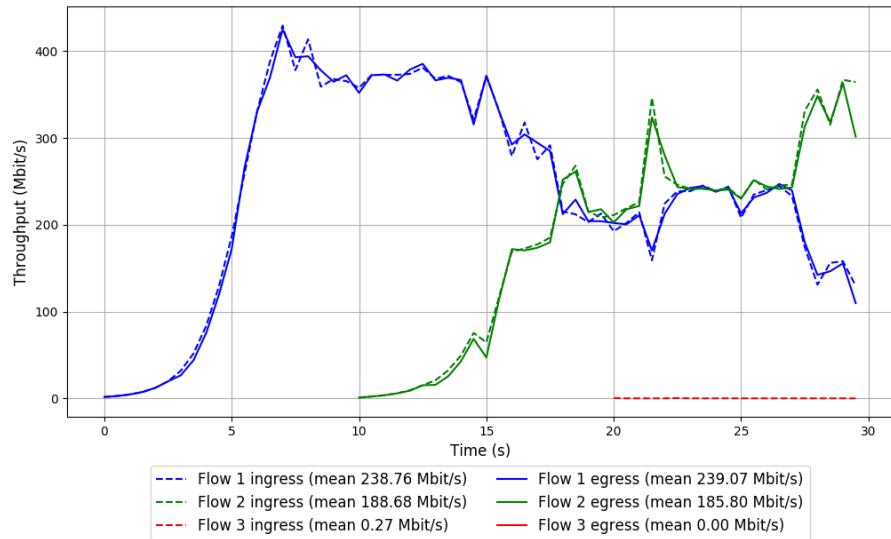


```
Run 1: Statistics of CalibratedKoho

Start at: 2017-08-21 10:59:19
End at: 2017-08-21 10:59:49

# Below is generated by plot.py at 2017-08-21 15:31:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.51 Mbit/s
95th percentile per-packet one-way delay: 72.058 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 239.07 Mbit/s
95th percentile per-packet one-way delay: 73.889 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 185.80 Mbit/s
95th percentile per-packet one-way delay: 69.192 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 63.473 ms
Loss rate: 99.55%
```

Run 1: Report of CalibratedKoho — Data Link



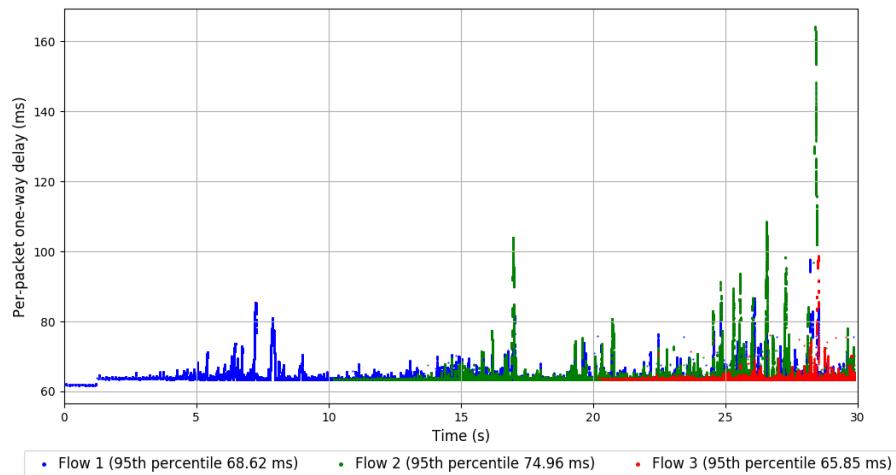
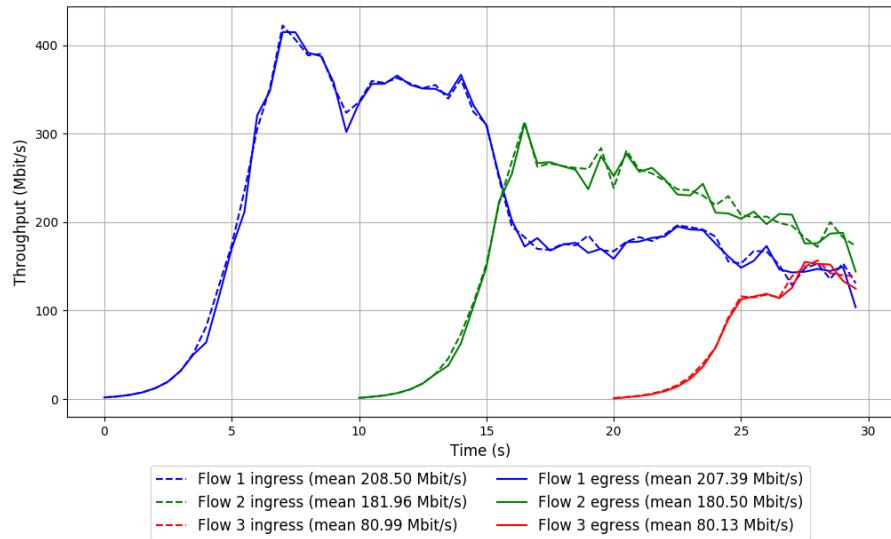
```
Run 2: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 11:11:14
```

```
End at: 2017-08-21 11:11:44
```

```
# Below is generated by plot.py at 2017-08-21 15:31:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.58 Mbit/s
95th percentile per-packet one-way delay: 70.489 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 207.39 Mbit/s
95th percentile per-packet one-way delay: 68.621 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 180.50 Mbit/s
95th percentile per-packet one-way delay: 74.957 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 80.13 Mbit/s
95th percentile per-packet one-way delay: 65.851 ms
Loss rate: 2.35%
```

Run 2: Report of CalibratedKoho — Data Link



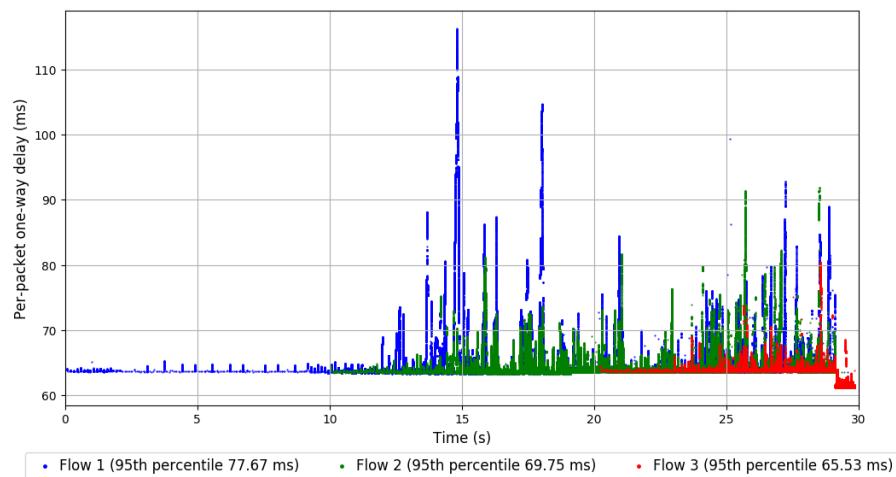
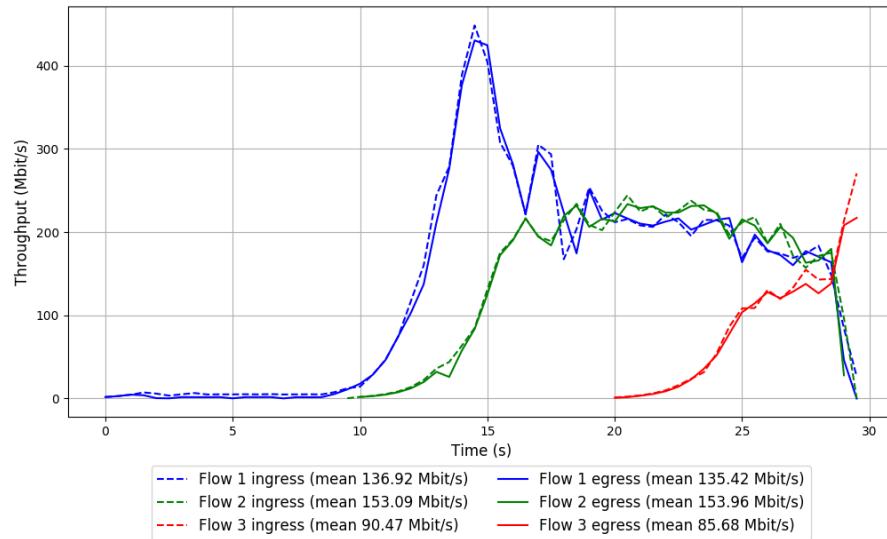
```
Run 3: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 11:23:16
```

```
End at: 2017-08-21 11:23:46
```

```
# Below is generated by plot.py at 2017-08-21 15:32:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.37 Mbit/s
95th percentile per-packet one-way delay: 73.533 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 135.42 Mbit/s
95th percentile per-packet one-way delay: 77.668 ms
Loss rate: 2.21%
-- Flow 2:
Average throughput: 153.96 Mbit/s
95th percentile per-packet one-way delay: 69.751 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 85.68 Mbit/s
95th percentile per-packet one-way delay: 65.535 ms
Loss rate: 6.56%
```

Run 3: Report of CalibratedKoho — Data Link



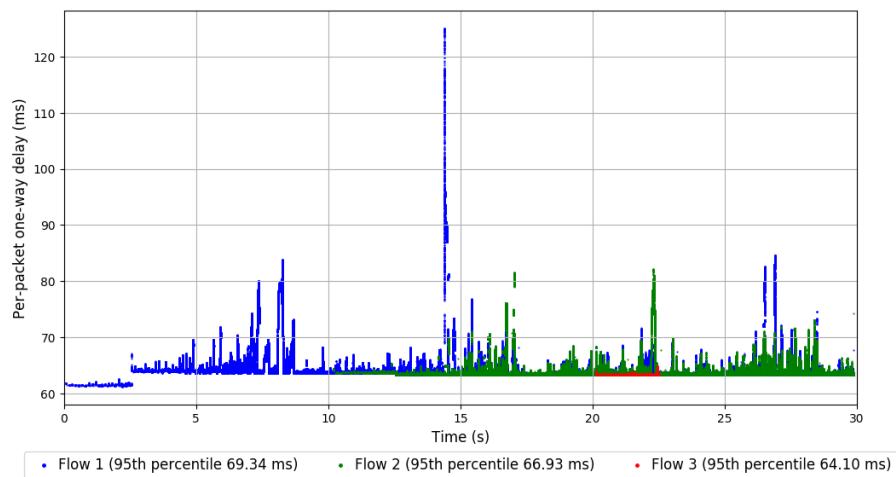
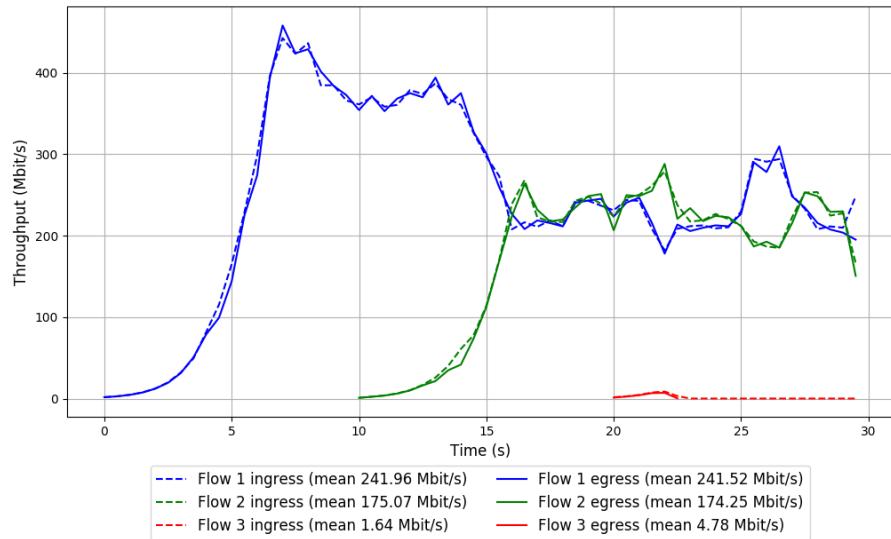
Run 4: Statistics of CalibratedKoho

Start at: 2017-08-21 11:35:02

End at: 2017-08-21 11:35:32

```
# Below is generated by plot.py at 2017-08-21 15:32:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.80 Mbit/s
95th percentile per-packet one-way delay: 68.534 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 241.52 Mbit/s
95th percentile per-packet one-way delay: 69.337 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 174.25 Mbit/s
95th percentile per-packet one-way delay: 66.928 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 64.097 ms
Loss rate: 29.79%
```

Run 4: Report of CalibratedKoho — Data Link



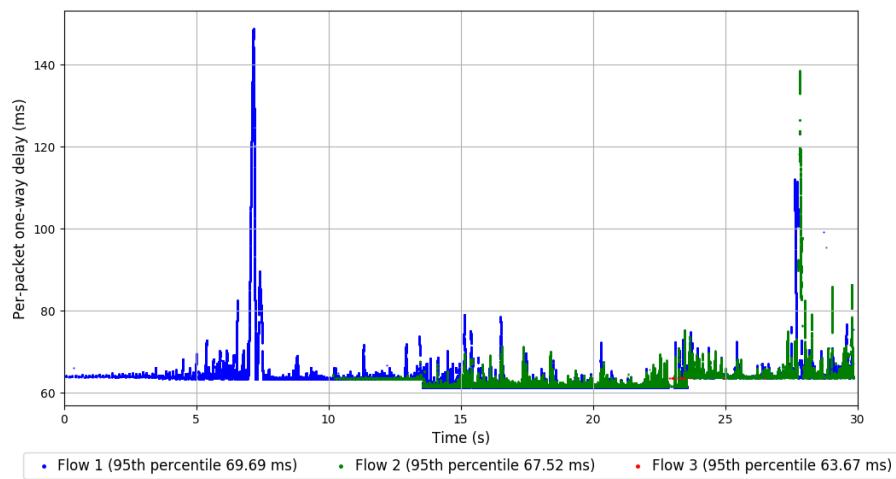
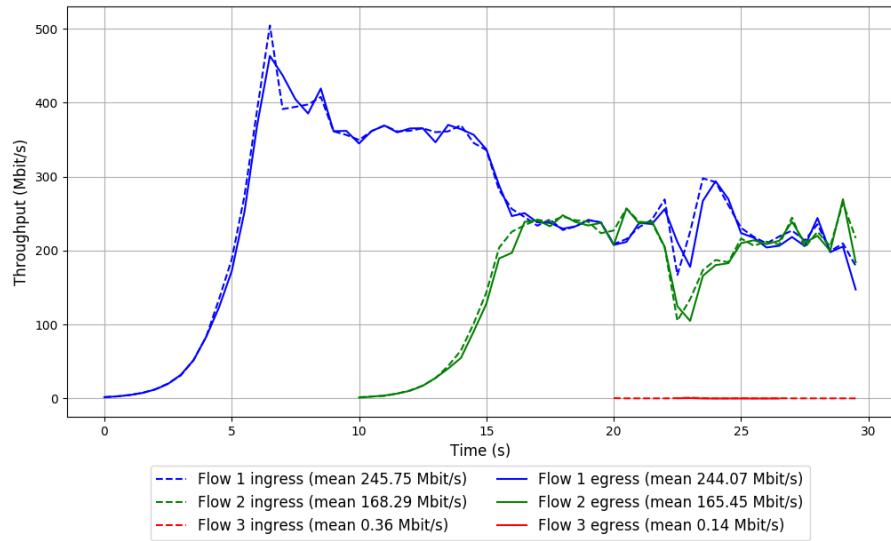
```
Run 5: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 11:46:41
```

```
End at: 2017-08-21 11:47:11
```

```
# Below is generated by plot.py at 2017-08-21 15:33:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.38 Mbit/s
95th percentile per-packet one-way delay: 69.096 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 244.07 Mbit/s
95th percentile per-packet one-way delay: 69.692 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 165.45 Mbit/s
95th percentile per-packet one-way delay: 67.516 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.666 ms
Loss rate: 85.37%
```

Run 5: Report of CalibratedKoho — Data Link



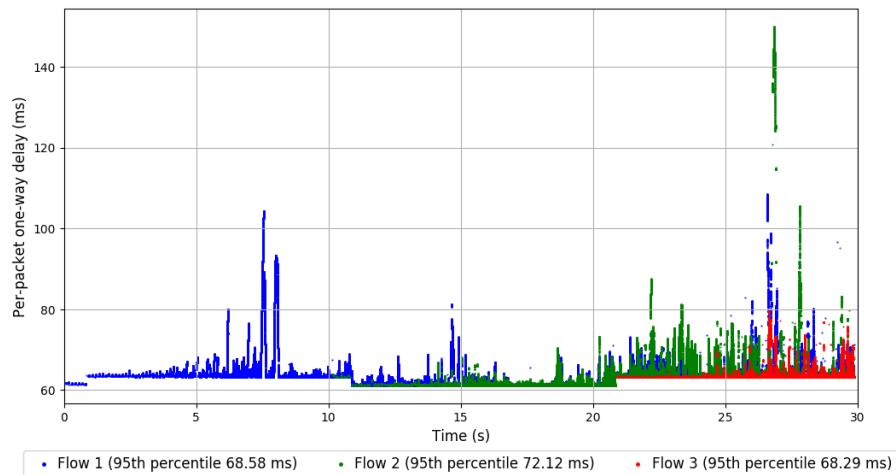
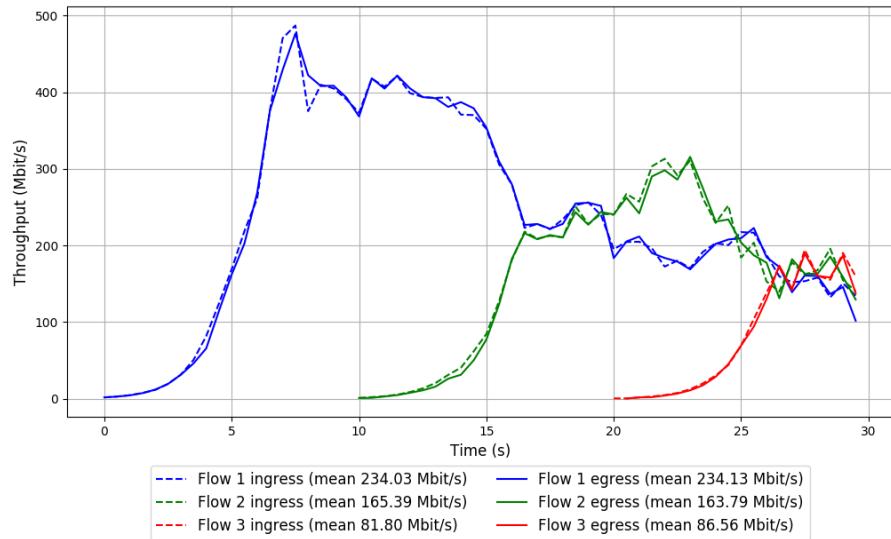
```
Run 6: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 11:58:24
```

```
End at: 2017-08-21 11:58:54
```

```
# Below is generated by plot.py at 2017-08-21 15:33:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.54 Mbit/s
95th percentile per-packet one-way delay: 70.231 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 234.13 Mbit/s
95th percentile per-packet one-way delay: 68.580 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 163.79 Mbit/s
95th percentile per-packet one-way delay: 72.116 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 68.290 ms
Loss rate: 3.07%
```

Run 6: Report of CalibratedKoho — Data Link

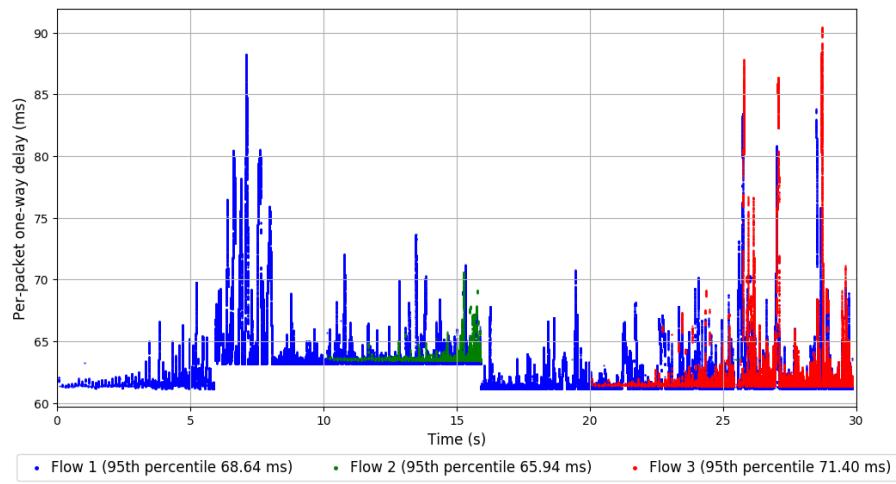
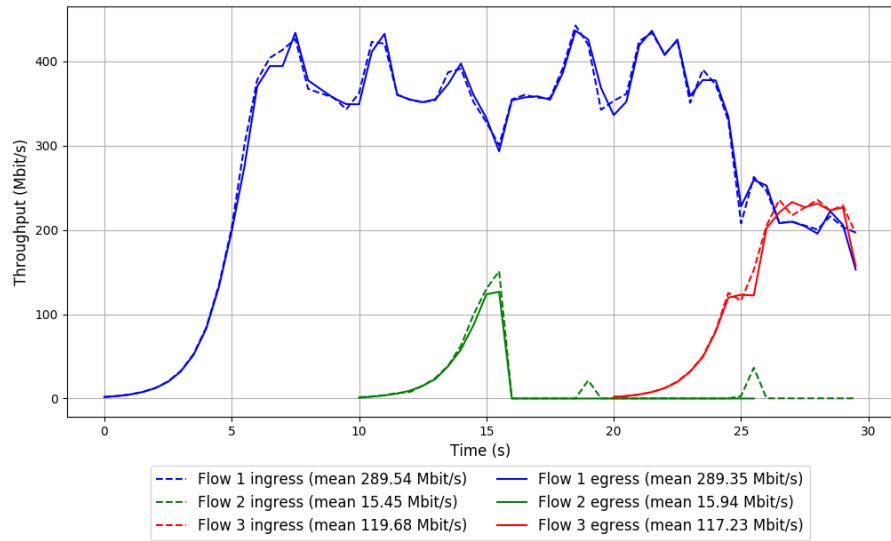


```
Run 7: Statistics of CalibratedKoho

Start at: 2017-08-21 12:10:09
End at: 2017-08-21 12:10:39

# Below is generated by plot.py at 2017-08-21 15:34:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.17 Mbit/s
95th percentile per-packet one-way delay: 68.661 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 289.35 Mbit/s
95th percentile per-packet one-way delay: 68.635 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 15.94 Mbit/s
95th percentile per-packet one-way delay: 65.937 ms
Loss rate: 19.17%
-- Flow 3:
Average throughput: 117.23 Mbit/s
95th percentile per-packet one-way delay: 71.402 ms
Loss rate: 3.36%
```

Run 7: Report of CalibratedKoho — Data Link



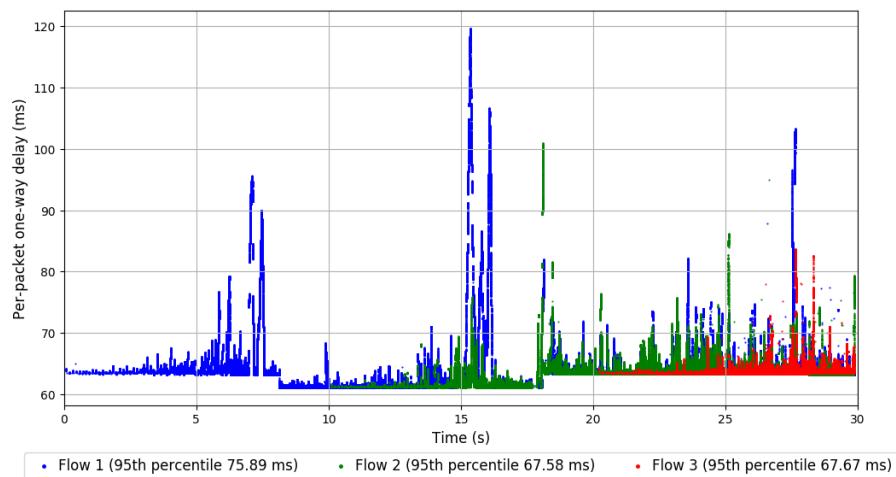
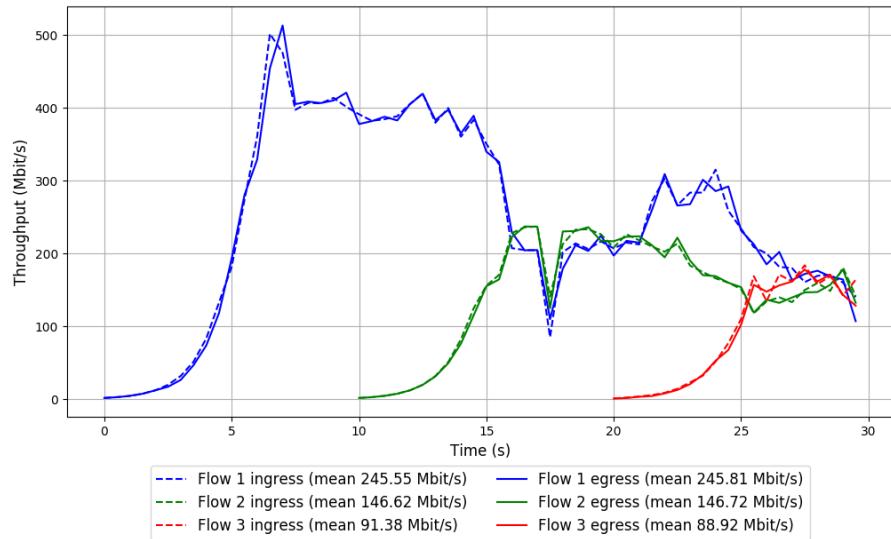
```
Run 8: Statistics of CalibratedKoho
```

```
Start at: 2017-08-21 12:21:47
```

```
End at: 2017-08-21 12:22:17
```

```
# Below is generated by plot.py at 2017-08-21 15:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.83 Mbit/s
95th percentile per-packet one-way delay: 72.340 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 245.81 Mbit/s
95th percentile per-packet one-way delay: 75.886 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 146.72 Mbit/s
95th percentile per-packet one-way delay: 67.583 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 67.674 ms
Loss rate: 3.95%
```

Run 8: Report of CalibratedKoho — Data Link

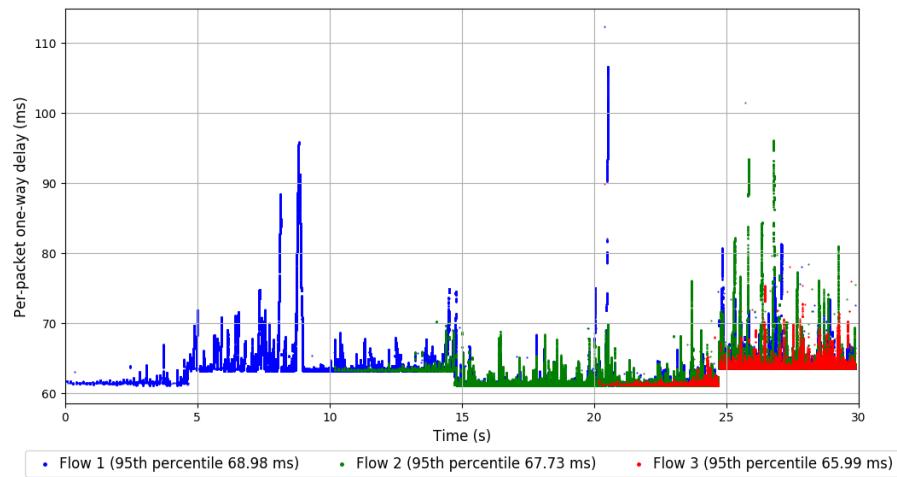
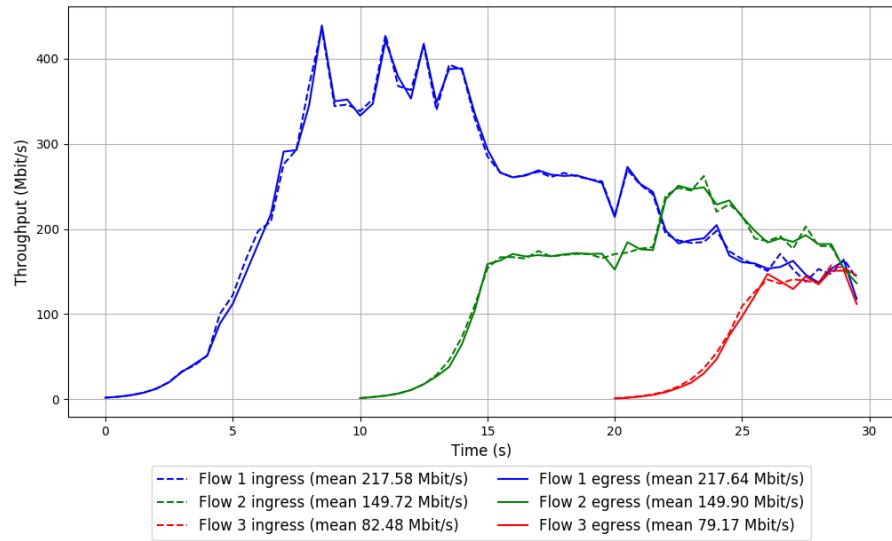


```
Run 9: Statistics of CalibratedKoho

Start at: 2017-08-21 12:33:30
End at: 2017-08-21 12:34:00

# Below is generated by plot.py at 2017-08-21 15:35:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.23 Mbit/s
95th percentile per-packet one-way delay: 68.324 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 217.64 Mbit/s
95th percentile per-packet one-way delay: 68.982 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 149.90 Mbit/s
95th percentile per-packet one-way delay: 67.733 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 79.17 Mbit/s
95th percentile per-packet one-way delay: 65.987 ms
Loss rate: 5.20%
```

Run 9: Report of CalibratedKoho — Data Link

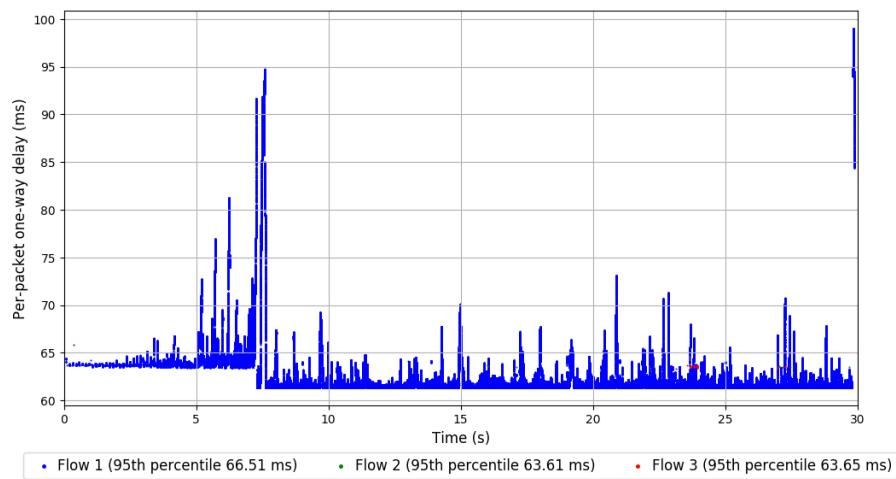
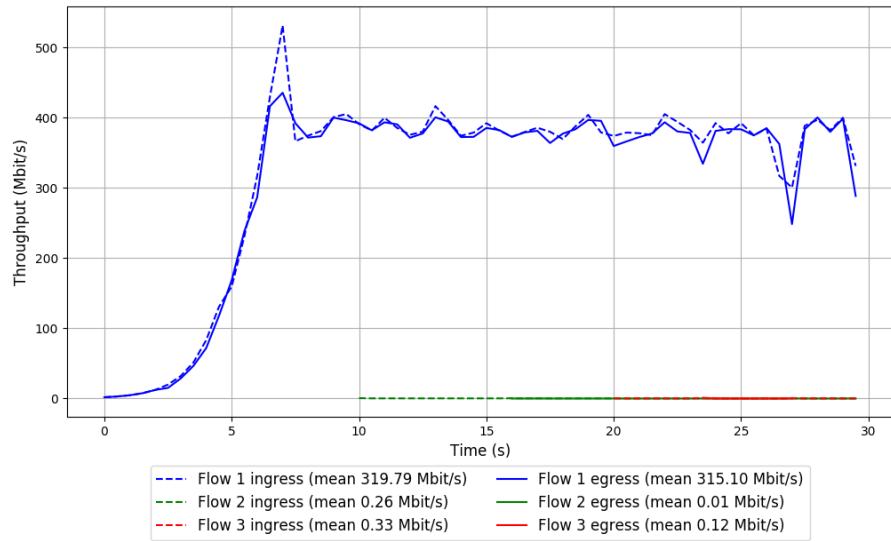


```
Run 10: Statistics of CalibratedKoho

Start at: 2017-08-21 12:45:08
End at: 2017-08-21 12:45:38

# Below is generated by plot.py at 2017-08-21 15:35:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.12 Mbit/s
95th percentile per-packet one-way delay: 66.507 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 315.10 Mbit/s
95th percentile per-packet one-way delay: 66.507 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 63.608 ms
Loss rate: 97.87%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 63.646 ms
Loss rate: 86.81%
```

Run 10: Report of CalibratedKoho — Data Link

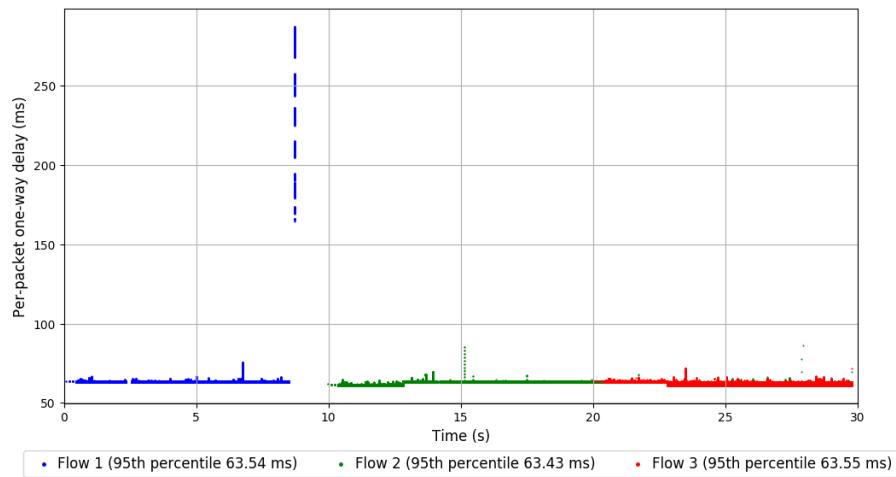
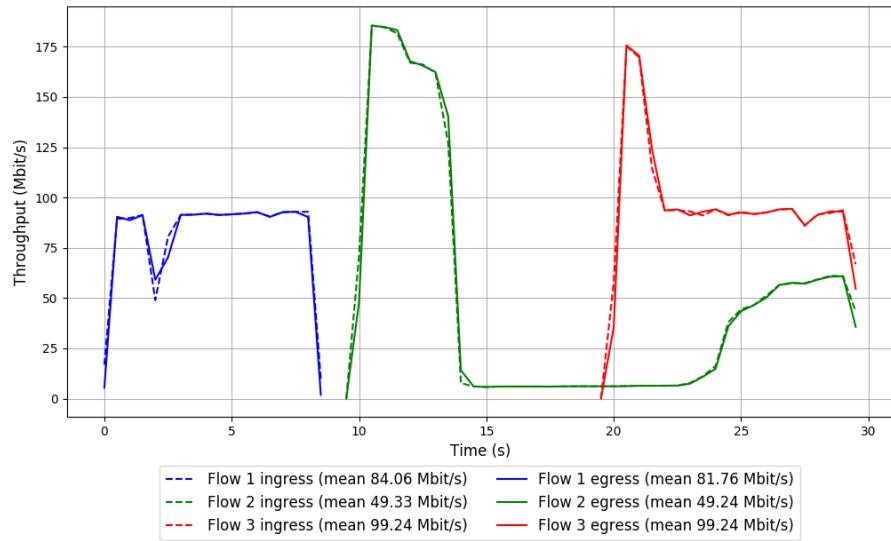


```
Run 1: Statistics of Copa

Start at: 2017-08-21 11:06:02
End at: 2017-08-21 11:06:32

# Below is generated by plot.py at 2017-08-21 15:35:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.36 Mbit/s
95th percentile per-packet one-way delay: 63.518 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 81.76 Mbit/s
95th percentile per-packet one-way delay: 63.537 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 49.24 Mbit/s
95th percentile per-packet one-way delay: 63.431 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 99.24 Mbit/s
95th percentile per-packet one-way delay: 63.550 ms
Loss rate: 1.20%
```

## Run 1: Report of Copa — Data Link



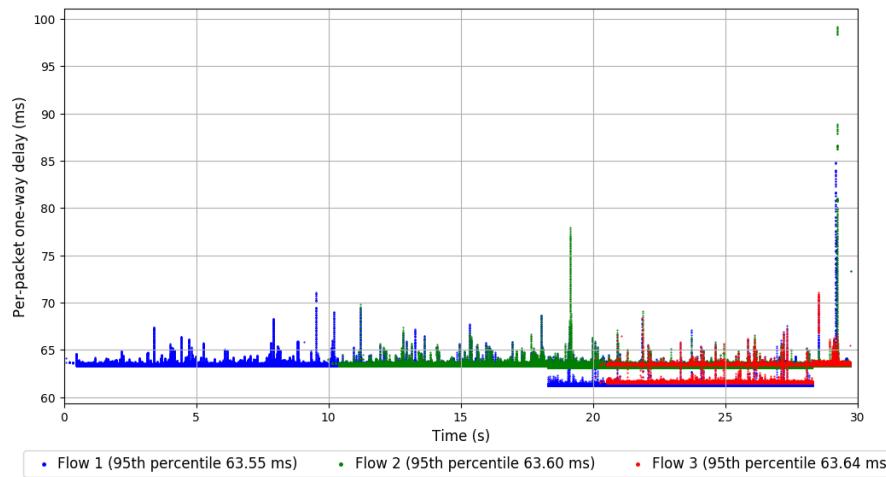
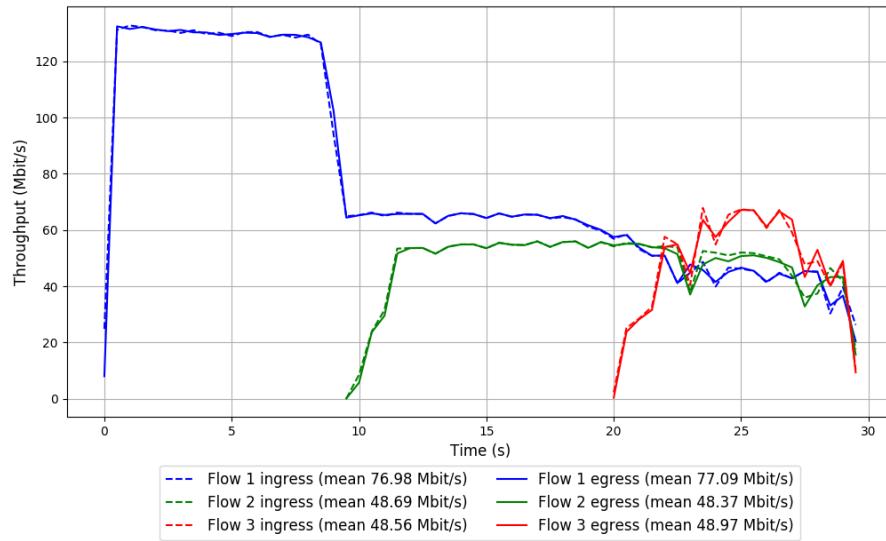
Run 2: Statistics of Copa

Start at: 2017-08-21 11:17:56

End at: 2017-08-21 11:18:26

```
# Below is generated by plot.py at 2017-08-21 15:36:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.17 Mbit/s
95th percentile per-packet one-way delay: 63.577 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 77.09 Mbit/s
95th percentile per-packet one-way delay: 63.551 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 48.37 Mbit/s
95th percentile per-packet one-way delay: 63.597 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 48.97 Mbit/s
95th percentile per-packet one-way delay: 63.638 ms
Loss rate: 0.44%
```

## Run 2: Report of Copa — Data Link



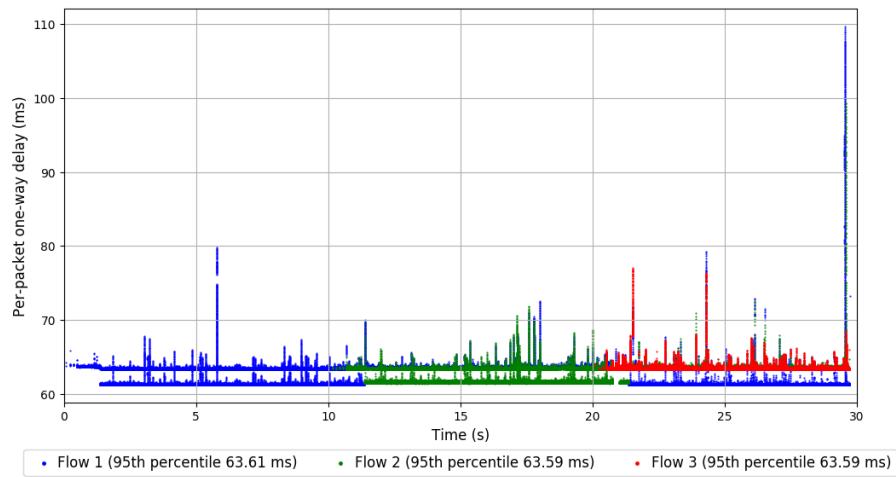
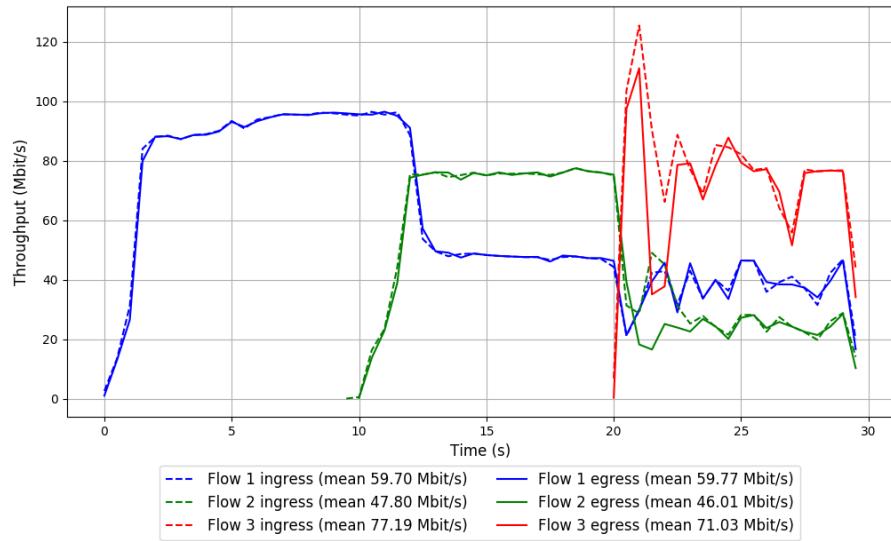
Run 3: Statistics of Copa

Start at: 2017-08-21 11:29:43

End at: 2017-08-21 11:30:13

```
# Below is generated by plot.py at 2017-08-21 15:36:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.35 Mbit/s
95th percentile per-packet one-way delay: 63.606 ms
Loss rate: 3.31%
-- Flow 1:
Average throughput: 59.77 Mbit/s
95th percentile per-packet one-way delay: 63.613 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 46.01 Mbit/s
95th percentile per-packet one-way delay: 63.587 ms
Loss rate: 4.35%
-- Flow 3:
Average throughput: 71.03 Mbit/s
95th percentile per-packet one-way delay: 63.594 ms
Loss rate: 9.17%
```

### Run 3: Report of Copa — Data Link



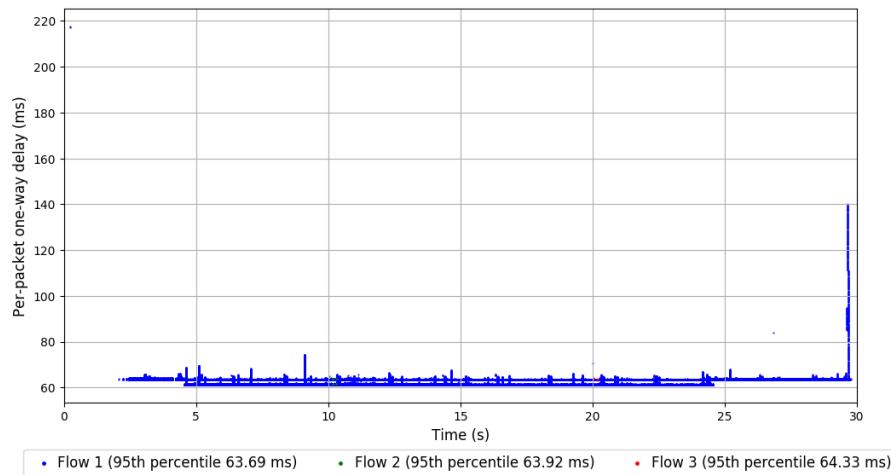
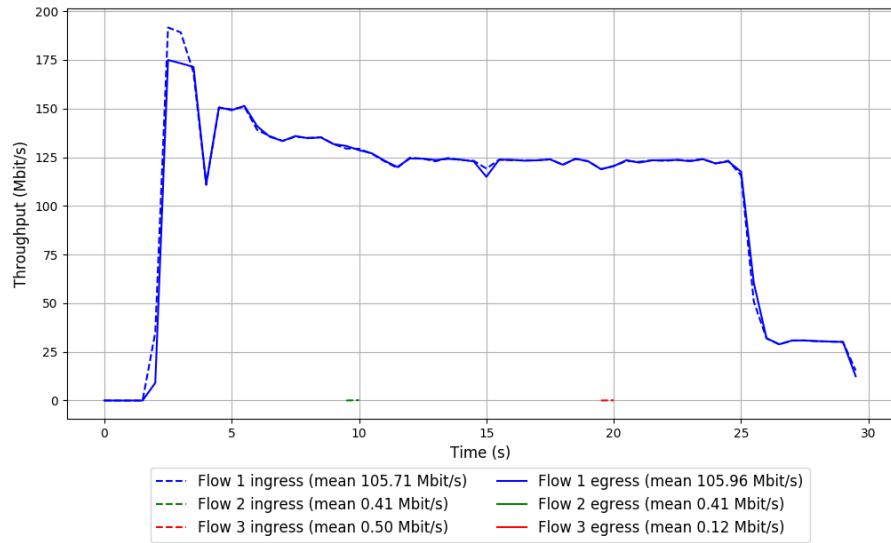
Run 4: Statistics of Copa

Start at: 2017-08-21 11:41:30

End at: 2017-08-21 11:42:00

```
# Below is generated by plot.py at 2017-08-21 15:37:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.96 Mbit/s
95th percentile per-packet one-way delay: 63.693 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 105.96 Mbit/s
95th percentile per-packet one-way delay: 63.693 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 63.917 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 64.330 ms
Loss rate: 76.95%
```

## Run 4: Report of Copa — Data Link



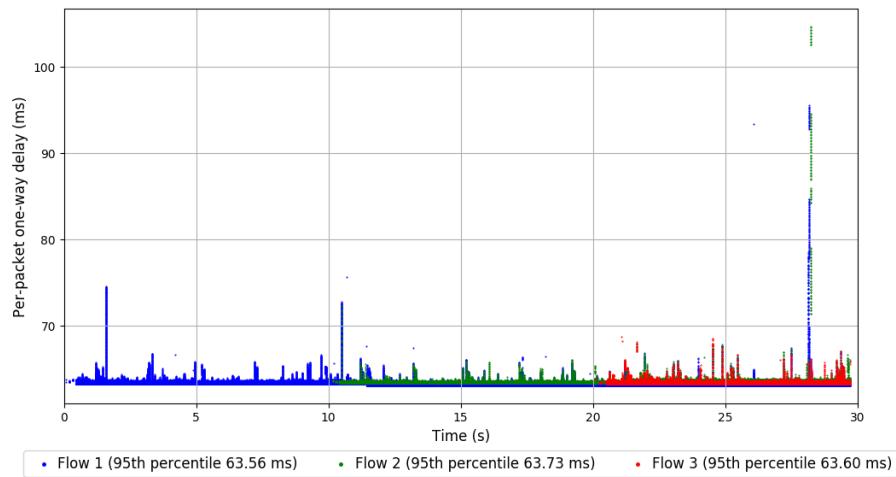
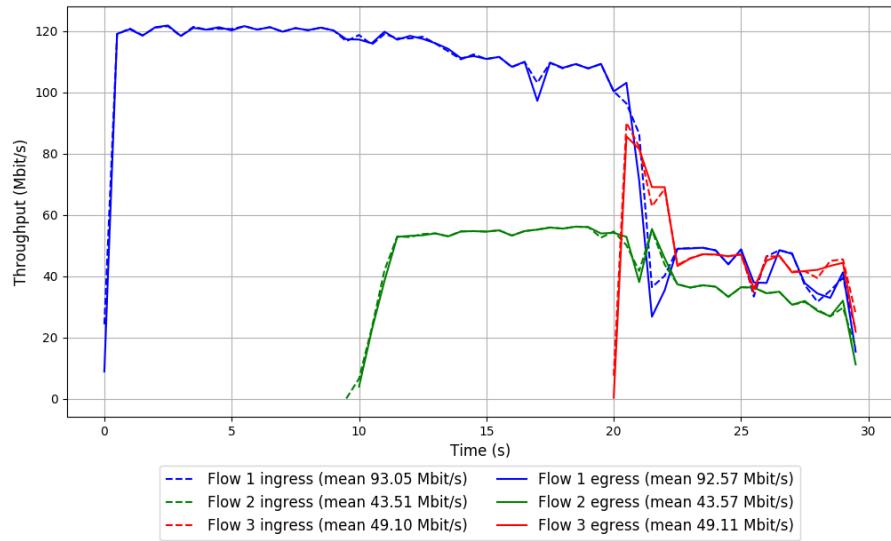
Run 5: Statistics of Copa

Start at: 2017-08-21 11:53:13

End at: 2017-08-21 11:53:43

```
# Below is generated by plot.py at 2017-08-21 15:37:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.45 Mbit/s
95th percentile per-packet one-way delay: 63.664 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 92.57 Mbit/s
95th percentile per-packet one-way delay: 63.556 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 43.57 Mbit/s
95th percentile per-packet one-way delay: 63.728 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 63.599 ms
Loss rate: 1.26%
```

## Run 5: Report of Copa — Data Link



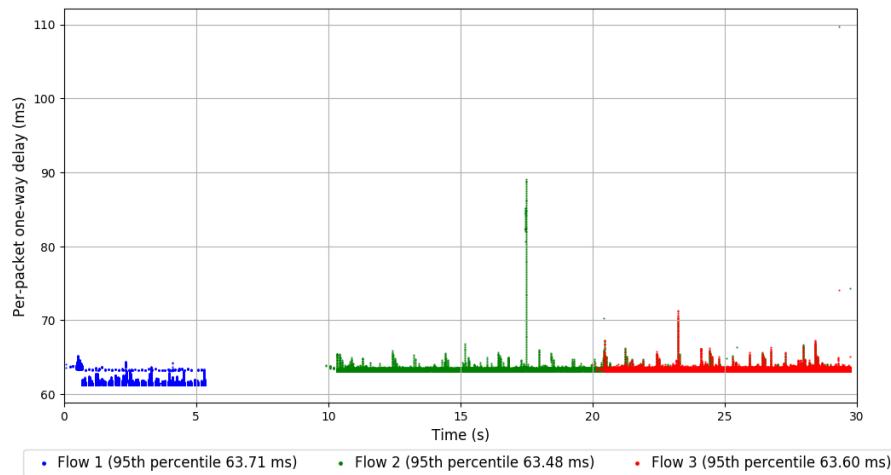
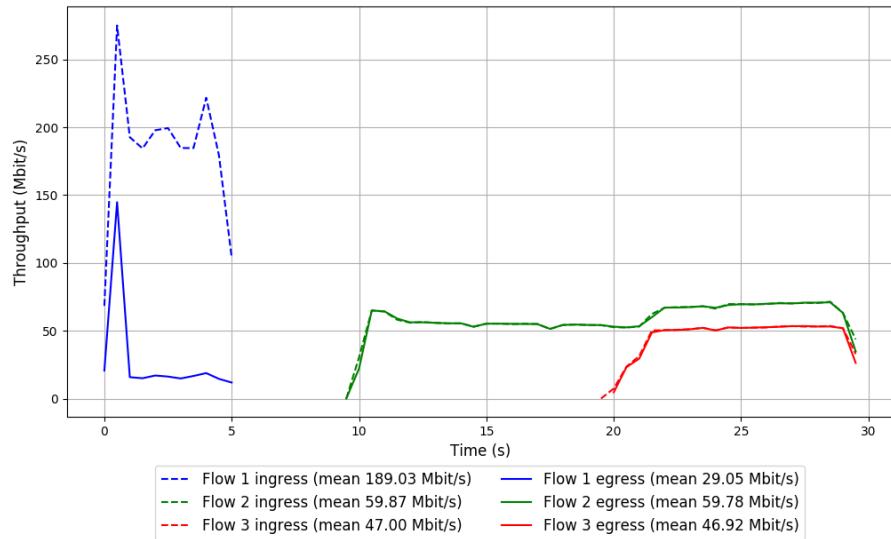
Run 6: Statistics of Copa

Start at: 2017-08-21 12:05:04

End at: 2017-08-21 12:05:34

```
# Below is generated by plot.py at 2017-08-21 15:37:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.47 Mbit/s
95th percentile per-packet one-way delay: 63.574 ms
Loss rate: 32.36%
-- Flow 1:
Average throughput: 29.05 Mbit/s
95th percentile per-packet one-way delay: 63.706 ms
Loss rate: 84.64%
-- Flow 2:
Average throughput: 59.78 Mbit/s
95th percentile per-packet one-way delay: 63.480 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 46.92 Mbit/s
95th percentile per-packet one-way delay: 63.599 ms
Loss rate: 1.46%
```

## Run 6: Report of Copa — Data Link



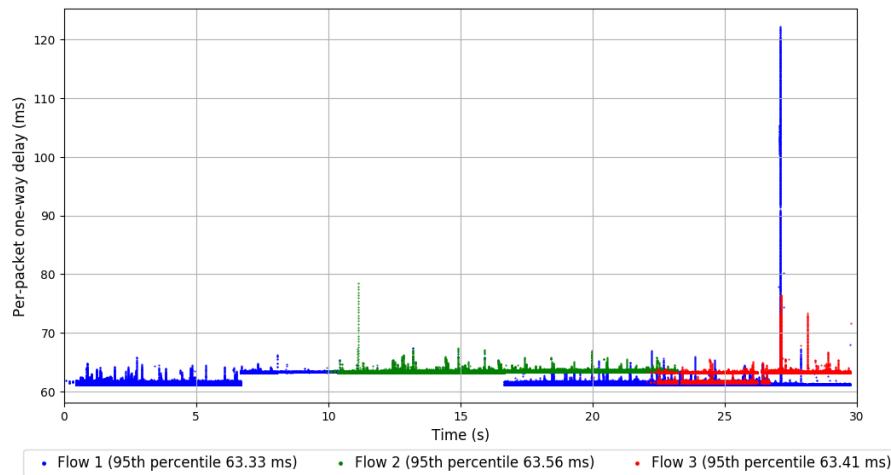
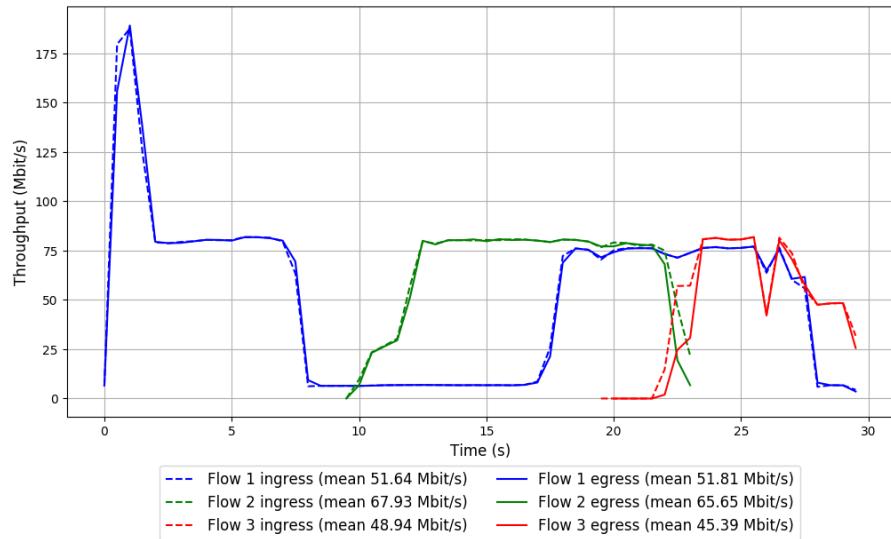
Run 7: Statistics of Copa

Start at: 2017-08-21 12:16:38

End at: 2017-08-21 12:17:08

```
# Below is generated by plot.py at 2017-08-21 15:37:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.99 Mbit/s
95th percentile per-packet one-way delay: 63.484 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 51.81 Mbit/s
95th percentile per-packet one-way delay: 63.326 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 63.559 ms
Loss rate: 3.36%
-- Flow 3:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 63.411 ms
Loss rate: 8.35%
```

