

Pantheon Report

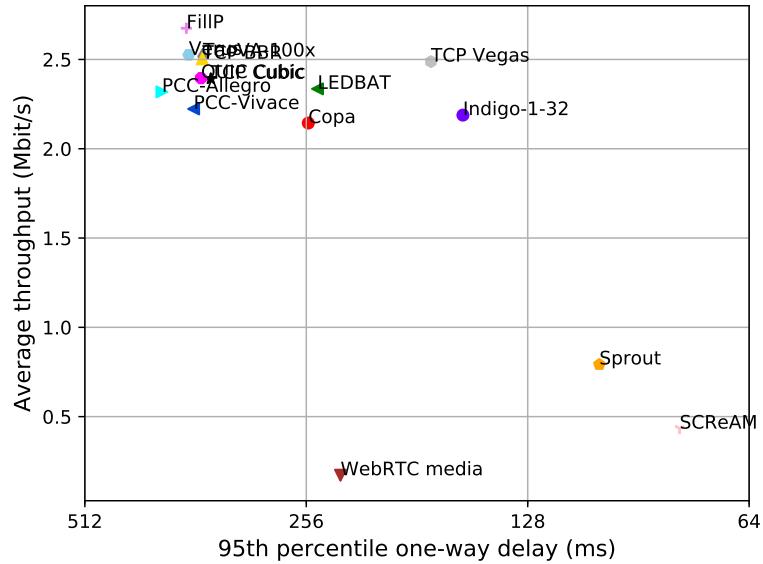
Generated at 2018-04-17 00:57:07 (UTC).
Data path: India ppp0 (*remote*) → AWS India 1 Ethernet (*local*).
Repeated the test of 16 congestion control schemes 3 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).
NTP offsets were measured against nets.org.sg and have been applied to correct the timestamps in logs.

Git summary:

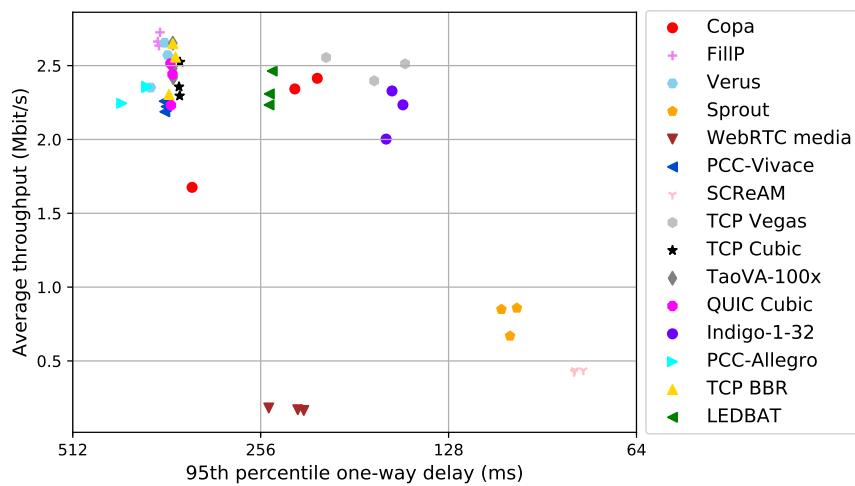
```
branch: master @ b3d6e7098641364fd3a292656a51aa81e316d0b4
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
```

third_party/webrtc @ f271183af822eee5d0031620f4bebf38aedc5581

test from India ppp0 to AWS India 1 Ethernet, 3 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from India ppp0 to AWS India 1 Ethernet, 3 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	3	1.44	1.03	1.16	351.78	356.94	362.82	5.54	11.45	19.34
TCP Cubic	3	1.66	0.88	0.48	342.09	345.59	346.94	1.52	5.04	7.69
LEDBAT	3	1.28	1.22	0.77	250.72	240.65	247.28	0.24	0.84	3.62
PCC-Allegro	3	1.34	1.05	0.93	374.61	401.49	777.11	42.88	56.26	88.63
QUIC Cubic	3	1.50	0.86	1.03	354.09	358.60	358.36	4.45	7.92	8.91
SCReAM	3	0.22	0.22	0.22	73.79	80.87	70.63	0.28	0.27	0.71
WebRTC media	3	0.06	0.06	0.05	236.56	215.14	229.84	0.43	0.04	2.22
Sprout	3	0.38	0.42	0.42	100.77	102.34	107.49	0.55	0.96	1.22
TaoVA-100x	3	1.44	1.18	0.88	349.79	356.42	367.63	9.52	13.71	38.21
TCP Vegas	3	1.31	1.22	1.13	176.92	171.81	148.70	0.69	0.61	1.29
Verus	3	1.98	0.73	0.20	361.59	382.14	348.52	34.89	79.17	62.17
Copa	3	1.30	0.90	0.76	238.36	261.00	283.28	1.39	2.80	6.23
FillP	3	1.43	1.33	1.17	370.33	374.47	371.15	40.91	55.08	52.49
Indigo-1-32	3	1.09	1.08	1.17	153.81	159.97	159.21	0.74	0.98	2.28
PCC-Vivace	3	1.18	1.12	0.93	357.65	367.62	376.80	17.08	23.63	46.77
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

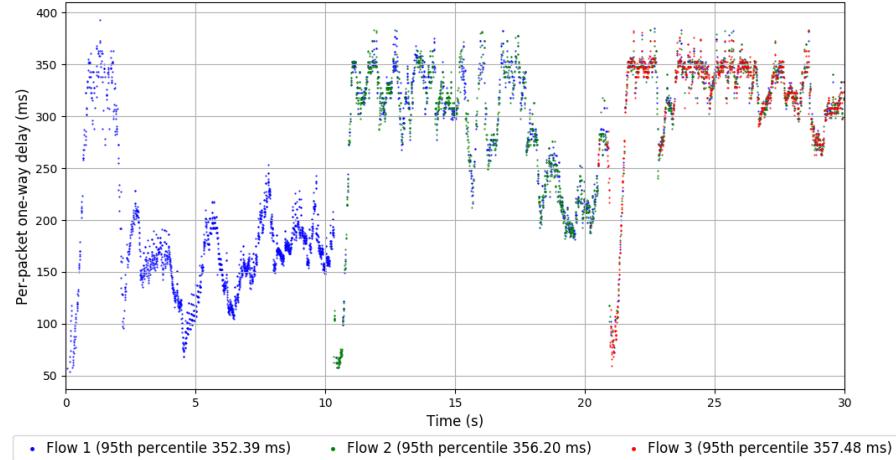
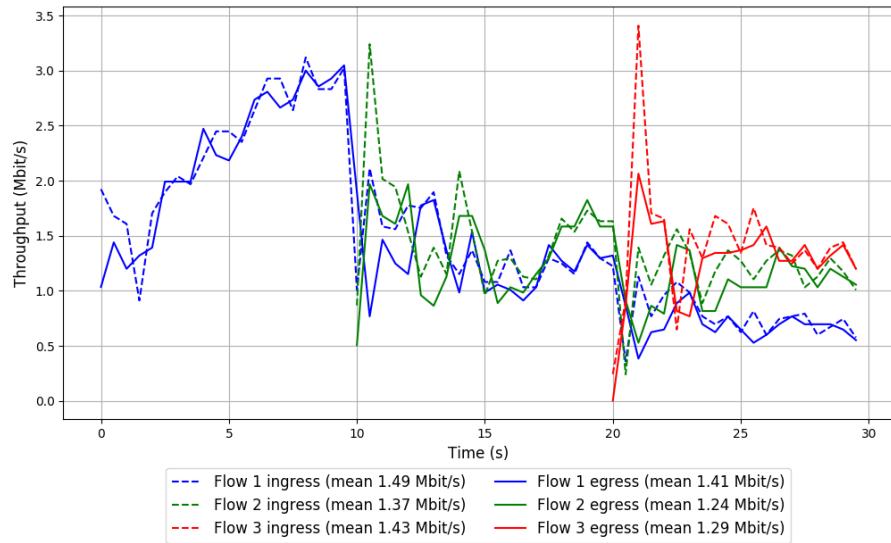
↳

Run 1: Statistics of TCP BBR

```
Start at: 2018-04-16 23:17:25
End at: 2018-04-16 23:17:55
Local clock offset: -6.142 ms
Remote clock offset: -5.907 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 353.913 ms
Loss rate: 8.06%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 352.388 ms
Loss rate: 5.61%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 356.196 ms
Loss rate: 10.31%
-- Flow 3:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 357.479 ms
Loss rate: 11.47%
```

Run 1: Report of TCP BBR — Data Link

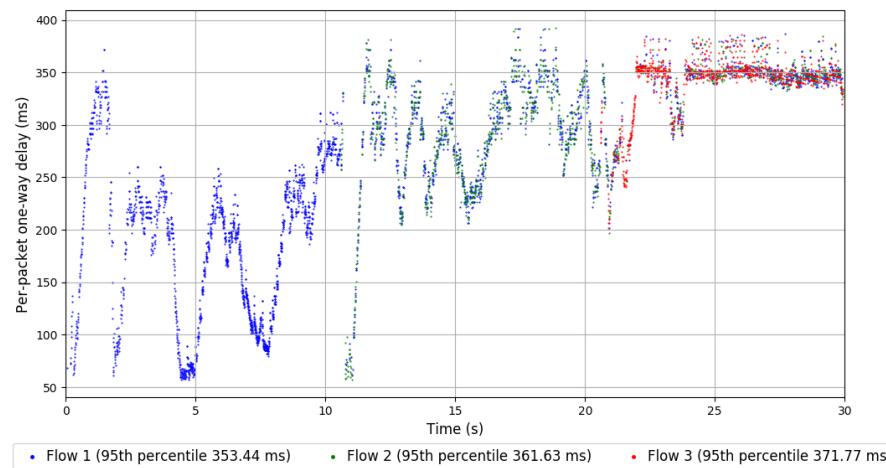
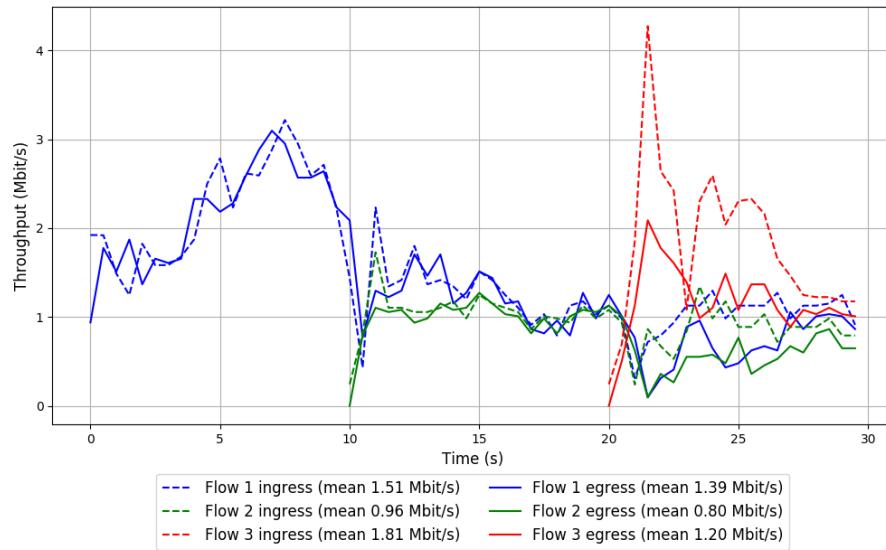


Run 2: Statistics of TCP BBR

```
Start at: 2018-04-16 23:36:09
End at: 2018-04-16 23:36:39
Local clock offset: -8.805 ms
Remote clock offset: -6.603 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 359.031 ms
Loss rate: 16.46%
-- Flow 1:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 353.445 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 361.629 ms
Loss rate: 17.63%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 371.767 ms
Loss rate: 35.97%
```

Run 2: Report of TCP BBR — Data Link

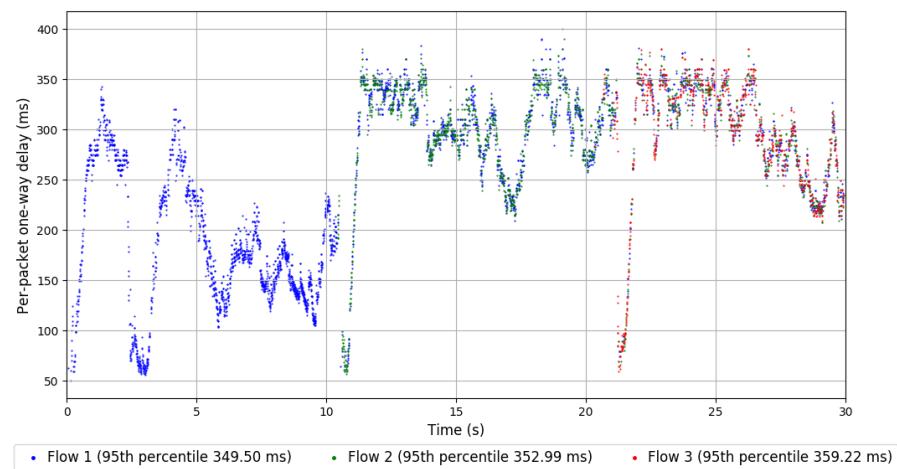
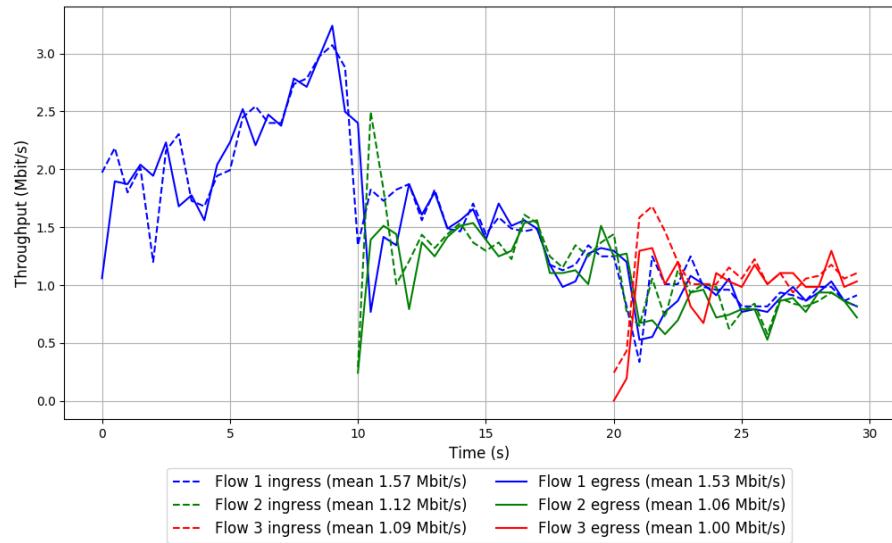


Run 3: Statistics of TCP BBR

```
Start at: 2018-04-16 23:54:53
End at: 2018-04-16 23:55:23
Local clock offset: -9.753 ms
Remote clock offset: -7.313 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 350.468 ms
Loss rate: 4.87%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 349.505 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 352.994 ms
Loss rate: 6.42%
-- Flow 3:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 359.219 ms
Loss rate: 10.57%
```

Run 3: Report of TCP BBR — Data Link

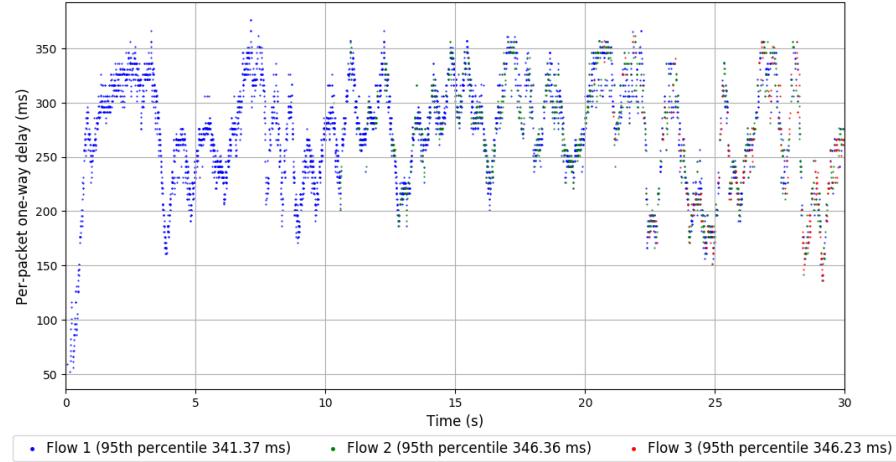
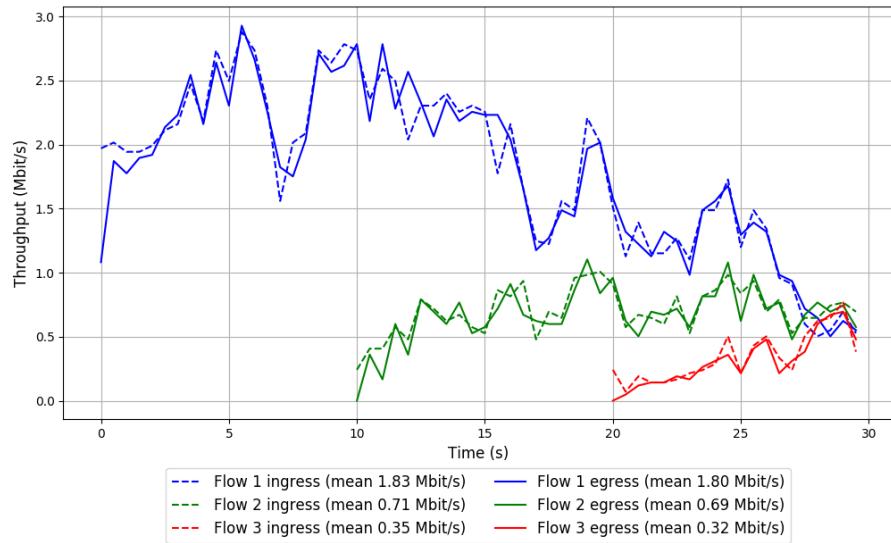


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2018-04-16 23:16:19
End at: 2018-04-16 23:16:49
Local clock offset: -6.328 ms
Remote clock offset: -5.03 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 345.987 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 341.372 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 346.355 ms
Loss rate: 4.44%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 346.227 ms
Loss rate: 9.44%
```

Run 1: Report of TCP Cubic — Data Link

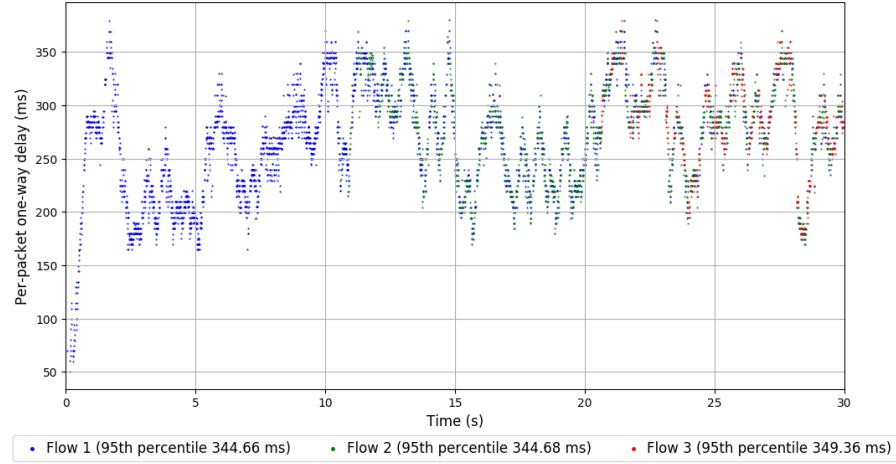
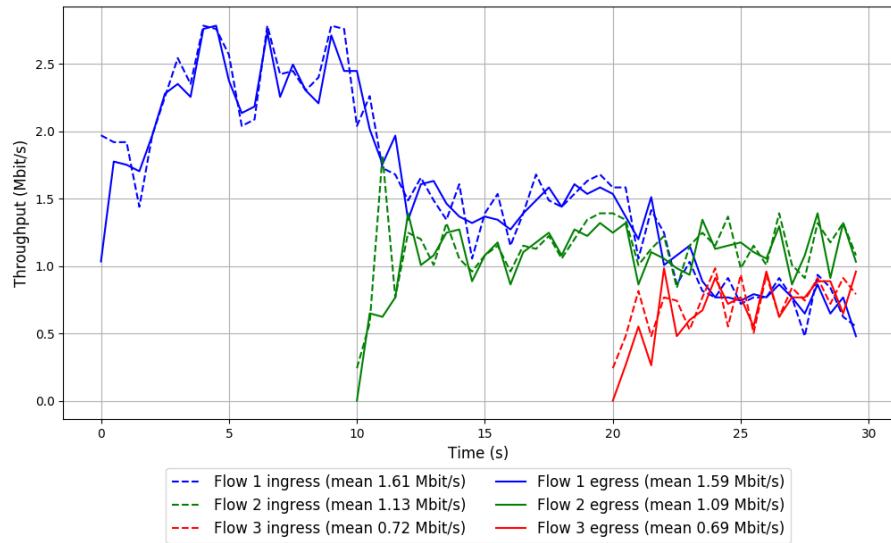


Run 2: Statistics of TCP Cubic

```
Start at: 2018-04-16 23:35:03
End at: 2018-04-16 23:35:33
Local clock offset: -10.249 ms
Remote clock offset: -5.848 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 344.721 ms
Loss rate: 3.22%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 344.664 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 344.675 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 349.358 ms
Loss rate: 7.06%
```

Run 2: Report of TCP Cubic — Data Link

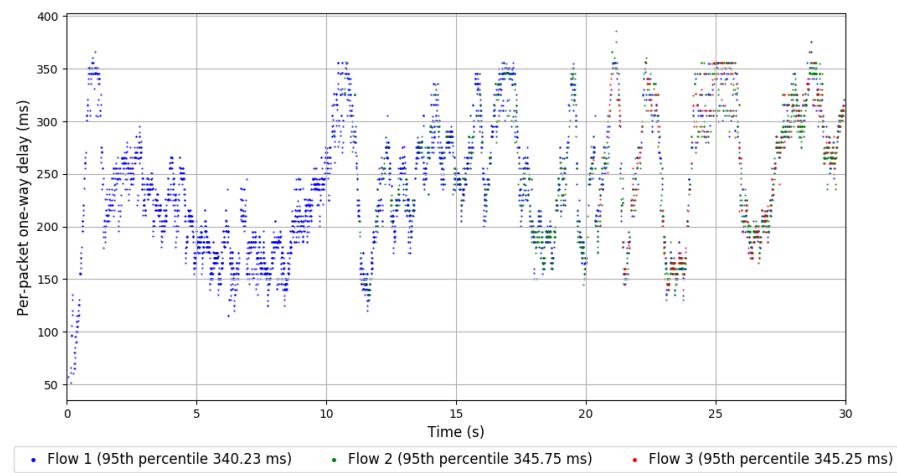
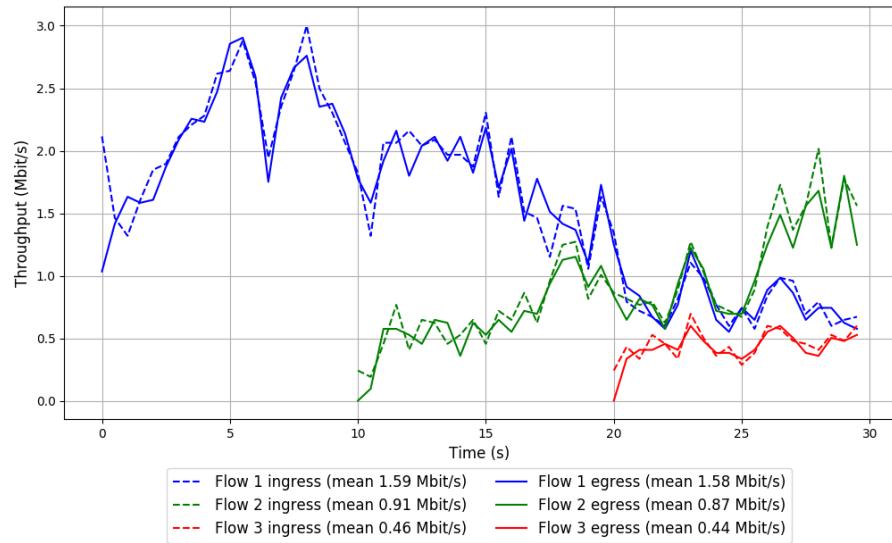


Run 3: Statistics of TCP Cubic

```
Start at: 2018-04-16 23:53:47
End at: 2018-04-16 23:54:17
Local clock offset: -9.714 ms
Remote clock offset: -7.527 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 345.157 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 340.232 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 345.754 ms
Loss rate: 5.68%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 345.248 ms
Loss rate: 6.58%
```

Run 3: Report of TCP Cubic — Data Link

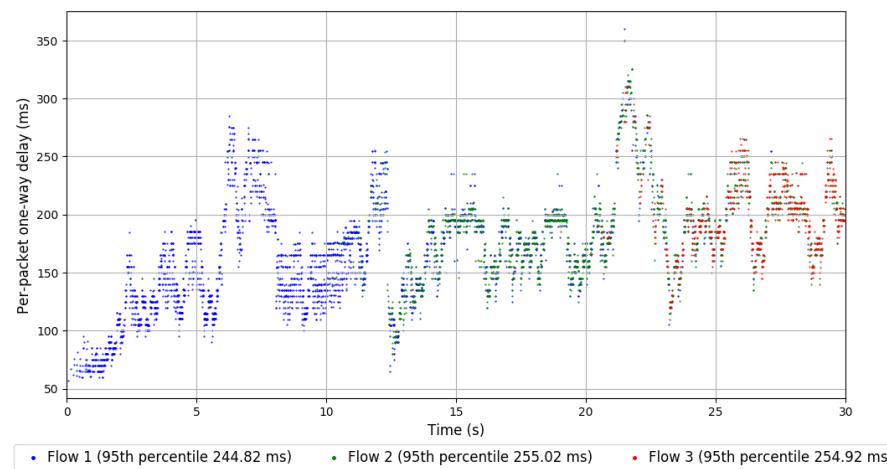
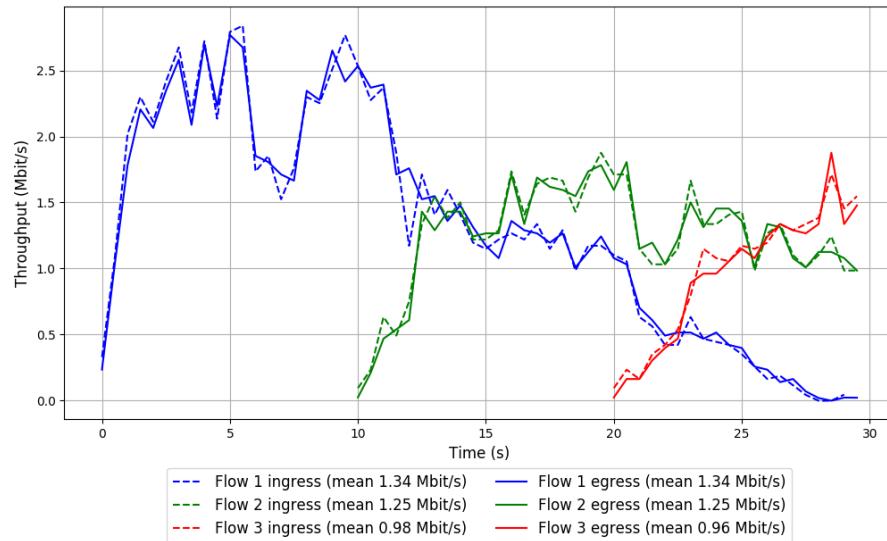


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-04-16 23:21:50
End at: 2018-04-16 23:22:20
Local clock offset: -7.446 ms
Remote clock offset: -4.907 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 245.330 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 244.820 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 255.017 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 254.920 ms
Loss rate: 3.49%
```

Run 1: Report of LEDBAT — Data Link

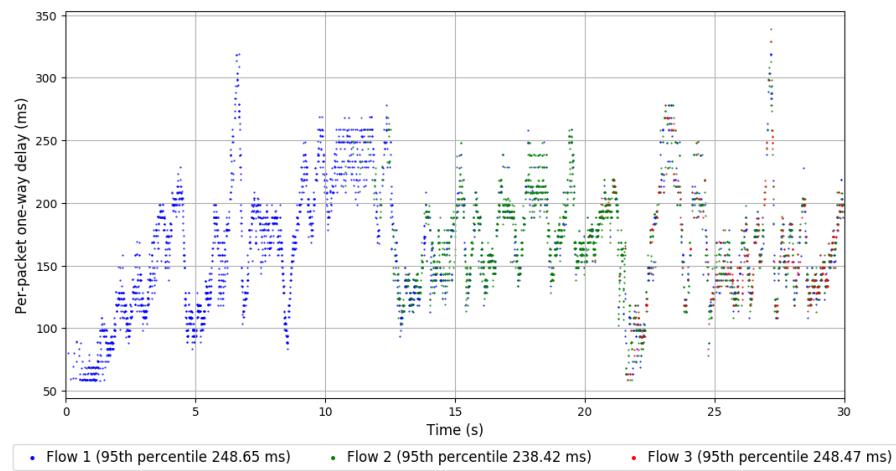
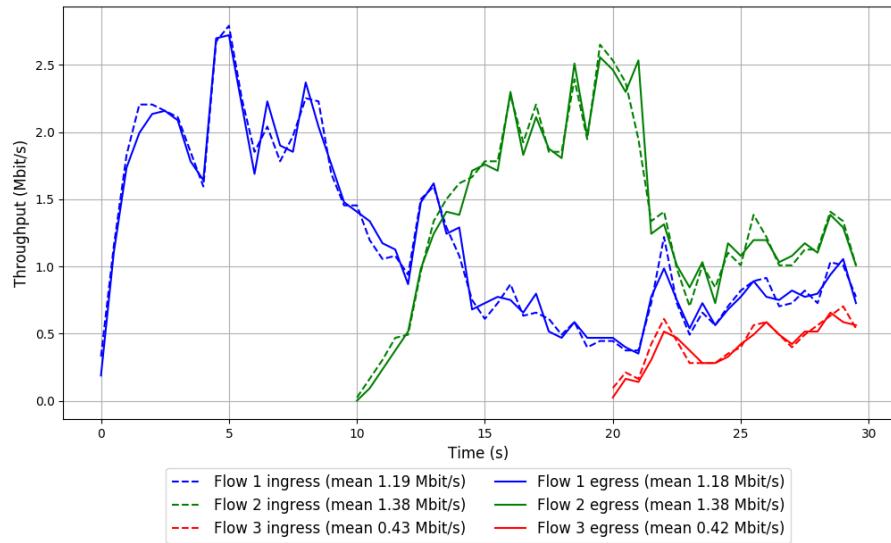


Run 2: Statistics of LEDBAT

```
Start at: 2018-04-16 23:40:33
End at: 2018-04-16 23:41:03
Local clock offset: -10.694 ms
Remote clock offset: -6.997 ms

# Below is generated by plot.py at 2018-04-17 00:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 248.206 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 248.654 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 238.418 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 248.473 ms
Loss rate: 4.41%
```

Run 2: Report of LEDBAT — Data Link

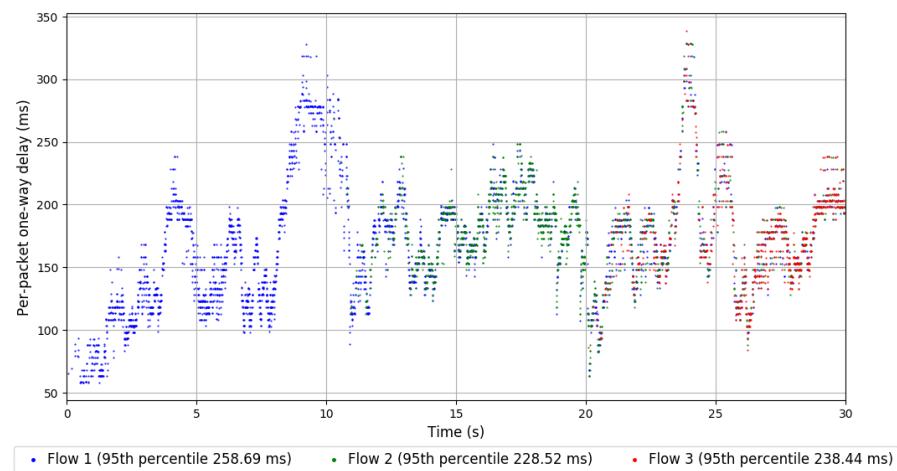
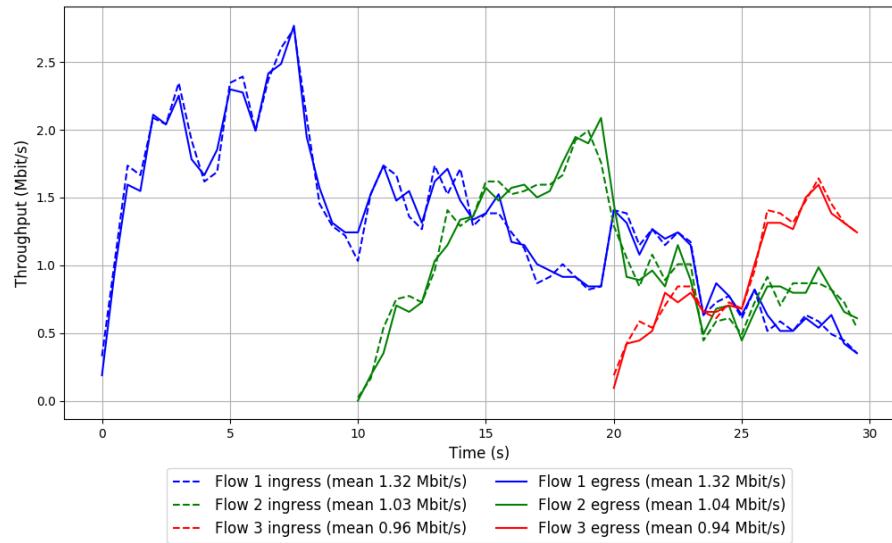


Run 3: Statistics of LEDBAT

```
Start at: 2018-04-16 23:59:17
End at: 2018-04-16 23:59:47
Local clock offset: -10.59 ms
Remote clock offset: -8.156 ms

# Below is generated by plot.py at 2018-04-17 00:56:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 247.991 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 258.690 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 228.516 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 238.442 ms
Loss rate: 2.96%
```

Run 3: Report of LEDBAT — Data Link

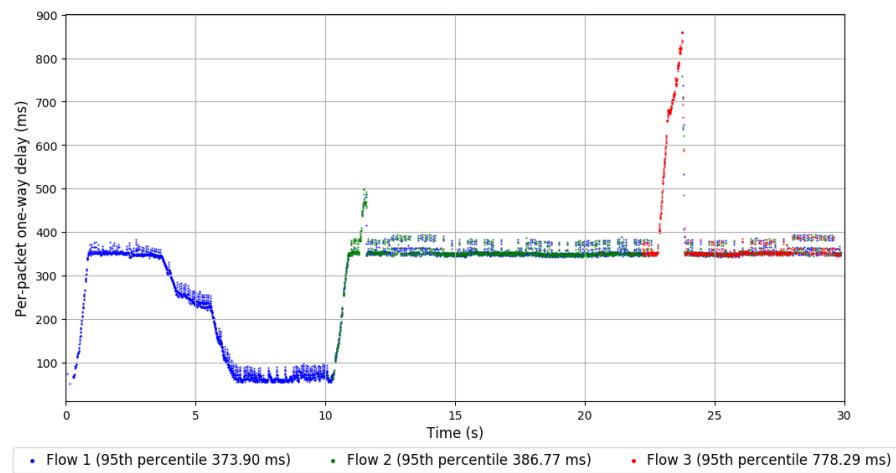
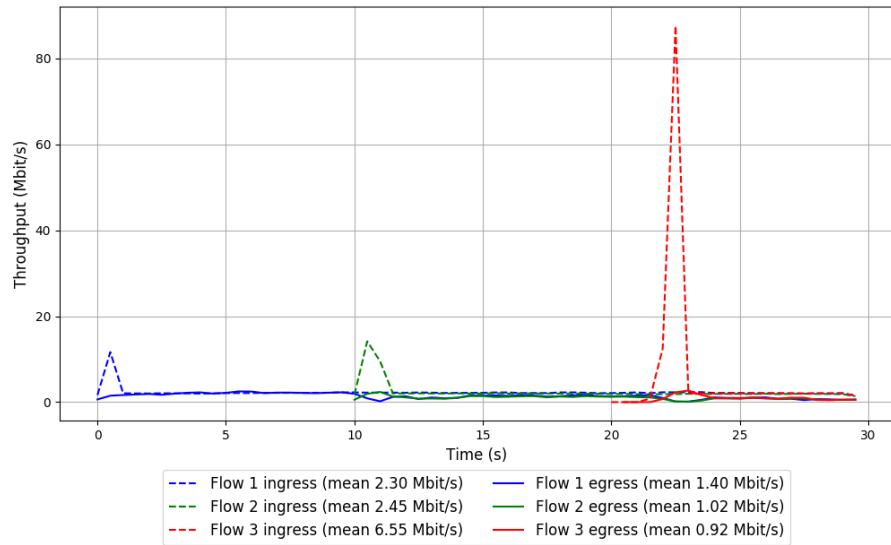


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2018-04-16 23:07:28
End at: 2018-04-16 23:07:58
Local clock offset: -1.377 ms
Remote clock offset: -6.717 ms