## Run 7: Report of Copa — Data Link



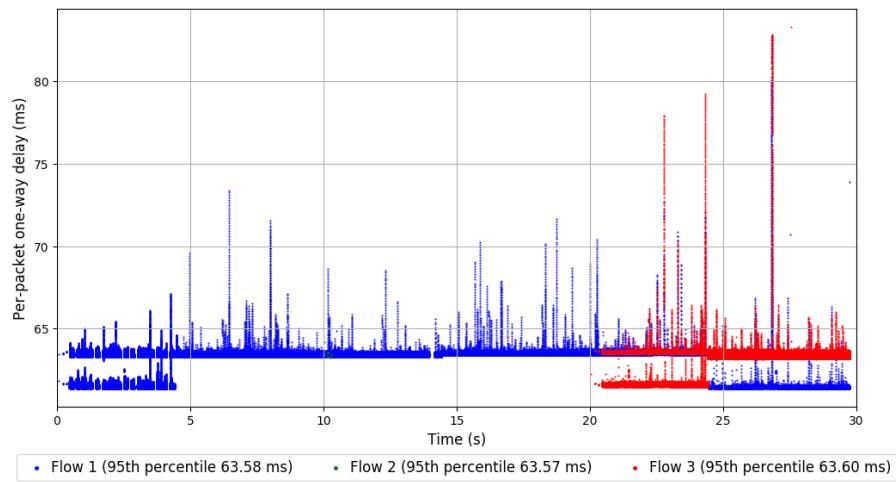
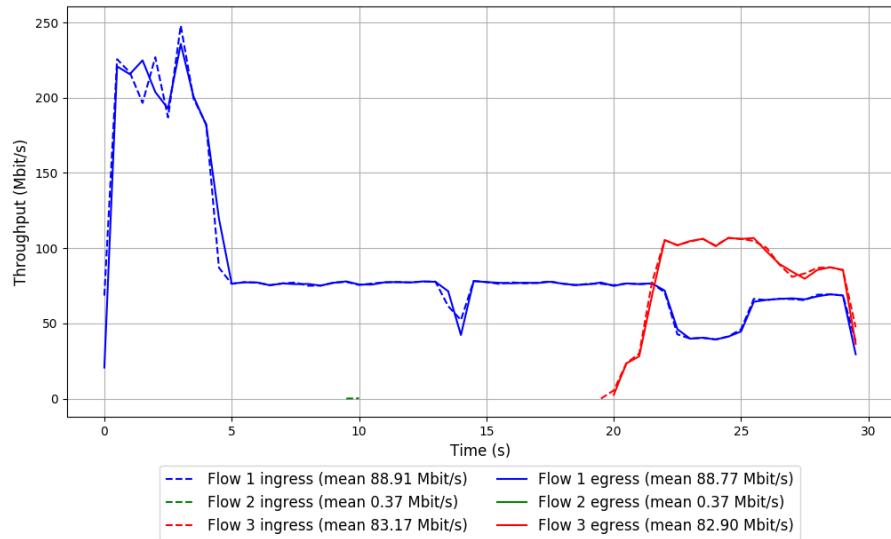
Run 8: Statistics of Copa

Start at: 2017-08-21 12:28:20

End at: 2017-08-21 12:28:50

```
# Below is generated by plot.py at 2017-08-21 15:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.85 Mbit/s
95th percentile per-packet one-way delay: 63.587 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 88.77 Mbit/s
95th percentile per-packet one-way delay: 63.577 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 63.568 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.90 Mbit/s
95th percentile per-packet one-way delay: 63.605 ms
Loss rate: 1.61%
```

## Run 8: Report of Copa — Data Link

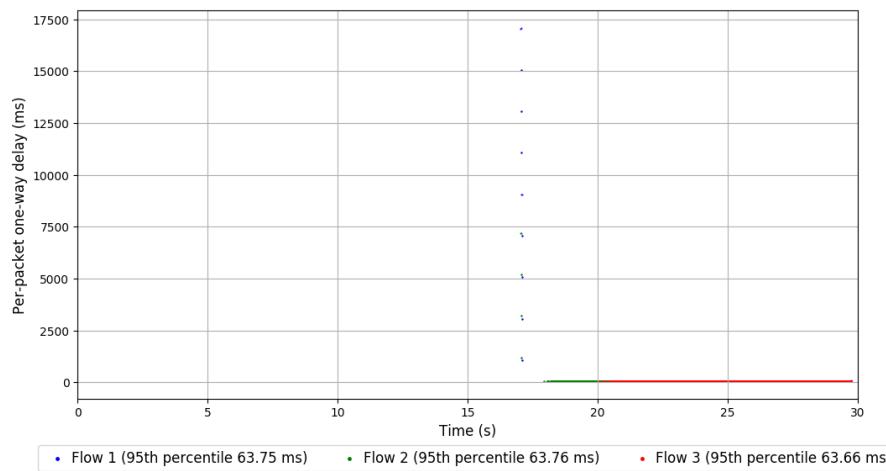
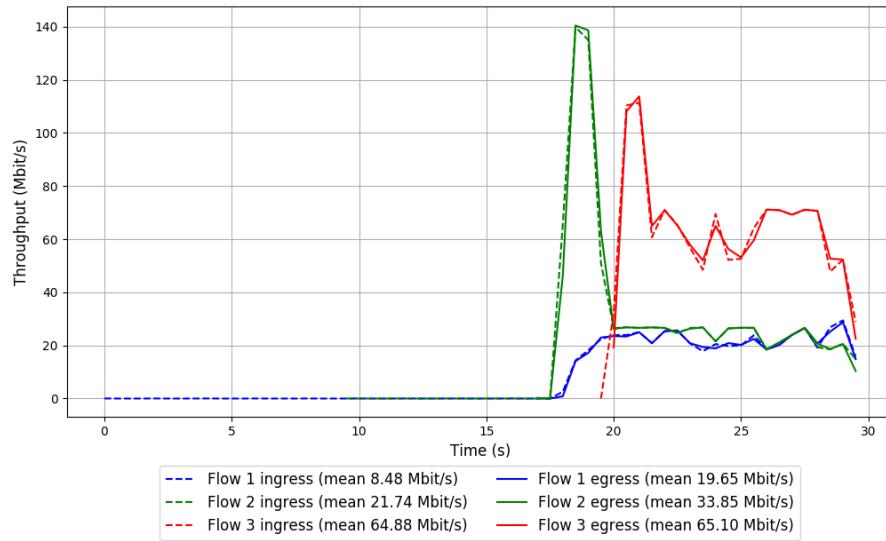


Run 9: Statistics of Copa

Start at: 2017-08-21 12:39:56

End at: 2017-08-21 12:40:26

## Run 9: Report of Copa — Data Link



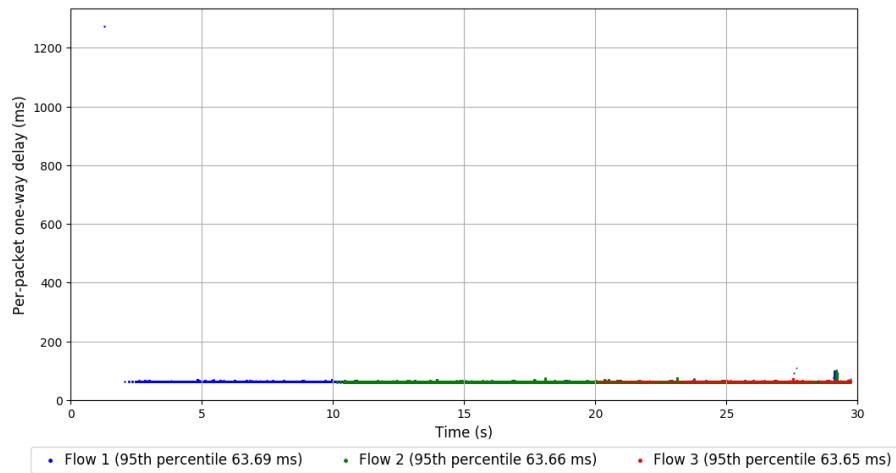
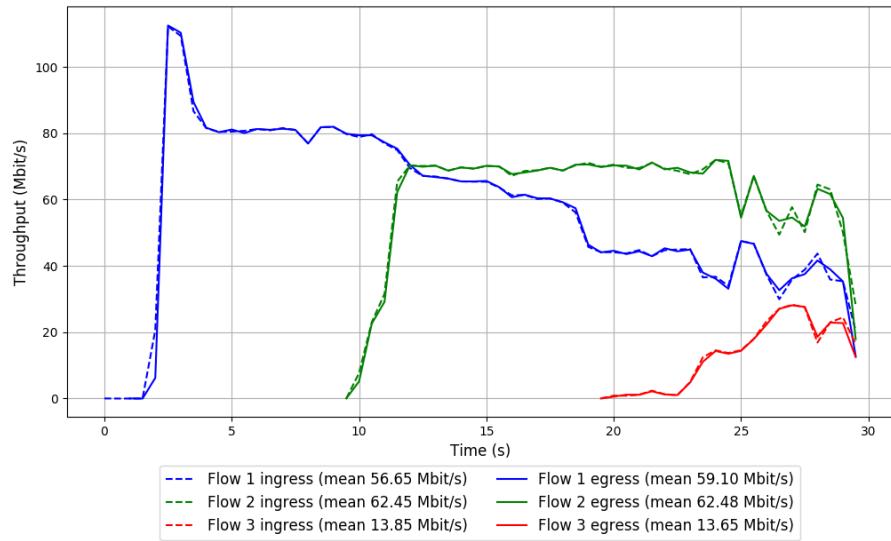
Run 10: Statistics of Copa

Start at: 2017-08-21 12:51:36

End at: 2017-08-21 12:52:06

```
# Below is generated by plot.py at 2017-08-21 15:38:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 107.09 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 63.692 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 62.48 Mbit/s
95th percentile per-packet one-way delay: 63.661 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 63.648 ms
Loss rate: 2.76%
```

Run 10: Report of Copa — Data Link

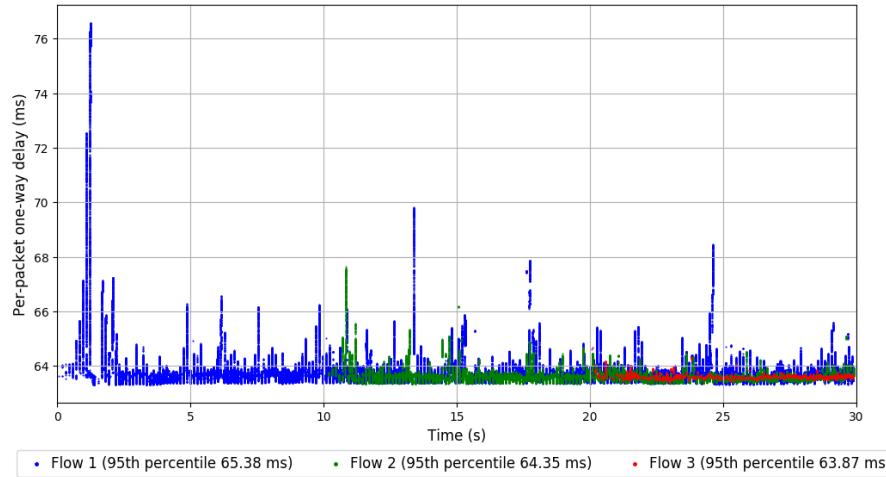
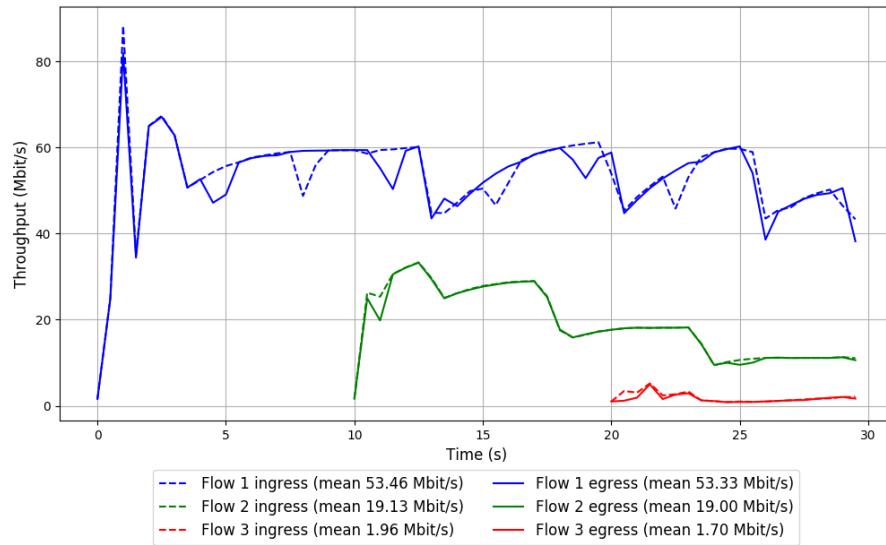


```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-21 11:02:51
End at: 2017-08-21 11:03:21

# Below is generated by plot.py at 2017-08-21 15:38:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.46 Mbit/s
95th percentile per-packet one-way delay: 65.183 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 65.380 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 64.349 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 63.869 ms
Loss rate: 14.15%
```

## Run 1: Report of TCP Cubic — Data Link



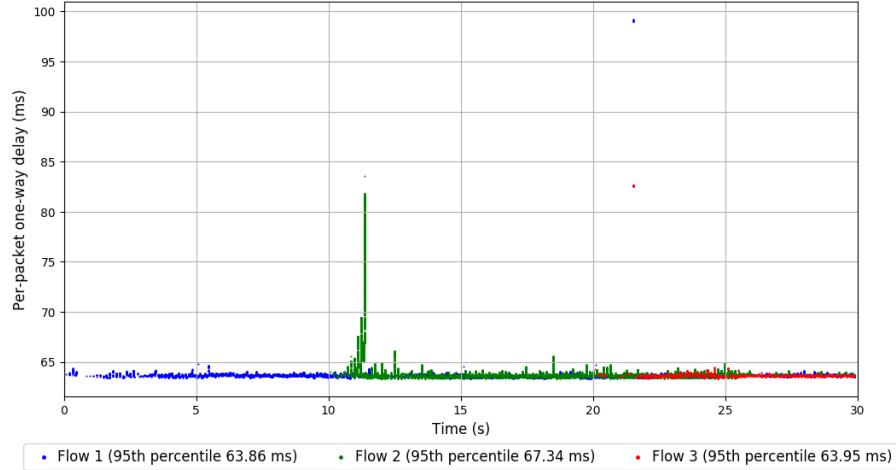
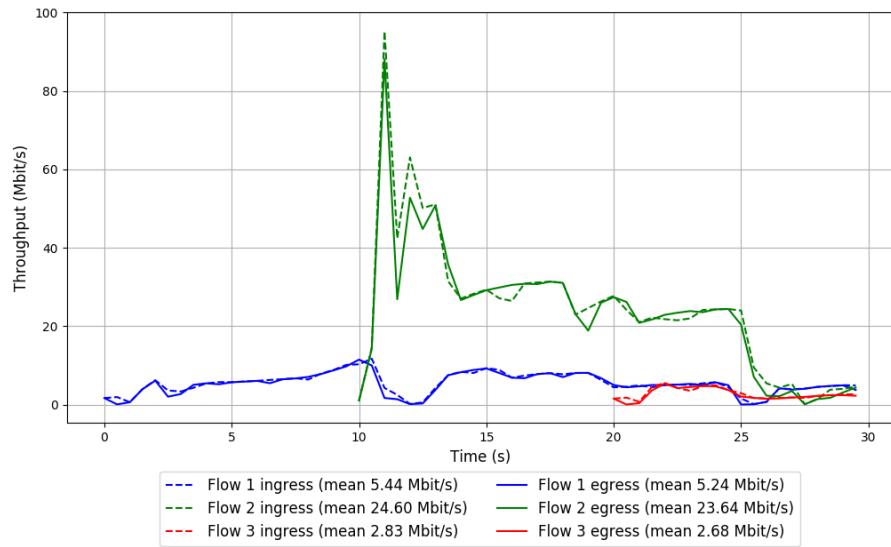
Run 2: Statistics of TCP Cubic

Start at: 2017-08-21 11:14:39

End at: 2017-08-21 11:15:09

```
# Below is generated by plot.py at 2017-08-21 15:38:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 65.567 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 63.859 ms
Loss rate: 3.92%
-- Flow 2:
Average throughput: 23.64 Mbit/s
95th percentile per-packet one-way delay: 67.343 ms
Loss rate: 4.71%
-- Flow 3:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 63.945 ms
Loss rate: 6.78%
```

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



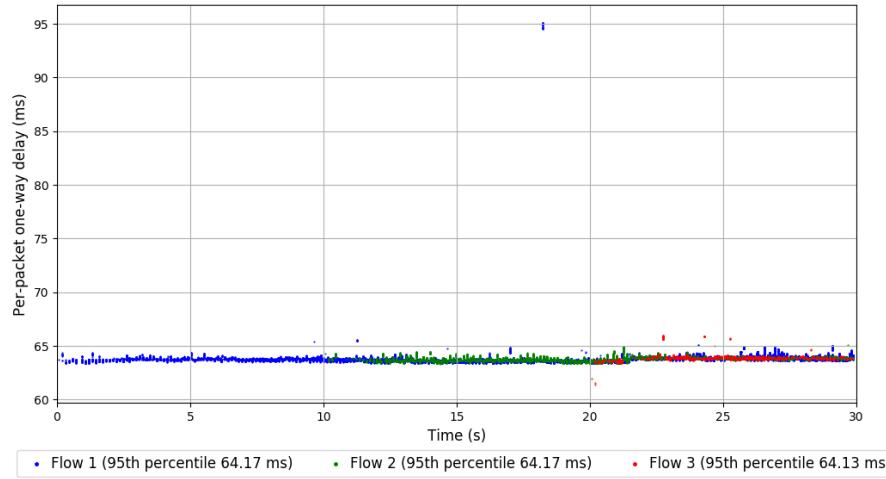
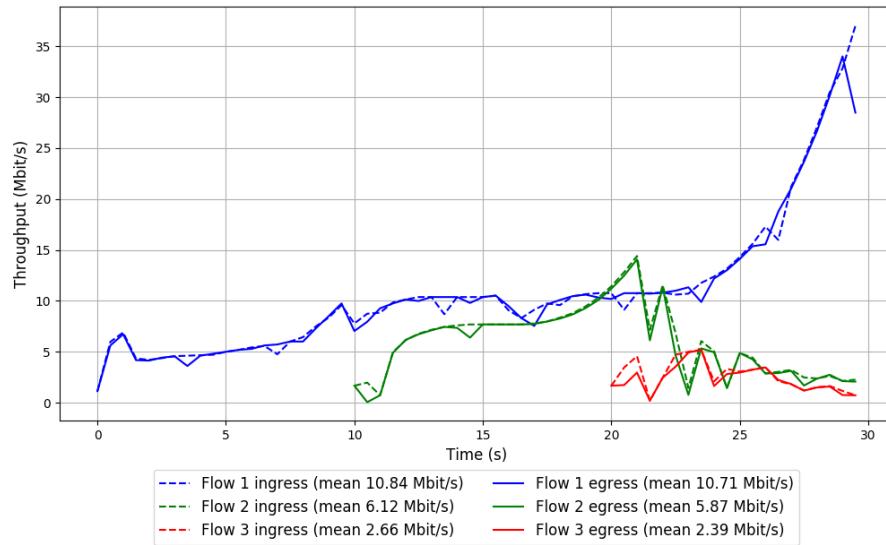
```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2017-08-21 11:26:33
```

```
End at: 2017-08-21 11:27:03
```

```
# Below is generated by plot.py at 2017-08-21 15:38:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 64.169 ms
Loss rate: 2.98%
-- Flow 1:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 64.174 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 5.87 Mbit/s
95th percentile per-packet one-way delay: 64.166 ms
Loss rate: 4.65%
-- Flow 3:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 64.134 ms
Loss rate: 11.39%
```

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



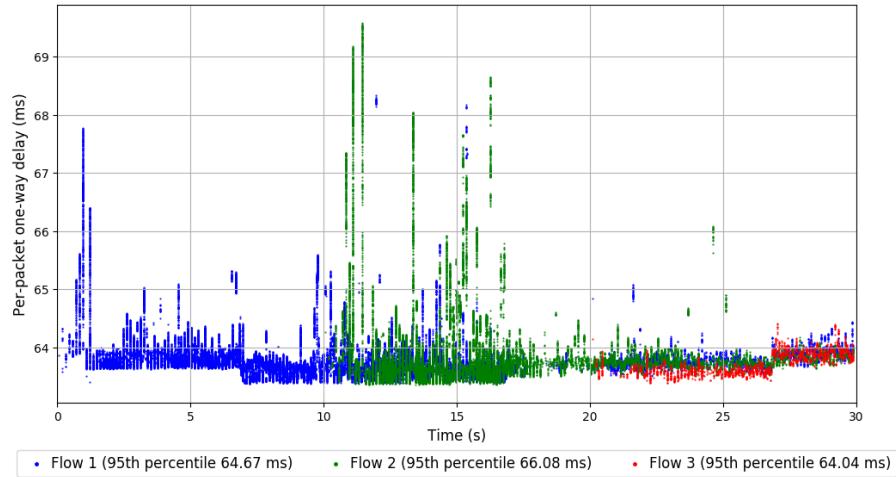
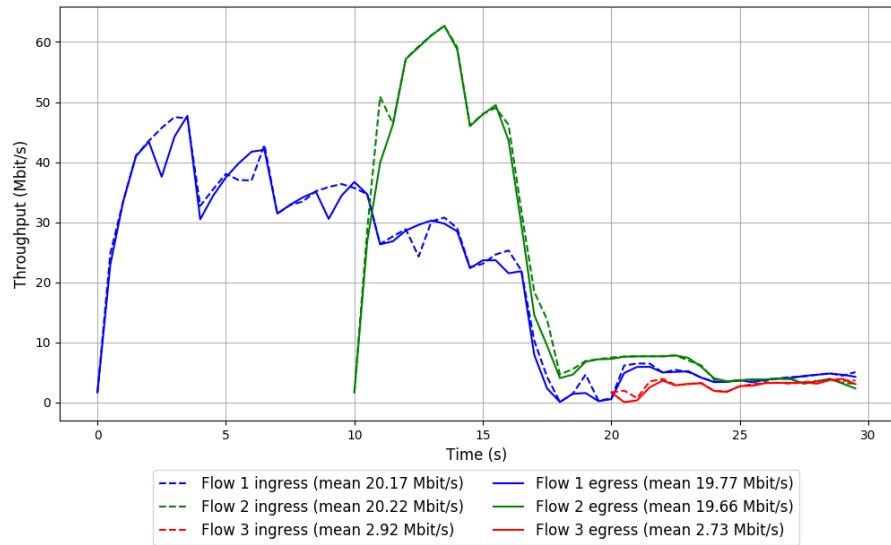
Run 4: Statistics of TCP Cubic

Start at: 2017-08-21 11:38:28

End at: 2017-08-21 11:38:58

```
# Below is generated by plot.py at 2017-08-21 15:38:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.72 Mbit/s
95th percentile per-packet one-way delay: 65.042 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 19.77 Mbit/s
95th percentile per-packet one-way delay: 64.669 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 19.66 Mbit/s
95th percentile per-packet one-way delay: 66.084 ms
Loss rate: 3.59%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 64.037 ms
Loss rate: 7.95%
```

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

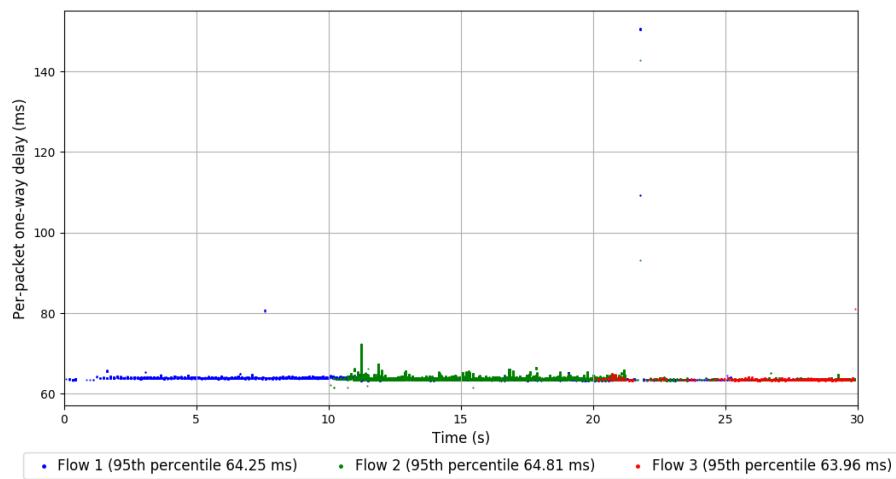
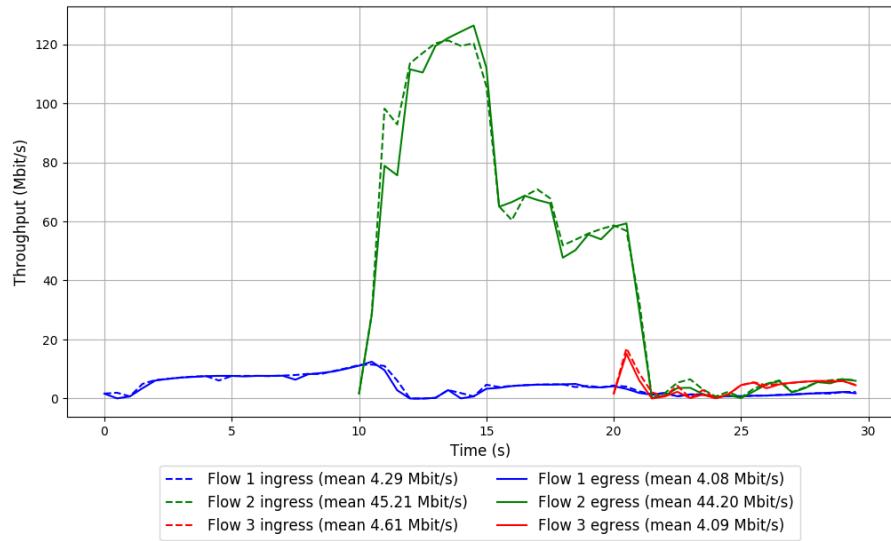


```
Run 5: Statistics of TCP Cubic

Start at: 2017-08-21 11:50:04
End at: 2017-08-21 11:50:34

# Below is generated by plot.py at 2017-08-21 15:38:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.77 Mbit/s
95th percentile per-packet one-way delay: 64.661 ms
Loss rate: 3.58%
-- Flow 1:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 64.245 ms
Loss rate: 5.27%
-- Flow 2:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 64.807 ms
Loss rate: 2.89%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 63.958 ms
Loss rate: 12.47%
```

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



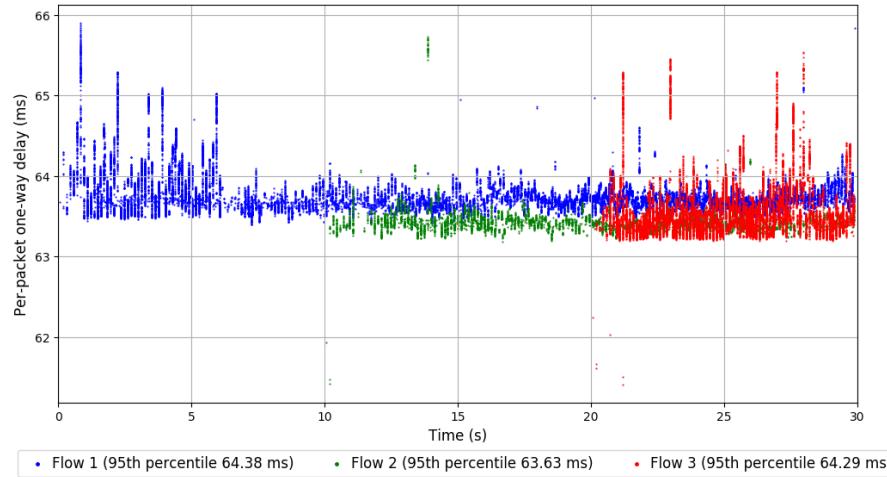
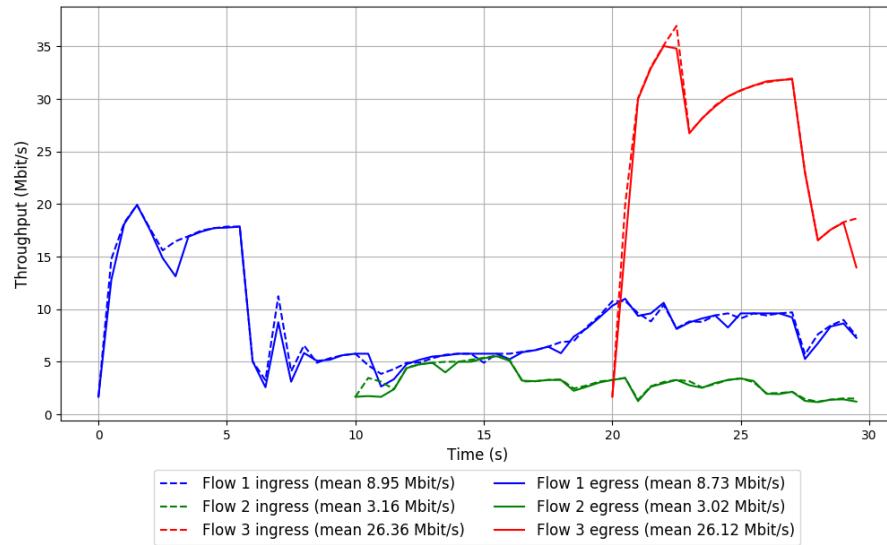
Run 6: Statistics of TCP Cubic

Start at: 2017-08-21 12:01:49

End at: 2017-08-21 12:02:19

```
# Below is generated by plot.py at 2017-08-21 15:38:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.30 Mbit/s
95th percentile per-packet one-way delay: 64.297 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 8.73 Mbit/s
95th percentile per-packet one-way delay: 64.380 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 63.629 ms
Loss rate: 4.97%
-- Flow 3:
Average throughput: 26.12 Mbit/s
95th percentile per-packet one-way delay: 64.289 ms
Loss rate: 2.14%
```

Run 6: Report of TCP Cubic — Data Link



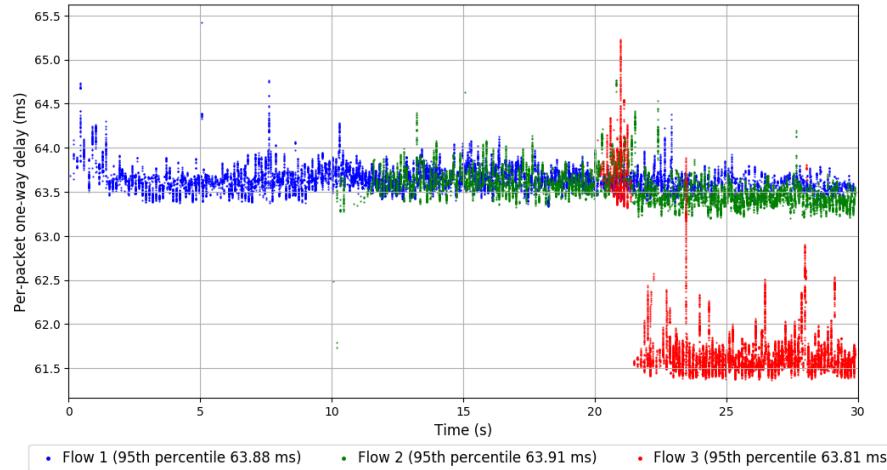
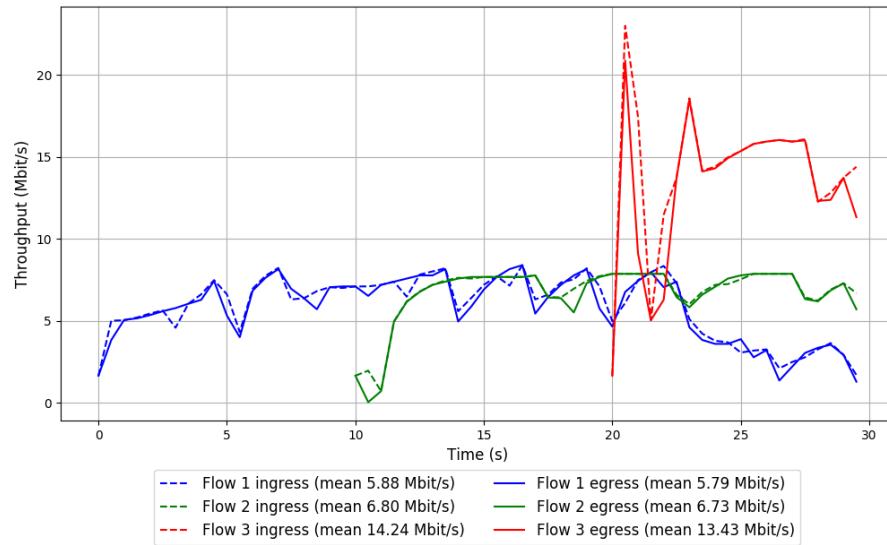
Run 7: Statistics of TCP Cubic

Start at: 2017-08-21 12:13:34

End at: 2017-08-21 12:14:04

```
# Below is generated by plot.py at 2017-08-21 15:38:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 63.885 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 63.884 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 63.906 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 13.43 Mbit/s
95th percentile per-packet one-way delay: 63.806 ms
Loss rate: 6.87%
```

Run 7: Report of TCP Cubic — Data Link



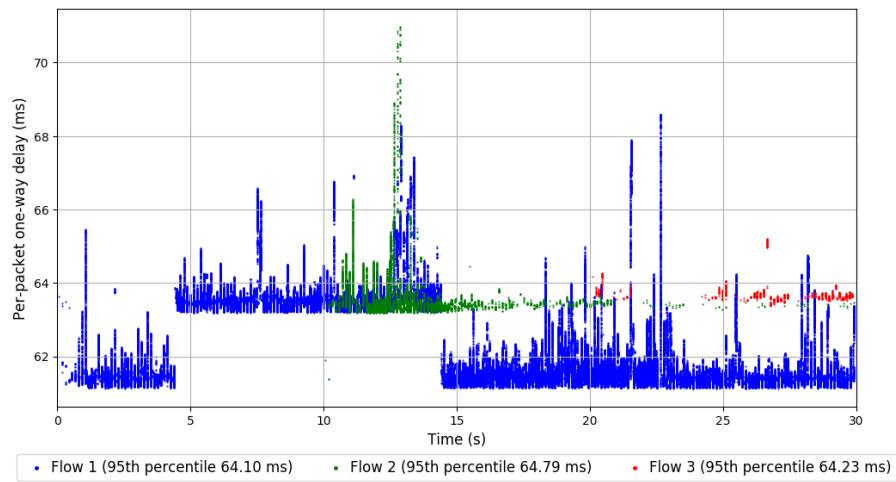
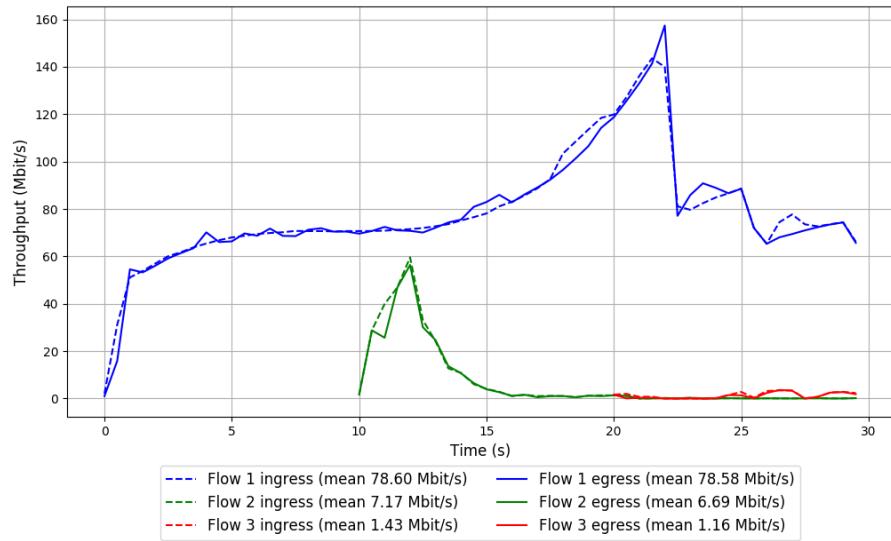
```
Run 8: Statistics of TCP Cubic
```

```
Start at: 2017-08-21 12:25:10
```

```
End at: 2017-08-21 12:25:40
```

```
# Below is generated by plot.py at 2017-08-21 15:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 64.164 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 78.58 Mbit/s
95th percentile per-packet one-way delay: 64.097 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 64.793 ms
Loss rate: 7.35%
-- Flow 3:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 64.232 ms
Loss rate: 20.08%
```

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



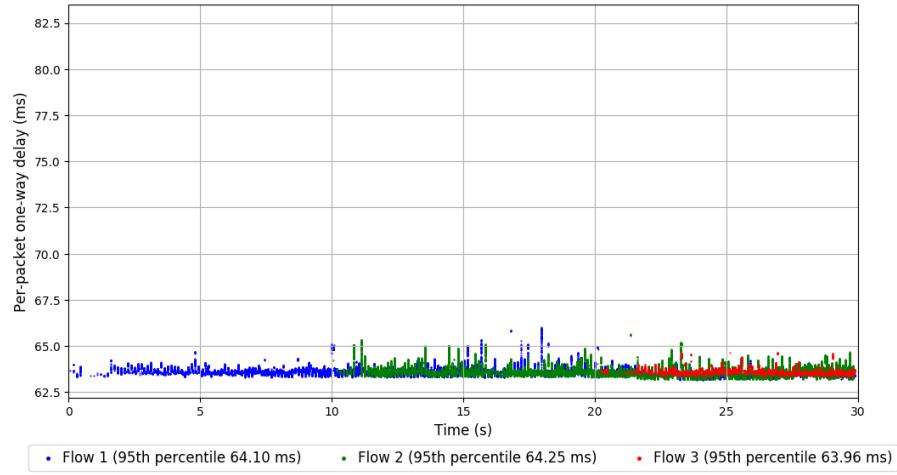
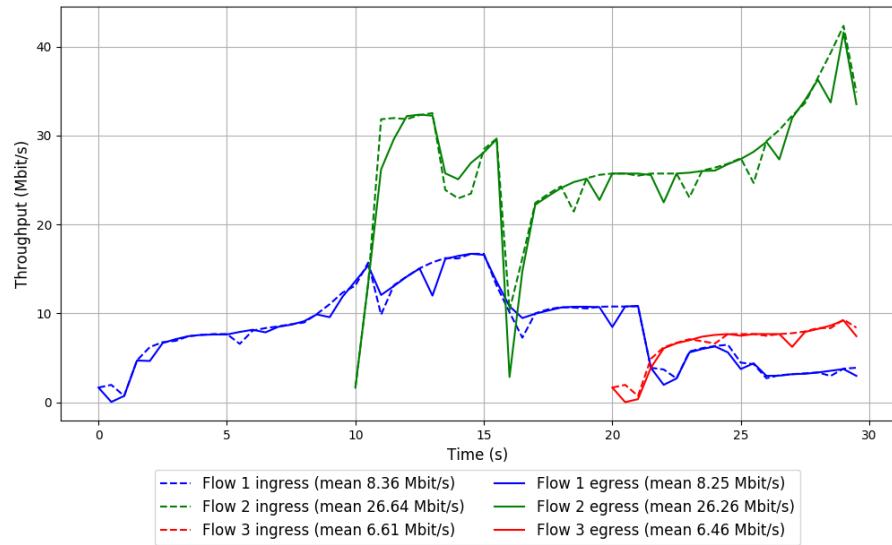
Run 9: Statistics of TCP Cubic

Start at: 2017-08-21 12:36:53

End at: 2017-08-21 12:37:23

```
# Below is generated by plot.py at 2017-08-21 15:39:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.81 Mbit/s
95th percentile per-packet one-way delay: 64.205 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 64.097 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 26.26 Mbit/s
95th percentile per-packet one-way delay: 64.250 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 63.964 ms
Loss rate: 3.48%
```

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



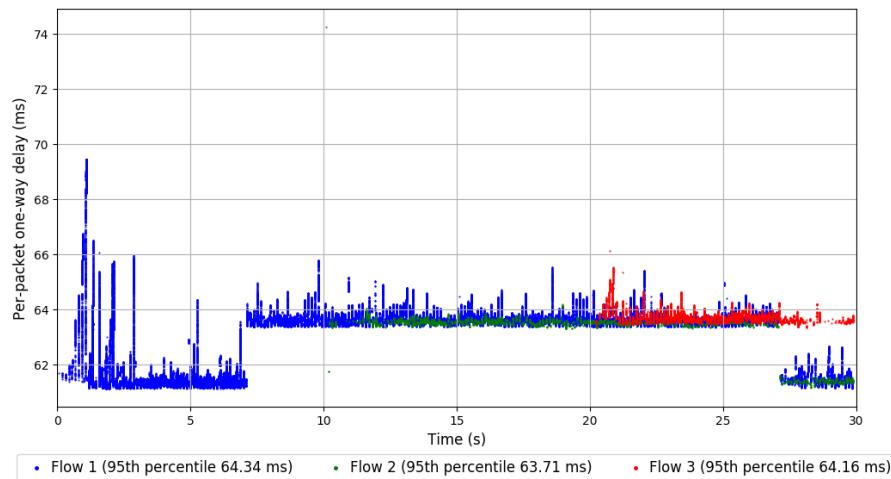
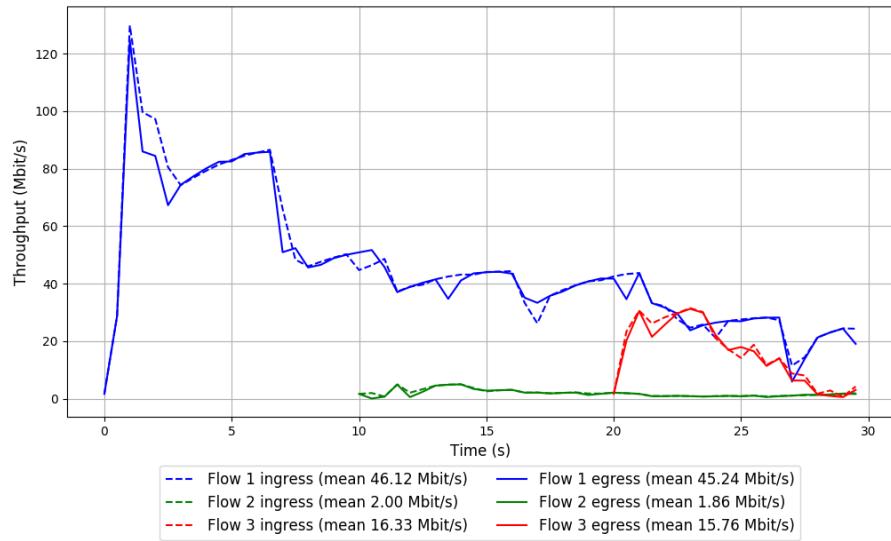
Run 10: Statistics of TCP Cubic

Start at: 2017-08-21 12:48:28

End at: 2017-08-21 12:48:58

```
# Below is generated by plot.py at 2017-08-21 15:39:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.62 Mbit/s
95th percentile per-packet one-way delay: 64.305 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 45.24 Mbit/s
95th percentile per-packet one-way delay: 64.342 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 63.708 ms
Loss rate: 7.64%
-- Flow 3:
Average throughput: 15.76 Mbit/s
95th percentile per-packet one-way delay: 64.158 ms
Loss rate: 5.19%
```

Run 10: Report of TCP Cubic — Data Link

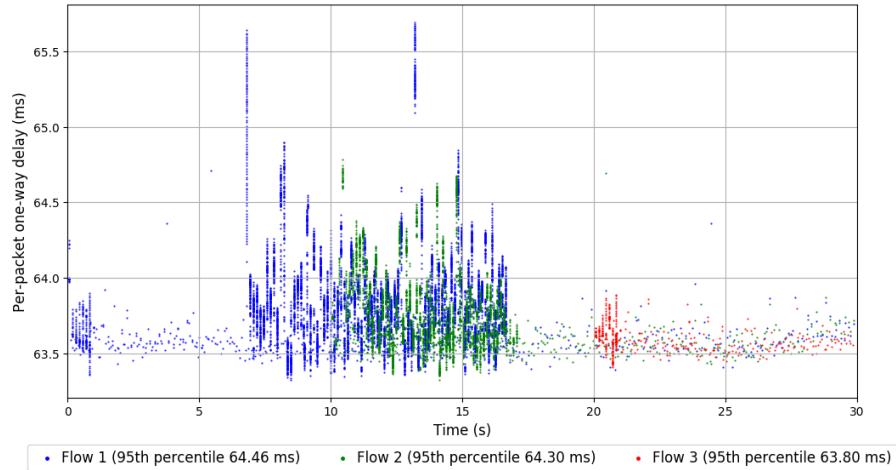
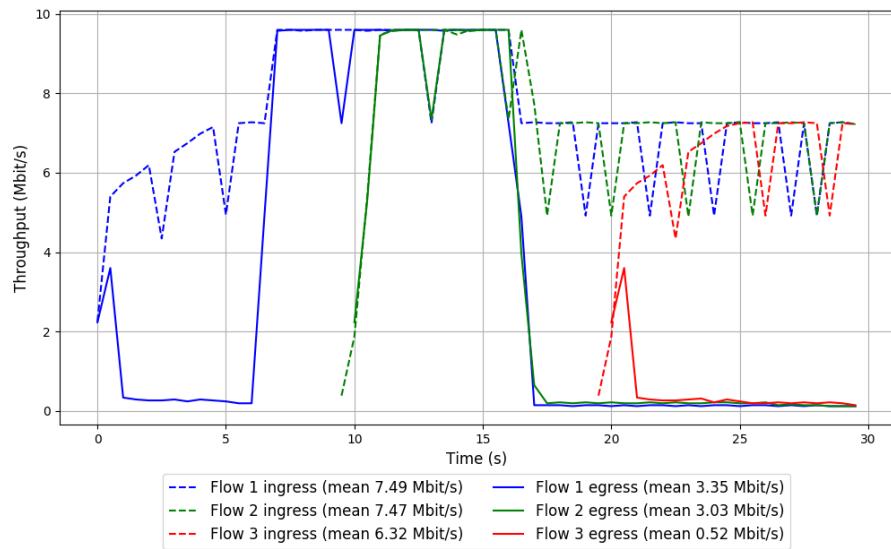


```
Run 1: Statistics of KohoCC

Start at: 2017-08-21 11:00:28
End at: 2017-08-21 11:00:58

# Below is generated by plot.py at 2017-08-21 15:39:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.53 Mbit/s
95th percentile per-packet one-way delay: 64.370 ms
Loss rate: 62.16%
-- Flow 1:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 64.463 ms
Loss rate: 55.46%
-- Flow 2:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 64.301 ms
Loss rate: 59.72%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 63.796 ms
Loss rate: 91.94%
```

## Run 1: Report of KohoCC — Data Link



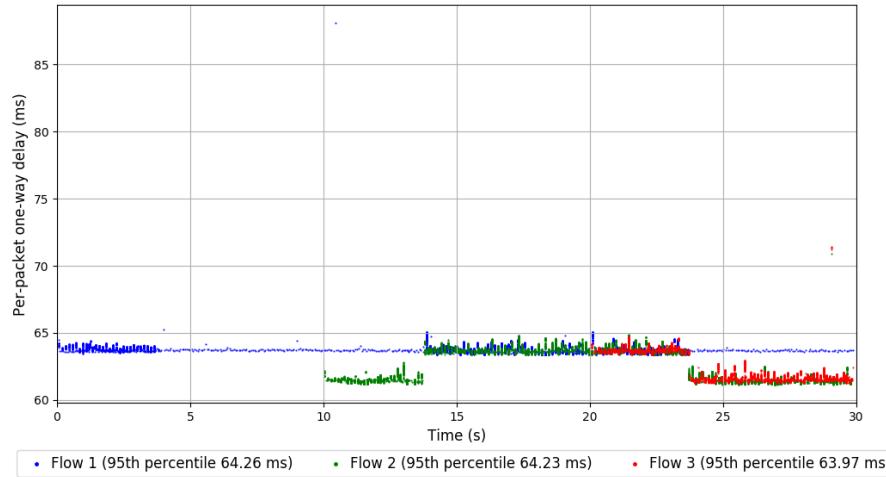
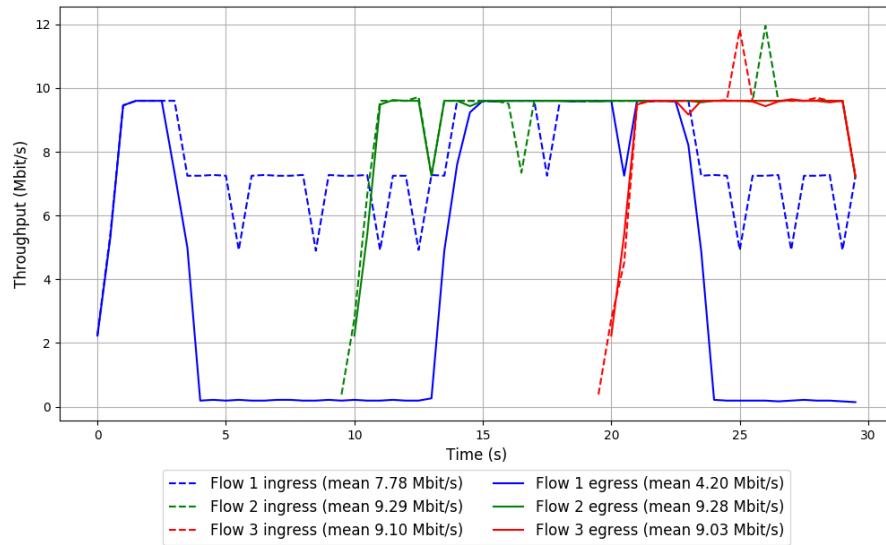
Run 2: Statistics of KohoCC

Start at: 2017-08-21 11:12:21

End at: 2017-08-21 11:12:51

```
# Below is generated by plot.py at 2017-08-21 15:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.33 Mbit/s
95th percentile per-packet one-way delay: 64.192 ms
Loss rate: 21.77%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 64.258 ms
Loss rate: 46.27%
-- Flow 2:
Average throughput: 9.28 Mbit/s
95th percentile per-packet one-way delay: 64.229 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 63.970 ms
Loss rate: 1.69%
```

## Run 2: Report of KohoCC — Data Link



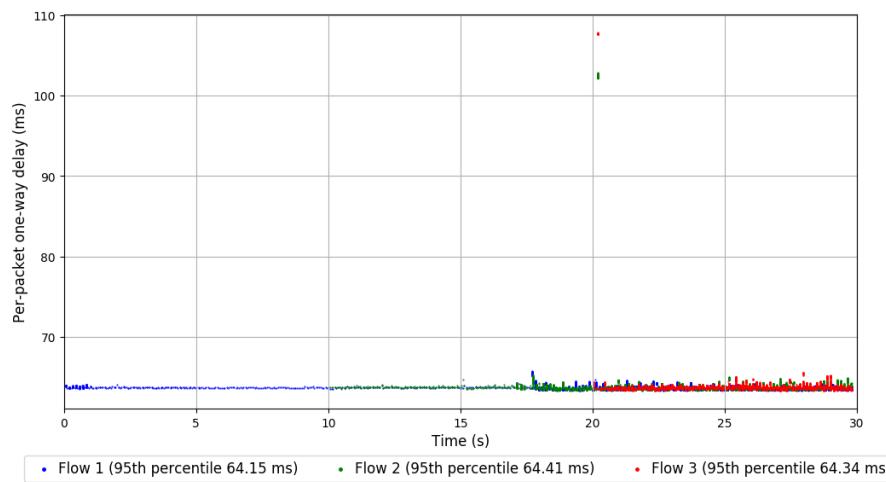
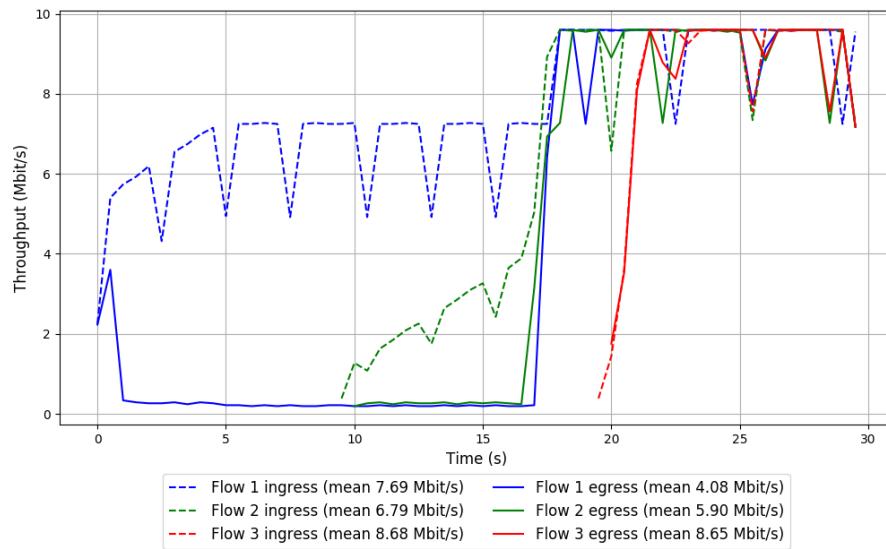
```
Run 3: Statistics of KohoCC
```

```
Start at: 2017-08-21 11:24:17
```

```
End at: 2017-08-21 11:24:47
```

```
# Below is generated by plot.py at 2017-08-21 15:39:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 64.314 ms
Loss rate: 28.51%
-- Flow 1:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 64.150 ms
Loss rate: 47.20%
-- Flow 2:
Average throughput: 5.90 Mbit/s
95th percentile per-packet one-way delay: 64.410 ms
Loss rate: 13.85%
-- Flow 3:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 64.340 ms
Loss rate: 1.60%
```

### Run 3: Report of KohoCC — Data Link



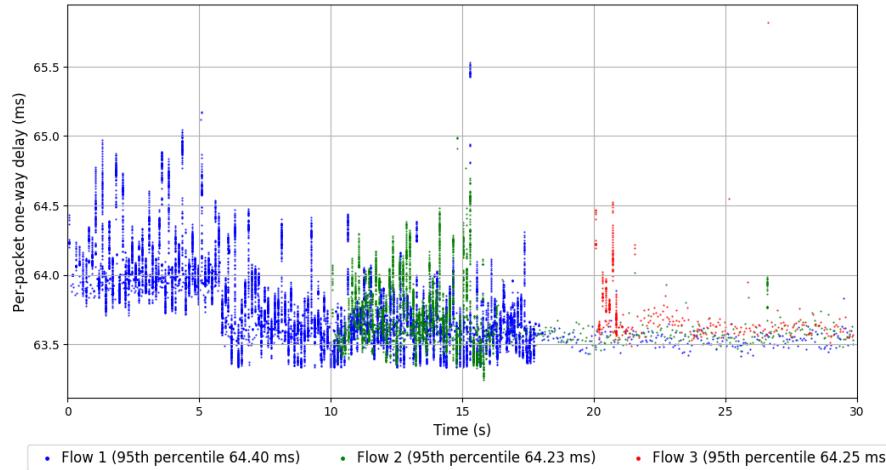
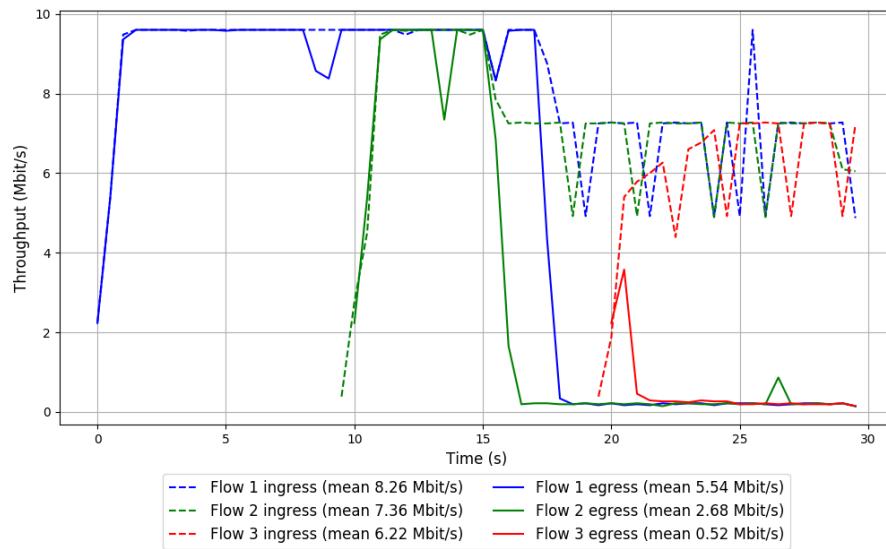
Run 4: Statistics of KohoCC

Start at: 2017-08-21 11:36:09

End at: 2017-08-21 11:36:39

```
# Below is generated by plot.py at 2017-08-21 15:39:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 64.352 ms
Loss rate: 51.03%
-- Flow 1:
Average throughput: 5.54 Mbit/s
95th percentile per-packet one-way delay: 64.396 ms
Loss rate: 33.26%
-- Flow 2:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 64.227 ms
Loss rate: 63.82%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 64.246 ms
Loss rate: 91.83%
```

## Run 4: Report of KohoCC — Data Link



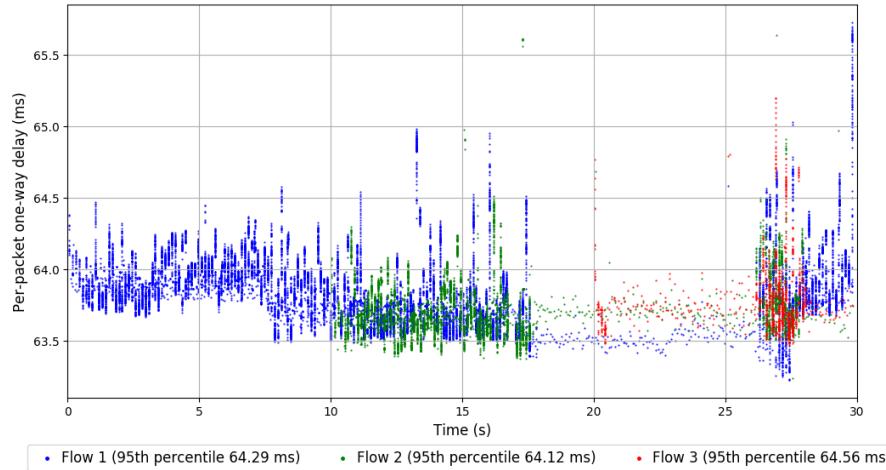
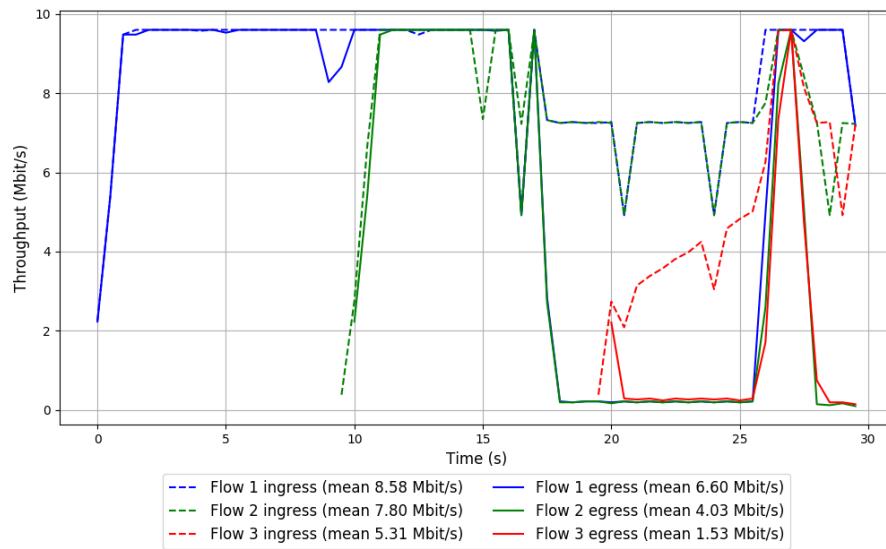
Run 5: Statistics of KohoCC