# Below is generated by plot.py at 2018-04-17 00:56:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 389.904 ms
Loss rate: 61.33%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 373.897 ms
Loss rate: 39.43%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 386.768 ms
Loss rate: 58.53%
-- Flow 3:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 778.293 ms
Loss rate: 86.83%
```

Run 1: Report of PCC-Allegro — Data Link

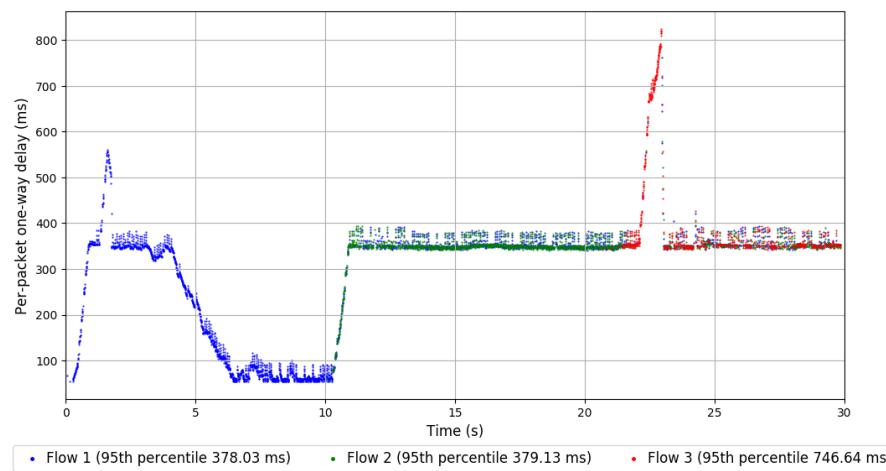
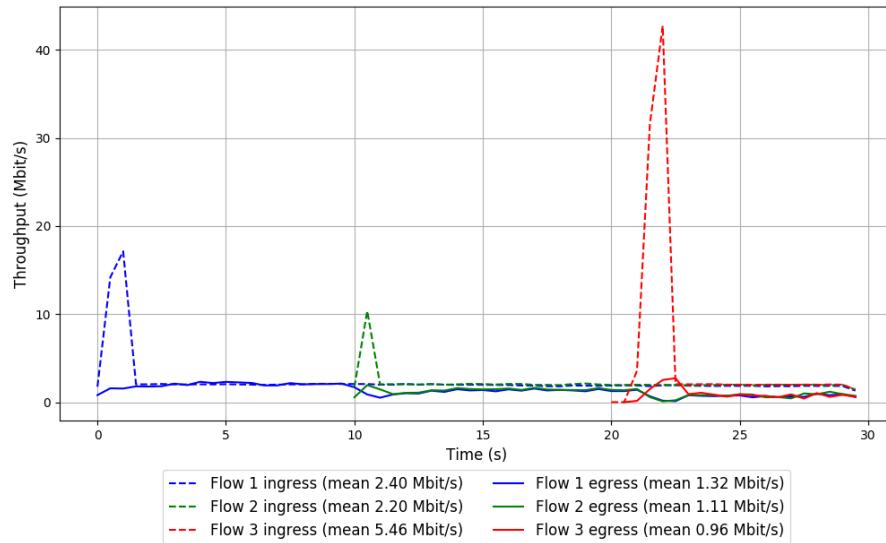


Run 2: Statistics of PCC-Allegro

```
Start at: 2018-04-16 23:26:14
End at: 2018-04-16 23:26:45
Local clock offset: -7.509 ms
Remote clock offset: -4.336 ms

# Below is generated by plot.py at 2018-04-17 00:56:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 389.513 ms
Loss rate: 58.54%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 378.033 ms
Loss rate: 45.05%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 379.134 ms
Loss rate: 49.88%
-- Flow 3:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 746.638 ms
Loss rate: 83.57%
```

Run 2: Report of PCC-Allegro — Data Link

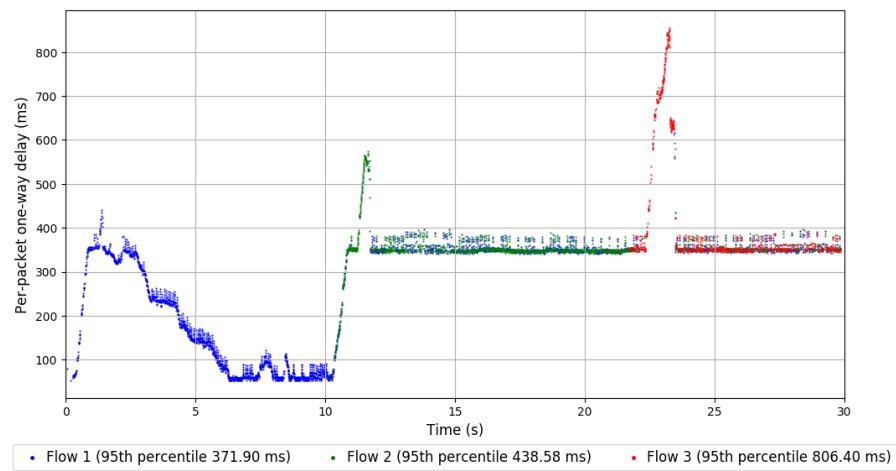
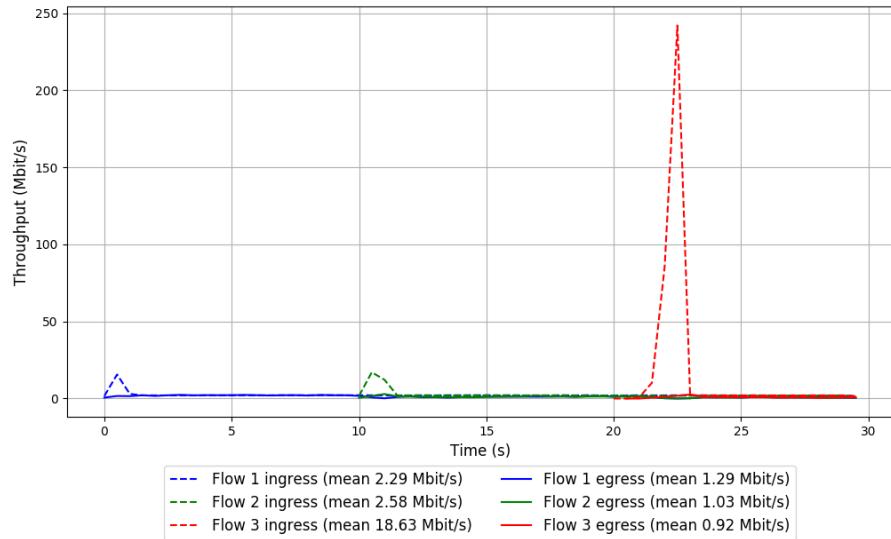


Run 3: Statistics of PCC-Allegro

```
Start at: 2018-04-16 23:44:58
End at: 2018-04-16 23:45:28
Local clock offset: -10.739 ms
Remote clock offset: -7.518 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 427.395 ms
Loss rate: 77.94%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 371.896 ms
Loss rate: 44.17%
-- Flow 2:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 438.576 ms
Loss rate: 60.36%
-- Flow 3:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 806.405 ms
Loss rate: 95.48%
```

Run 3: Report of PCC-Allegro — Data Link

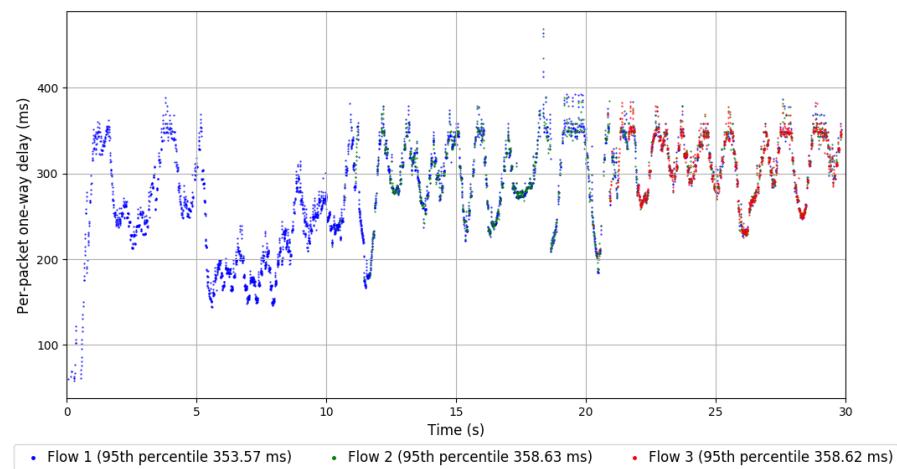
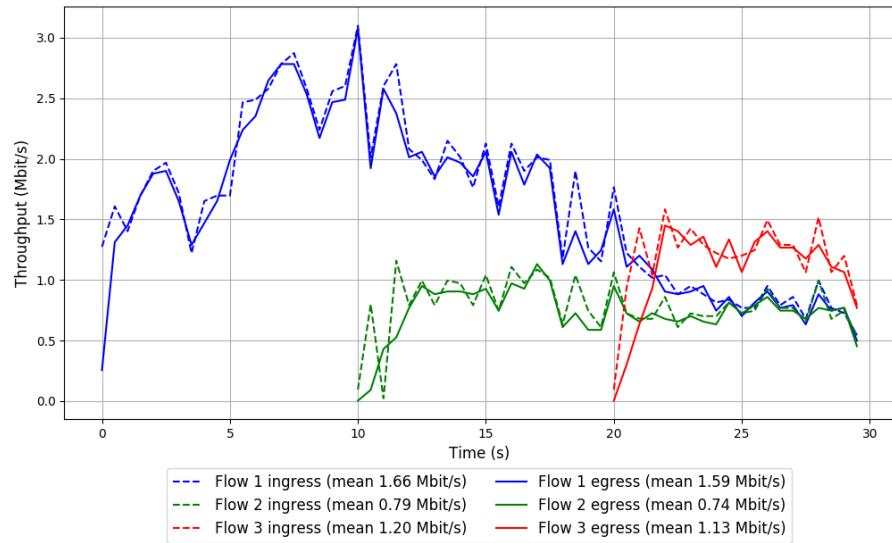


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-16 23:11:52
End at: 2018-04-16 23:12:22
Local clock offset: -4.338 ms
Remote clock offset: -6.55 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 354.391 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 353.570 ms
Loss rate: 4.23%
-- Flow 2:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 358.629 ms
Loss rate: 7.91%
-- Flow 3:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 358.616 ms
Loss rate: 8.81%
```

Run 1: Report of QUIC Cubic — Data Link

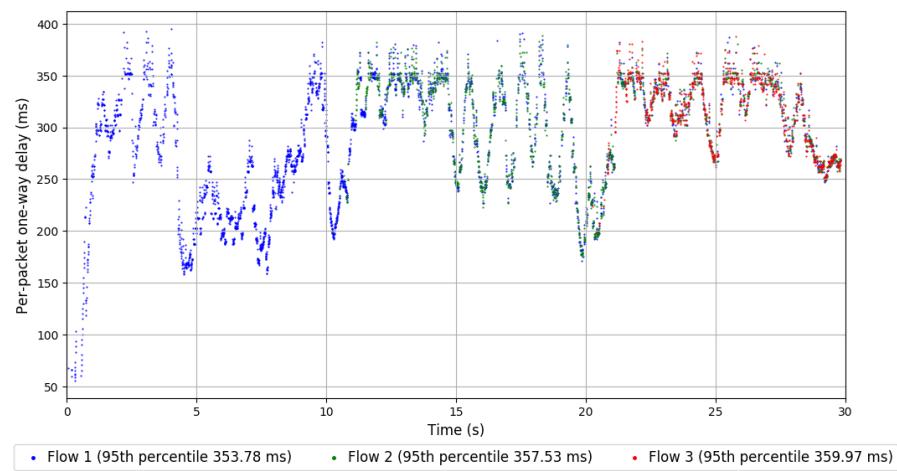
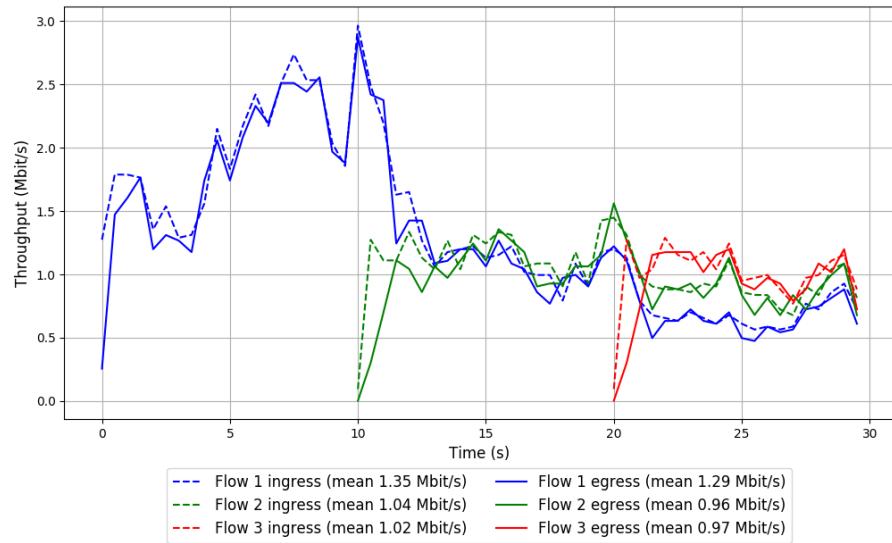


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-04-16 23:30:39
End at: 2018-04-16 23:31:09
Local clock offset: -8.855 ms
Remote clock offset: -6.005 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 356.410 ms
Loss rate: 6.40%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 353.781 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 357.526 ms
Loss rate: 8.25%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 359.967 ms
Loss rate: 7.89%
```

Run 2: Report of QUIC Cubic — Data Link

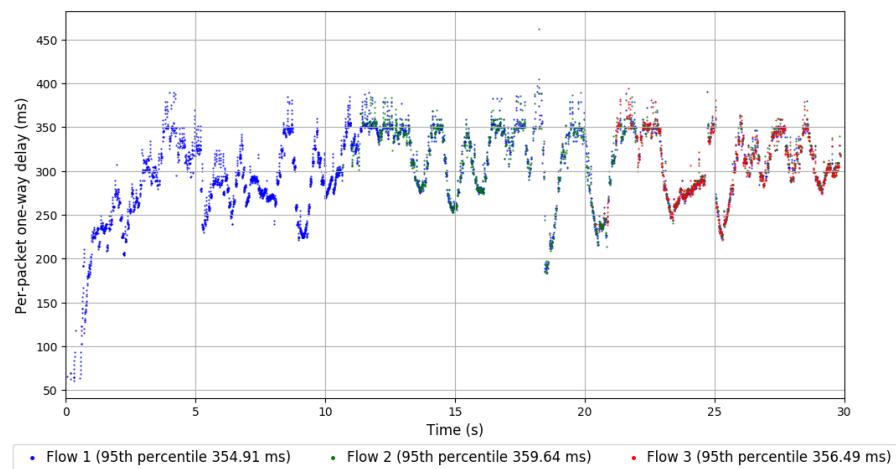
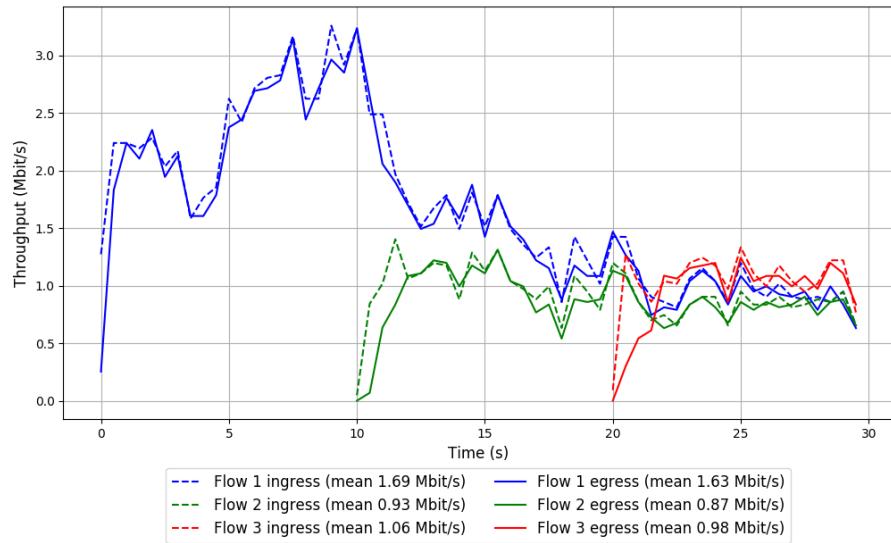


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-04-16 23:49:23
End at: 2018-04-16 23:49:53
Local clock offset: -14.263 ms
Remote clock offset: -14.935 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 357.111 ms
Loss rate: 5.65%
-- Flow 1:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 354.908 ms
Loss rate: 4.04%
-- Flow 2:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 359.636 ms
Loss rate: 7.60%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 356.491 ms
Loss rate: 10.04%
```

Run 3: Report of QUIC Cubic — Data Link

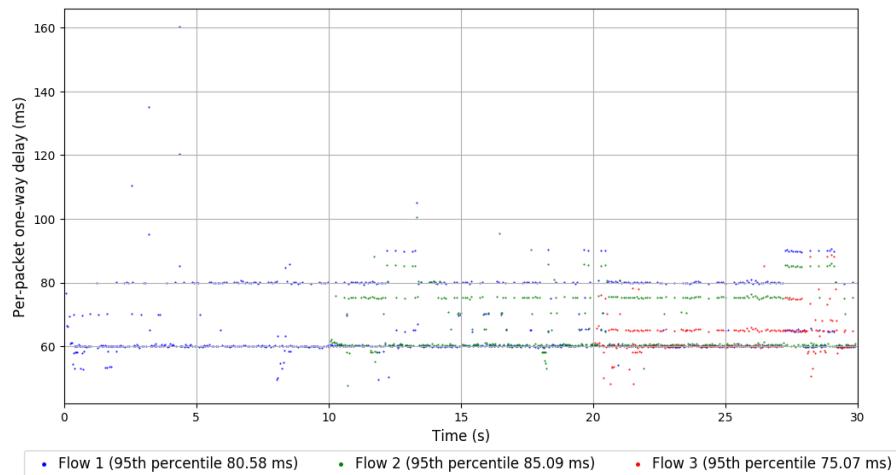
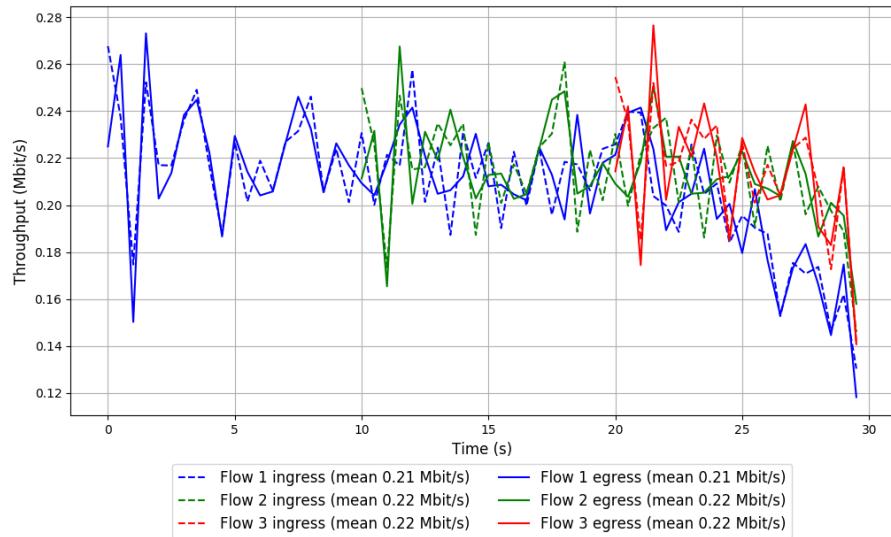


```
Run 1: Statistics of SCReAM

Start at: 2018-04-16 23:15:13
End at: 2018-04-16 23:15:43
Local clock offset: -5.277 ms
Remote clock offset: -6.133 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 80.559 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 80.578 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.086 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 75.072 ms
Loss rate: 0.63%
```

Run 1: Report of SCReAM — Data Link

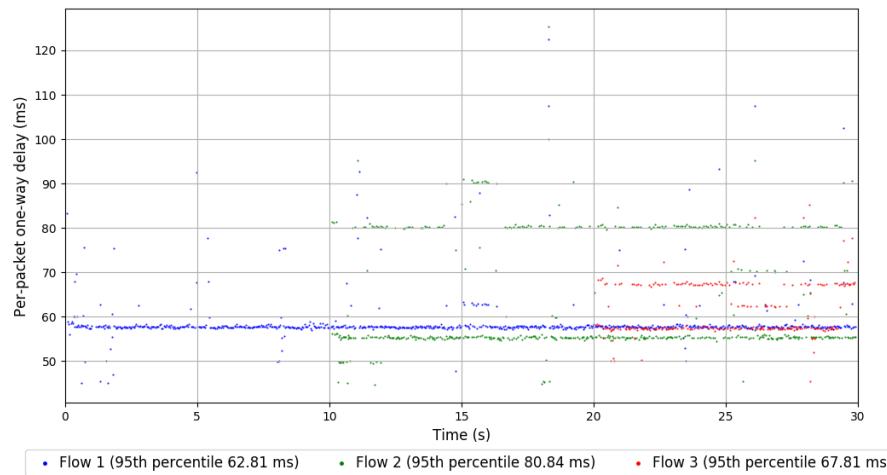
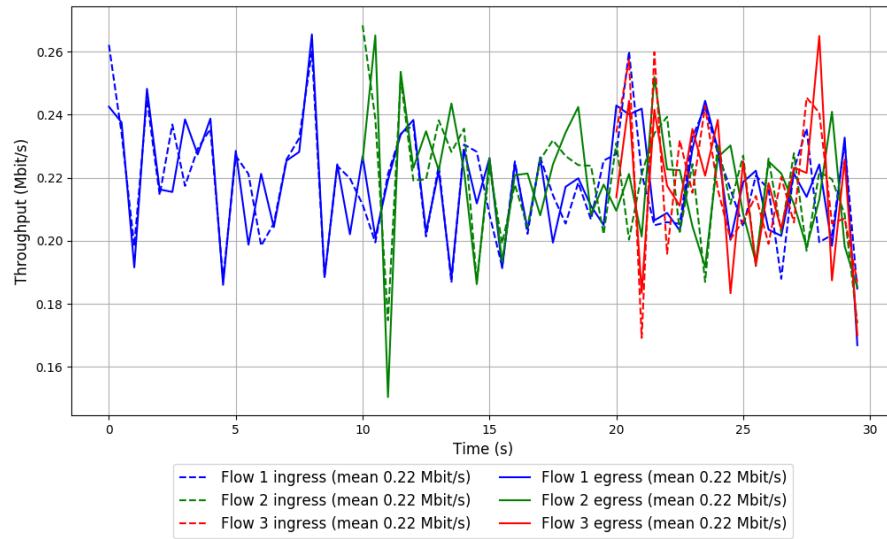


Run 2: Statistics of SCReAM

```
Start at: 2018-04-16 23:33:57
End at: 2018-04-16 23:34:27
Local clock offset: -10.112 ms
Remote clock offset: -5.813 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 80.288 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.815 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.837 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.813 ms
Loss rate: 0.75%
```

Run 2: Report of SCReAM — Data Link

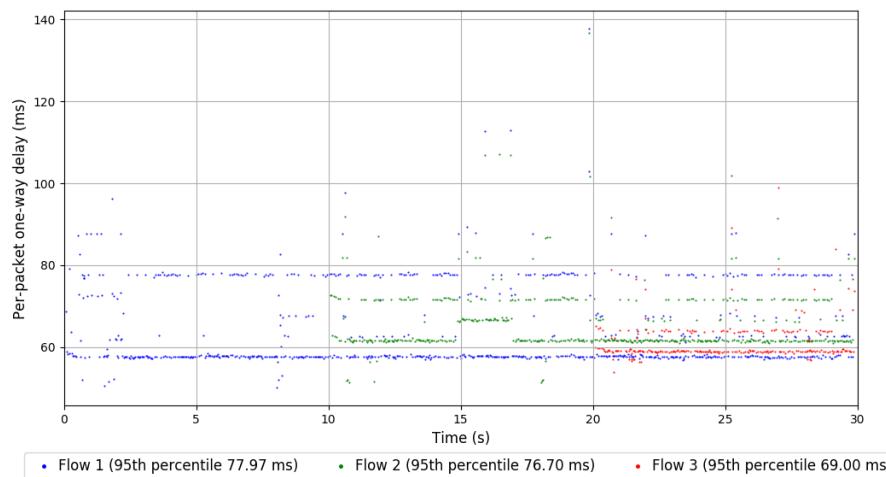
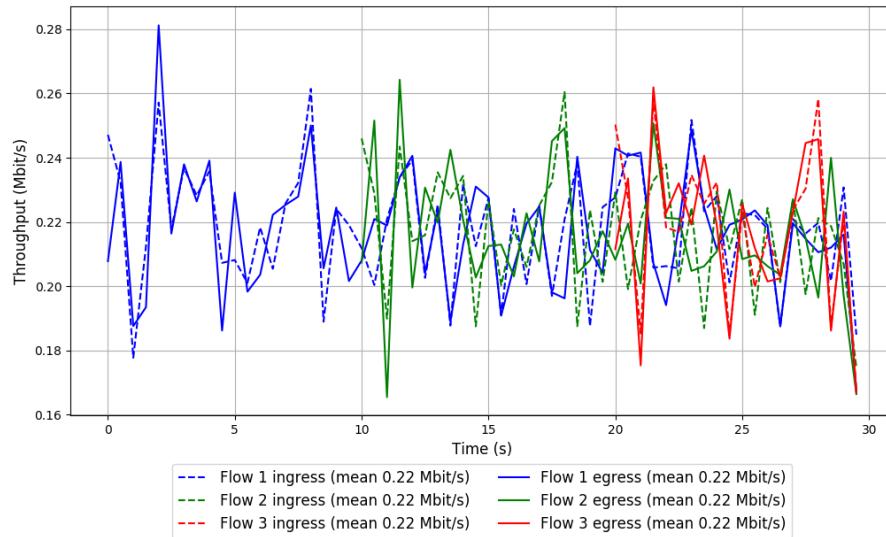


Run 3: Statistics of SCReAM

```
Start at: 2018-04-16 23:52:41
End at: 2018-04-16 23:53:11
Local clock offset: -8.867 ms
Remote clock offset: -7.966 ms

# Below is generated by plot.py at 2018-04-17 00:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 77.857 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.968 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 76.701 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.004 ms
Loss rate: 0.74%
```

Run 3: Report of SCReAM — Data Link

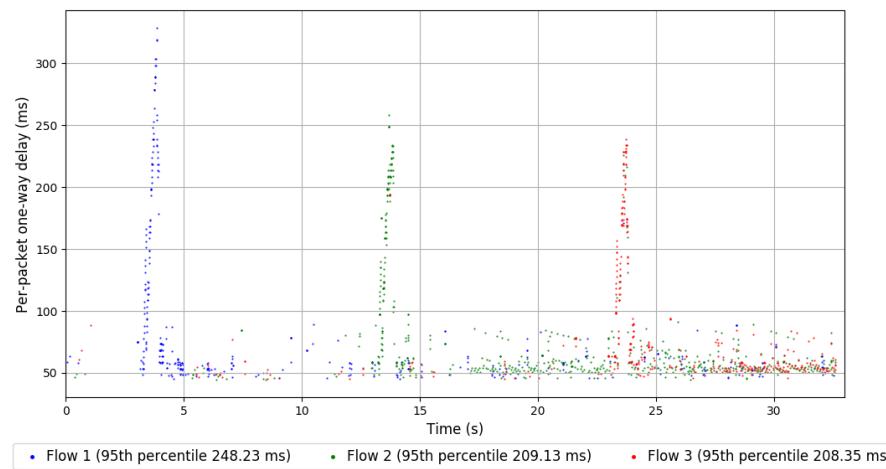
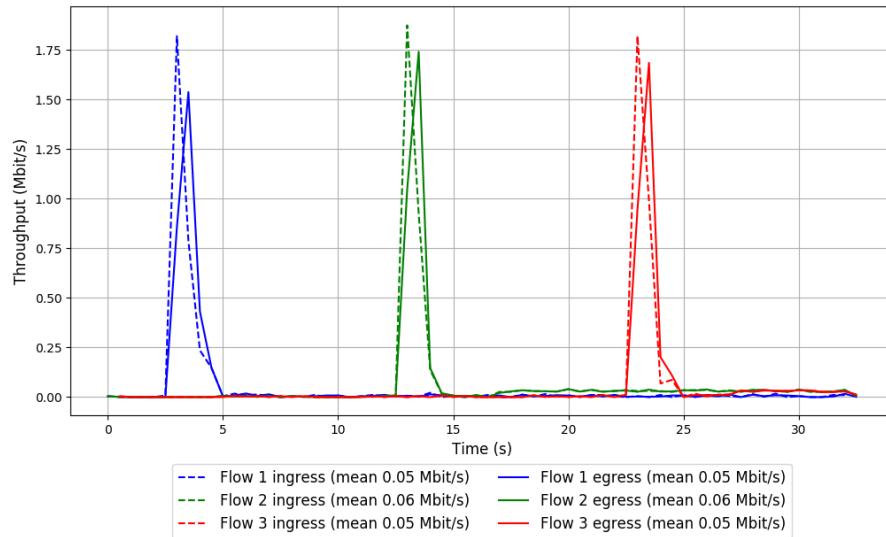


```
Run 1: Statistics of WebRTC media
```

```
Start at: 2018-04-16 23:08:34
End at: 2018-04-16 23:09:04
Local clock offset: -2.32 ms
Remote clock offset: -5.403 ms

# Below is generated by plot.py at 2018-04-17 00:56:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 218.354 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 248.233 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 209.134 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 208.347 ms
Loss rate: 0.82%
```

Run 1: Report of WebRTC media — Data Link

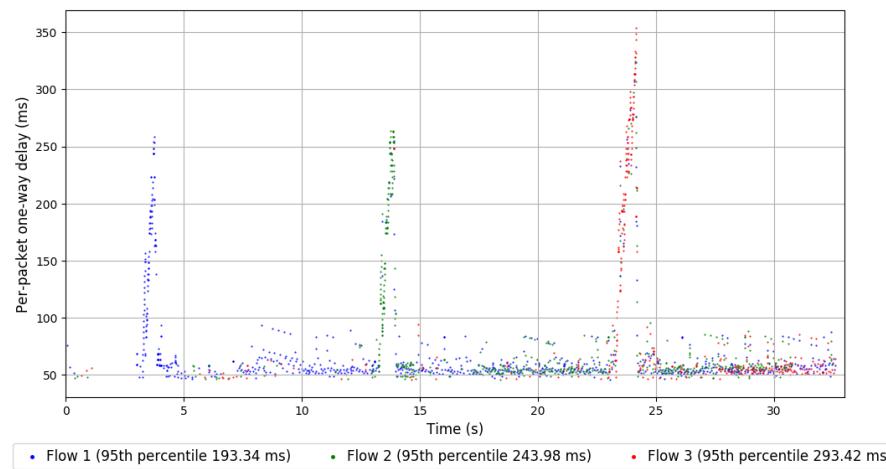
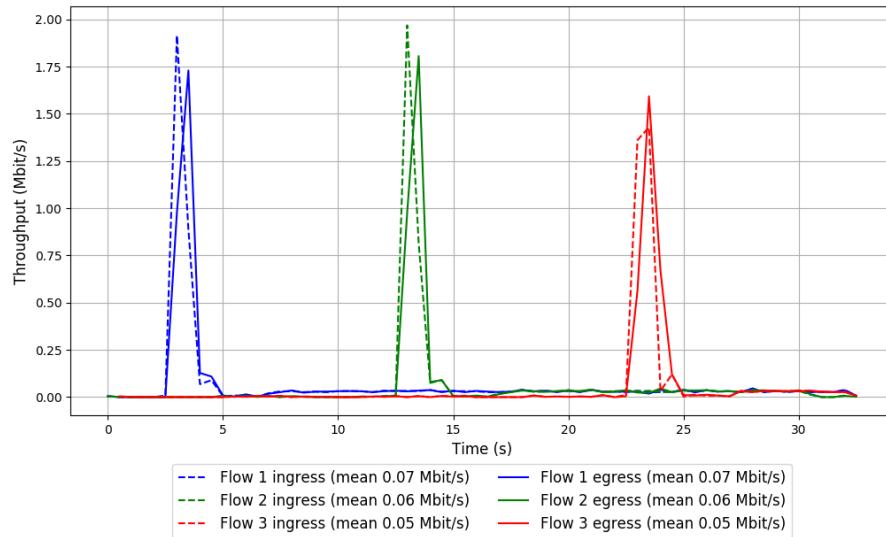


Run 2: Statistics of WebRTC media

```
Start at: 2018-04-16 23:27:21
End at: 2018-04-16 23:27:51
Local clock offset: -8.355 ms
Remote clock offset: -4.976 ms

# Below is generated by plot.py at 2018-04-17 00:56:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 248.460 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 193.338 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 243.976 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 293.420 ms
Loss rate: 0.12%
```

Run 2: Report of WebRTC media — Data Link

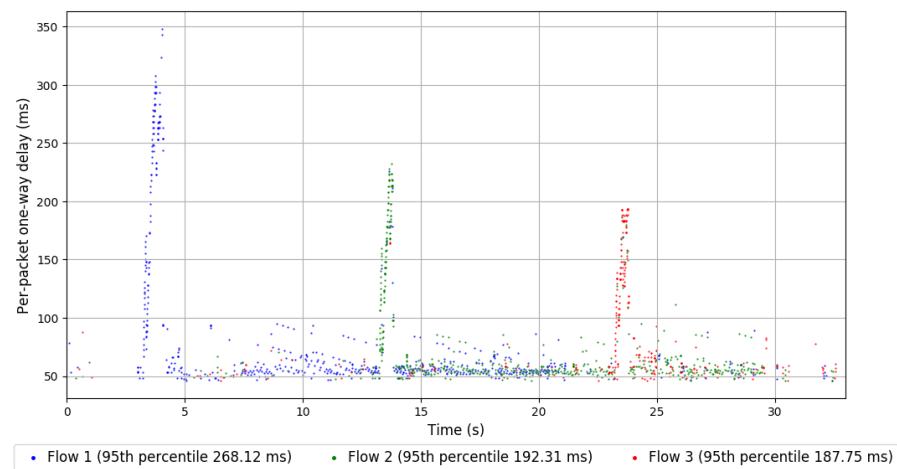
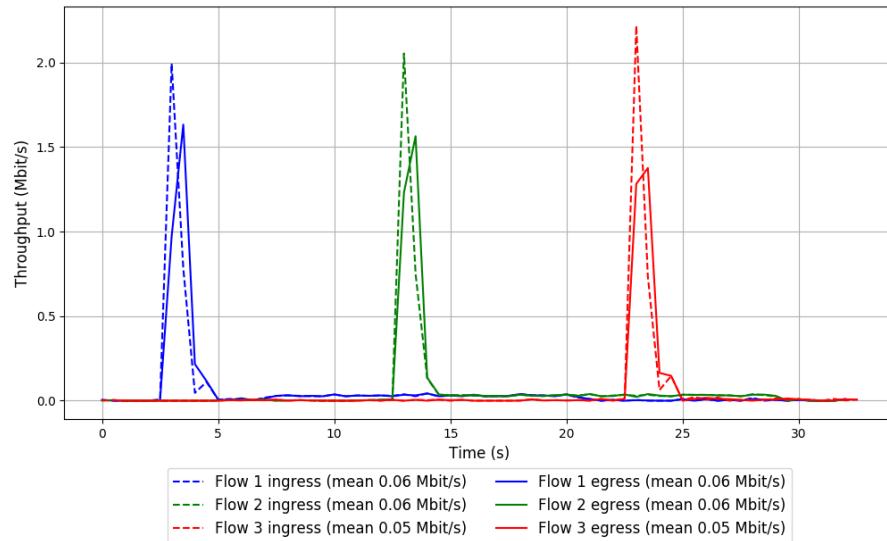


Run 3: Statistics of WebRTC media

```
Start at: 2018-04-16 23:46:04
End at: 2018-04-16 23:46:34
Local clock offset: -9.481 ms
Remote clock offset: -7.415 ms

# Below is generated by plot.py at 2018-04-17 00:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 223.235 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 268.122 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 192.306 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 187.749 ms
Loss rate: 5.73%
```

Run 3: Report of WebRTC media — Data Link

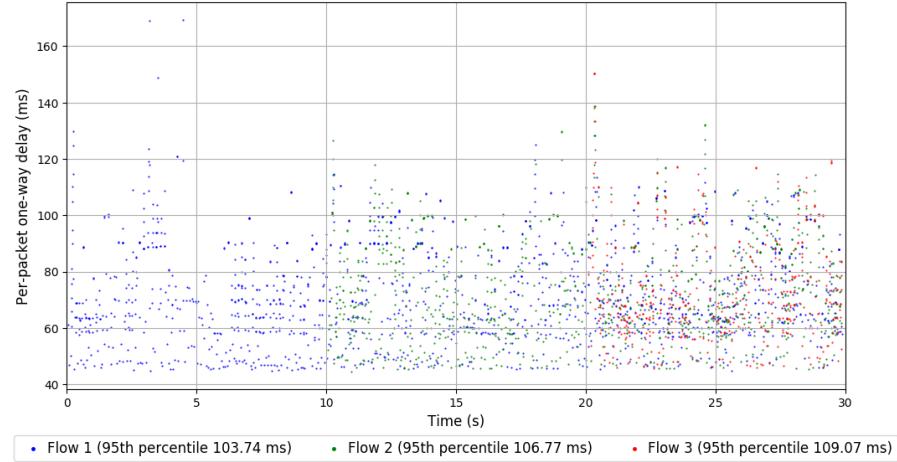
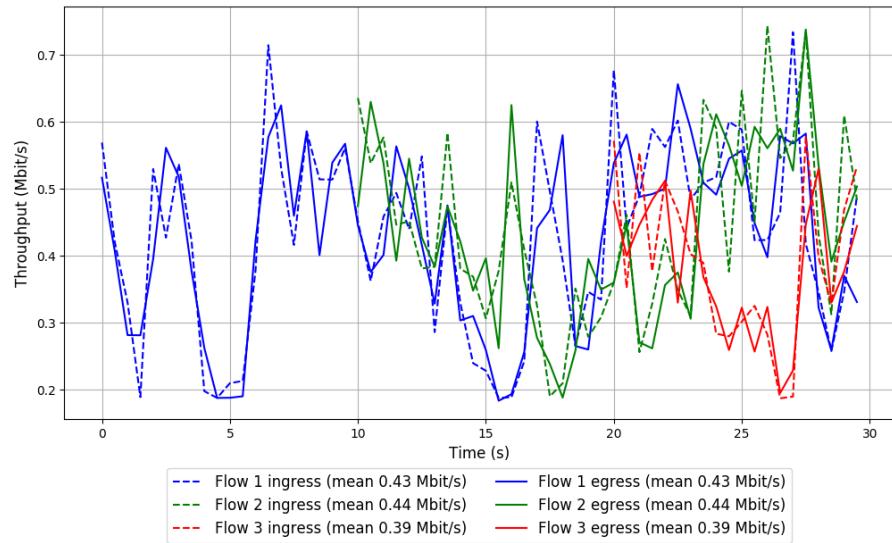