Start at: 2017-08-21 11:47:47

End at: 2017-08-21 11:48:17

```
# Below is generated by plot.py at 2017-08-21 15:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 64.253 ms
Loss rate: 37.30%
-- Flow 1:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 64.287 ms
Loss rate: 23.40%
-- Flow 2:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 64.120 ms
Loss rate: 48.64%
-- Flow 3:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 64.558 ms
Loss rate: 71.58%
```

Run 5: Report of KohoCC — Data Link



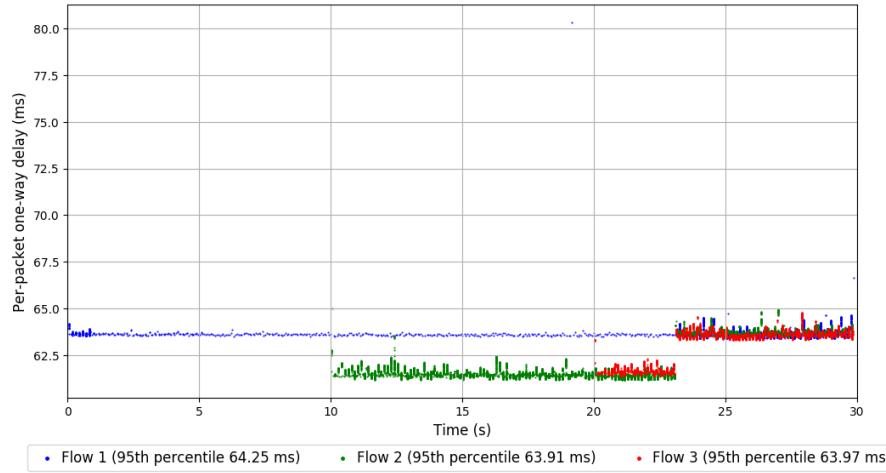
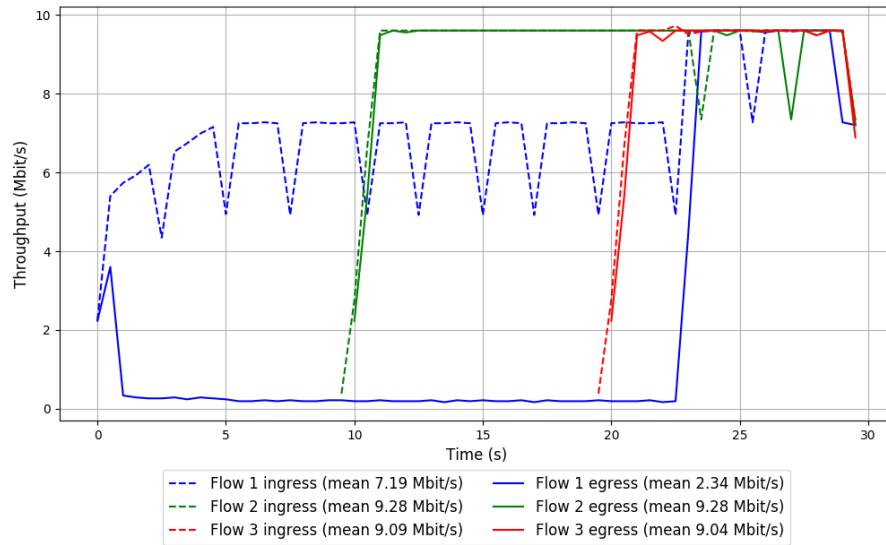
Run 6: Statistics of KohoCC

Start at: 2017-08-21 11:59:32

End at: 2017-08-21 12:00:02

```
# Below is generated by plot.py at 2017-08-21 15:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 63.982 ms
Loss rate: 30.14%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 64.252 ms
Loss rate: 67.46%
-- Flow 2:
Average throughput: 9.28 Mbit/s
95th percentile per-packet one-way delay: 63.915 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 63.971 ms
Loss rate: 1.76%
```

## Run 6: Report of KohoCC — Data Link



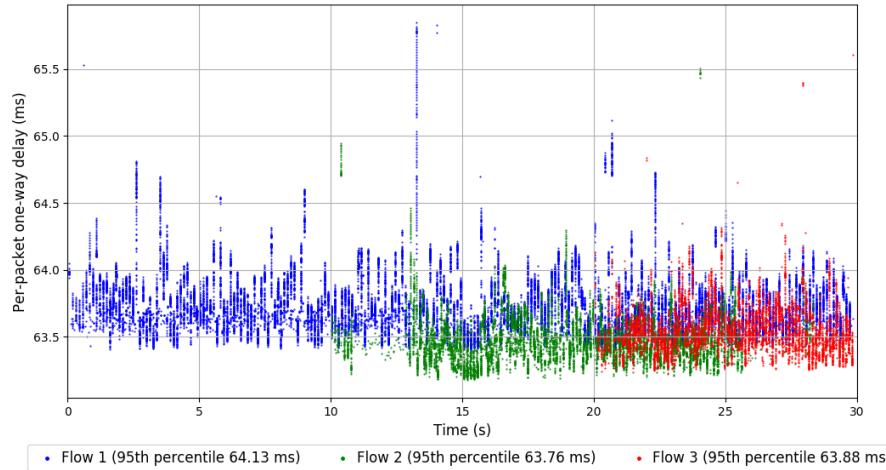
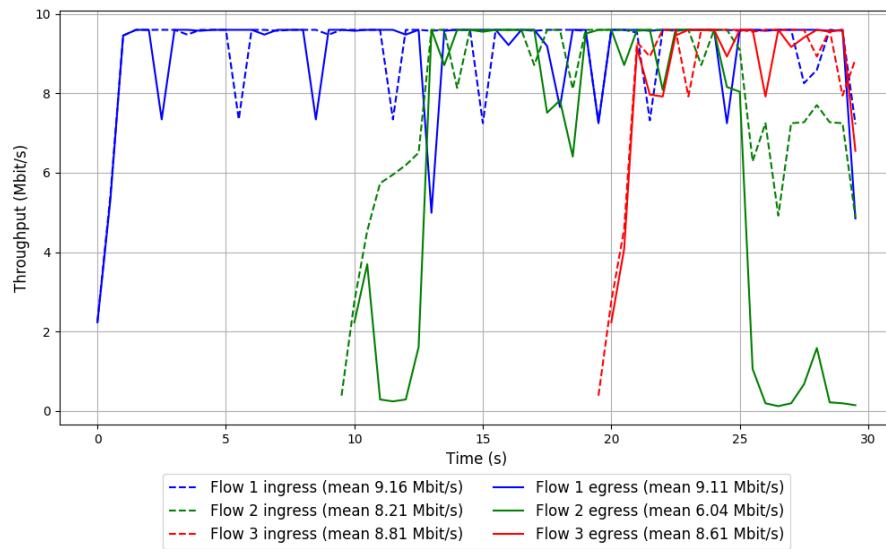
Run 7: Statistics of KohoCC

Start at: 2017-08-21 12:11:15

End at: 2017-08-21 12:11:45

```
# Below is generated by plot.py at 2017-08-21 15:39:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.96 Mbit/s
95th percentile per-packet one-way delay: 64.054 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 64.126 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 63.764 ms
Loss rate: 26.82%
-- Flow 3:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 63.880 ms
Loss rate: 3.21%
```

Run 7: Report of KohoCC — Data Link



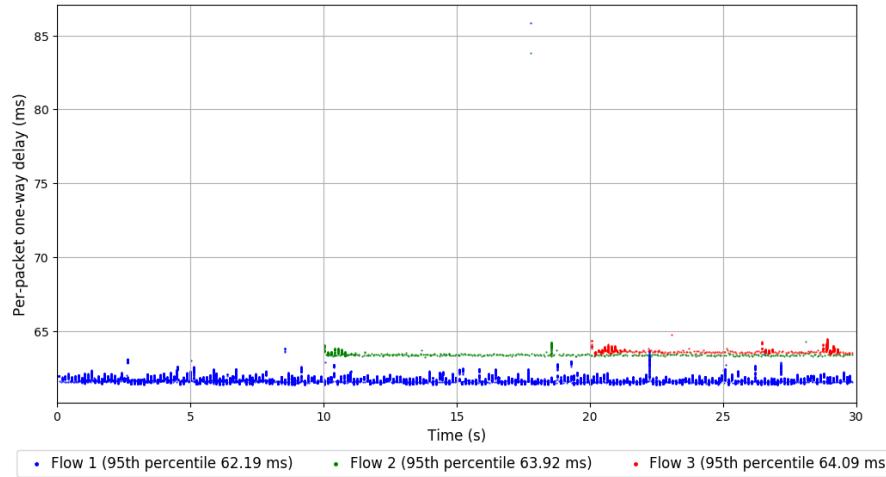
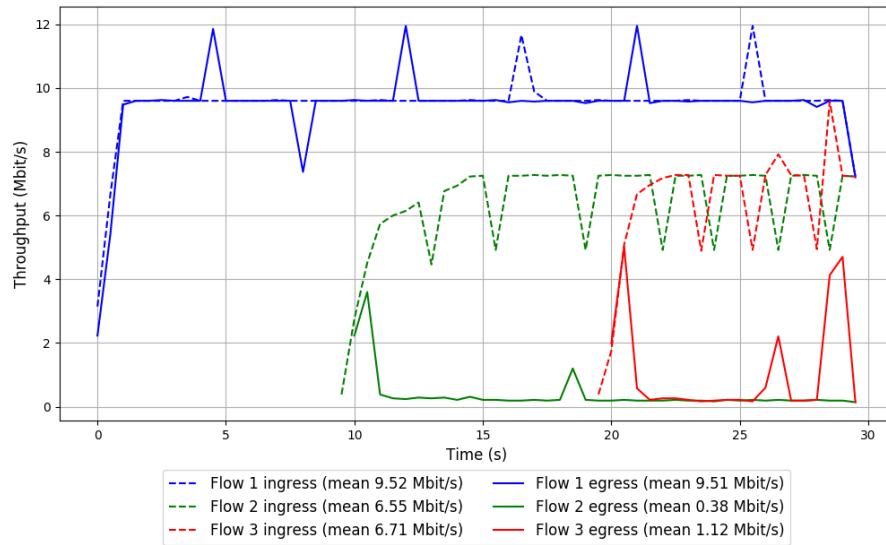
Run 8: Statistics of KohoCC

Start at: 2017-08-21 12:22:56

End at: 2017-08-21 12:23:26

```
# Below is generated by plot.py at 2017-08-21 15:39:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.13 Mbit/s
95th percentile per-packet one-way delay: 63.413 ms
Loss rate: 37.36%
-- Flow 1:
Average throughput: 9.51 Mbit/s
95th percentile per-packet one-way delay: 62.187 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 63.920 ms
Loss rate: 94.23%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 64.094 ms
Loss rate: 83.53%
```

## Run 8: Report of KohoCC — Data Link



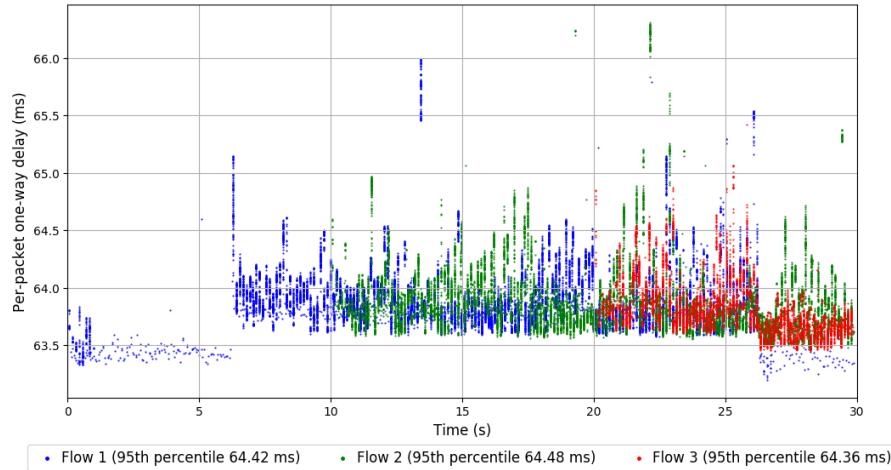
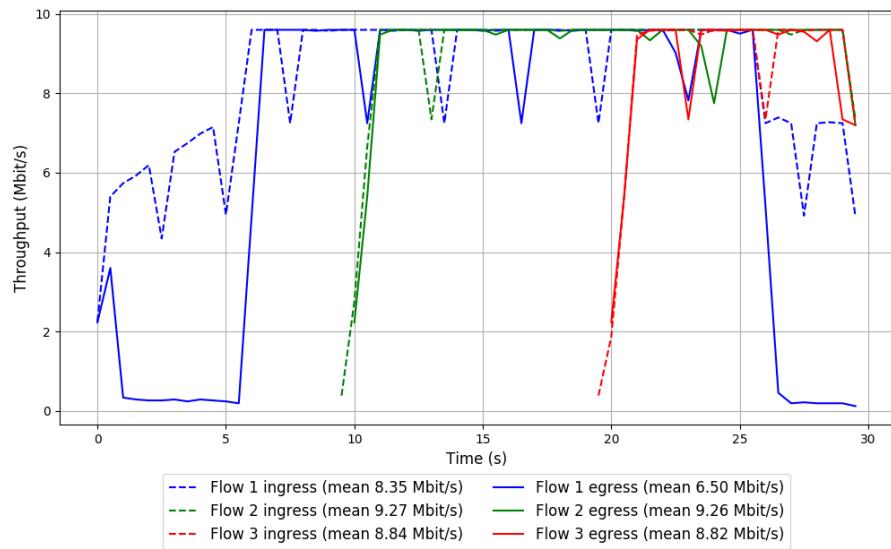
Run 9: Statistics of KohoCC

Start at: 2017-08-21 12:34:39

End at: 2017-08-21 12:35:09

```
# Below is generated by plot.py at 2017-08-21 15:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.55 Mbit/s
95th percentile per-packet one-way delay: 64.437 ms
Loss rate: 11.30%
-- Flow 1:
Average throughput: 6.50 Mbit/s
95th percentile per-packet one-way delay: 64.425 ms
Loss rate: 22.51%
-- Flow 2:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 64.484 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 64.361 ms
Loss rate: 1.56%
```

Run 9: Report of KohoCC — Data Link



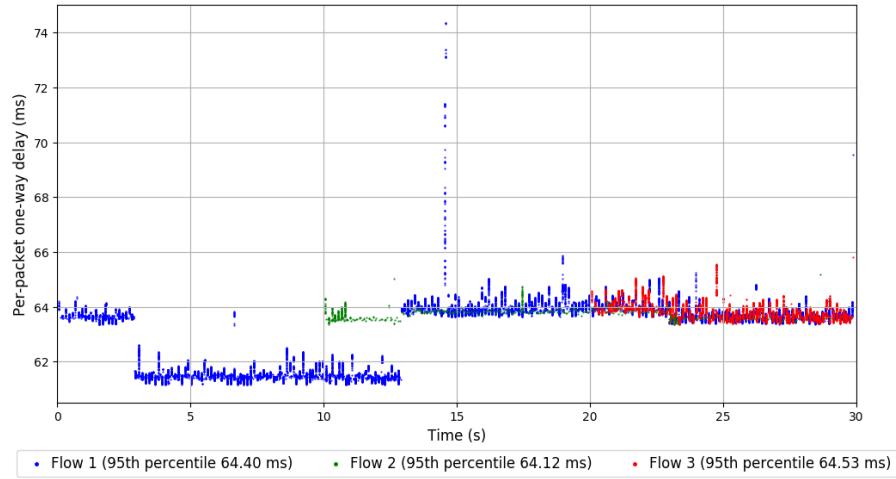
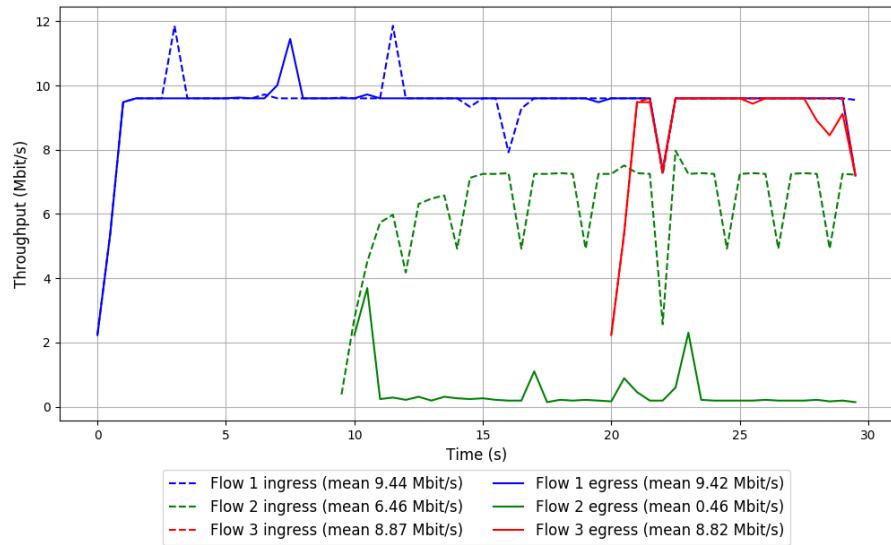
Run 10: Statistics of KohoCC

Start at: 2017-08-21 12:46:12

End at: 2017-08-21 12:46:42

```
# Below is generated by plot.py at 2017-08-21 15:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 64.428 ms
Loss rate: 24.46%
-- Flow 1:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 64.396 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 64.124 ms
Loss rate: 92.92%
-- Flow 3:
Average throughput: 8.82 Mbit/s
95th percentile per-packet one-way delay: 64.533 ms
Loss rate: 1.45%
```

Run 10: Report of KohoCC — Data Link

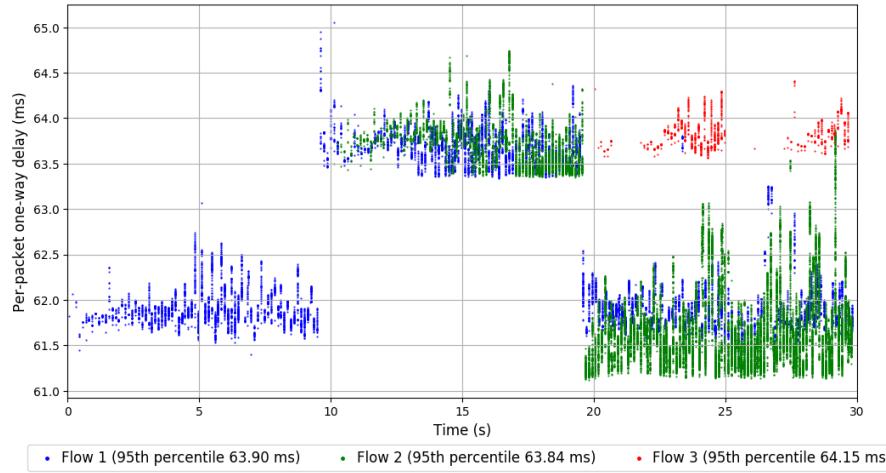
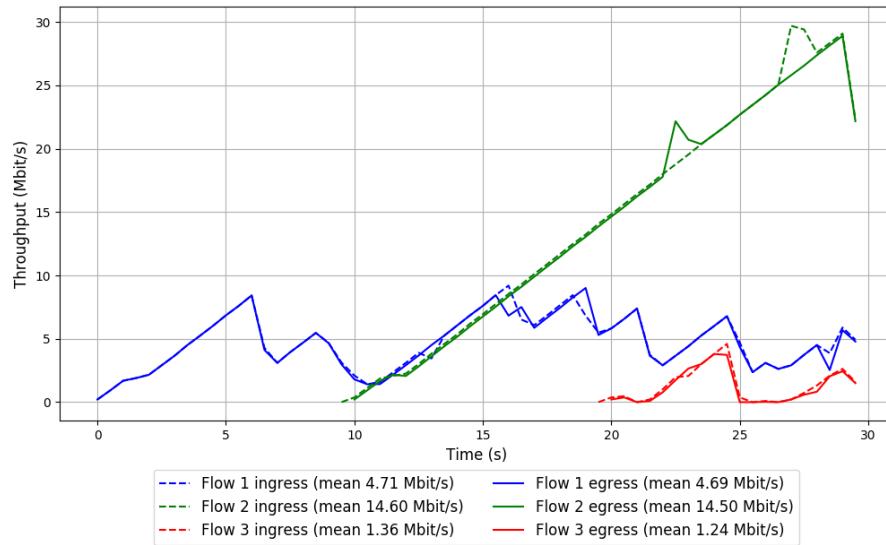


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-21 11:07:35
End at: 2017-08-21 11:08:05

# Below is generated by plot.py at 2017-08-21 15:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.74 Mbit/s
95th percentile per-packet one-way delay: 63.892 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 63.898 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 14.50 Mbit/s
95th percentile per-packet one-way delay: 63.844 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 64.151 ms
Loss rate: 9.55%
```

Run 1: Report of LEDBAT — Data Link



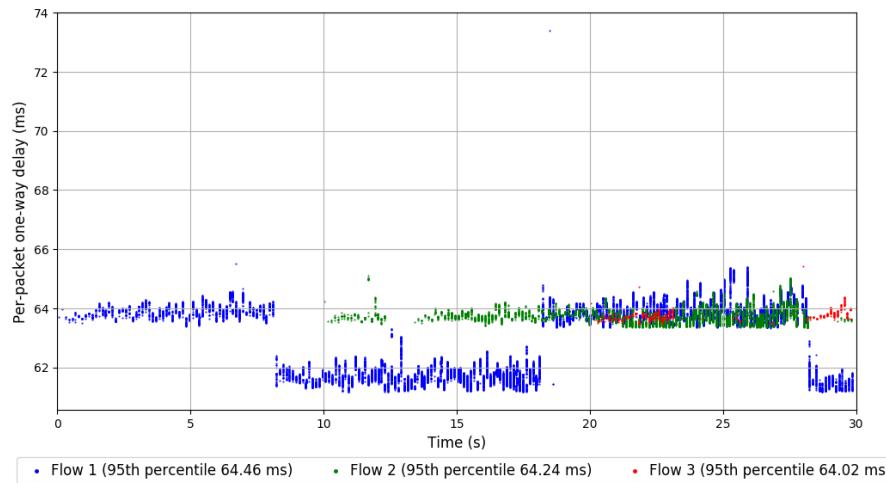
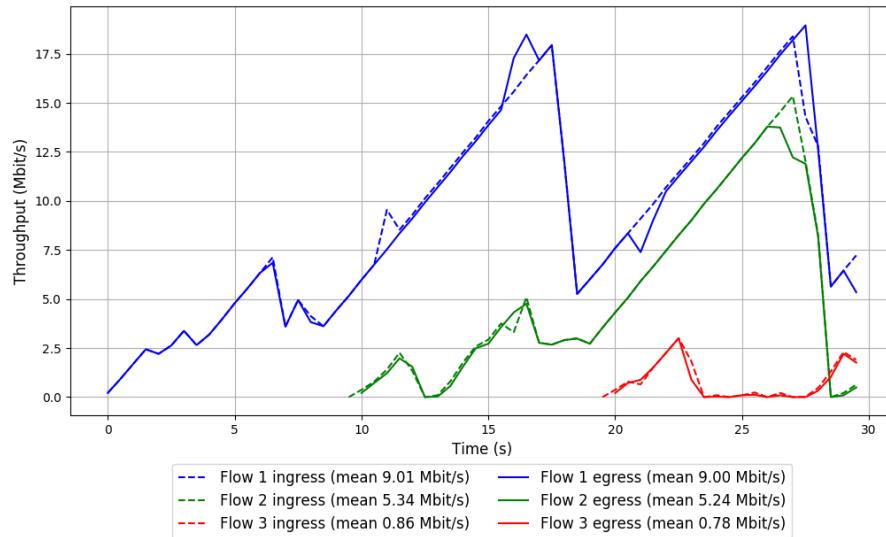
Run 2: Statistics of LEDBAT

Start at: 2017-08-21 11:19:37

End at: 2017-08-21 11:20:07

```
# Below is generated by plot.py at 2017-08-21 15:39:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 64.419 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 9.00 Mbit/s
95th percentile per-packet one-way delay: 64.458 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 64.240 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 64.024 ms
Loss rate: 11.28%
```

Run 2: Report of LEDBAT — Data Link



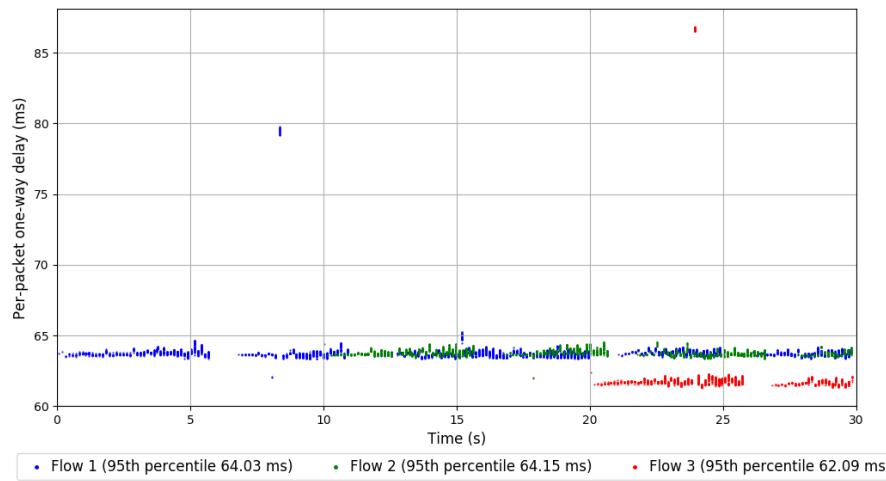
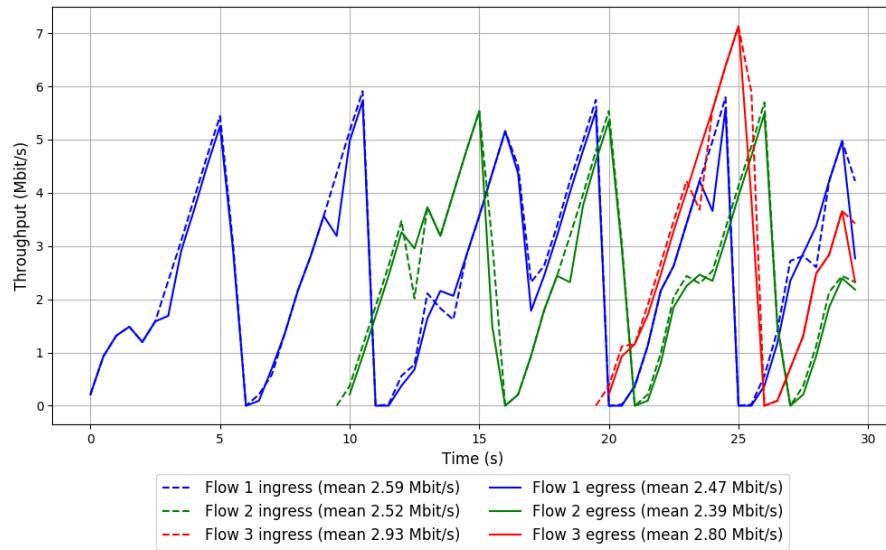
Run 3: Statistics of LEDBAT

Start at: 2017-08-21 11:31:22

End at: 2017-08-21 11:31:52

```
# Below is generated by plot.py at 2017-08-21 15:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 64.057 ms
Loss rate: 5.23%
-- Flow 1:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 64.035 ms
Loss rate: 5.02%
-- Flow 2:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 64.148 ms
Loss rate: 5.48%
-- Flow 3:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 62.089 ms
Loss rate: 5.37%
```

Run 3: Report of LEDBAT — Data Link



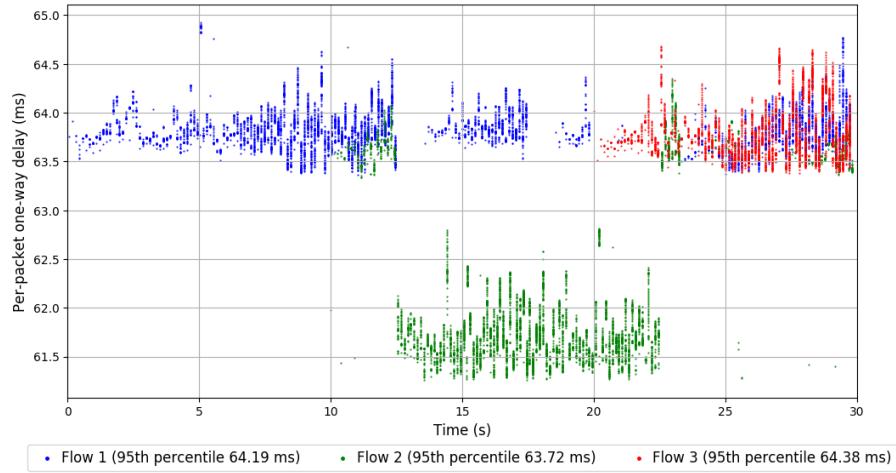
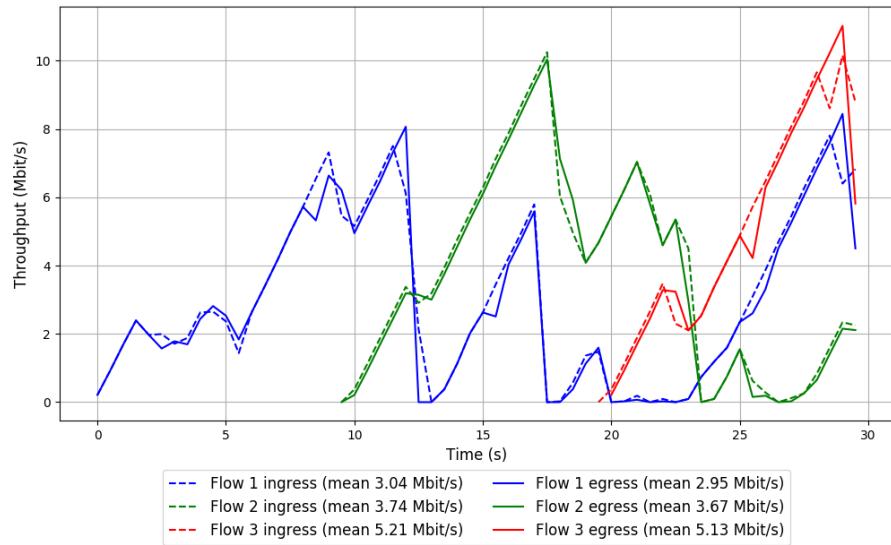
Run 4: Statistics of LEDBAT

Start at: 2017-08-21 11:43:02

End at: 2017-08-21 11:43:32

```
# Below is generated by plot.py at 2017-08-21 15:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 64.193 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 64.194 ms
Loss rate: 3.58%
-- Flow 2:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 63.716 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 64.375 ms
Loss rate: 2.91%
```

Run 4: Report of LEDBAT — Data Link



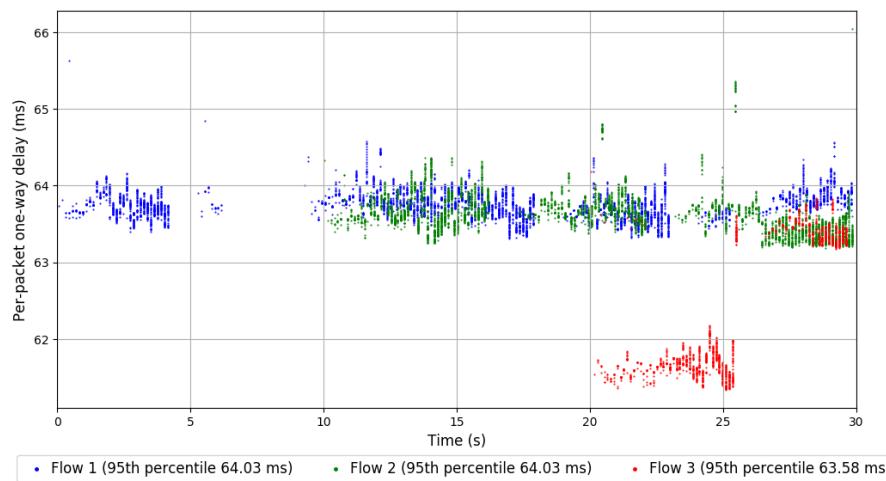
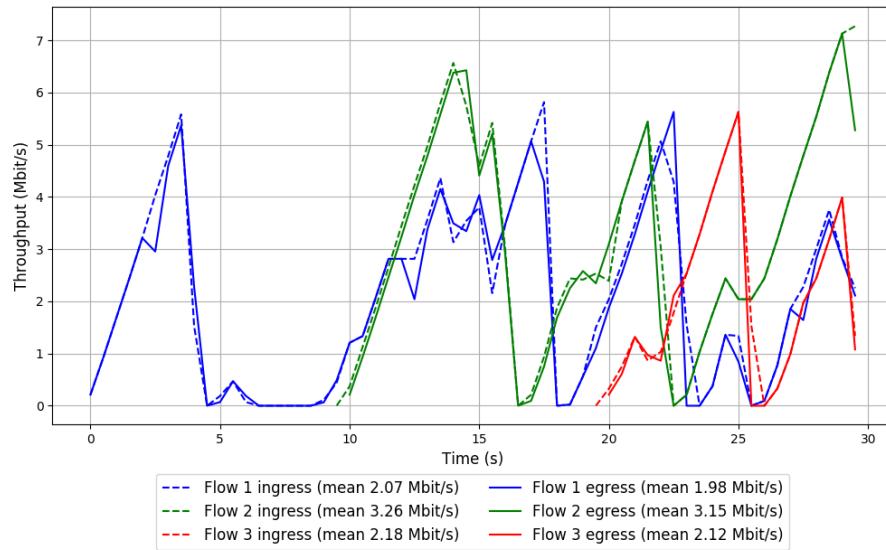
Run 5: Statistics of LEDBAT

Start at: 2017-08-21 11:54:49

End at: 2017-08-21 11:55:19

```
# Below is generated by plot.py at 2017-08-21 15:39:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 64.013 ms
Loss rate: 4.21%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 64.033 ms
Loss rate: 4.54%
-- Flow 2:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 64.026 ms
Loss rate: 3.90%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 63.581 ms
Loss rate: 4.22%
```

Run 5: Report of LEDBAT — Data Link



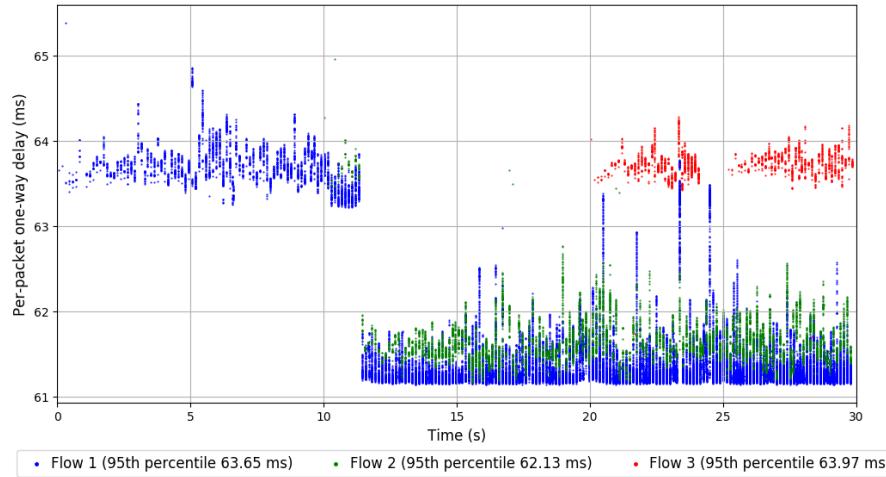
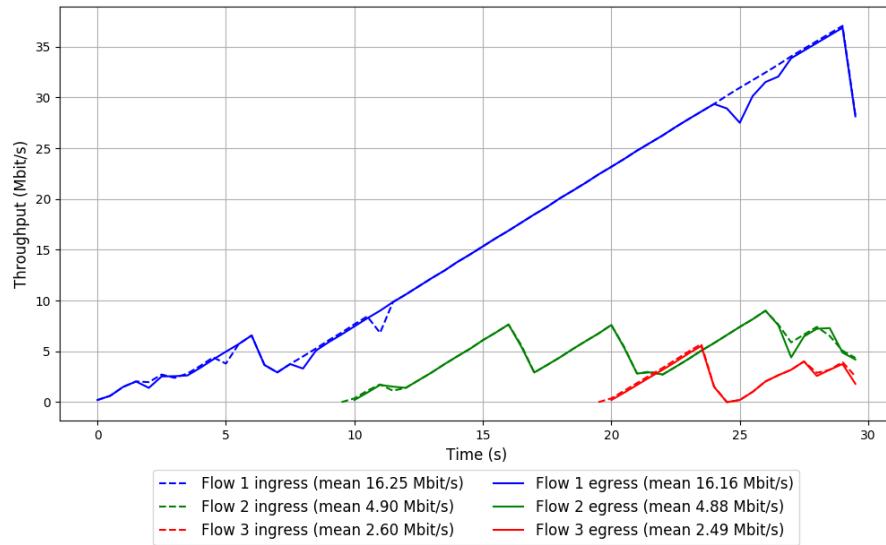
Run 6: Statistics of LEDBAT

Start at: 2017-08-21 12:06:33

End at: 2017-08-21 12:07:03

```
# Below is generated by plot.py at 2017-08-21 15:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.18 Mbit/s
95th percentile per-packet one-way delay: 63.731 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 63.649 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 4.88 Mbit/s
95th percentile per-packet one-way delay: 62.127 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 63.968 ms
Loss rate: 5.38%
```

Run 6: Report of LEDBAT — Data Link



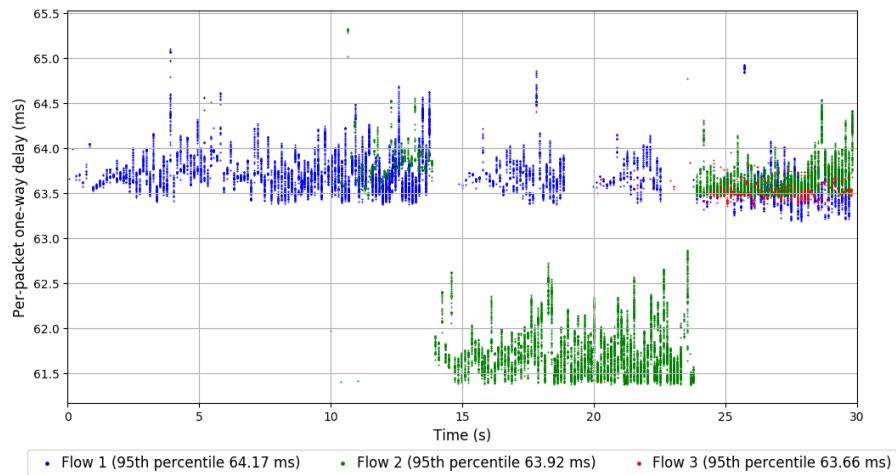
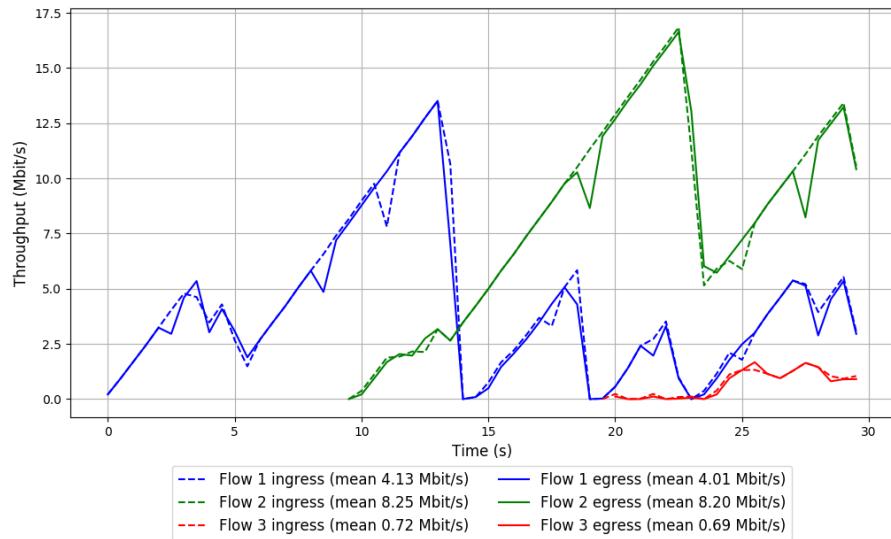
Run 7: Statistics of LEDBAT

Start at: 2017-08-21 12:18:11

End at: 2017-08-21 12:18:41

```
# Below is generated by plot.py at 2017-08-21 15:39:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 64.045 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 64.167 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 63.664 ms
Loss rate: 5.38%
```

Run 7: Report of LEDBAT — Data Link



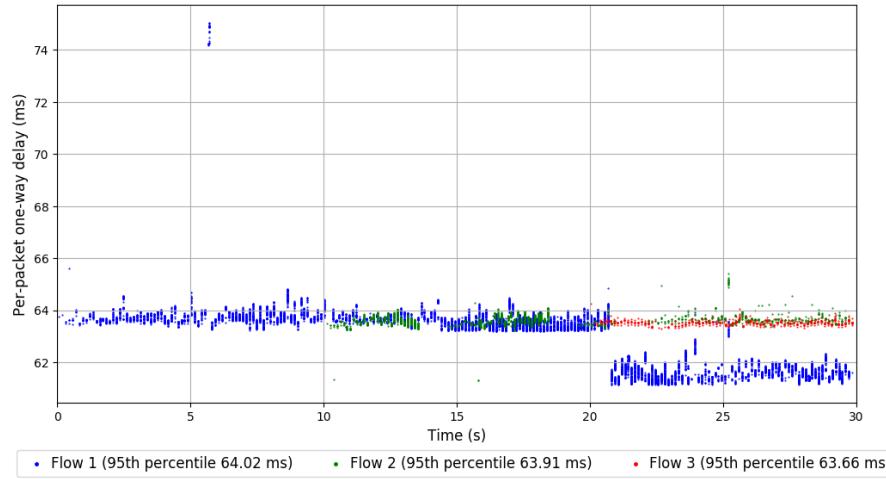
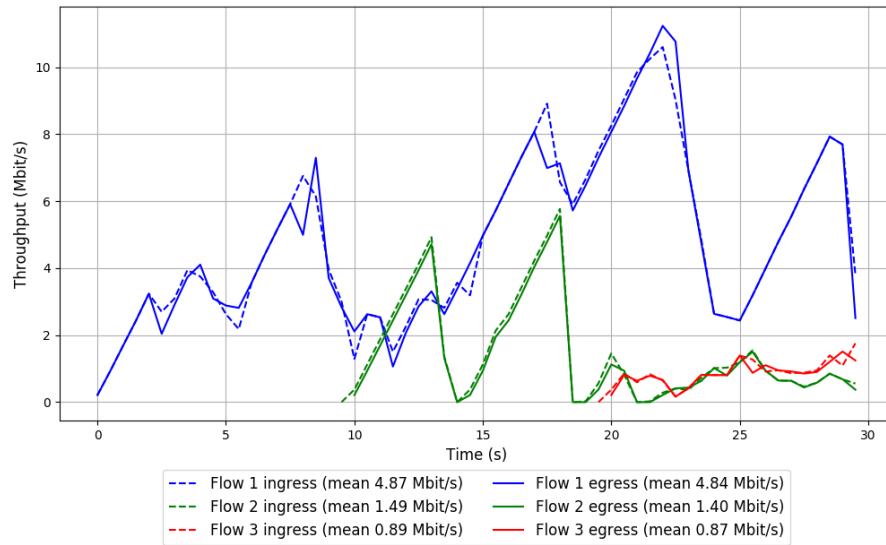
Run 8: Statistics of LEDBAT

Start at: 2017-08-21 12:29:54

End at: 2017-08-21 12:30:24

```
# Below is generated by plot.py at 2017-08-21 15:39:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 63.988 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 64.020 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 63.909 ms
Loss rate: 6.60%
-- Flow 3:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 63.659 ms
Loss rate: 3.93%
```

Run 8: Report of LEDBAT — Data Link



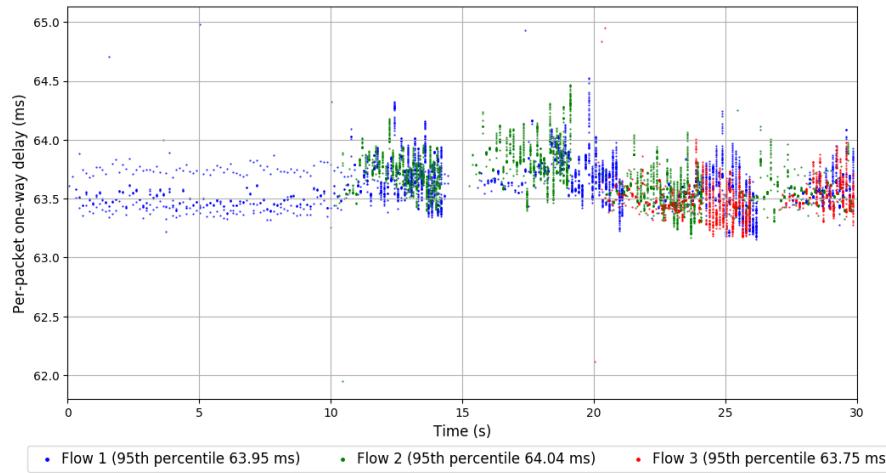
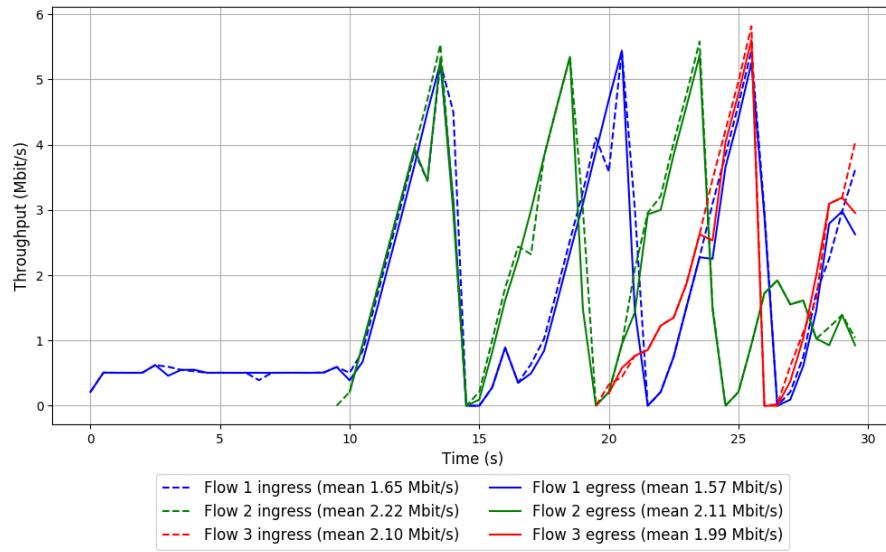
Run 9: Statistics of LEDBAT

Start at: 2017-08-21 12:41:24

End at: 2017-08-21 12:41:54

```
# Below is generated by plot.py at 2017-08-21 15:39:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 63.975 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 63.953 ms
Loss rate: 5.48%
-- Flow 2:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 64.039 ms
Loss rate: 5.66%
-- Flow 3:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 63.749 ms
Loss rate: 6.25%
```

Run 9: Report of LEDBAT — Data Link



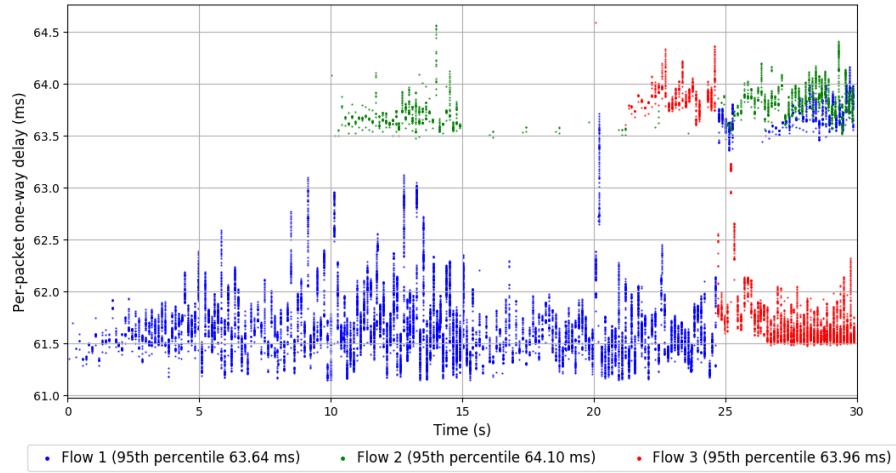
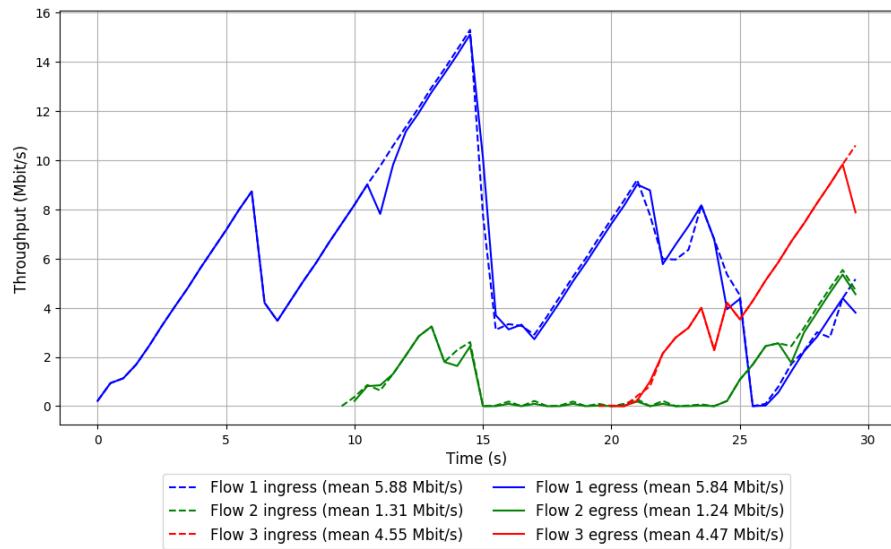
Run 10: Statistics of LEDBAT

Start at: 2017-08-21 12:53:10

End at: 2017-08-21 12:53:40

```
# Below is generated by plot.py at 2017-08-21 15:39:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 63.881 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 64.097 ms
Loss rate: 6.17%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 63.959 ms
Loss rate: 3.03%
```

Run 10: Report of LEDBAT — Data Link

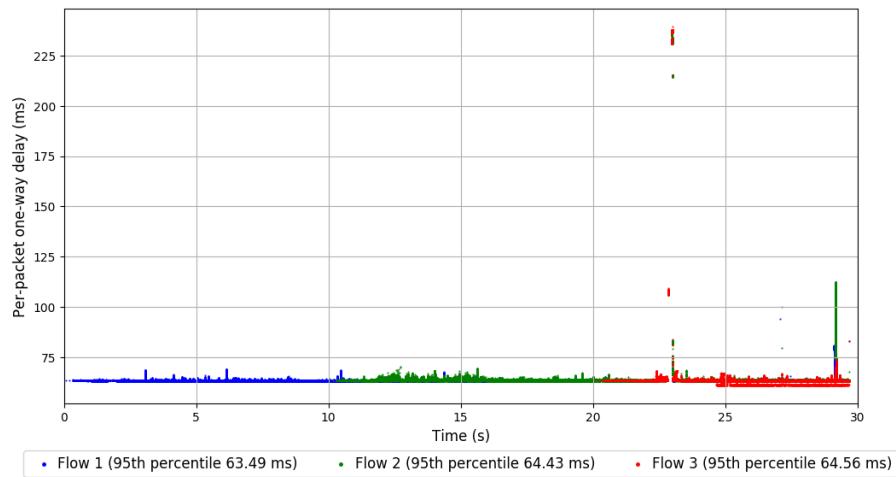
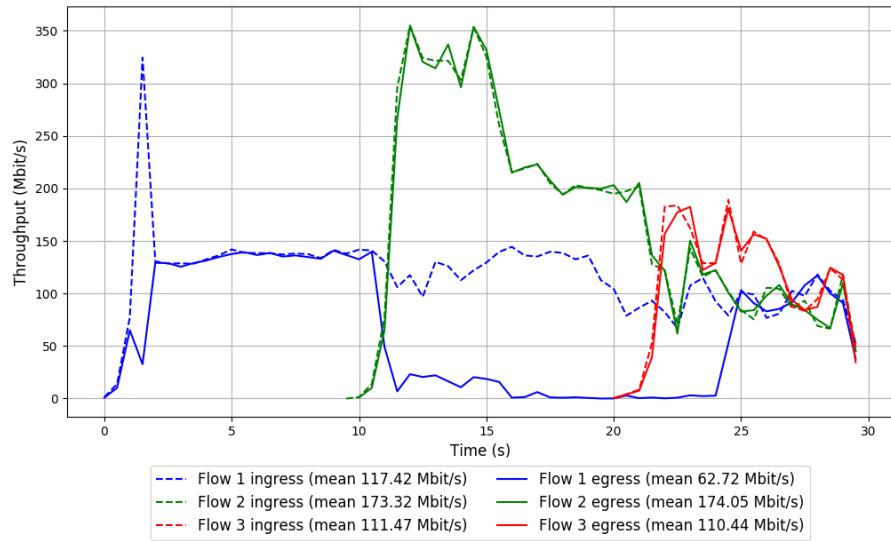


```
Run 1: Statistics of PCC

Start at: 2017-08-21 11:04:20
End at: 2017-08-21 11:04:50

# Below is generated by plot.py at 2017-08-21 15:40:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 64.242 ms
Loss rate: 20.81%
-- Flow 1:
Average throughput: 62.72 Mbit/s
95th percentile per-packet one-way delay: 63.488 ms
Loss rate: 46.78%
-- Flow 2:
Average throughput: 174.05 Mbit/s
95th percentile per-packet one-way delay: 64.430 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 110.44 Mbit/s
95th percentile per-packet one-way delay: 64.557 ms
Loss rate: 2.04%
```

Run 1: Report of PCC — Data Link



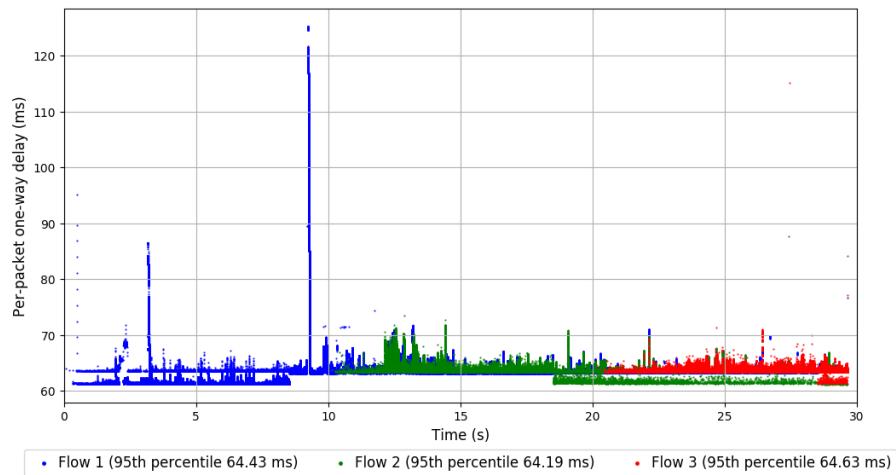
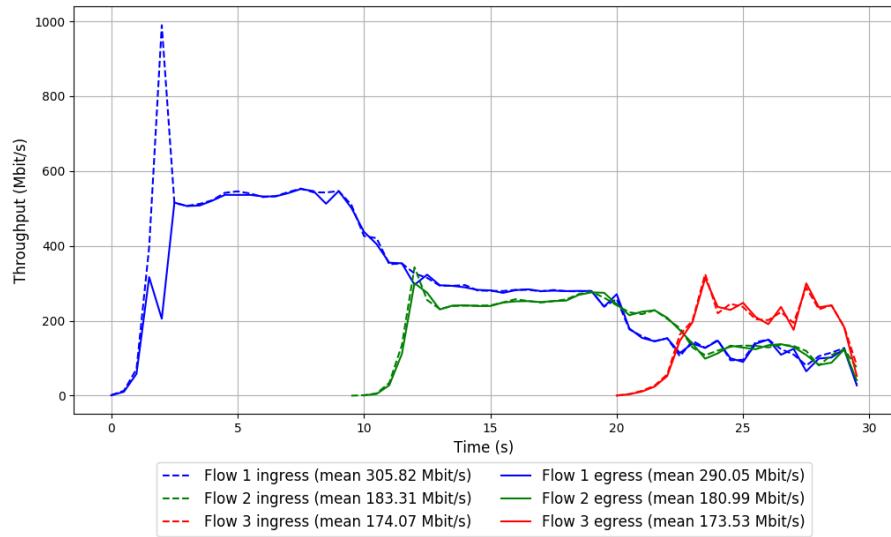
Run 2: Statistics of PCC

Start at: 2017-08-21 11:16:06

End at: 2017-08-21 11:16:36