Run 1: Statistics of Sprout

```
Start at: 2018-04-16 23:19:38
End at: 2018-04-16 23:20:08
Local clock offset: -7.354 ms
Remote clock offset: -4.793 ms

# Below is generated by plot.py at 2018-04-17 00:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 105.336 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 103.743 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 106.765 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 109.071 ms
Loss rate: 2.88%
```

Run 1: Report of Sprout — Data Link

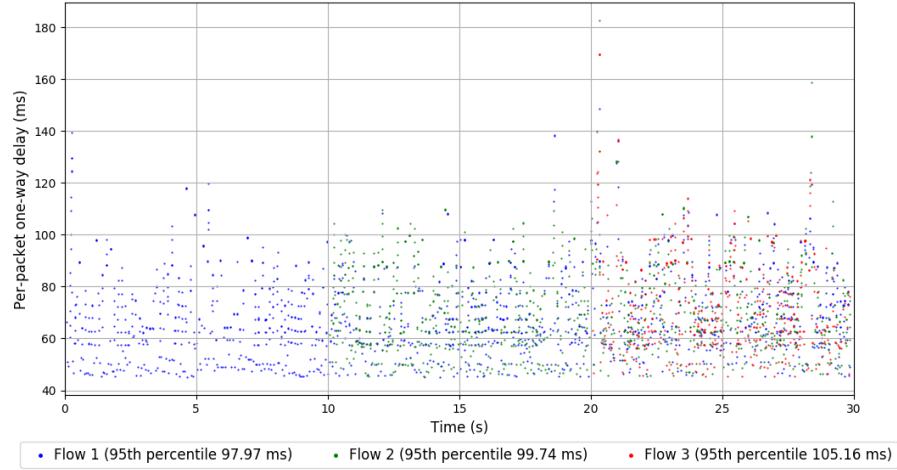
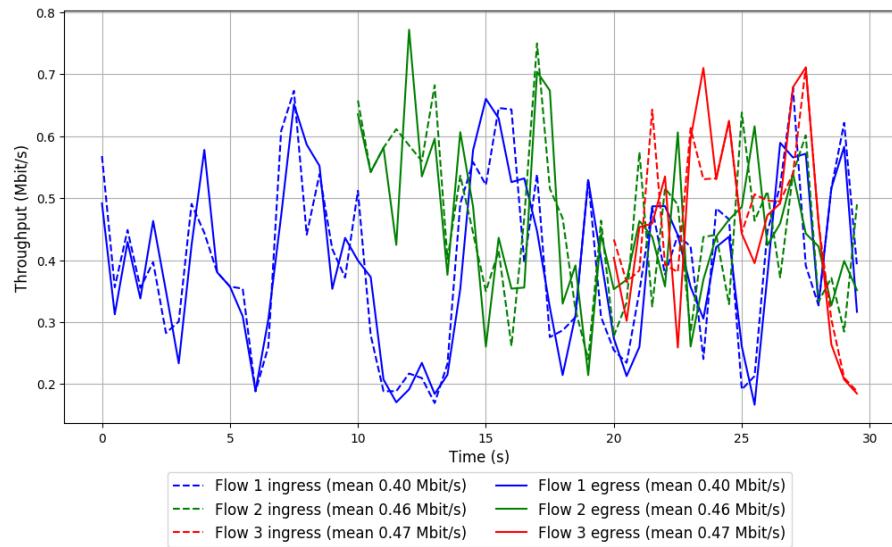


Run 2: Statistics of Sprout

```
Start at: 2018-04-16 23:38:21
End at: 2018-04-16 23:38:51
Local clock offset: -9.968 ms
Remote clock offset: -6.739 ms

# Below is generated by plot.py at 2018-04-17 00:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 99.494 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 97.970 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 99.736 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 105.157 ms
Loss rate: 0.75%
```

Run 2: Report of Sprout — Data Link

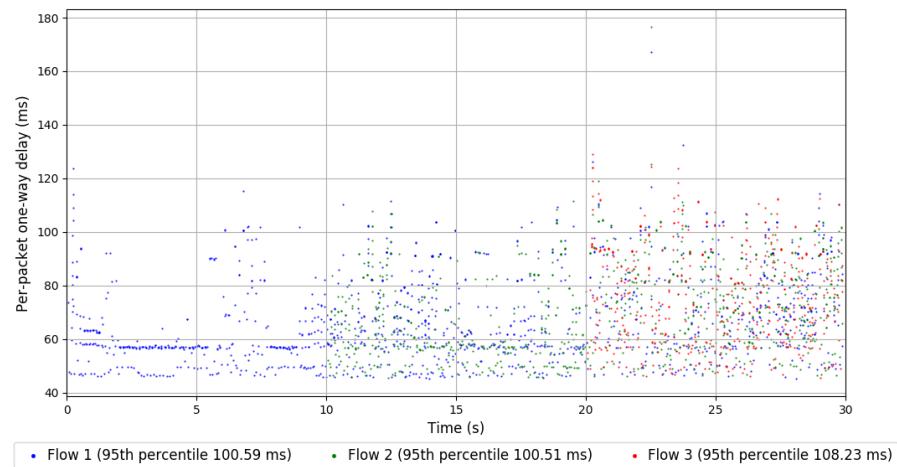
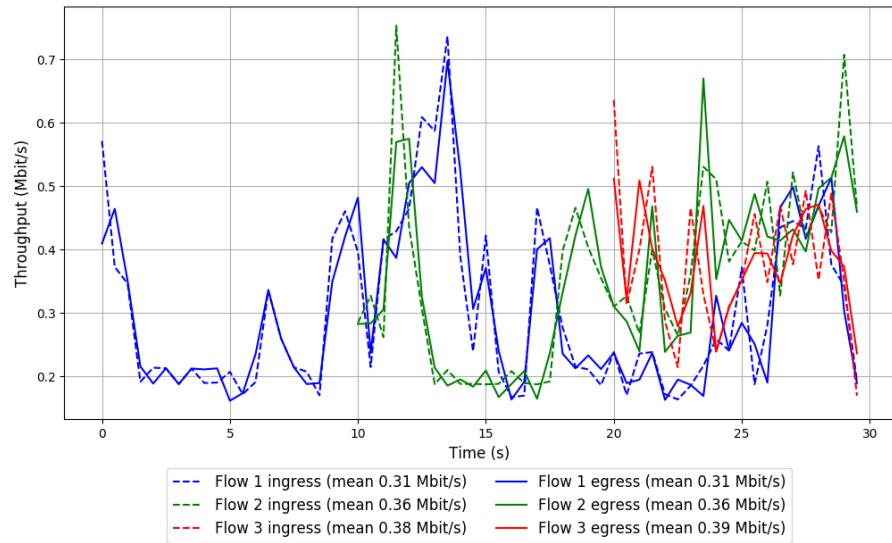


Run 3: Statistics of Sprout

```
Start at: 2018-04-16 23:57:05
End at: 2018-04-16 23:57:35
Local clock offset: -10.6 ms
Remote clock offset: -8.144 ms

# Below is generated by plot.py at 2018-04-17 00:56:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 102.046 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 100.587 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 100.513 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 108.229 ms
Loss rate: 0.04%
```

Run 3: Report of Sprout — Data Link

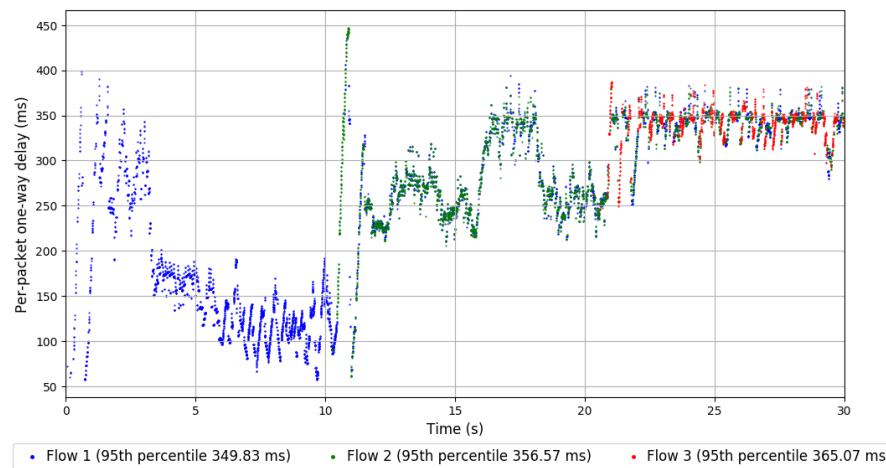
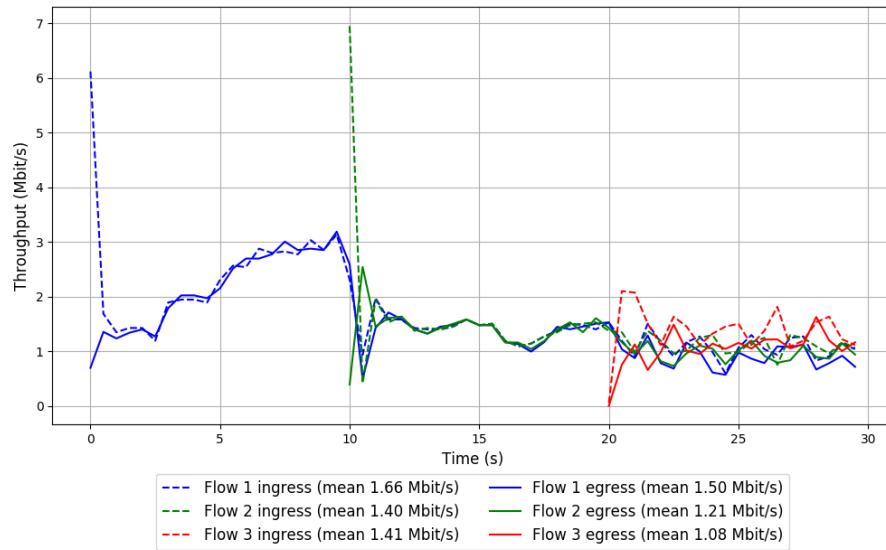


Run 1: Statistics of TaoVA-100x

```
Start at: 2018-04-16 23:09:40
End at: 2018-04-16 23:10:10
Local clock offset: -2.99 ms
Remote clock offset: -6.551 ms

# Below is generated by plot.py at 2018-04-17 00:56:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 353.989 ms
Loss rate: 13.38%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 349.828 ms
Loss rate: 10.20%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 356.566 ms
Loss rate: 14.05%
-- Flow 3:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 365.075 ms
Loss rate: 23.56%
```

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

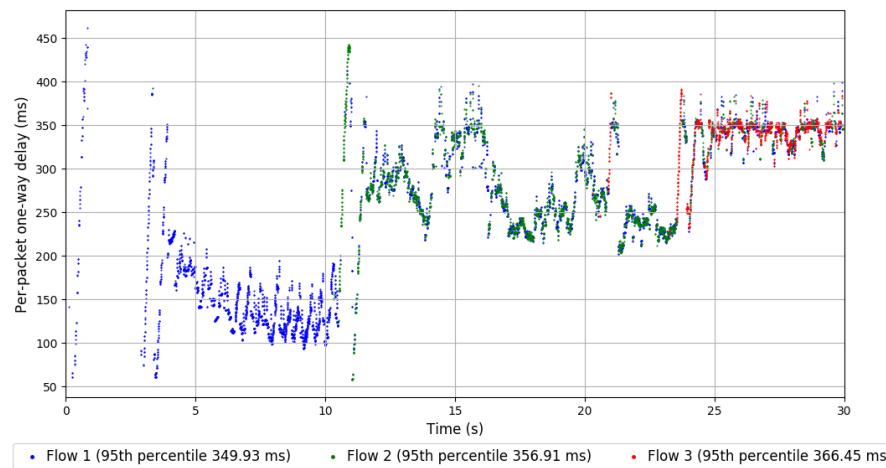
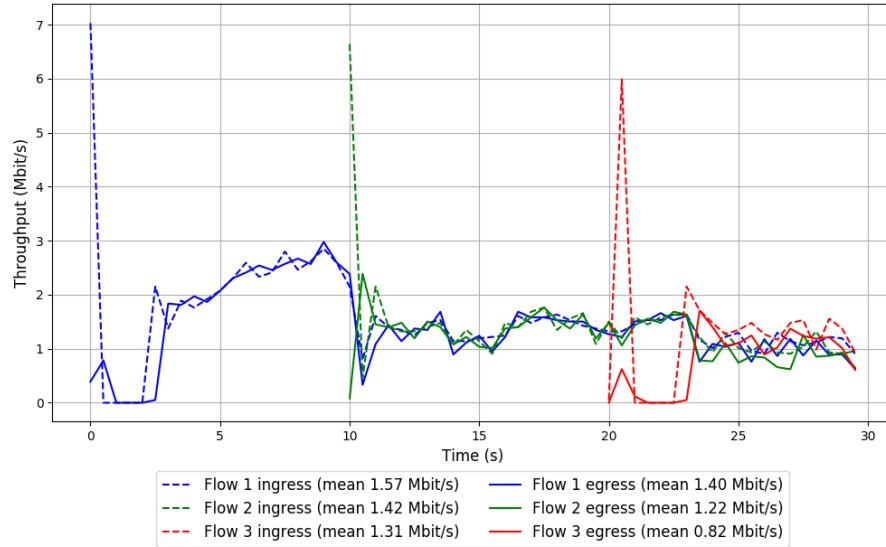


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-04-16 23:28:27
End at: 2018-04-16 23:28:57
Local clock offset: -7.865 ms
Remote clock offset: -5.51 ms

# Below is generated by plot.py at 2018-04-17 00:56:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 353.928 ms
Loss rate: 16.36%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 349.931 ms
Loss rate: 11.30%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 356.911 ms
Loss rate: 14.73%
-- Flow 3:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 366.450 ms
Loss rate: 38.48%
```

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

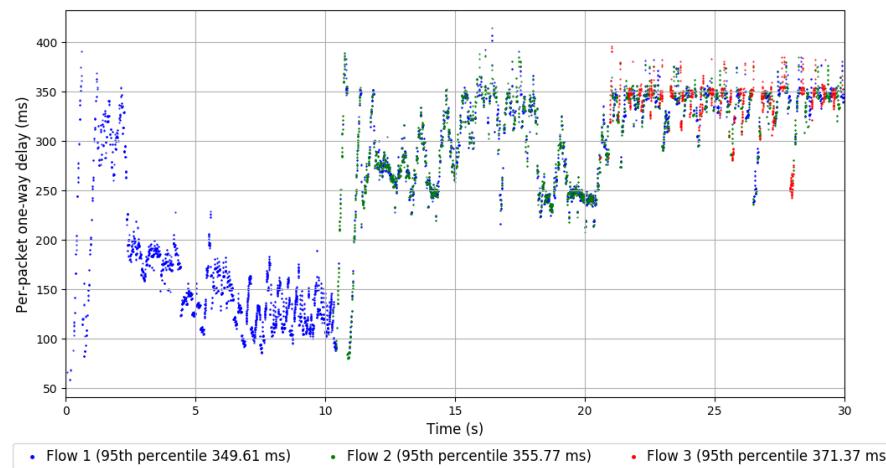
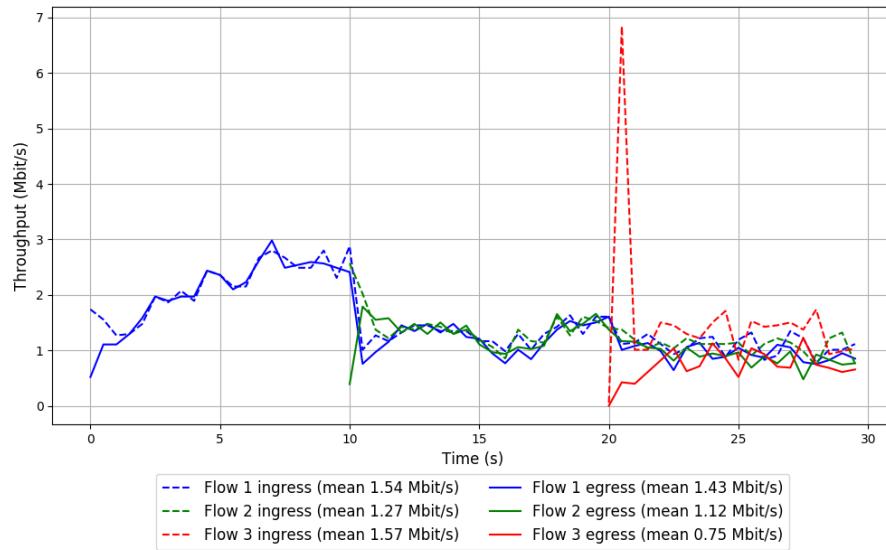


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-04-16 23:47:10
End at: 2018-04-16 23:47:40
Local clock offset: -9.742 ms
Remote clock offset: -7.422 ms

# Below is generated by plot.py at 2018-04-17 00:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 353.419 ms
Loss rate: 16.60%
-- Flow 1:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 349.606 ms
Loss rate: 7.07%
-- Flow 2:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 355.774 ms
Loss rate: 12.34%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 371.370 ms
Loss rate: 52.60%
```

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

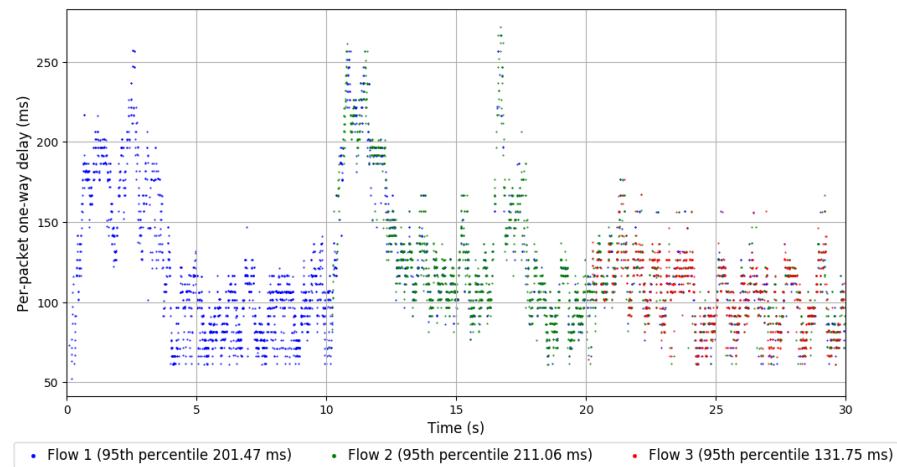
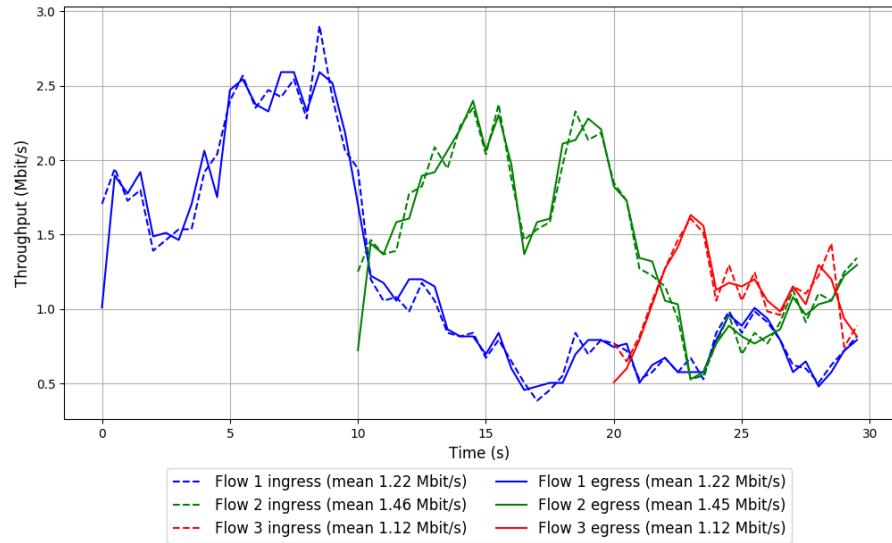


Run 1: Statistics of TCP Vegas

```
Start at: 2018-04-16 23:04:09
End at: 2018-04-16 23:04:39
Local clock offset: -0.667 ms
Remote clock offset: -6.683 ms

# Below is generated by plot.py at 2018-04-17 00:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 201.112 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 201.474 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 211.064 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 131.755 ms
Loss rate: 1.61%
```

Run 1: Report of TCP Vegas — Data Link

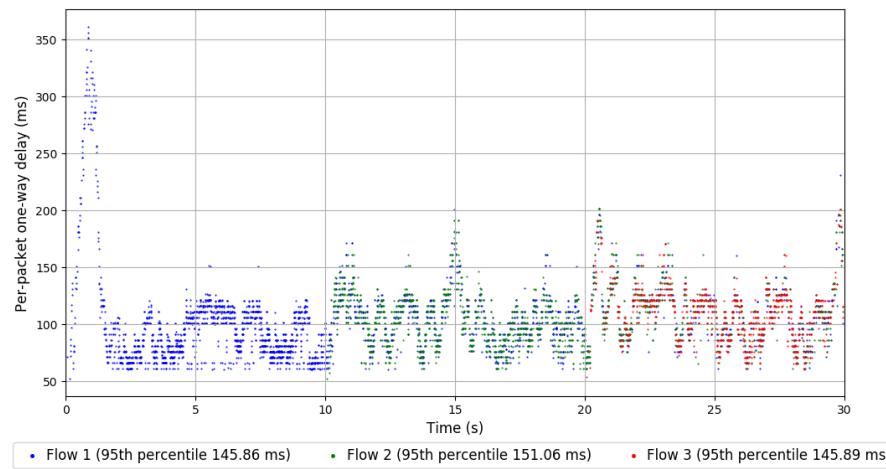
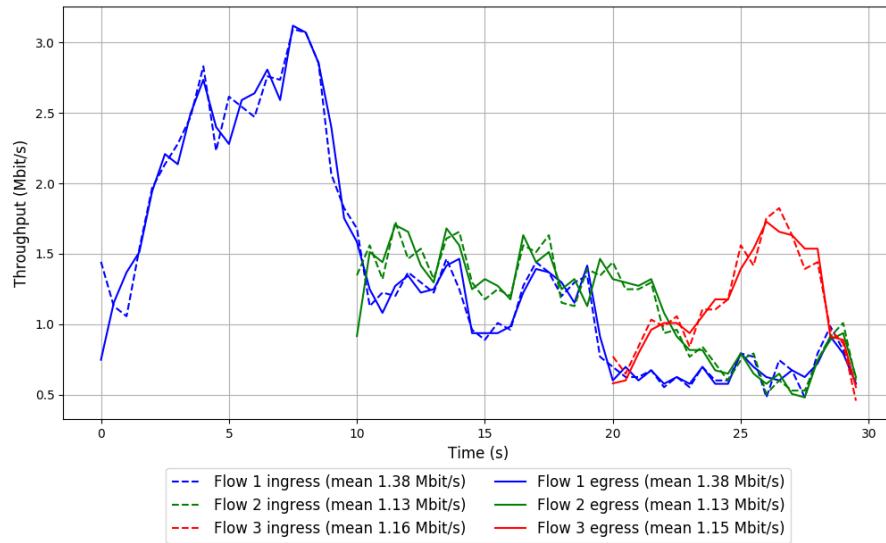


Run 2: Statistics of TCP Vegas

```
Start at: 2018-04-16 23:22:56
End at: 2018-04-16 23:23:26
Local clock offset: -6.803 ms
Remote clock offset: -5.054 ms

# Below is generated by plot.py at 2018-04-17 00:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 150.284 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 145.863 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 151.063 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 145.891 ms
Loss rate: 0.84%
```

Run 2: Report of TCP Vegas — Data Link

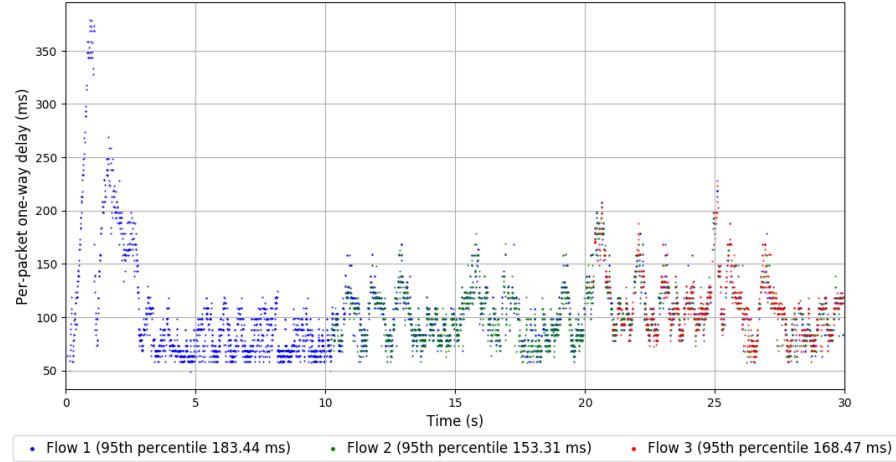
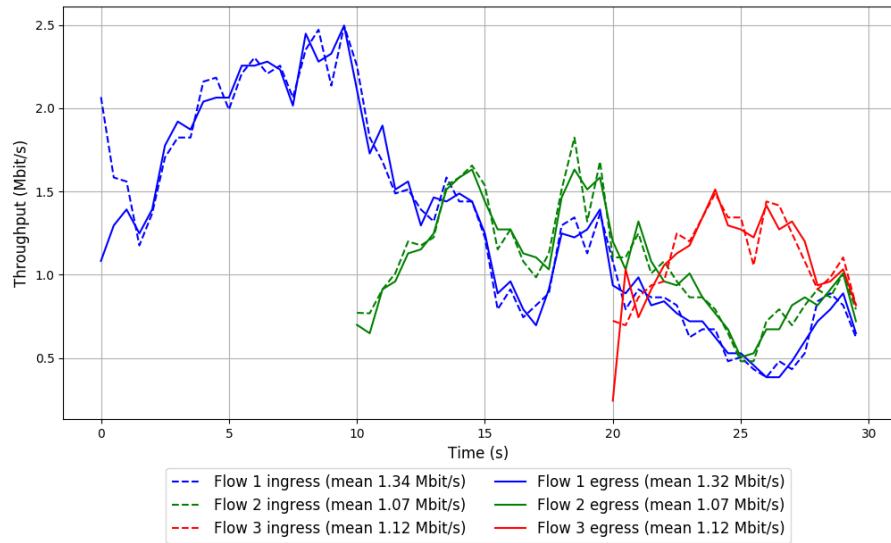


Run 3: Statistics of TCP Vegas

```
Start at: 2018-04-16 23:41:40
End at: 2018-04-16 23:42:10
Local clock offset: -10.866 ms
Remote clock offset: -7.217 ms

# Below is generated by plot.py at 2018-04-17 00:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 168.440 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 183.438 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 153.311 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 168.467 ms
Loss rate: 1.41%
```

Run 3: Report of TCP Vegas — Data Link

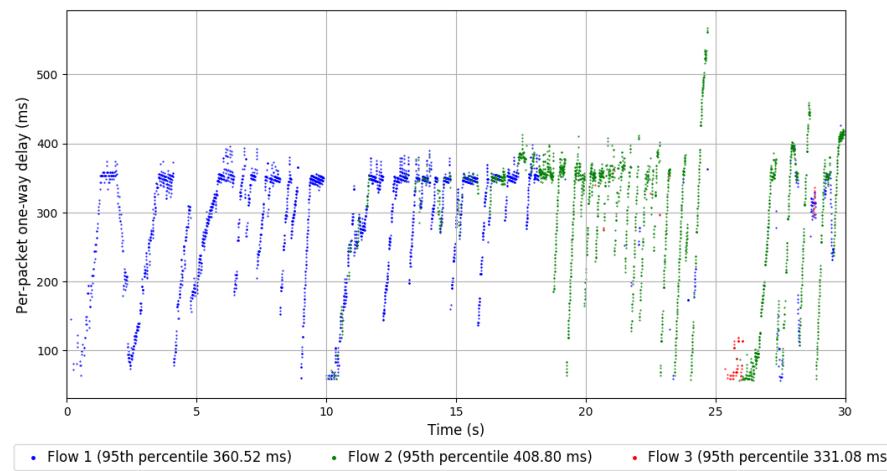
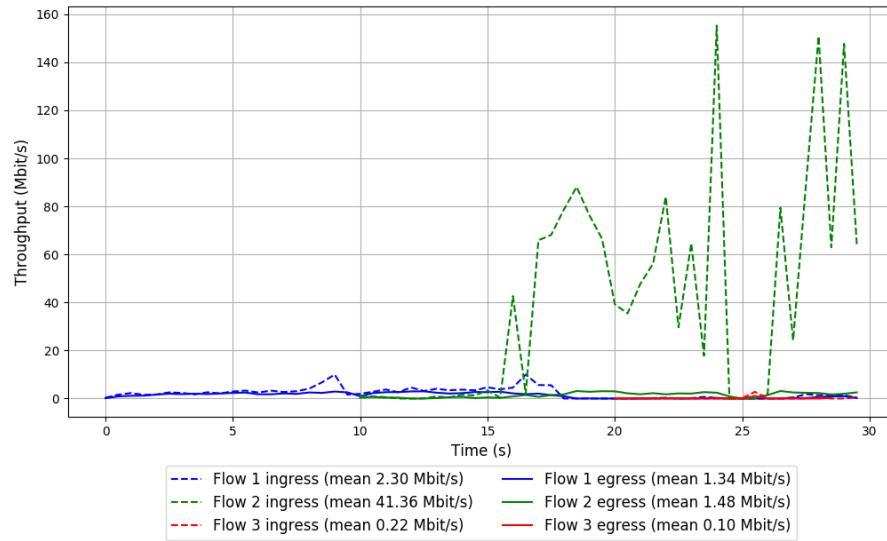


Run 1: Statistics of Verus

```
Start at: 2018-04-16 23:14:05
End at: 2018-04-16 23:14:35
Local clock offset: -5.351 ms
Remote clock offset: -5.958 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 384.050 ms
Loss rate: 92.17%
-- Flow 1:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 360.519 ms
Loss rate: 41.27%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 408.799 ms
Loss rate: 96.44%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 331.079 ms
Loss rate: 60.96%
```

Run 1: Report of Verus — Data Link

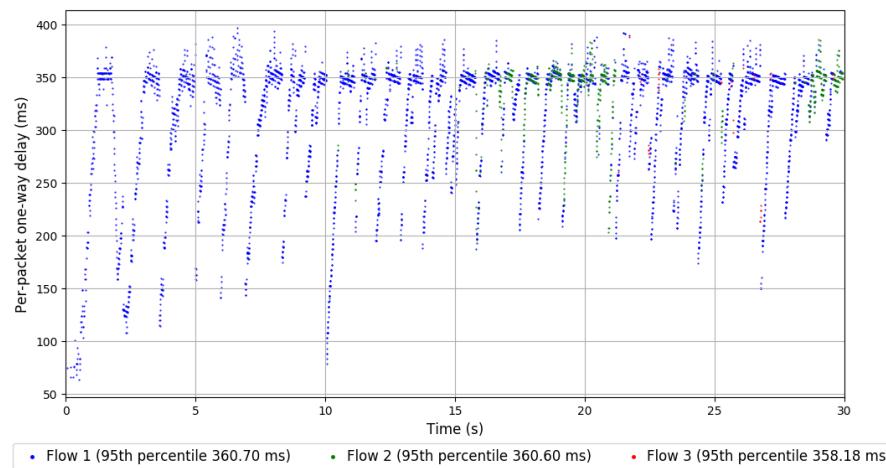
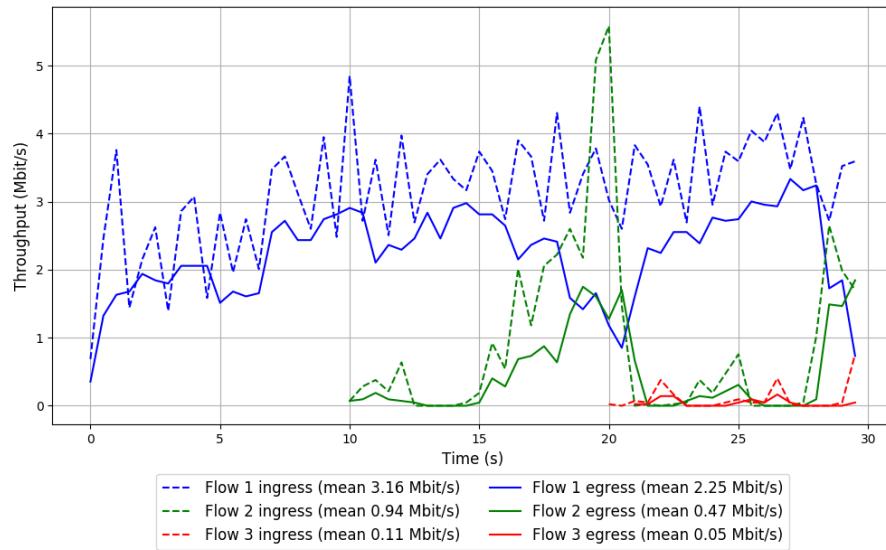


Run 2: Statistics of Verus

```
Start at: 2018-04-16 23:32:51
End at: 2018-04-16 23:33:21
Local clock offset: -8.379 ms
Remote clock offset: -6.833 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 360.695 ms
Loss rate: 32.82%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 360.704 ms
Loss rate: 29.08%
-- Flow 2:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 360.603 ms
Loss rate: 50.16%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 358.183 ms
Loss rate: 63.74%
```

Run 2: Report of Verus — Data Link

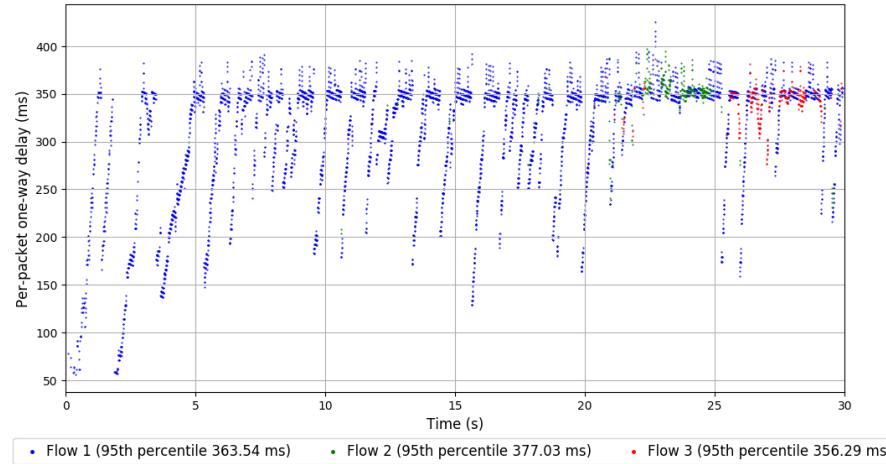
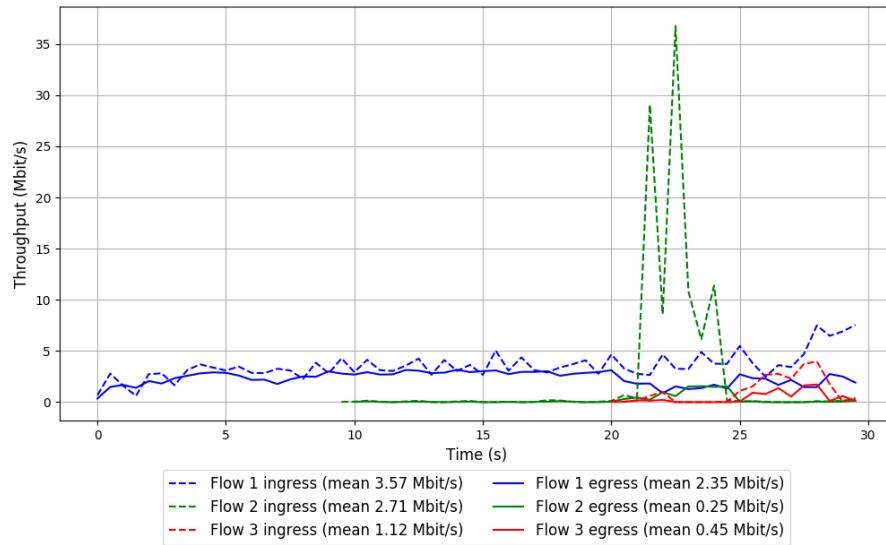


Run 3: Statistics of Verus

```
Start at: 2018-04-16 23:51:35
End at: 2018-04-16 23:52:05
Local clock offset: -10.268 ms
Remote clock offset: -7.999 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 364.850 ms
Loss rate: 53.68%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 363.537 ms
Loss rate: 34.31%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 377.030 ms
Loss rate: 90.92%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 356.286 ms
Loss rate: 61.81%
```

Run 3: Report of Verus — Data Link

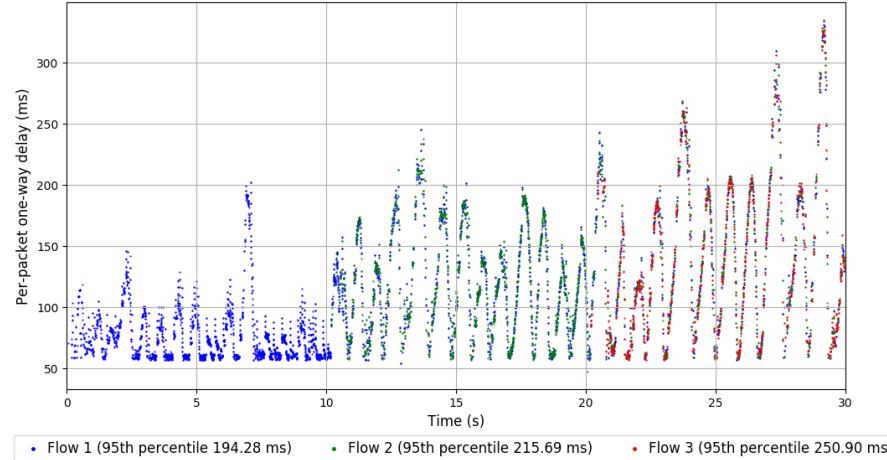
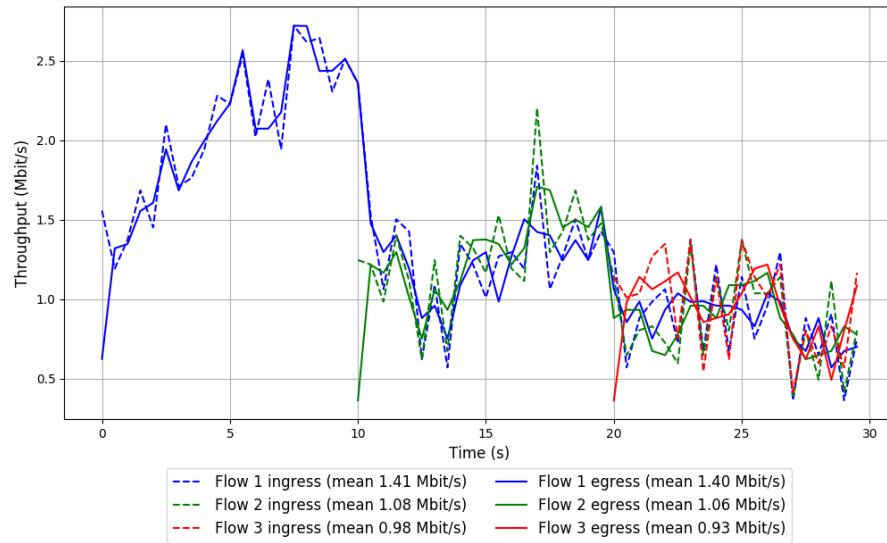