```
# Below is generated by plot.py at 2017-08-21 15:40:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.77 Mbit/s
95th percentile per-packet one-way delay: 64.433 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 290.05 Mbit/s
95th percentile per-packet one-way delay: 64.430 ms
Loss rate: 5.53%
-- Flow 2:
Average throughput: 180.99 Mbit/s
95th percentile per-packet one-way delay: 64.194 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 173.53 Mbit/s
95th percentile per-packet one-way delay: 64.633 ms
Loss rate: 1.54%
```

## Run 2: Report of PCC — Data Link



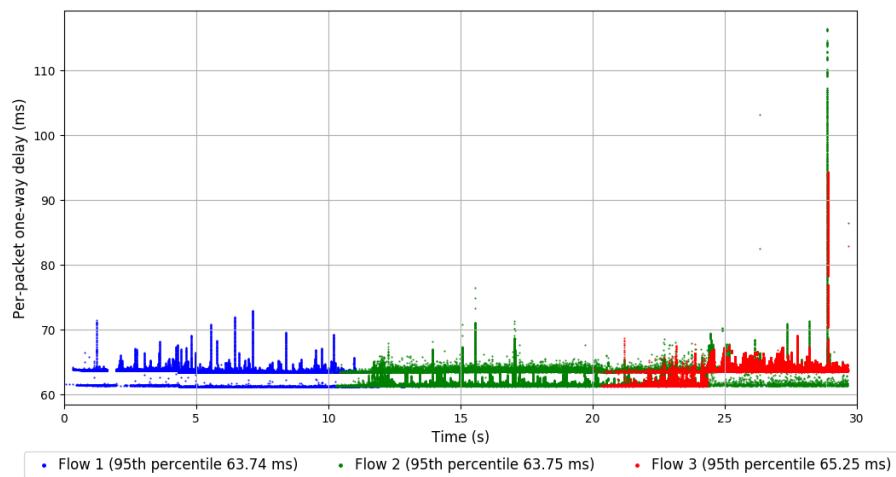
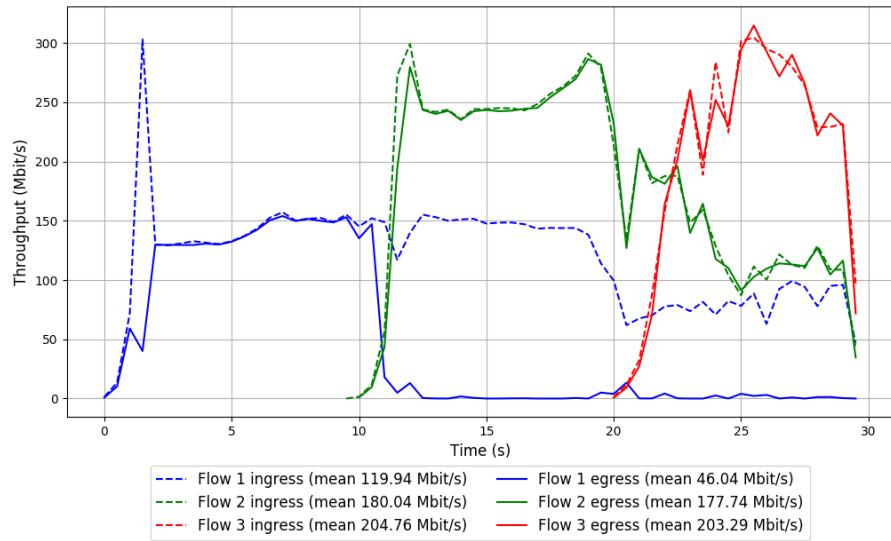
Run 3: Statistics of PCC

Start at: 2017-08-21 11:28:00

End at: 2017-08-21 11:28:30

```
# Below is generated by plot.py at 2017-08-21 15:40:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.88 Mbit/s
95th percentile per-packet one-way delay: 64.312 ms
Loss rate: 25.31%
-- Flow 1:
Average throughput: 46.04 Mbit/s
95th percentile per-packet one-way delay: 63.738 ms
Loss rate: 61.83%
-- Flow 2:
Average throughput: 177.74 Mbit/s
95th percentile per-packet one-way delay: 63.752 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 203.29 Mbit/s
95th percentile per-packet one-way delay: 65.246 ms
Loss rate: 1.86%
```

Run 3: Report of PCC — Data Link



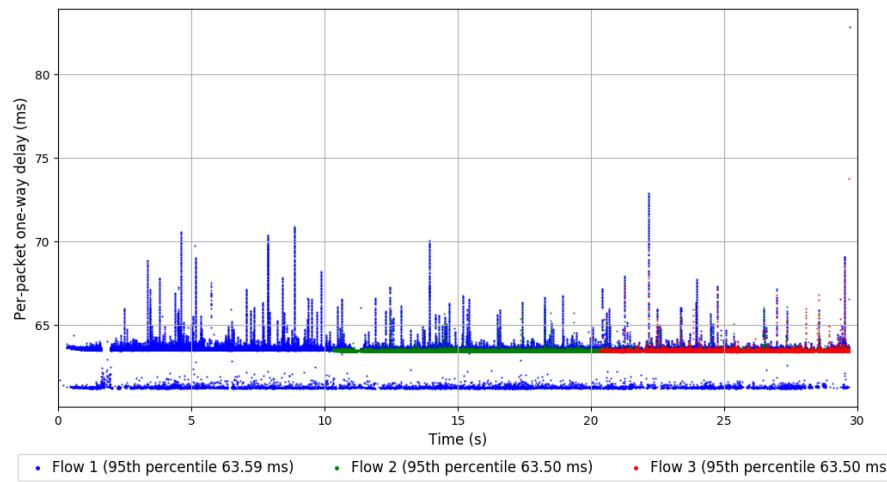
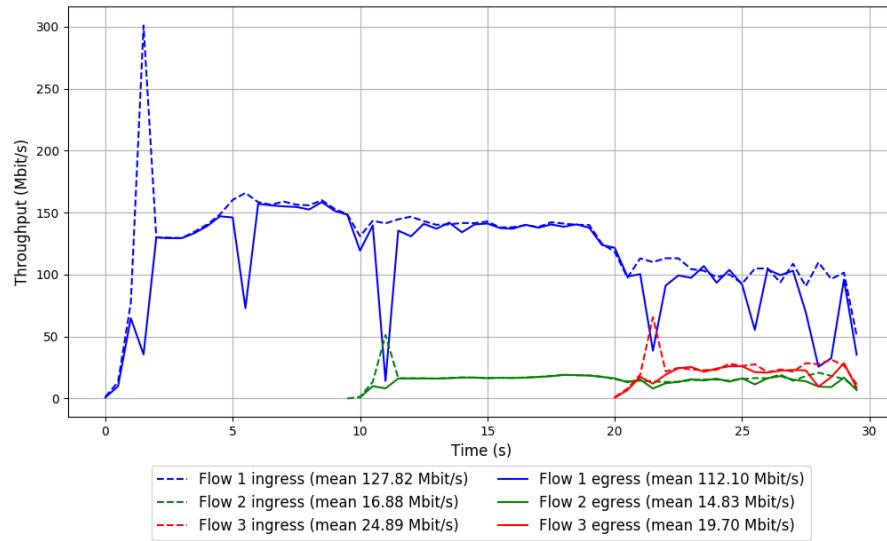
Run 4: Statistics of PCC

Start at: 2017-08-21 11:39:56

End at: 2017-08-21 11:40:26

```
# Below is generated by plot.py at 2017-08-21 15:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.32 Mbit/s
95th percentile per-packet one-way delay: 63.586 ms
Loss rate: 13.13%
-- Flow 1:
Average throughput: 112.10 Mbit/s
95th percentile per-packet one-way delay: 63.592 ms
Loss rate: 12.62%
-- Flow 2:
Average throughput: 14.83 Mbit/s
95th percentile per-packet one-way delay: 63.504 ms
Loss rate: 12.70%
-- Flow 3:
Average throughput: 19.70 Mbit/s
95th percentile per-packet one-way delay: 63.501 ms
Loss rate: 21.84%
```

Run 4: Report of PCC — Data Link



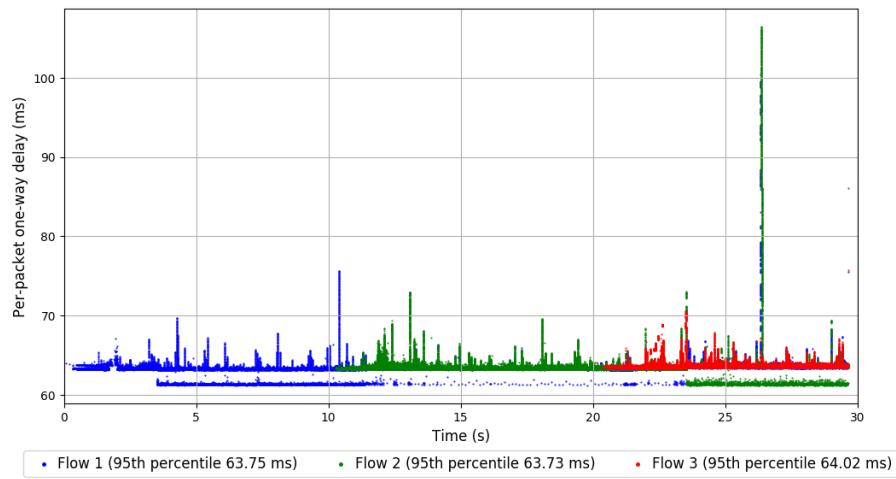
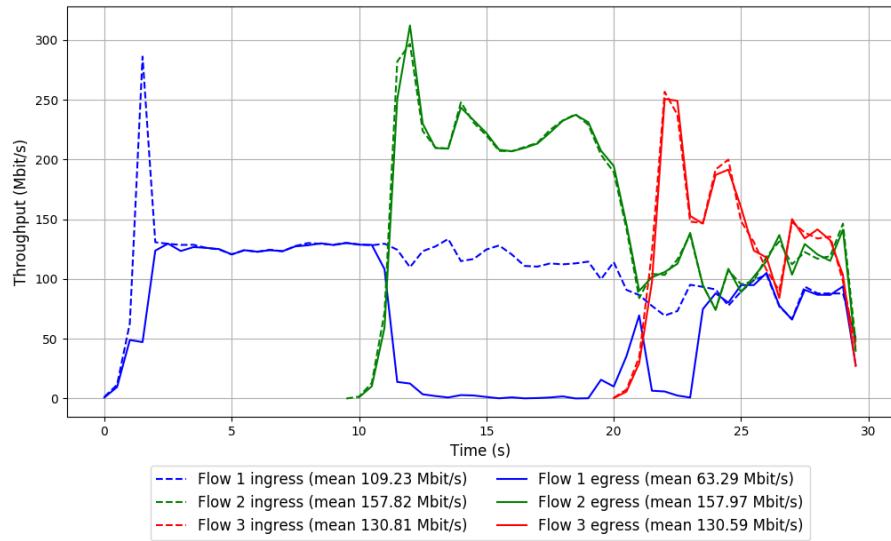
Run 5: Statistics of PCC

Start at: 2017-08-21 11:51:31

End at: 2017-08-21 11:52:01

```
# Below is generated by plot.py at 2017-08-21 15:41:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.13 Mbit/s
95th percentile per-packet one-way delay: 63.791 ms
Loss rate: 18.41%
-- Flow 1:
Average throughput: 63.29 Mbit/s
95th percentile per-packet one-way delay: 63.751 ms
Loss rate: 42.29%
-- Flow 2:
Average throughput: 157.97 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 130.59 Mbit/s
95th percentile per-packet one-way delay: 64.015 ms
Loss rate: 1.40%
```

Run 5: Report of PCC — Data Link



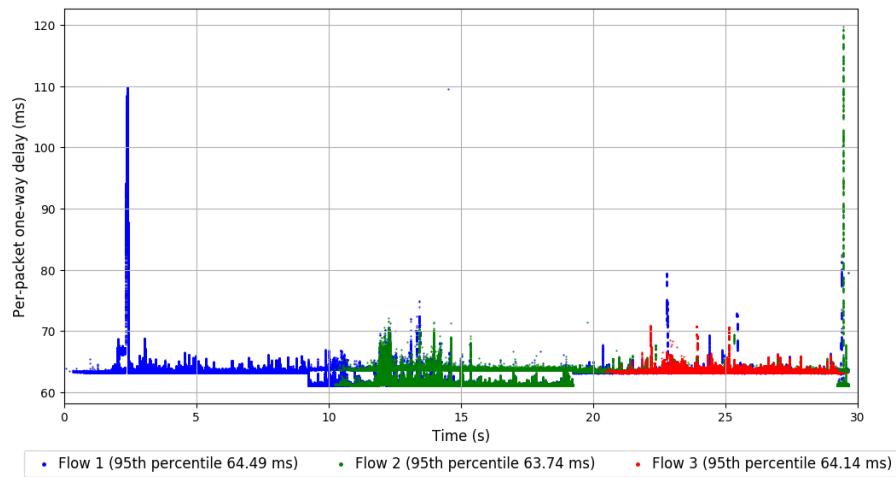
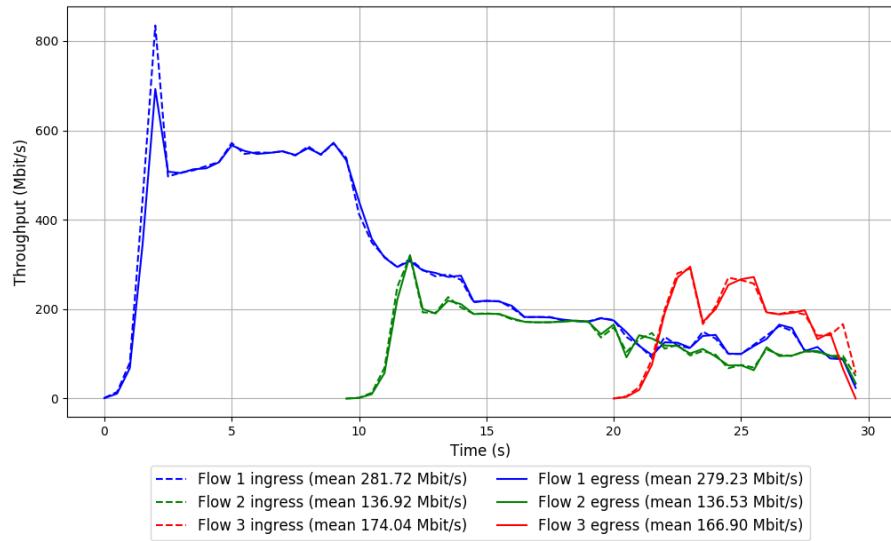
Run 6: Statistics of PCC

Start at: 2017-08-21 12:03:15

End at: 2017-08-21 12:03:45

```
# Below is generated by plot.py at 2017-08-21 15:42:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.03 Mbit/s
95th percentile per-packet one-way delay: 64.202 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 279.23 Mbit/s
95th percentile per-packet one-way delay: 64.488 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 136.53 Mbit/s
95th percentile per-packet one-way delay: 63.744 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 166.90 Mbit/s
95th percentile per-packet one-way delay: 64.138 ms
Loss rate: 5.65%
```

Run 6: Report of PCC — Data Link



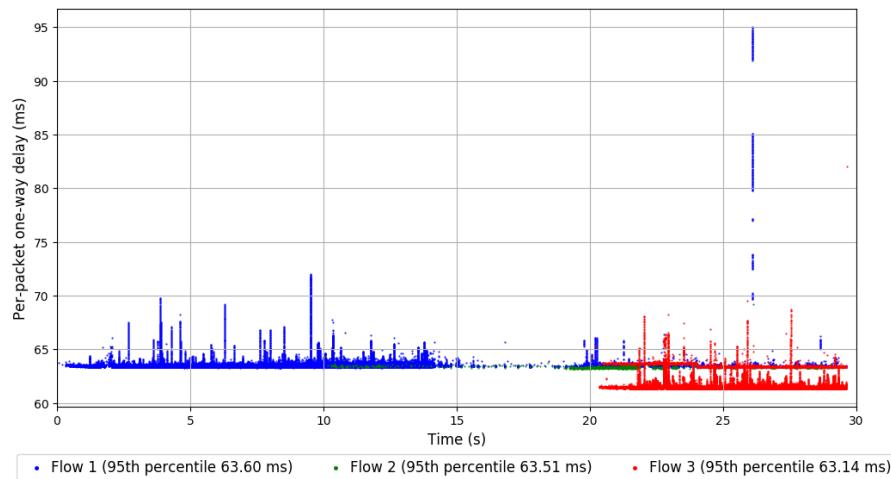
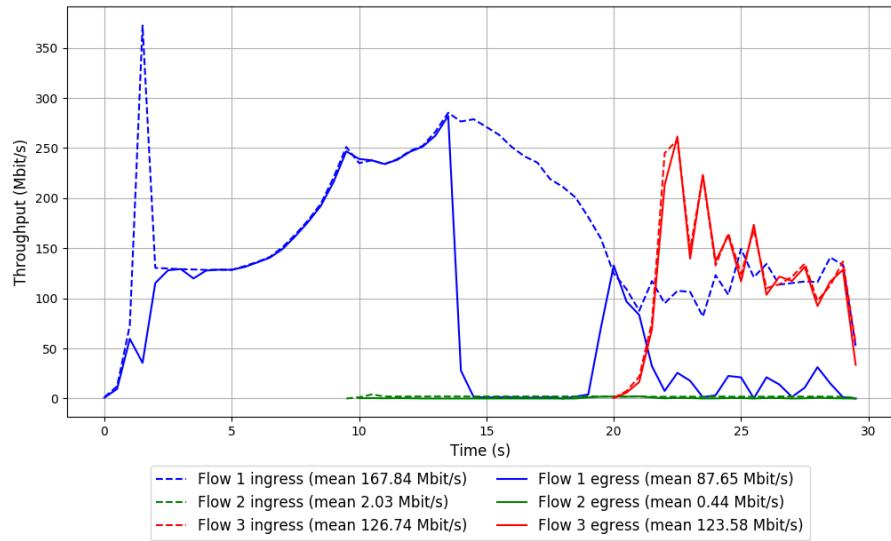
Run 7: Statistics of PCC

Start at: 2017-08-21 12:15:01

End at: 2017-08-21 12:15:31

```
# Below is generated by plot.py at 2017-08-21 15:42:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.78 Mbit/s
95th percentile per-packet one-way delay: 63.571 ms
Loss rate: 39.51%
-- Flow 1:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 63.596 ms
Loss rate: 48.04%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.509 ms
Loss rate: 78.28%
-- Flow 3:
Average throughput: 123.58 Mbit/s
95th percentile per-packet one-way delay: 63.137 ms
Loss rate: 3.57%
```

Run 7: Report of PCC — Data Link



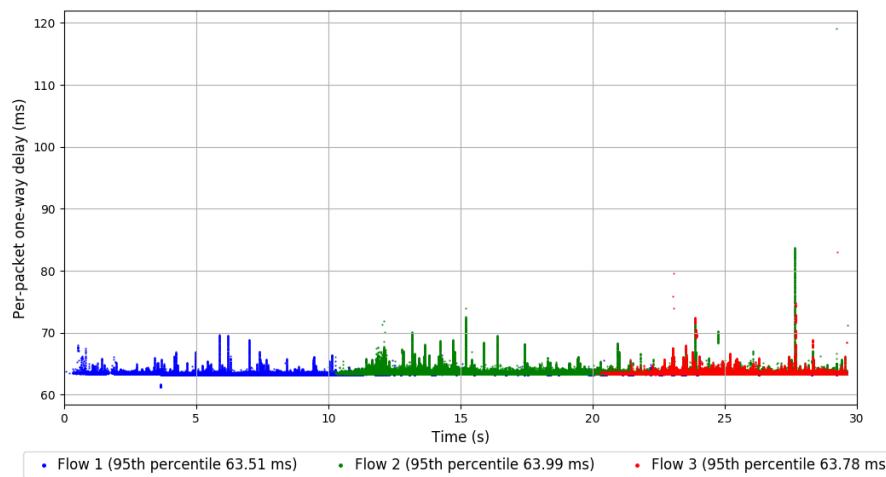
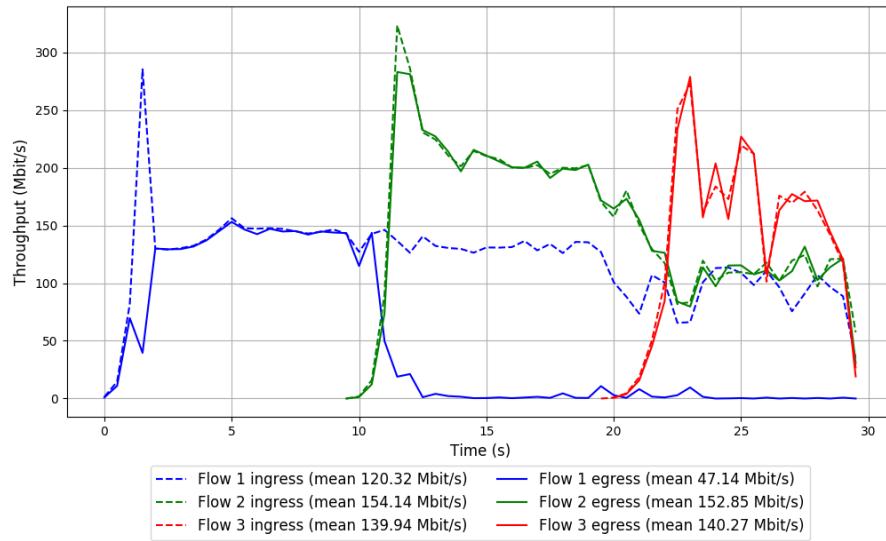
Run 8: Statistics of PCC

Start at: 2017-08-21 12:26:41

End at: 2017-08-21 12:27:11

```
# Below is generated by plot.py at 2017-08-21 15:42:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 194.15 Mbit/s
95th percentile per-packet one-way delay: 63.787 ms
Loss rate: 28.05%
-- Flow 1:
Average throughput: 47.14 Mbit/s
95th percentile per-packet one-way delay: 63.512 ms
Loss rate: 61.01%
-- Flow 2:
Average throughput: 152.85 Mbit/s
95th percentile per-packet one-way delay: 63.992 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 140.27 Mbit/s
95th percentile per-packet one-way delay: 63.783 ms
Loss rate: 1.07%
```

Run 8: Report of PCC — Data Link



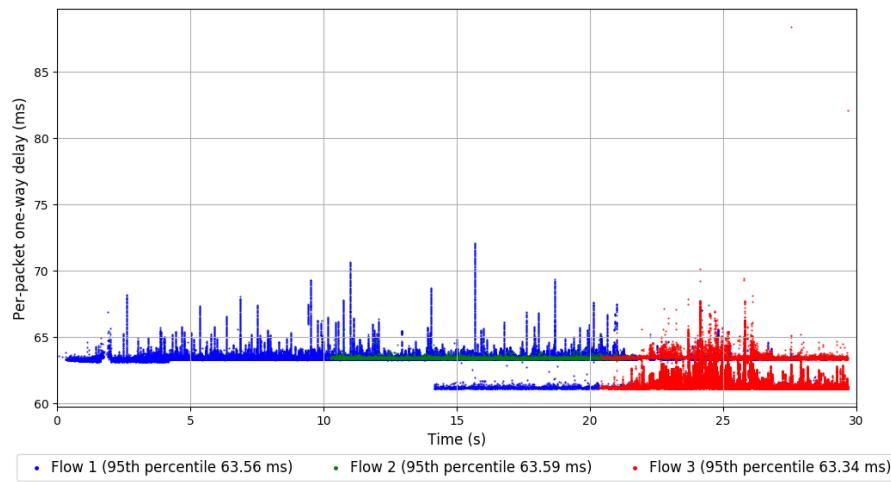
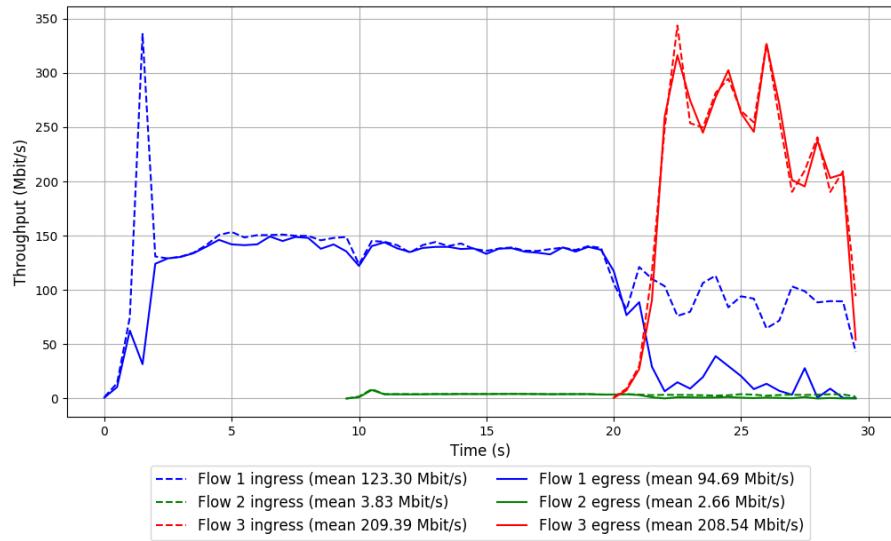
Run 9: Statistics of PCC

Start at: 2017-08-21 12:38:21

End at: 2017-08-21 12:38:51

```
# Below is generated by plot.py at 2017-08-21 15:42:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.95 Mbit/s
95th percentile per-packet one-way delay: 63.511 ms
Loss rate: 15.90%
-- Flow 1:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 63.558 ms
Loss rate: 23.58%
-- Flow 2:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 63.586 ms
Loss rate: 30.98%
-- Flow 3:
Average throughput: 208.54 Mbit/s
95th percentile per-packet one-way delay: 63.343 ms
Loss rate: 1.51%
```

Run 9: Report of PCC — Data Link



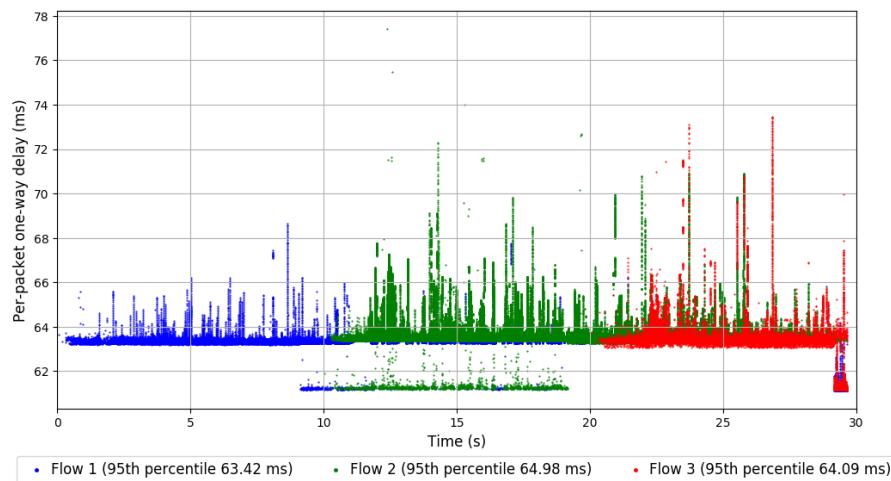
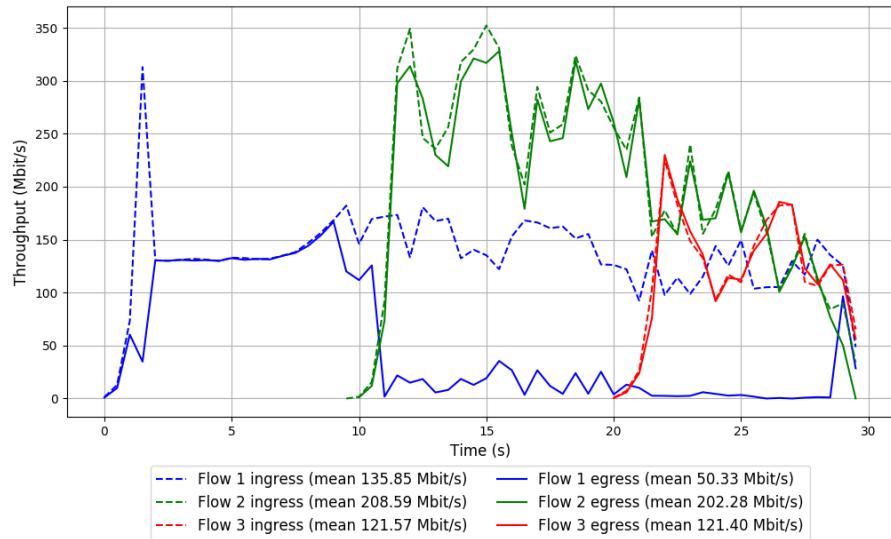
Run 10: Statistics of PCC

Start at: 2017-08-21 12:49:56

End at: 2017-08-21 12:50:26

```
# Below is generated by plot.py at 2017-08-21 15:43:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.78 Mbit/s
95th percentile per-packet one-way delay: 64.553 ms
Loss rate: 29.08%
-- Flow 1:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 63.419 ms
Loss rate: 63.11%
-- Flow 2:
Average throughput: 202.28 Mbit/s
95th percentile per-packet one-way delay: 64.981 ms
Loss rate: 3.65%
-- Flow 3:
Average throughput: 121.40 Mbit/s
95th percentile per-packet one-way delay: 64.091 ms
Loss rate: 1.45%
```

Run 10: Report of PCC — Data Link

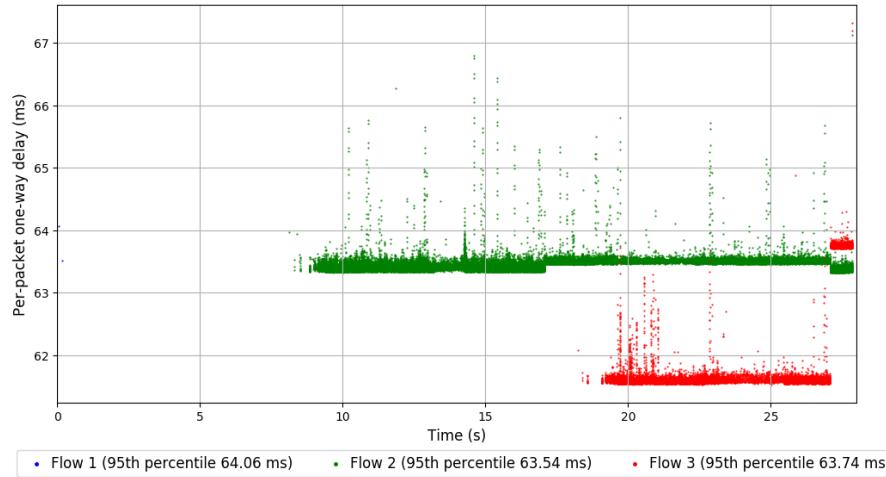
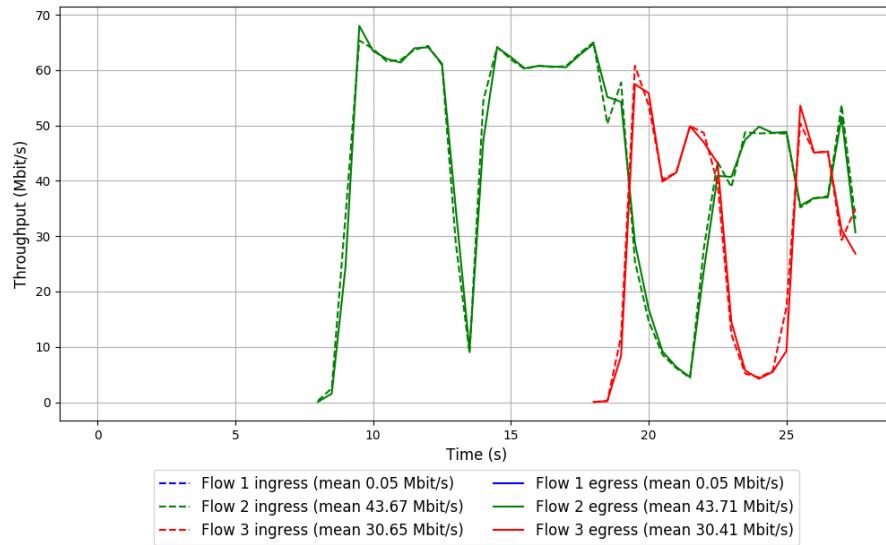


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-21 11:03:36
End at: 2017-08-21 11:04:06

# Below is generated by plot.py at 2017-08-21 15:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.53 Mbit/s
95th percentile per-packet one-way delay: 63.546 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.059 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.71 Mbit/s
95th percentile per-packet one-way delay: 63.536 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 30.41 Mbit/s
95th percentile per-packet one-way delay: 63.741 ms
Loss rate: 1.99%
```

Run 1: Report of QUIC Cubic — Data Link



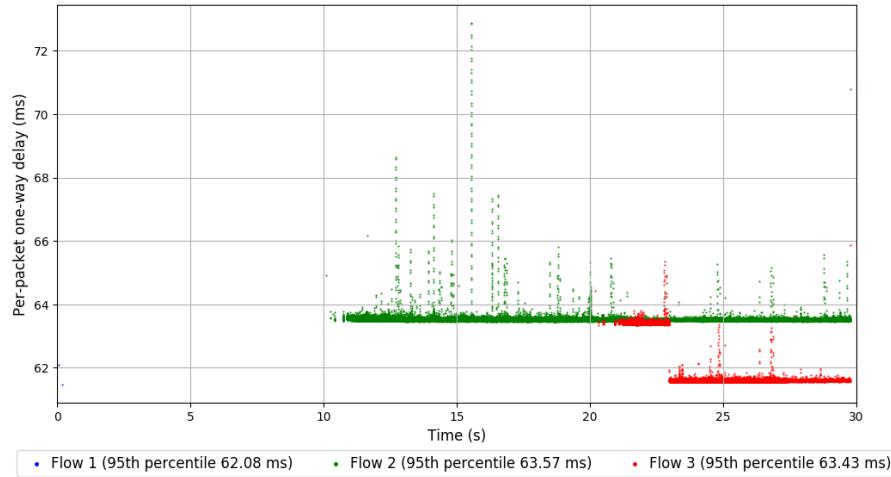
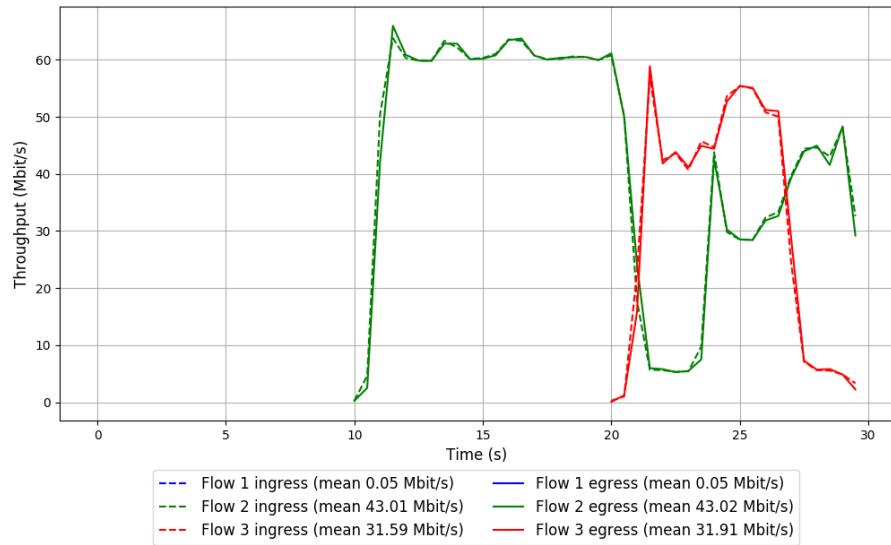
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-21 11:15:22

End at: 2017-08-21 11:15:52

```
# Below is generated by plot.py at 2017-08-21 15:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 63.563 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.02 Mbit/s
95th percentile per-packet one-way delay: 63.574 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 63.426 ms
Loss rate: 0.25%
```

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



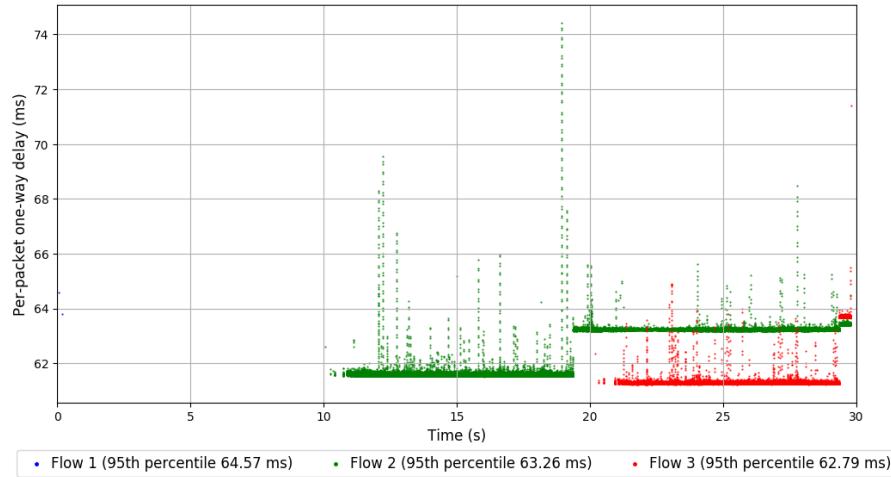
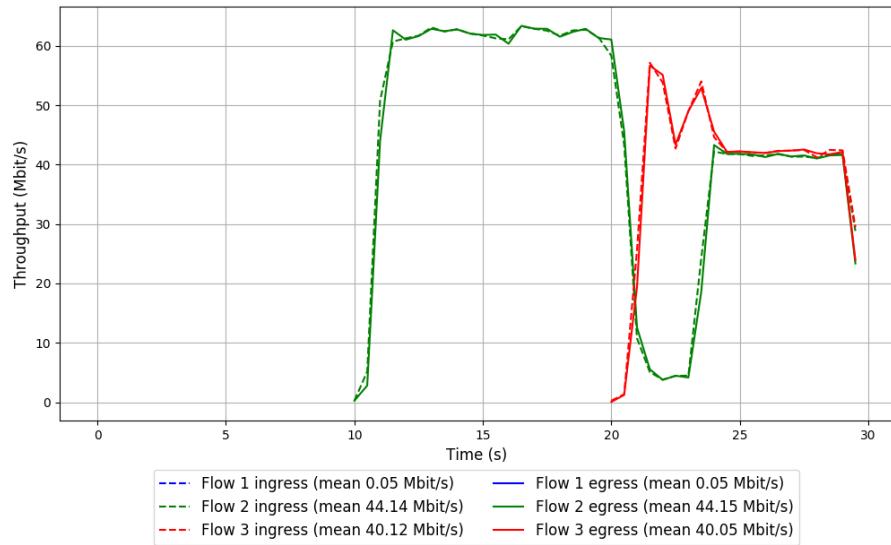
Run 3: Statistics of QUIC Cubic

Start at: 2017-08-21 11:27:15

End at: 2017-08-21 11:27:45

```
# Below is generated by plot.py at 2017-08-21 15:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.21 Mbit/s
95th percentile per-packet one-way delay: 63.263 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.572 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.15 Mbit/s
95th percentile per-packet one-way delay: 63.263 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 40.05 Mbit/s
95th percentile per-packet one-way delay: 62.791 ms
Loss rate: 1.41%
```

Run 3: Report of QUIC Cubic — Data Link



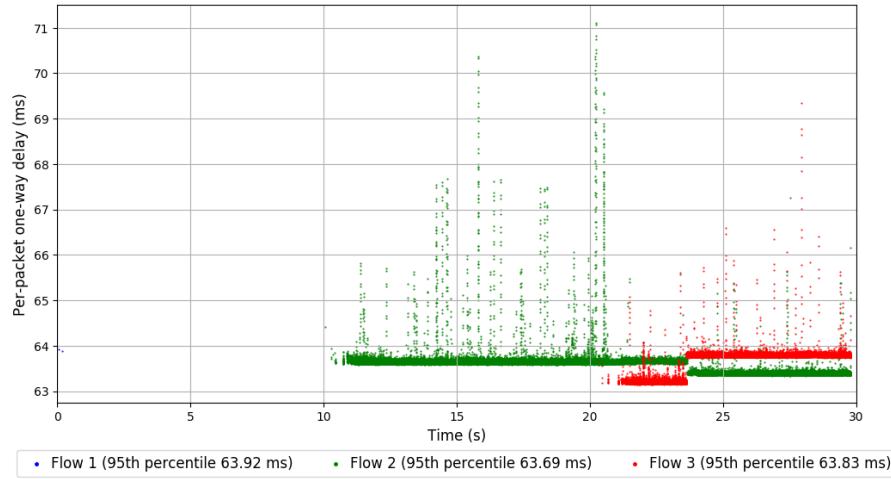
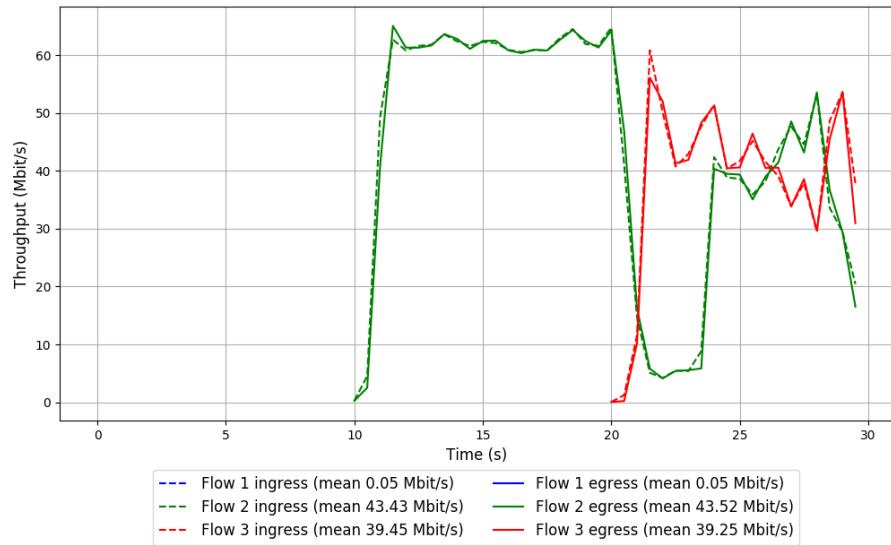
Run 4: Statistics of QUIC Cubic

Start at: 2017-08-21 11:39:11

End at: 2017-08-21 11:39:41

```
# Below is generated by plot.py at 2017-08-21 15:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.35 Mbit/s
95th percentile per-packet one-way delay: 63.803 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.924 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.52 Mbit/s
95th percentile per-packet one-way delay: 63.686 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 63.826 ms
Loss rate: 1.83%
```

Run 4: Report of QUIC Cubic — Data Link



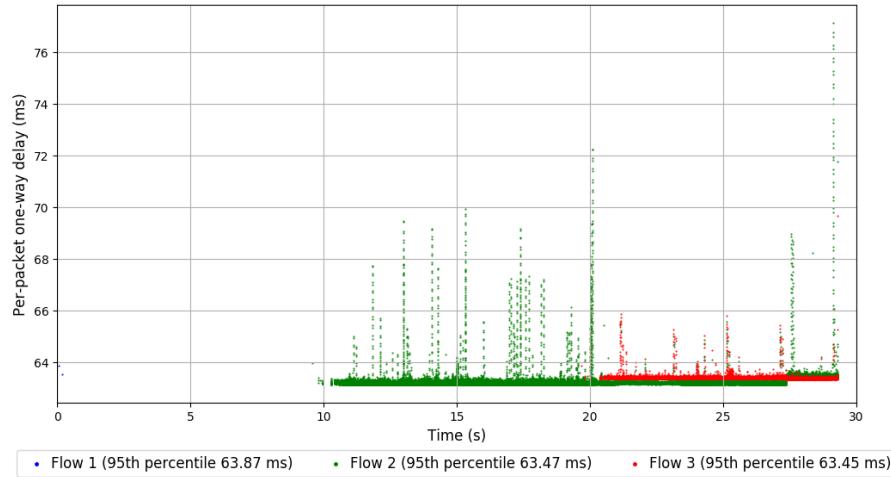
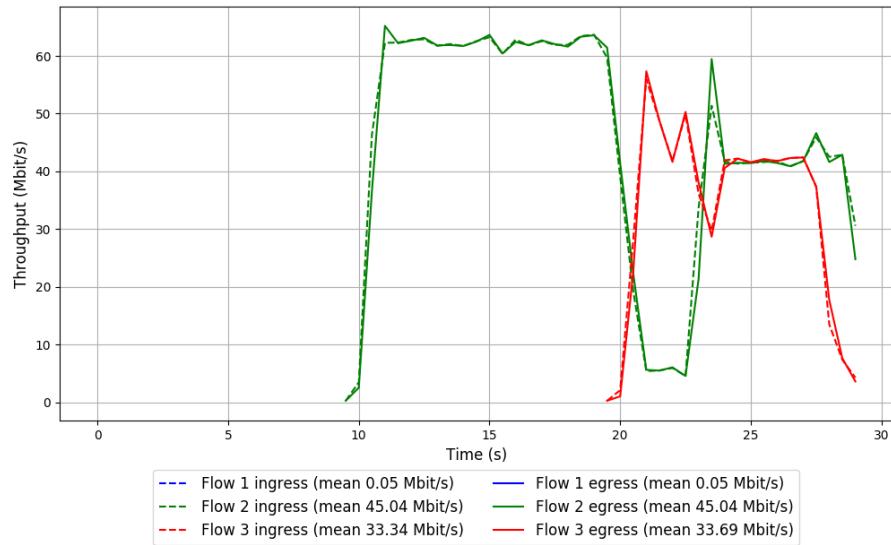
Run 5: Statistics of QUIC Cubic

Start at: 2017-08-21 11:50:47

End at: 2017-08-21 11:51:17

```
# Below is generated by plot.py at 2017-08-21 15:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.44 Mbit/s
95th percentile per-packet one-way delay: 63.465 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.871 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 63.471 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 63.446 ms
Loss rate: 0.23%
```

Run 5: Report of QUIC Cubic — Data Link



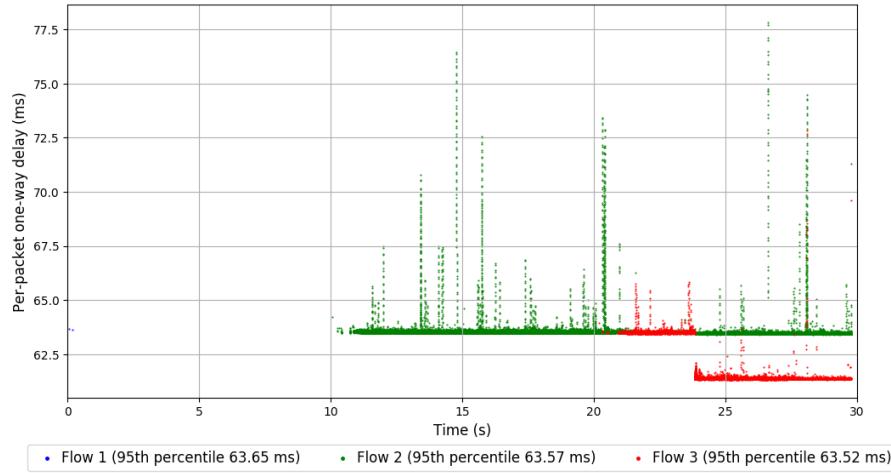
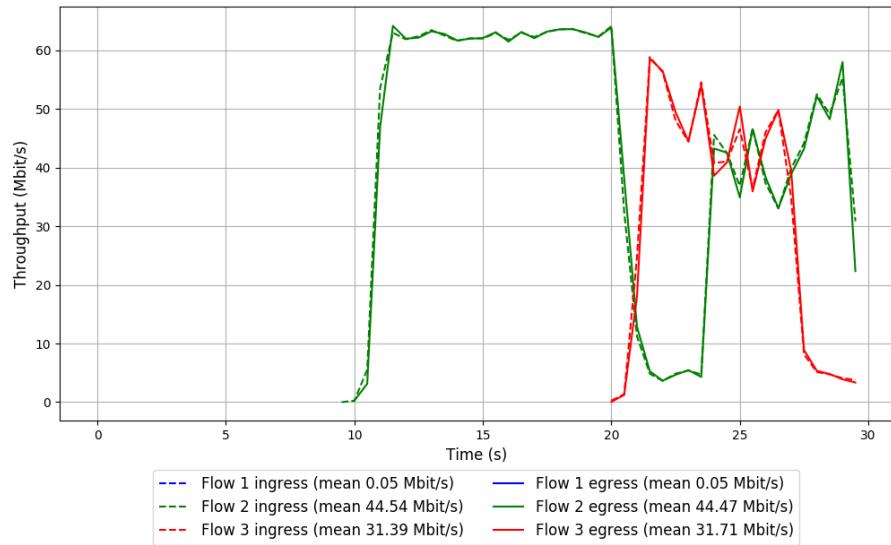
Run 6: Statistics of QUIC Cubic

Start at: 2017-08-21 12:02:31

End at: 2017-08-21 12:03:01

```
# Below is generated by plot.py at 2017-08-21 15:43:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 63.564 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.650 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 63.574 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 63.518 ms
Loss rate: 0.18%
```

Run 6: Report of QUIC Cubic — Data Link



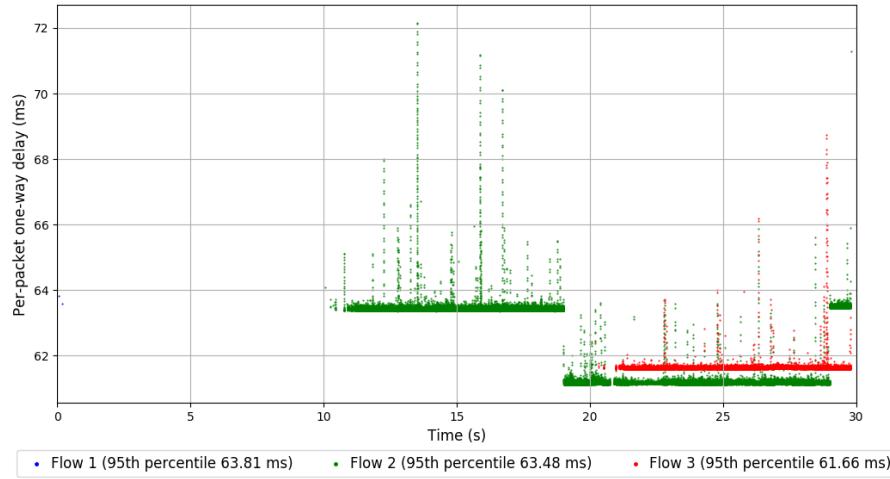
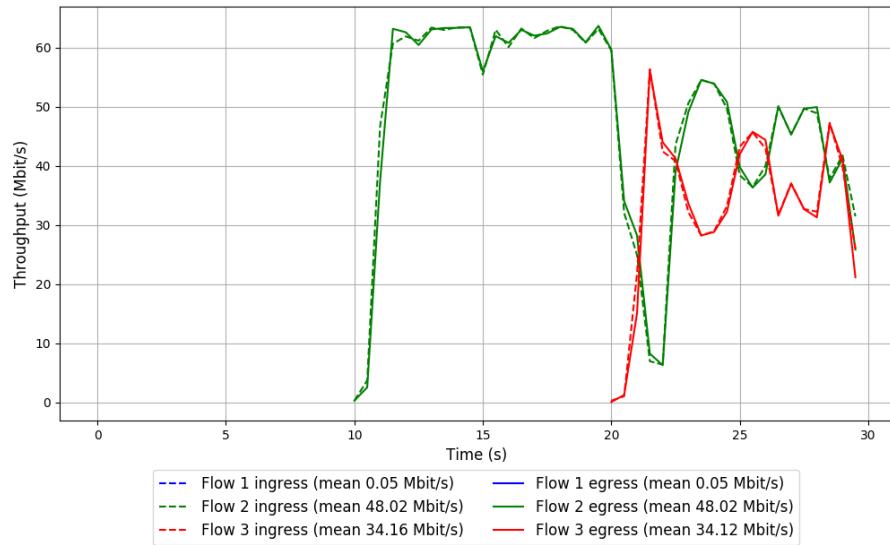
Run 7: Statistics of QUIC Cubic

Start at: 2017-08-21 12:14:16

End at: 2017-08-21 12:14:46

```
# Below is generated by plot.py at 2017-08-21 15:43:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.84 Mbit/s
95th percentile per-packet one-way delay: 63.467 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.813 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.02 Mbit/s
95th percentile per-packet one-way delay: 63.478 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 34.12 Mbit/s
95th percentile per-packet one-way delay: 61.661 ms
Loss rate: 1.40%
```

Run 7: Report of QUIC Cubic — Data Link



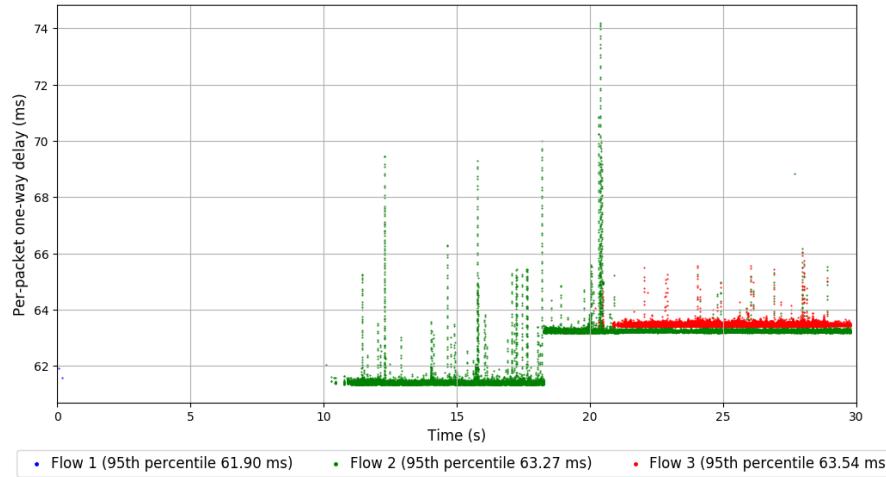
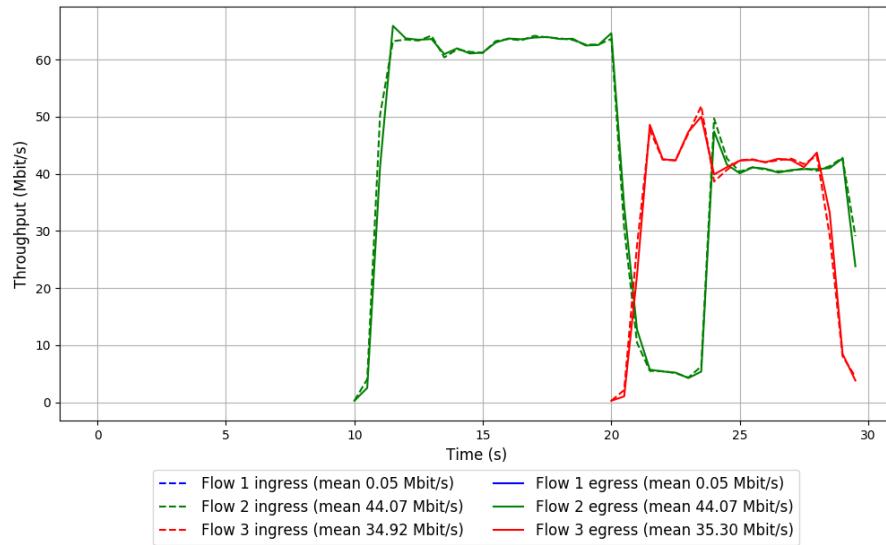
Run 8: Statistics of QUIC Cubic

Start at: 2017-08-21 12:25:57

End at: 2017-08-21 12:26:27

```
# Below is generated by plot.py at 2017-08-21 15:43:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.59 Mbit/s
95th percentile per-packet one-way delay: 63.498 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.903 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.07 Mbit/s
95th percentile per-packet one-way delay: 63.267 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 35.30 Mbit/s
95th percentile per-packet one-way delay: 63.542 ms
Loss rate: 0.23%
```

Run 8: Report of QUIC Cubic — Data Link



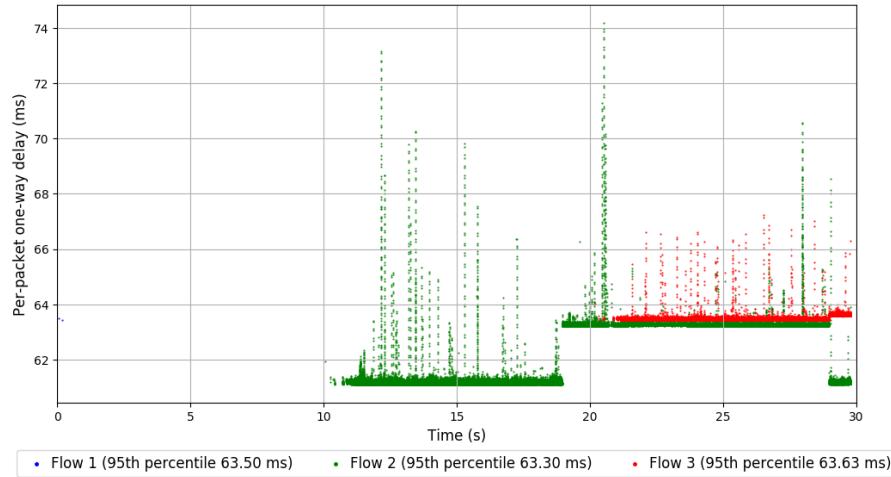
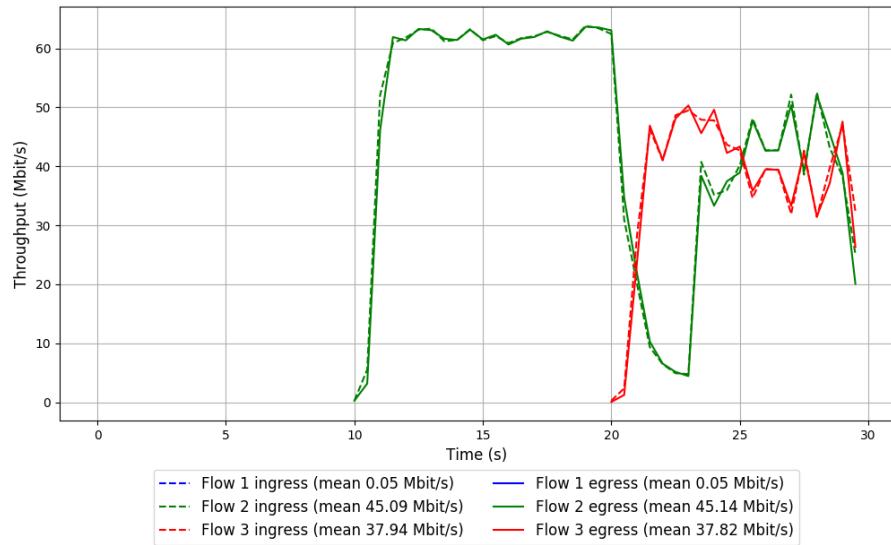
Run 9: Statistics of QUIC Cubic

Start at: 2017-08-21 12:37:36

End at: 2017-08-21 12:38:06

```
# Below is generated by plot.py at 2017-08-21 15:43:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.14 Mbit/s
95th percentile per-packet one-way delay: 63.529 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.503 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.14 Mbit/s
95th percentile per-packet one-way delay: 63.297 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 37.82 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 1.63%
```