Run 1: Statistics of Copa

```
Start at: 2018-04-16 23:12:58
End at: 2018-04-16 23:13:28
Local clock offset: -4.973 ms
Remote clock offset: -6.453 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 207.756 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 194.278 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 215.693 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 250.898 ms
Loss rate: 4.60%
```

Run 1: Report of Copa — Data Link

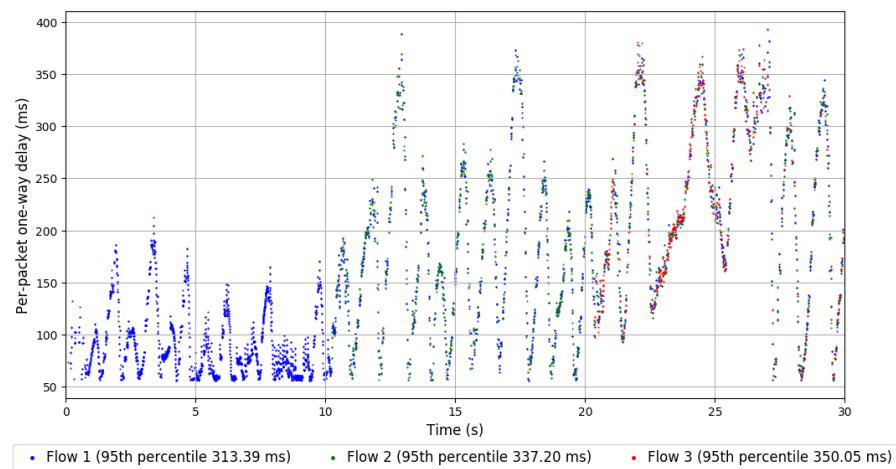
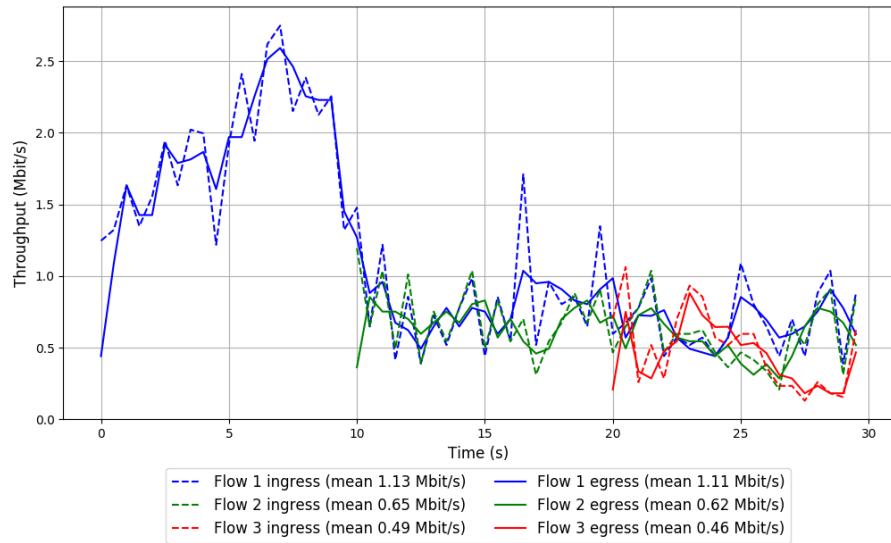


Run 2: Statistics of Copa

```
Start at: 2018-04-16 23:31:45
End at: 2018-04-16 23:32:15
Local clock offset: -9.207 ms
Remote clock offset: -5.966 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 329.696 ms
Loss rate: 3.40%
-- Flow 1:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 313.395 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 337.204 ms
Loss rate: 4.90%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 350.054 ms
Loss rate: 9.46%
```

Run 2: Report of Copa — Data Link

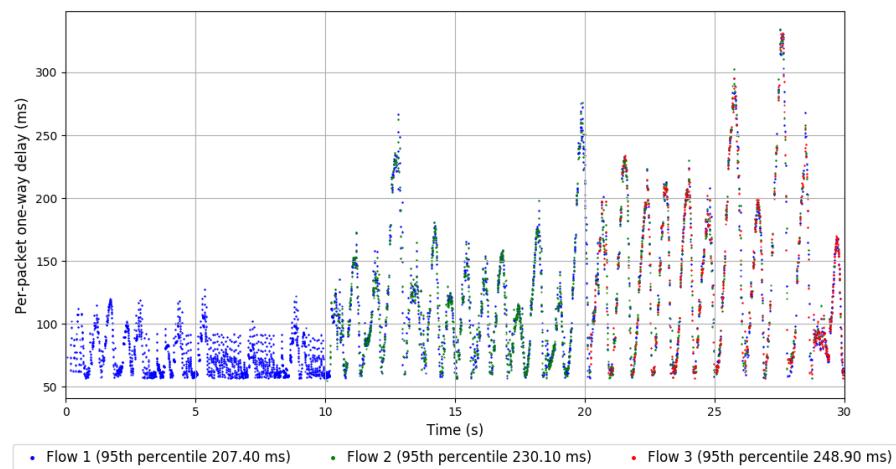
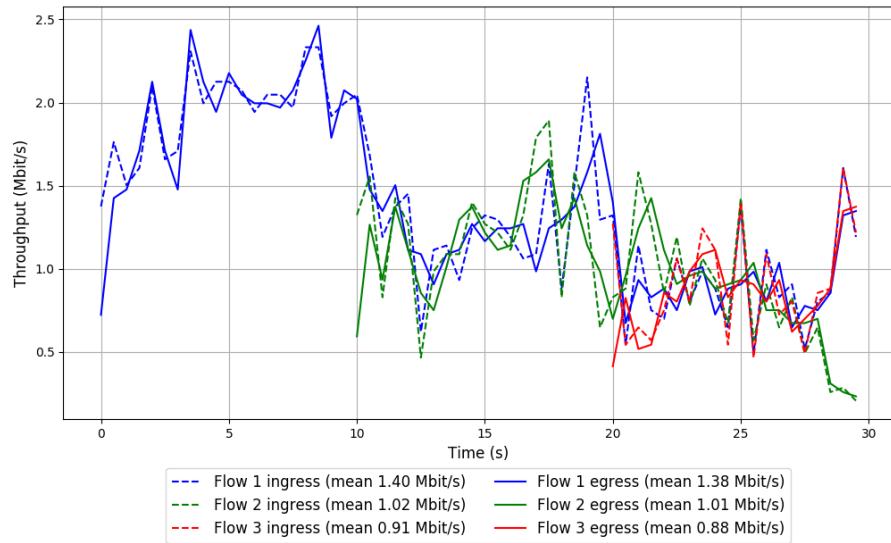


Run 3: Statistics of Copa

```
Start at: 2018-04-16 23:50:29
End at: 2018-04-16 23:50:59
Local clock offset: -9.608 ms
Remote clock offset: -7.962 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 225.701 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 207.402 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 230.103 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 248.900 ms
Loss rate: 4.62%
```

Run 3: Report of Copa — Data Link

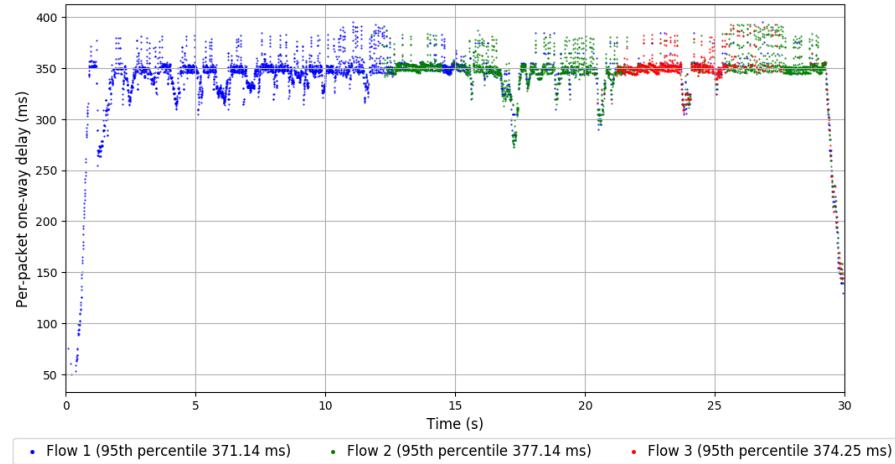
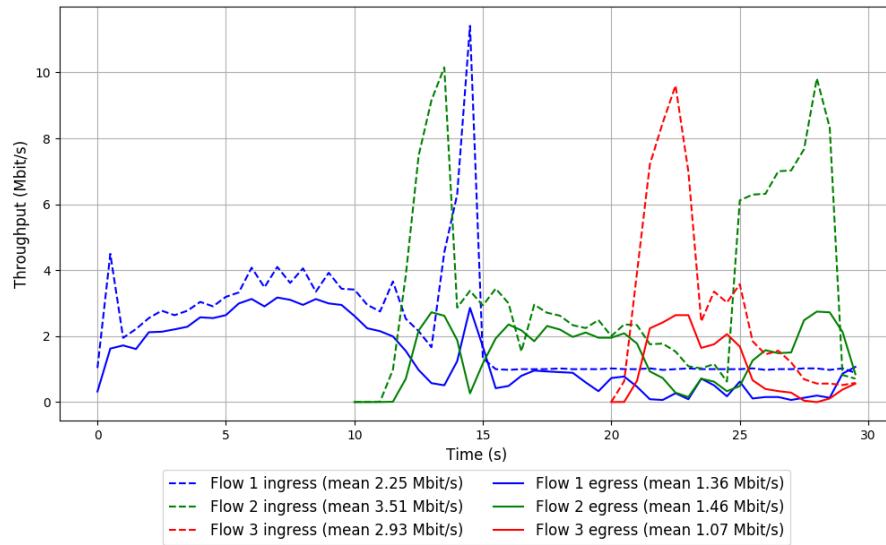


```
Run 1: Statistics of FillP

Start at: 2018-04-16 23:05:15
End at: 2018-04-16 23:05:45
Local clock offset: -1.1 ms
Remote clock offset: -5.373 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 374.256 ms
Loss rate: 52.22%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 371.144 ms
Loss rate: 39.68%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 377.139 ms
Loss rate: 59.07%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 374.252 ms
Loss rate: 64.75%
```

Run 1: Report of FillP — Data Link

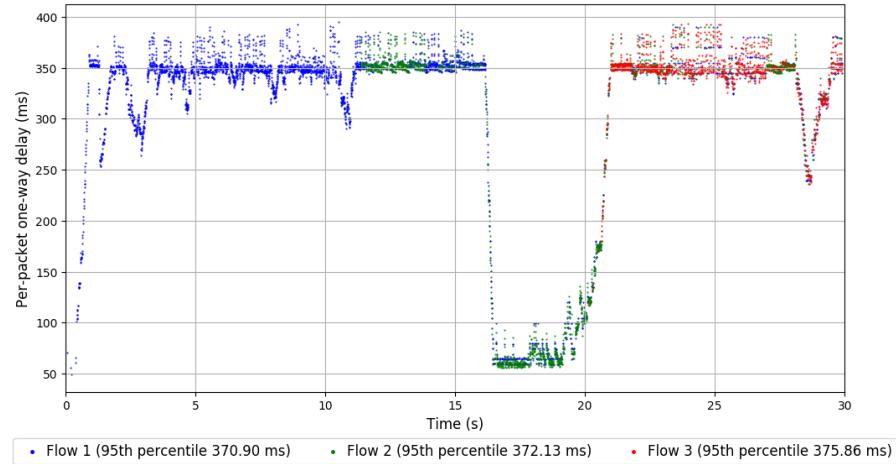
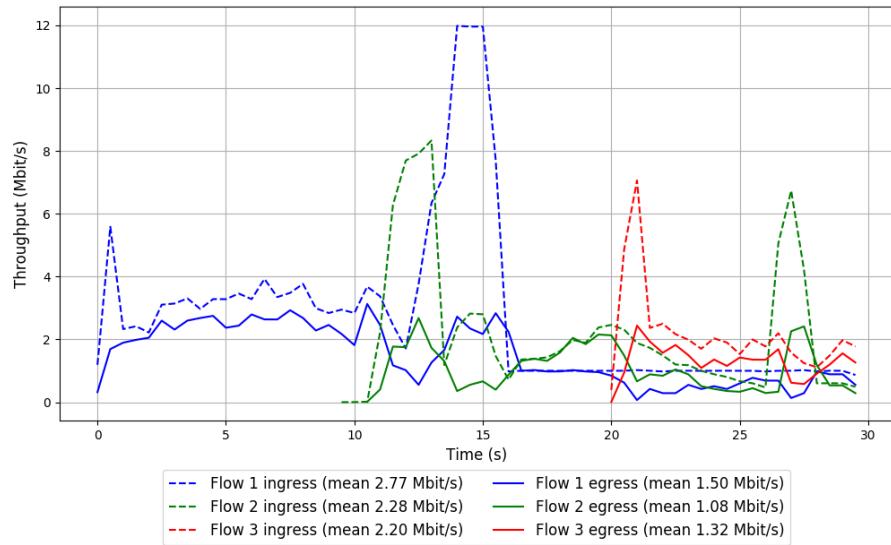


Run 2: Statistics of FillP

```
Start at: 2018-04-16 23:24:02
End at: 2018-04-16 23:24:32
Local clock offset: -7.894 ms
Remote clock offset: -5.032 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 372.484 ms
Loss rate: 47.62%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 370.896 ms
Loss rate: 45.99%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 372.126 ms
Loss rate: 53.79%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 375.860 ms
Loss rate: 40.98%
```

Run 2: Report of FillP — Data Link

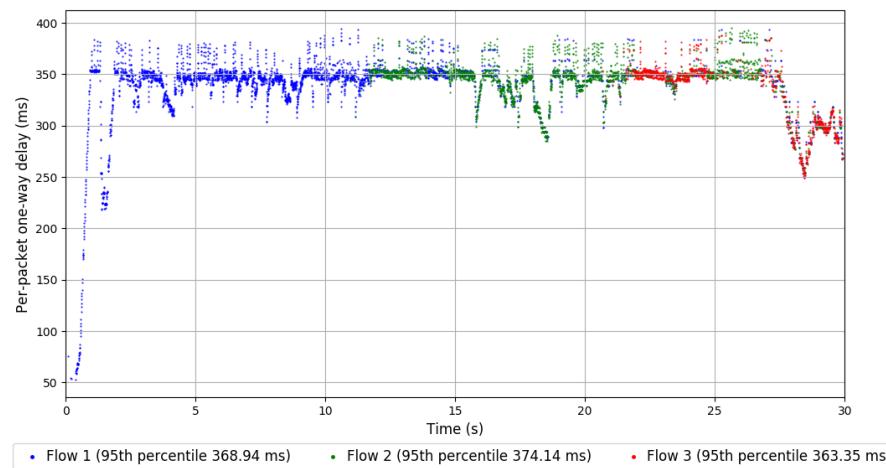
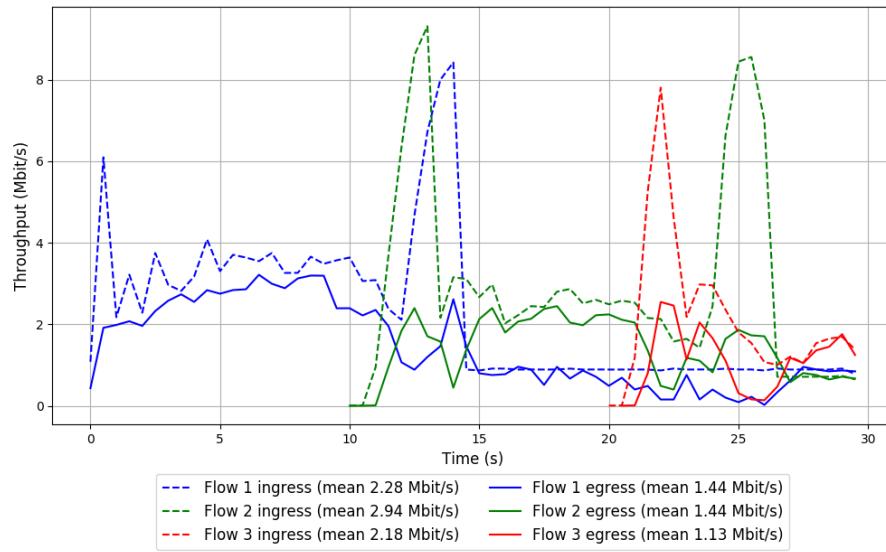


Run 3: Statistics of FillP

```
Start at: 2018-04-16 23:42:46
End at: 2018-04-16 23:43:16
Local clock offset: -10.818 ms
Remote clock offset: -7.891 ms

# Below is generated by plot.py at 2018-04-17 00:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 371.068 ms
Loss rate: 45.25%
-- Flow 1:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 368.936 ms
Loss rate: 37.05%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 374.137 ms
Loss rate: 52.38%
-- Flow 3:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 363.348 ms
Loss rate: 51.75%
```

Run 3: Report of FillP — Data Link

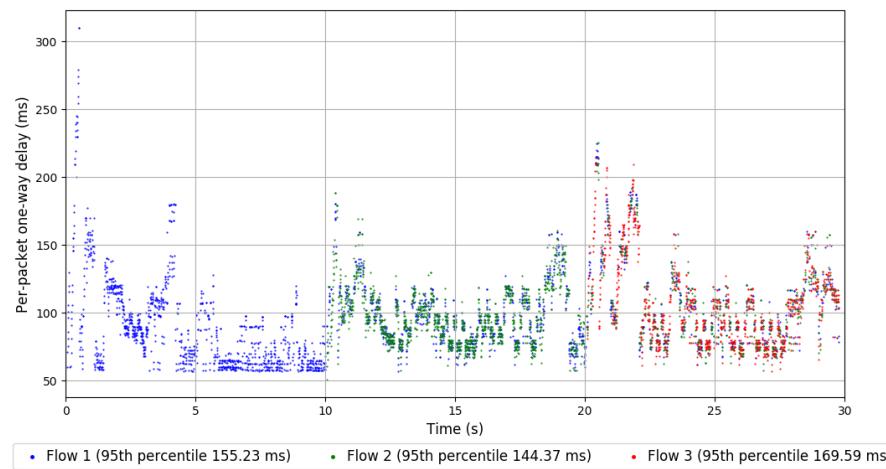
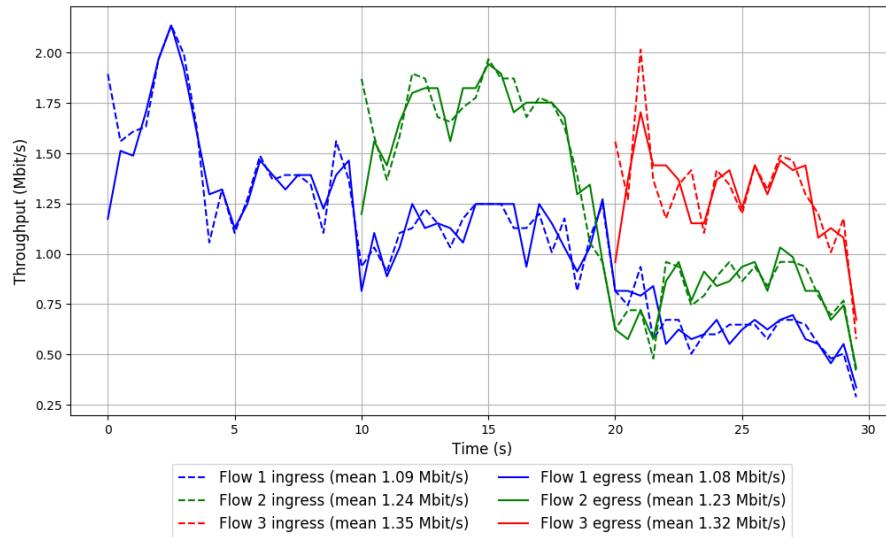