Run 9: Report of QUIC Cubic — Data Link



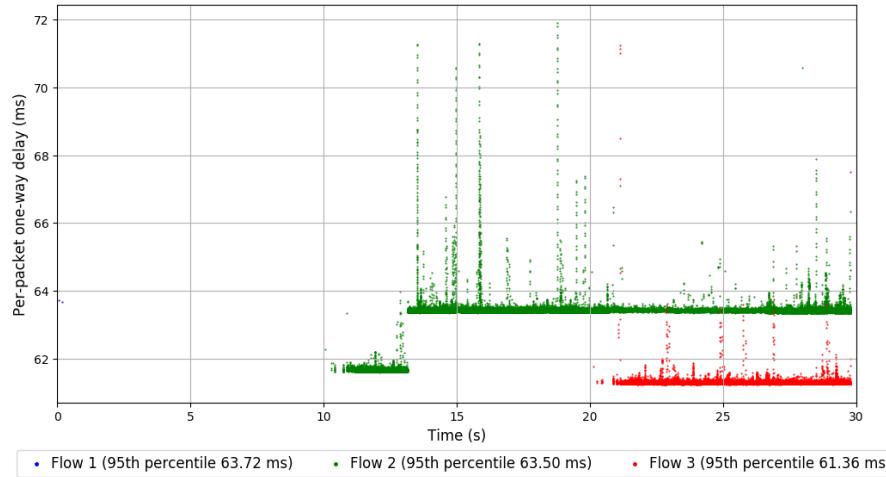
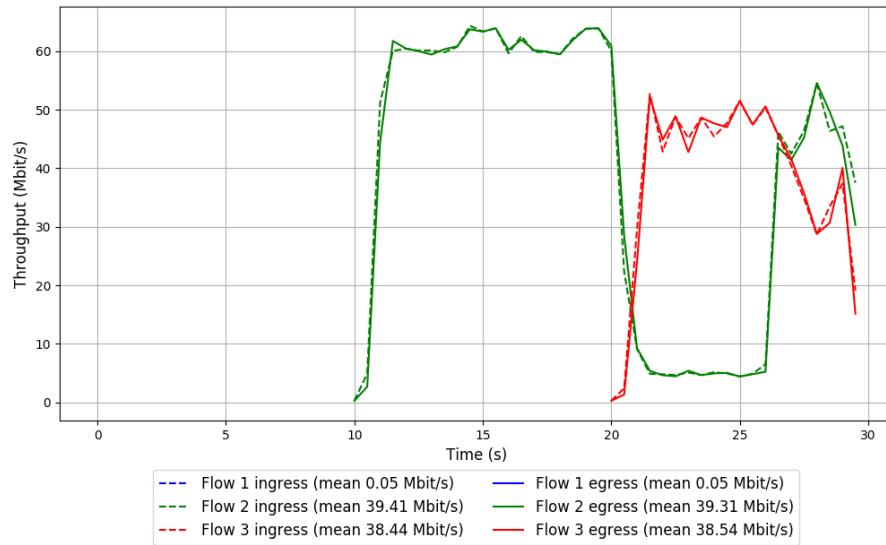
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-21 12:49:12

End at: 2017-08-21 12:49:42

```
# Below is generated by plot.py at 2017-08-21 15:43:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 63.475 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.721 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.31 Mbit/s
95th percentile per-packet one-way delay: 63.497 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 61.356 ms
Loss rate: 1.00%
```

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

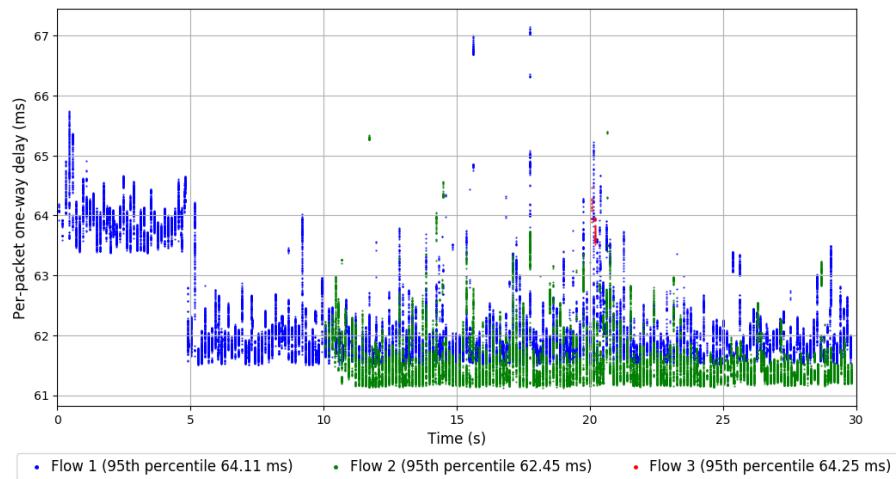
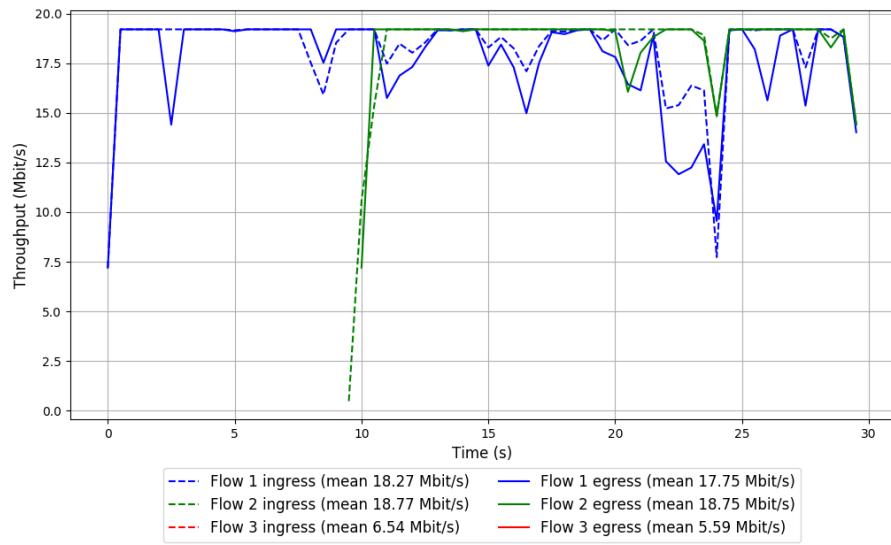


```
Run 1: Statistics of Saturator

Start at: 2017-08-21 11:01:10
End at: 2017-08-21 11:01:40

# Below is generated by plot.py at 2017-08-21 15:43:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 63.938 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 17.75 Mbit/s
95th percentile per-packet one-way delay: 64.108 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 18.75 Mbit/s
95th percentile per-packet one-way delay: 62.450 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 5.59 Mbit/s
95th percentile per-packet one-way delay: 64.253 ms
Loss rate: 57.14%
```

Run 1: Report of Saturator — Data Link



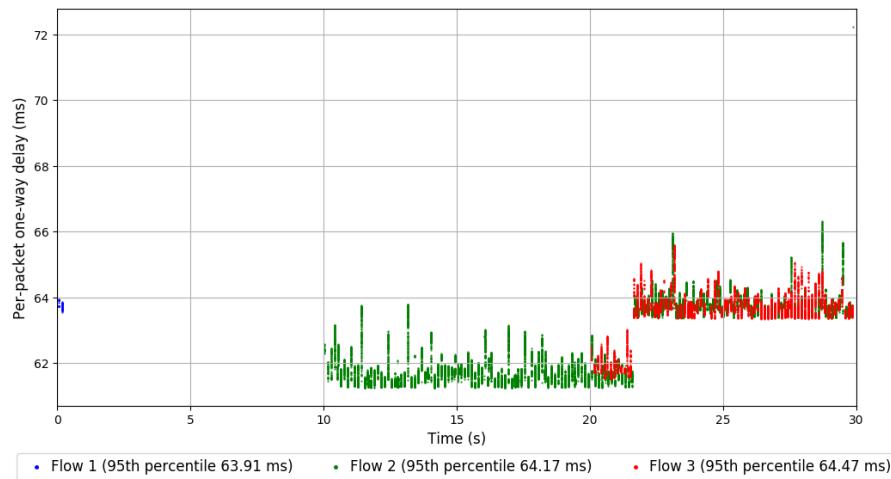
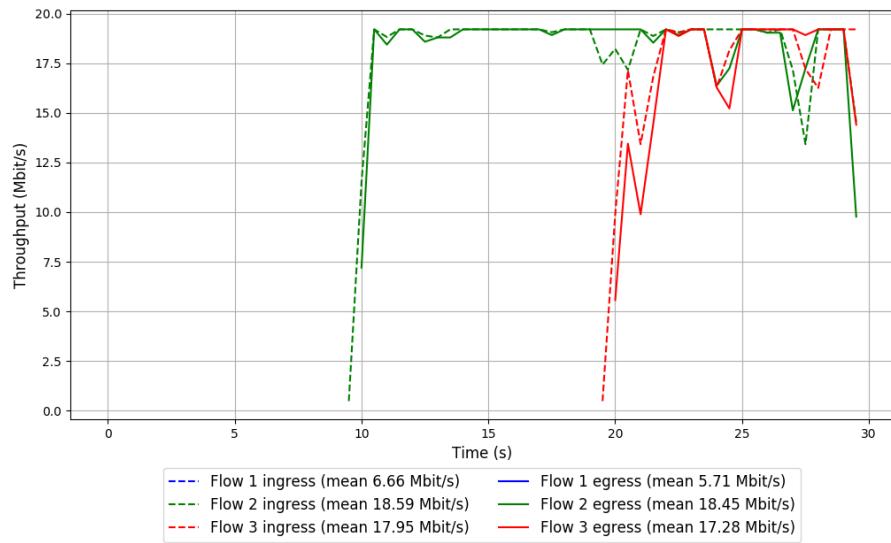
Run 2: Statistics of Saturator

Start at: 2017-08-21 11:13:03

End at: 2017-08-21 11:13:33

```
# Below is generated by plot.py at 2017-08-21 15:44:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.98 Mbit/s
95th percentile per-packet one-way delay: 64.258 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 63.914 ms
Loss rate: 57.14%
-- Flow 2:
Average throughput: 18.45 Mbit/s
95th percentile per-packet one-way delay: 64.169 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 17.28 Mbit/s
95th percentile per-packet one-way delay: 64.470 ms
Loss rate: 4.96%
```

Run 2: Report of Saturator — Data Link

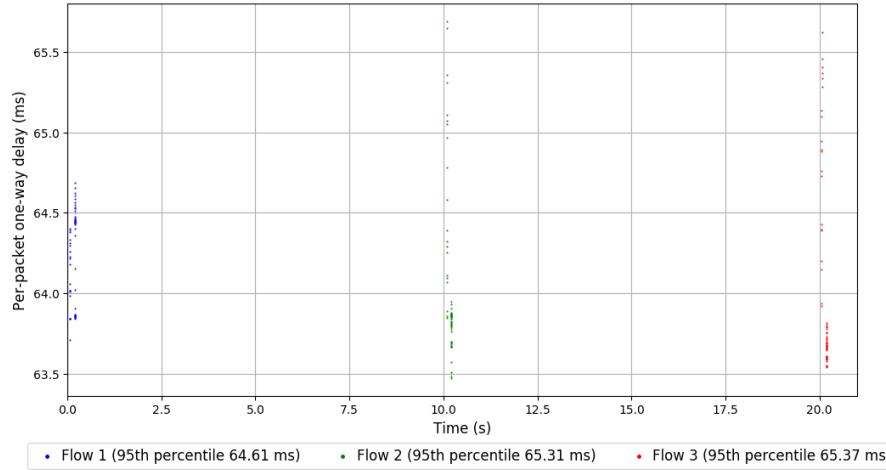
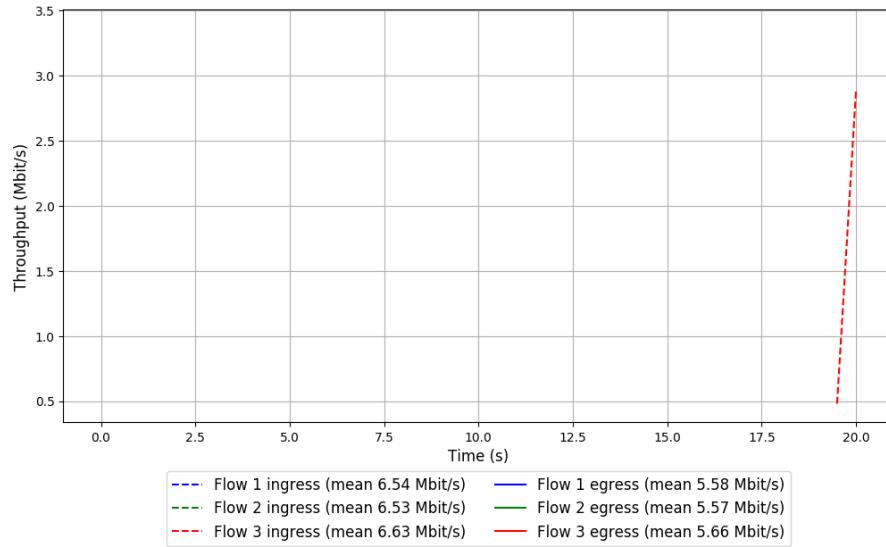


Run 3: Statistics of Saturator

Start at: 2017-08-21 11:24:59

End at: 2017-08-21 11:25:29

### Run 3: Report of Saturator — Data Link

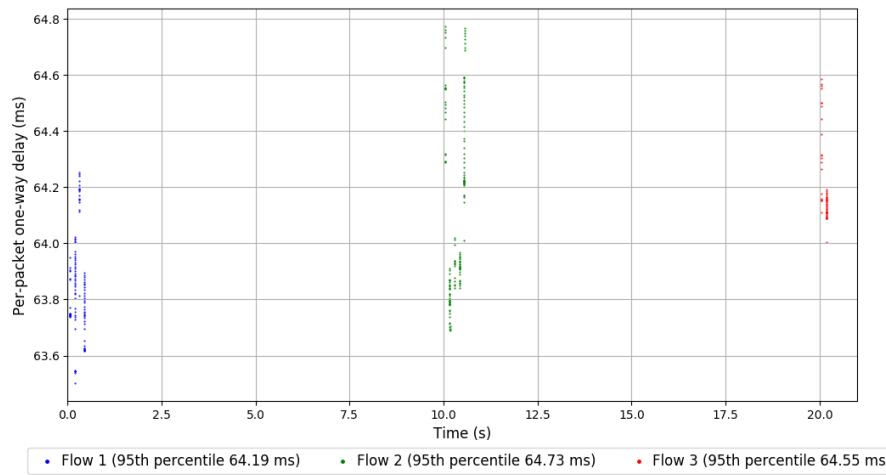
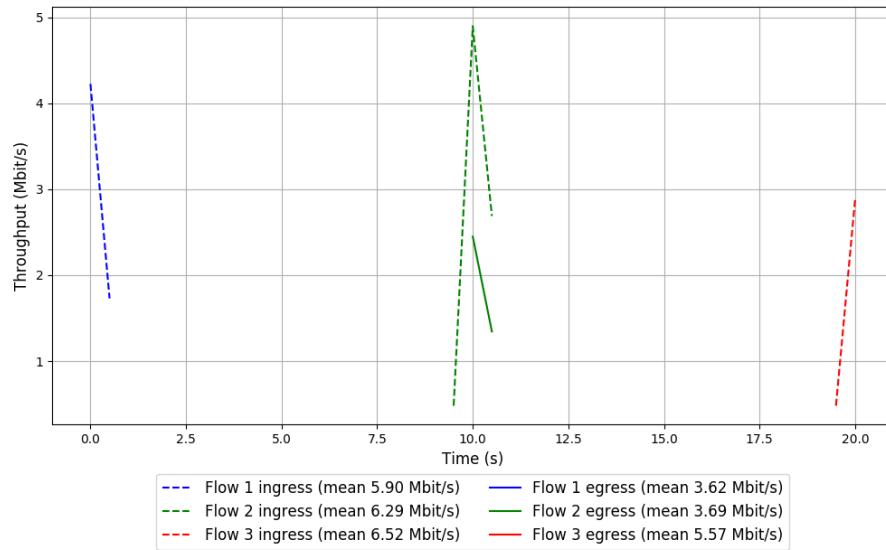


Run 4: Statistics of Saturator

Start at: 2017-08-21 11:36:51

End at: 2017-08-21 11:37:21

Run 4: Report of Saturator — Data Link



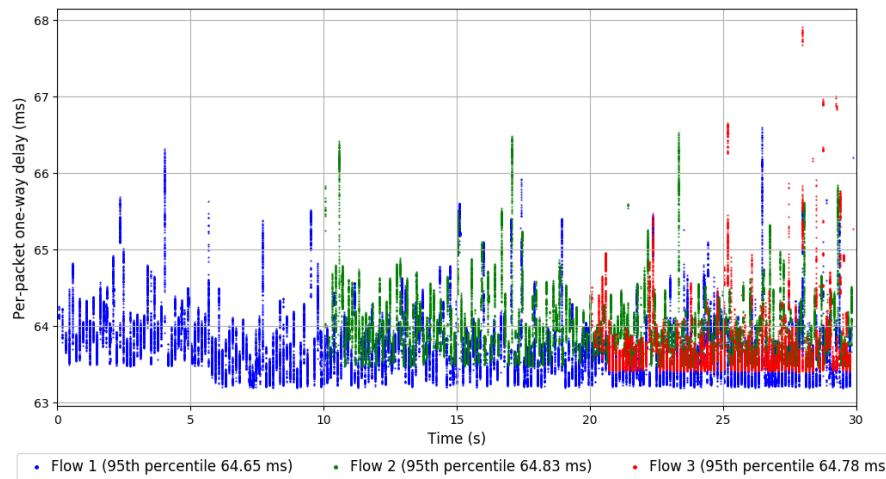
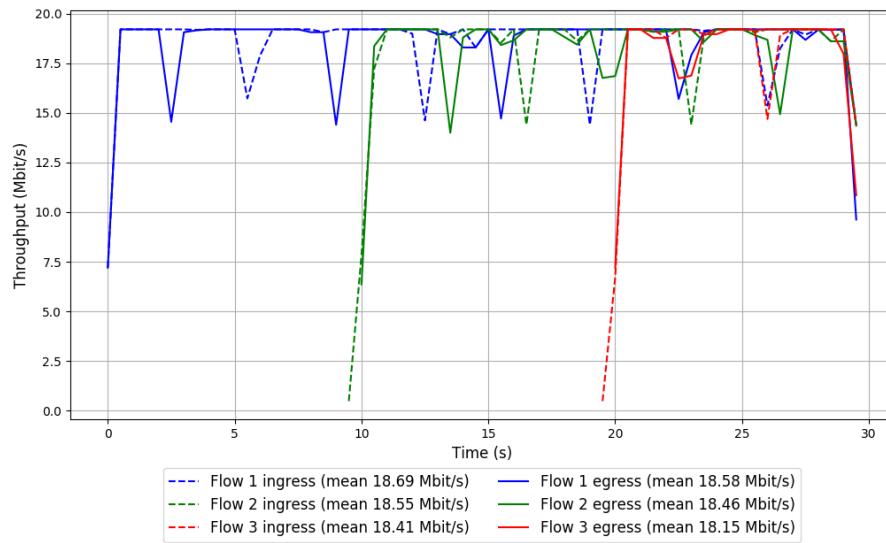
Run 5: Statistics of Saturator

Start at: 2017-08-21 11:48:29

End at: 2017-08-21 11:48:59

```
# Below is generated by plot.py at 2017-08-21 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 64.738 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 18.58 Mbit/s
95th percentile per-packet one-way delay: 64.647 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 18.46 Mbit/s
95th percentile per-packet one-way delay: 64.831 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 18.15 Mbit/s
95th percentile per-packet one-way delay: 64.785 ms
Loss rate: 1.51%
```

Run 5: Report of Saturator — Data Link



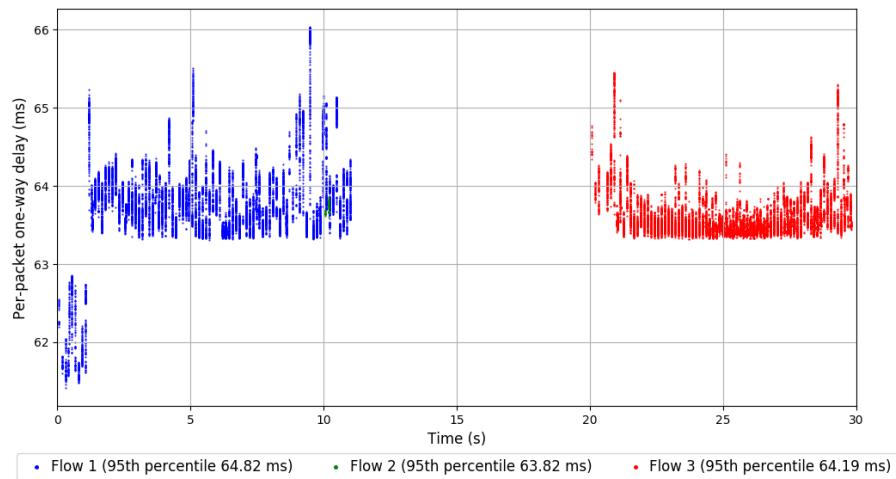
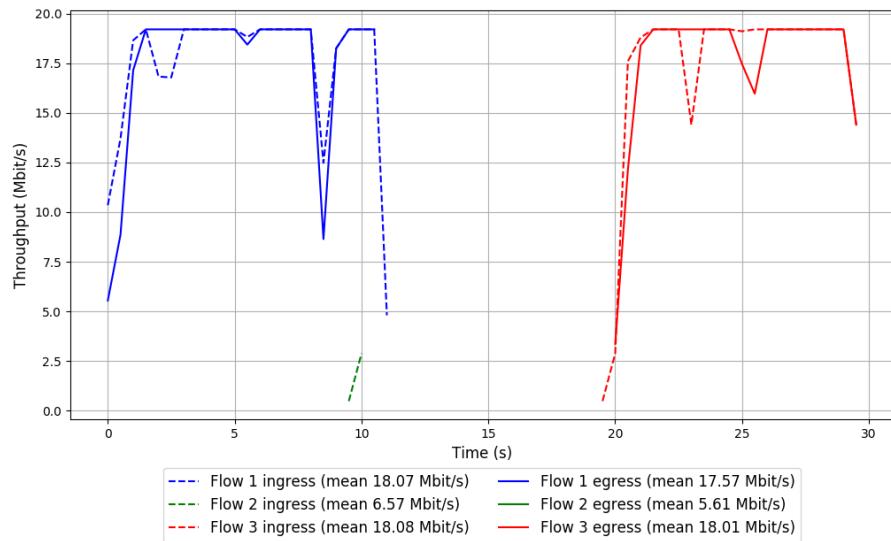
Run 6: Statistics of Saturator

Start at: 2017-08-21 12:00:14

End at: 2017-08-21 12:00:44

```
# Below is generated by plot.py at 2017-08-21 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 64.521 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 17.57 Mbit/s
95th percentile per-packet one-way delay: 64.819 ms
Loss rate: 3.85%
-- Flow 2:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 63.823 ms
Loss rate: 57.14%
-- Flow 3:
Average throughput: 18.01 Mbit/s
95th percentile per-packet one-way delay: 64.185 ms
Loss rate: 1.67%
```

Run 6: Report of Saturator — Data Link



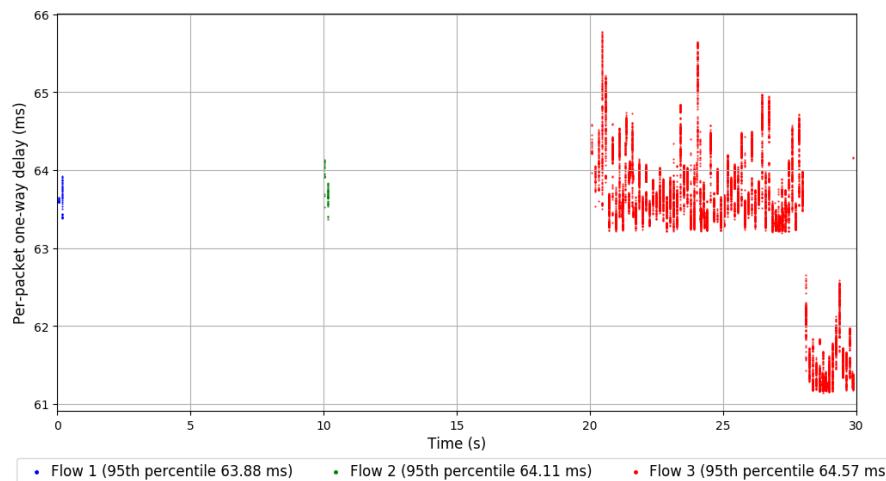
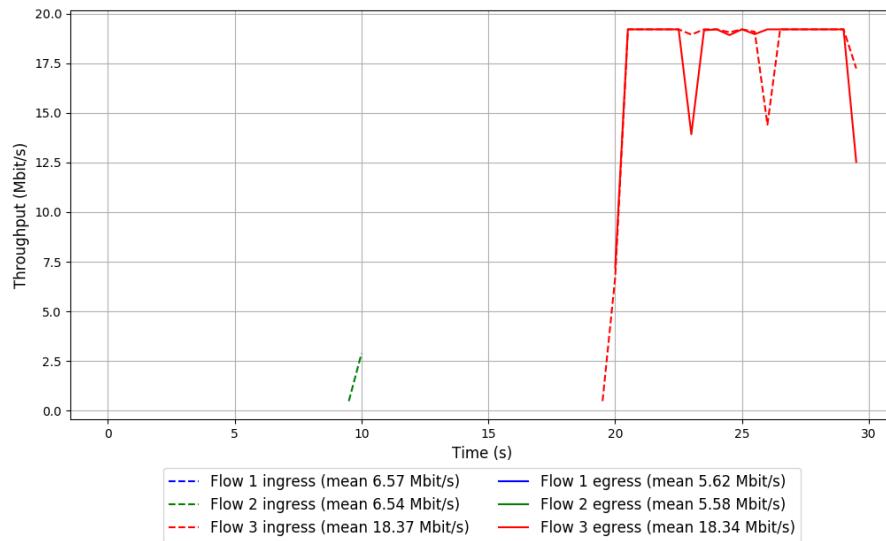
Run 7: Statistics of Saturator

Start at: 2017-08-21 12:11:57

End at: 2017-08-21 12:12:27

```
# Below is generated by plot.py at 2017-08-21 15:44:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 64.567 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 63.881 ms
Loss rate: 57.14%
-- Flow 2:
Average throughput: 5.58 Mbit/s
95th percentile per-packet one-way delay: 64.106 ms
Loss rate: 57.14%
-- Flow 3:
Average throughput: 18.34 Mbit/s
95th percentile per-packet one-way delay: 64.571 ms
Loss rate: 1.43%
```

Run 7: Report of Saturator — Data Link



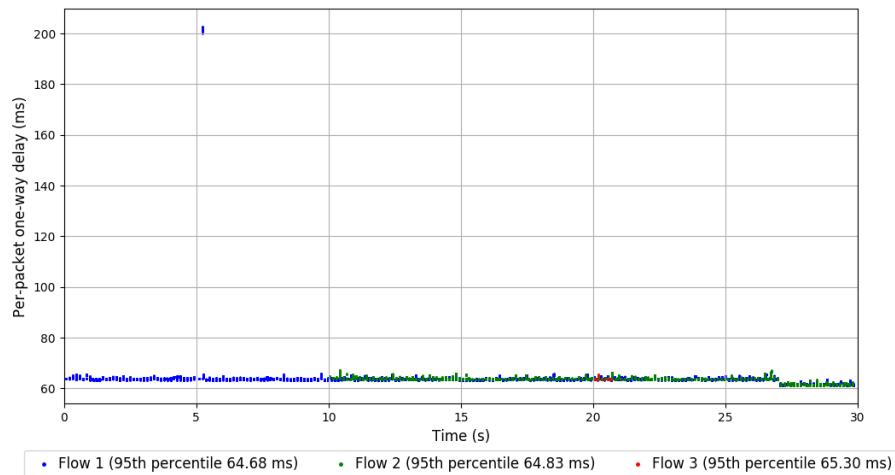
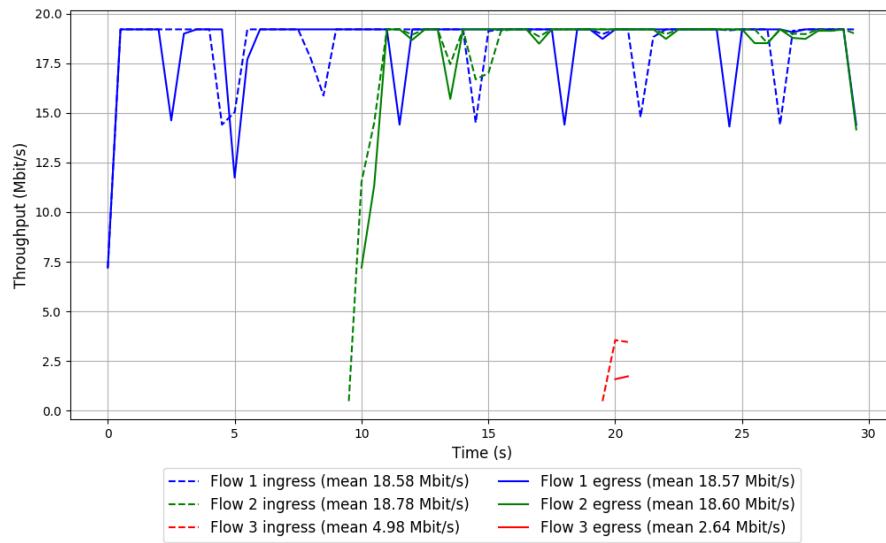
Run 8: Statistics of Saturator

Start at: 2017-08-21 12:23:38

End at: 2017-08-21 12:24:08

```
# Below is generated by plot.py at 2017-08-21 15:44:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 64.726 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 18.57 Mbit/s
95th percentile per-packet one-way delay: 64.677 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 18.60 Mbit/s
95th percentile per-packet one-way delay: 64.827 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 65.301 ms
Loss rate: 55.77%
```

Run 8: Report of Saturator — Data Link



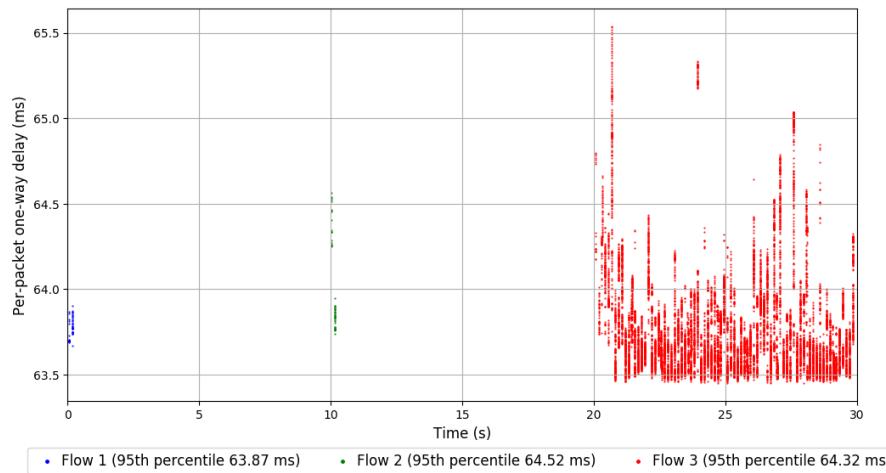
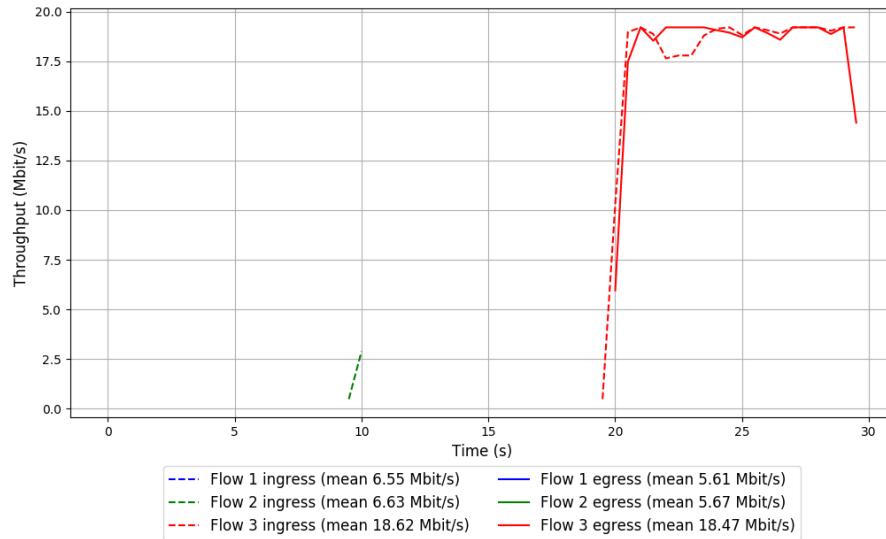
Run 9: Statistics of Saturator

Start at: 2017-08-21 12:35:21

End at: 2017-08-21 12:35:51

```
# Below is generated by plot.py at 2017-08-21 15:44:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 64.323 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 63.868 ms
Loss rate: 57.14%
-- Flow 2:
Average throughput: 5.67 Mbit/s
95th percentile per-packet one-way delay: 64.523 ms
Loss rate: 57.14%
-- Flow 3:
Average throughput: 18.47 Mbit/s
95th percentile per-packet one-way delay: 64.318 ms
Loss rate: 2.09%
```

### Run 9: Report of Saturator — Data Link



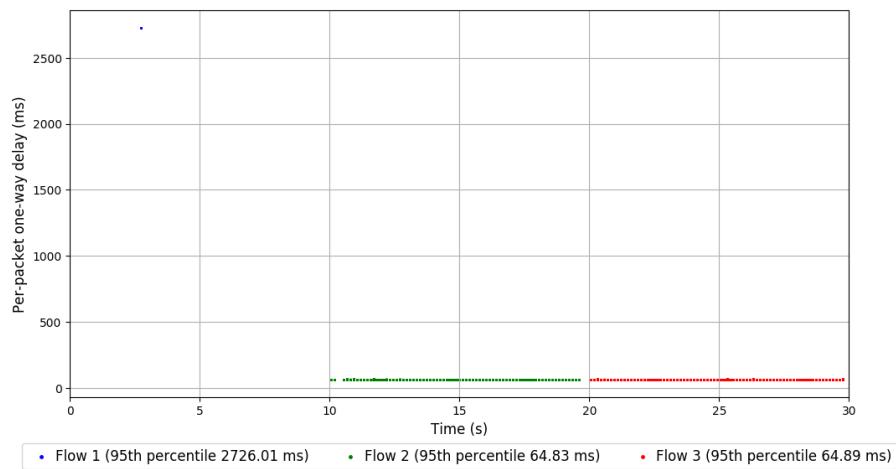
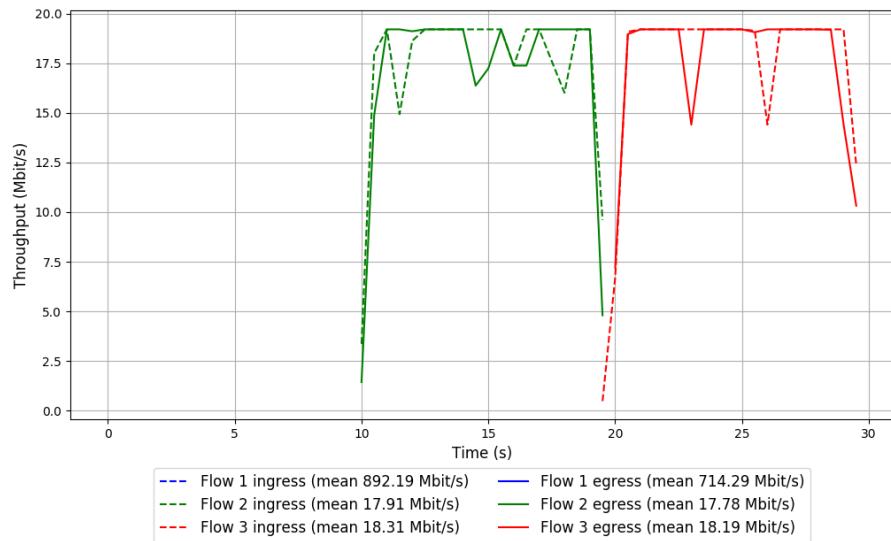
Run 10: Statistics of Saturator

Start at: 2017-08-21 12:46:54

End at: 2017-08-21 12:47:24

```
# Below is generated by plot.py at 2017-08-21 15:44:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.81 Mbit/s
95th percentile per-packet one-way delay: 64.883 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 714.29 Mbit/s
95th percentile per-packet one-way delay: 2726.006 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.78 Mbit/s
95th percentile per-packet one-way delay: 64.830 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 18.19 Mbit/s
95th percentile per-packet one-way delay: 64.891 ms
Loss rate: 1.95%
```

Run 10: Report of Saturator — Data Link

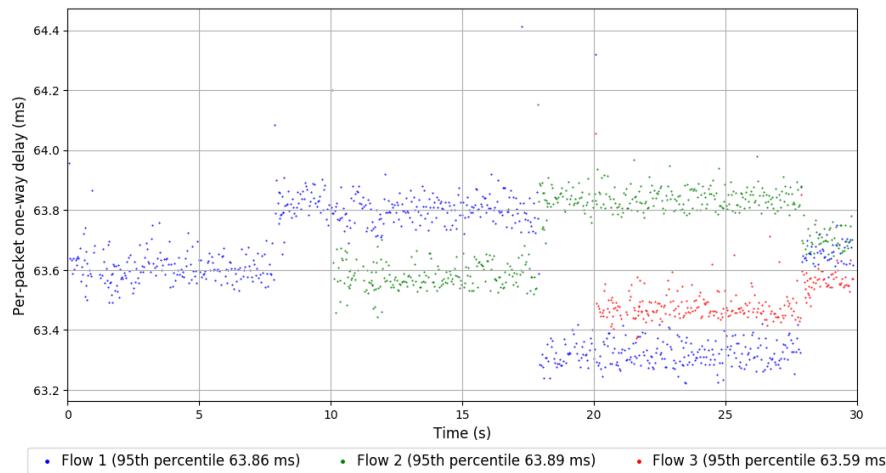
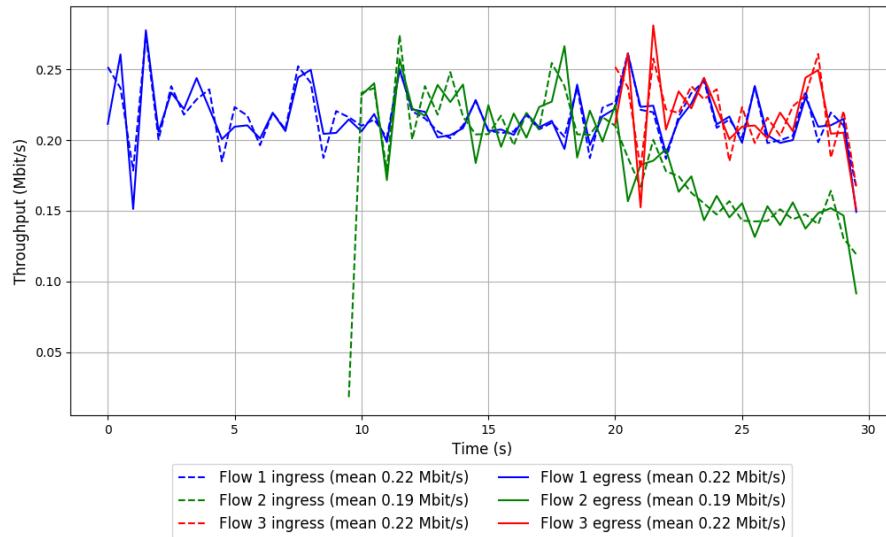


```
Run 1: Statistics of SCReAM

Start at: 2017-08-21 10:57:57
End at: 2017-08-21 10:58:27

# Below is generated by plot.py at 2017-08-21 15:44:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 63.869 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.860 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 63.886 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.593 ms
Loss rate: 1.10%
```

Run 1: Report of SCReAM — Data Link



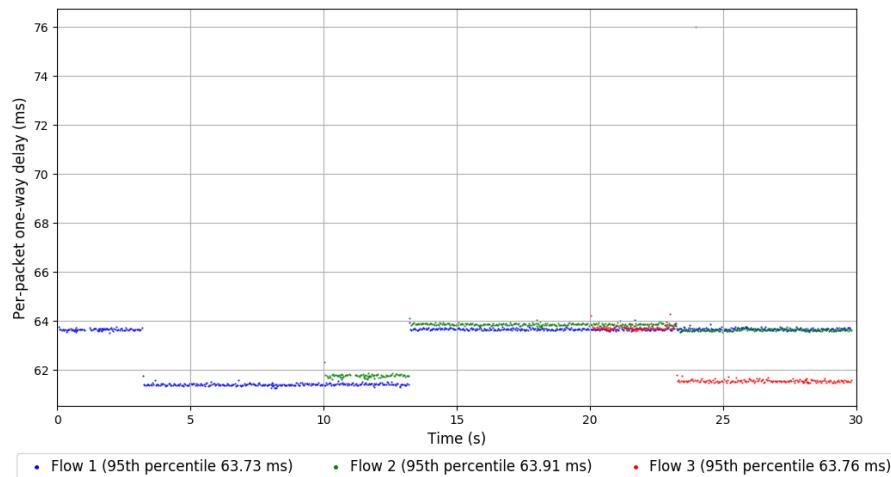
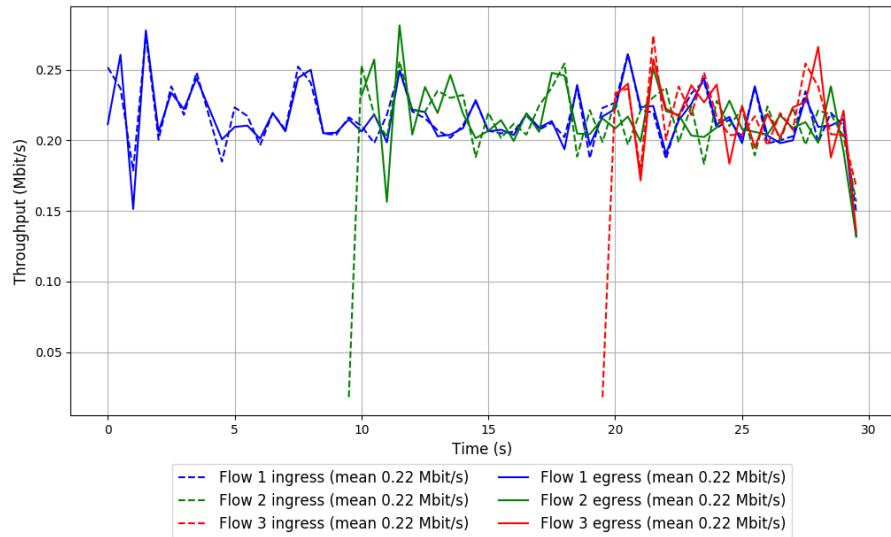
Run 2: Statistics of SCReAM

Start at: 2017-08-21 11:09:52

End at: 2017-08-21 11:10:22

```
# Below is generated by plot.py at 2017-08-21 15:44:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.888 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.731 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.914 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.755 ms
Loss rate: 1.10%
```

Run 2: Report of SCReAM — Data Link



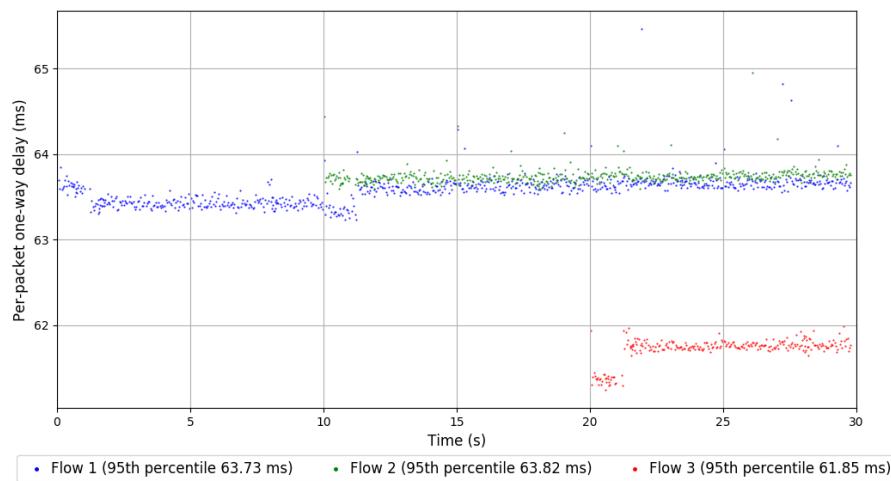
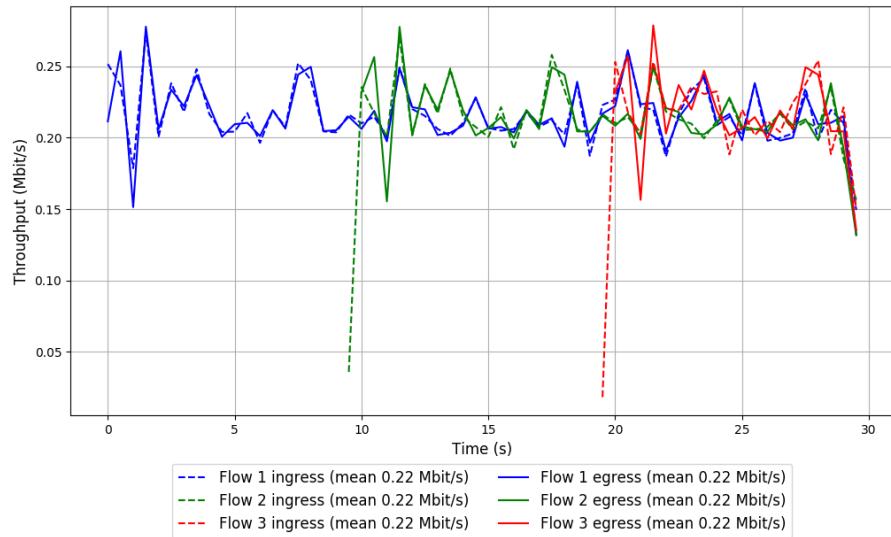
Run 3: Statistics of SCReAM

Start at: 2017-08-21 11:21:54

End at: 2017-08-21 11:22:24

```
# Below is generated by plot.py at 2017-08-21 15:44:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.726 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.823 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.848 ms
Loss rate: 1.10%
```

### Run 3: Report of SCReAM — Data Link



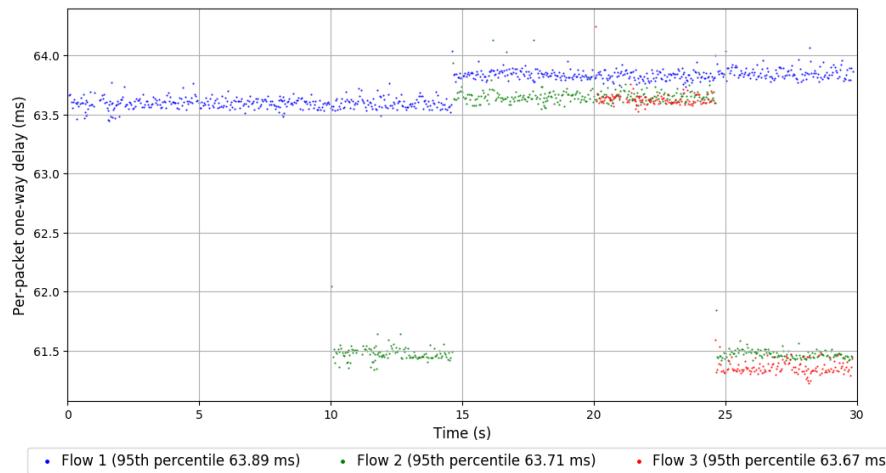
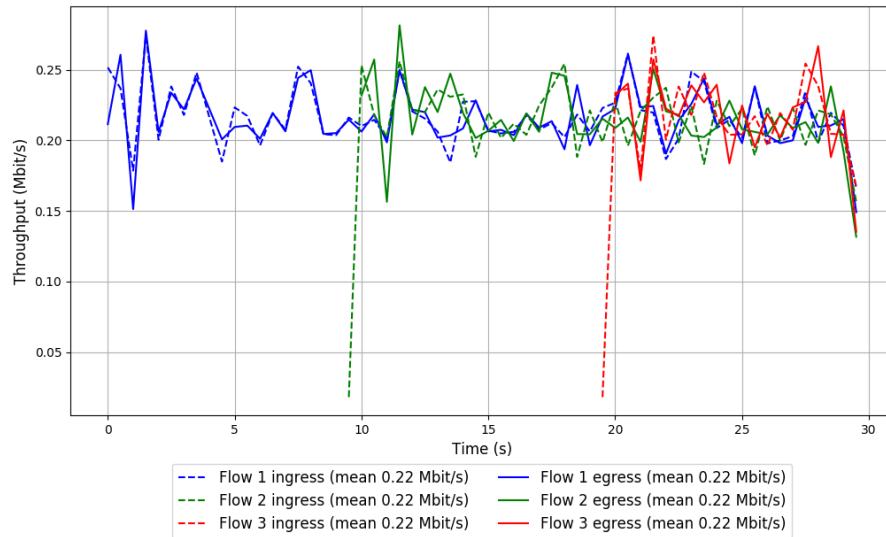
Run 4: Statistics of SCReAM

Start at: 2017-08-21 11:33:40

End at: 2017-08-21 11:34:10

```
# Below is generated by plot.py at 2017-08-21 15:44:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.874 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.892 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.706 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.669 ms
Loss rate: 1.10%
```

Run 4: Report of SCReAM — Data Link



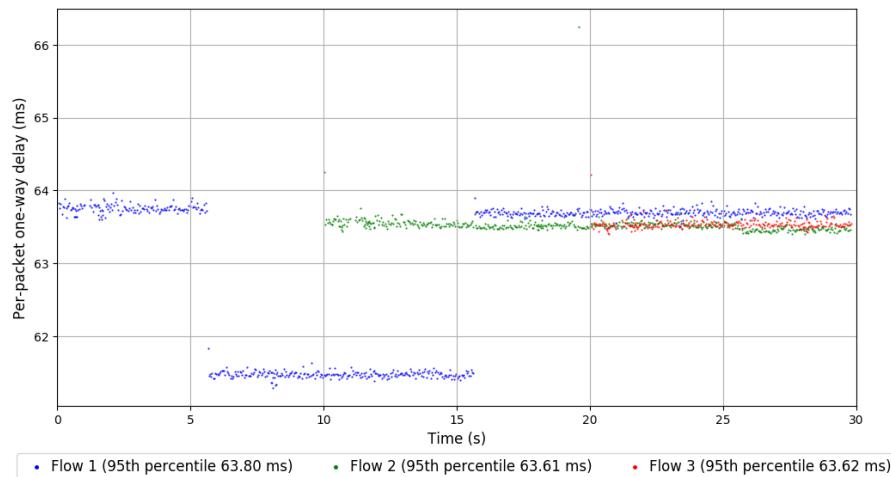
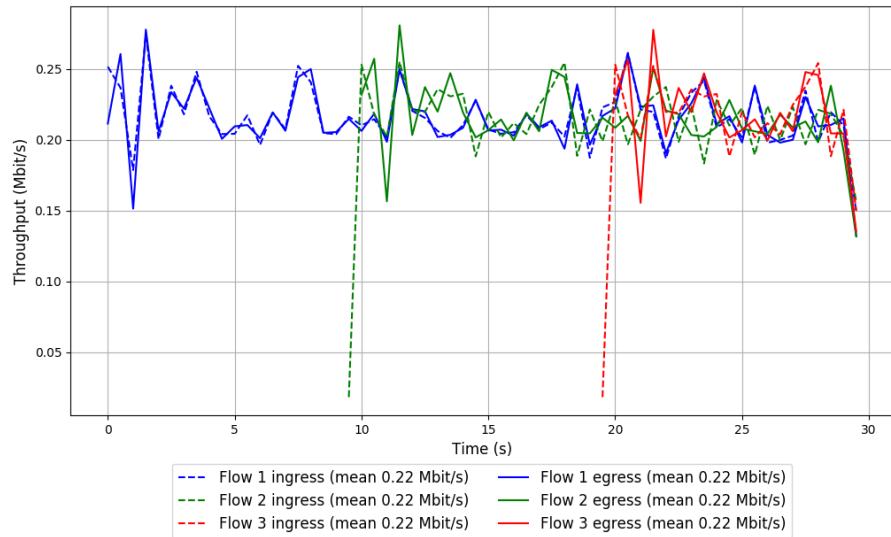
Run 5: Statistics of SCReAM

Start at: 2017-08-21 11:45:19

End at: 2017-08-21 11:45:49

```
# Below is generated by plot.py at 2017-08-21 15:44:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.771 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.795 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.609 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.615 ms
Loss rate: 1.10%
```

Run 5: Report of SCReAM — Data Link



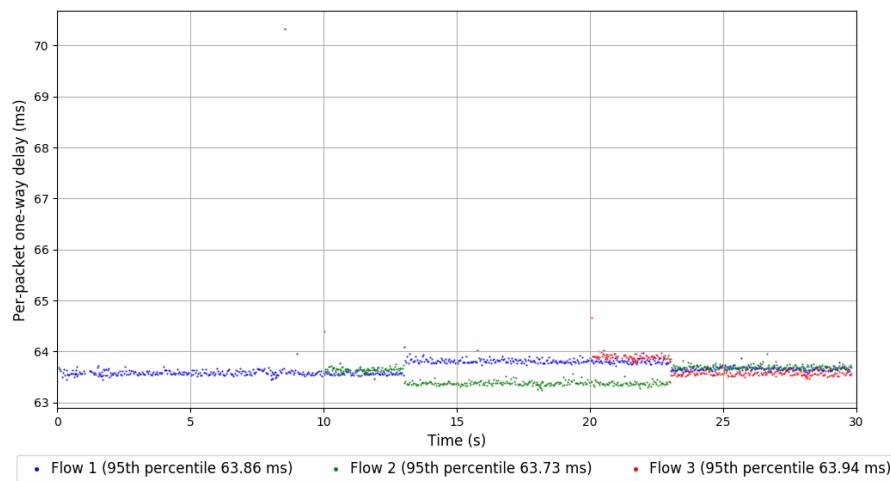
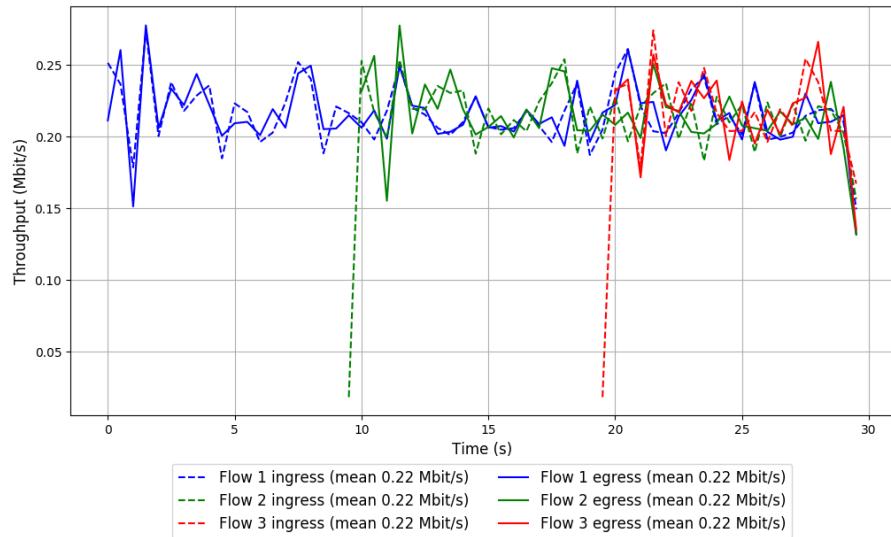
Run 6: Statistics of SCReAM

Start at: 2017-08-21 11:57:02

End at: 2017-08-21 11:57:32

```
# Below is generated by plot.py at 2017-08-21 15:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.876 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.857 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.730 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.936 ms
Loss rate: 1.10%
```

Run 6: Report of SCReAM — Data Link

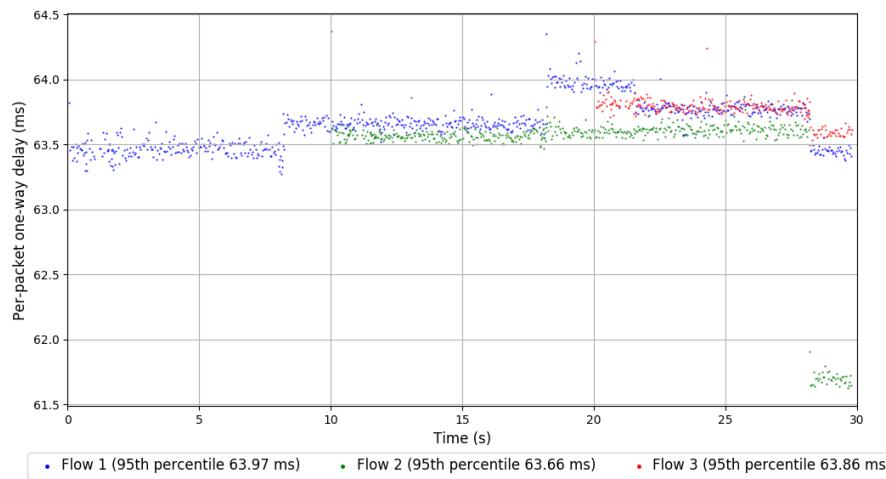
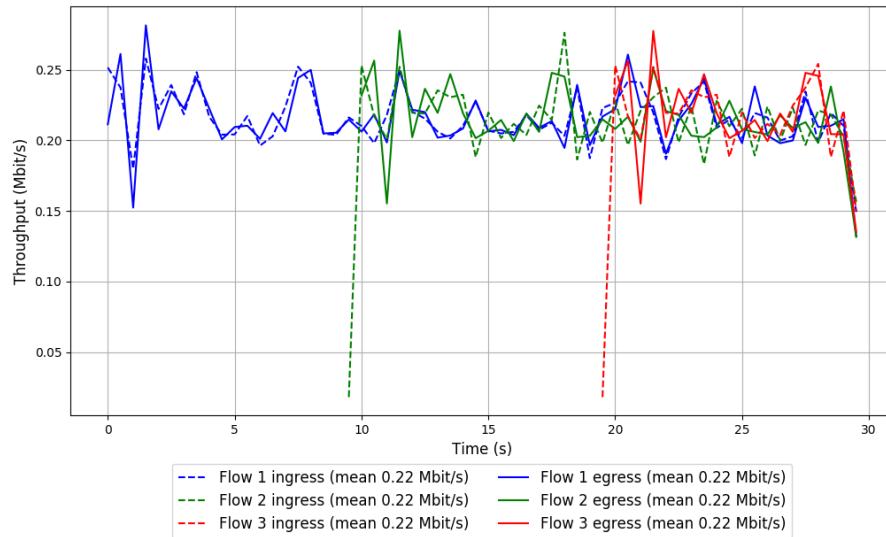


```
Run 7: Statistics of SCReAM

Start at: 2017-08-21 12:08:47
End at: 2017-08-21 12:09:17

# Below is generated by plot.py at 2017-08-21 15:44:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.935 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.974 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.661 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.862 ms
Loss rate: 1.10%
```

Run 7: Report of SCReAM — Data Link

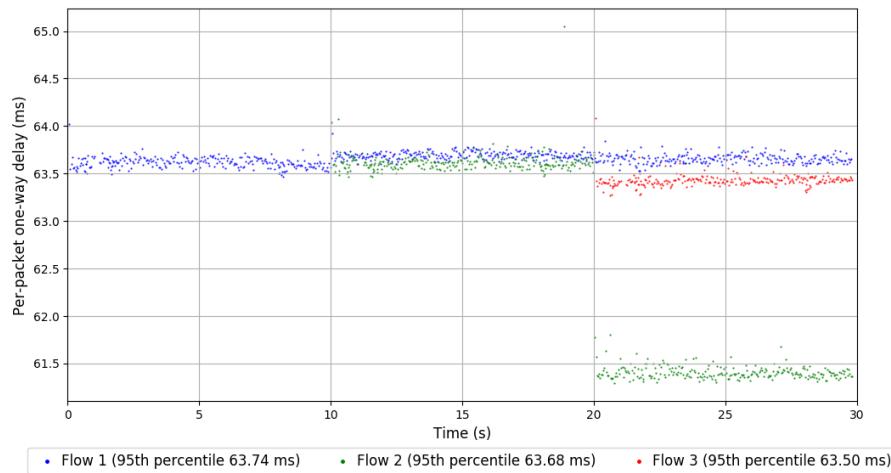
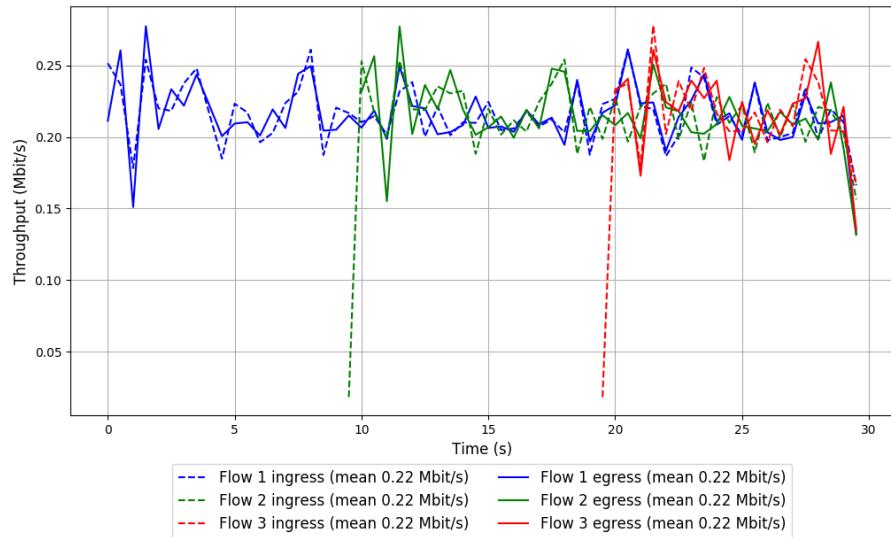


```
Run 8: Statistics of SCReAM

Start at: 2017-08-21 12:20:25
End at: 2017-08-21 12:20:55

# Below is generated by plot.py at 2017-08-21 15:44:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.730 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.680 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.501 ms
Loss rate: 1.10%
```

## Run 8: Report of SCReAM — Data Link



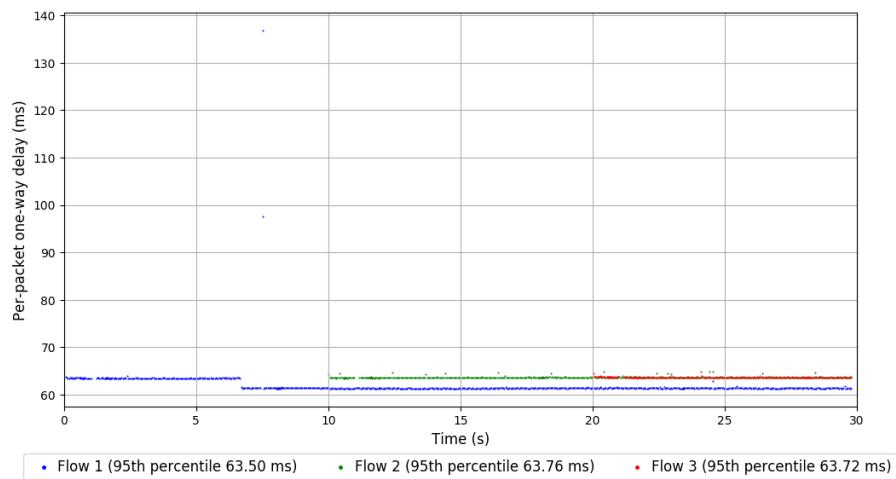
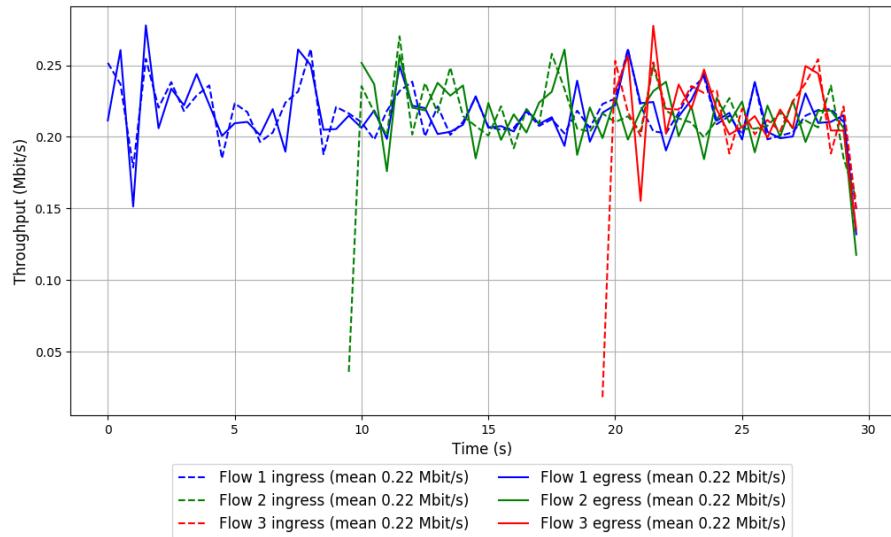
Run 9: Statistics of SCReAM

Start at: 2017-08-21 12:32:08

End at: 2017-08-21 12:32:38

```
# Below is generated by plot.py at 2017-08-21 15:44:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.704 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.498 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.762 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.718 ms
Loss rate: 1.10%
```

Run 9: Report of SCReAM — Data Link



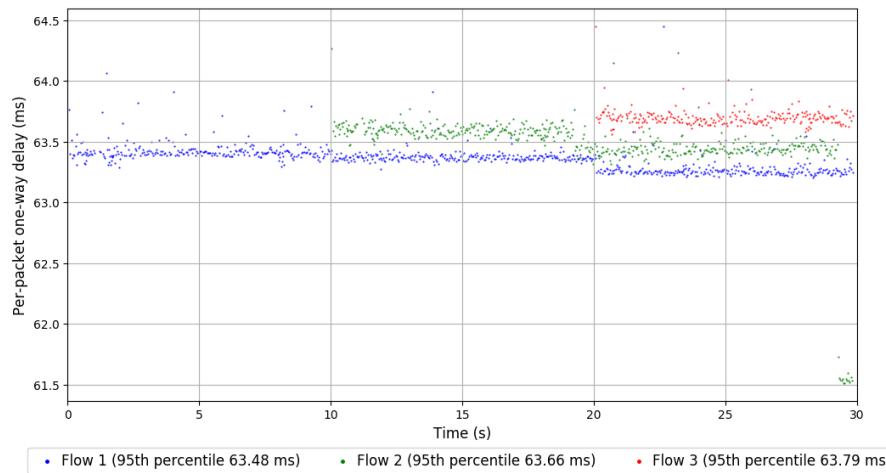
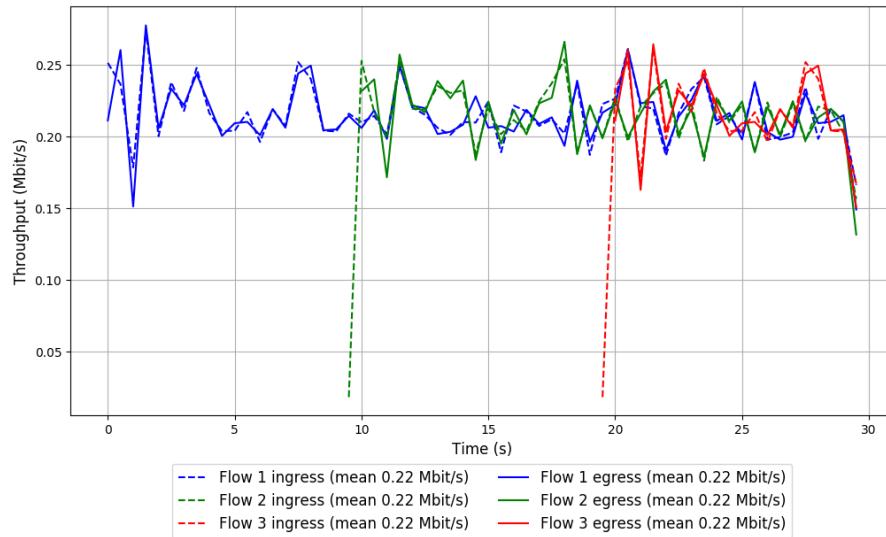
Run 10: Statistics of SCReAM

Start at: 2017-08-21 12:43:46

End at: 2017-08-21 12:44:16

```
# Below is generated by plot.py at 2017-08-21 15:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.727 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.481 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.660 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.793 ms
Loss rate: 1.10%
```

## Run 10: Report of SCReAM — Data Link



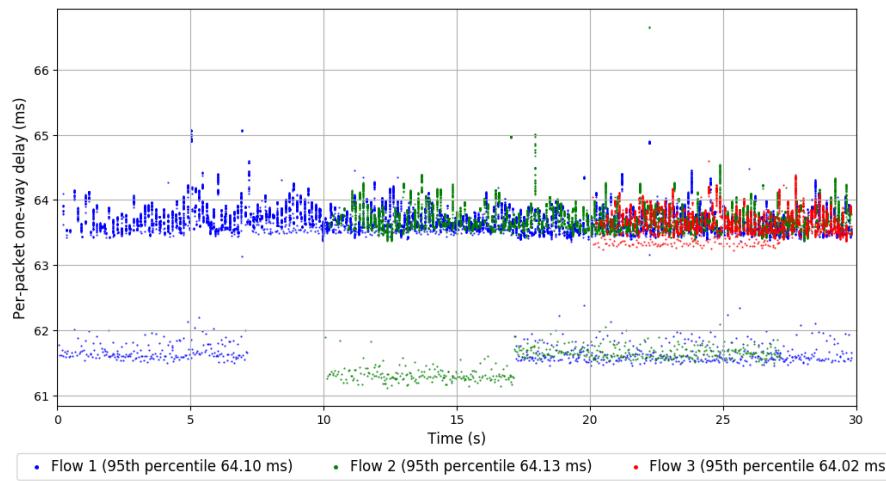
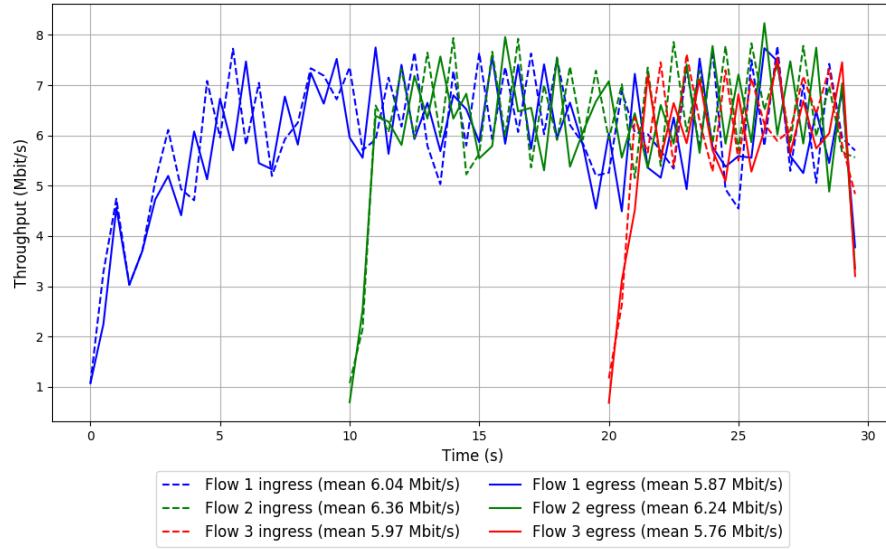
Run 1: Statistics of Sprout

Start at: 2017-08-21 10:58:38

End at: 2017-08-21 10:59:08

```
# Below is generated by plot.py at 2017-08-21 15:44:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.89 Mbit/s
95th percentile per-packet one-way delay: 64.101 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 5.87 Mbit/s
95th percentile per-packet one-way delay: 64.098 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 64.128 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 64.020 ms
Loss rate: 4.77%
```

Run 1: Report of Sprout — Data Link



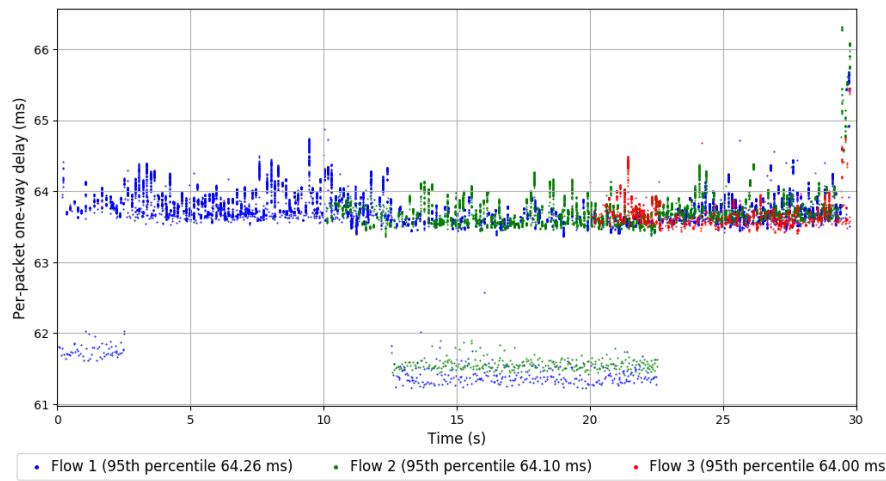
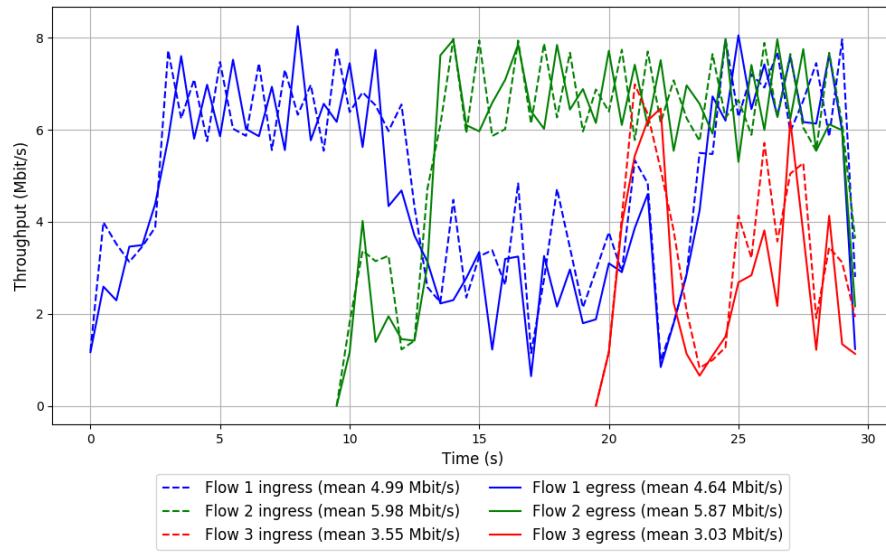
Run 2: Statistics of Sprout

Start at: 2017-08-21 11:10:32

End at: 2017-08-21 11:11:02

```
# Below is generated by plot.py at 2017-08-21 15:44:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 64.213 ms
Loss rate: 6.45%
-- Flow 1:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 64.258 ms
Loss rate: 7.41%
-- Flow 2:
Average throughput: 5.87 Mbit/s
95th percentile per-packet one-way delay: 64.103 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 64.003 ms
Loss rate: 15.64%
```

Run 2: Report of Sprout — Data Link



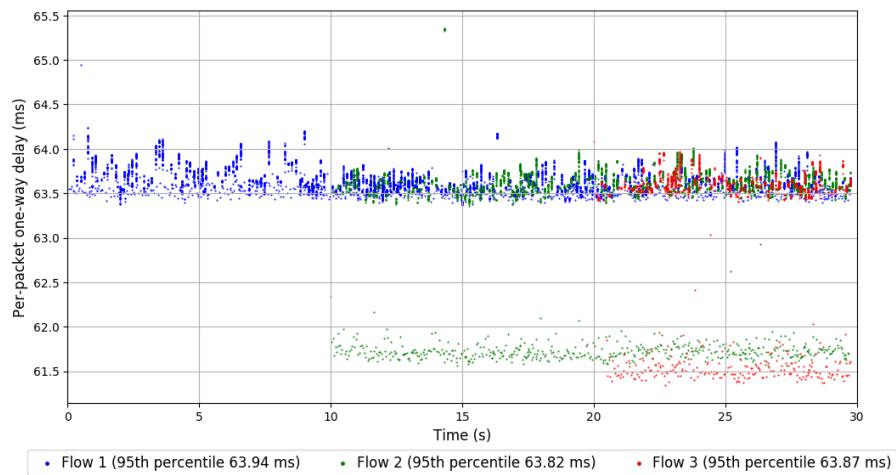
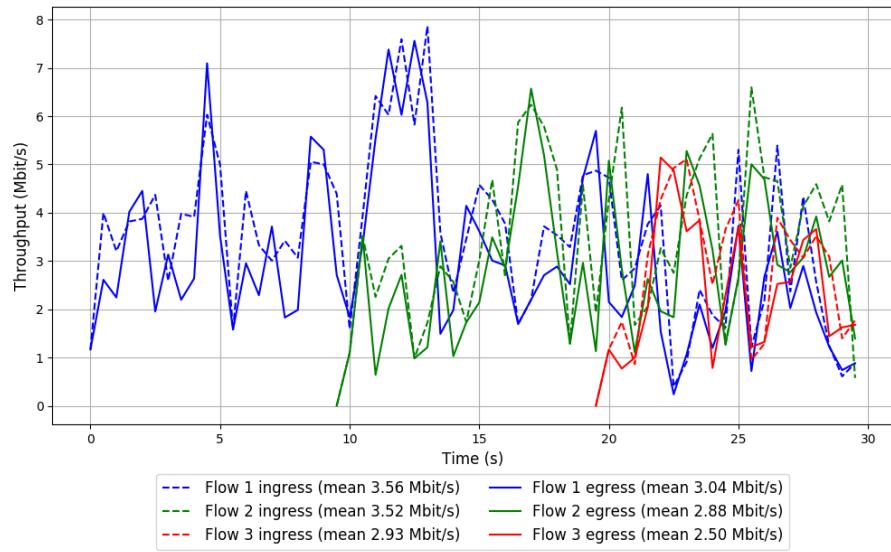
Run 3: Statistics of Sprout

Start at: 2017-08-21 11:22:34

End at: 2017-08-21 11:23:04

```
# Below is generated by plot.py at 2017-08-21 15:44:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 63.893 ms
Loss rate: 16.38%
-- Flow 1:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 63.941 ms
Loss rate: 14.93%
-- Flow 2:
Average throughput: 2.88 Mbit/s
95th percentile per-packet one-way delay: 63.823 ms
Loss rate: 18.80%
-- Flow 3:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 63.870 ms
Loss rate: 15.86%
```

Run 3: Report of Sprout — Data Link



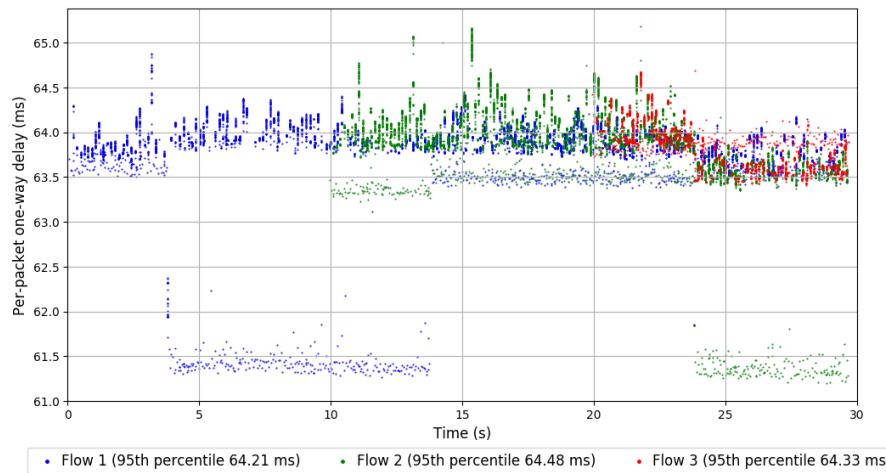
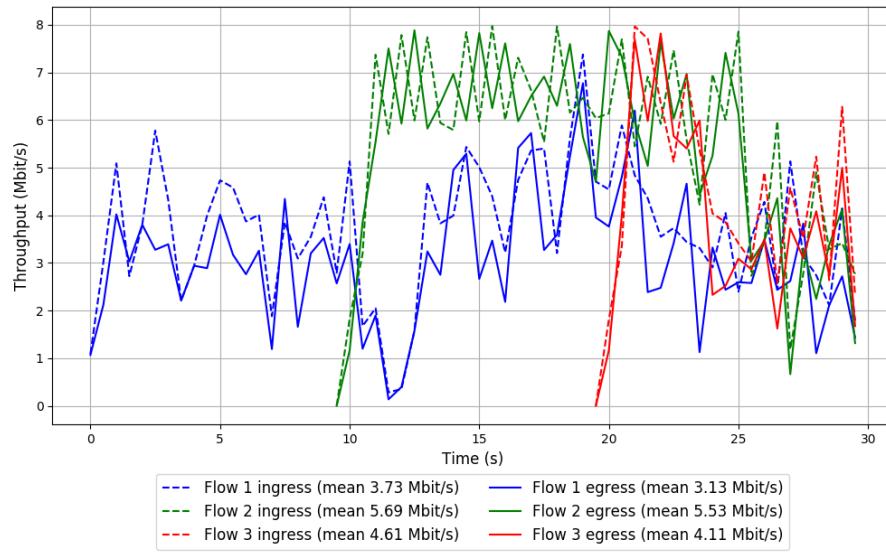
Run 4: Statistics of Sprout

Start at: 2017-08-21 11:34:21

End at: 2017-08-21 11:34:51

```
# Below is generated by plot.py at 2017-08-21 15:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 64.375 ms
Loss rate: 10.34%
-- Flow 1:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 64.210 ms
Loss rate: 16.67%
-- Flow 2:
Average throughput: 5.53 Mbit/s
95th percentile per-packet one-way delay: 64.479 ms
Loss rate: 3.39%
-- Flow 3:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 64.329 ms
Loss rate: 12.15%
```

Run 4: Report of Sprout — Data Link



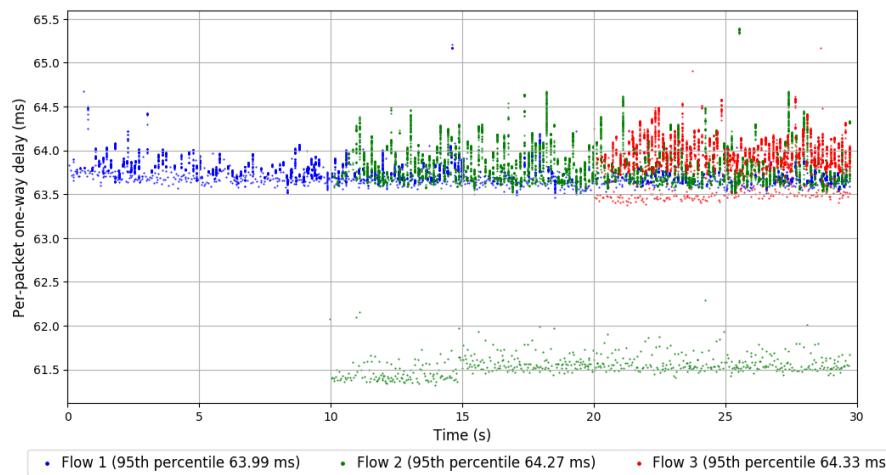
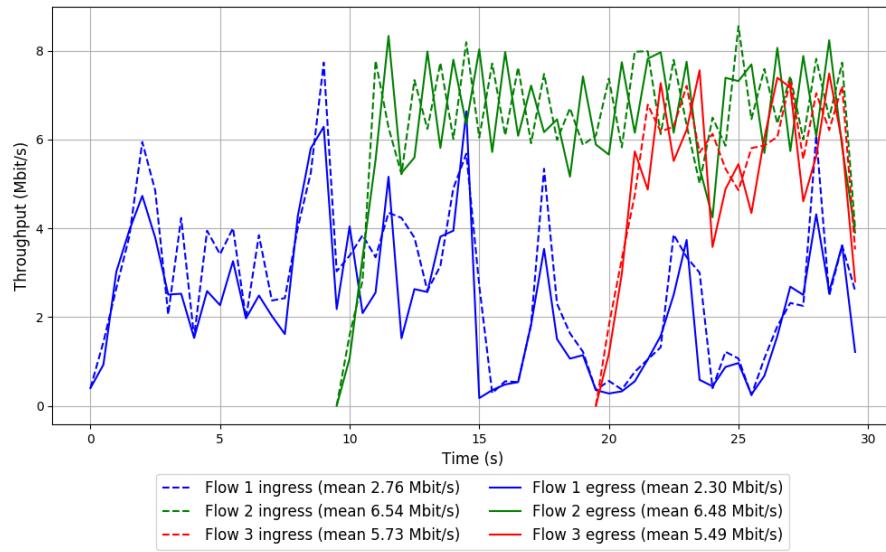
Run 5: Statistics of Sprout

Start at: 2017-08-21 11:46:00

End at: 2017-08-21 11:46:30

```
# Below is generated by plot.py at 2017-08-21 15:44:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 64.243 ms
Loss rate: 7.16%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 63.987 ms
Loss rate: 17.06%
-- Flow 2:
Average throughput: 6.48 Mbit/s
95th percentile per-packet one-way delay: 64.274 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 5.49 Mbit/s
95th percentile per-packet one-way delay: 64.329 ms
Loss rate: 5.62%
```

Run 5: Report of Sprout — Data Link



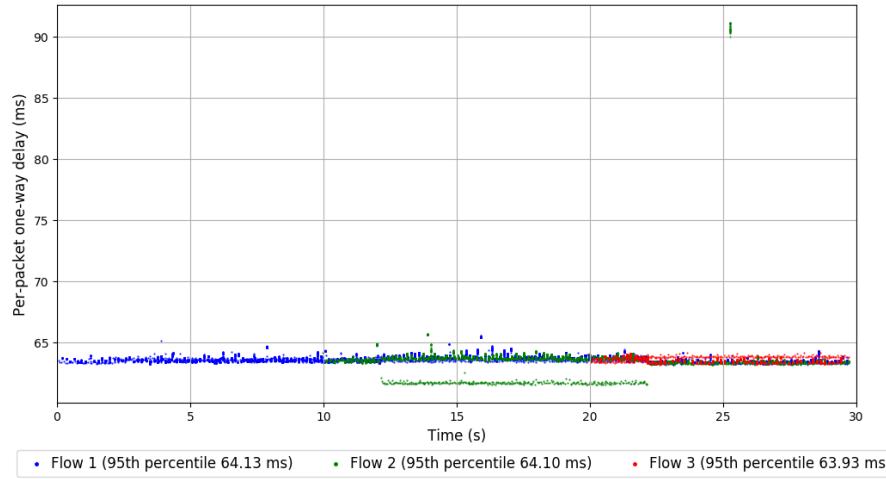
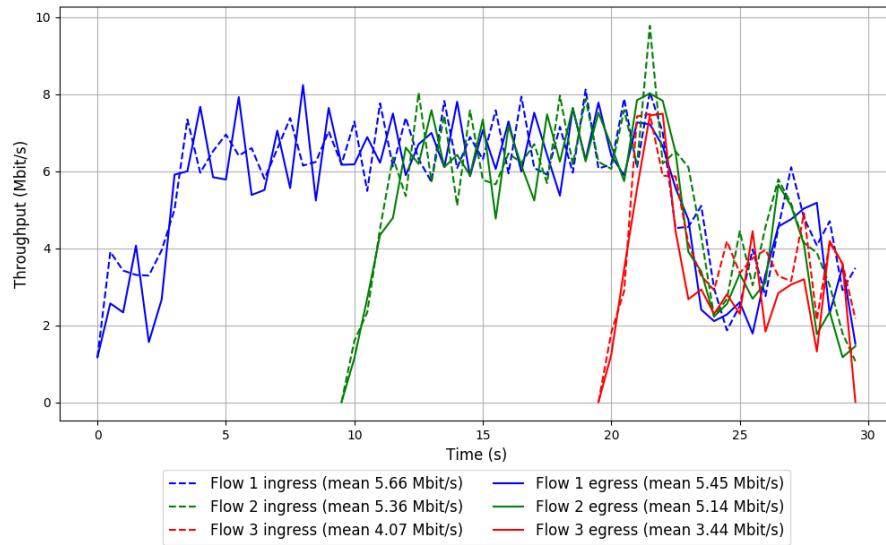
Run 6: Statistics of Sprout

Start at: 2017-08-21 11:57:43

End at: 2017-08-21 11:58:13

```
# Below is generated by plot.py at 2017-08-21 15:44:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.00 Mbit/s
95th percentile per-packet one-way delay: 64.095 ms
Loss rate: 5.98%
-- Flow 1:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 64.133 ms
Loss rate: 4.21%
-- Flow 2:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 64.098 ms
Loss rate: 4.86%
-- Flow 3:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 63.932 ms
Loss rate: 16.43%
```

## Run 6: Report of Sprout — Data Link



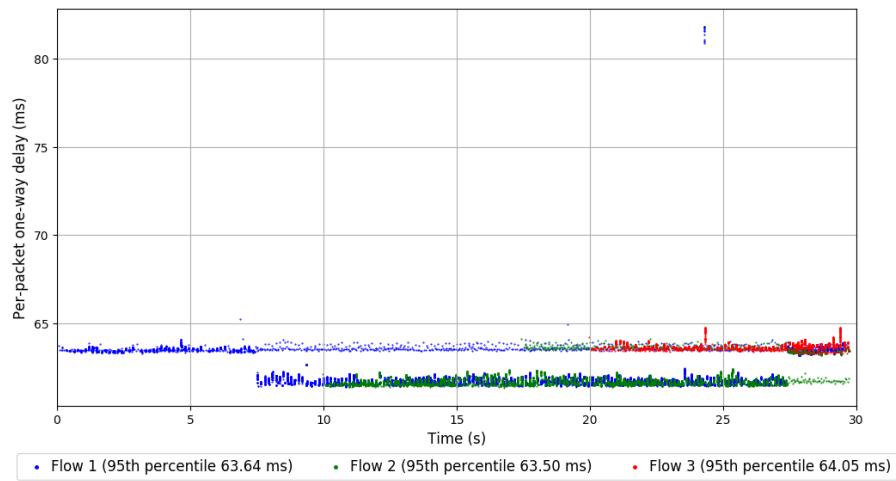
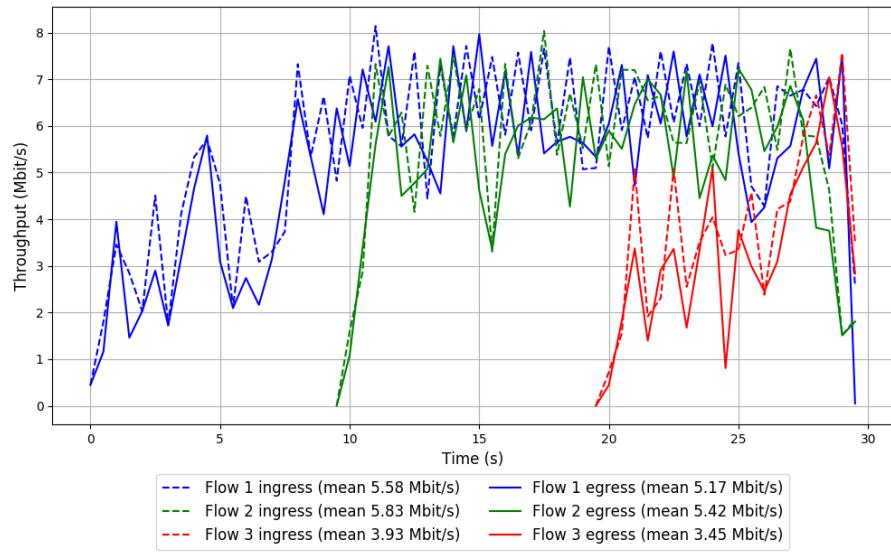
Run 7: Statistics of Sprout

Start at: 2017-08-21 12:09:27

End at: 2017-08-21 12:09:57

```
# Below is generated by plot.py at 2017-08-21 15:44:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.91 Mbit/s
95th percentile per-packet one-way delay: 63.764 ms
Loss rate: 8.32%
-- Flow 1:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 63.637 ms
Loss rate: 7.73%
-- Flow 2:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 63.497 ms
Loss rate: 7.44%
-- Flow 3:
Average throughput: 3.45 Mbit/s
95th percentile per-packet one-way delay: 64.051 ms
Loss rate: 13.44%
```

Run 7: Report of Sprout — Data Link



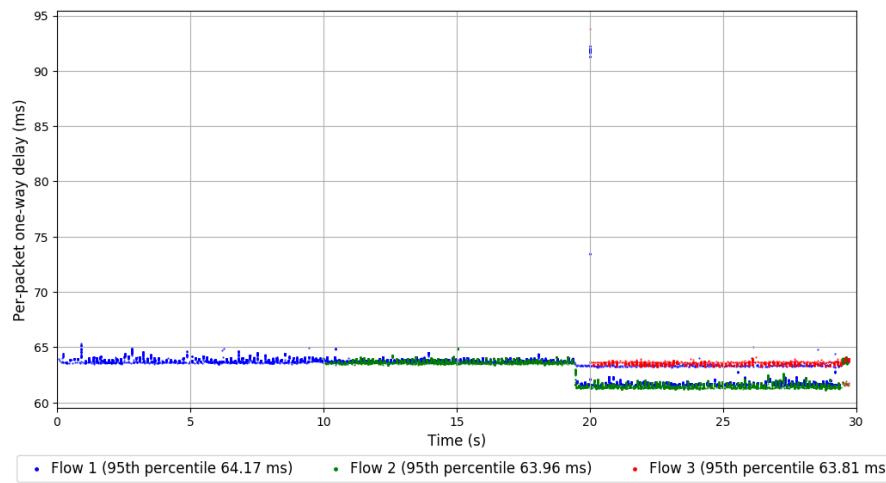
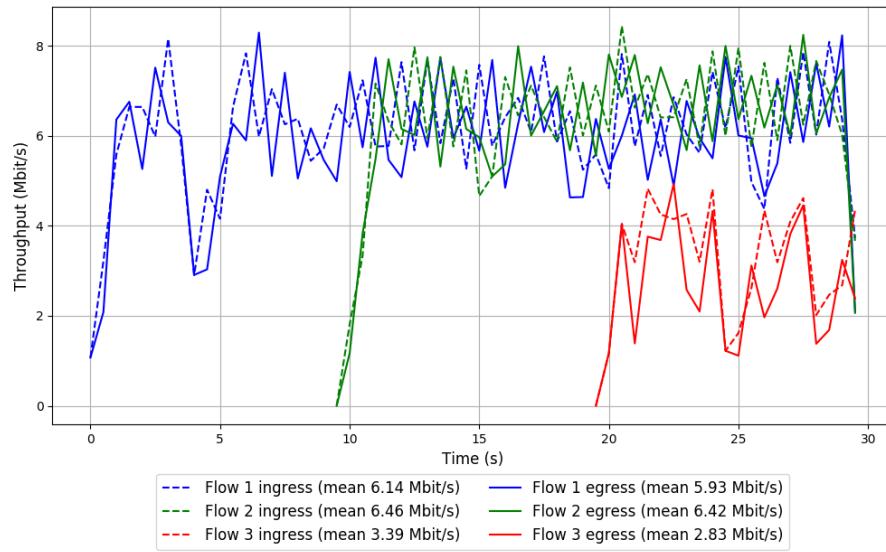
Run 8: Statistics of Sprout

Start at: 2017-08-21 12:21:05

End at: 2017-08-21 12:21:35

```
# Below is generated by plot.py at 2017-08-21 15:44:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 64.059 ms
Loss rate: 4.32%
-- Flow 1:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 64.173 ms
Loss rate: 3.87%
-- Flow 2:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 63.957 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 63.814 ms
Loss rate: 18.09%
```

Run 8: Report of Sprout — Data Link



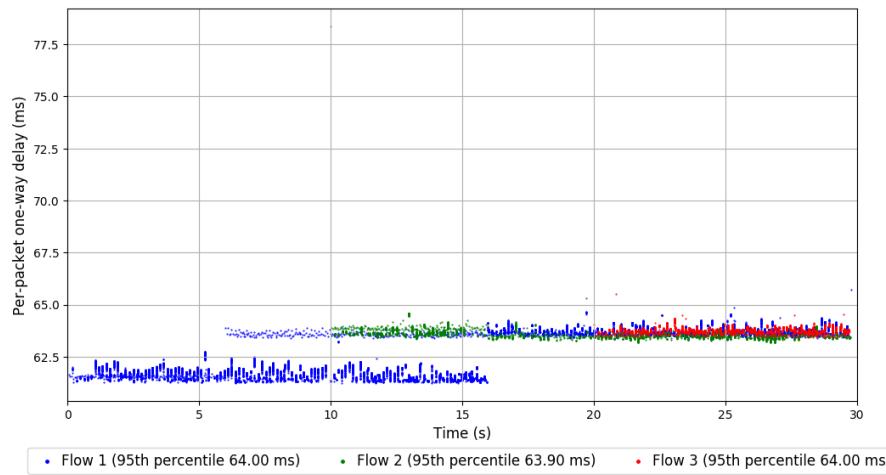
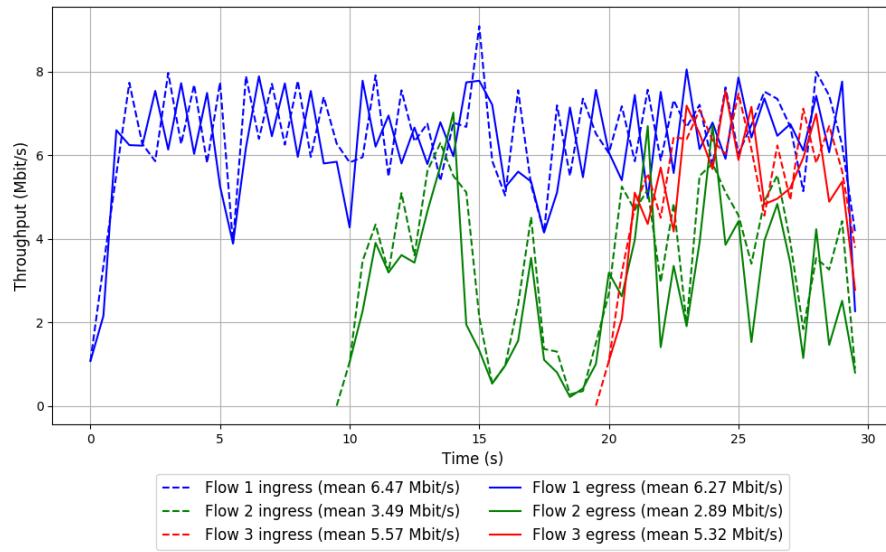
Run 9: Statistics of Sprout

Start at: 2017-08-21 12:32:49

End at: 2017-08-21 12:33:19

```
# Below is generated by plot.py at 2017-08-21 15:44:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.93 Mbit/s
95th percentile per-packet one-way delay: 63.987 ms
Loss rate: 6.90%
-- Flow 1:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 63.996 ms
Loss rate: 3.31%
-- Flow 2:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 63.903 ms
Loss rate: 17.78%
-- Flow 3:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 64.003 ms
Loss rate: 5.76%
```

## Run 9: Report of Sprout — Data Link



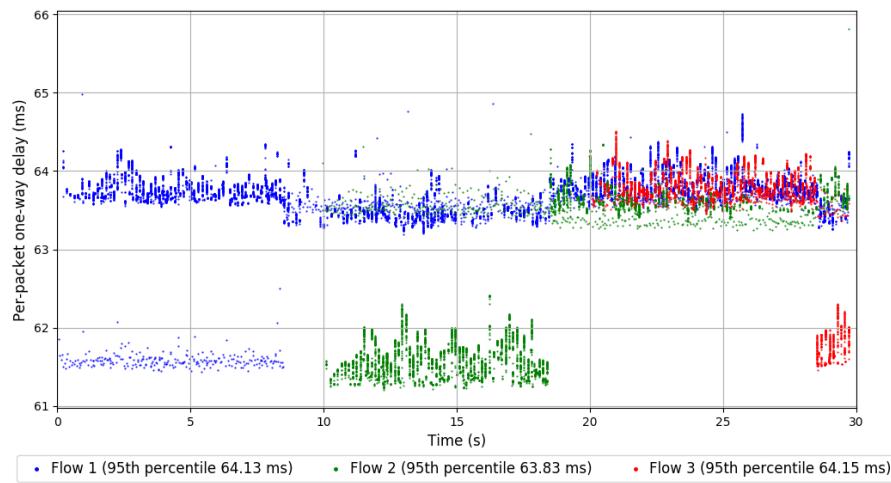
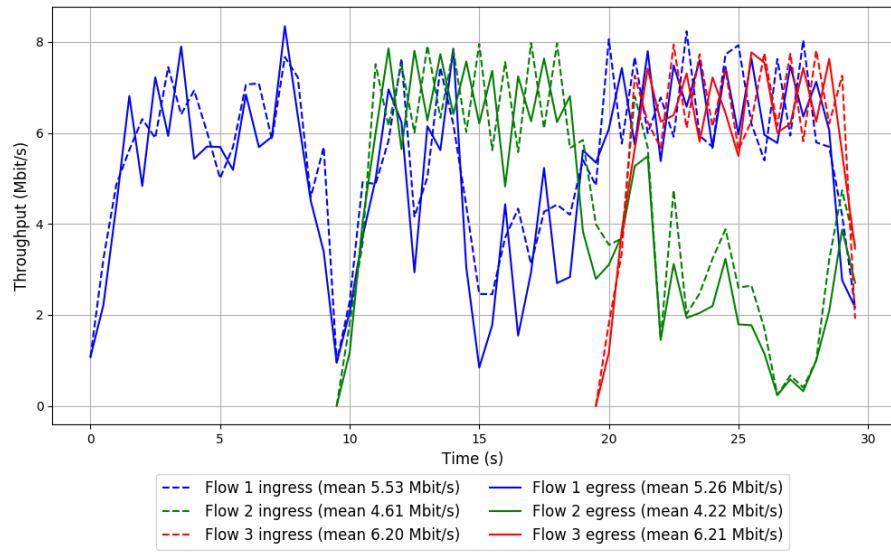
Run 10: Statistics of Sprout

Start at: 2017-08-21 12:44:26

End at: 2017-08-21 12:44:56

```
# Below is generated by plot.py at 2017-08-21 15:44:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 64.110 ms
Loss rate: 5.57%
-- Flow 1:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 64.127 ms
Loss rate: 5.34%
-- Flow 2:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 8.94%
-- Flow 3:
Average throughput: 6.21 Mbit/s
95th percentile per-packet one-way delay: 64.154 ms
Loss rate: 1.12%
```

## Run 10: Report of Sprout — Data Link

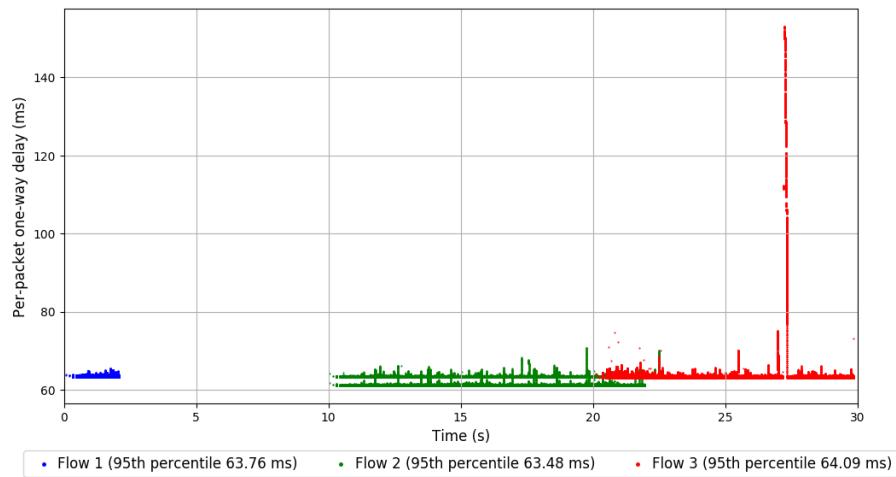
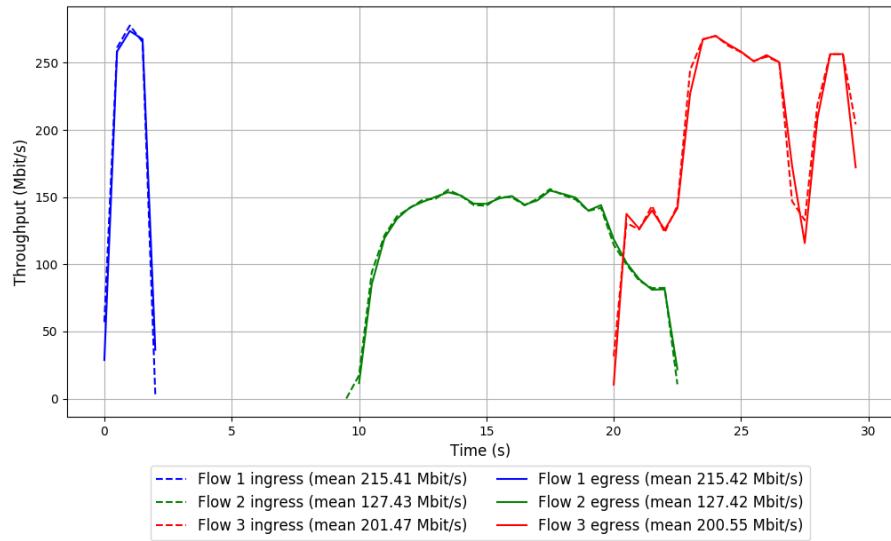


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-21 10:57:03
End at: 2017-08-21 10:57:33

# Below is generated by plot.py at 2017-08-21 15:45:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.98 Mbit/s
95th percentile per-packet one-way delay: 63.711 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 215.42 Mbit/s
95th percentile per-packet one-way delay: 63.758 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.42 Mbit/s
95th percentile per-packet one-way delay: 63.480 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 200.55 Mbit/s
95th percentile per-packet one-way delay: 64.087 ms
Loss rate: 1.63%
```

Run 1: Report of TaoVA-100x — Data Link



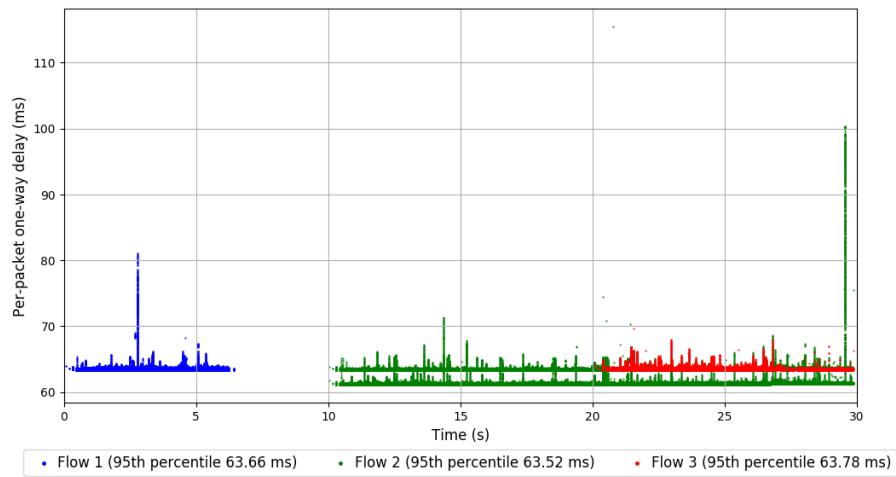
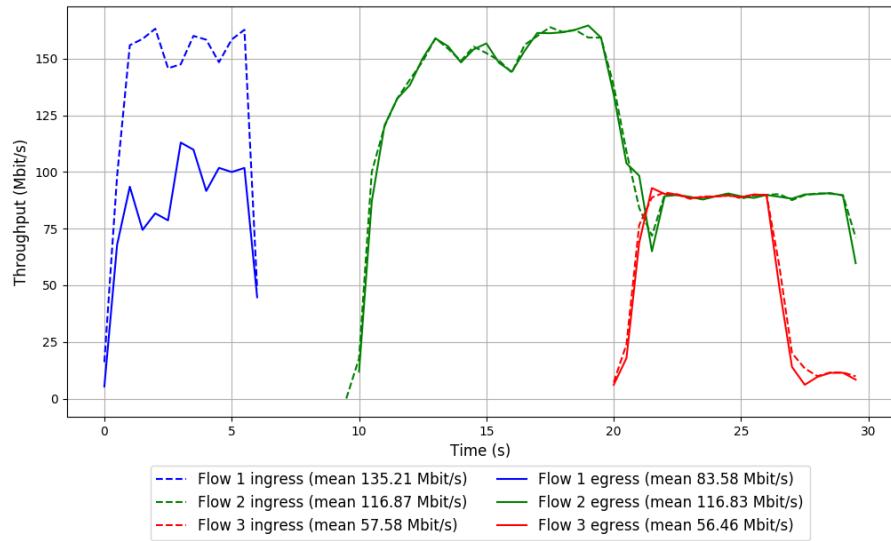
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-21 11:08:58

End at: 2017-08-21 11:09:28

```
# Below is generated by plot.py at 2017-08-21 15:45:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.01 Mbit/s
95th percentile per-packet one-way delay: 63.644 ms
Loss rate: 9.62%
-- Flow 1:
Average throughput: 83.58 Mbit/s
95th percentile per-packet one-way delay: 63.655 ms
Loss rate: 38.19%
-- Flow 2:
Average throughput: 116.83 Mbit/s
95th percentile per-packet one-way delay: 63.520 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 56.46 Mbit/s
95th percentile per-packet one-way delay: 63.785 ms
Loss rate: 3.18%
```

Run 2: Report of TaoVA-100x — Data Link



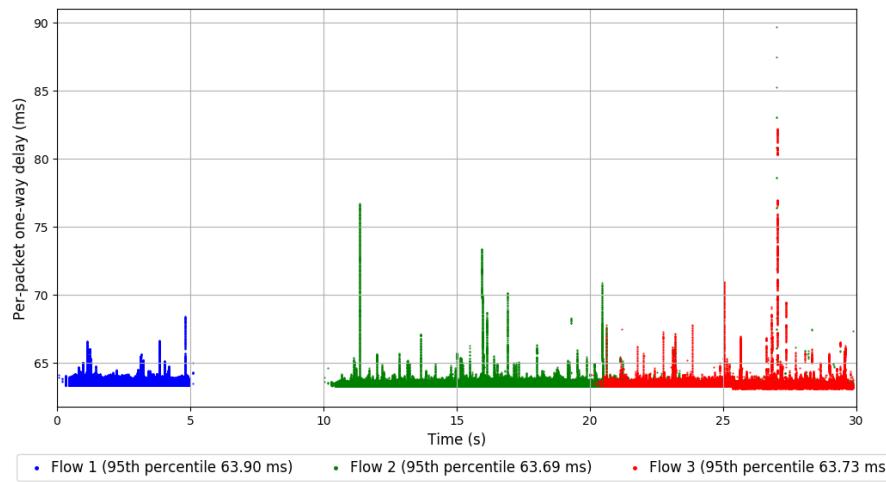
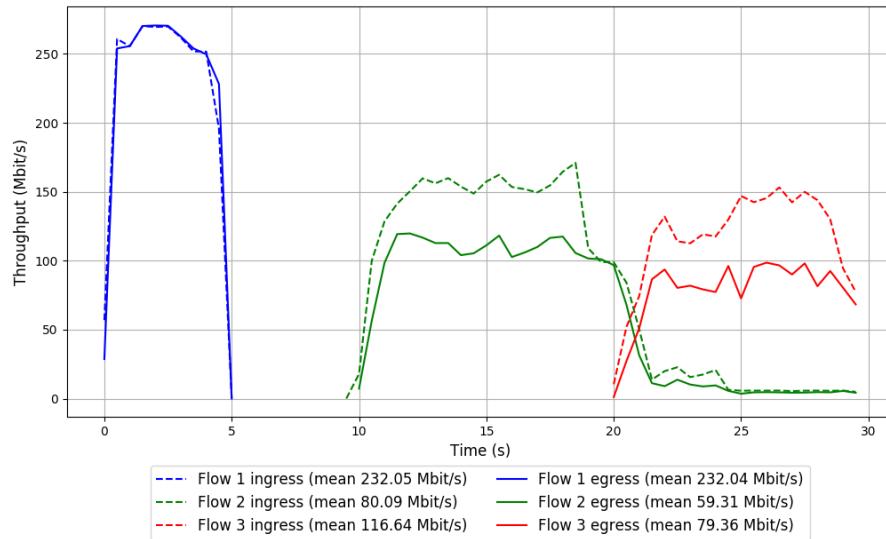
Run 3: Statistics of TaoVA-100x

Start at: 2017-08-21 11:20:59

End at: 2017-08-21 11:21:29

```
# Below is generated by plot.py at 2017-08-21 15:45:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 104.74 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 20.41%
-- Flow 1:
Average throughput: 232.04 Mbit/s
95th percentile per-packet one-way delay: 63.904 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 63.694 ms
Loss rate: 26.39%
-- Flow 3:
Average throughput: 79.36 Mbit/s
95th percentile per-packet one-way delay: 63.732 ms
Loss rate: 32.87%
```

Run 3: Report of TaoVA-100x — Data Link



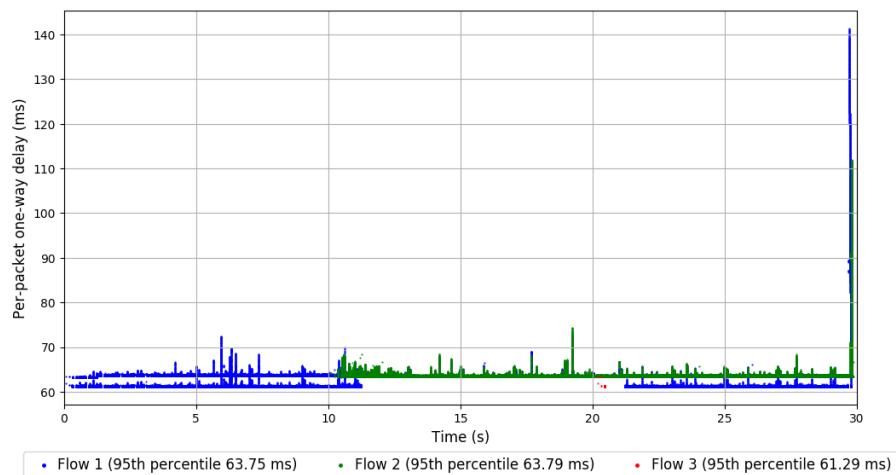
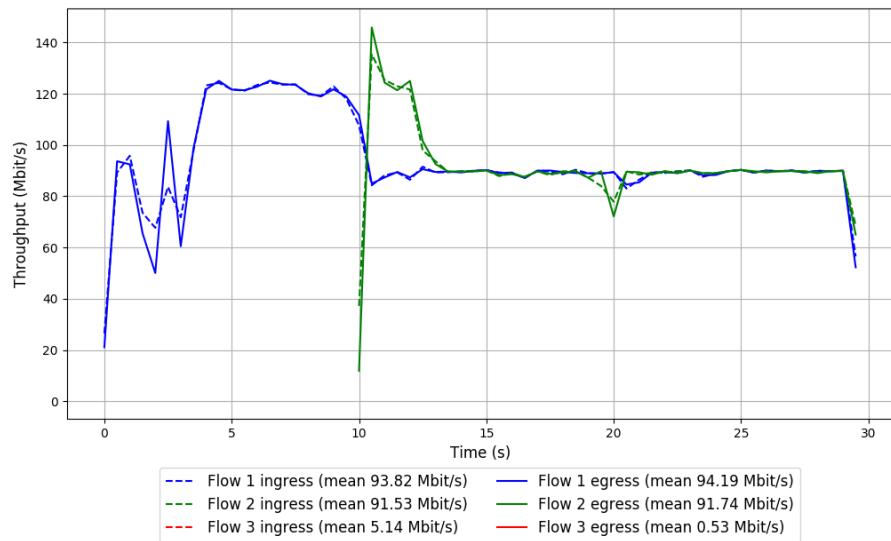
Run 4: Statistics of TaoVA-100x

Start at: 2017-08-21 11:32:44

End at: 2017-08-21 11:33:14

```
# Below is generated by plot.py at 2017-08-21 15:46:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.84 Mbit/s
95th percentile per-packet one-way delay: 63.751 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 94.19 Mbit/s
95th percentile per-packet one-way delay: 63.746 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 91.74 Mbit/s
95th percentile per-packet one-way delay: 63.794 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 61.286 ms
Loss rate: 89.68%
```

Run 4: Report of TaoVA-100x — Data Link



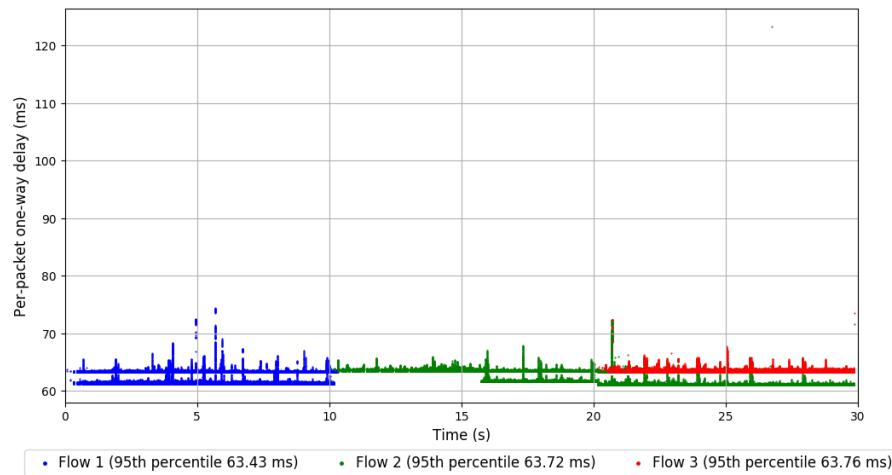
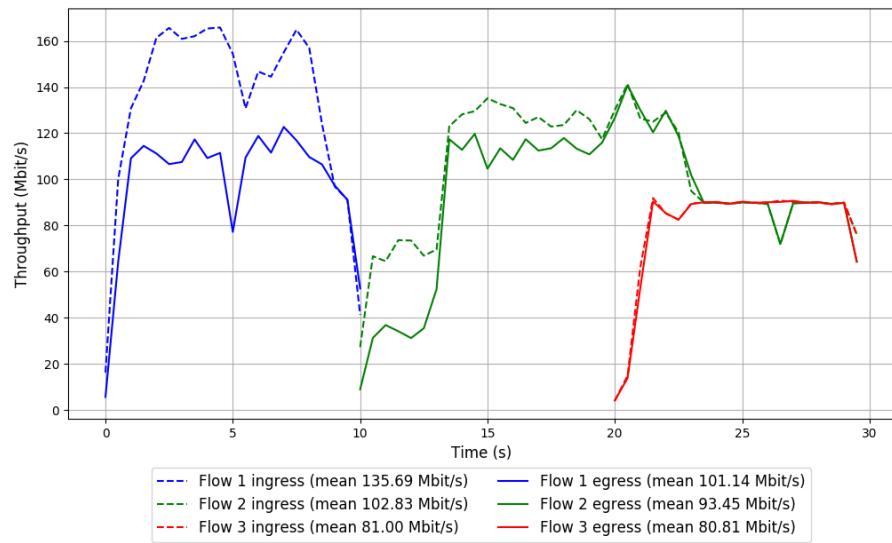
Run 5: Statistics of TaoVA-100x

Start at: 2017-08-21 11:44:25

End at: 2017-08-21 11:44:55

```
# Below is generated by plot.py at 2017-08-21 15:46:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.99 Mbit/s
95th percentile per-packet one-way delay: 63.714 ms
Loss rate: 13.31%
-- Flow 1:
Average throughput: 101.14 Mbit/s
95th percentile per-packet one-way delay: 63.434 ms
Loss rate: 25.46%
-- Flow 2:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 63.719 ms
Loss rate: 9.66%
-- Flow 3:
Average throughput: 80.81 Mbit/s
95th percentile per-packet one-way delay: 63.757 ms
Loss rate: 1.46%
```

Run 5: Report of TaoVA-100x — Data Link



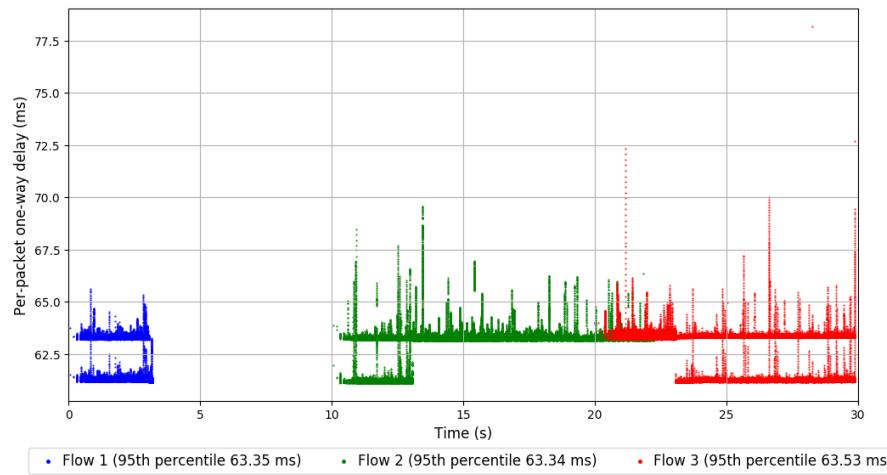
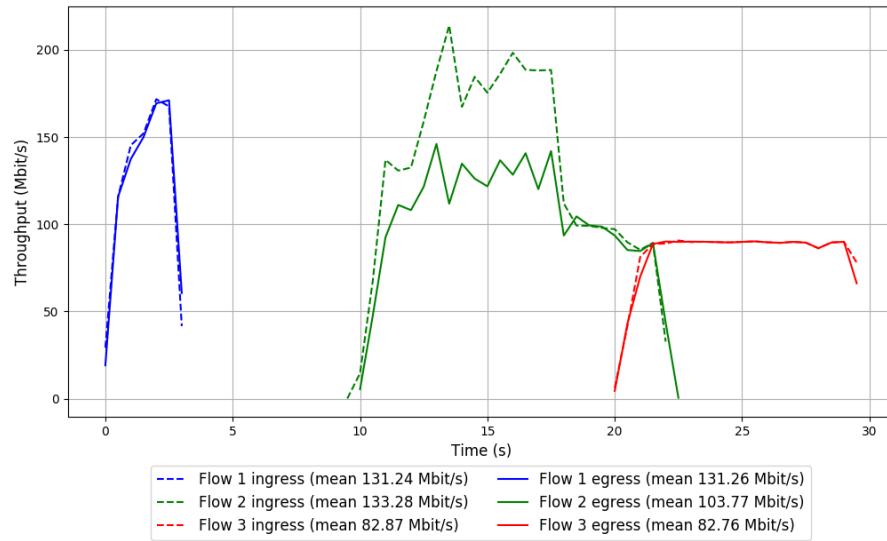
Run 6: Statistics of TaoVA-100x

Start at: 2017-08-21 11:56:12

End at: 2017-08-21 11:56:42

```
# Below is generated by plot.py at 2017-08-21 15:46:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.26 Mbit/s
95th percentile per-packet one-way delay: 63.481 ms
Loss rate: 13.11%
-- Flow 1:
Average throughput: 131.26 Mbit/s
95th percentile per-packet one-way delay: 63.352 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 103.77 Mbit/s
95th percentile per-packet one-way delay: 63.342 ms
Loss rate: 22.13%
-- Flow 3:
Average throughput: 82.76 Mbit/s
95th percentile per-packet one-way delay: 63.534 ms
Loss rate: 1.40%
```

Run 6: Report of TaoVA-100x — Data Link



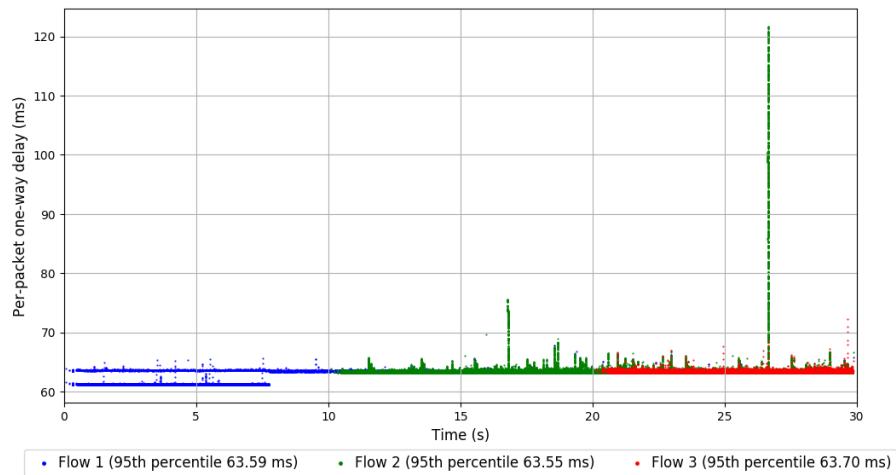
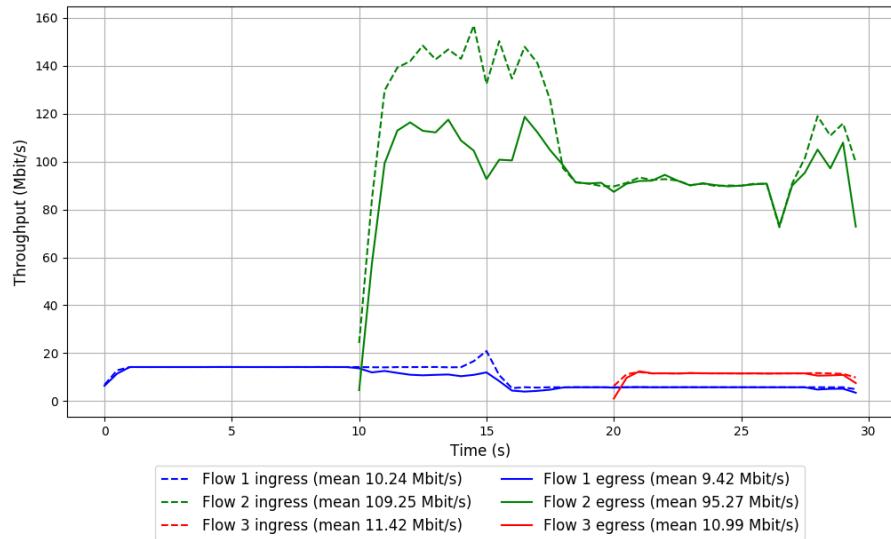
Run 7: Statistics of TaoVA-100x

Start at: 2017-08-21 12:07:57

End at: 2017-08-21 12:08:27

```
# Below is generated by plot.py at 2017-08-21 15:47:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.23 Mbit/s
95th percentile per-packet one-way delay: 63.572 ms
Loss rate: 12.42%
-- Flow 1:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 63.593 ms
Loss rate: 8.40%
-- Flow 2:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 63.548 ms
Loss rate: 13.37%
-- Flow 3:
Average throughput: 10.99 Mbit/s
95th percentile per-packet one-way delay: 63.697 ms
Loss rate: 4.99%
```

Run 7: Report of TaoVA-100x — Data Link



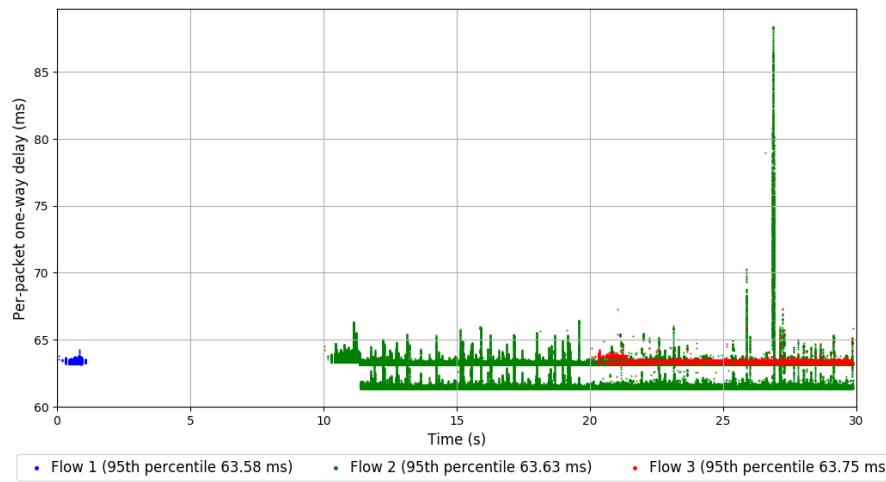
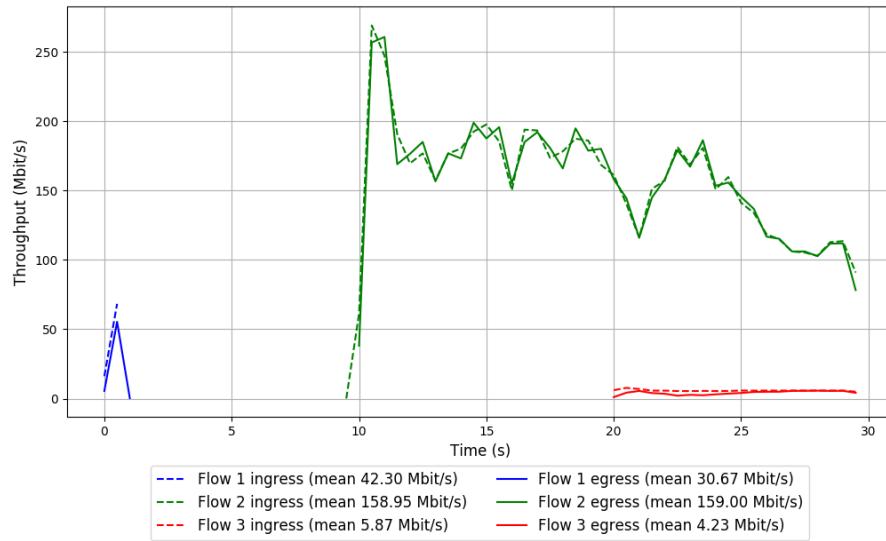
Run 8: Statistics of TaoVA-100x

Start at: 2017-08-21 12:19:33

End at: 2017-08-21 12:20:03

```
# Below is generated by plot.py at 2017-08-21 15:47:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 108.19 Mbit/s
95th percentile per-packet one-way delay: 63.634 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 63.582 ms
Loss rate: 27.51%
-- Flow 2:
Average throughput: 159.00 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 63.748 ms
Loss rate: 28.90%
```

Run 8: Report of TaoVA-100x — Data Link



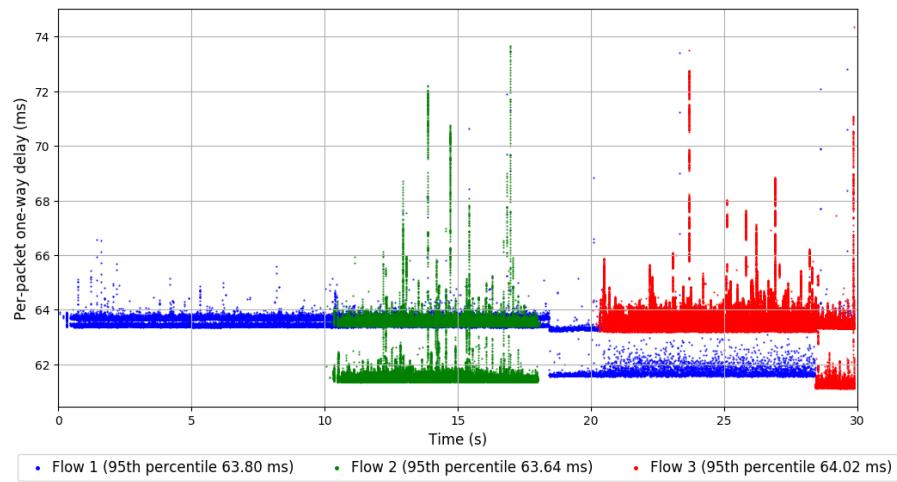
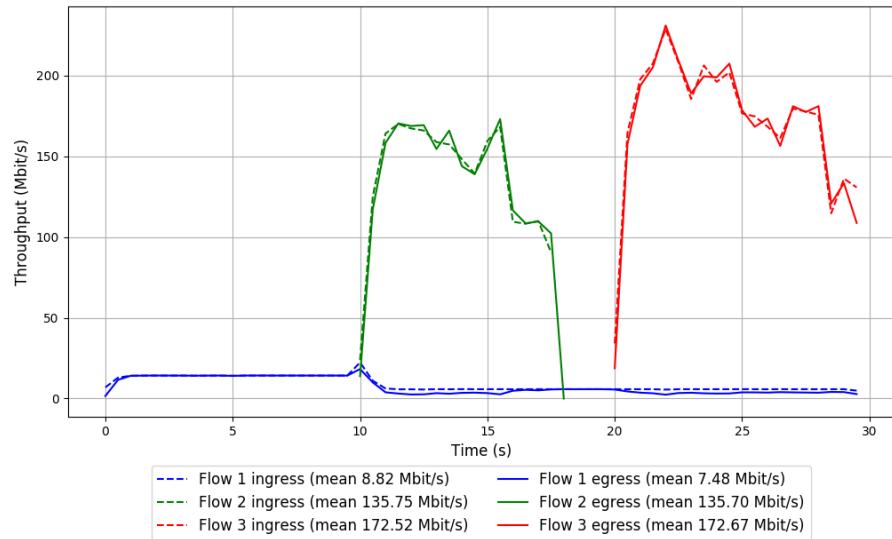
Run 9: Statistics of TaoVA-100x

Start at: 2017-08-21 12:31:16

End at: 2017-08-21 12:31:46

```
# Below is generated by plot.py at 2017-08-21 15:47:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.58 Mbit/s
95th percentile per-packet one-way delay: 63.869 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 63.796 ms
Loss rate: 15.53%
-- Flow 2:
Average throughput: 135.70 Mbit/s
95th percentile per-packet one-way delay: 63.644 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 172.67 Mbit/s
95th percentile per-packet one-way delay: 64.020 ms
Loss rate: 1.08%
```

Run 9: Report of TaoVA-100x — Data Link



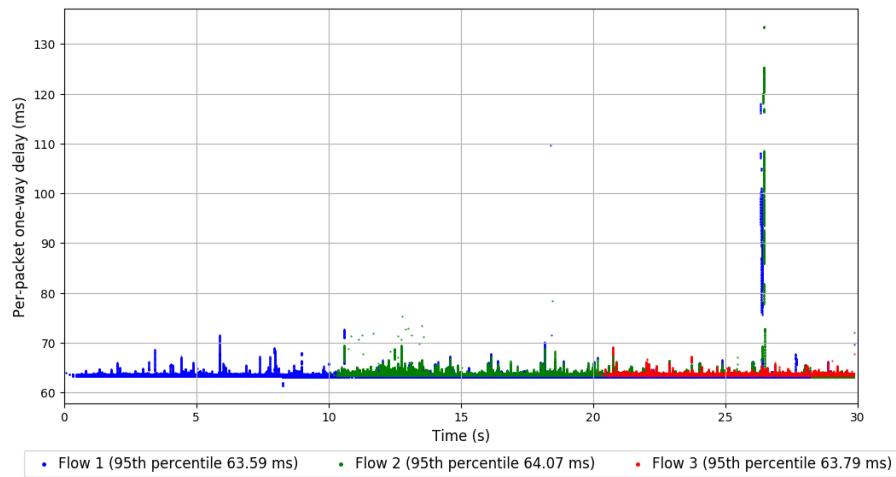
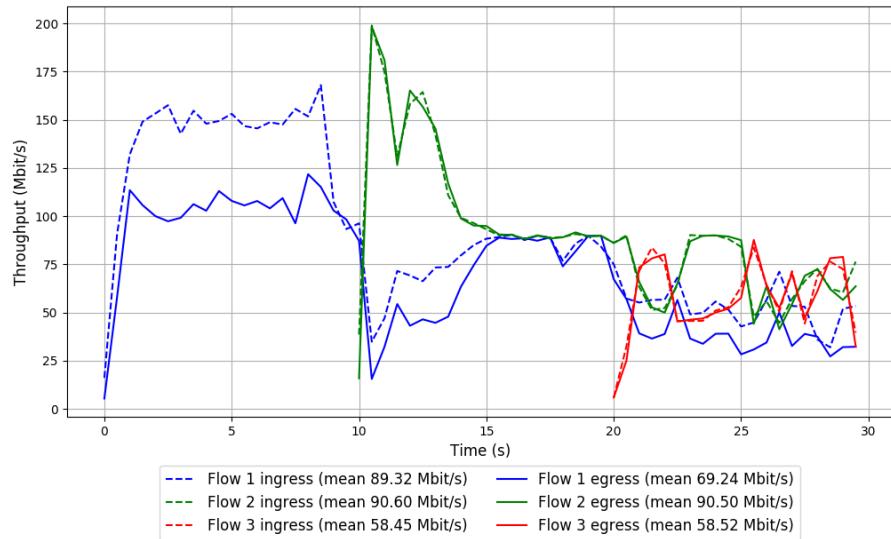
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-21 12:42:47

End at: 2017-08-21 12:43:17

```
# Below is generated by plot.py at 2017-08-21 15:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.29 Mbit/s
95th percentile per-packet one-way delay: 63.769 ms
Loss rate: 12.45%
-- Flow 1:
Average throughput: 69.24 Mbit/s
95th percentile per-packet one-way delay: 63.591 ms
Loss rate: 22.81%
-- Flow 2:
Average throughput: 90.50 Mbit/s
95th percentile per-packet one-way delay: 64.071 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 58.52 Mbit/s
95th percentile per-packet one-way delay: 63.787 ms
Loss rate: 1.07%
```

Run 10: Report of TaoVA-100x — Data Link

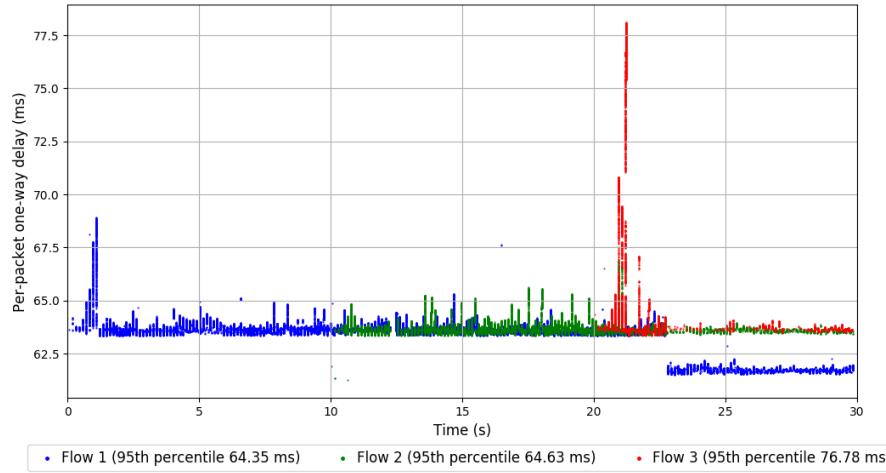
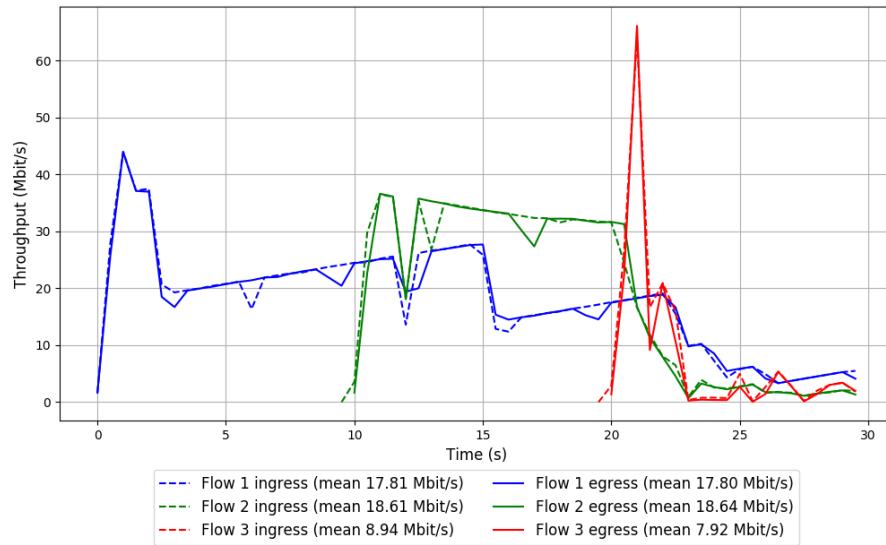


```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-21 11:06:52
End at: 2017-08-21 11:07:22

# Below is generated by plot.py at 2017-08-21 15:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.79 Mbit/s
95th percentile per-packet one-way delay: 65.080 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 64.348 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 18.64 Mbit/s
95th percentile per-packet one-way delay: 64.632 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 76.785 ms
Loss rate: 12.56%
```

Run 1: Report of TCP Vegas — Data Link



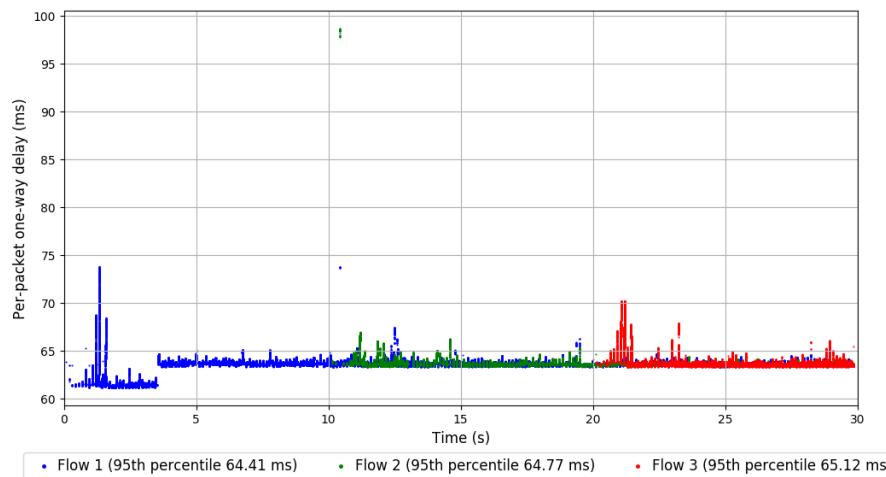
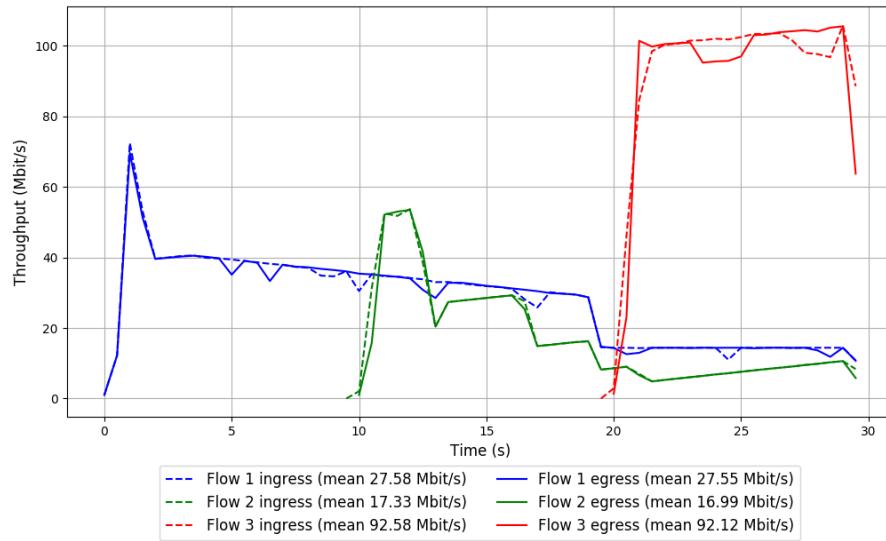
Run 2: Statistics of TCP Vegas

Start at: 2017-08-21 11:18:51

End at: 2017-08-21 11:19:21

```
# Below is generated by plot.py at 2017-08-21 15:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.20 Mbit/s
95th percentile per-packet one-way delay: 64.744 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 27.55 Mbit/s
95th percentile per-packet one-way delay: 64.414 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 16.99 Mbit/s
95th percentile per-packet one-way delay: 64.767 ms
Loss rate: 2.63%
-- Flow 3:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 65.125 ms
Loss rate: 1.77%
```

Run 2: Report of TCP Vegas — Data Link



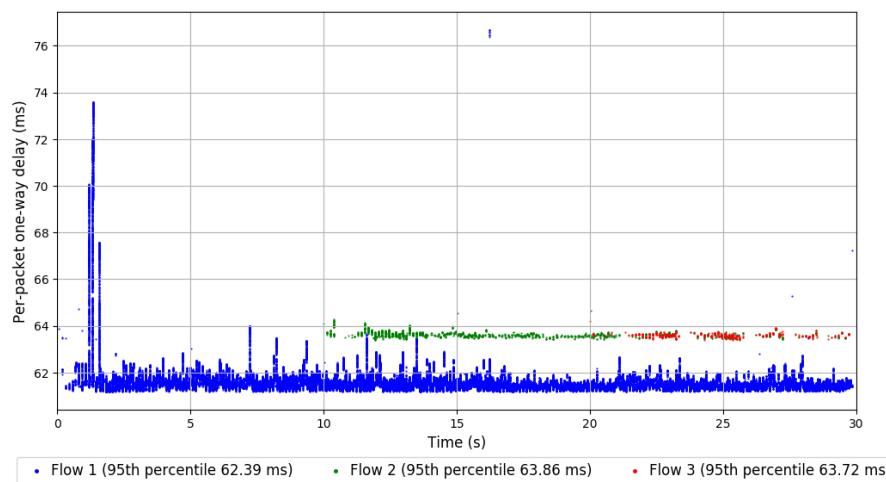
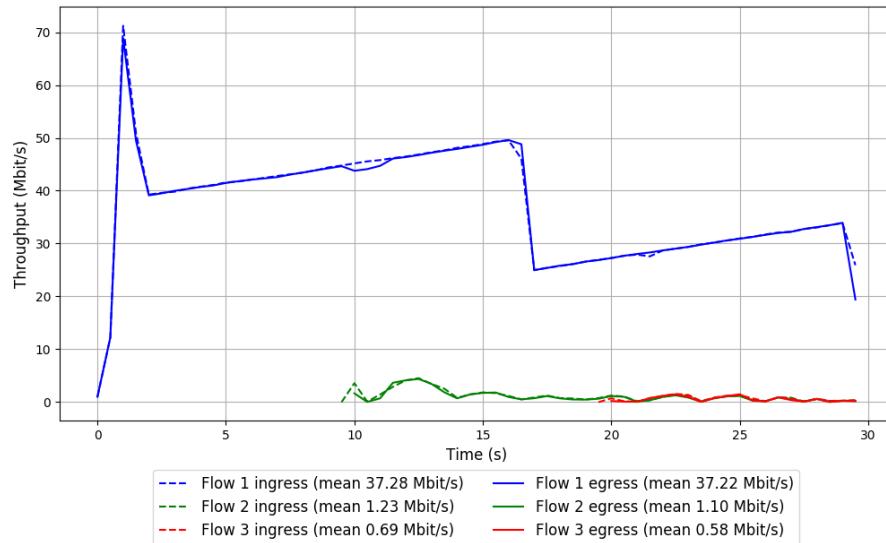
Run 3: Statistics of TCP Vegas

Start at: 2017-08-21 11:30:38

End at: 2017-08-21 11:31:08

```
# Below is generated by plot.py at 2017-08-21 15:48:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 63.239 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 37.22 Mbit/s
95th percentile per-packet one-way delay: 62.386 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 63.857 ms
Loss rate: 11.01%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 63.723 ms
Loss rate: 16.66%
```

Run 3: Report of TCP Vegas — Data Link

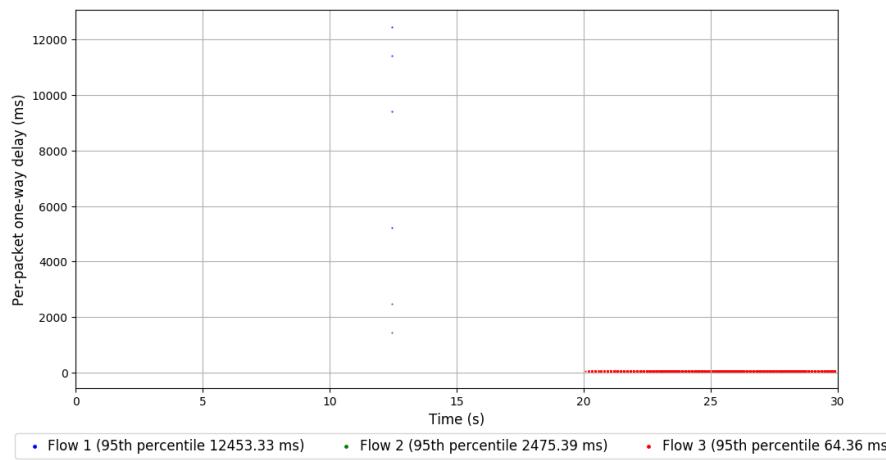
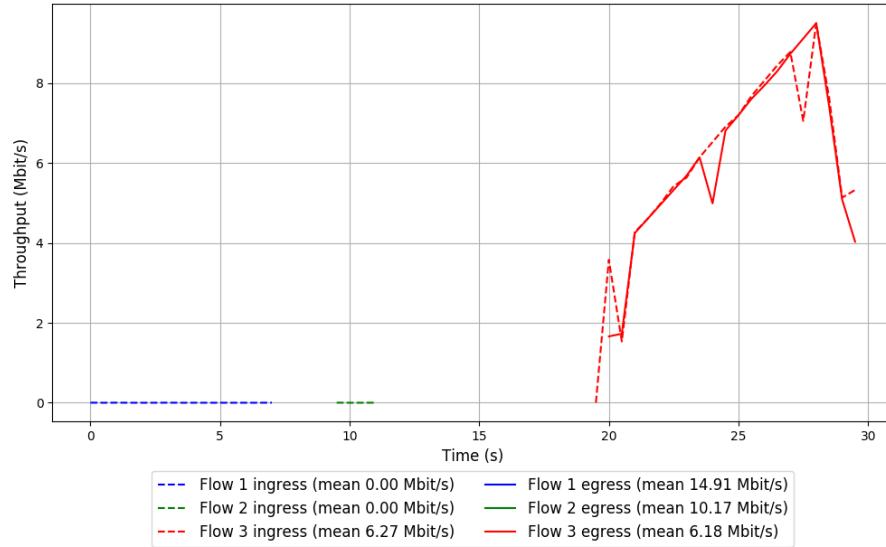


Run 4: Statistics of TCP Vegas

Start at: 2017-08-21 11:42:21

End at: 2017-08-21 11:42:51

### Run 4: Report of TCP Vegas — Data Link

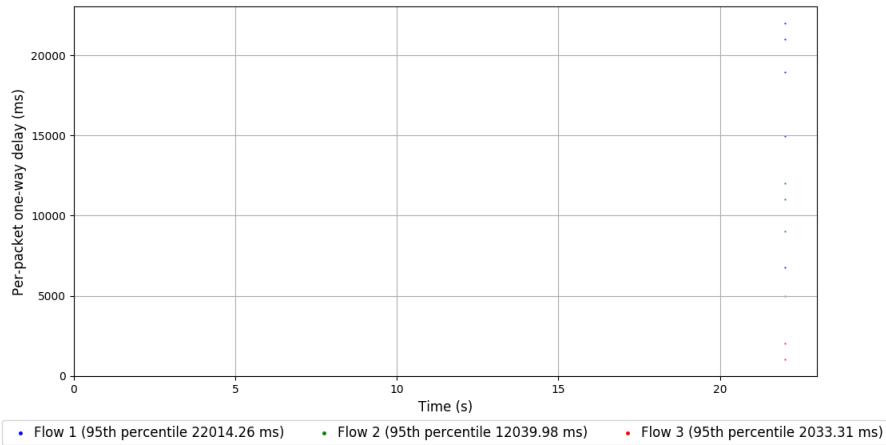
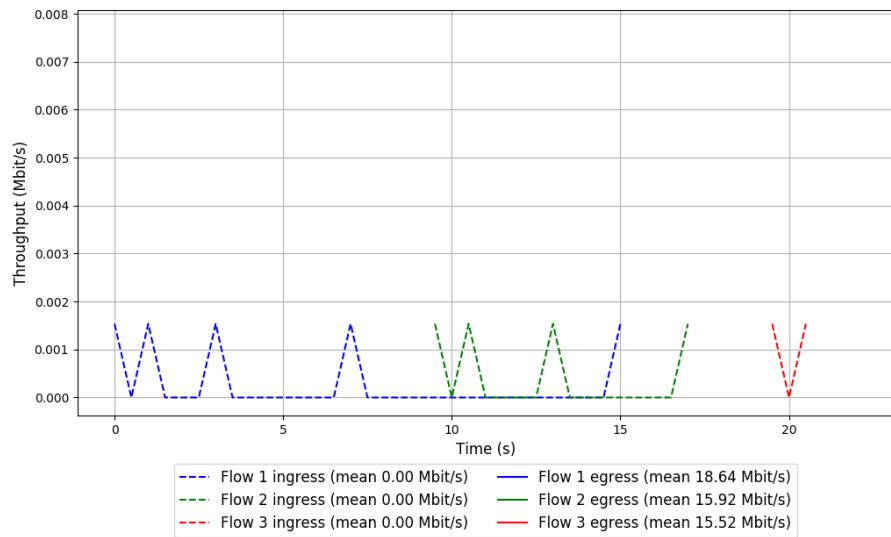


Run 5: Statistics of TCP Vegas

Start at: 2017-08-21 11:54:09

End at: 2017-08-21 11:54:39

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

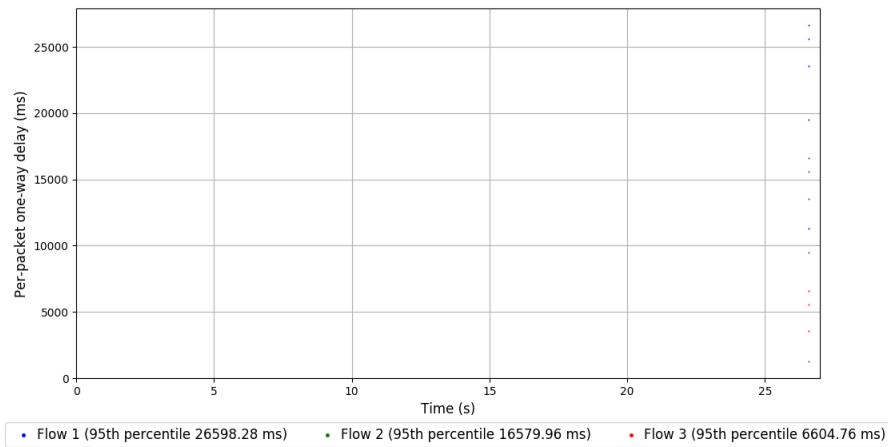
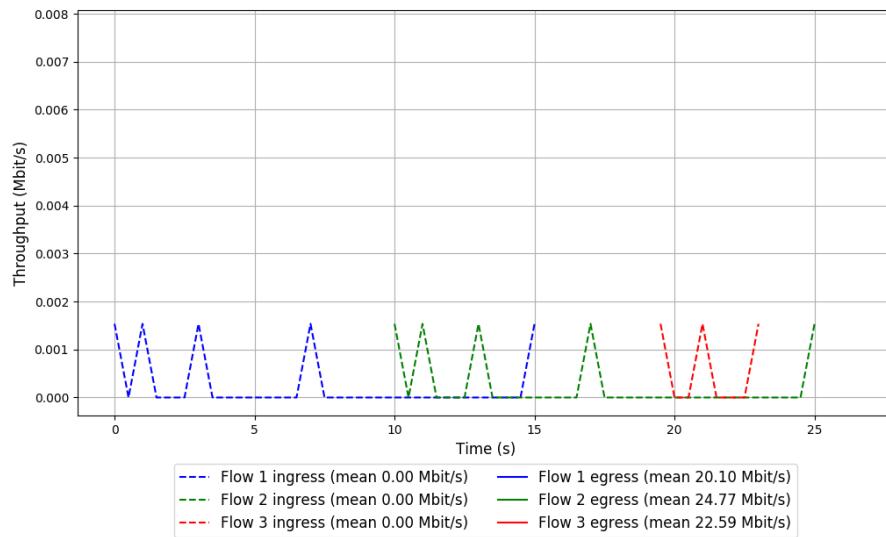


Run 6: Statistics of TCP Vegas

Start at: 2017-08-21 12:05:53

End at: 2017-08-21 12:06:23

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

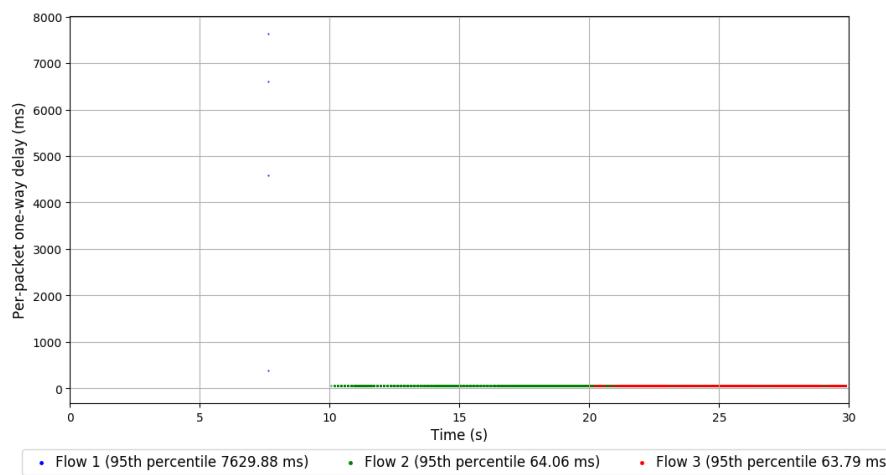
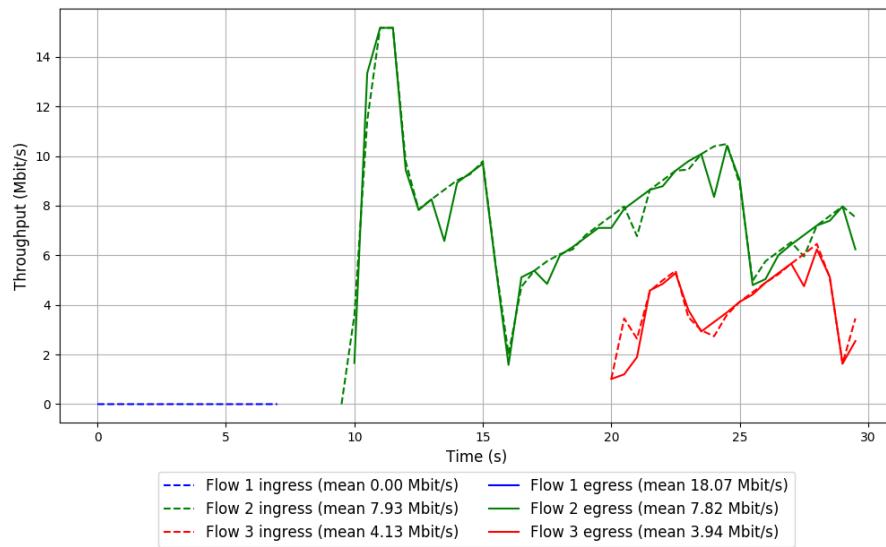


Run 7: Statistics of TCP Vegas

Start at: 2017-08-21 12:17:30

End at: 2017-08-21 12:18:00

Run 7: Report of TCP Vegas — Data Link



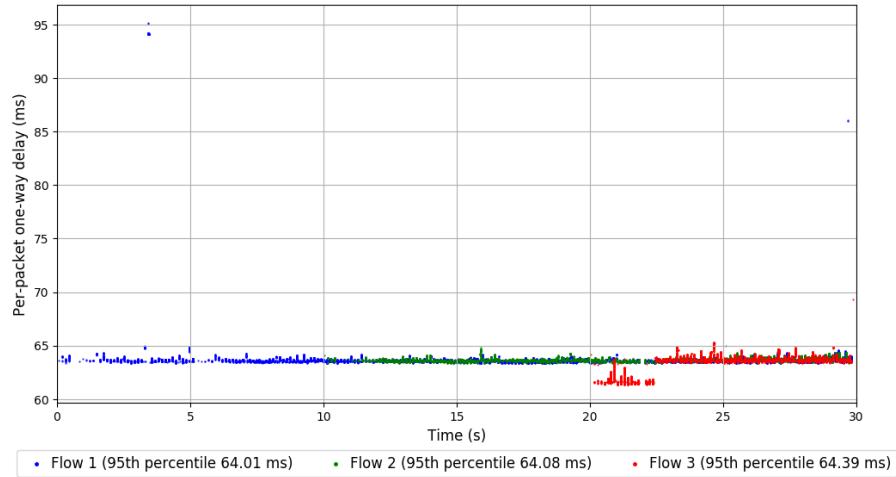
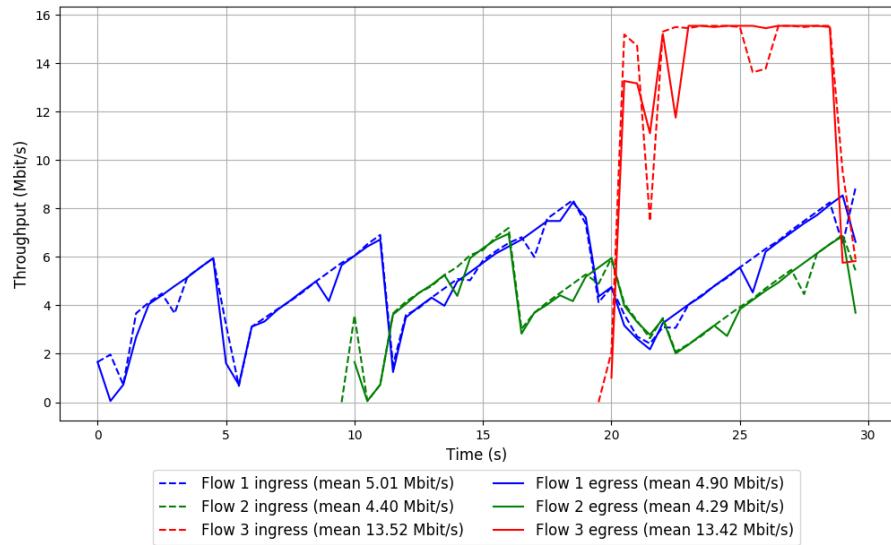
Run 8: Statistics of TCP Vegas

Start at: 2017-08-21 12:29:12

End at: 2017-08-21 12:29:42

```
# Below is generated by plot.py at 2017-08-21 15:48:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.16 Mbit/s
95th percentile per-packet one-way delay: 64.155 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 64.006 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 64.078 ms
Loss rate: 3.43%
-- Flow 3:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 64.393 ms
Loss rate: 1.82%
```

Run 8: Report of TCP Vegas — Data Link



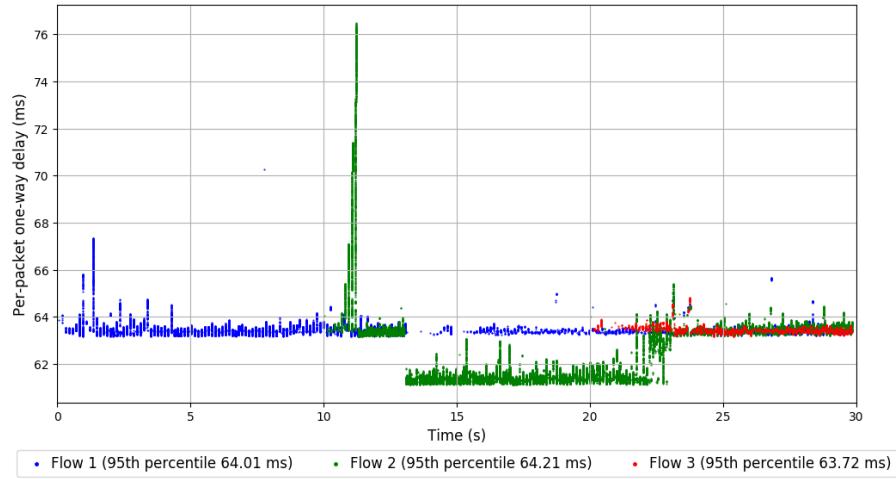
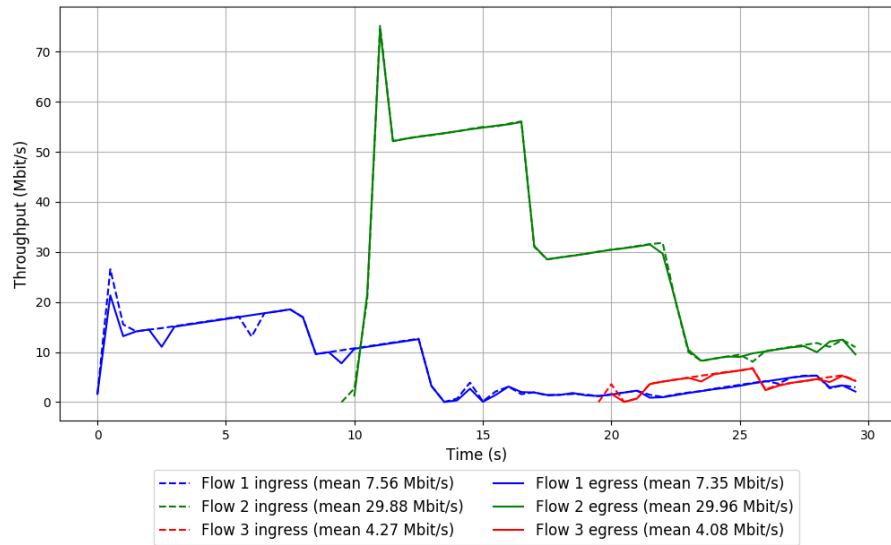
Run 9: Statistics of TCP Vegas

Start at: 2017-08-21 12:40:42

End at: 2017-08-21 12:41:12

```
# Below is generated by plot.py at 2017-08-21 15:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.59 Mbit/s
95th percentile per-packet one-way delay: 64.082 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 64.014 ms
Loss rate: 3.16%
-- Flow 2:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 64.207 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 63.720 ms
Loss rate: 5.85%
```

Run 9: Report of TCP Vegas — Data Link



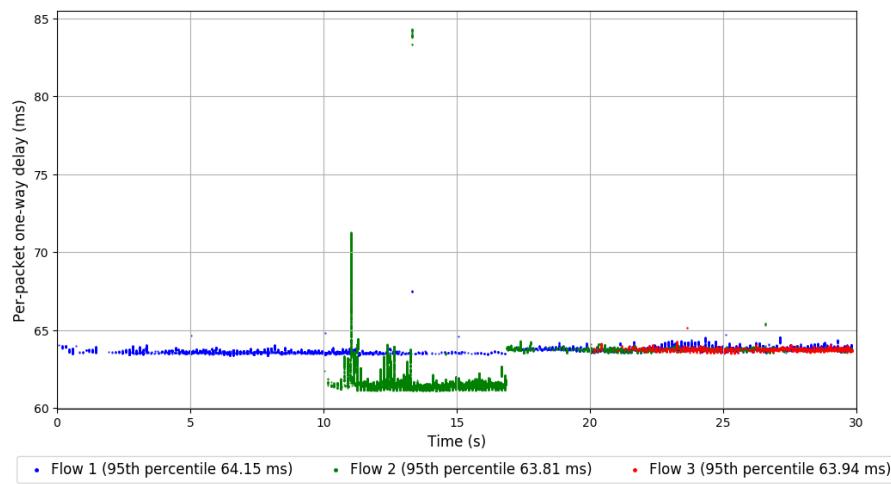
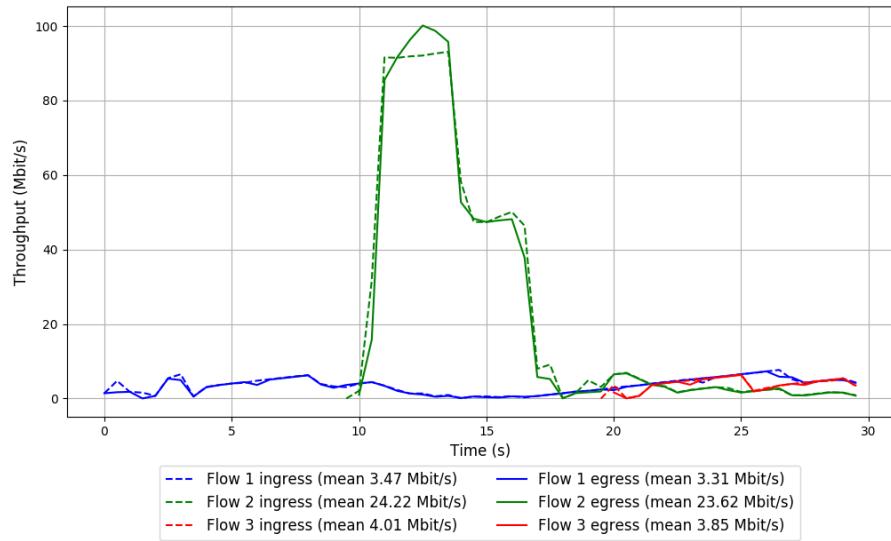
Run 10: Statistics of TCP Vegas

Start at: 2017-08-21 12:52:28

End at: 2017-08-21 12:52:58

```
# Below is generated by plot.py at 2017-08-21 15:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 63.942 ms
Loss rate: 3.57%
-- Flow 1:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 64.150 ms
Loss rate: 5.12%
-- Flow 2:
Average throughput: 23.62 Mbit/s
95th percentile per-packet one-way delay: 63.815 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 63.935 ms
Loss rate: 5.39%
```

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

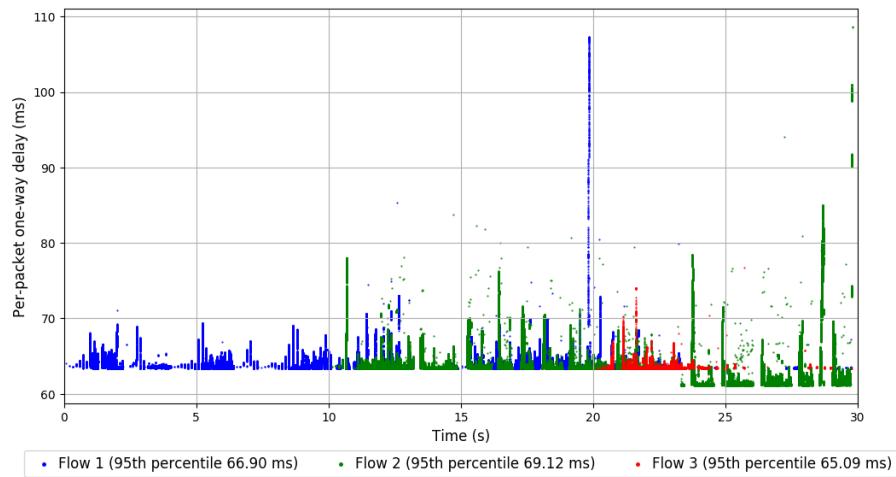
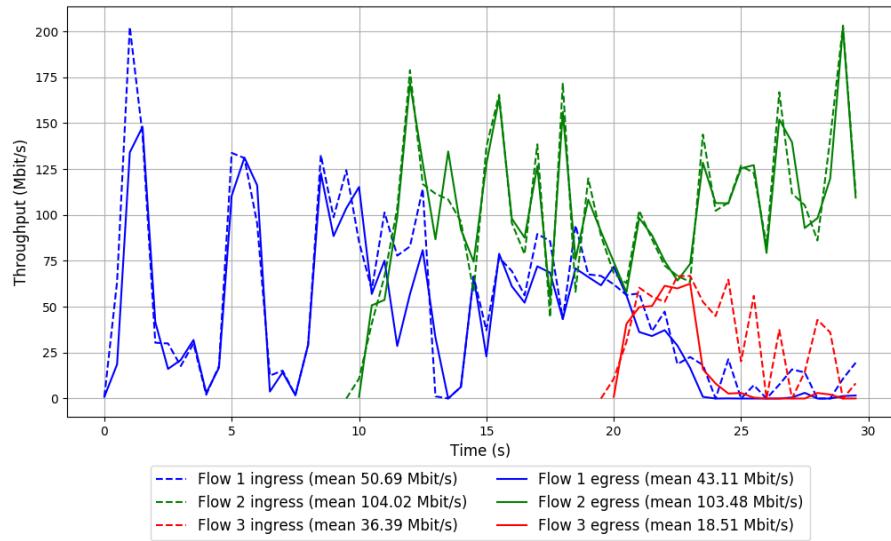


```
Run 1: Statistics of Verus

Start at: 2017-08-21 11:05:11
End at: 2017-08-21 11:05:41

# Below is generated by plot.py at 2017-08-21 15:48:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.01 Mbit/s
95th percentile per-packet one-way delay: 68.026 ms
Loss rate: 10.64%
-- Flow 1:
Average throughput: 43.11 Mbit/s
95th percentile per-packet one-way delay: 66.903 ms
Loss rate: 14.98%
-- Flow 2:
Average throughput: 103.48 Mbit/s
95th percentile per-packet one-way delay: 69.120 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 18.51 Mbit/s
95th percentile per-packet one-way delay: 65.087 ms
Loss rate: 49.89%
```

Run 1: Report of Verus — Data Link



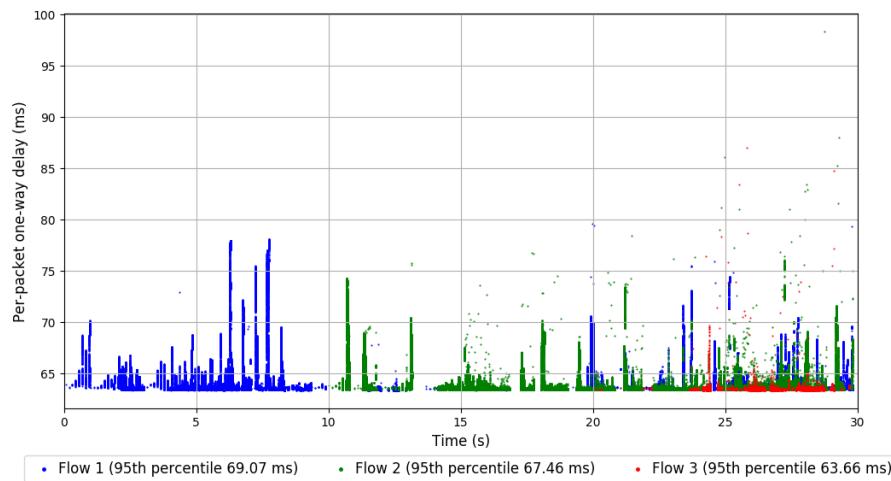
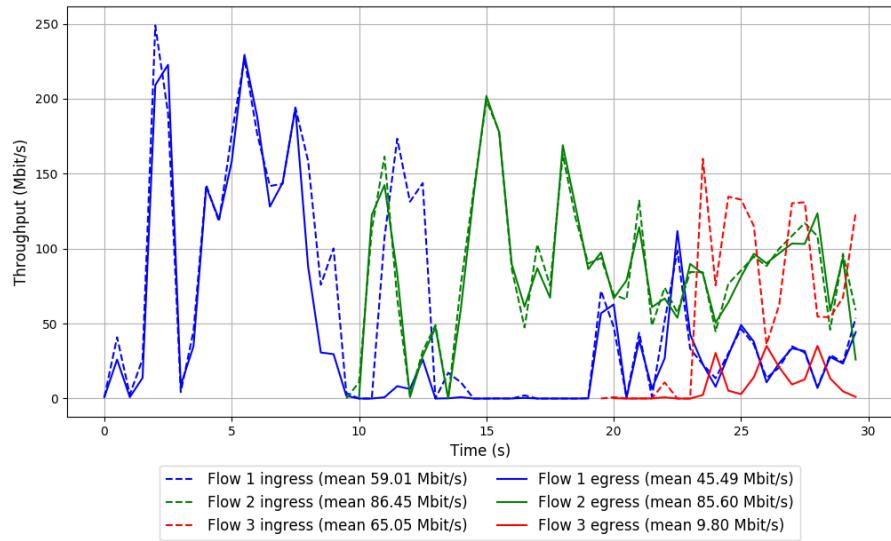
Run 2: Statistics of Verus

Start at: 2017-08-21 11:17:07

End at: 2017-08-21 11:17:37

```
# Below is generated by plot.py at 2017-08-21 15:48:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.60 Mbit/s
95th percentile per-packet one-way delay: 67.966 ms
Loss rate: 23.82%
-- Flow 1:
Average throughput: 45.49 Mbit/s
95th percentile per-packet one-way delay: 69.071 ms
Loss rate: 22.99%
-- Flow 2:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 67.463 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 9.80 Mbit/s
95th percentile per-packet one-way delay: 63.659 ms
Loss rate: 85.36%
```

## Run 2: Report of Verus — Data Link



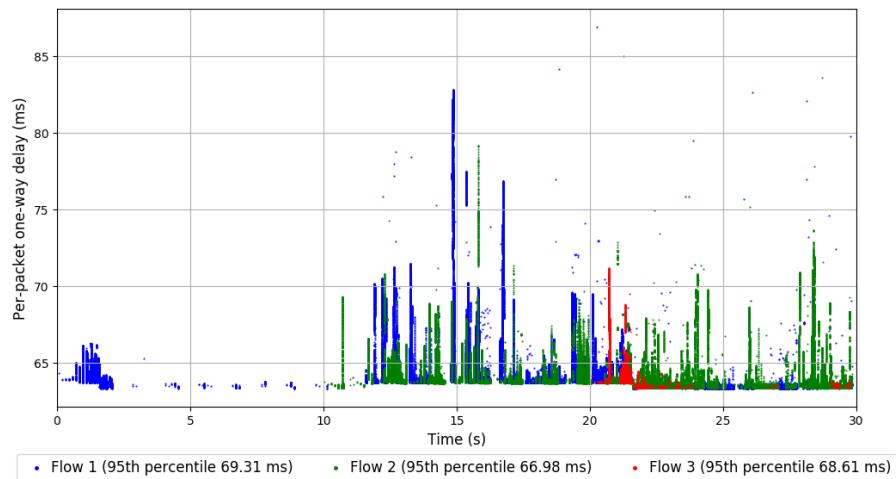
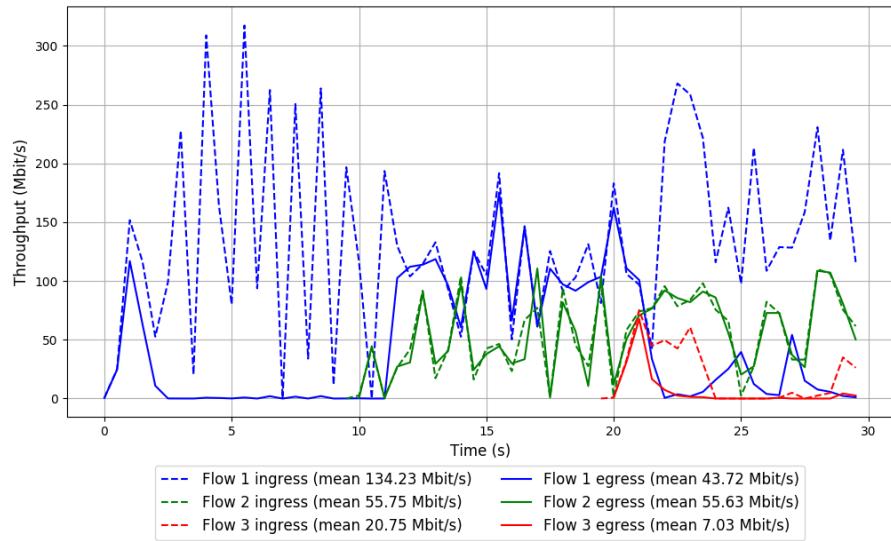
Run 3: Statistics of Verus

Start at: 2017-08-21 11:28:53

End at: 2017-08-21 11:29:23

```
# Below is generated by plot.py at 2017-08-21 15:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.95 Mbit/s
95th percentile per-packet one-way delay: 68.501 ms
Loss rate: 53.65%
-- Flow 1:
Average throughput: 43.72 Mbit/s
95th percentile per-packet one-way delay: 69.308 ms
Loss rate: 67.59%
-- Flow 2:
Average throughput: 55.63 Mbit/s
95th percentile per-packet one-way delay: 66.978 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 68.605 ms
Loss rate: 66.88%
```

Run 3: Report of Verus — Data Link



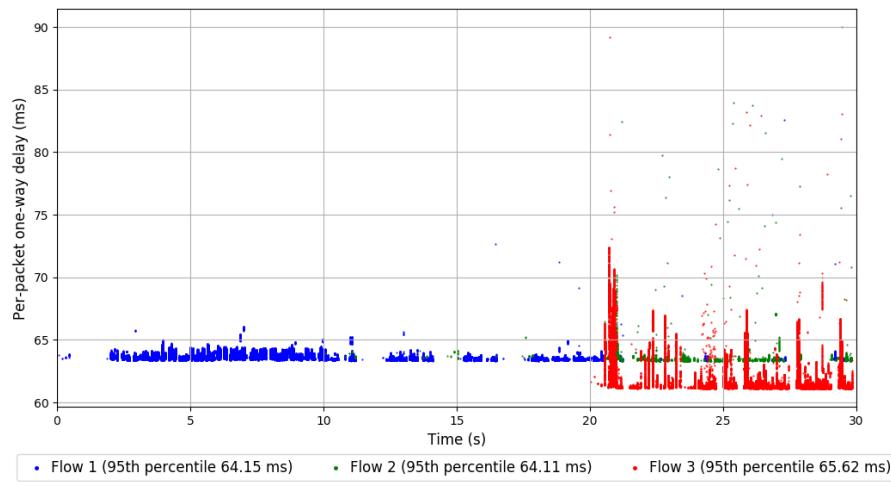
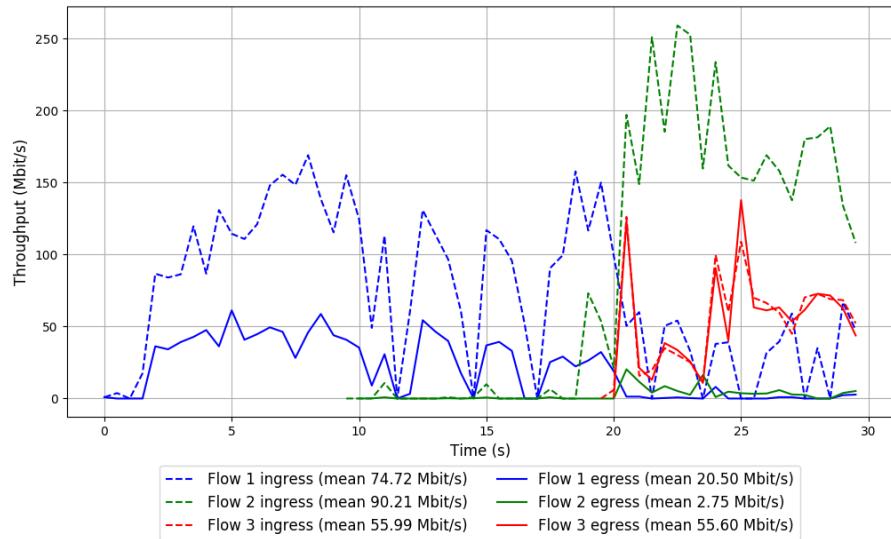
Run 4: Statistics of Verus

Start at: 2017-08-21 11:40:44

End at: 2017-08-21 11:41:14

```
# Below is generated by plot.py at 2017-08-21 15:48:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.58 Mbit/s
95th percentile per-packet one-way delay: 64.345 ms
Loss rate: 73.57%
-- Flow 1:
Average throughput: 20.50 Mbit/s
95th percentile per-packet one-way delay: 64.148 ms
Loss rate: 72.56%
-- Flow 2:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 64.114 ms
Loss rate: 96.98%
-- Flow 3:
Average throughput: 55.60 Mbit/s
95th percentile per-packet one-way delay: 65.621 ms
Loss rate: 2.02%
```

Run 4: Report of Verus — Data Link



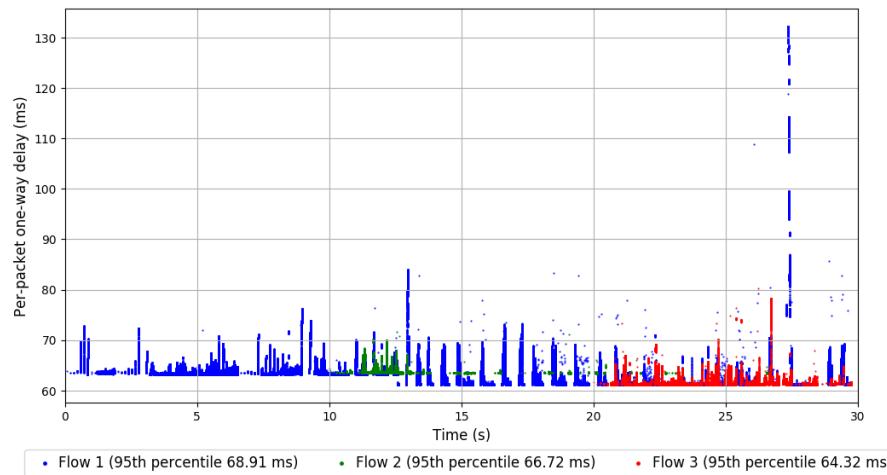
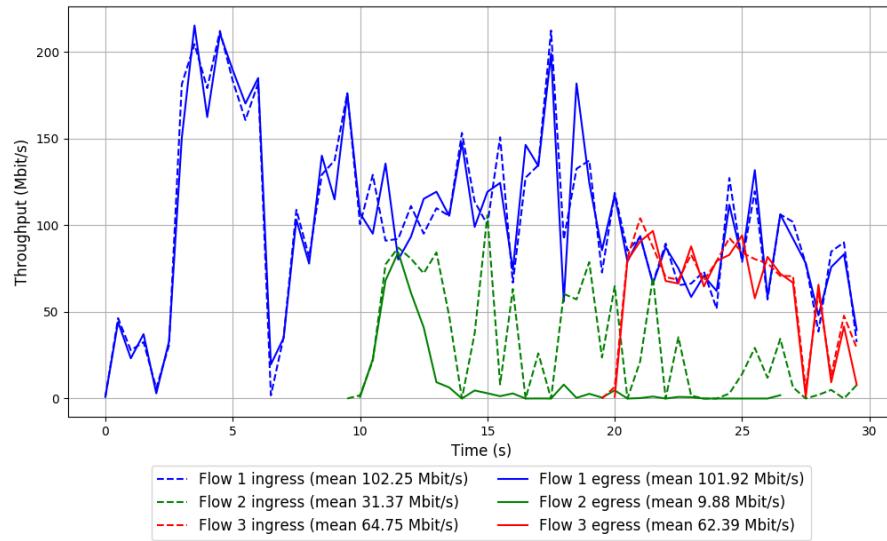
Run 5: Statistics of Verus

Start at: 2017-08-21 11:52:22

End at: 2017-08-21 11:52:52

```
# Below is generated by plot.py at 2017-08-21 15:49:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.86 Mbit/s
95th percentile per-packet one-way delay: 68.371 ms
Loss rate: 11.65%
-- Flow 1:
Average throughput: 101.92 Mbit/s
95th percentile per-packet one-way delay: 68.907 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 9.88 Mbit/s
95th percentile per-packet one-way delay: 66.718 ms
Loss rate: 73.62%
-- Flow 3:
Average throughput: 62.39 Mbit/s
95th percentile per-packet one-way delay: 64.324 ms
Loss rate: 5.22%
```

Run 5: Report of Verus — Data Link



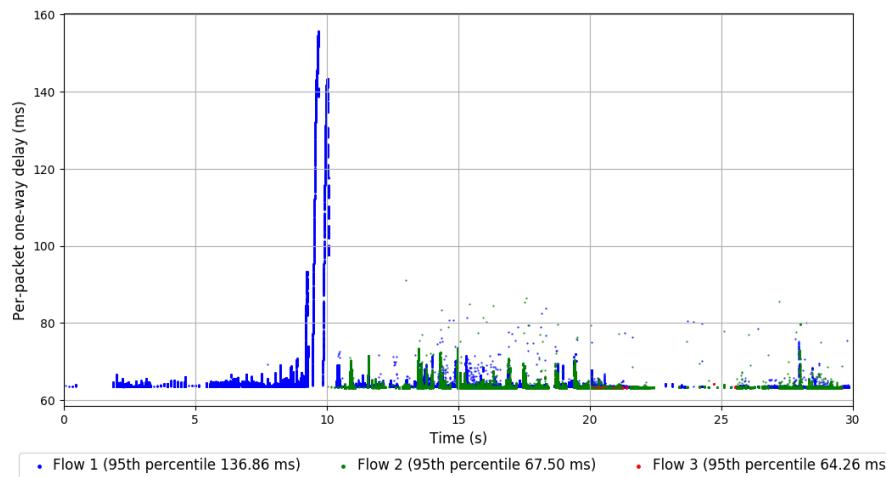
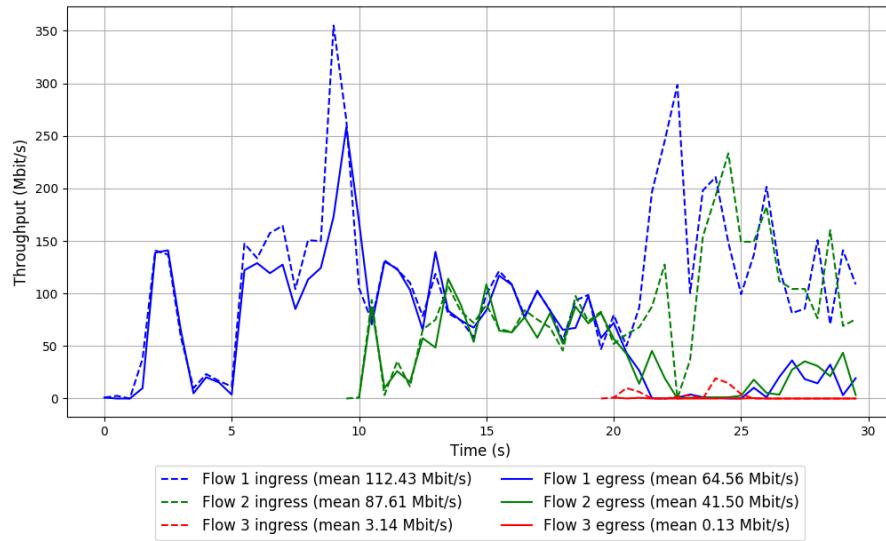
Run 6: Statistics of Verus

Start at: 2017-08-21 12:04:14

End at: 2017-08-21 12:04:44

```
# Below is generated by plot.py at 2017-08-21 15:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.83 Mbit/s
95th percentile per-packet one-way delay: 115.350 ms
Loss rate: 46.78%
-- Flow 1:
Average throughput: 64.56 Mbit/s
95th percentile per-packet one-way delay: 136.858 ms
Loss rate: 42.83%
-- Flow 2:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 67.502 ms
Loss rate: 53.52%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 64.260 ms
Loss rate: 96.00%
```

Run 6: Report of Verus — Data Link



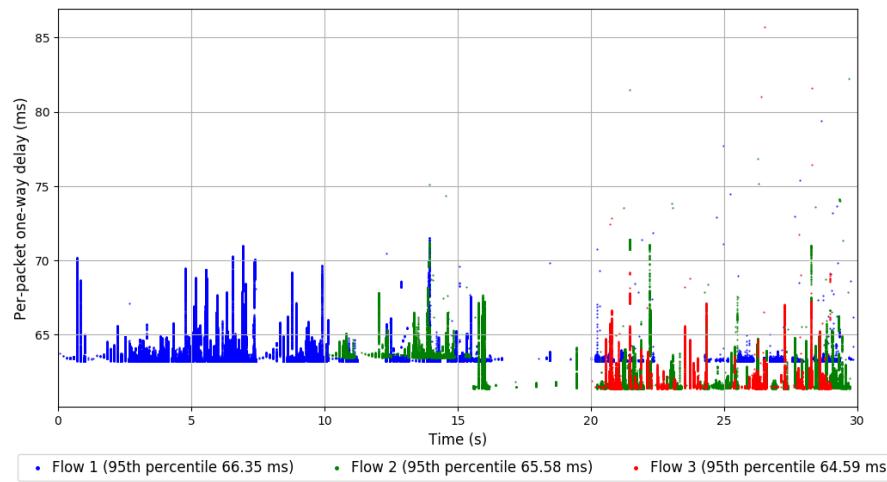
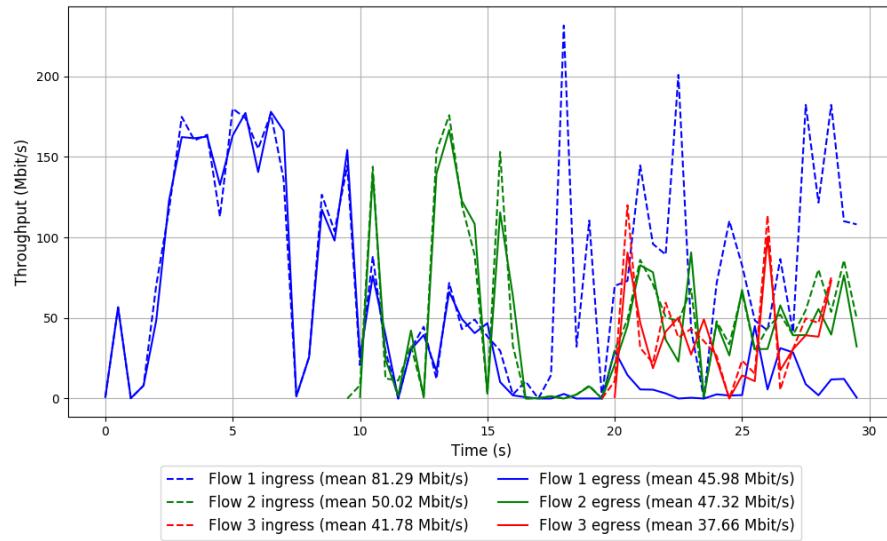
Run 7: Statistics of Verus

Start at: 2017-08-21 12:15:49

End at: 2017-08-21 12:16:19

```
# Below is generated by plot.py at 2017-08-21 15:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.57 Mbit/s
95th percentile per-packet one-way delay: 65.896 ms
Loss rate: 30.55%
-- Flow 1:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 66.354 ms
Loss rate: 43.61%
-- Flow 2:
Average throughput: 47.32 Mbit/s
95th percentile per-packet one-way delay: 65.577 ms
Loss rate: 6.49%
-- Flow 3:
Average throughput: 37.66 Mbit/s
95th percentile per-packet one-way delay: 64.586 ms
Loss rate: 9.87%
```

Run 7: Report of Verus — Data Link



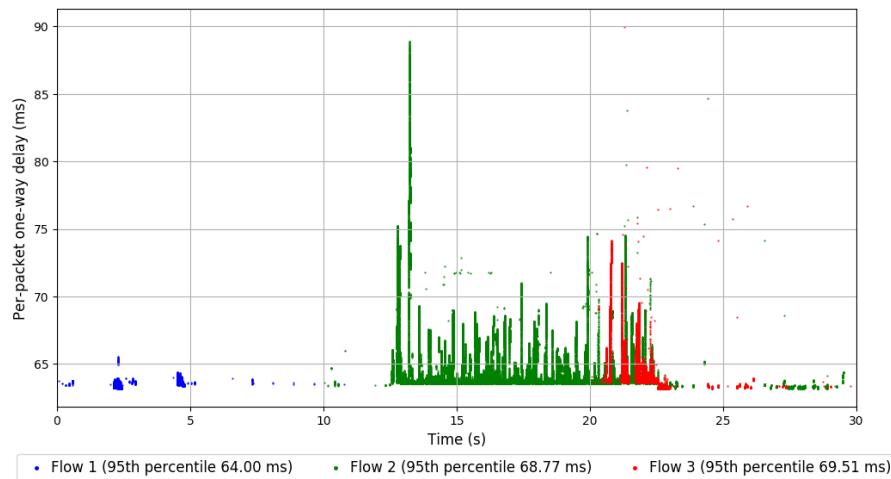
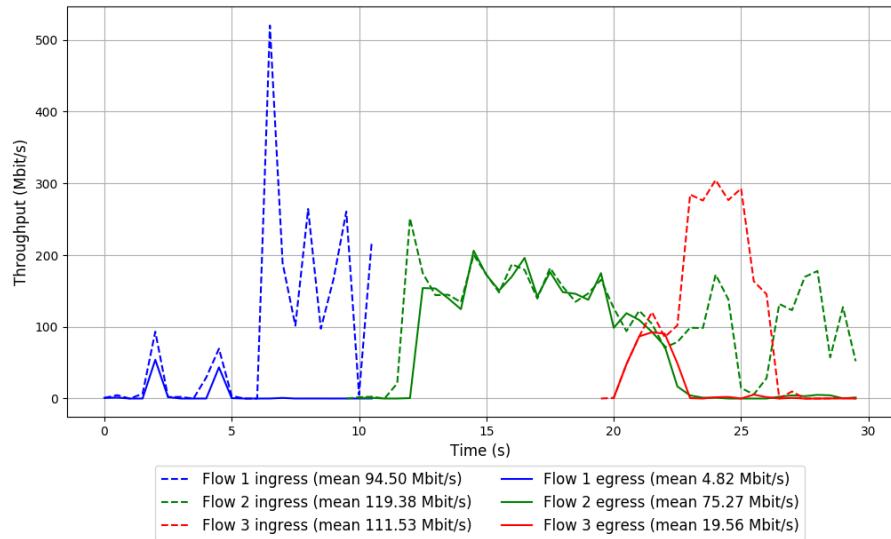
Run 8: Statistics of Verus

Start at: 2017-08-21 12:27:32

End at: 2017-08-21 12:28:02

```
# Below is generated by plot.py at 2017-08-21 15:49:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.50 Mbit/s
95th percentile per-packet one-way delay: 68.837 ms
Loss rate: 61.66%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 64.003 ms
Loss rate: 94.91%
-- Flow 2:
Average throughput: 75.27 Mbit/s
95th percentile per-packet one-way delay: 68.767 ms
Loss rate: 37.32%
-- Flow 3:
Average throughput: 19.56 Mbit/s
95th percentile per-packet one-way delay: 69.513 ms
Loss rate: 82.69%
```

Run 8: Report of Verus — Data Link



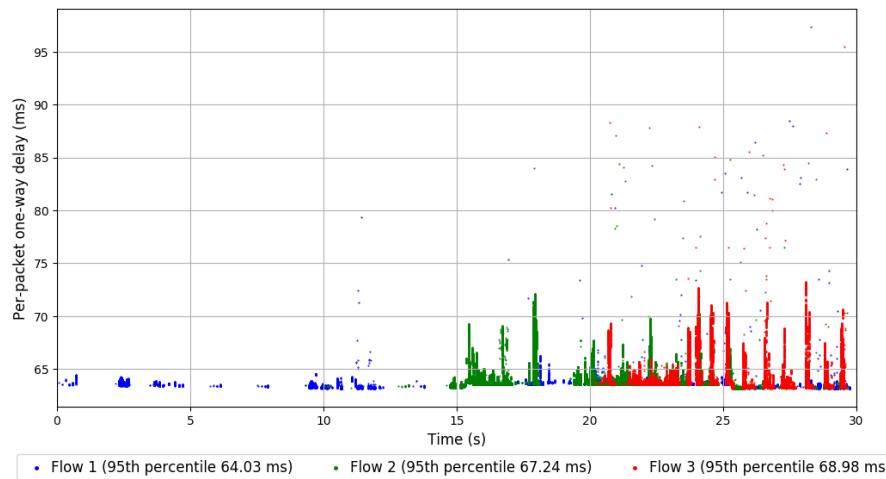
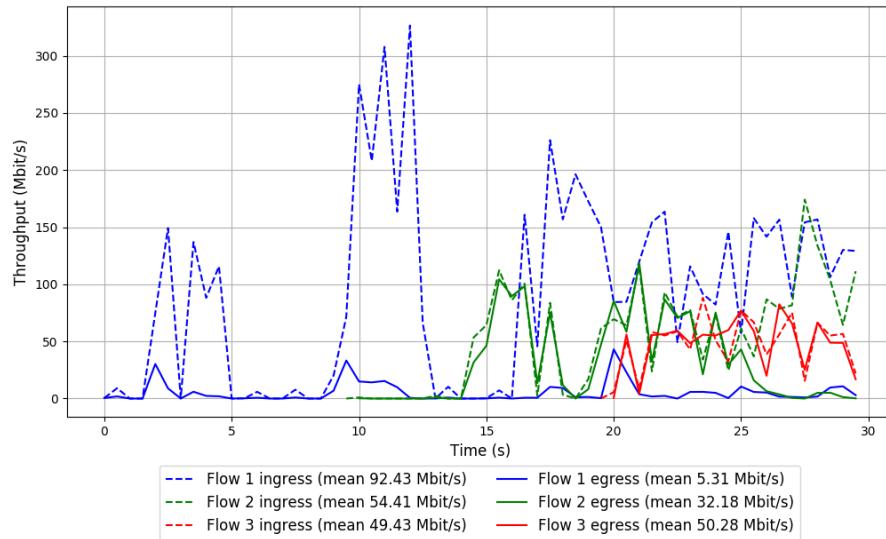
Run 9: Statistics of Verus

Start at: 2017-08-21 12:39:10

End at: 2017-08-21 12:39:40

```
# Below is generated by plot.py at 2017-08-21 15:49:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.77 Mbit/s
95th percentile per-packet one-way delay: 68.129 ms
Loss rate: 70.72%
-- Flow 1:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 64.033 ms
Loss rate: 94.29%
-- Flow 2:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 67.240 ms
Loss rate: 41.76%
-- Flow 3:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 68.982 ms
Loss rate: 2.01%
```

Run 9: Report of Verus — Data Link

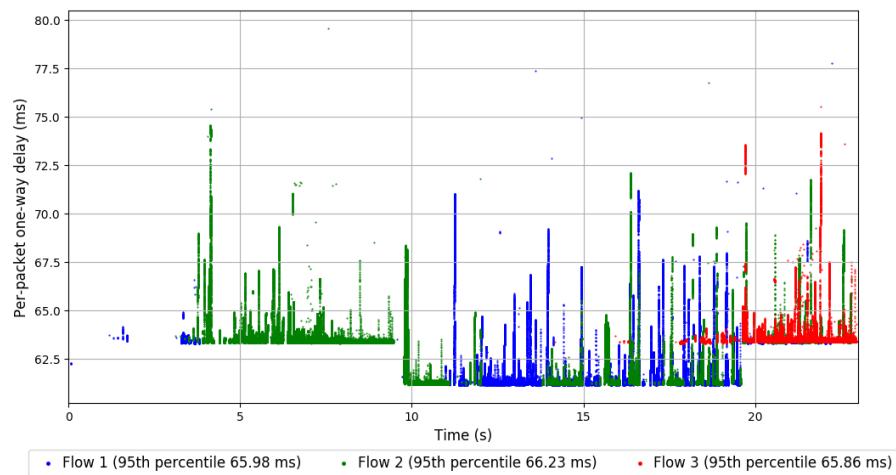
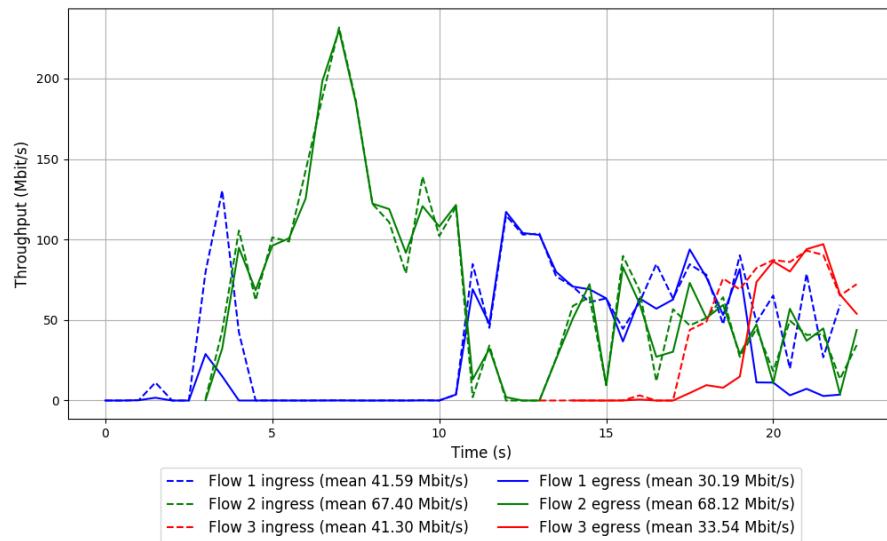


Run 10: Statistics of Verus

Start at: 2017-08-21 12:50:48

End at: 2017-08-21 12:51:18

## Run 10: Report of Verus — Data Link

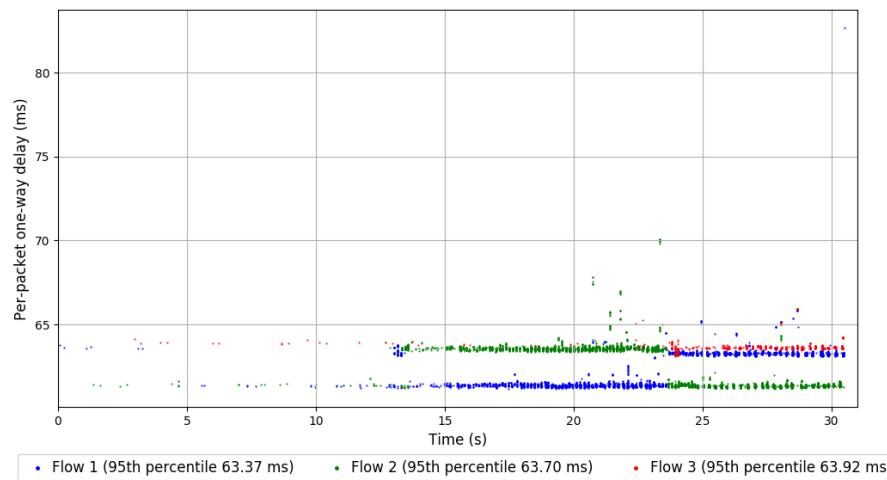
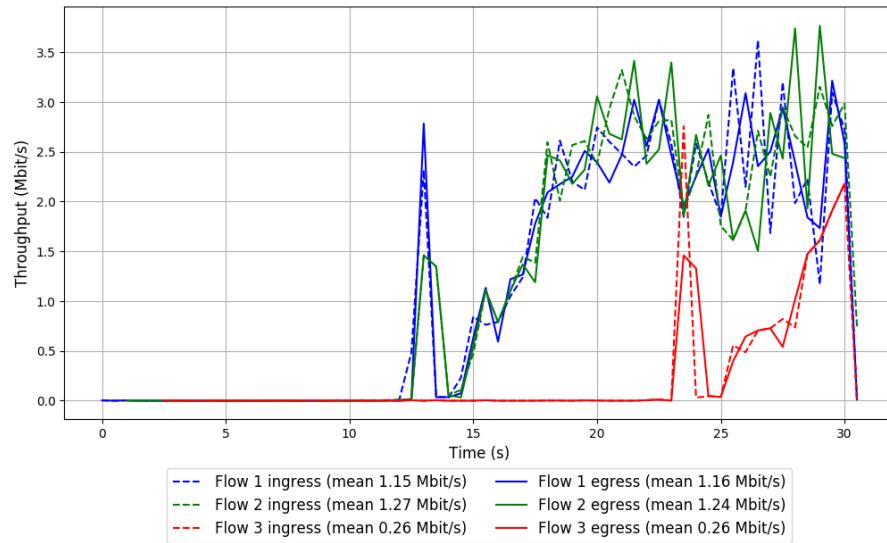


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-21 10:56:22
End at: 2017-08-21 10:56:52

# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 63.690 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 63.370 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 63.702 ms
Loss rate: 2.13%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 63.919 ms
Loss rate: 0.02%
```

Run 1: Report of WebRTC media — Data Link



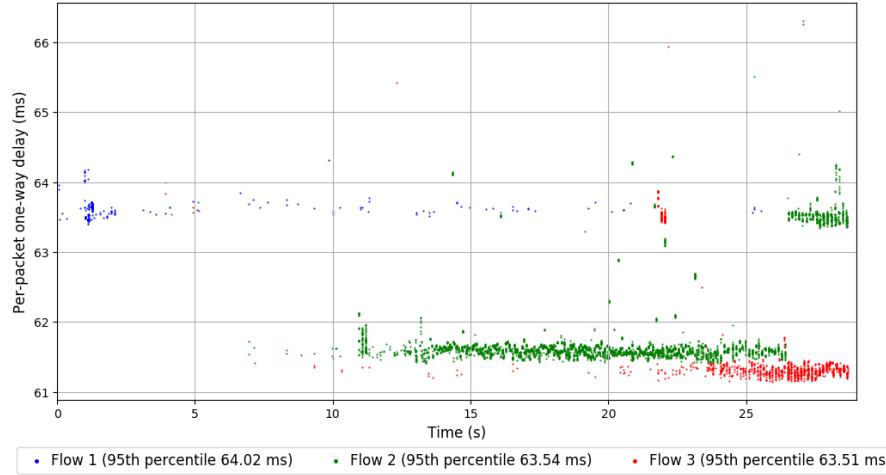
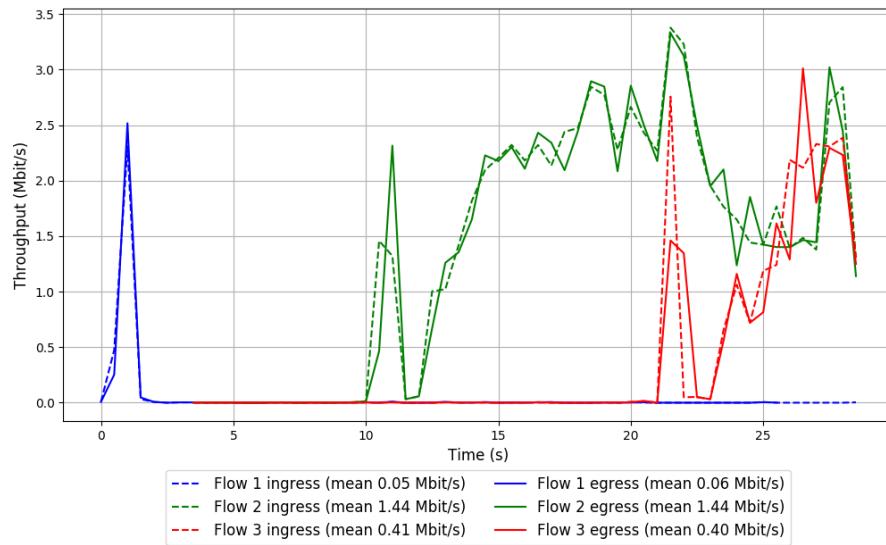
Run 2: Statistics of WebRTC media

Start at: 2017-08-21 11:08:17

End at: 2017-08-21 11:08:47

```
# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 63.581 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 64.023 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 63.542 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 63.514 ms
Loss rate: 3.69%
```

Run 2: Report of WebRTC media — Data Link



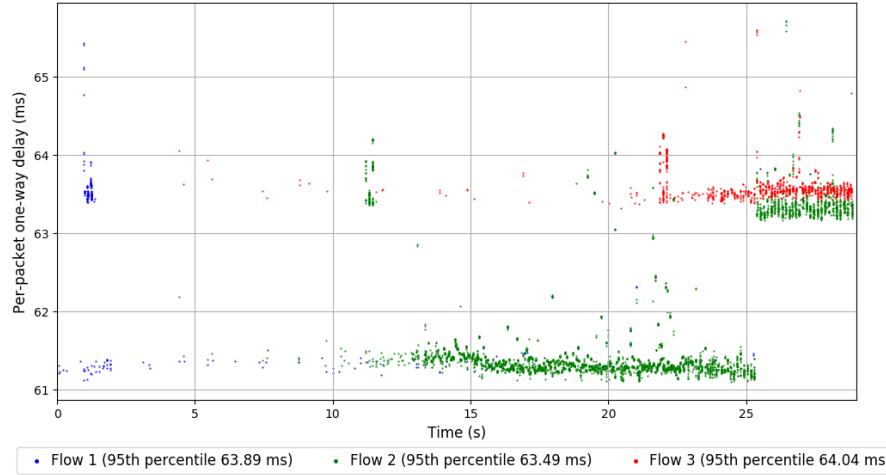
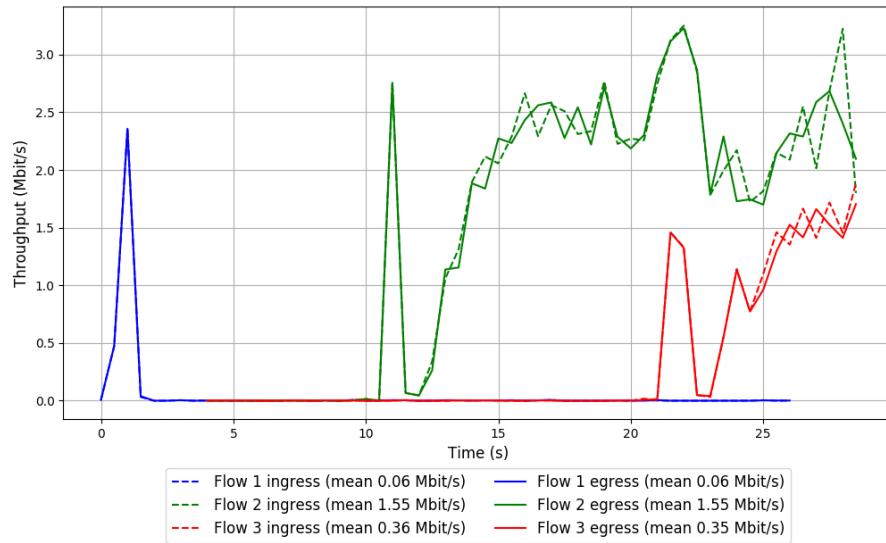
Run 3: Statistics of WebRTC media

Start at: 2017-08-21 11:20:19

End at: 2017-08-21 11:20:49

```
# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 63.693 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 63.887 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 63.486 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 64.041 ms
Loss rate: 3.15%
```

Run 3: Report of WebRTC media — Data Link



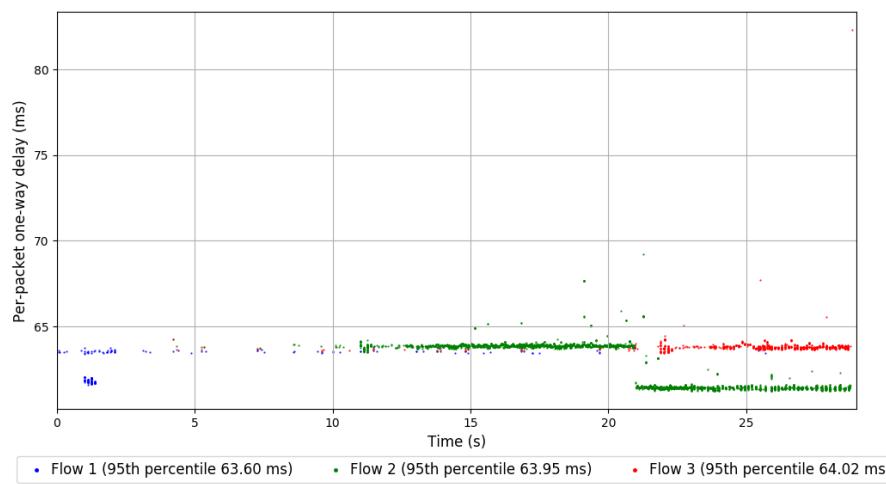
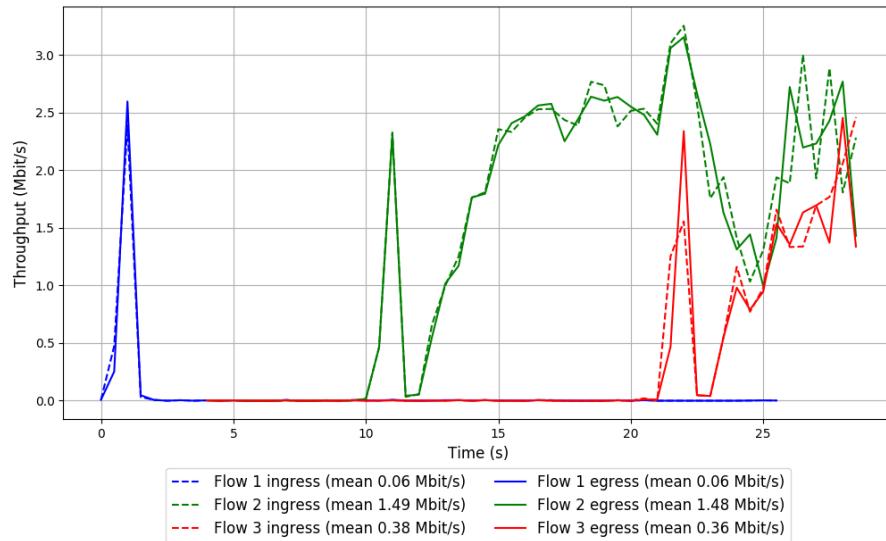
Run 4: Statistics of WebRTC media

Start at: 2017-08-21 11:32:03

End at: 2017-08-21 11:32:33

```
# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 63.958 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 63.600 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 63.951 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 64.020 ms
Loss rate: 6.00%
```

Run 4: Report of WebRTC media — Data Link

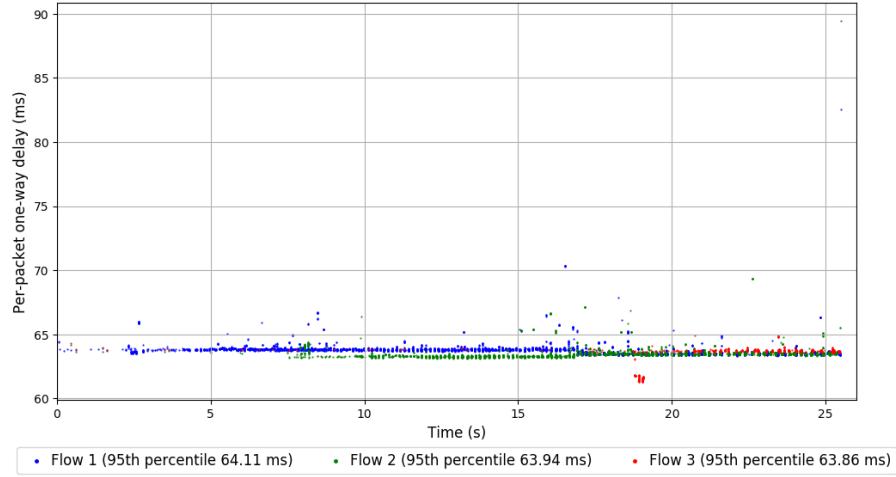
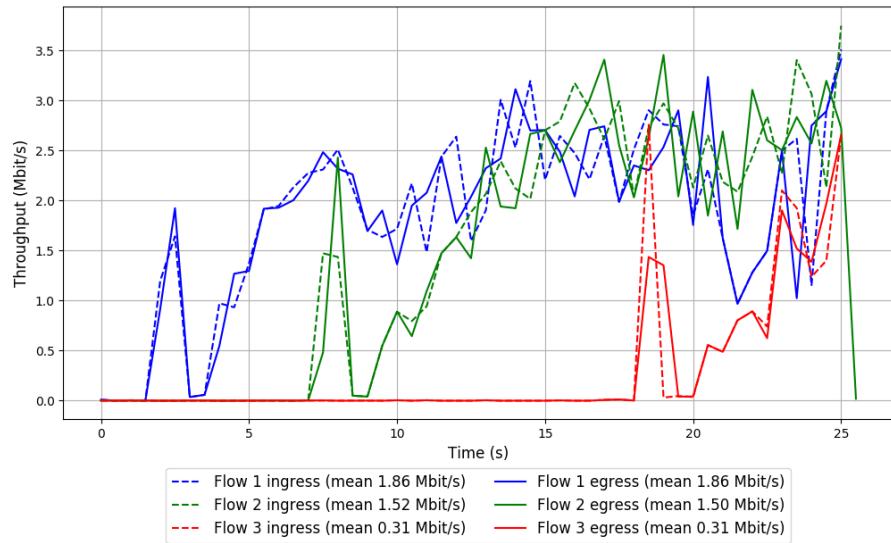


```
Run 5: Statistics of WebRTC media

Start at: 2017-08-21 11:43:44
End at: 2017-08-21 11:44:14

# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 64.024 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 64.111 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 63.938 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 63.856 ms
Loss rate: 0.01%
```

Run 5: Report of WebRTC media — Data Link

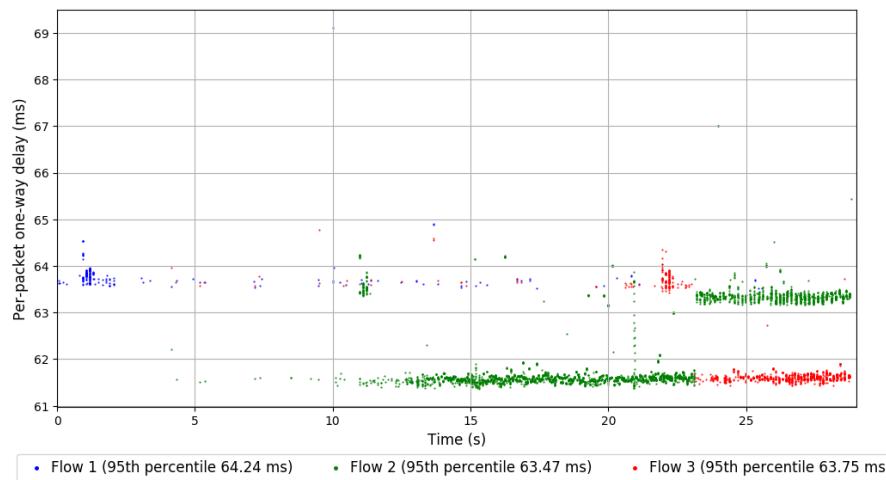
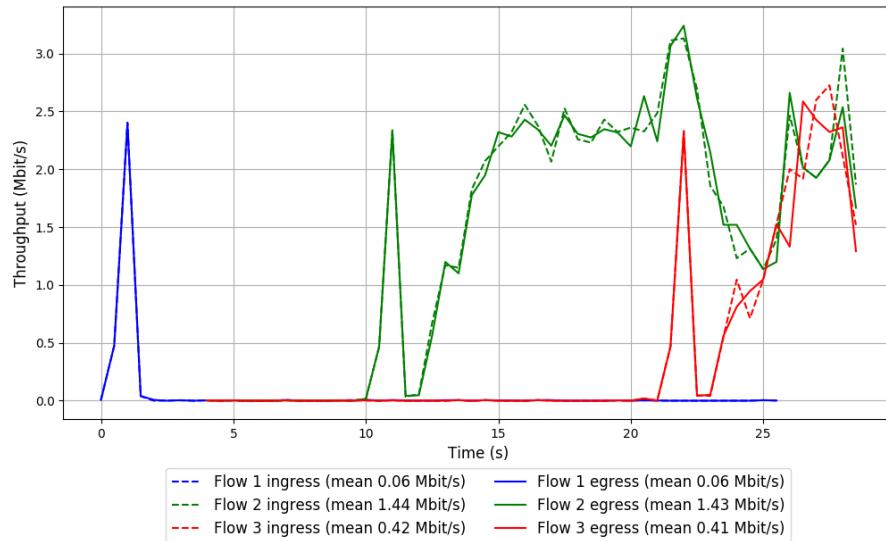


```
Run 6: Statistics of WebRTC media

Start at: 2017-08-21 11:55:31
End at: 2017-08-21 11:56:01

# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 63.709 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 64.236 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 63.467 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 63.754 ms
Loss rate: 2.69%
```

Run 6: Report of WebRTC media — Data Link

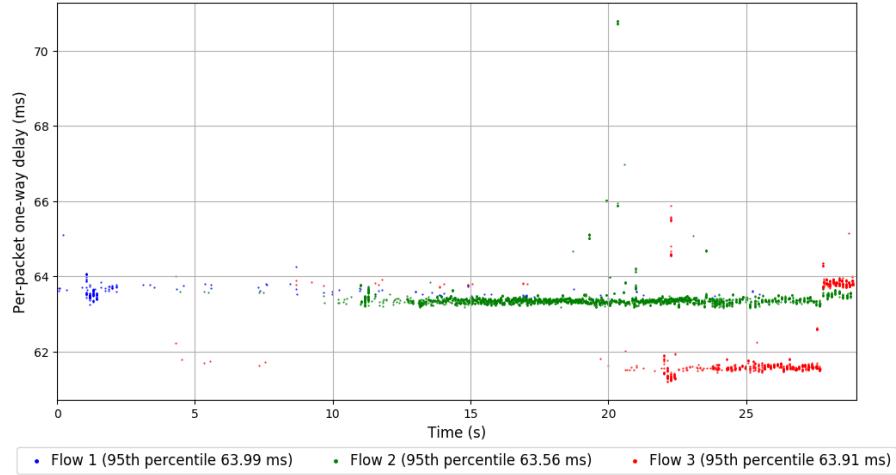
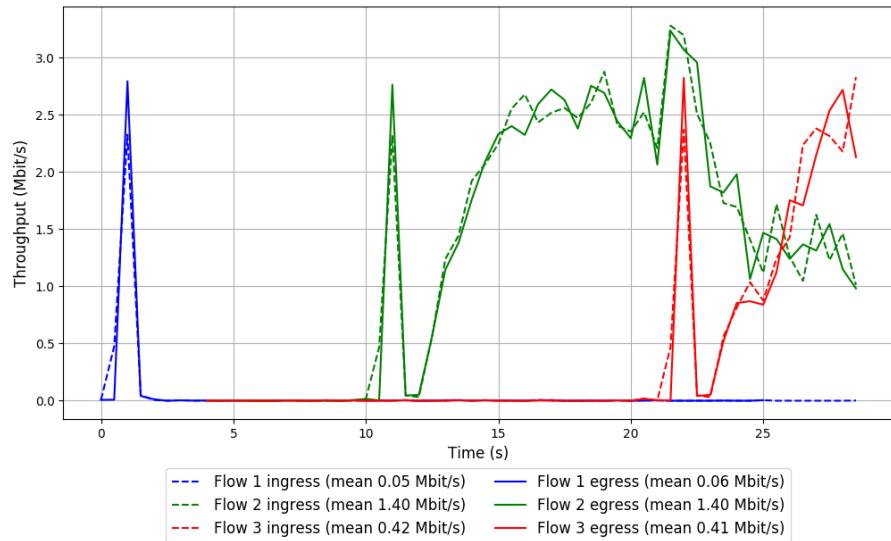


```
Run 7: Statistics of WebRTC media

Start at: 2017-08-21 12:07:16
End at: 2017-08-21 12:07:46

# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 63.826 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 63.986 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 63.565 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 63.914 ms
Loss rate: 3.35%
```

Run 7: Report of WebRTC media — Data Link

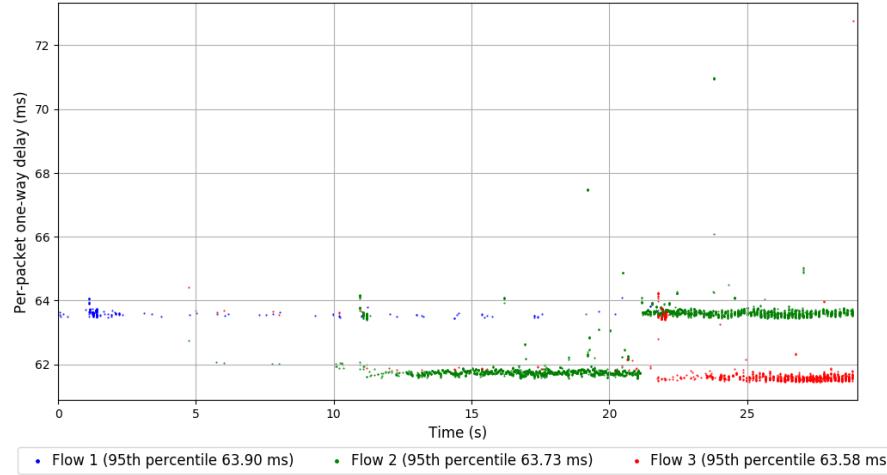
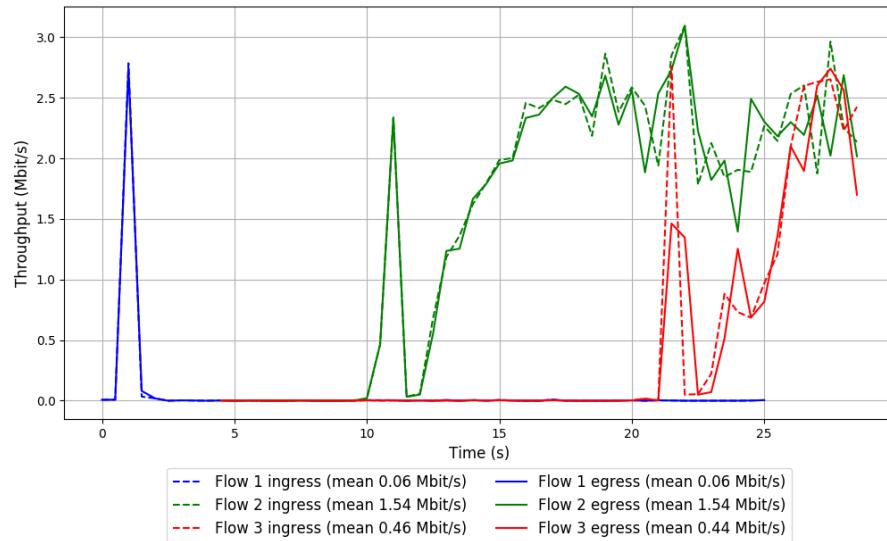


```
Run 8: Statistics of WebRTC media

Start at: 2017-08-21 12:18:53
End at: 2017-08-21 12:19:23

# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 63.720 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 63.896 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 63.727 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.580 ms
Loss rate: 4.66%
```

Run 8: Report of WebRTC media — Data Link

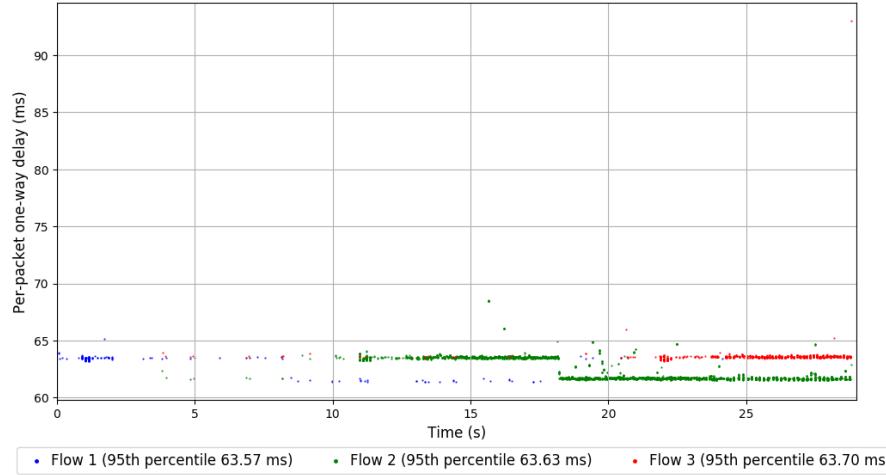
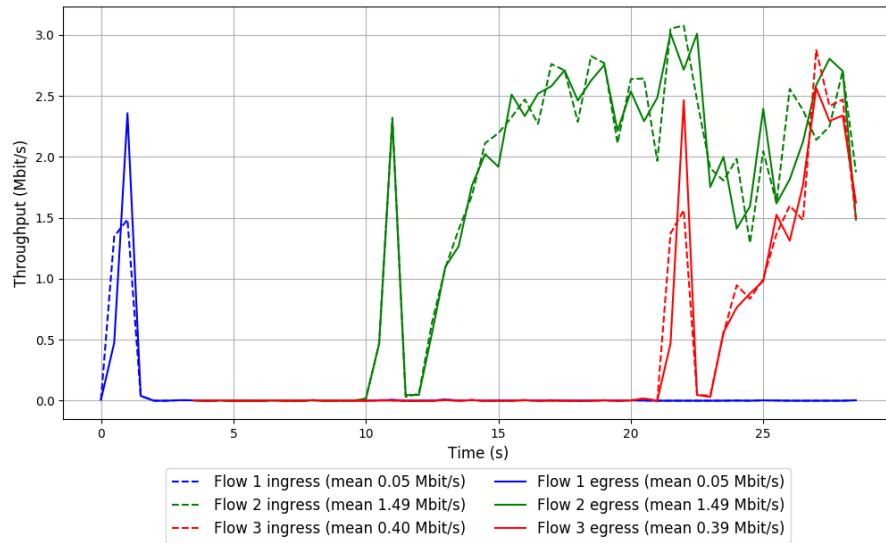


```
Run 9: Statistics of WebRTC media

Start at: 2017-08-21 12:30:36
End at: 2017-08-21 12:31:06

# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 63.658 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 63.627 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 63.699 ms
Loss rate: 2.15%
```

### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-21 12:42:06

End at: 2017-08-21 12:42:36

```
# Below is generated by plot.py at 2017-08-21 15:49:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 63.685 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.284 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 63.457 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 63.683 ms
Loss rate: 2.12%
```

### Run 10: Report of WebRTC media — Data Link