Run 1: Statistics of Indigo-1-32

```
Start at: 2018-04-16 23:06:22
End at: 2018-04-16 23:06:52
Local clock offset: -2.133 ms
Remote clock offset: -6.917 ms

# Below is generated by plot.py at 2018-04-17 00:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 157.693 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 155.231 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 144.373 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 169.590 ms
Loss rate: 2.20%
```

Run 1: Report of Indigo-1-32 — Data Link

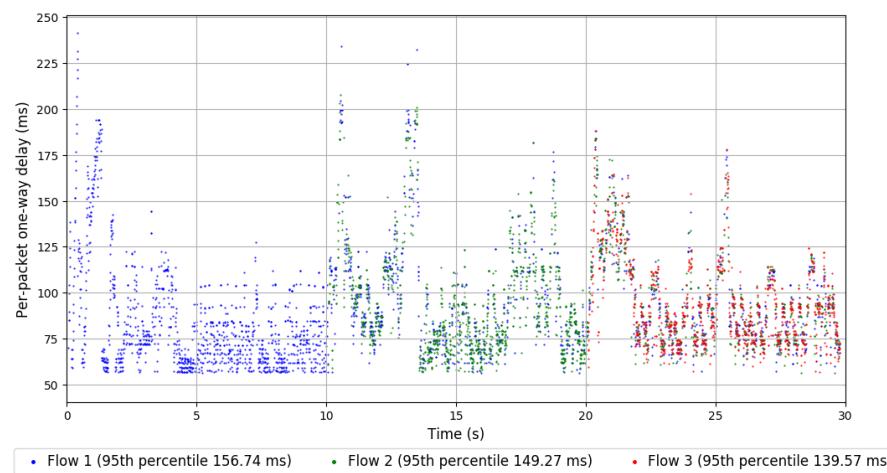
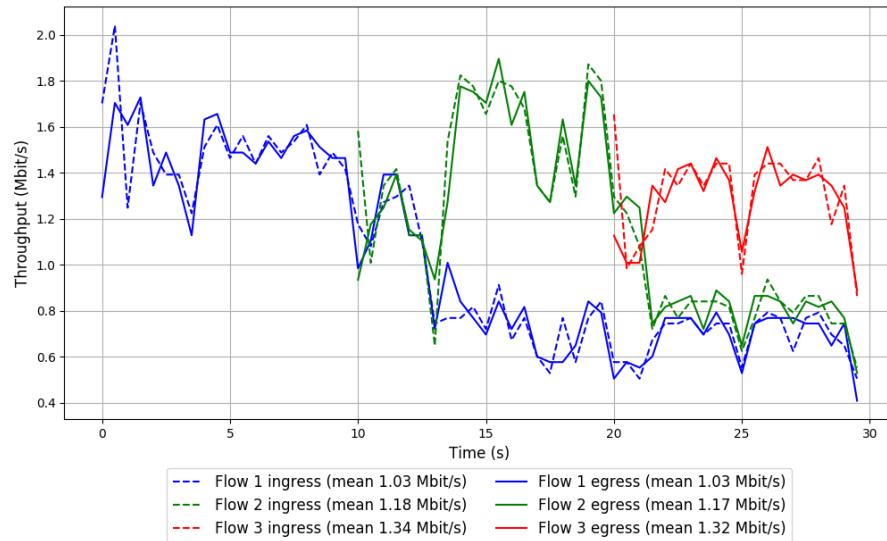


Run 2: Statistics of Indigo-1-32

```
Start at: 2018-04-16 23:25:08
End at: 2018-04-16 23:25:38
Local clock offset: -7.339 ms
Remote clock offset: -4.349 ms

# Below is generated by plot.py at 2018-04-17 00:57:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 151.481 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 156.739 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 149.272 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 139.570 ms
Loss rate: 1.84%
```

Run 2: Report of Indigo-1-32 — Data Link

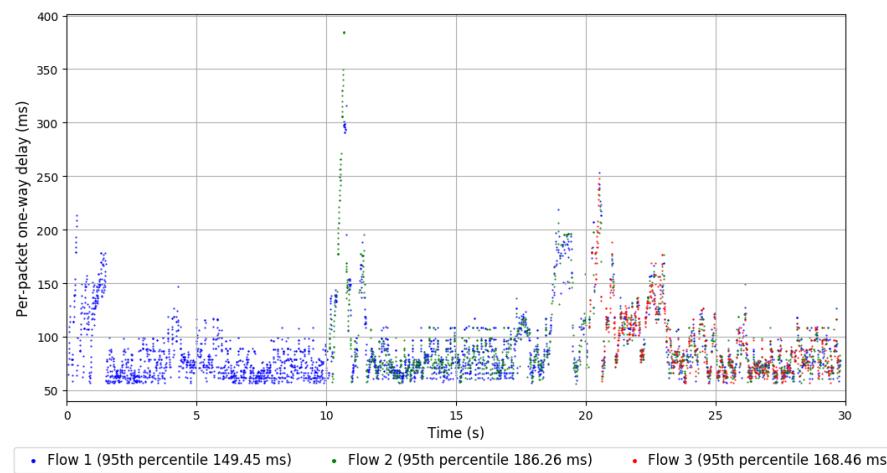
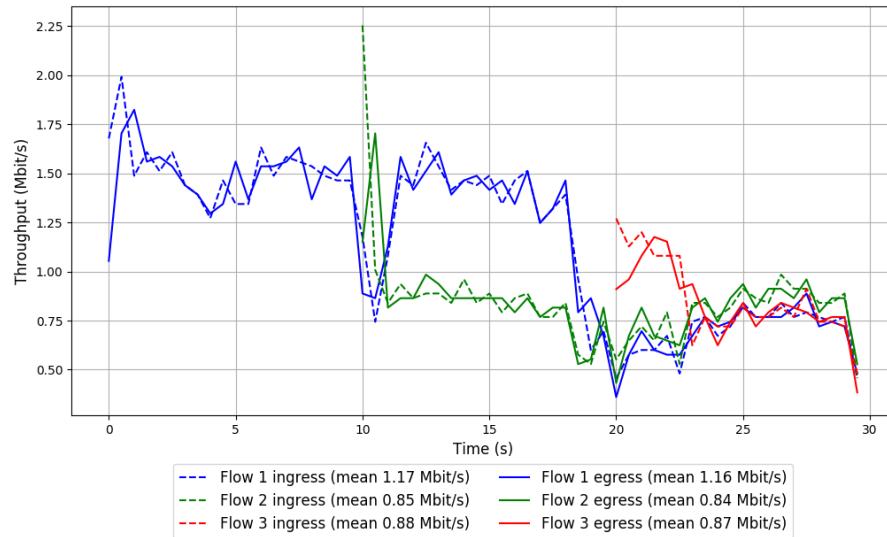


Run 3: Statistics of Indigo-1-32

```
Start at: 2018-04-16 23:43:52
End at: 2018-04-16 23:44:22
Local clock offset: -9.386 ms
Remote clock offset: -7.257 ms

# Below is generated by plot.py at 2018-04-17 00:57:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 161.159 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 149.453 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 186.257 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 168.456 ms
Loss rate: 2.79%
```

Run 3: Report of Indigo-1-32 — Data Link

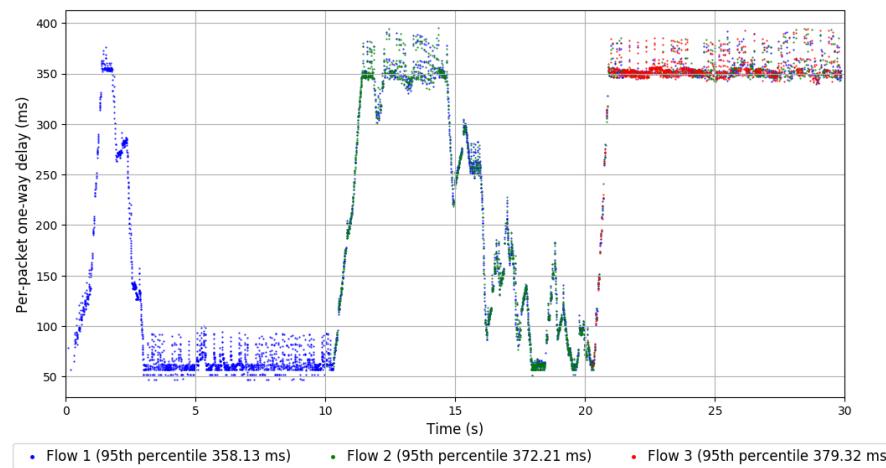
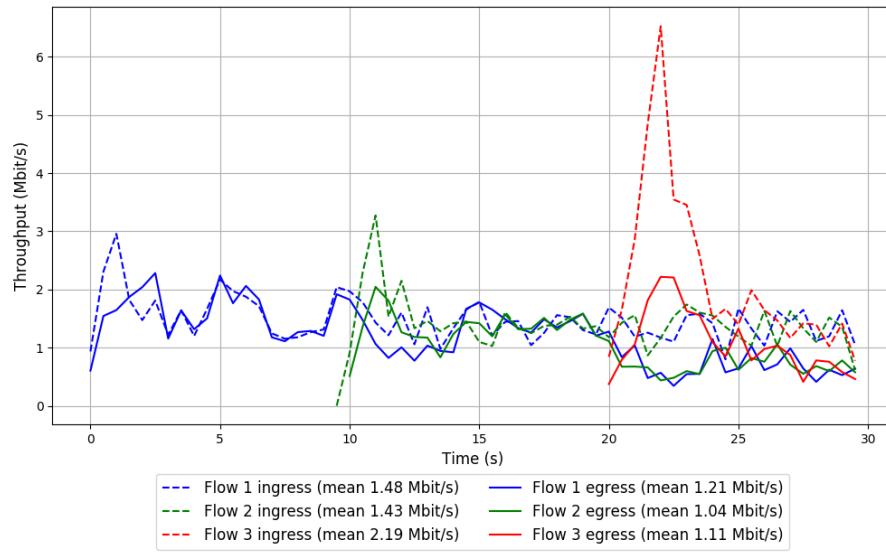


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2018-04-16 23:20:44
End at: 2018-04-16 23:21:14
Local clock offset: -7.049 ms
Remote clock offset: -5.739 ms

# Below is generated by plot.py at 2018-04-17 00:57:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 365.427 ms
Loss rate: 28.70%
-- Flow 1:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 358.131 ms
Loss rate: 18.91%
-- Flow 2:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 372.209 ms
Loss rate: 27.78%
-- Flow 3:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 379.319 ms
Loss rate: 49.99%
```

Run 1: Report of PCC-Vivace — Data Link

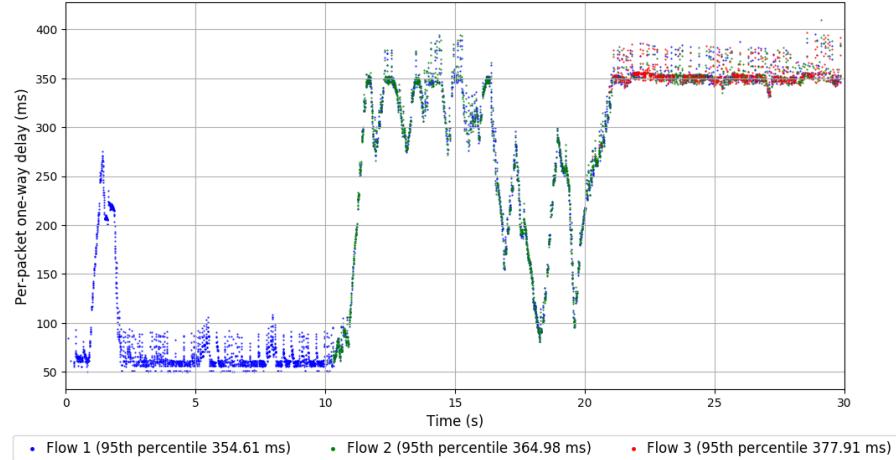
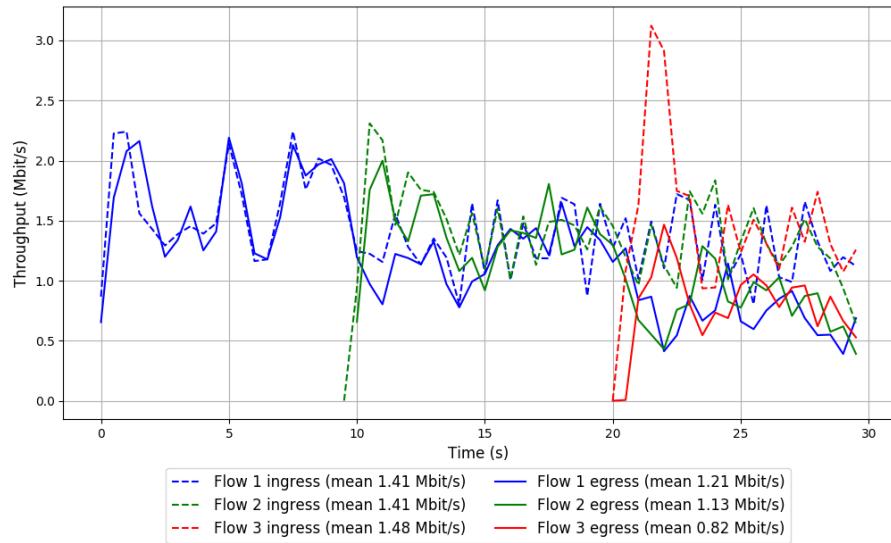


Run 2: Statistics of PCC-Vivace

```
Start at: 2018-04-16 23:39:27
End at: 2018-04-16 23:39:57
Local clock offset: -9.269 ms
Remote clock offset: -6.937 ms

# Below is generated by plot.py at 2018-04-17 00:57:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 362.781 ms
Loss rate: 21.91%
-- Flow 1:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 354.613 ms
Loss rate: 14.66%
-- Flow 2:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 364.978 ms
Loss rate: 20.14%
-- Flow 3:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 377.908 ms
Loss rate: 46.30%
```

Run 2: Report of PCC-Vivace — Data Link

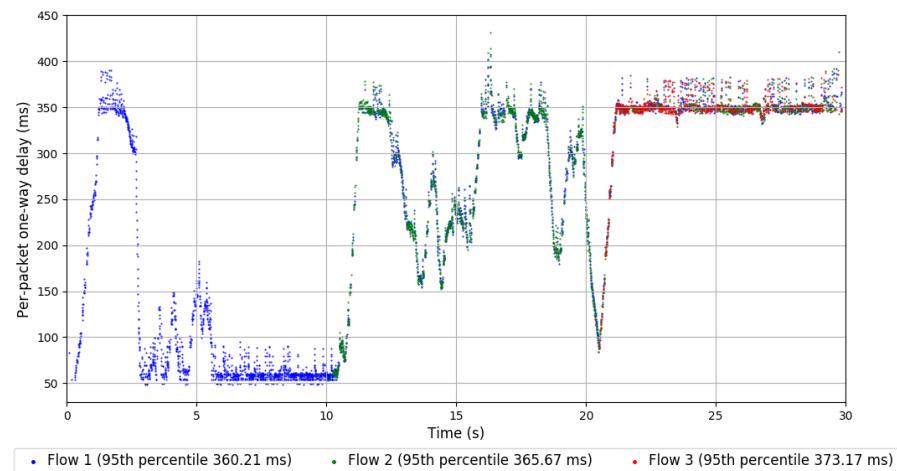
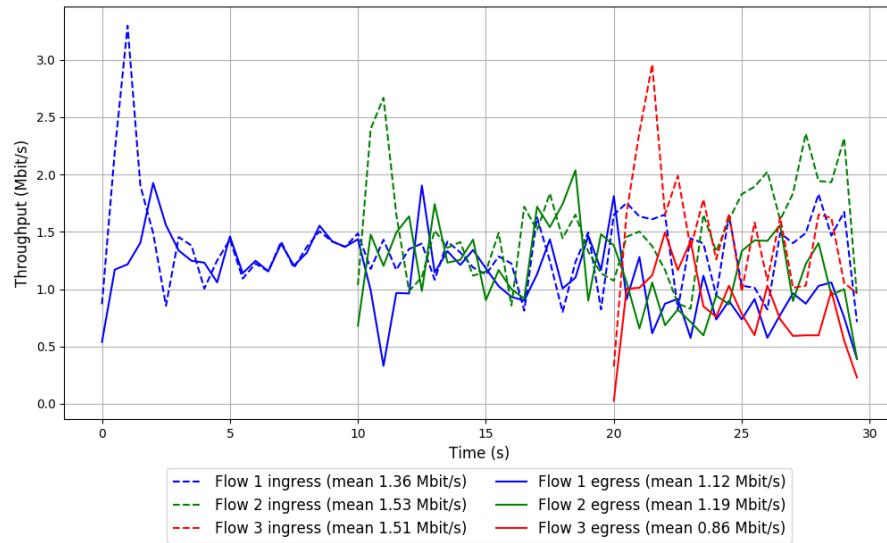


Run 3: Statistics of PCC-Vivace

```
Start at: 2018-04-16 23:58:11
End at: 2018-04-16 23:58:41
Local clock offset: -10.57 ms
Remote clock offset: -8.078 ms

# Below is generated by plot.py at 2018-04-17 00:57:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 364.628 ms
Loss rate: 24.10%
-- Flow 1:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 360.206 ms
Loss rate: 17.68%
-- Flow 2:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 365.671 ms
Loss rate: 22.96%
-- Flow 3:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 373.170 ms
Loss rate: 44.01%
```

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-04-16 23:10:46

End at: 2018-04-16 23:11:16

Local clock offset: -3.26 ms

Remote clock offset: -5.909 ms

Run 1: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of PCC-Expr

Start at: 2018-04-16 23:29:33

End at: 2018-04-16 23:30:03

Local clock offset: -8.626 ms

Remote clock offset: -6.188 ms

Run 2: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of PCC-Expr

Start at: 2018-04-16 23:48:16
End at: 2018-04-16 23:48:46
Local clock offset: -9.254 ms
Remote clock offset: -8.208 ms

Run 3: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing