

## Pantheon Report

Generated at 2018-06-18 22:47:23 (UTC).

Data path: AWS California 1 Ethernet (*local*) → Stanford Ethernet (*remote*).

Repeated the test of 16 congestion control schemes 10 times.

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

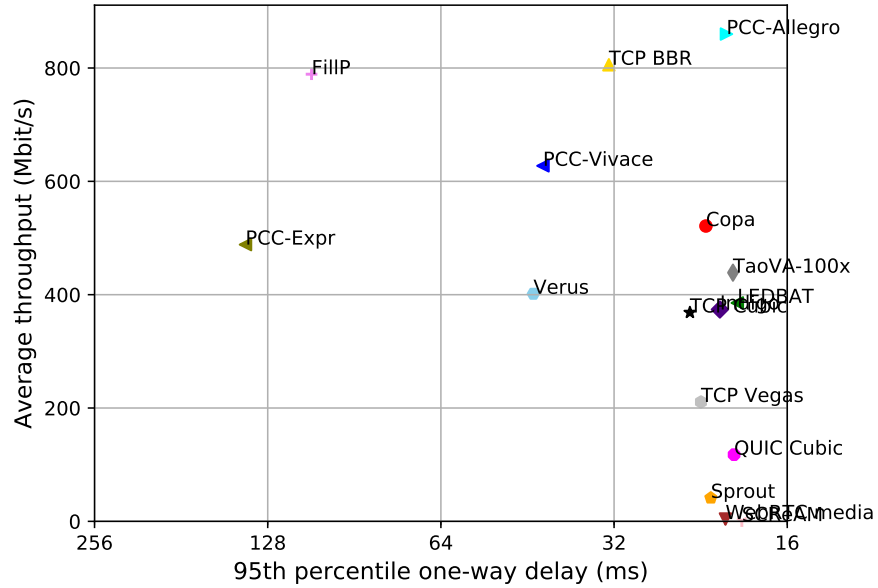
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

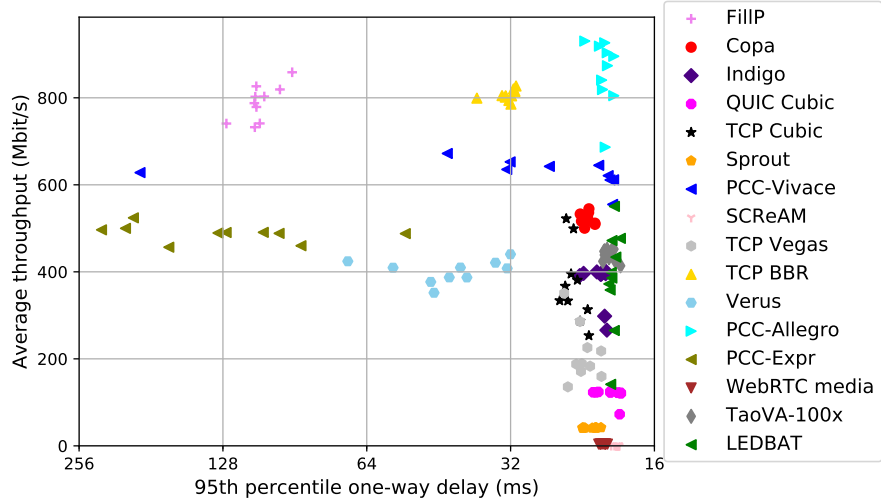
Git summary:

```
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

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



test from AWS California 1 to Stanford, 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	478.24	352.45	281.32	33.74	25.43	20.77	5.68	9.67	12.35
Copa	10	281.53	251.67	216.56	21.30	22.61	23.44	0.01	0.02	0.04
TCP Cubic	10	199.36	167.48	173.23	22.56	23.90	24.39	0.07	0.09	0.09
FillP	10	508.57	313.73	217.79	104.74	105.94	96.67	11.92	18.47	20.82
Indigo	10	181.87	199.59	183.56	21.46	20.44	20.46	0.01	0.01	0.01
LEDBAT	10	222.54	179.03	131.24	19.59	19.42	19.18	0.03	0.04	0.06
PCC-Allegro	10	725.04	167.63	71.38	20.35	19.83	20.00	0.54	0.47	0.52
PCC-Expr	10	286.02	253.91	101.38	133.75	134.79	31.78	1.31	1.91	0.05
QUIC Cubic	10	60.38	60.73	51.67	19.09	19.37	22.64	0.00	0.01	0.01
SCReAM	10	0.22	0.22	0.22	18.96	18.69	18.97	0.00	0.00	0.00
Sprout	10	20.79	20.70	20.73	21.49	21.82	21.88	0.05	0.04	0.04
TaoVA-100x	10	223.57	225.59	195.63	19.38	19.62	21.12	0.01	0.01	0.01
TCP Vegas	10	89.32	114.32	135.91	21.24	22.47	24.01	0.07	0.04	0.12
Verus	10	207.44	203.16	180.40	47.25	37.18	34.62	23.52	22.84	24.72
PCC-Vivace	10	372.97	324.06	117.84	26.72	46.65	40.68	0.29	0.63	2.25
WebRTC media	10	2.03	1.43	0.58	20.09	20.53	21.43	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

Start at: 2018-06-18 16:19:07

End at: 2018-06-18 16:19:37

Local clock offset: 4.431 ms

Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-06-18 20:57:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 799.24 Mbit/s

95th percentile per-packet one-way delay: 37.645 ms

Loss rate: 8.14%

-- Flow 1:

Average throughput: 487.47 Mbit/s

95th percentile per-packet one-way delay: 38.540 ms

Loss rate: 5.82%

-- Flow 2:

Average throughput: 349.97 Mbit/s

95th percentile per-packet one-way delay: 25.963 ms

Loss rate: 10.75%

-- Flow 3:

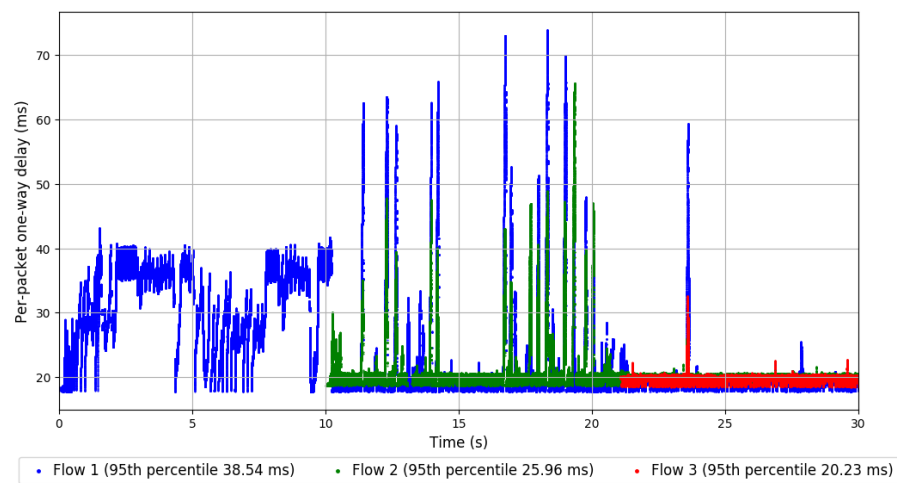
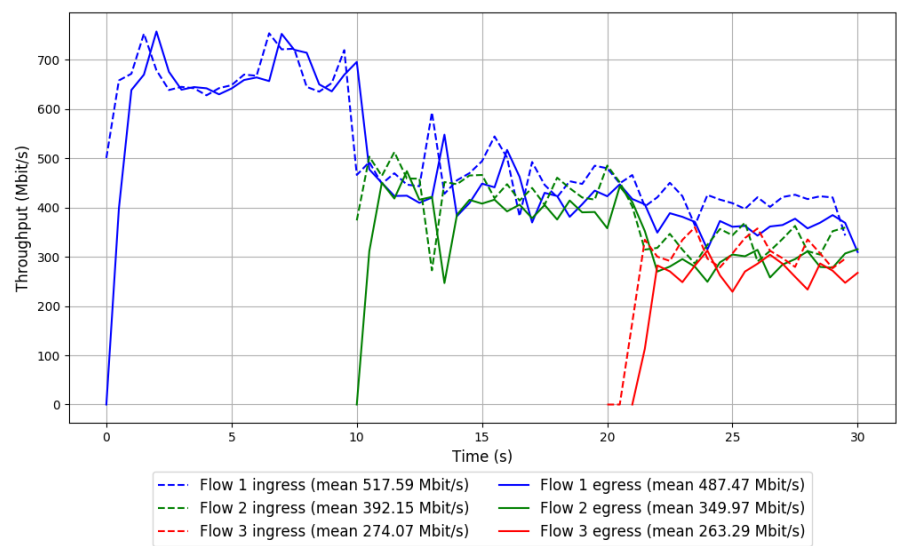
Average throughput: 263.29 Mbit/s

95th percentile per-packet one-way delay: 20.227 ms

Loss rate: 13.83%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-18 16:44:50

End at: 2018-06-18 16:45:20

Local clock offset: 4.565 ms

Remote clock offset: 0.694 ms

# Below is generated by plot.py at 2018-06-18 20:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 827.15 Mbit/s

95th percentile per-packet one-way delay: 31.171 ms

Loss rate: 7.37%

-- Flow 1:

Average throughput: 502.88 Mbit/s

95th percentile per-packet one-way delay: 31.565 ms

Loss rate: 4.16%

-- Flow 2:

Average throughput: 332.93 Mbit/s

95th percentile per-packet one-way delay: 31.527 ms

Loss rate: 11.76%

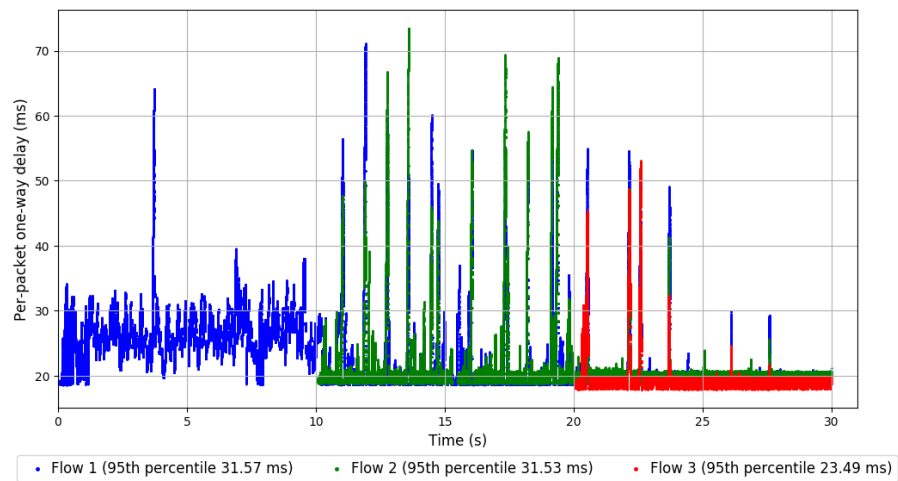
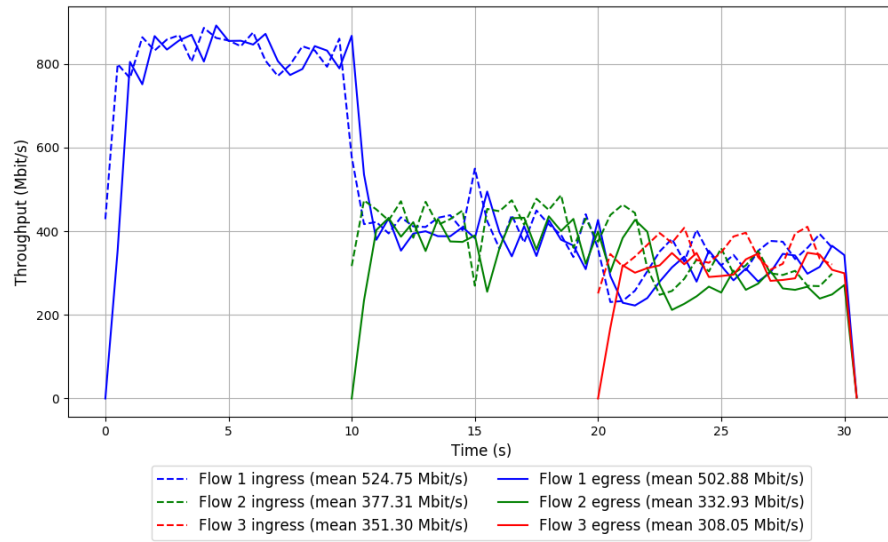
-- Flow 3:

Average throughput: 308.05 Mbit/s

95th percentile per-packet one-way delay: 23.492 ms

Loss rate: 12.30%

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



Run 3: Statistics of TCP BBR

Start at: 2018-06-18 17:10:31

End at: 2018-06-18 17:11:01

Local clock offset: 4.047 ms

Remote clock offset: 0.699 ms

# Below is generated by plot.py at 2018-06-18 20:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 805.06 Mbit/s

95th percentile per-packet one-way delay: 33.344 ms

Loss rate: 7.57%

-- Flow 1:

Average throughput: 480.33 Mbit/s

95th percentile per-packet one-way delay: 34.193 ms

Loss rate: 5.74%

-- Flow 2:

Average throughput: 319.85 Mbit/s

95th percentile per-packet one-way delay: 25.350 ms

Loss rate: 9.79%

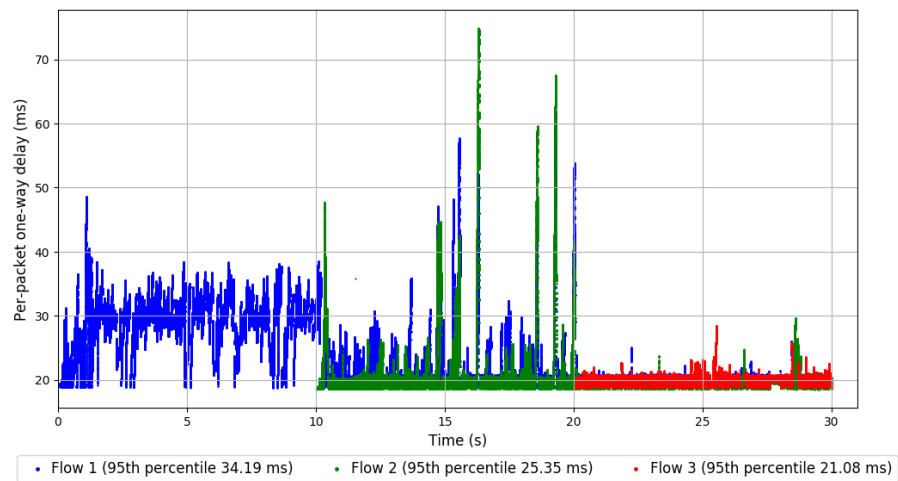
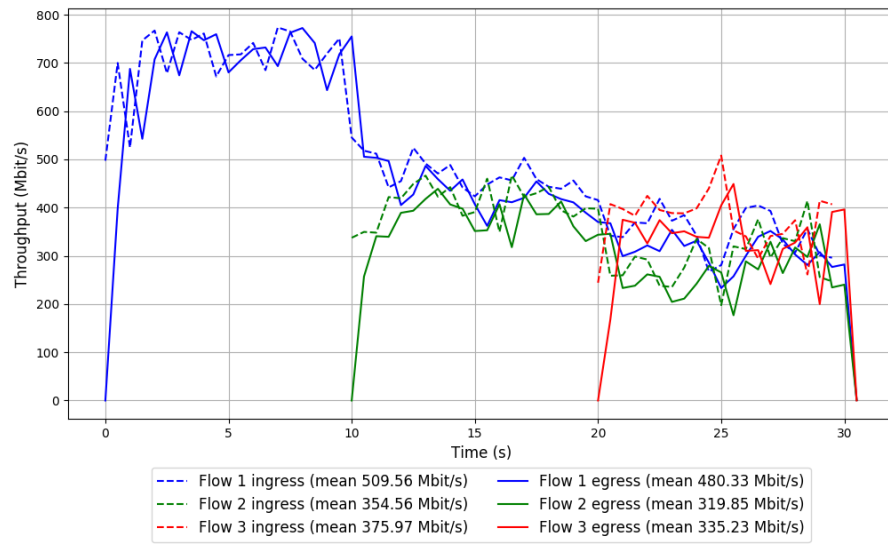
-- Flow 3:

Average throughput: 335.23 Mbit/s

95th percentile per-packet one-way delay: 21.084 ms

Loss rate: 10.83%

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



Run 4: Statistics of TCP BBR

Start at: 2018-06-18 17:36:16

End at: 2018-06-18 17:36:46

Local clock offset: 3.538 ms

Remote clock offset: 0.332 ms

# Below is generated by plot.py at 2018-06-18 20:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 804.76 Mbit/s

95th percentile per-packet one-way delay: 32.772 ms

Loss rate: 7.59%

-- Flow 1:

Average throughput: 453.99 Mbit/s

95th percentile per-packet one-way delay: 34.001 ms

Loss rate: 6.33%

-- Flow 2:

Average throughput: 379.82 Mbit/s

95th percentile per-packet one-way delay: 26.335 ms

Loss rate: 7.91%

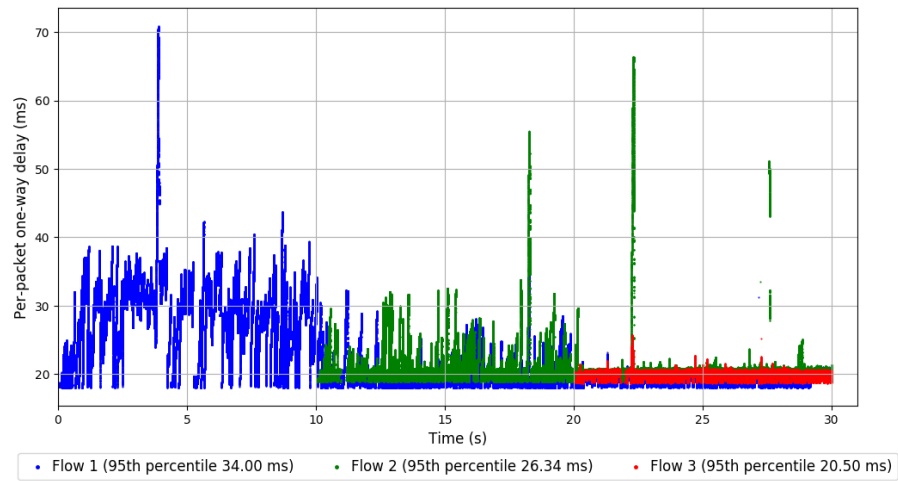
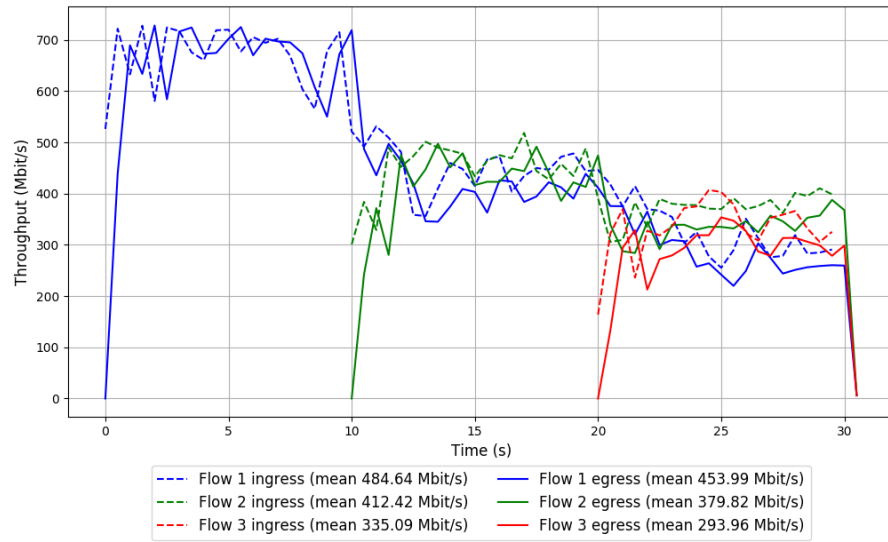
-- Flow 3:

Average throughput: 293.96 Mbit/s

95th percentile per-packet one-way delay: 20.496 ms

Loss rate: 12.28%

# Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-06-18 18:01:41

End at: 2018-06-18 18:02:11

Local clock offset: 3.744 ms

Remote clock offset: 2.628 ms

# Below is generated by plot.py at 2018-06-18 20:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 820.36 Mbit/s

95th percentile per-packet one-way delay: 31.553 ms

Loss rate: 7.70%

-- Flow 1:

Average throughput: 493.88 Mbit/s

95th percentile per-packet one-way delay: 32.652 ms

Loss rate: 5.76%

-- Flow 2:

Average throughput: 373.12 Mbit/s

95th percentile per-packet one-way delay: 23.549 ms

Loss rate: 10.05%

-- Flow 3:

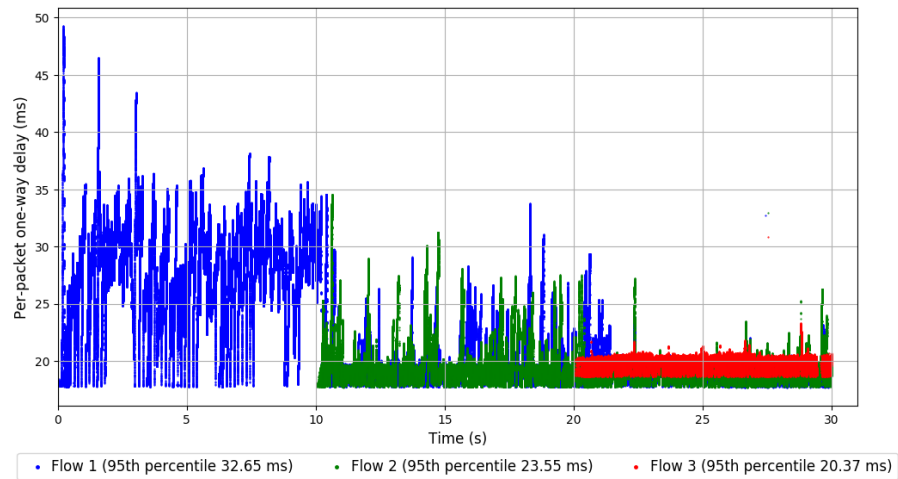
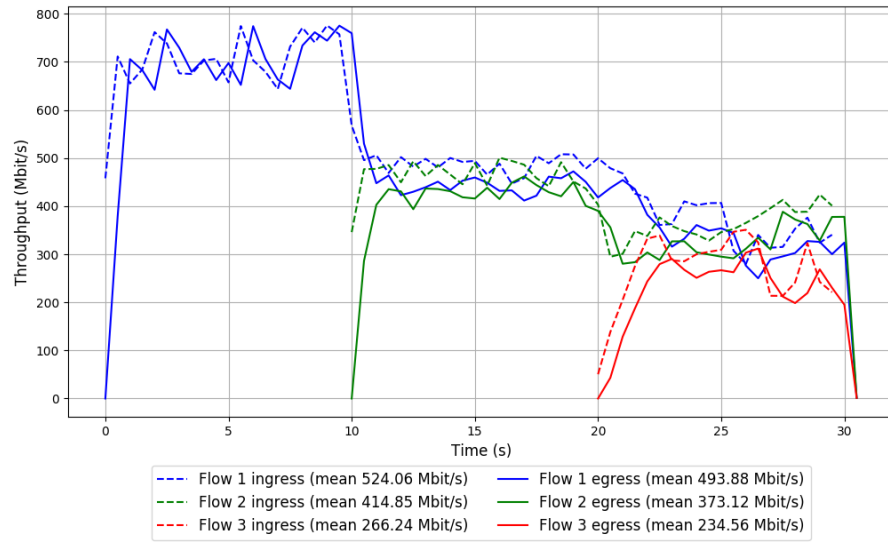
Average throughput: 234.56 Mbit/s

95th percentile per-packet one-way delay: 20.367 ms

Loss rate: 11.88%



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



Run 6: Statistics of TCP BBR

Start at: 2018-06-18 18:27:10

End at: 2018-06-18 18:27:40

Local clock offset: 3.803 ms

Remote clock offset: 4.911 ms

# Below is generated by plot.py at 2018-06-18 20:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 793.93 Mbit/s

95th percentile per-packet one-way delay: 32.263 ms

Loss rate: 7.58%

-- Flow 1:

Average throughput: 461.57 Mbit/s

95th percentile per-packet one-way delay: 33.193 ms

Loss rate: 5.91%

-- Flow 2:

Average throughput: 367.05 Mbit/s

95th percentile per-packet one-way delay: 26.150 ms

Loss rate: 8.81%

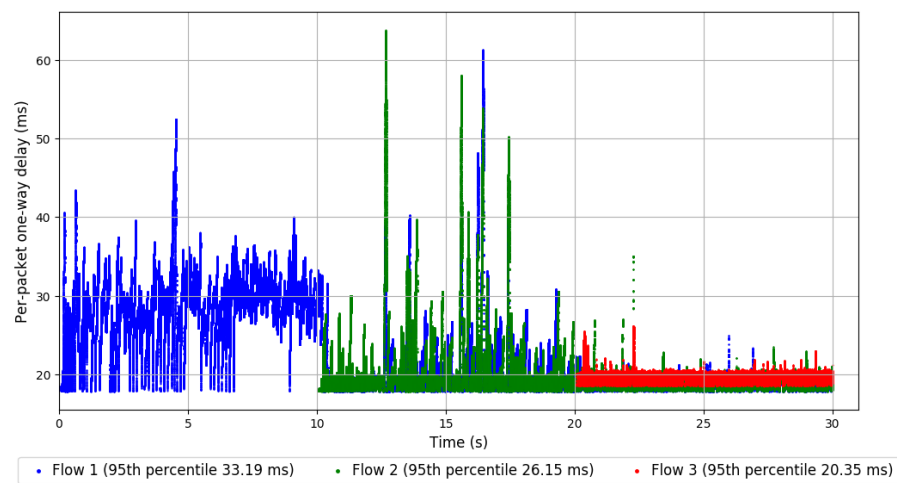
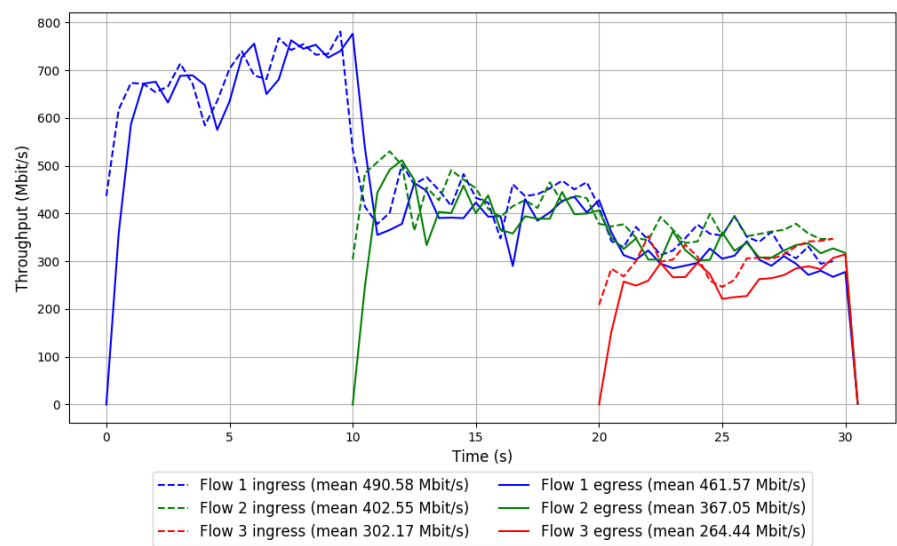
-- Flow 3:

Average throughput: 264.44 Mbit/s

95th percentile per-packet one-way delay: 20.347 ms

Loss rate: 12.49%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-06-18 18:52:50

End at: 2018-06-18 18:53:20

Local clock offset: 3.791 ms

Remote clock offset: 6.373 ms

# Below is generated by plot.py at 2018-06-18 20:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 804.51 Mbit/s

95th percentile per-packet one-way delay: 31.851 ms

Loss rate: 7.69%

-- Flow 1:

Average throughput: 481.82 Mbit/s

95th percentile per-packet one-way delay: 32.953 ms

Loss rate: 5.68%

-- Flow 2:

Average throughput: 346.98 Mbit/s

95th percentile per-packet one-way delay: 22.226 ms

Loss rate: 10.09%

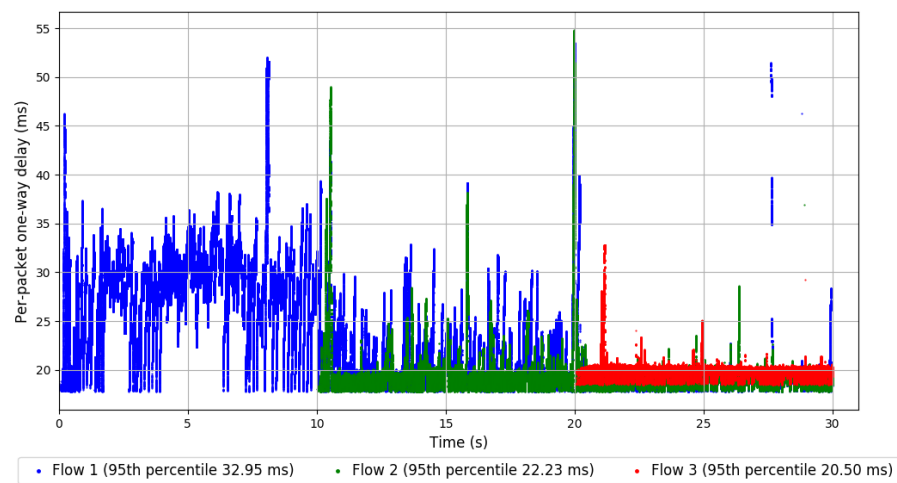
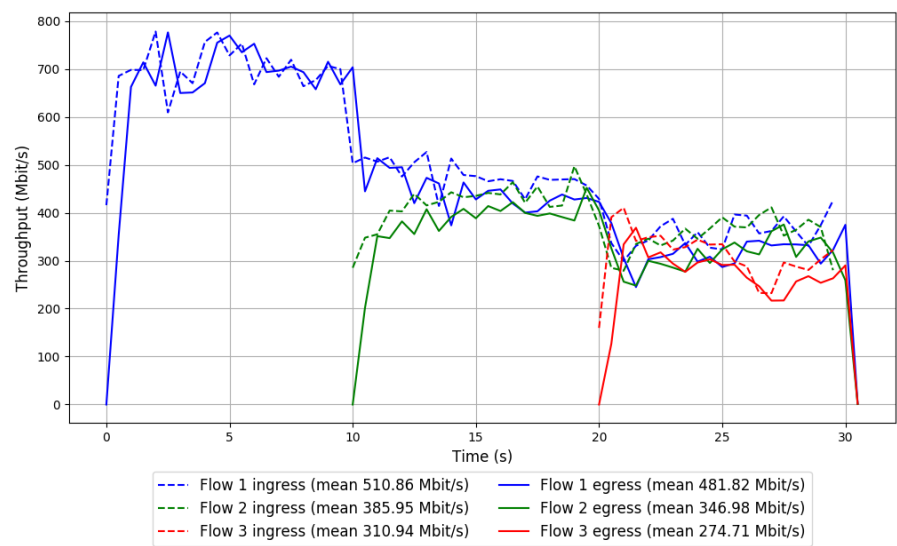
-- Flow 3:

Average throughput: 274.71 Mbit/s

95th percentile per-packet one-way delay: 20.498 ms

Loss rate: 11.65%

Run 7: Report of TCP BBR — Data Link

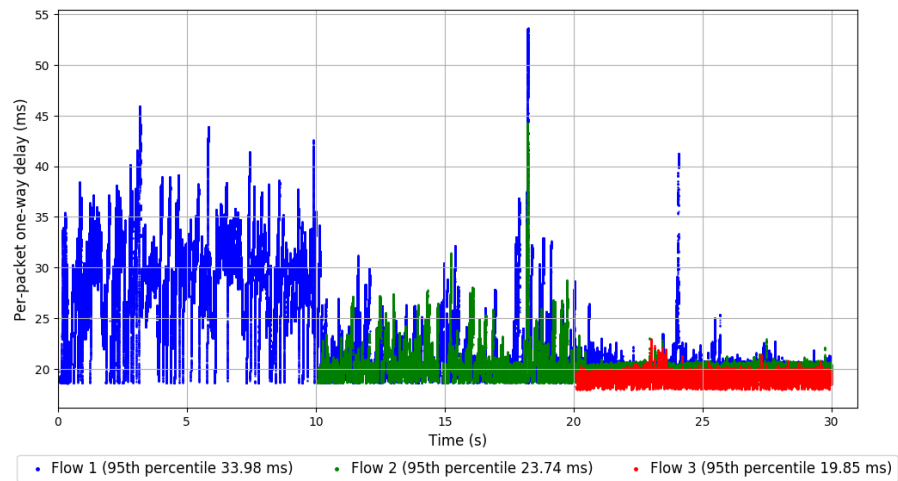
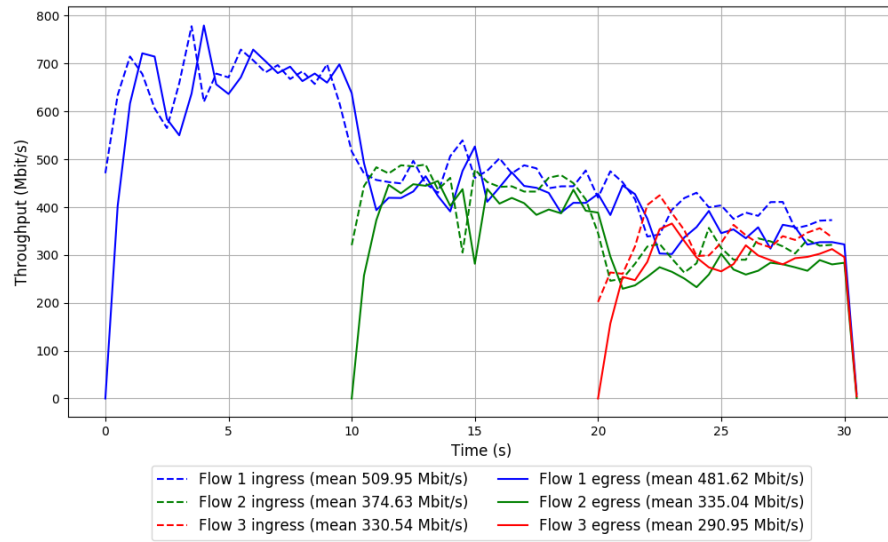


Run 8: Statistics of TCP BBR

Start at: 2018-06-18 19:18:01  
End at: 2018-06-18 19:18:31  
Local clock offset: 3.814 ms  
Remote clock offset: -0.424 ms

# Below is generated by plot.py at 2018-06-18 20:58:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 801.54 Mbit/s  
95th percentile per-packet one-way delay: 32.834 ms  
Loss rate: 7.81%  
-- Flow 1:  
Average throughput: 481.62 Mbit/s  
95th percentile per-packet one-way delay: 33.977 ms  
Loss rate: 5.56%  
-- Flow 2:  
Average throughput: 335.04 Mbit/s  
95th percentile per-packet one-way delay: 23.738 ms  
Loss rate: 10.57%  
-- Flow 3:  
Average throughput: 290.95 Mbit/s  
95th percentile per-packet one-way delay: 19.851 ms  
Loss rate: 11.97%

# Run 8: Report of TCP BBR — Data Link



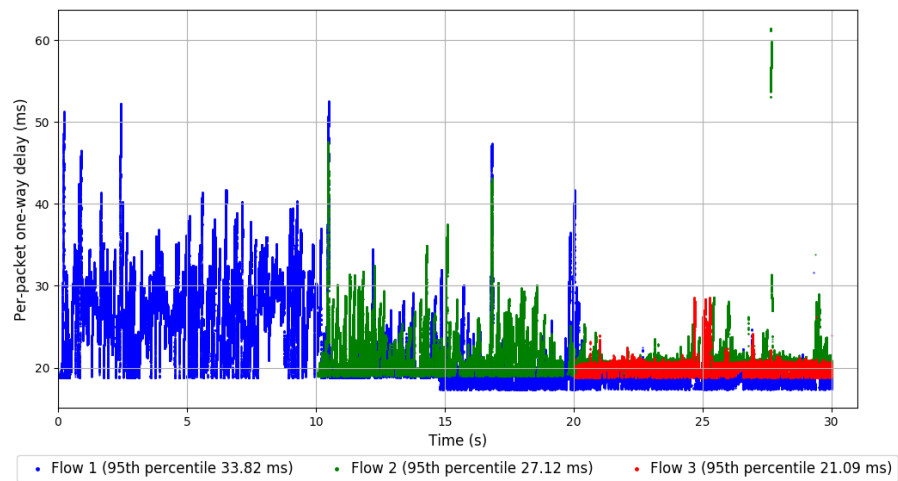
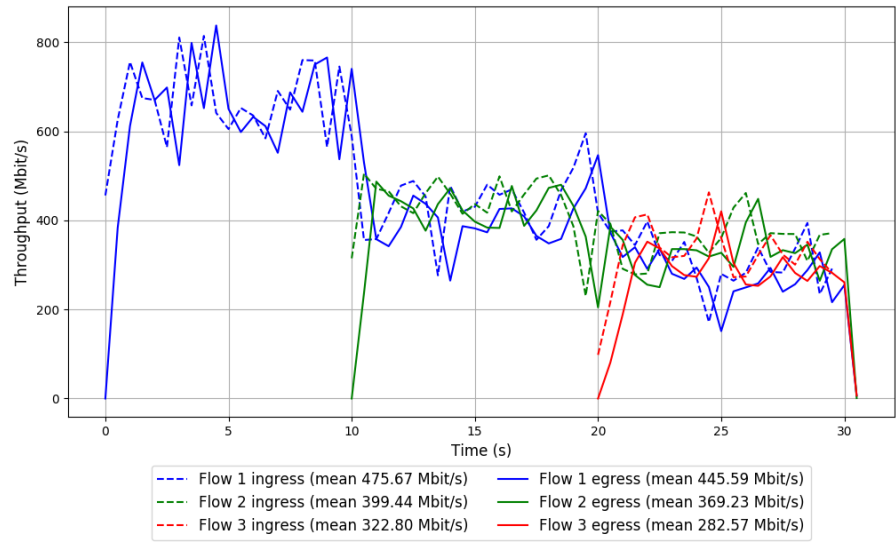
Run 9: Statistics of TCP BBR

Start at: 2018-06-18 19:43:11  
End at: 2018-06-18 19:43:41  
Local clock offset: 3.8 ms  
Remote clock offset: -3.218 ms

# Below is generated by plot.py at 2018-06-18 21:06:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 785.51 Mbit/s  
95th percentile per-packet one-way delay: 31.944 ms  
Loss rate: 7.49%  
-- Flow 1:  
Average throughput: 445.59 Mbit/s  
95th percentile per-packet one-way delay: 33.819 ms  
Loss rate: 6.33%  
-- Flow 2:  
Average throughput: 369.23 Mbit/s  
95th percentile per-packet one-way delay: 27.119 ms  
Loss rate: 7.56%  
-- Flow 3:  
Average throughput: 282.57 Mbit/s  
95th percentile per-packet one-way delay: 21.094 ms  
Loss rate: 12.42%



# Run 9: Report of TCP BBR — Data Link

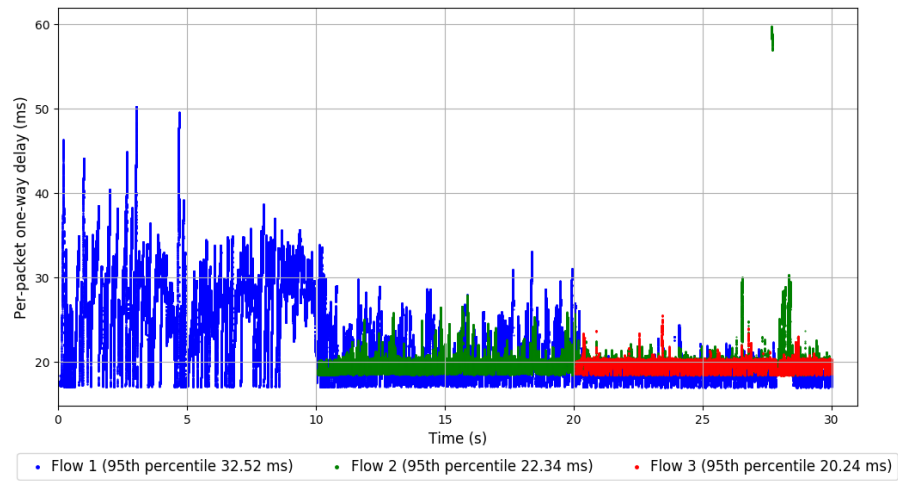
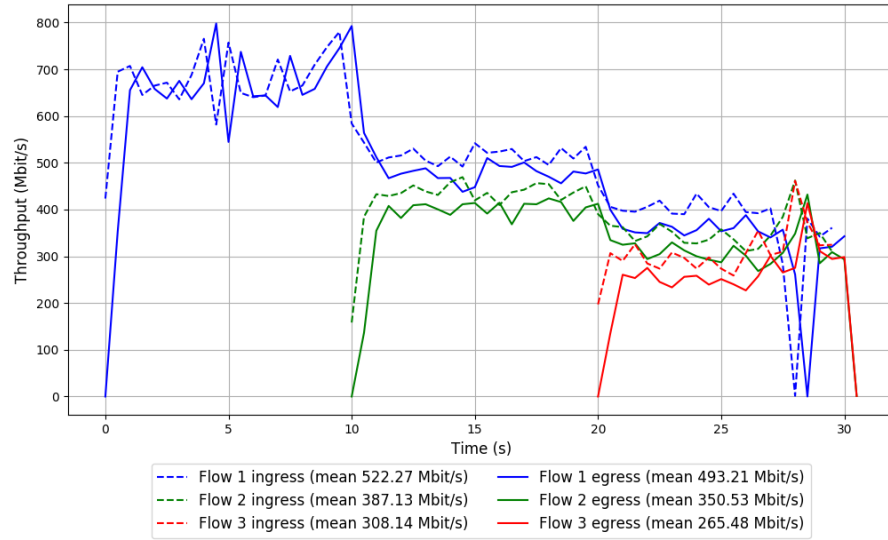


Run 10: Statistics of TCP BBR

Start at: 2018-06-18 20:08:32  
End at: 2018-06-18 20:09:02  
Local clock offset: 3.829 ms  
Remote clock offset: -5.087 ms

# Below is generated by plot.py at 2018-06-18 21:06:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 814.98 Mbit/s  
95th percentile per-packet one-way delay: 31.332 ms  
Loss rate: 7.66%  
-- Flow 1:  
Average throughput: 493.21 Mbit/s  
95th percentile per-packet one-way delay: 32.522 ms  
Loss rate: 5.56%  
-- Flow 2:  
Average throughput: 350.53 Mbit/s  
95th percentile per-packet one-way delay: 22.342 ms  
Loss rate: 9.45%  
-- Flow 3:  
Average throughput: 265.48 Mbit/s  
95th percentile per-packet one-way delay: 20.244 ms  
Loss rate: 13.83%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-18 16:31:41

End at: 2018-06-18 16:32:11

Local clock offset: 4.52 ms

Remote clock offset: 0.44 ms

# Below is generated by plot.py at 2018-06-18 21:09:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 544.84 Mbit/s

95th percentile per-packet one-way delay: 21.939 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 307.85 Mbit/s

95th percentile per-packet one-way delay: 21.294 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 258.76 Mbit/s

95th percentile per-packet one-way delay: 23.385 ms

Loss rate: 0.03%

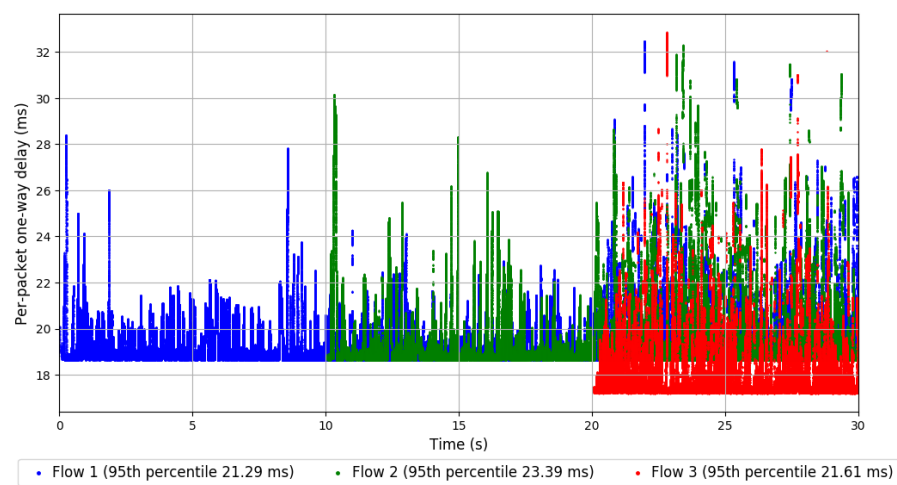
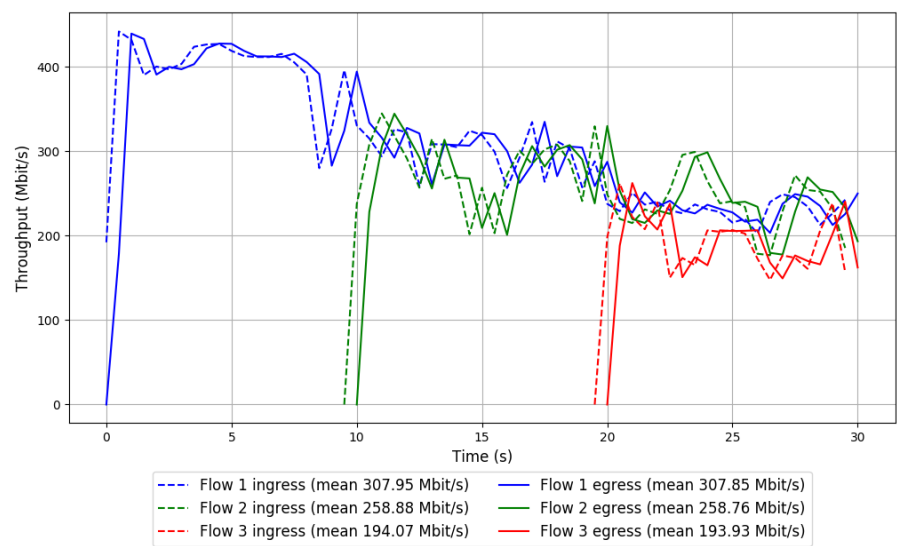
-- Flow 3:

Average throughput: 193.93 Mbit/s

95th percentile per-packet one-way delay: 21.613 ms

Loss rate: 0.08%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-18 16:57:25

End at: 2018-06-18 16:57:55

Local clock offset: 4.591 ms

Remote clock offset: 0.497 ms

# Below is generated by plot.py at 2018-06-18 21:09:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 524.95 Mbit/s

95th percentile per-packet one-way delay: 22.083 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 273.81 Mbit/s

95th percentile per-packet one-way delay: 20.750 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 272.45 Mbit/s

95th percentile per-packet one-way delay: 23.175 ms

Loss rate: 0.01%

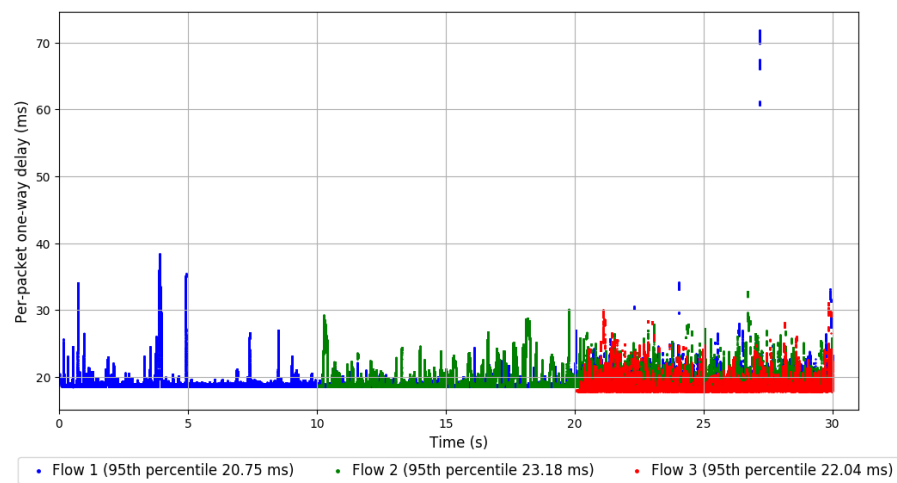
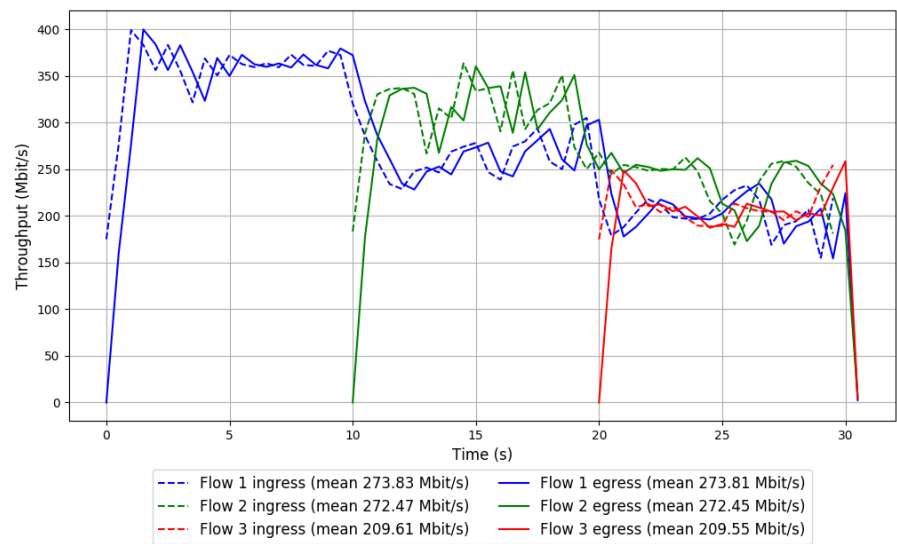
-- Flow 3:

Average throughput: 209.55 Mbit/s

95th percentile per-packet one-way delay: 22.036 ms

Loss rate: 0.03%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-18 17:23:12

End at: 2018-06-18 17:23:42

Local clock offset: 3.651 ms

Remote clock offset: 0.499 ms

# Below is generated by plot.py at 2018-06-18 21:09:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 500.30 Mbit/s

95th percentile per-packet one-way delay: 22.401 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 269.89 Mbit/s

95th percentile per-packet one-way delay: 21.328 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 240.24 Mbit/s

95th percentile per-packet one-way delay: 22.718 ms

Loss rate: 0.02%

-- Flow 3:

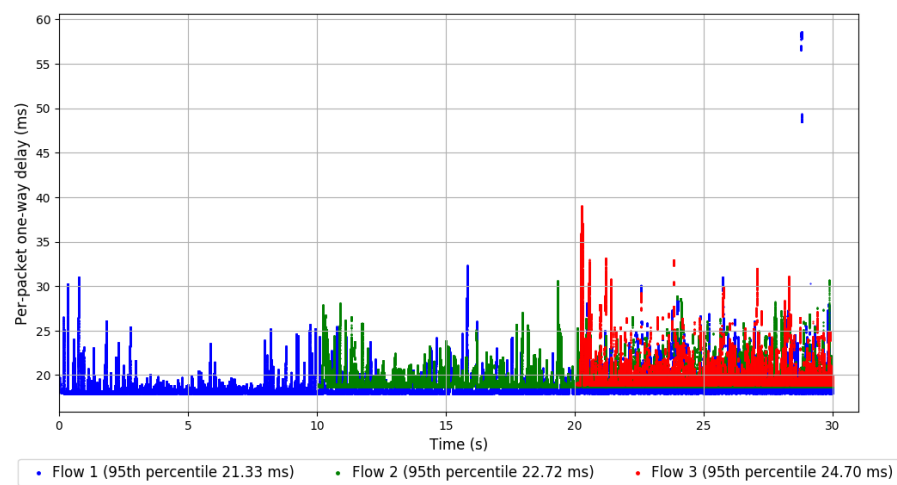
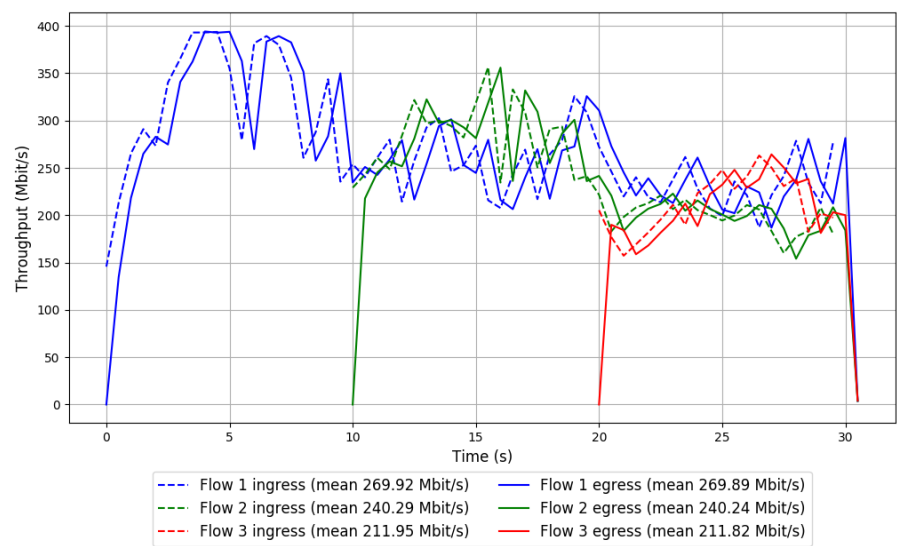
Average throughput: 211.82 Mbit/s

95th percentile per-packet one-way delay: 24.701 ms

Loss rate: 0.06%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-06-18 17:48:45

End at: 2018-06-18 17:49:15

Local clock offset: 3.664 ms

Remote clock offset: 0.462 ms

# Below is generated by plot.py at 2018-06-18 21:09:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 516.45 Mbit/s

95th percentile per-packet one-way delay: 22.741 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 277.16 Mbit/s

95th percentile per-packet one-way delay: 22.094 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 241.94 Mbit/s

95th percentile per-packet one-way delay: 22.934 ms

Loss rate: 0.03%

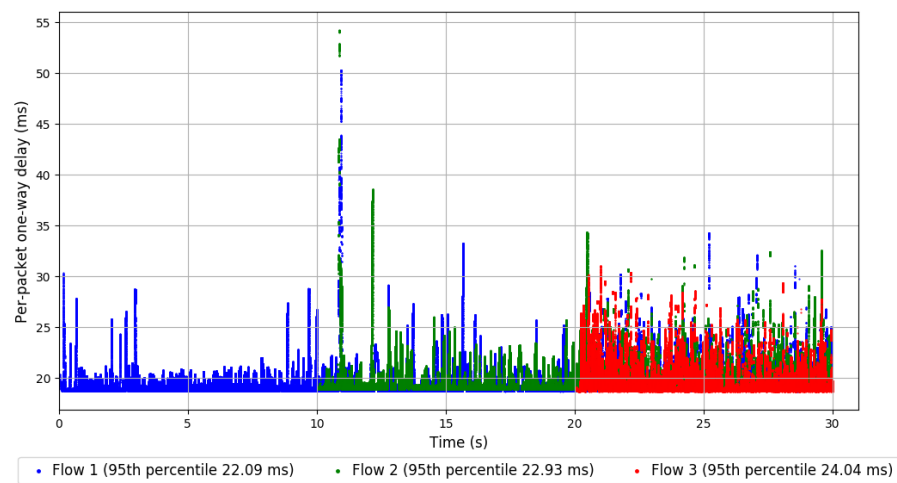
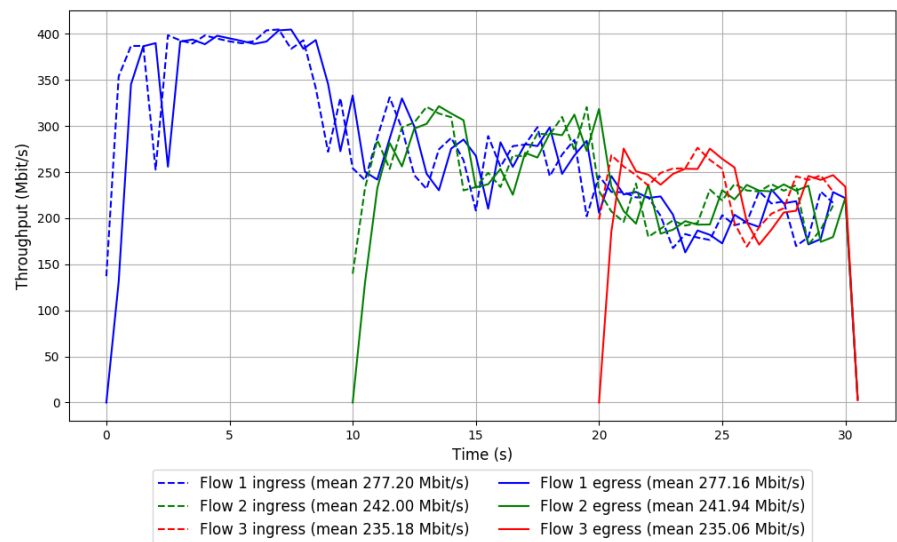
-- Flow 3:

Average throughput: 235.06 Mbit/s

95th percentile per-packet one-way delay: 24.043 ms

Loss rate: 0.06%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-06-18 18:14:14

End at: 2018-06-18 18:14:44

Local clock offset: 3.701 ms

Remote clock offset: 3.936 ms

# Below is generated by plot.py at 2018-06-18 21:09:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 536.32 Mbit/s

95th percentile per-packet one-way delay: 21.970 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 298.84 Mbit/s

95th percentile per-packet one-way delay: 21.416 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 244.38 Mbit/s

95th percentile per-packet one-way delay: 21.979 ms

Loss rate: 0.03%

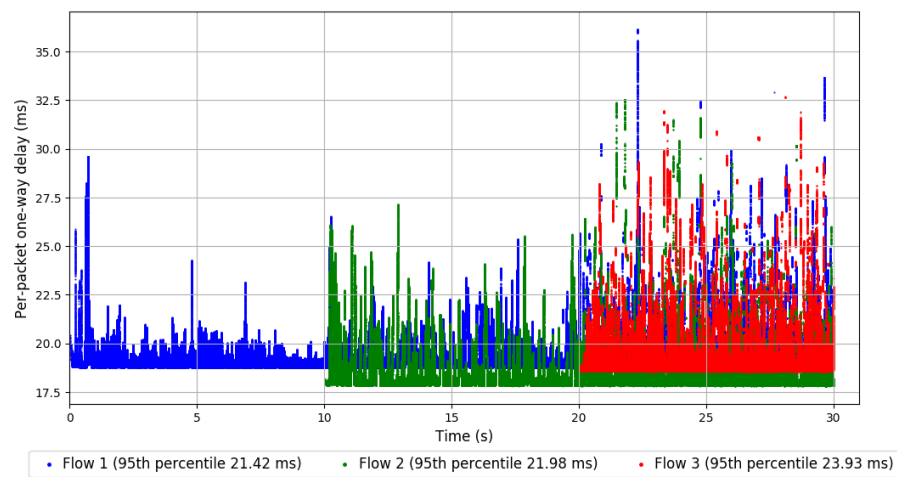
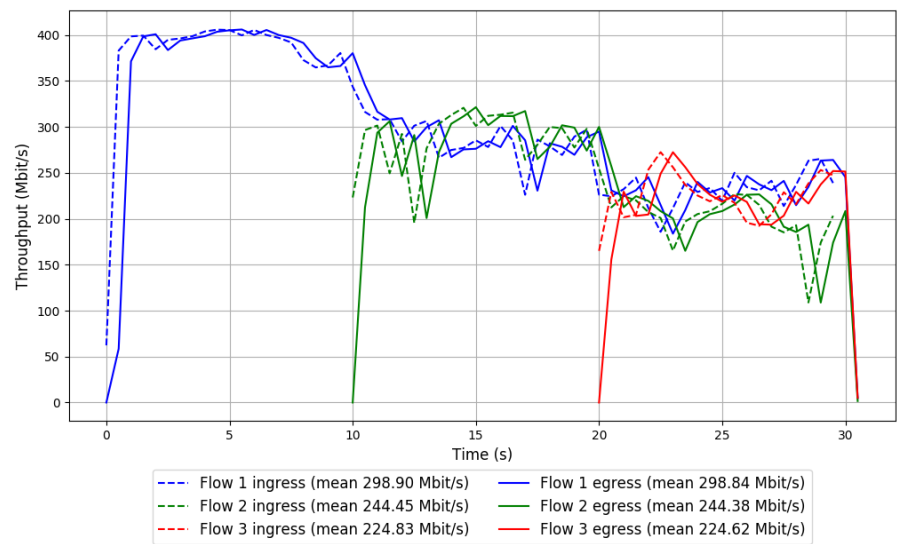
-- Flow 3:

Average throughput: 224.62 Mbit/s

95th percentile per-packet one-way delay: 23.935 ms

Loss rate: 0.08%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-18 18:39:49

End at: 2018-06-18 18:40:19

Local clock offset: 3.769 ms

Remote clock offset: 5.576 ms

# Below is generated by plot.py at 2018-06-18 21:09:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 511.83 Mbit/s

95th percentile per-packet one-way delay: 21.311 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 268.53 Mbit/s

95th percentile per-packet one-way delay: 20.763 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 256.95 Mbit/s

95th percentile per-packet one-way delay: 21.076 ms

Loss rate: 0.01%

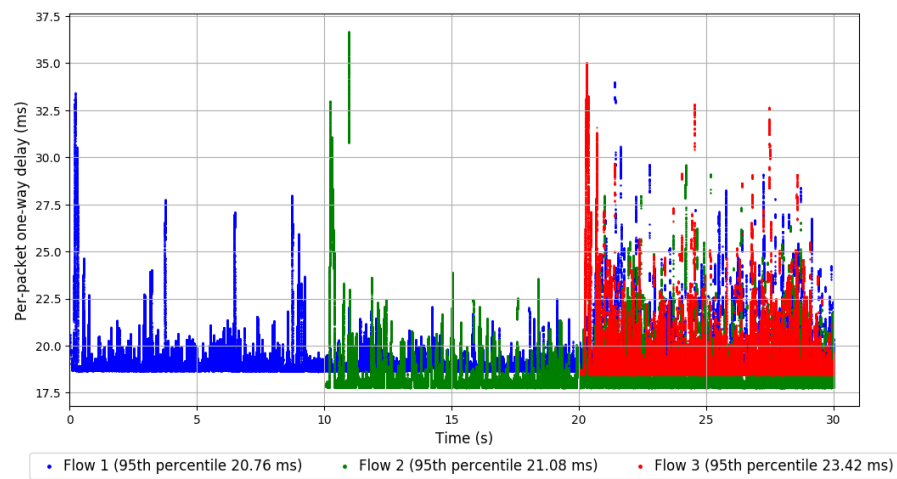
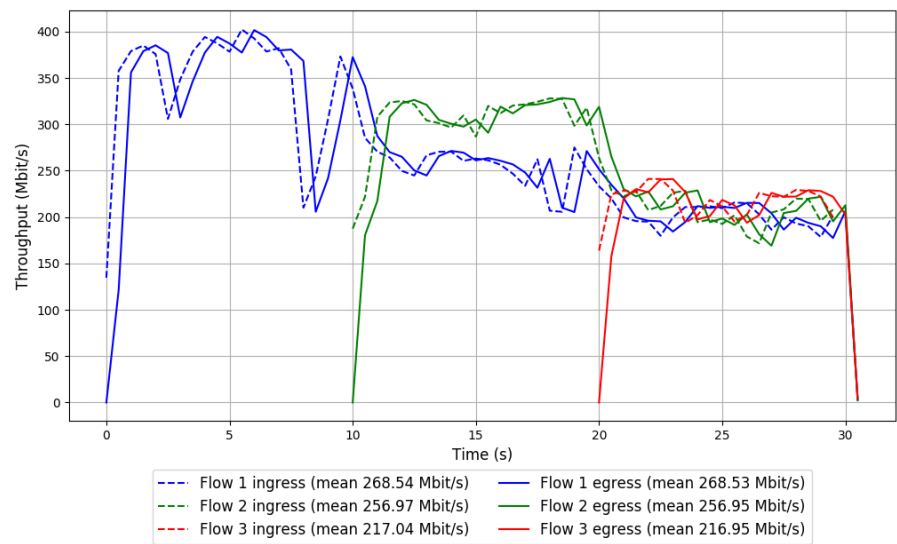
-- Flow 3:

Average throughput: 216.95 Mbit/s

95th percentile per-packet one-way delay: 23.418 ms

Loss rate: 0.05%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-18 19:05:08

End at: 2018-06-18 19:05:38

Local clock offset: 3.804 ms

Remote clock offset: 3.16 ms

# Below is generated by plot.py at 2018-06-18 21:18:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 532.89 Mbit/s

95th percentile per-packet one-way delay: 22.877 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 288.97 Mbit/s

95th percentile per-packet one-way delay: 22.068 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 259.17 Mbit/s

95th percentile per-packet one-way delay: 23.141 ms

Loss rate: 0.01%

-- Flow 3:

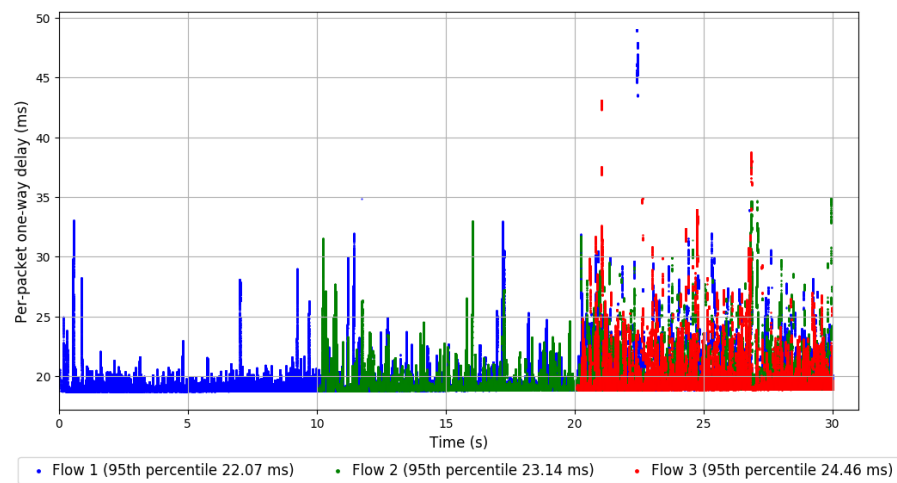
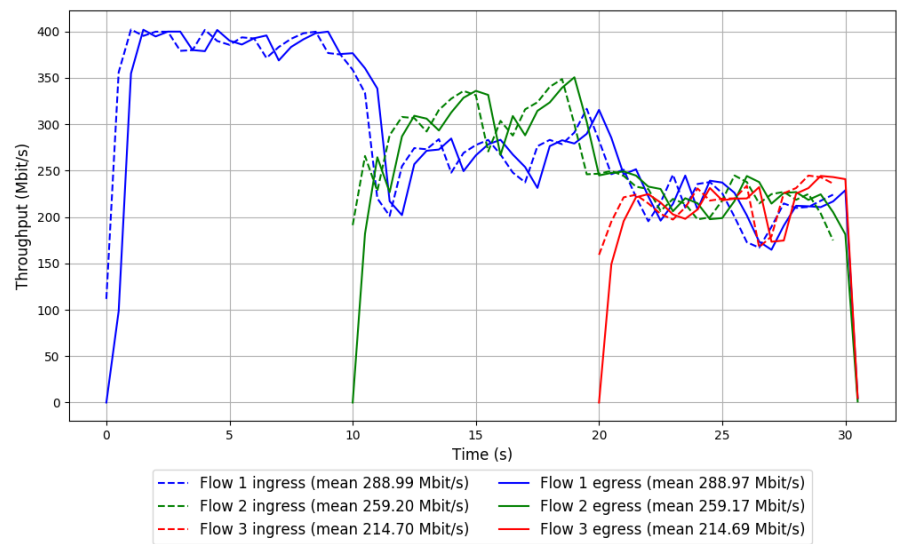
Average throughput: 214.69 Mbit/s

95th percentile per-packet one-way delay: 24.464 ms

Loss rate: 0.00%



Run 7: Report of Copa — Data Link

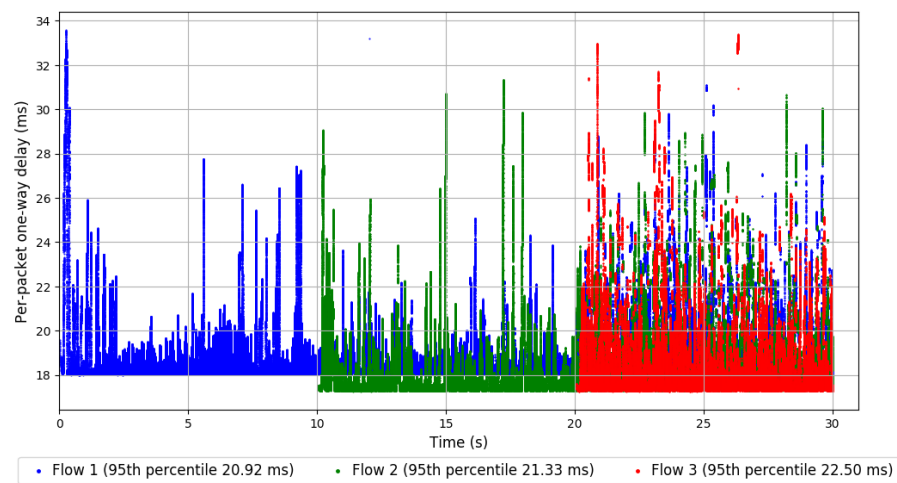
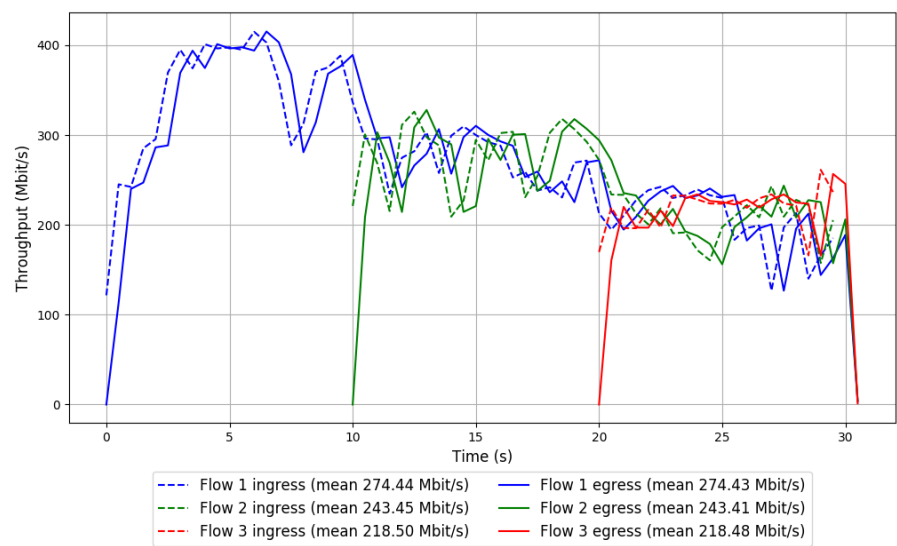


Run 8: Statistics of Copa

Start at: 2018-06-18 19:30:12  
End at: 2018-06-18 19:30:42  
Local clock offset: 3.784 ms  
Remote clock offset: -1.862 ms

# Below is generated by plot.py at 2018-06-18 21:18:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 509.19 Mbit/s  
95th percentile per-packet one-way delay: 21.308 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 274.43 Mbit/s  
95th percentile per-packet one-way delay: 20.923 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 243.41 Mbit/s  
95th percentile per-packet one-way delay: 21.330 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 218.48 Mbit/s  
95th percentile per-packet one-way delay: 22.503 ms  
Loss rate: 0.01%

Run 8: Report of Copa — Data Link

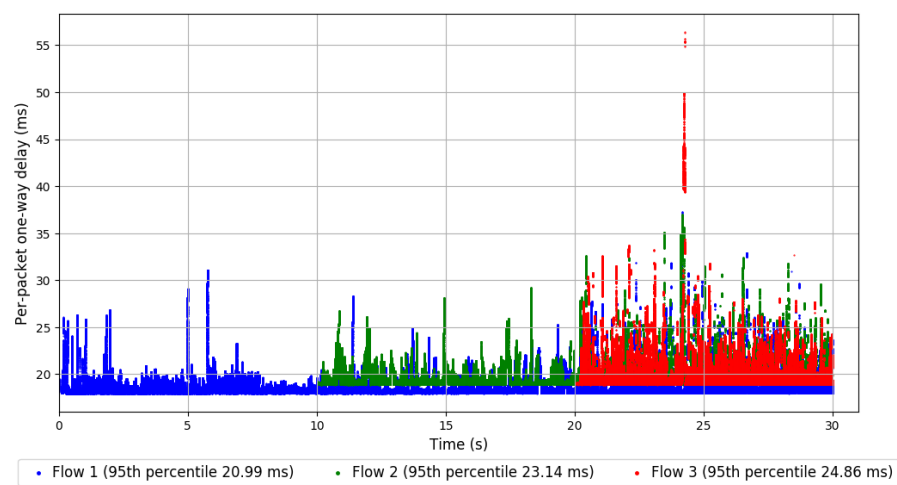
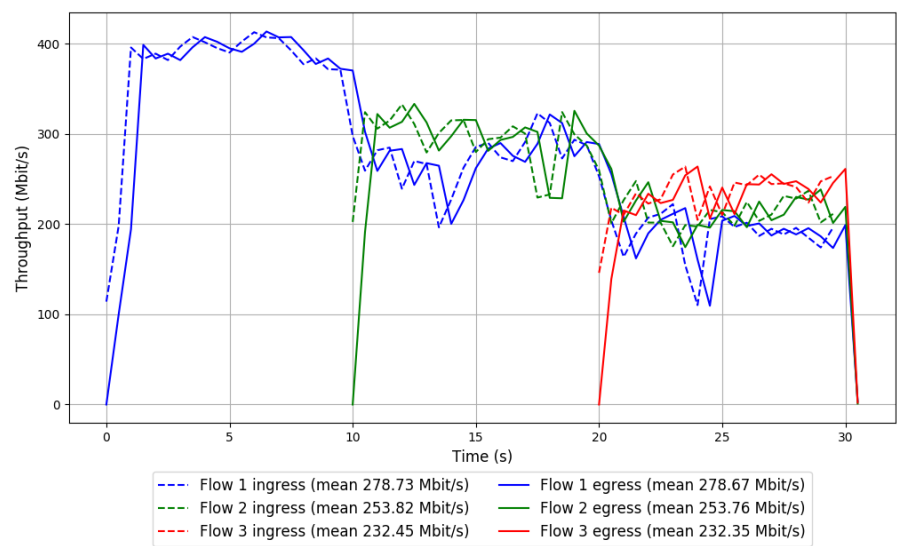


Run 9: Statistics of Copa

Start at: 2018-06-18 19:55:34  
End at: 2018-06-18 19:56:04  
Local clock offset: 3.867 ms  
Remote clock offset: -4.378 ms

# Below is generated by plot.py at 2018-06-18 21:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 524.94 Mbit/s  
95th percentile per-packet one-way delay: 22.537 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 278.67 Mbit/s  
95th percentile per-packet one-way delay: 20.993 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 253.76 Mbit/s  
95th percentile per-packet one-way delay: 23.137 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 232.35 Mbit/s  
95th percentile per-packet one-way delay: 24.858 ms  
Loss rate: 0.05%

Run 9: Report of Copa — Data Link

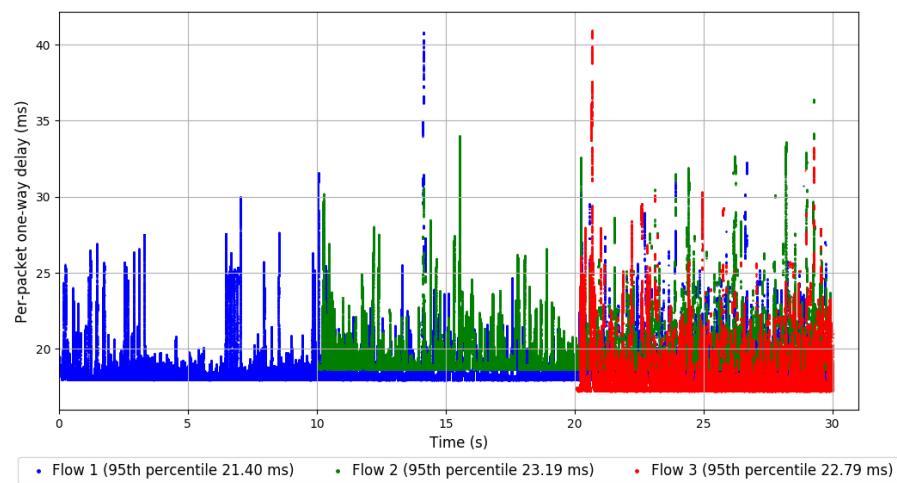
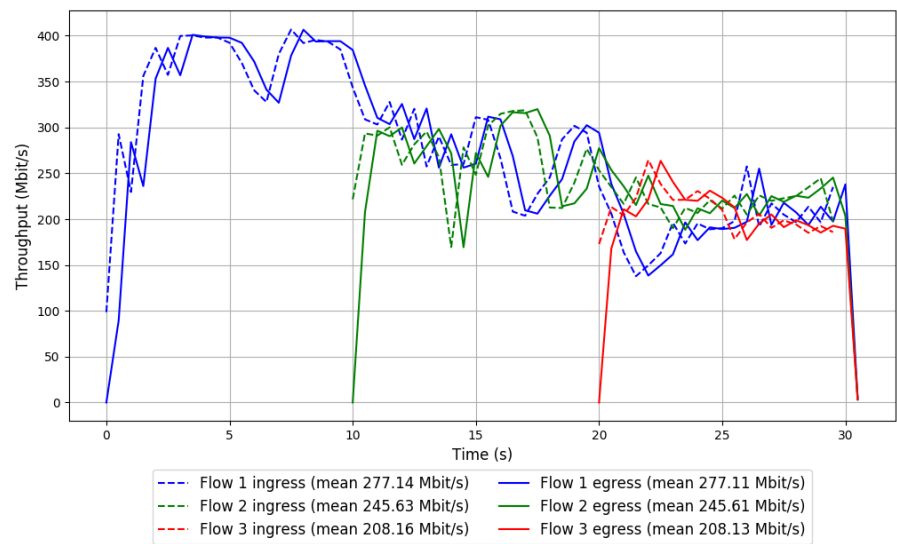


Run 10: Statistics of Copa

Start at: 2018-06-18 20:20:56  
End at: 2018-06-18 20:21:26  
Local clock offset: 3.568 ms  
Remote clock offset: -3.708 ms

# Below is generated by plot.py at 2018-06-18 21:19:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 509.83 Mbit/s  
95th percentile per-packet one-way delay: 22.398 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 277.11 Mbit/s  
95th percentile per-packet one-way delay: 21.396 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 245.61 Mbit/s  
95th percentile per-packet one-way delay: 23.186 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 208.13 Mbit/s  
95th percentile per-packet one-way delay: 22.787 ms  
Loss rate: 0.02%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-06-18 16:33:32

End at: 2018-06-18 16:34:02

Local clock offset: 4.626 ms

Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 522.20 Mbit/s

95th percentile per-packet one-way delay: 24.473 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 357.82 Mbit/s

95th percentile per-packet one-way delay: 25.051 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 168.29 Mbit/s

95th percentile per-packet one-way delay: 22.288 ms

Loss rate: 0.07%

-- Flow 3:

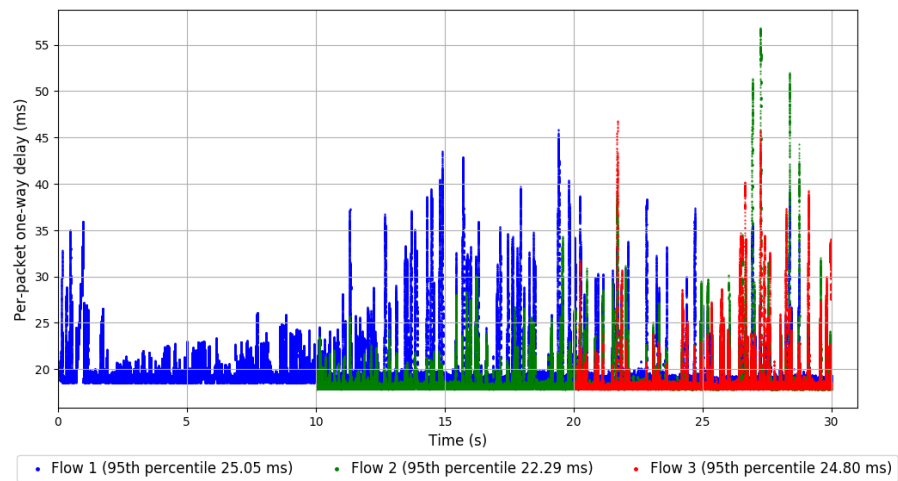
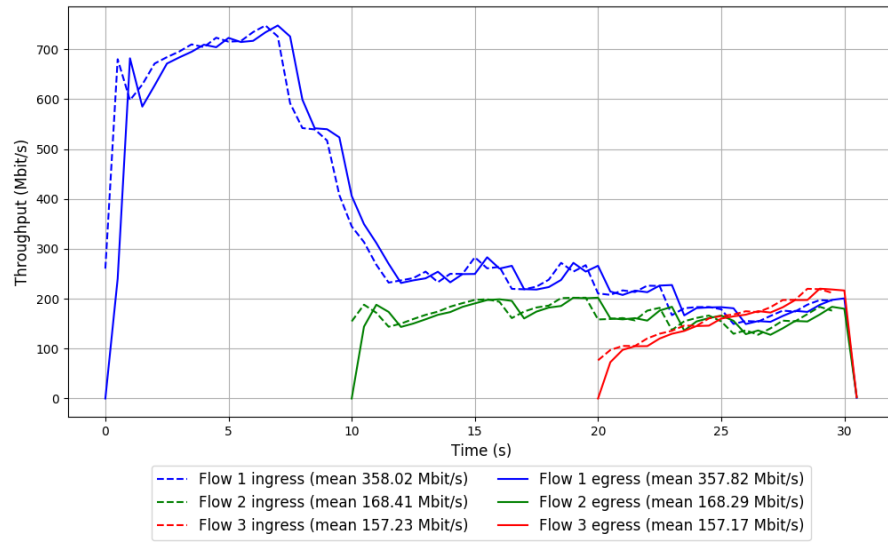
Average throughput: 157.17 Mbit/s

95th percentile per-packet one-way delay: 24.802 ms

Loss rate: 0.04%



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



Run 2: Statistics of TCP Cubic

Start at: 2018-06-18 16:59:14

End at: 2018-06-18 16:59:44

Local clock offset: 4.5 ms

Remote clock offset: 0.573 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 381.05 Mbit/s

95th percentile per-packet one-way delay: 23.195 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 228.79 Mbit/s

95th percentile per-packet one-way delay: 23.237 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 158.13 Mbit/s

95th percentile per-packet one-way delay: 23.057 ms

Loss rate: 0.01%

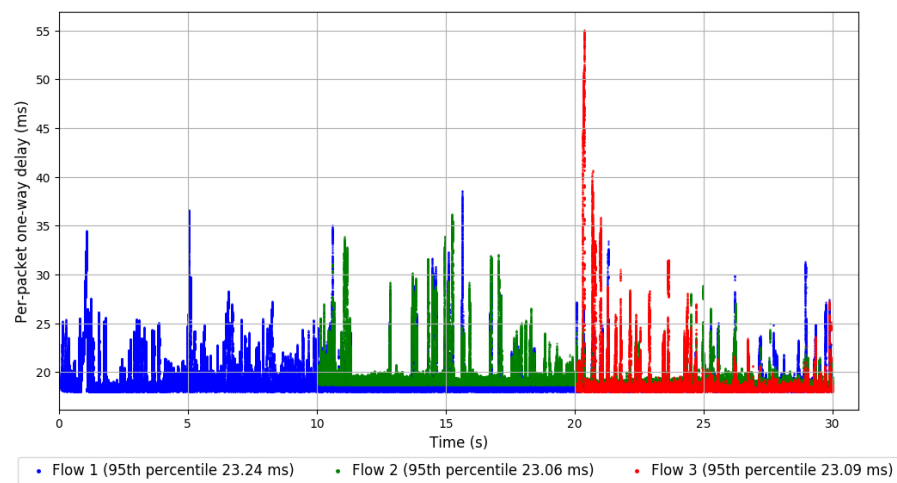
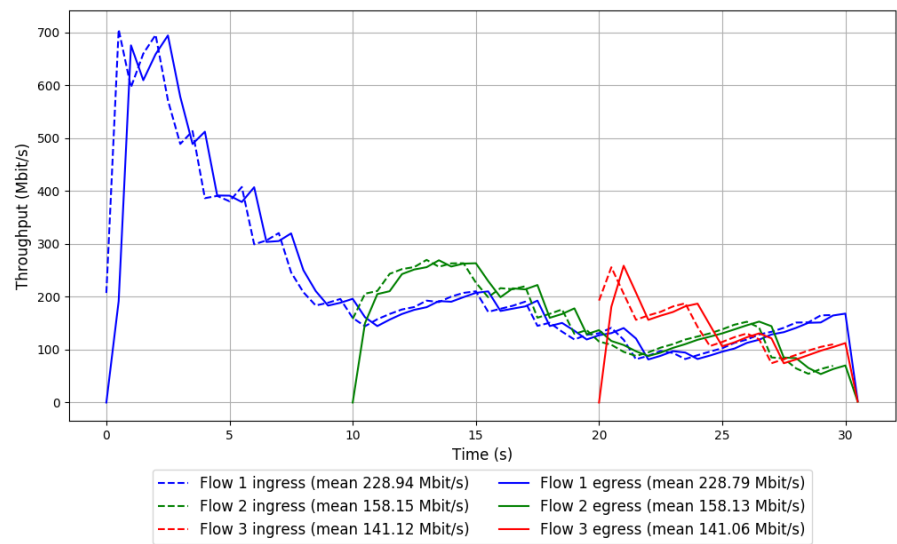
-- Flow 3:

Average throughput: 141.06 Mbit/s

95th percentile per-packet one-way delay: 23.085 ms

Loss rate: 0.04%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-06-18 17:25:00

End at: 2018-06-18 17:25:30

Local clock offset: 3.611 ms

Remote clock offset: 0.429 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 498.98 Mbit/s

95th percentile per-packet one-way delay: 23.624 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 290.14 Mbit/s

95th percentile per-packet one-way delay: 23.320 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 186.44 Mbit/s

95th percentile per-packet one-way delay: 23.160 ms

Loss rate: 0.12%

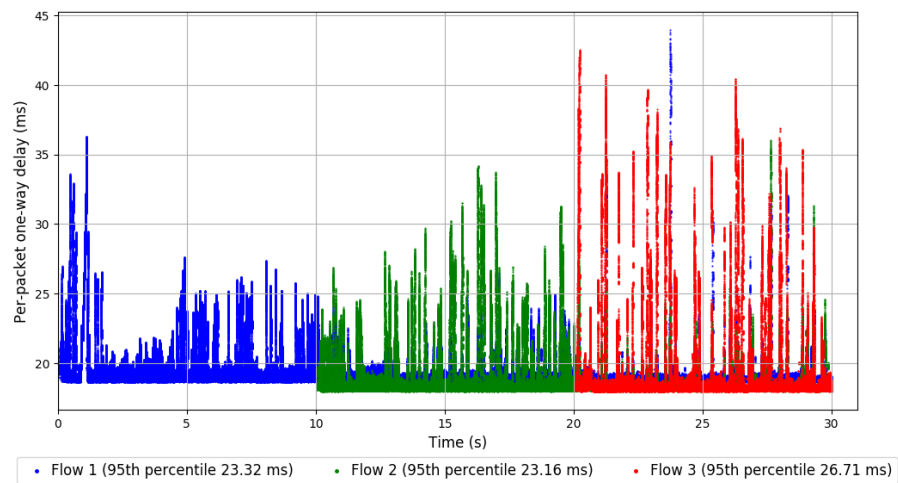
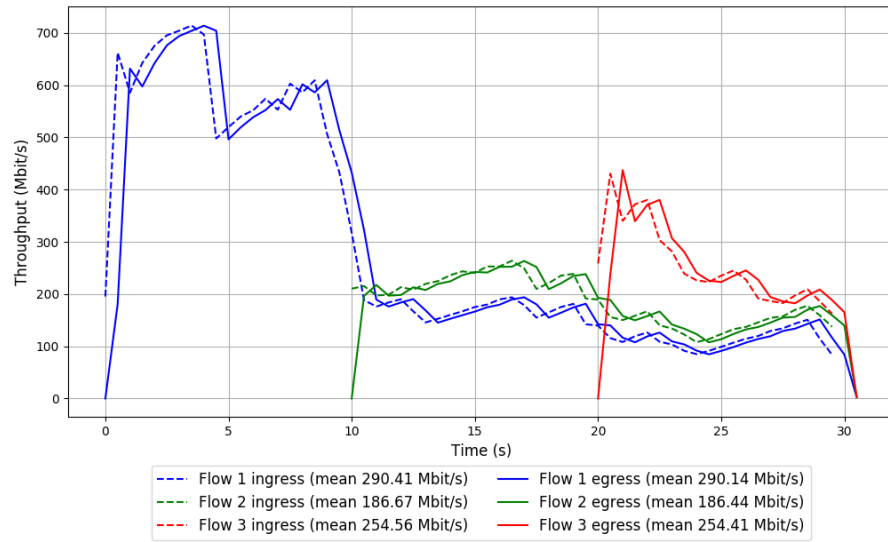
-- Flow 3:

Average throughput: 254.41 Mbit/s

95th percentile per-packet one-way delay: 26.711 ms

Loss rate: 0.06%

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



Run 4: Statistics of TCP Cubic

Start at: 2018-06-18 17:50:34

End at: 2018-06-18 17:51:04

Local clock offset: 3.762 ms

Remote clock offset: 0.407 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 333.34 Mbit/s

95th percentile per-packet one-way delay: 24.294 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 185.76 Mbit/s

95th percentile per-packet one-way delay: 23.730 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 136.64 Mbit/s

95th percentile per-packet one-way delay: 21.824 ms

Loss rate: 0.08%

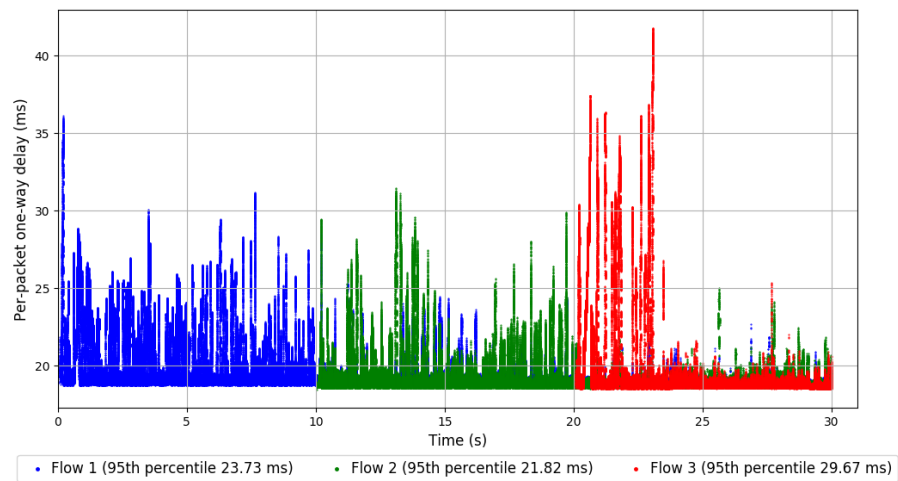
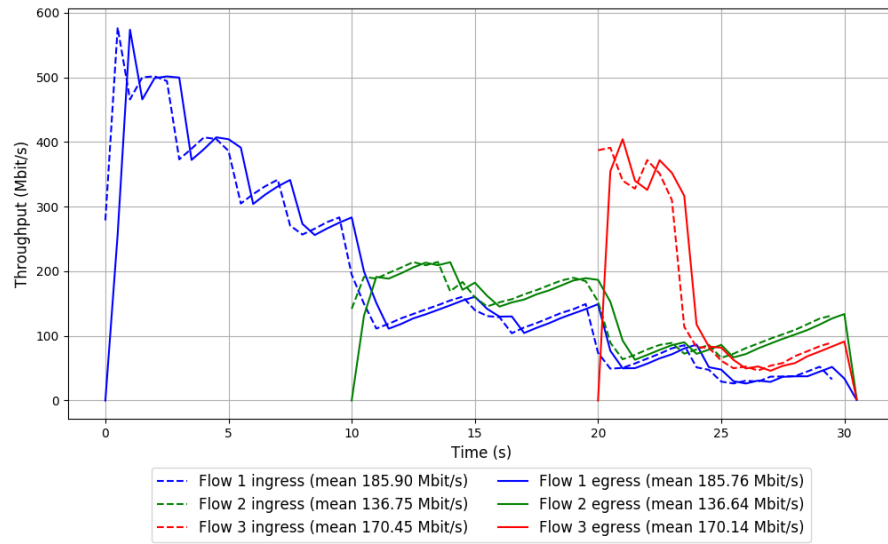
-- Flow 3:

Average throughput: 170.14 Mbit/s

95th percentile per-packet one-way delay: 29.667 ms

Loss rate: 0.18%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-06-18 18:16:05

End at: 2018-06-18 18:16:35

Local clock offset: 3.696 ms

Remote clock offset: 4.2 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 286.79 Mbit/s

95th percentile per-packet one-way delay: 22.890 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 111.59 Mbit/s

95th percentile per-packet one-way delay: 20.052 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 197.85 Mbit/s

95th percentile per-packet one-way delay: 26.247 ms

Loss rate: 0.13%

-- Flow 3:

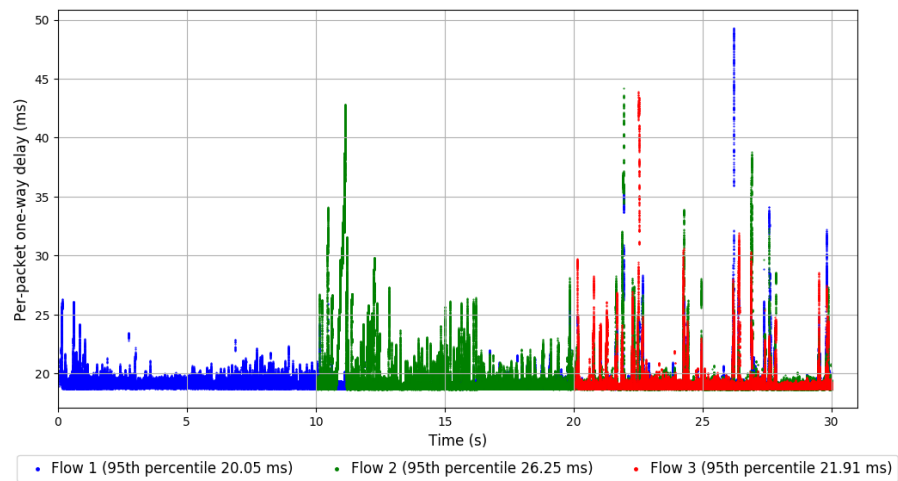
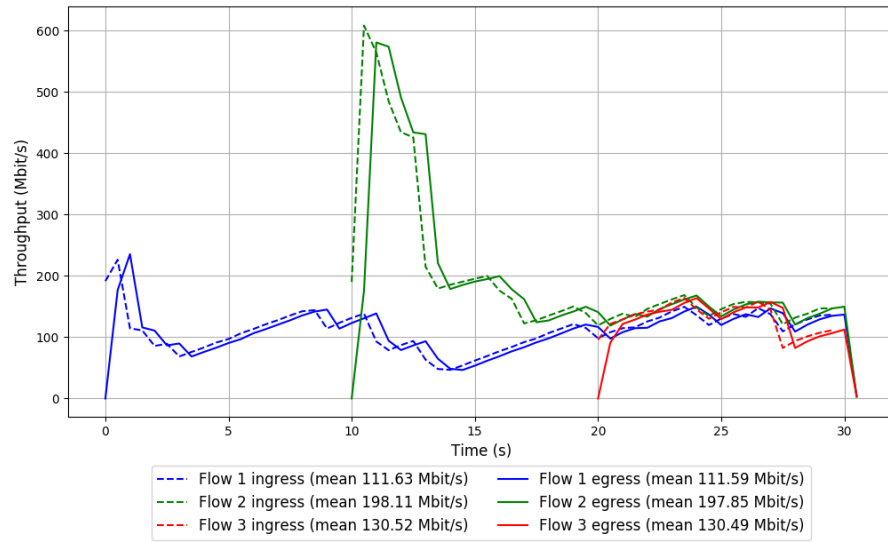
Average throughput: 130.49 Mbit/s

95th percentile per-packet one-way delay: 21.907 ms

Loss rate: 0.02%



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



Run 6: Statistics of TCP Cubic

Start at: 2018-06-18 18:41:39

End at: 2018-06-18 18:42:09

Local clock offset: 3.673 ms

Remote clock offset: 5.824 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 313.19 Mbit/s

95th percentile per-packet one-way delay: 22.074 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 183.11 Mbit/s

95th percentile per-packet one-way delay: 22.091 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 127.69 Mbit/s

95th percentile per-packet one-way delay: 21.066 ms

Loss rate: 0.13%

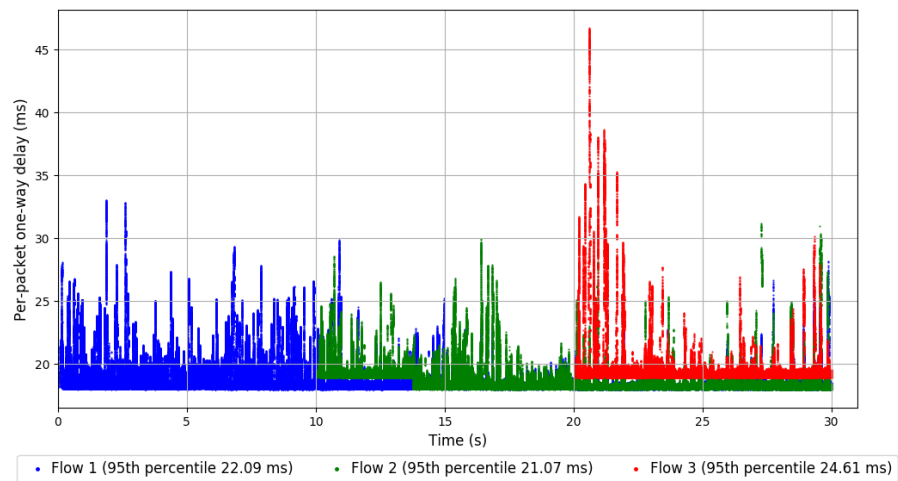
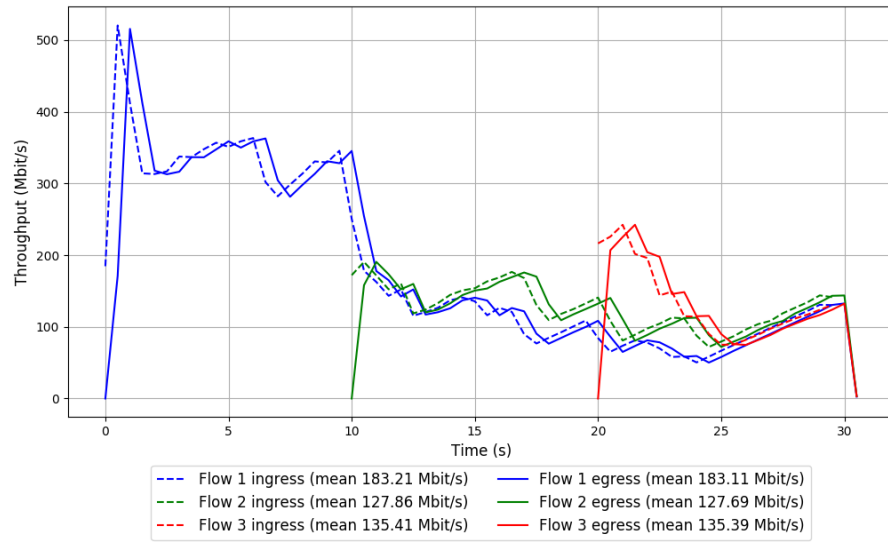
-- Flow 3:

Average throughput: 135.39 Mbit/s

95th percentile per-packet one-way delay: 24.612 ms

Loss rate: 0.01%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-06-18 19:06:58

End at: 2018-06-18 19:07:28

Local clock offset: 3.818 ms

Remote clock offset: 2.394 ms

# Below is generated by plot.py at 2018-06-18 21:19:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 253.40 Mbit/s

95th percentile per-packet one-way delay: 21.941 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 110.77 Mbit/s

95th percentile per-packet one-way delay: 20.595 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 135.73 Mbit/s

95th percentile per-packet one-way delay: 23.458 ms

Loss rate: 0.02%

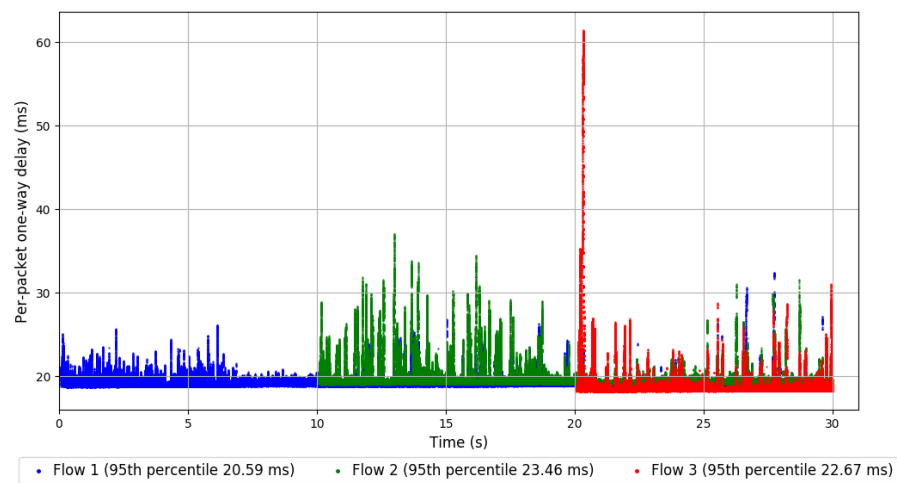
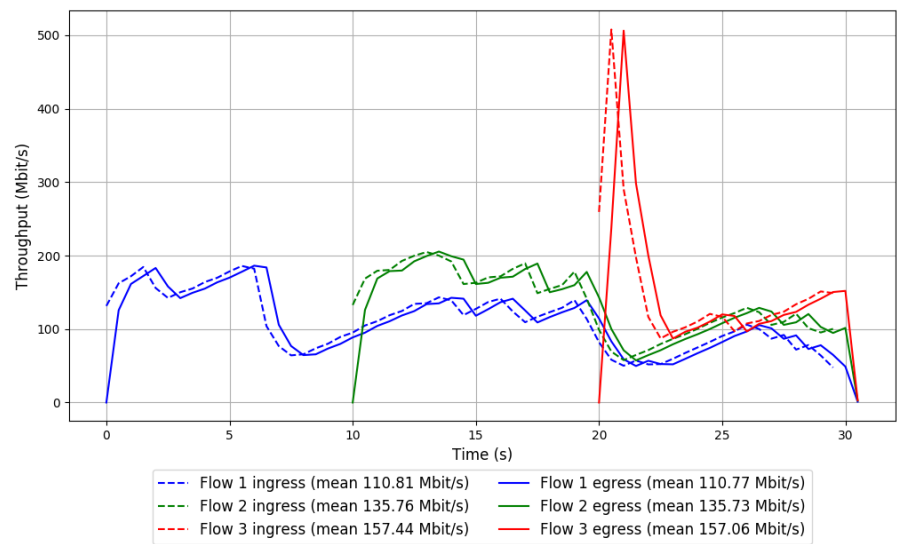
-- Flow 3:

Average throughput: 157.06 Mbit/s

95th percentile per-packet one-way delay: 22.670 ms

Loss rate: 0.24%

Run 7: Report of TCP Cubic — Data Link

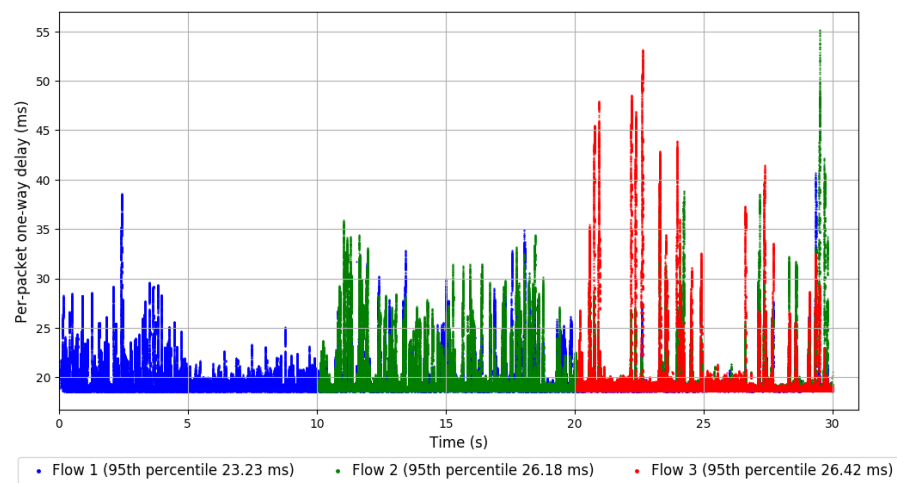
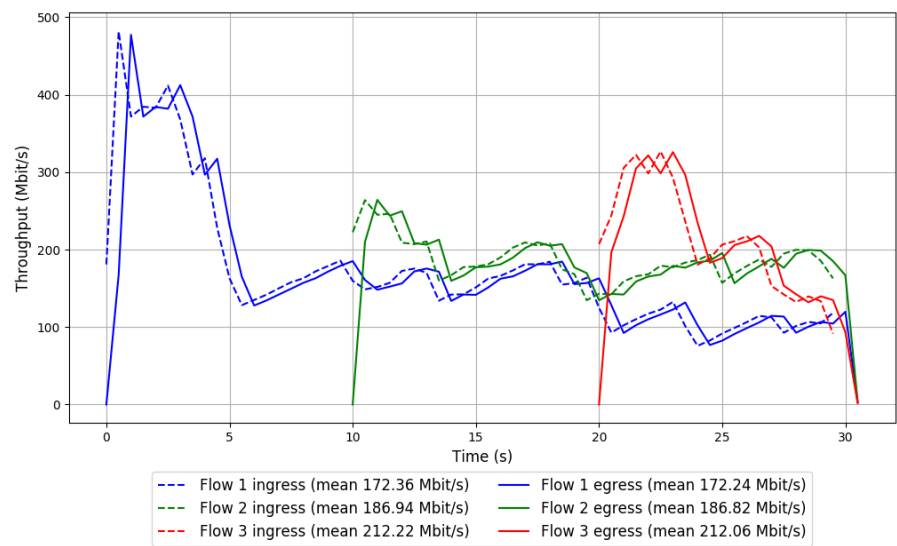


Run 8: Statistics of TCP Cubic

Start at: 2018-06-18 19:32:01  
End at: 2018-06-18 19:32:31  
Local clock offset: 3.889 ms  
Remote clock offset: -2.064 ms

# Below is generated by plot.py at 2018-06-18 21:19:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 367.22 Mbit/s  
95th percentile per-packet one-way delay: 24.587 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 172.24 Mbit/s  
95th percentile per-packet one-way delay: 23.230 ms  
Loss rate: 0.07%  
-- Flow 2:  
Average throughput: 186.82 Mbit/s  
95th percentile per-packet one-way delay: 26.183 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 212.06 Mbit/s  
95th percentile per-packet one-way delay: 26.420 ms  
Loss rate: 0.06%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-18 19:57:24

End at: 2018-06-18 19:57:54

Local clock offset: 3.881 ms

Remote clock offset: -4.54 ms

# Below is generated by plot.py at 2018-06-18 21:21:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 395.31 Mbit/s

95th percentile per-packet one-way delay: 23.907 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 233.96 Mbit/s

95th percentile per-packet one-way delay: 23.747 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 160.54 Mbit/s

95th percentile per-packet one-way delay: 24.491 ms

Loss rate: 0.14%

-- Flow 3:

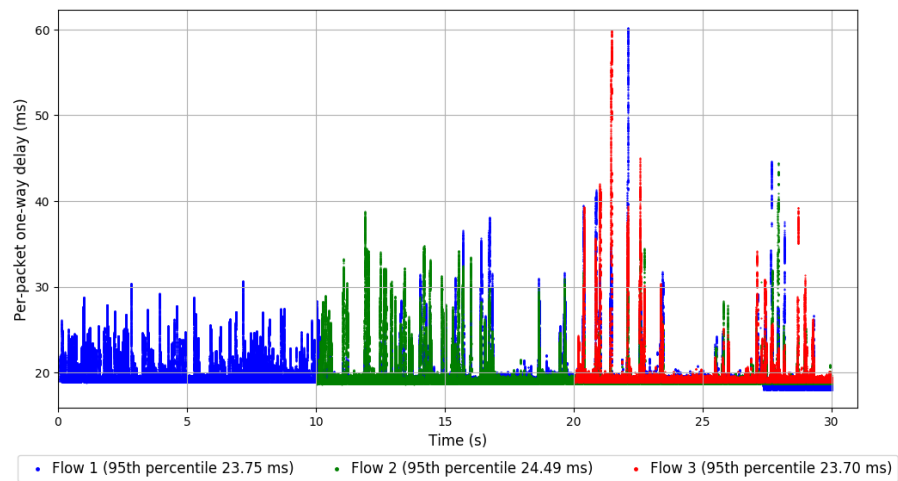
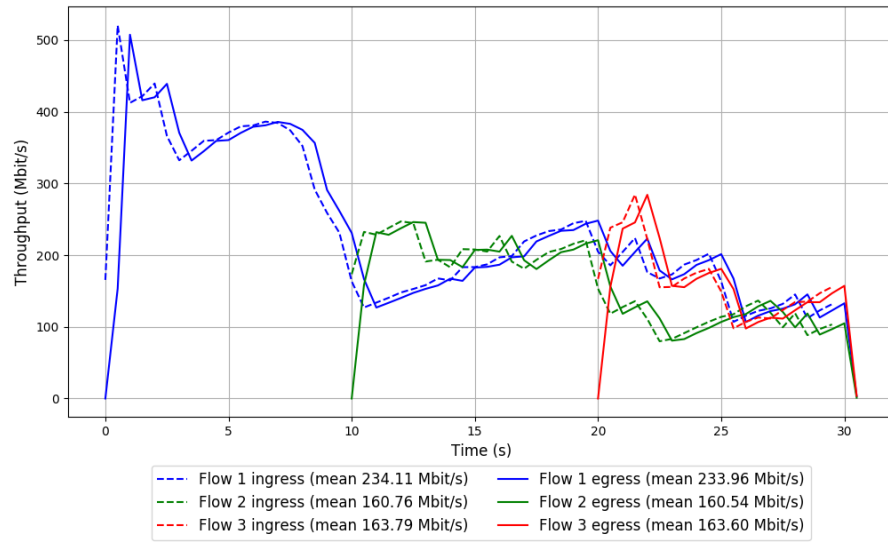
Average throughput: 163.60 Mbit/s

95th percentile per-packet one-way delay: 23.697 ms

Loss rate: 0.13%



# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-06-18 20:22:46

End at: 2018-06-18 20:23:16

Local clock offset: 3.659 ms

Remote clock offset: -3.66 ms

# Below is generated by plot.py at 2018-06-18 21:21:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 333.91 Mbit/s

95th percentile per-packet one-way delay: 25.247 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 119.41 Mbit/s

95th percentile per-packet one-way delay: 20.511 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 216.69 Mbit/s

95th percentile per-packet one-way delay: 27.205 ms

Loss rate: 0.18%

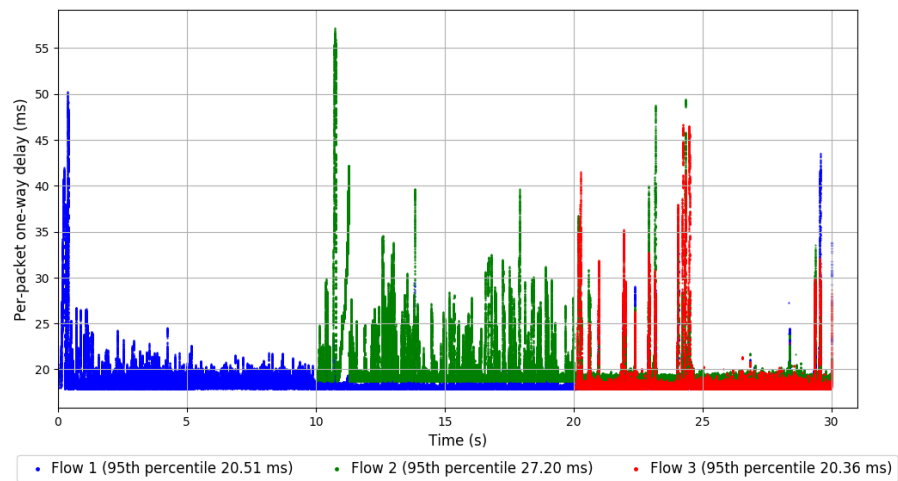
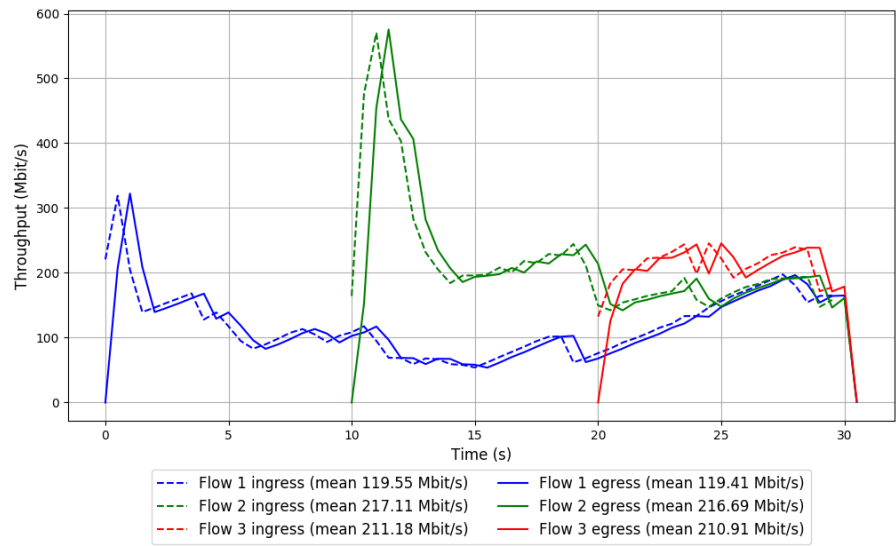
-- Flow 3:

Average throughput: 210.91 Mbit/s

95th percentile per-packet one-way delay: 20.356 ms

Loss rate: 0.08%

# Run 10: Report of TCP Cubic — Data Link

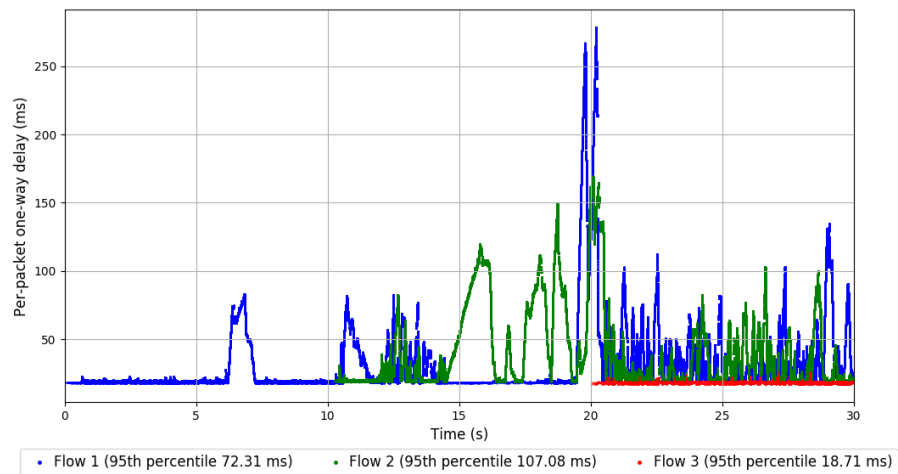
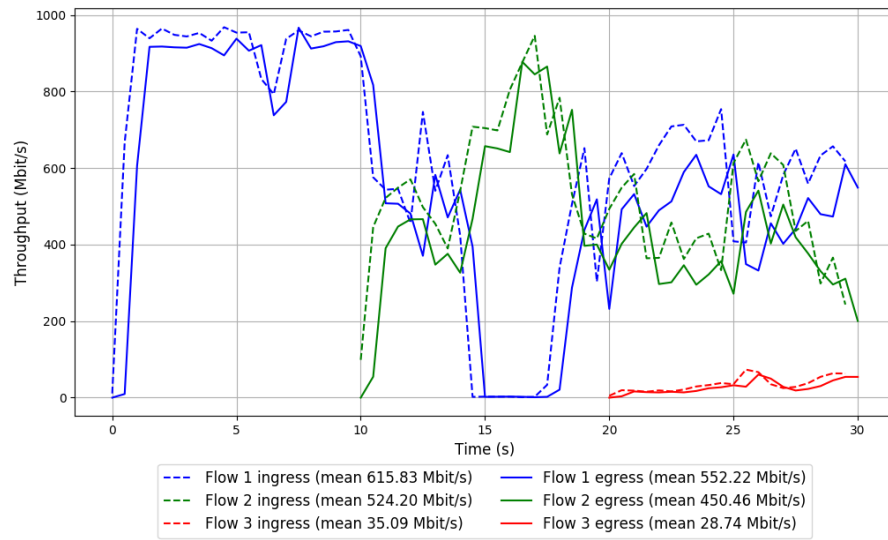


Run 1: Statistics of FillP

Start at: 2018-06-18 16:17:19  
End at: 2018-06-18 16:17:49  
Local clock offset: 4.276 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-18 21:30:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 858.67 Mbit/s  
95th percentile per-packet one-way delay: 91.679 ms  
Loss rate: 12.07%  
-- Flow 1:  
Average throughput: 552.22 Mbit/s  
95th percentile per-packet one-way delay: 72.313 ms  
Loss rate: 10.33%  
-- Flow 2:  
Average throughput: 450.46 Mbit/s  
95th percentile per-packet one-way delay: 107.081 ms  
Loss rate: 14.94%  
-- Flow 3:  
Average throughput: 28.74 Mbit/s  
95th percentile per-packet one-way delay: 18.711 ms  
Loss rate: 18.09%

## Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-18 16:43:02

End at: 2018-06-18 16:43:32

Local clock offset: 4.569 ms

Remote clock offset: 0.787 ms

# Below is generated by plot.py at 2018-06-18 21:30:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 819.17 Mbit/s

95th percentile per-packet one-way delay: 97.248 ms

Loss rate: 14.49%

-- Flow 1:

Average throughput: 530.01 Mbit/s

95th percentile per-packet one-way delay: 96.726 ms

Loss rate: 10.87%

-- Flow 2:

Average throughput: 339.04 Mbit/s

95th percentile per-packet one-way delay: 100.232 ms

Loss rate: 19.46%

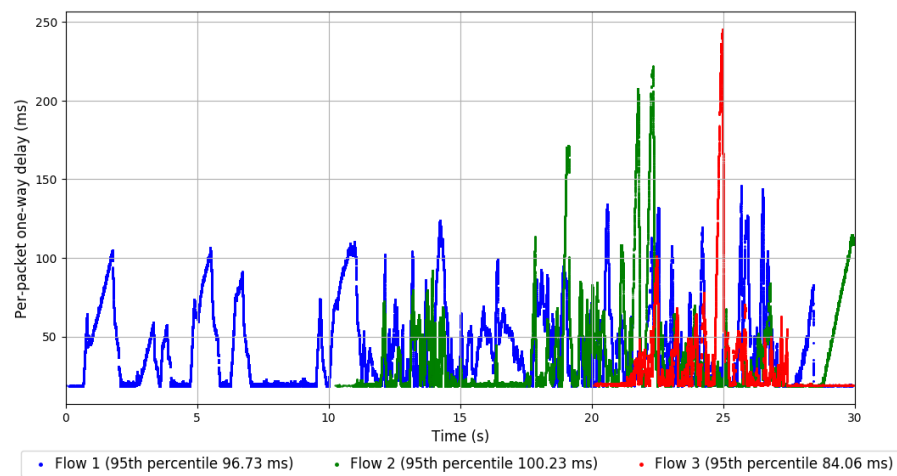
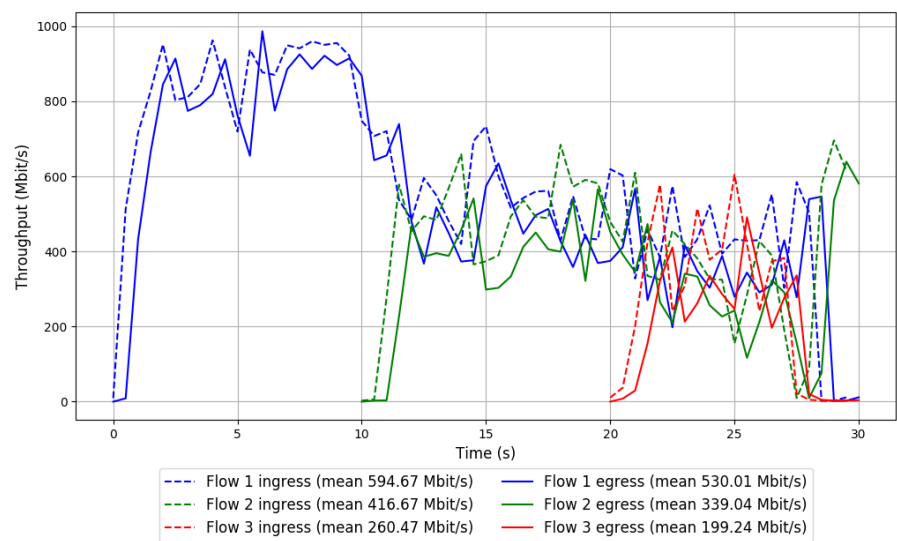
-- Flow 3:

Average throughput: 199.24 Mbit/s

95th percentile per-packet one-way delay: 84.058 ms

Loss rate: 23.50%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-06-18 17:08:44

End at: 2018-06-18 17:09:14

Local clock offset: 4.251 ms

Remote clock offset: 0.687 ms

# Below is generated by plot.py at 2018-06-18 21:31:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 826.44 Mbit/s

95th percentile per-packet one-way delay: 108.976 ms

Loss rate: 14.43%

-- Flow 1:

Average throughput: 525.69 Mbit/s

95th percentile per-packet one-way delay: 110.647 ms

Loss rate: 11.62%

-- Flow 2:

Average throughput: 288.47 Mbit/s

95th percentile per-packet one-way delay: 83.441 ms

Loss rate: 17.14%

-- Flow 3:

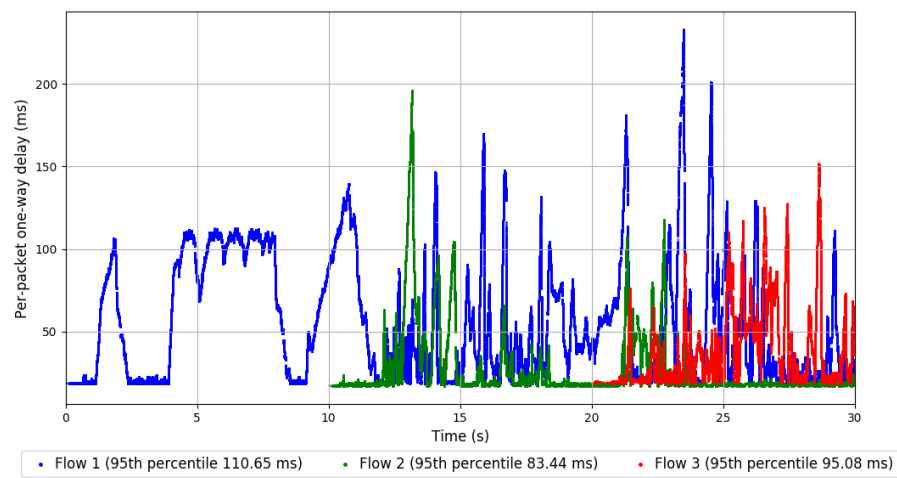
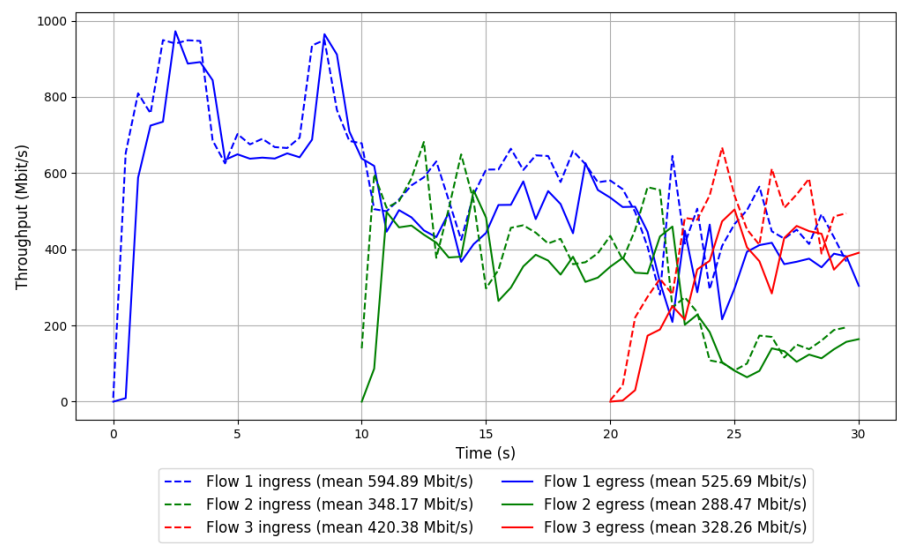
Average throughput: 328.26 Mbit/s

95th percentile per-packet one-way delay: 95.079 ms

Loss rate: 21.90%



Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-06-18 17:34:30

End at: 2018-06-18 17:35:00

Local clock offset: 3.588 ms

Remote clock offset: 0.226 ms

# Below is generated by plot.py at 2018-06-18 21:32:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 802.38 Mbit/s

95th percentile per-packet one-way delay: 109.526 ms

Loss rate: 14.93%

-- Flow 1:

Average throughput: 572.50 Mbit/s

95th percentile per-packet one-way delay: 112.588 ms

Loss rate: 12.44%

-- Flow 2:

Average throughput: 283.28 Mbit/s

95th percentile per-packet one-way delay: 89.663 ms

Loss rate: 19.22%

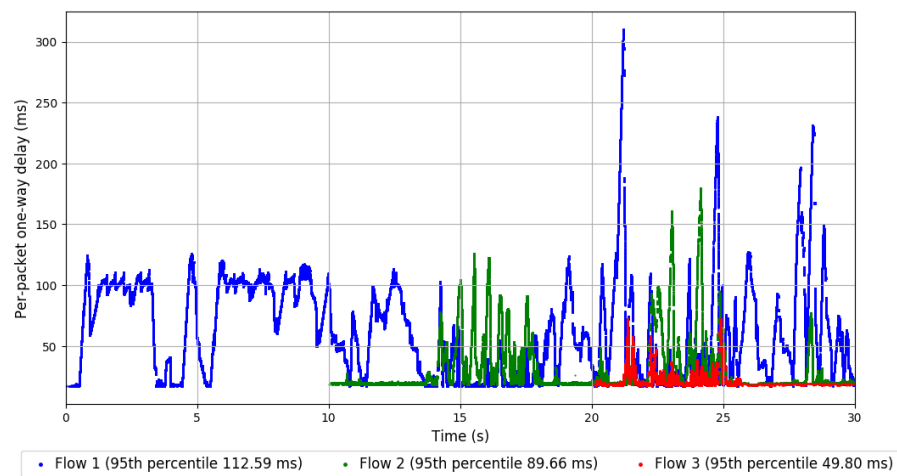
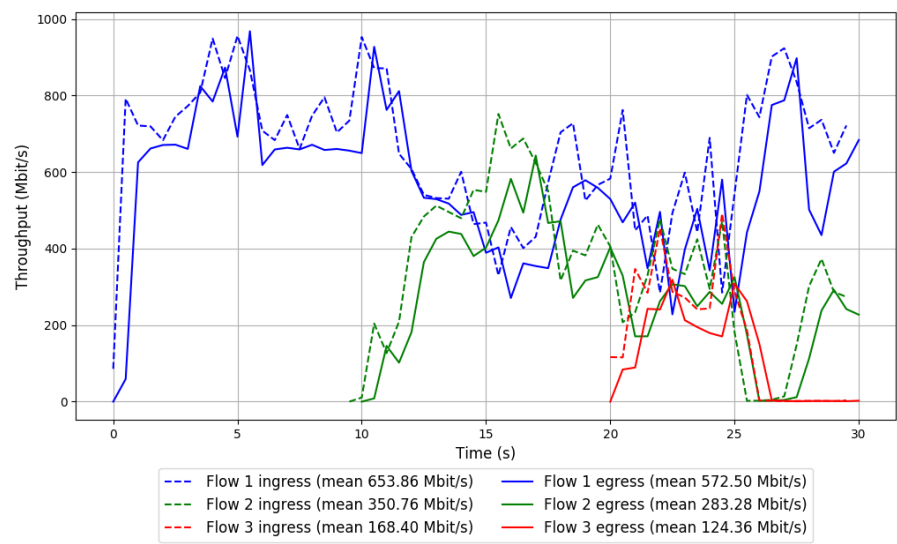
-- Flow 3:

Average throughput: 124.36 Mbit/s

95th percentile per-packet one-way delay: 49.805 ms

Loss rate: 26.15%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-06-18 17:59:55

End at: 2018-06-18 18:00:25

Local clock offset: 3.679 ms

Remote clock offset: 2.416 ms

# Below is generated by plot.py at 2018-06-18 21:32:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 787.68 Mbit/s

95th percentile per-packet one-way delay: 110.004 ms

Loss rate: 14.54%

-- Flow 1:

Average throughput: 460.96 Mbit/s

95th percentile per-packet one-way delay: 105.443 ms

Loss rate: 11.87%

-- Flow 2:

Average throughput: 425.68 Mbit/s

95th percentile per-packet one-way delay: 119.855 ms

Loss rate: 18.34%

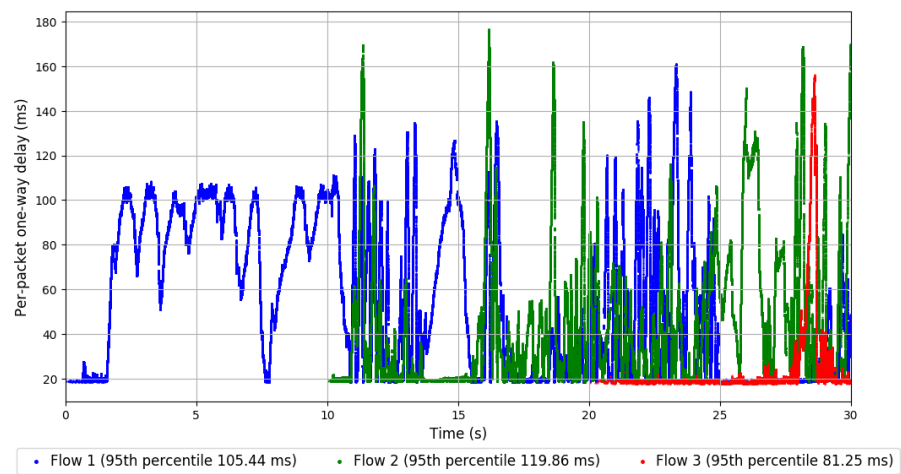
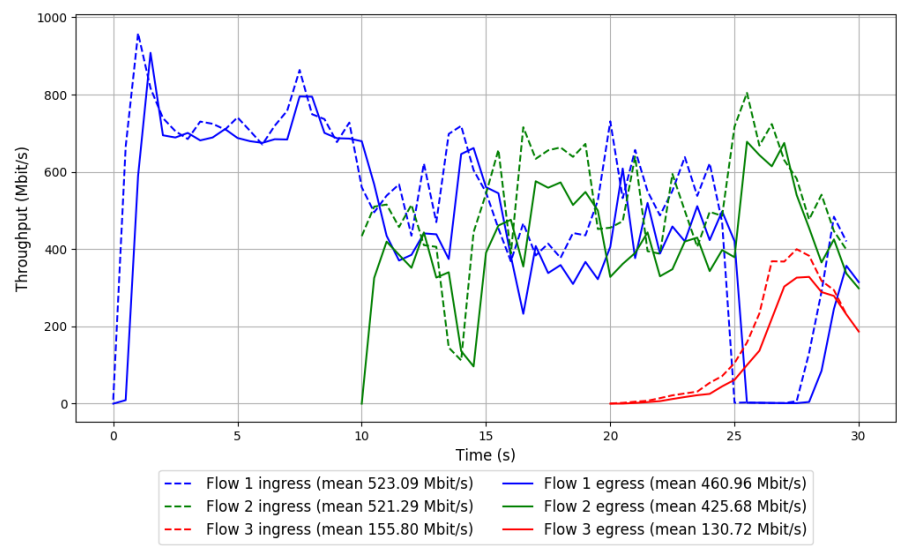
-- Flow 3:

Average throughput: 130.72 Mbit/s

95th percentile per-packet one-way delay: 81.255 ms

Loss rate: 16.08%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-18 18:25:27

End at: 2018-06-18 18:25:57

Local clock offset: 3.802 ms

Remote clock offset: 4.854 ms

# Below is generated by plot.py at 2018-06-18 21:32:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 732.42 Mbit/s

95th percentile per-packet one-way delay: 109.763 ms

Loss rate: 14.09%

-- Flow 1:

Average throughput: 504.71 Mbit/s

95th percentile per-packet one-way delay: 106.317 ms

Loss rate: 10.73%

-- Flow 2:

Average throughput: 238.93 Mbit/s

95th percentile per-packet one-way delay: 154.838 ms

Loss rate: 20.48%

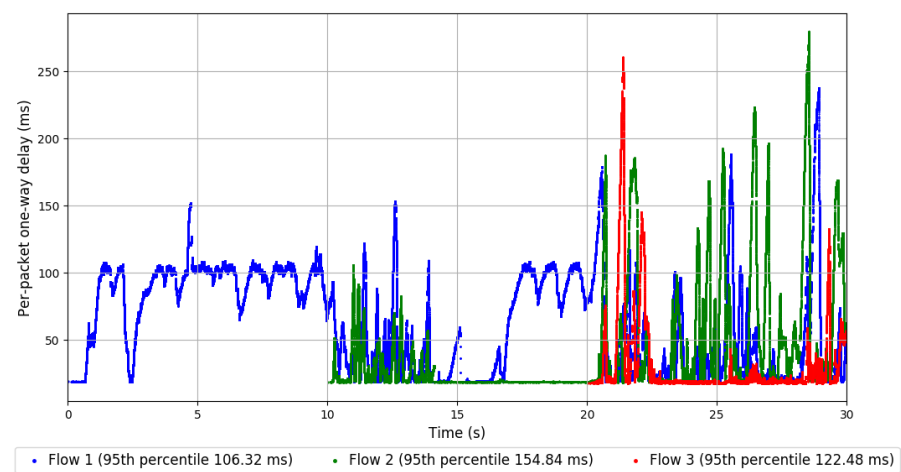
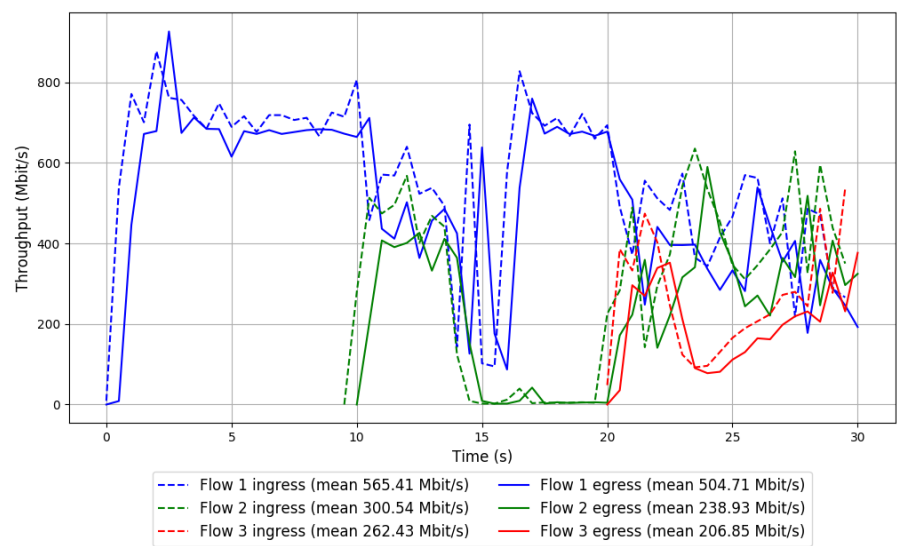
-- Flow 3:

Average throughput: 206.85 Mbit/s

95th percentile per-packet one-way delay: 122.478 ms

Loss rate: 21.15%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-06-18 18:51:04

End at: 2018-06-18 18:51:34

Local clock offset: 3.783 ms

Remote clock offset: 6.292 ms

# Below is generated by plot.py at 2018-06-18 21:33:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 778.93 Mbit/s

95th percentile per-packet one-way delay: 108.923 ms

Loss rate: 16.07%

-- Flow 1:

Average throughput: 461.73 Mbit/s

95th percentile per-packet one-way delay: 107.187 ms

Loss rate: 13.20%

-- Flow 2:

Average throughput: 268.94 Mbit/s

95th percentile per-packet one-way delay: 132.807 ms

Loss rate: 20.10%

-- Flow 3:

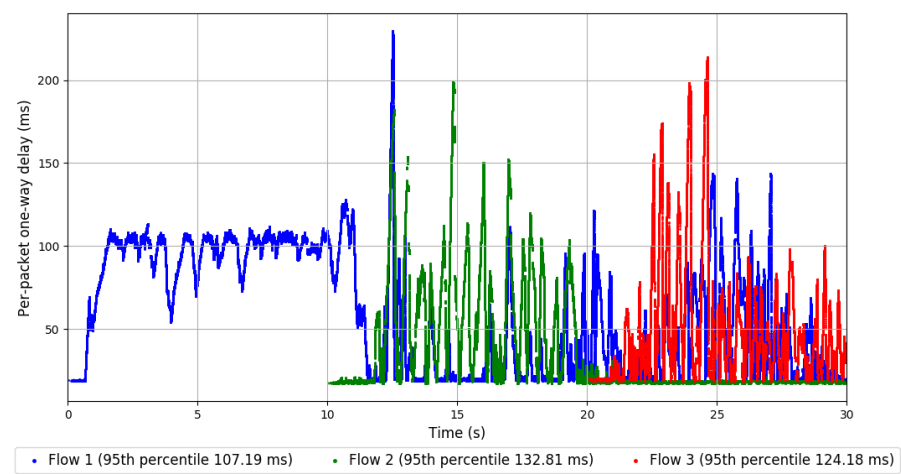
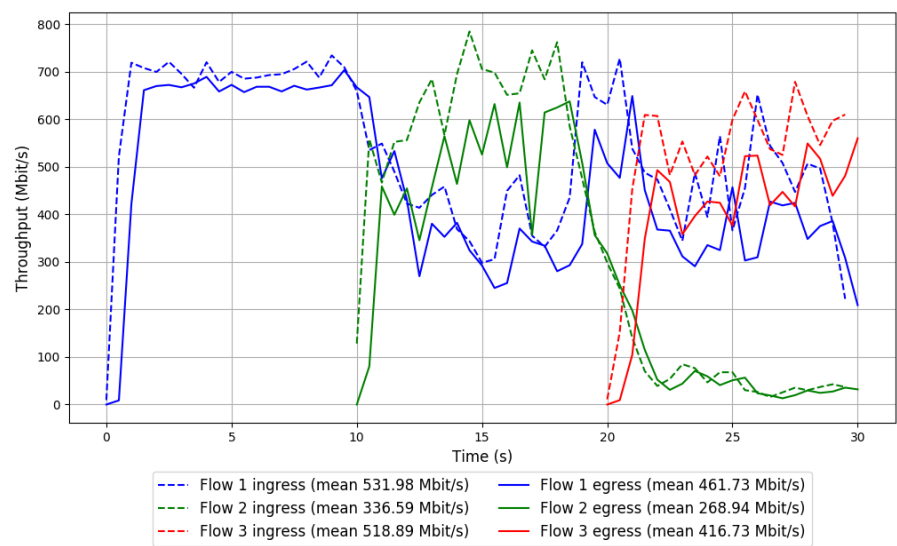
Average throughput: 416.73 Mbit/s

95th percentile per-packet one-way delay: 124.178 ms

Loss rate: 19.67%



Run 7: Report of FillP — Data Link

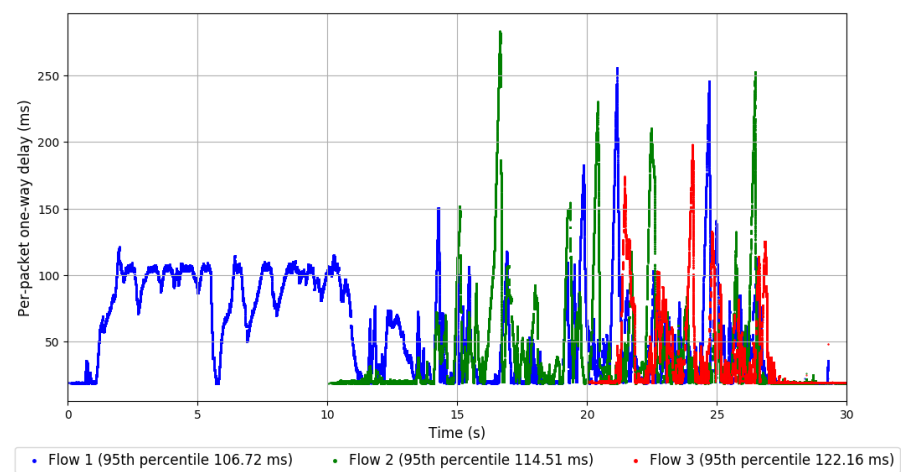
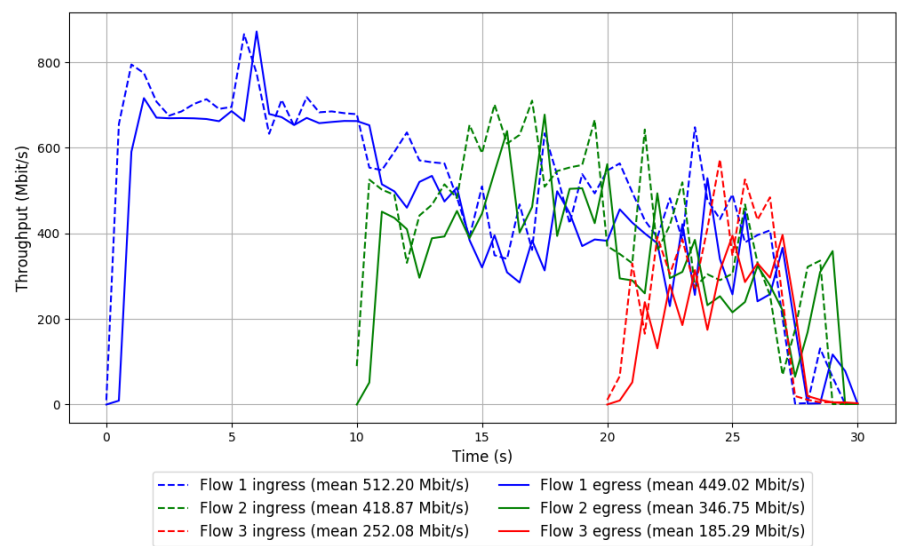


Run 8: Statistics of FillP

Start at: 2018-06-18 19:16:16  
End at: 2018-06-18 19:16:46  
Local clock offset: 3.717 ms  
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2018-06-18 21:33:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 741.12 Mbit/s  
95th percentile per-packet one-way delay: 107.155 ms  
Loss rate: 15.24%  
-- Flow 1:  
Average throughput: 449.02 Mbit/s  
95th percentile per-packet one-way delay: 106.718 ms  
Loss rate: 12.34%  
-- Flow 2:  
Average throughput: 346.75 Mbit/s  
95th percentile per-packet one-way delay: 114.512 ms  
Loss rate: 17.22%  
-- Flow 3:  
Average throughput: 185.29 Mbit/s  
95th percentile per-packet one-way delay: 122.161 ms  
Loss rate: 26.50%

Run 8: Report of FillP — Data Link

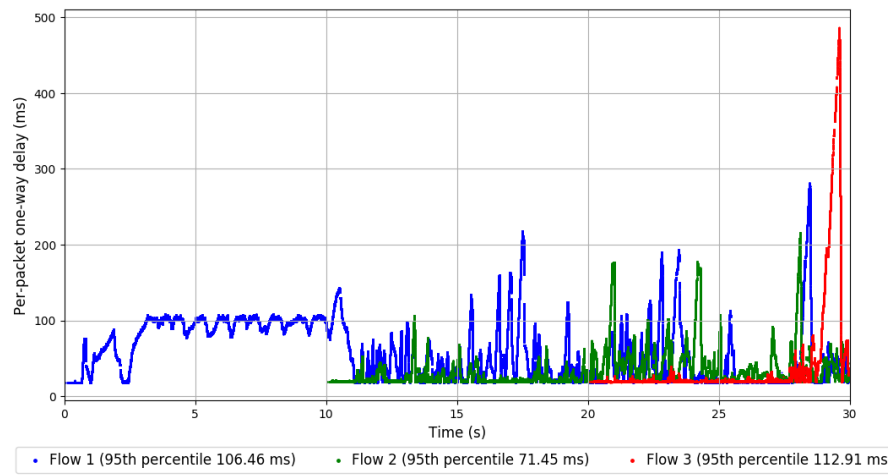
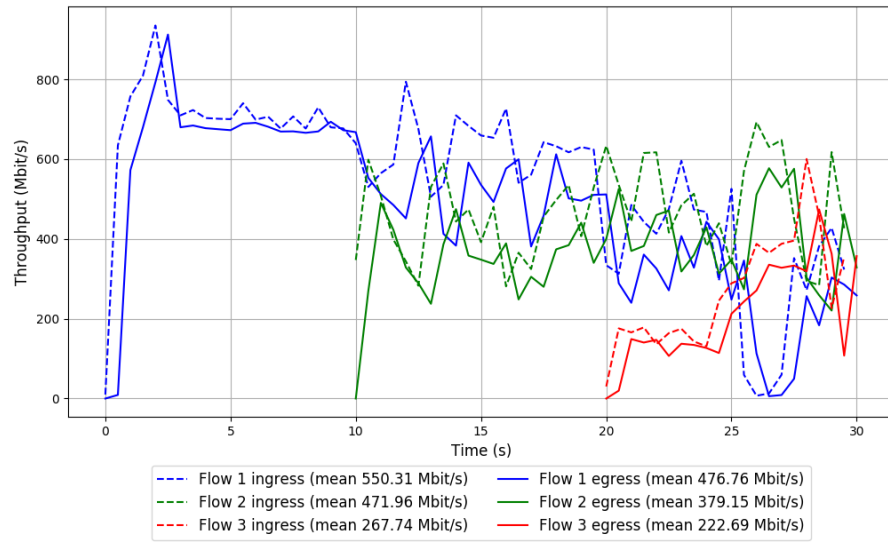


Run 9: Statistics of FillP

Start at: 2018-06-18 19:41:25  
End at: 2018-06-18 19:41:55  
Local clock offset: 3.882 ms  
Remote clock offset: -3.091 ms

# Below is generated by plot.py at 2018-06-18 21:43:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 802.94 Mbit/s  
95th percentile per-packet one-way delay: 104.870 ms  
Loss rate: 15.73%  
-- Flow 1:  
Average throughput: 476.76 Mbit/s  
95th percentile per-packet one-way delay: 106.462 ms  
Loss rate: 13.33%  
-- Flow 2:  
Average throughput: 379.15 Mbit/s  
95th percentile per-packet one-way delay: 71.454 ms  
Loss rate: 19.63%  
-- Flow 3:  
Average throughput: 222.69 Mbit/s  
95th percentile per-packet one-way delay: 112.909 ms  
Loss rate: 16.80%

# Run 9: Report of FillP — Data Link

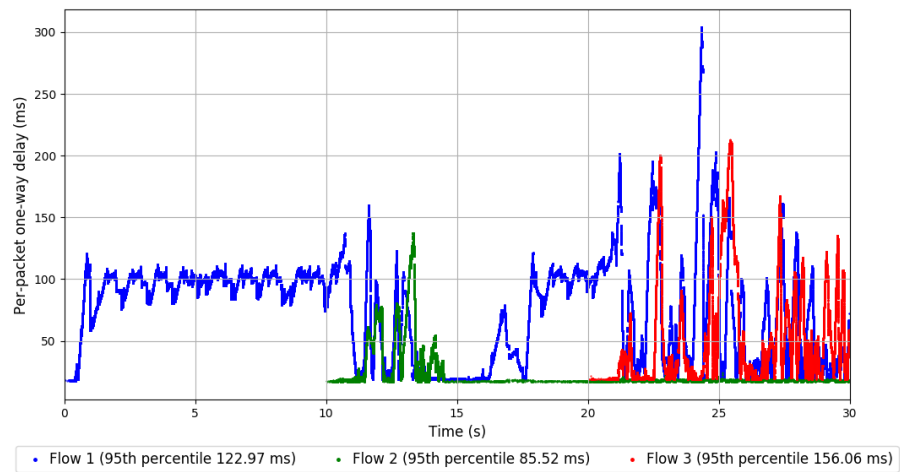
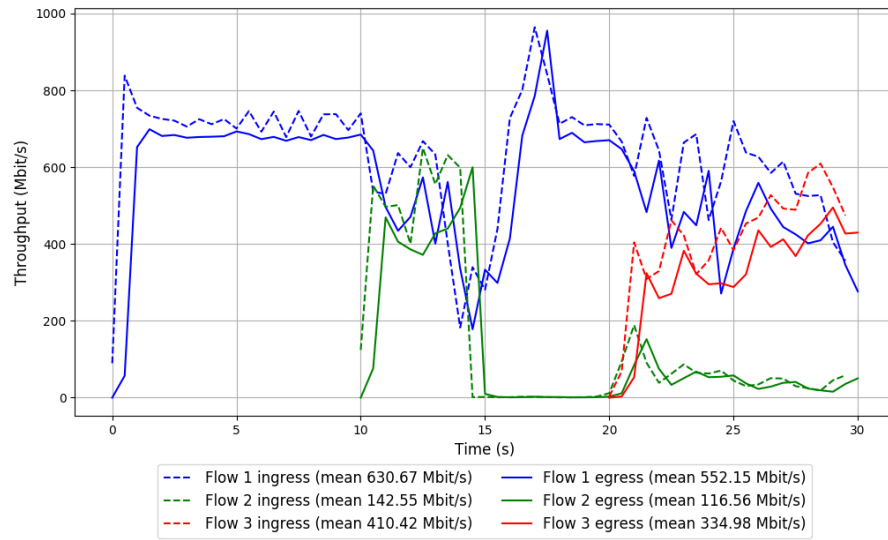


Run 10: Statistics of FillP

Start at: 2018-06-18 20:06:48  
End at: 2018-06-18 20:07:18  
Local clock offset: 3.81 ms  
Remote clock offset: -5.345 ms

# Below is generated by plot.py at 2018-06-18 21:43:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 740.81 Mbit/s  
95th percentile per-packet one-way delay: 125.875 ms  
Loss rate: 14.01%  
-- Flow 1:  
Average throughput: 552.15 Mbit/s  
95th percentile per-packet one-way delay: 122.972 ms  
Loss rate: 12.43%  
-- Flow 2:  
Average throughput: 116.56 Mbit/s  
95th percentile per-packet one-way delay: 85.521 ms  
Loss rate: 18.22%  
-- Flow 3:  
Average throughput: 334.98 Mbit/s  
95th percentile per-packet one-way delay: 156.060 ms  
Loss rate: 18.37%

# Run 10: Report of FillP — Data Link



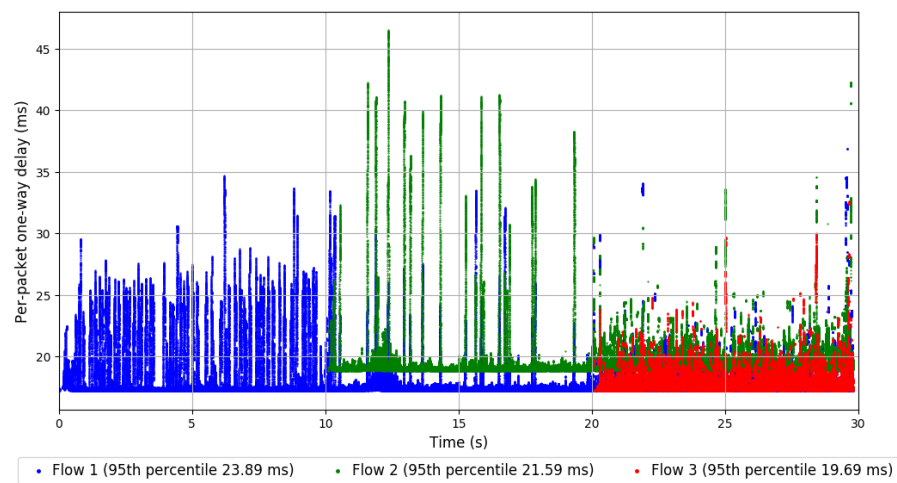
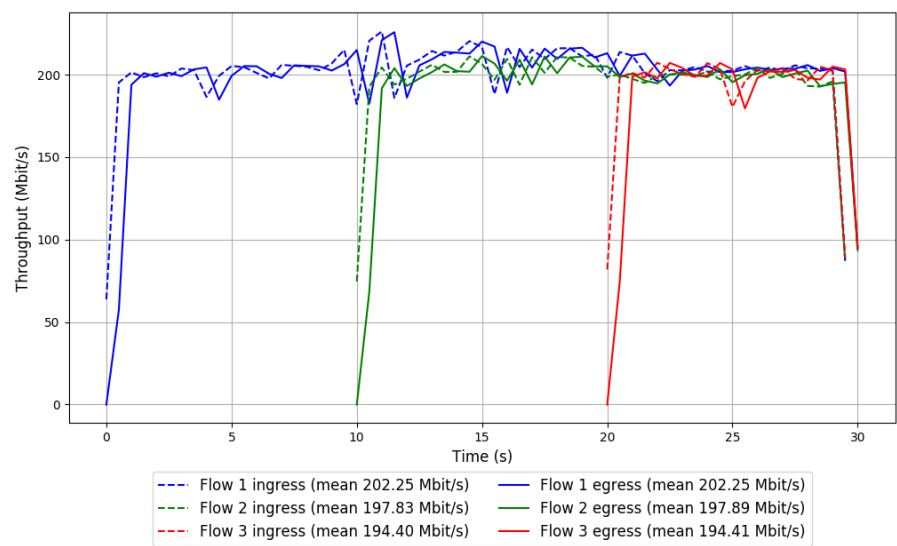
```
Run 1: Statistics of Indigo

Start at: 2018-06-18 16:24:26
End at: 2018-06-18 16:24:56
Local clock offset: 4.422 ms
Remote clock offset: 0.209 ms

# Below is generated by plot.py at 2018-06-18 21:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.49 Mbit/s
95th percentile per-packet one-way delay: 22.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.25 Mbit/s
95th percentile per-packet one-way delay: 23.892 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 197.89 Mbit/s
95th percentile per-packet one-way delay: 21.593 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 194.41 Mbit/s
95th percentile per-packet one-way delay: 19.689 ms
Loss rate: 0.00%
```



Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-18 16:50:11

End at: 2018-06-18 16:50:41

Local clock offset: 4.566 ms

Remote clock offset: 0.567 ms

# Below is generated by plot.py at 2018-06-18 21:43:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 391.26 Mbit/s

95th percentile per-packet one-way delay: 22.930 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 197.60 Mbit/s

95th percentile per-packet one-way delay: 25.989 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 201.84 Mbit/s

95th percentile per-packet one-way delay: 20.541 ms

Loss rate: 0.03%

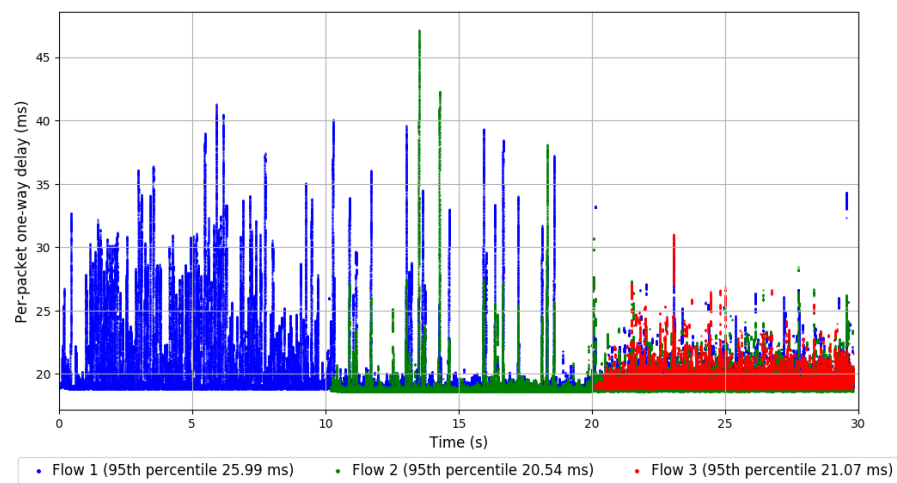
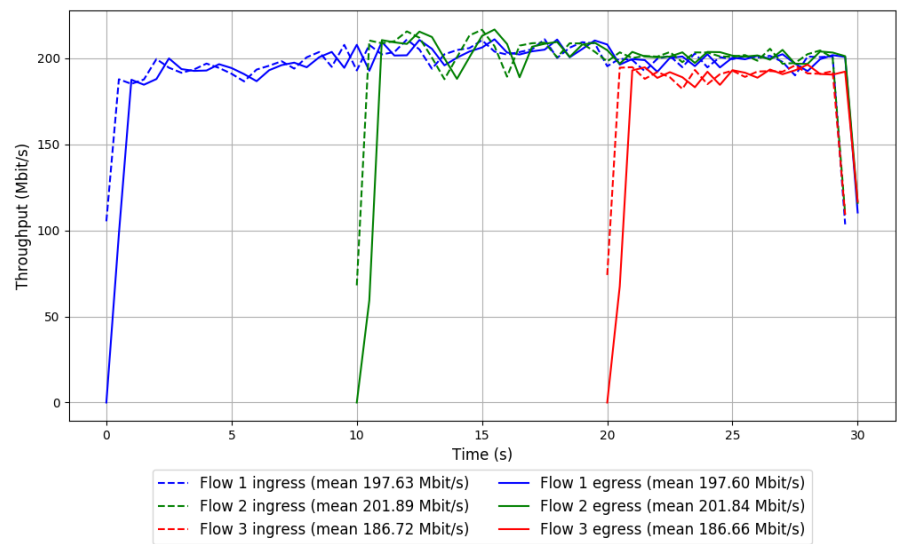
-- Flow 3:

Average throughput: 186.66 Mbit/s

95th percentile per-packet one-way delay: 21.068 ms

Loss rate: 0.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-18 17:15:53

End at: 2018-06-18 17:16:23

Local clock offset: 3.826 ms

Remote clock offset: 0.887 ms

# Below is generated by plot.py at 2018-06-18 21:43:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 399.80 Mbit/s

95th percentile per-packet one-way delay: 21.117 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 202.16 Mbit/s

95th percentile per-packet one-way delay: 21.871 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 201.19 Mbit/s

95th percentile per-packet one-way delay: 20.535 ms

Loss rate: 0.02%

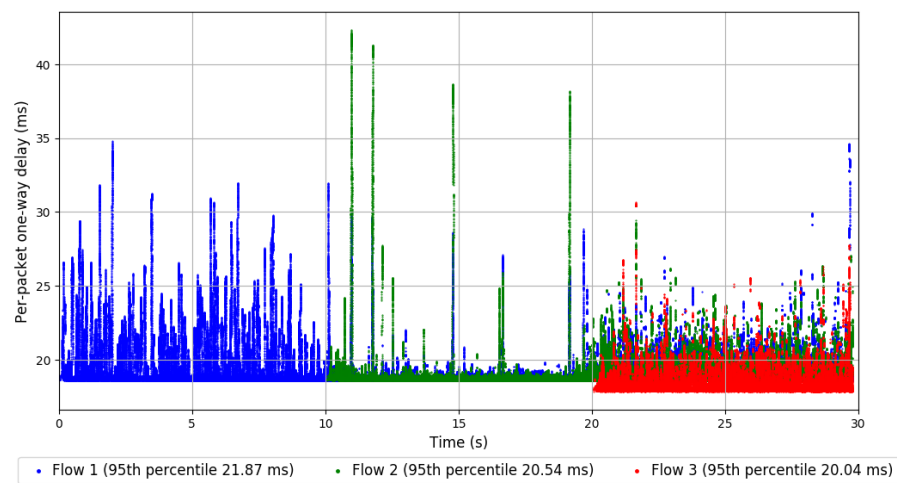
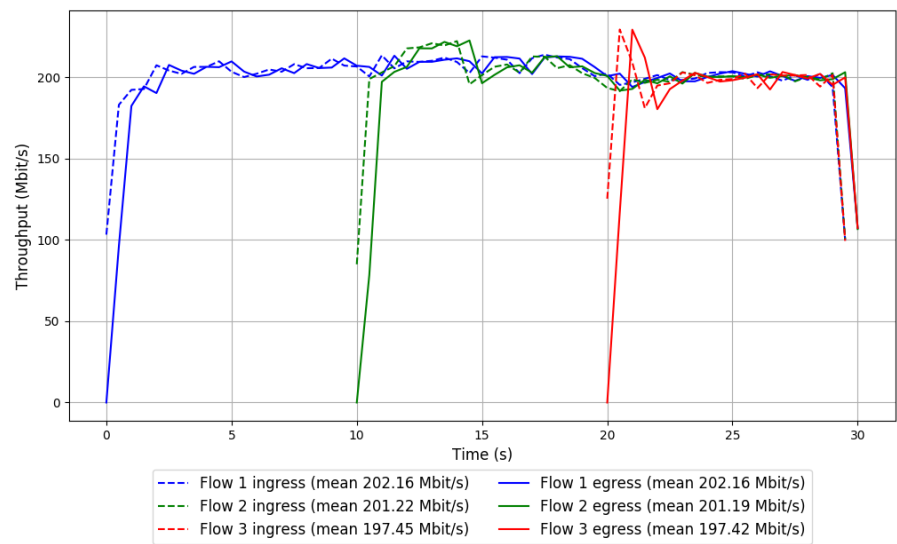
-- Flow 3:

Average throughput: 197.42 Mbit/s

95th percentile per-packet one-way delay: 20.036 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-06-18 17:41:33

End at: 2018-06-18 17:42:03

Local clock offset: 3.713 ms

Remote clock offset: 0.298 ms

# Below is generated by plot.py at 2018-06-18 21:43:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 394.22 Mbit/s

95th percentile per-packet one-way delay: 20.737 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 200.68 Mbit/s

95th percentile per-packet one-way delay: 20.673 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 199.11 Mbit/s

95th percentile per-packet one-way delay: 20.827 ms

Loss rate: 0.04%

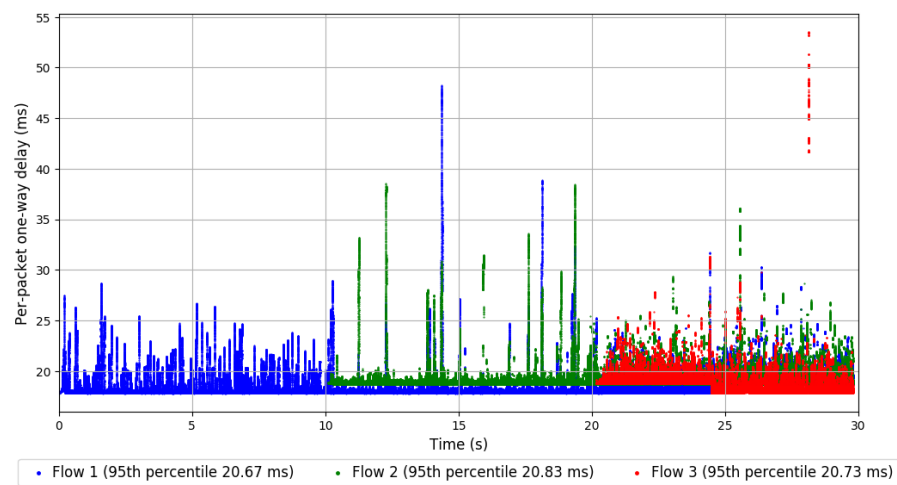
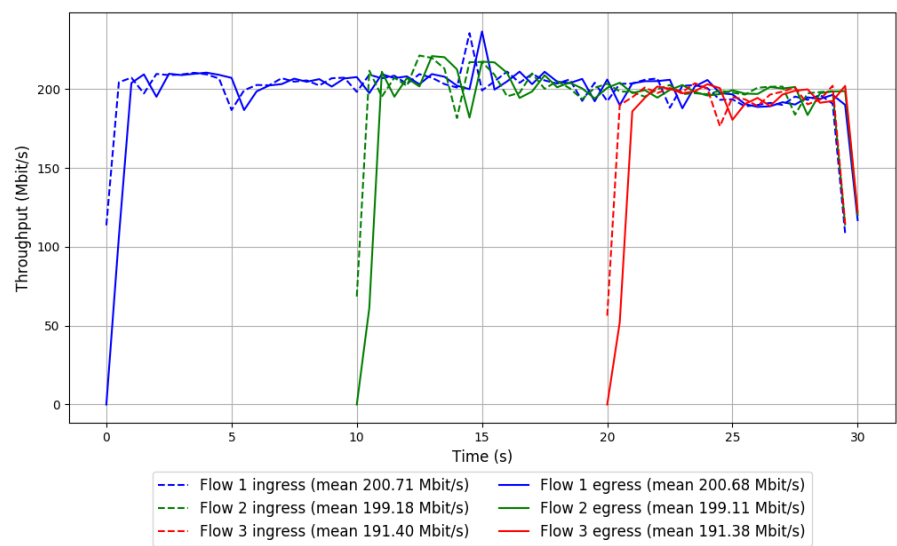
-- Flow 3:

Average throughput: 191.38 Mbit/s

95th percentile per-packet one-way delay: 20.727 ms

Loss rate: 0.02%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-06-18 18:07:00

End at: 2018-06-18 18:07:30

Local clock offset: 3.768 ms

Remote clock offset: 3.301 ms

# Below is generated by plot.py at 2018-06-18 21:43:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 394.72 Mbit/s

95th percentile per-packet one-way delay: 20.666 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 199.96 Mbit/s

95th percentile per-packet one-way delay: 21.121 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 198.85 Mbit/s

95th percentile per-packet one-way delay: 19.677 ms

Loss rate: 0.01%

-- Flow 3:

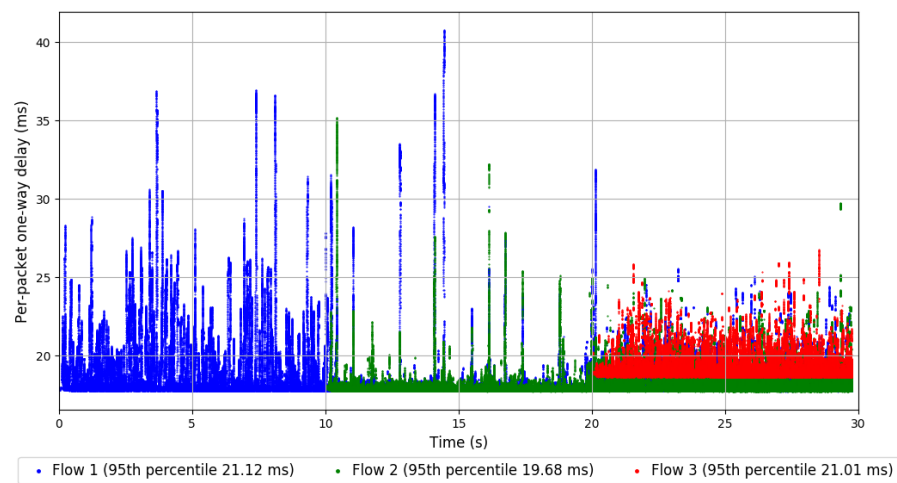
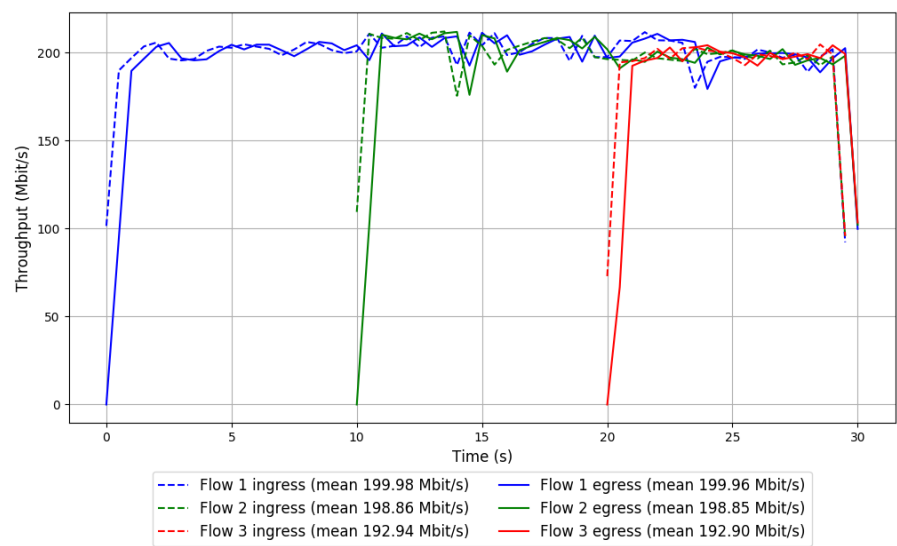
Average throughput: 192.90 Mbit/s

95th percentile per-packet one-way delay: 21.011 ms

Loss rate: 0.02%



Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-06-18 18:32:34

End at: 2018-06-18 18:33:04

Local clock offset: 3.787 ms

Remote clock offset: 5.272 ms

# Below is generated by plot.py at 2018-06-18 21:43:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 403.95 Mbit/s

95th percentile per-packet one-way delay: 20.344 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 206.69 Mbit/s

95th percentile per-packet one-way delay: 20.268 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 203.87 Mbit/s

95th percentile per-packet one-way delay: 19.416 ms

Loss rate: 0.00%

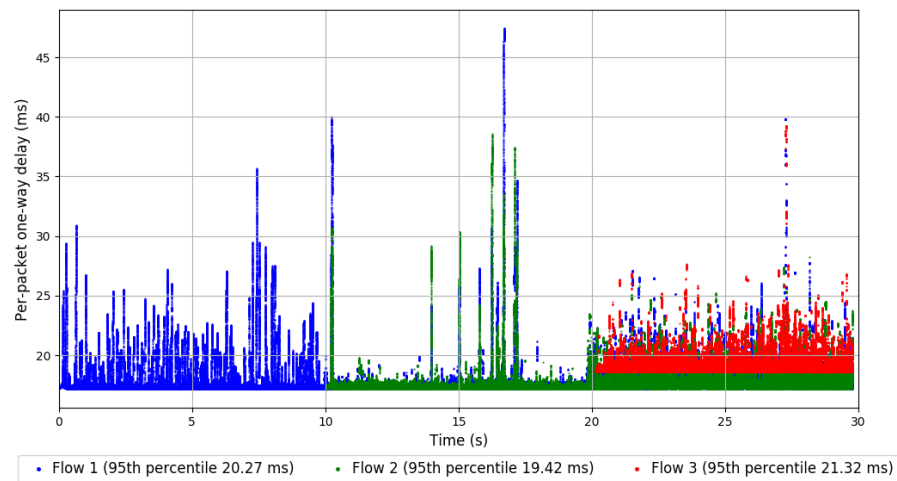
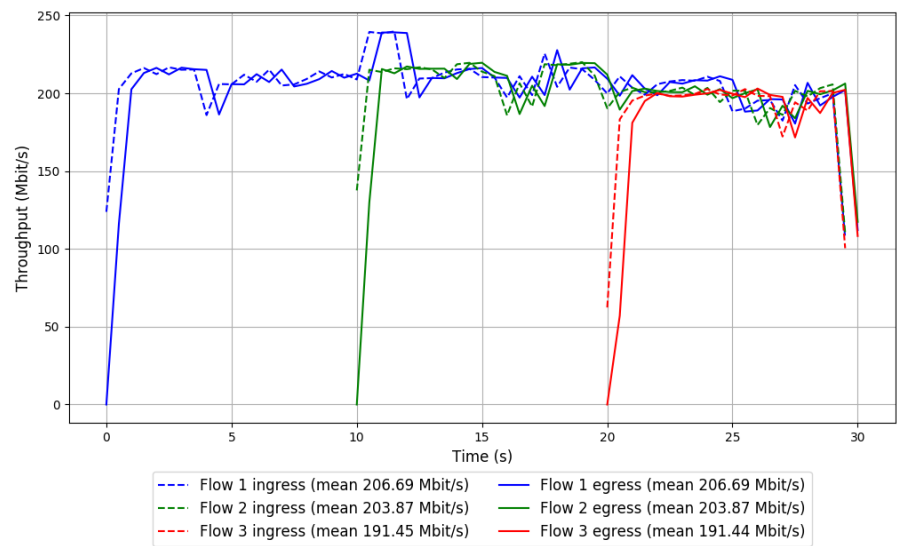
-- Flow 3:

Average throughput: 191.44 Mbit/s

95th percentile per-packet one-way delay: 21.316 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-06-18 18:58:01

End at: 2018-06-18 18:58:31

Local clock offset: 3.718 ms

Remote clock offset: 6.73 ms

# Below is generated by plot.py at 2018-06-18 21:43:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 298.08 Mbit/s

95th percentile per-packet one-way delay: 20.340 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 103.54 Mbit/s

95th percentile per-packet one-way delay: 20.094 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 197.10 Mbit/s

95th percentile per-packet one-way delay: 21.310 ms

Loss rate: 0.01%

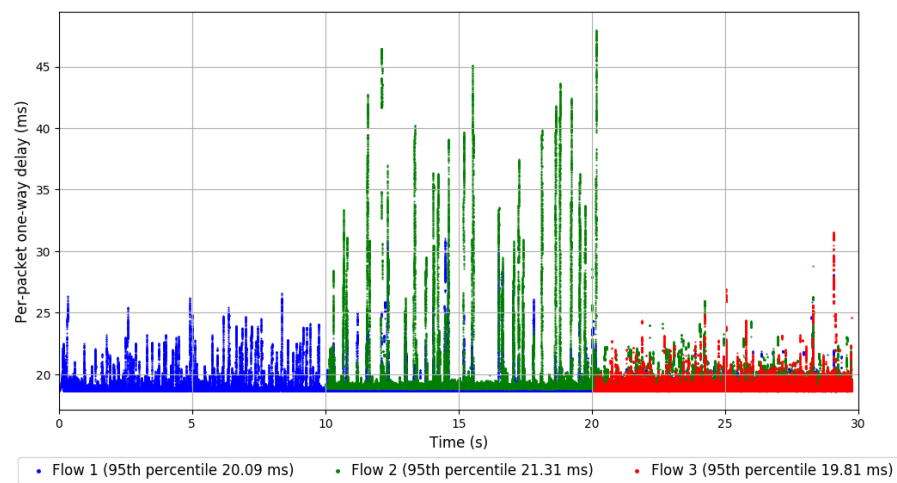
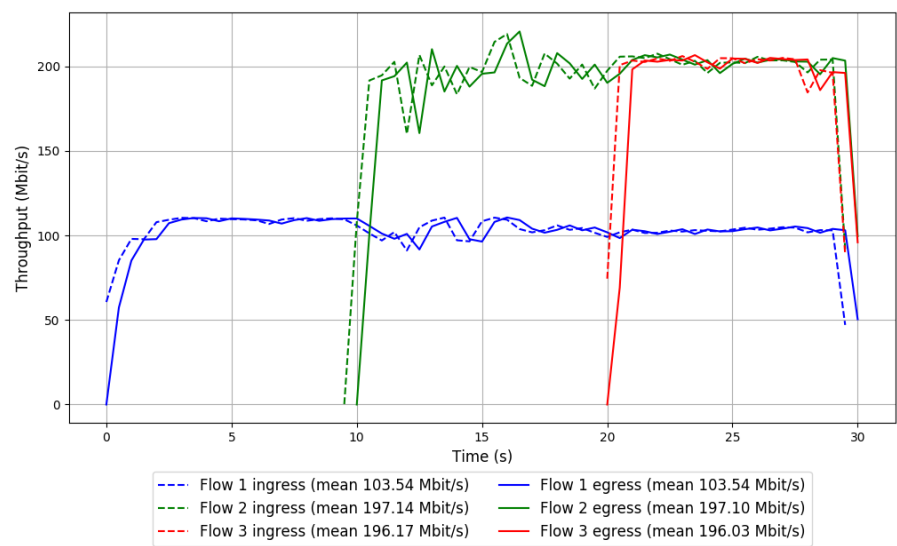
-- Flow 3:

Average throughput: 196.03 Mbit/s

95th percentile per-packet one-way delay: 19.808 ms

Loss rate: 0.01%

Run 7: Report of Indigo — Data Link

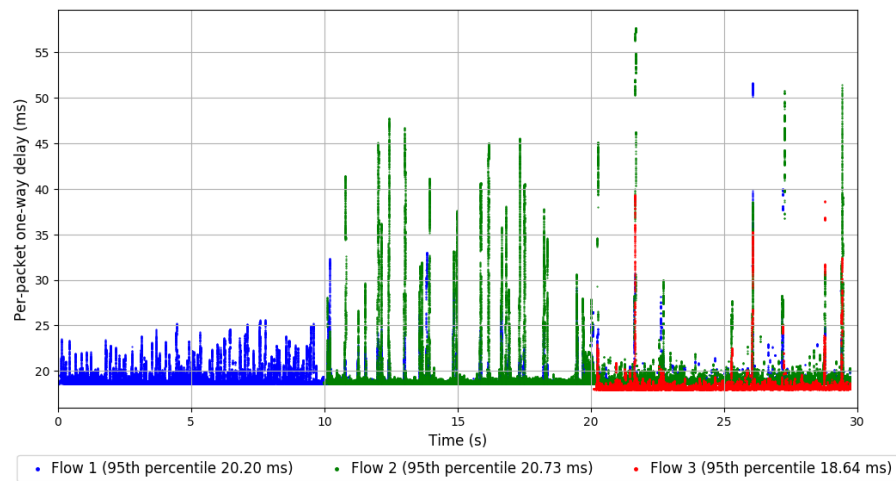
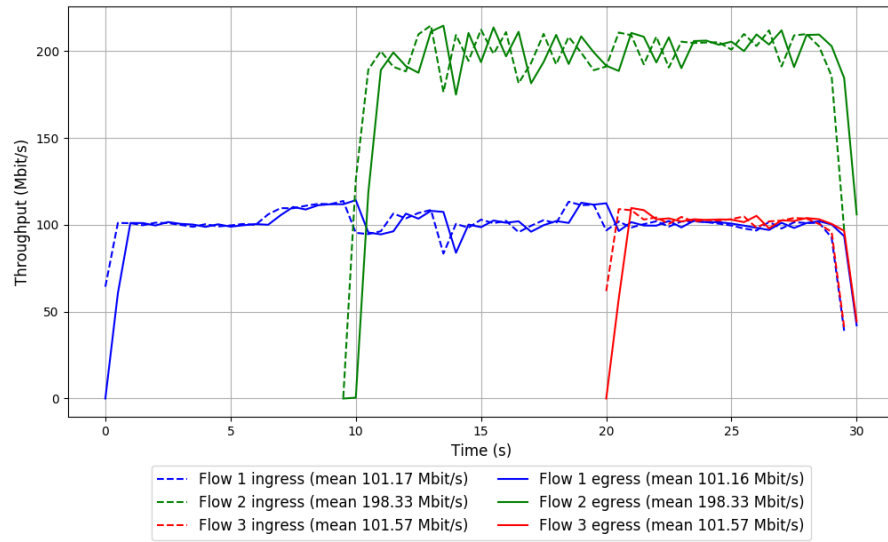


Run 8: Statistics of Indigo

Start at: 2018-06-18 19:23:03  
End at: 2018-06-18 19:23:33  
Local clock offset: 3.831 ms  
Remote clock offset: -1.117 ms

# Below is generated by plot.py at 2018-06-18 21:43:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 266.00 Mbit/s  
95th percentile per-packet one-way delay: 20.120 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 101.16 Mbit/s  
95th percentile per-packet one-way delay: 20.199 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 198.33 Mbit/s  
95th percentile per-packet one-way delay: 20.730 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 101.57 Mbit/s  
95th percentile per-packet one-way delay: 18.642 ms  
Loss rate: 0.00%

## Run 8: Report of Indigo — Data Link



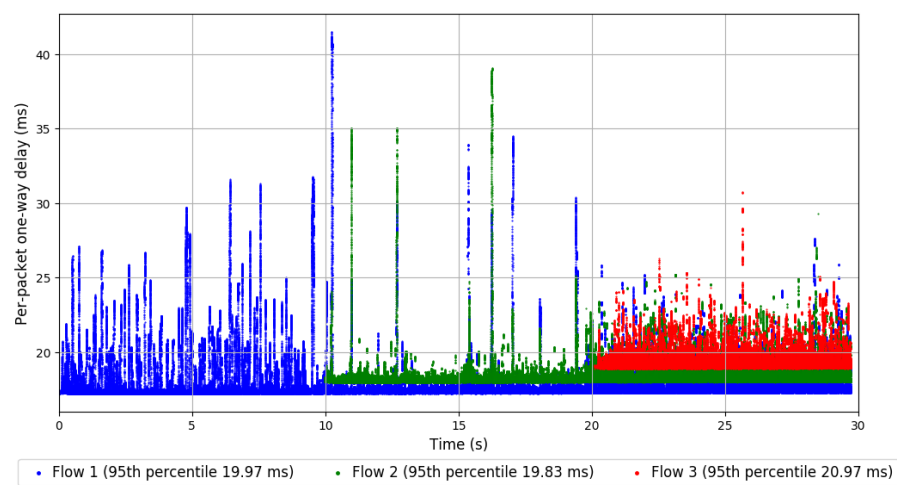
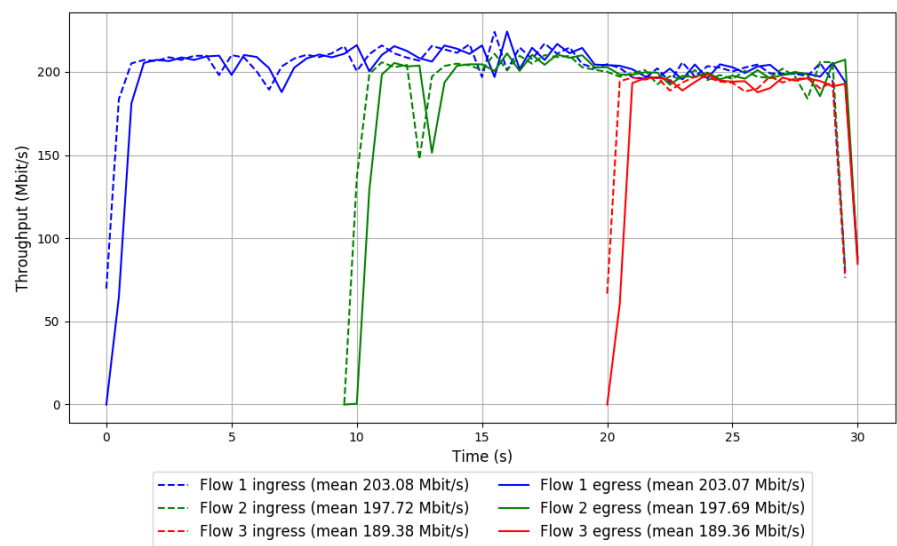
Run 9: Statistics of Indigo

Start at: 2018-06-18 19:48:23  
End at: 2018-06-18 19:48:53  
Local clock offset: 3.914 ms  
Remote clock offset: -3.691 ms

# Below is generated by plot.py at 2018-06-18 21:43:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 395.73 Mbit/s  
95th percentile per-packet one-way delay: 20.239 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 203.07 Mbit/s  
95th percentile per-packet one-way delay: 19.969 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 197.69 Mbit/s  
95th percentile per-packet one-way delay: 19.829 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 189.36 Mbit/s  
95th percentile per-packet one-way delay: 20.969 ms  
Loss rate: 0.00%



Run 9: Report of Indigo — Data Link

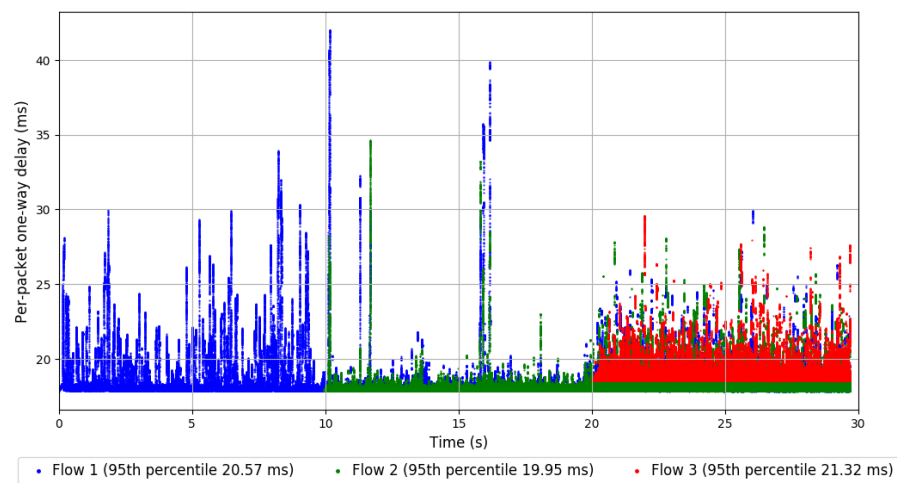
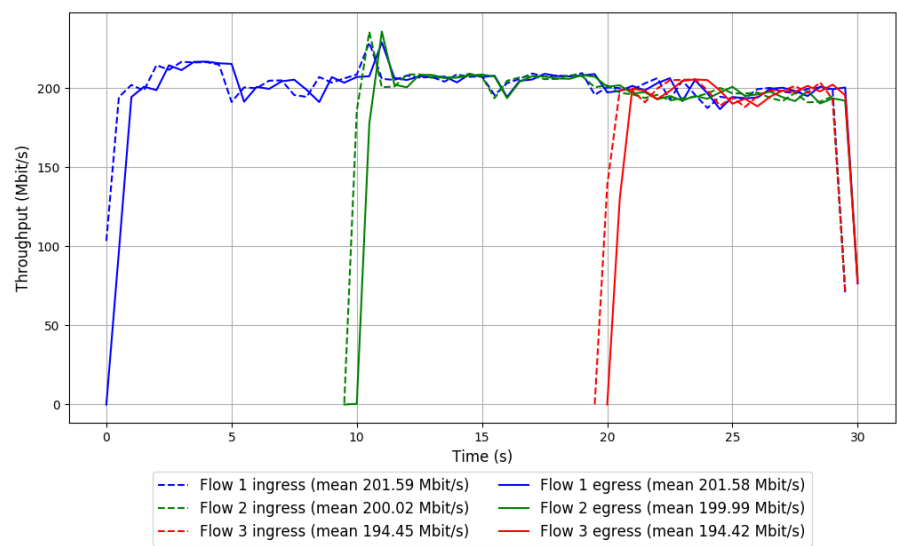


Run 10: Statistics of Indigo

Start at: 2018-06-18 20:13:41  
End at: 2018-06-18 20:14:11  
Local clock offset: 3.696 ms  
Remote clock offset: -4.217 ms

# Below is generated by plot.py at 2018-06-18 21:43:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 398.12 Mbit/s  
95th percentile per-packet one-way delay: 20.536 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 201.58 Mbit/s  
95th percentile per-packet one-way delay: 20.568 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 199.99 Mbit/s  
95th percentile per-packet one-way delay: 19.945 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 194.42 Mbit/s  
95th percentile per-packet one-way delay: 21.320 ms  
Loss rate: 0.04%

Run 10: Report of Indigo — Data Link

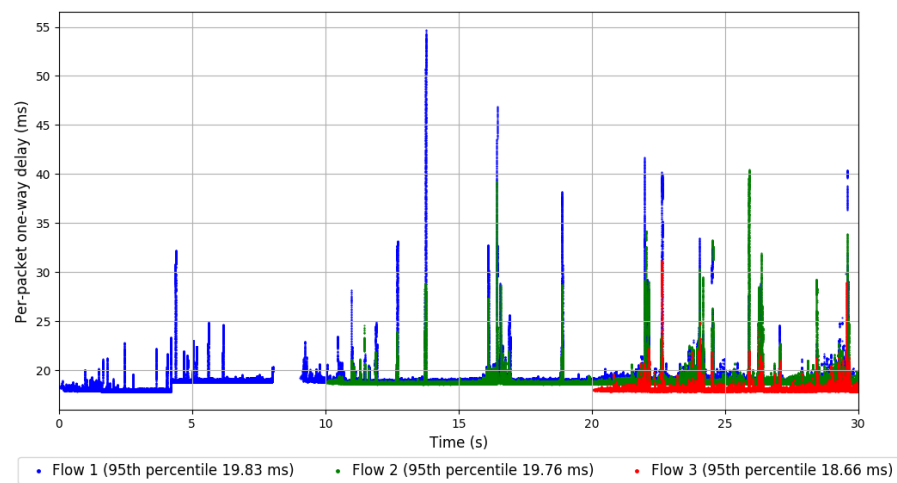
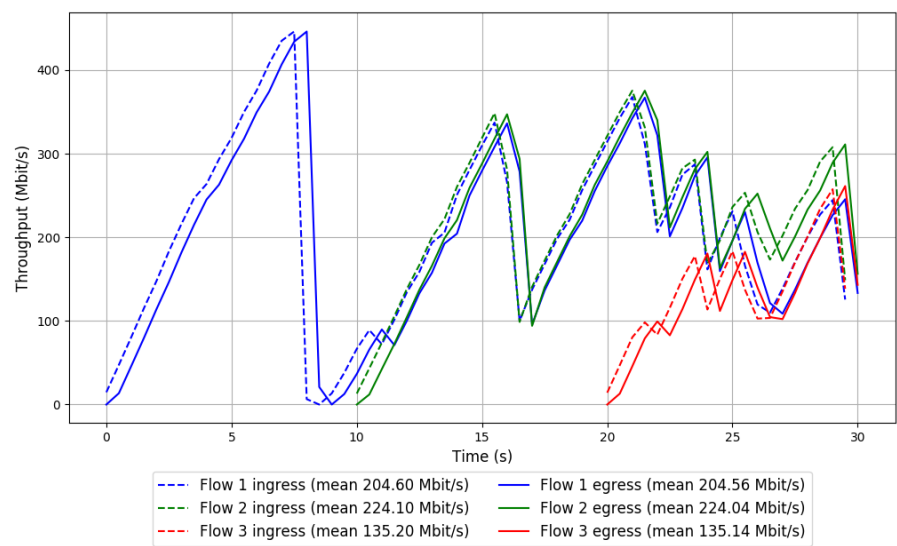


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-18 16:21:03
End at: 2018-06-18 16:21:33
Local clock offset: 4.456 ms
Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2018-06-18 21:43:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.71 Mbit/s
95th percentile per-packet one-way delay: 19.702 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 204.56 Mbit/s
95th percentile per-packet one-way delay: 19.830 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 224.04 Mbit/s
95th percentile per-packet one-way delay: 19.763 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 135.14 Mbit/s
95th percentile per-packet one-way delay: 18.655 ms
Loss rate: 0.04%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-06-18 16:46:45

End at: 2018-06-18 16:47:15

Local clock offset: 4.571 ms

Remote clock offset: 0.621 ms

# Below is generated by plot.py at 2018-06-18 21:43:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 471.92 Mbit/s

95th percentile per-packet one-way delay: 19.631 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 282.29 Mbit/s

95th percentile per-packet one-way delay: 19.750 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 210.83 Mbit/s

95th percentile per-packet one-way delay: 19.508 ms

Loss rate: 0.03%

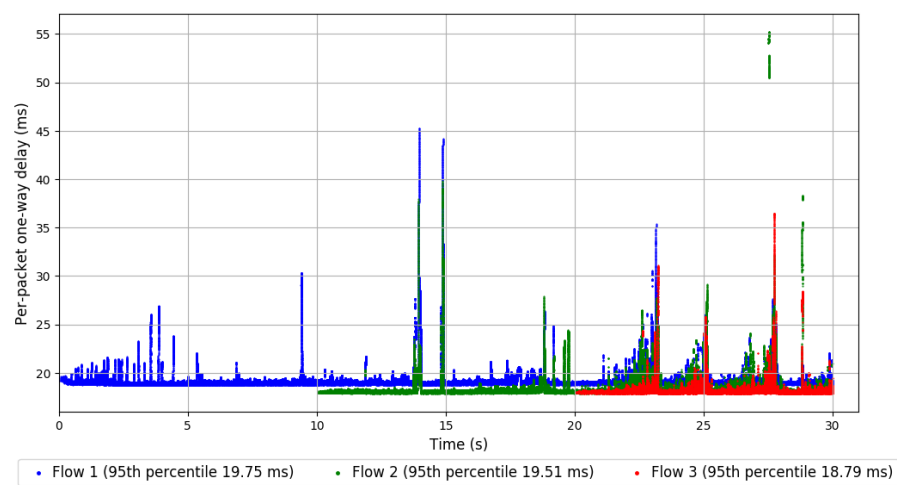
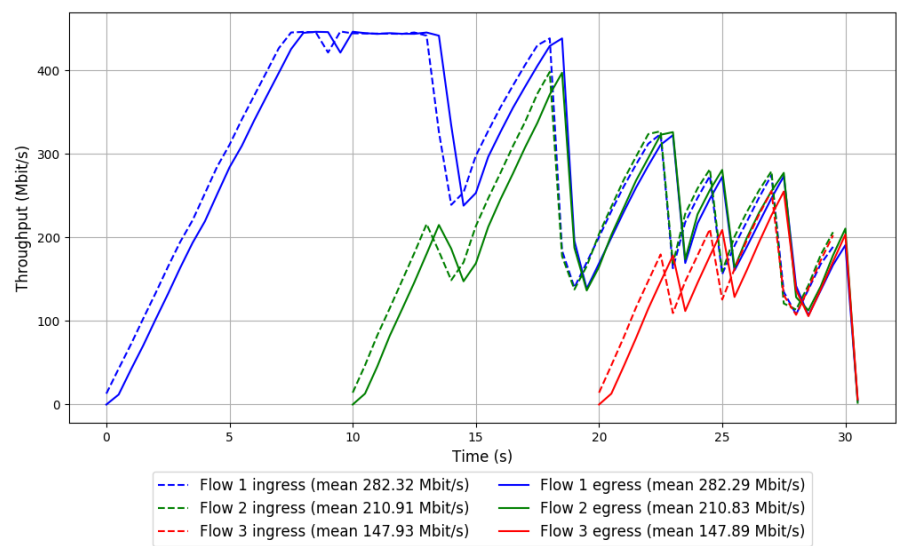
-- Flow 3:

Average throughput: 147.89 Mbit/s

95th percentile per-packet one-way delay: 18.787 ms

Loss rate: 0.02%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-06-18 17:12:24

End at: 2018-06-18 17:12:54

Local clock offset: 4.026 ms

Remote clock offset: 0.796 ms

# Below is generated by plot.py at 2018-06-18 21:45:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 550.38 Mbit/s

95th percentile per-packet one-way delay: 19.404 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 329.38 Mbit/s

95th percentile per-packet one-way delay: 19.290 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 245.84 Mbit/s

95th percentile per-packet one-way delay: 19.653 ms

Loss rate: 0.01%

-- Flow 3:

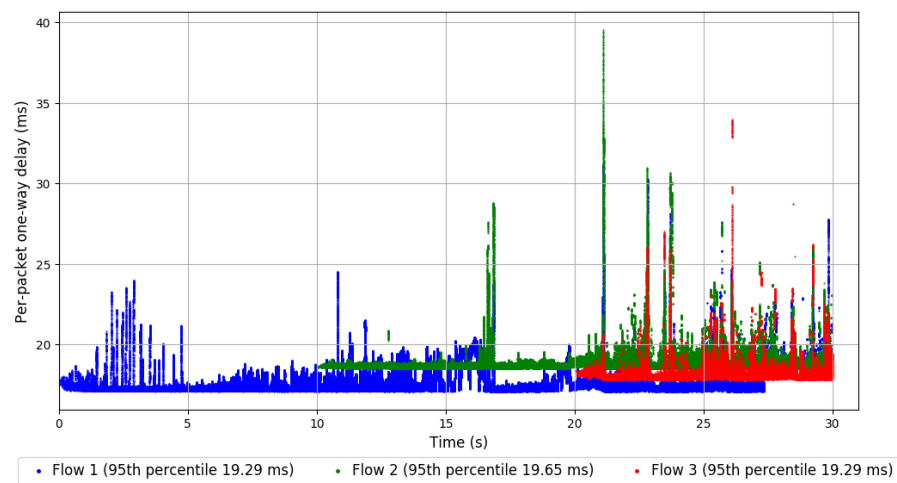
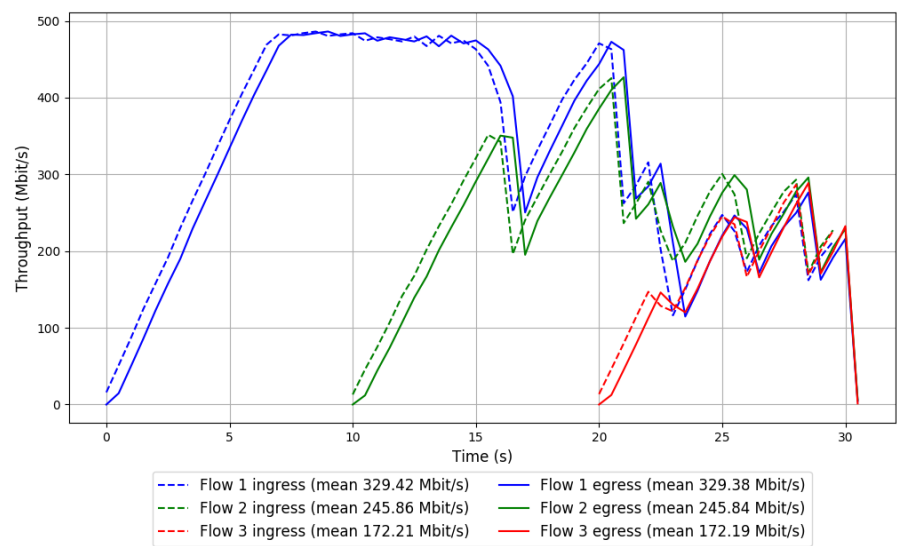
Average throughput: 172.19 Mbit/s

95th percentile per-packet one-way delay: 19.285 ms

Loss rate: 0.01%



Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-06-18 17:38:08

End at: 2018-06-18 17:38:38

Local clock offset: 3.576 ms

Remote clock offset: 0.345 ms

# Below is generated by plot.py at 2018-06-18 21:45:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 433.83 Mbit/s

95th percentile per-packet one-way delay: 19.271 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 242.87 Mbit/s

95th percentile per-packet one-way delay: 18.334 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 224.92 Mbit/s

95th percentile per-packet one-way delay: 19.802 ms

Loss rate: 0.01%

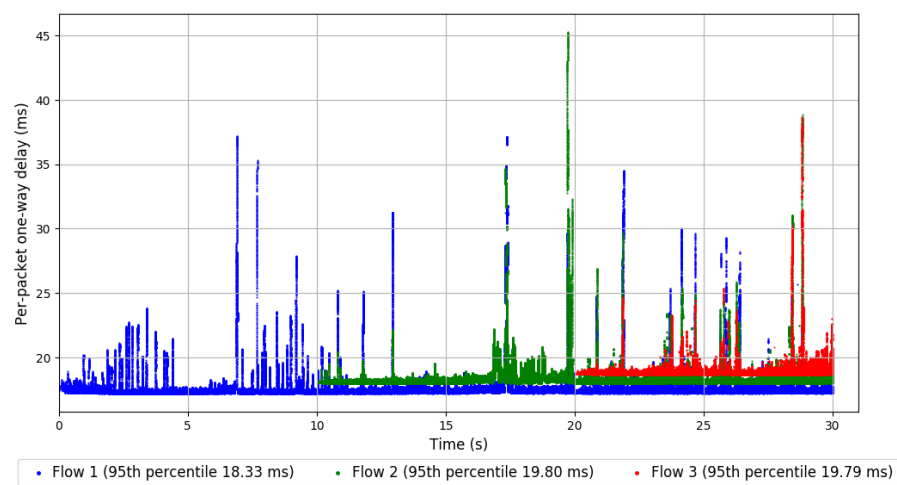
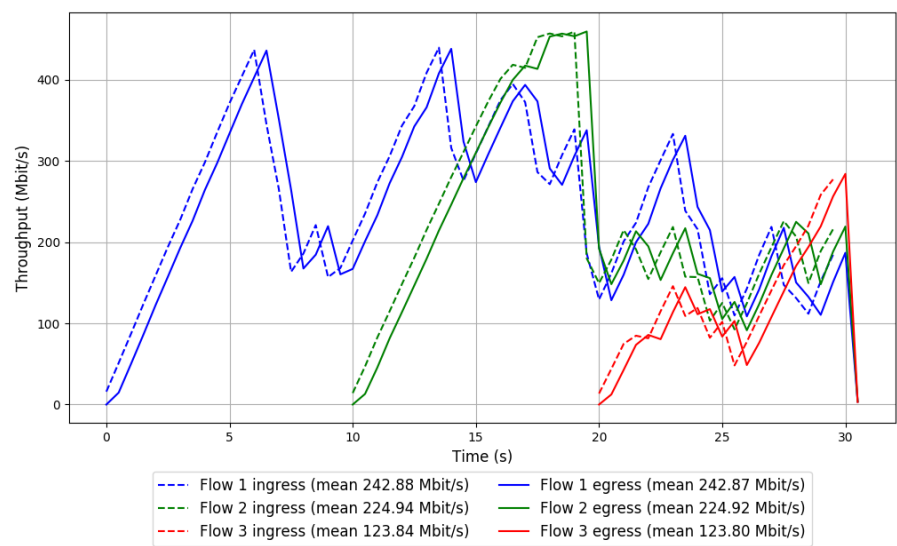
-- Flow 3:

Average throughput: 123.80 Mbit/s

95th percentile per-packet one-way delay: 19.791 ms

Loss rate: 0.05%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-06-18 18:03:38

End at: 2018-06-18 18:04:08

Local clock offset: 3.748 ms

Remote clock offset: 2.967 ms

# Below is generated by plot.py at 2018-06-18 21:45:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 372.10 Mbit/s

95th percentile per-packet one-way delay: 19.938 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 216.34 Mbit/s

95th percentile per-packet one-way delay: 20.056 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 173.36 Mbit/s

95th percentile per-packet one-way delay: 19.711 ms

Loss rate: 0.03%

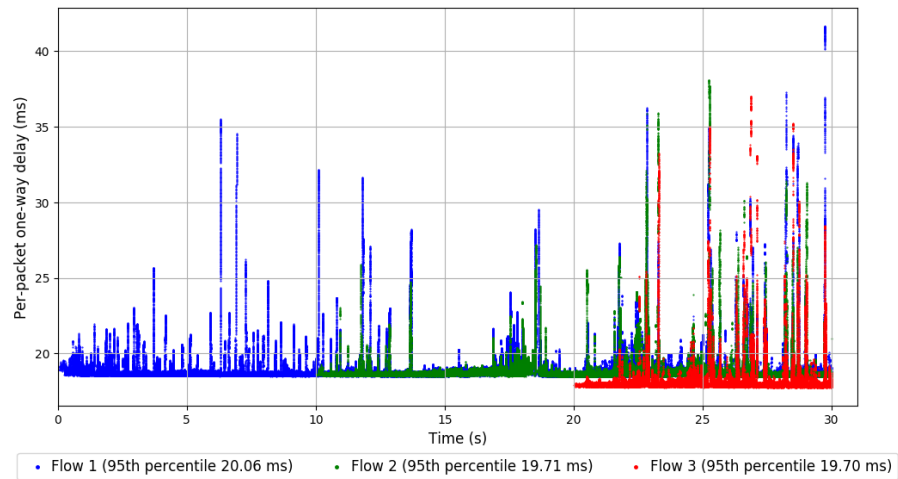
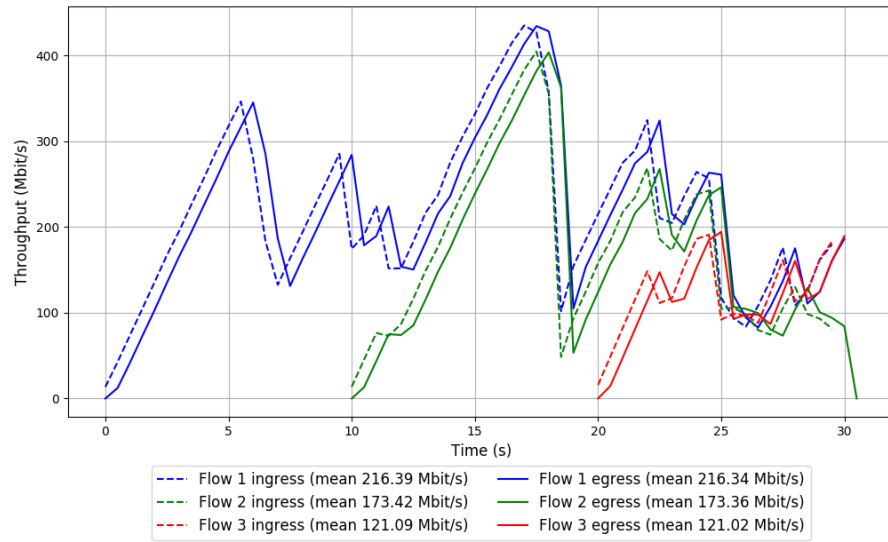
-- Flow 3:

Average throughput: 121.02 Mbit/s

95th percentile per-packet one-way delay: 19.701 ms

Loss rate: 0.05%

## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-06-18 18:29:06

End at: 2018-06-18 18:29:36

Local clock offset: 3.707 ms

Remote clock offset: 4.963 ms

# Below is generated by plot.py at 2018-06-18 21:46:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 476.93 Mbit/s

95th percentile per-packet one-way delay: 18.854 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 290.90 Mbit/s

95th percentile per-packet one-way delay: 18.998 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 183.42 Mbit/s

95th percentile per-packet one-way delay: 18.527 ms

Loss rate: 0.05%

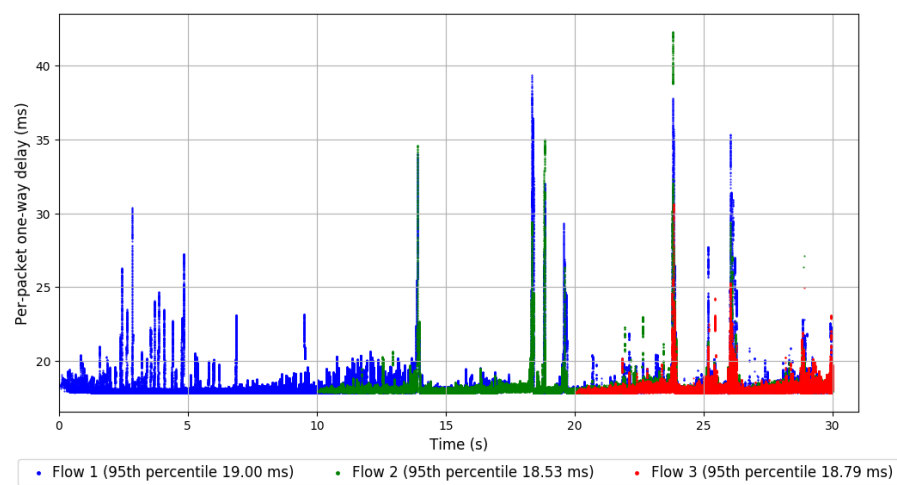
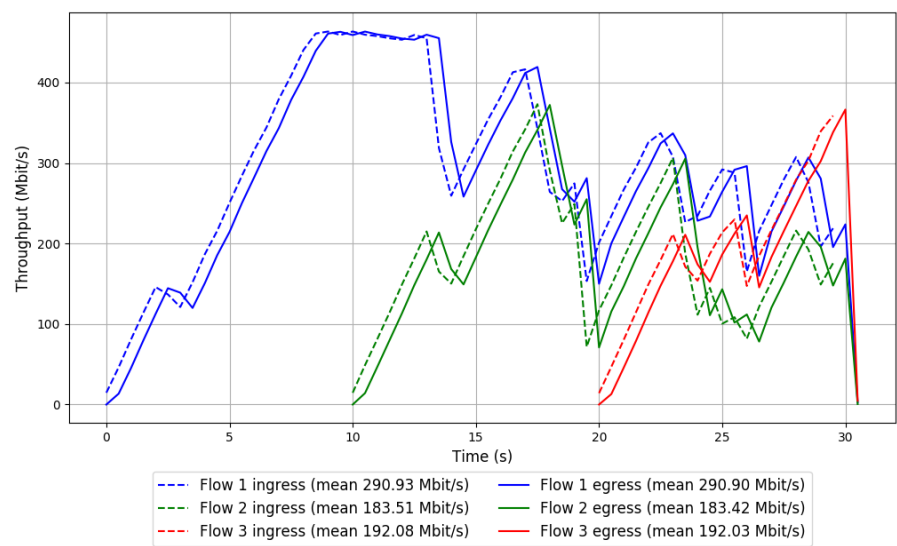
-- Flow 3:

Average throughput: 192.03 Mbit/s

95th percentile per-packet one-way delay: 18.787 ms

Loss rate: 0.02%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-06-18 18:54:45

End at: 2018-06-18 18:55:15

Local clock offset: 3.772 ms

Remote clock offset: 6.469 ms

# Below is generated by plot.py at 2018-06-18 21:46:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 265.14 Mbit/s

95th percentile per-packet one-way delay: 19.416 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 125.15 Mbit/s

95th percentile per-packet one-way delay: 19.898 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 143.85 Mbit/s

95th percentile per-packet one-way delay: 18.513 ms

Loss rate: 0.01%

-- Flow 3:

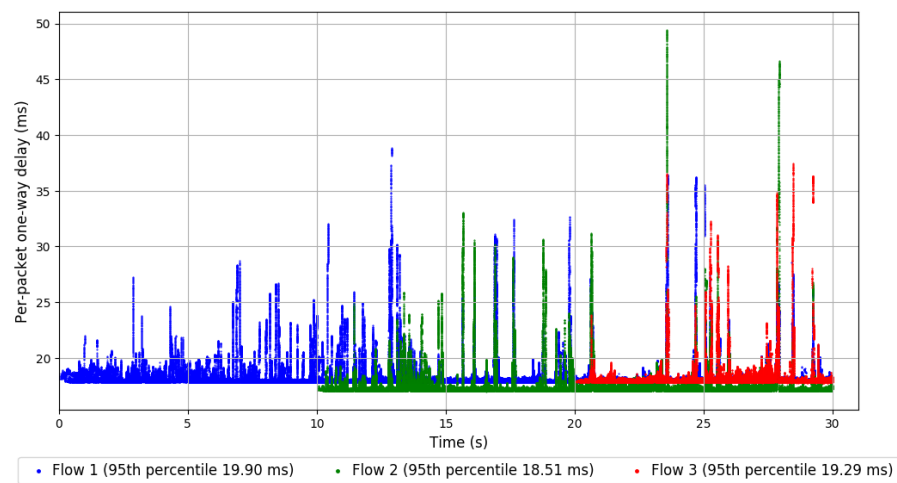
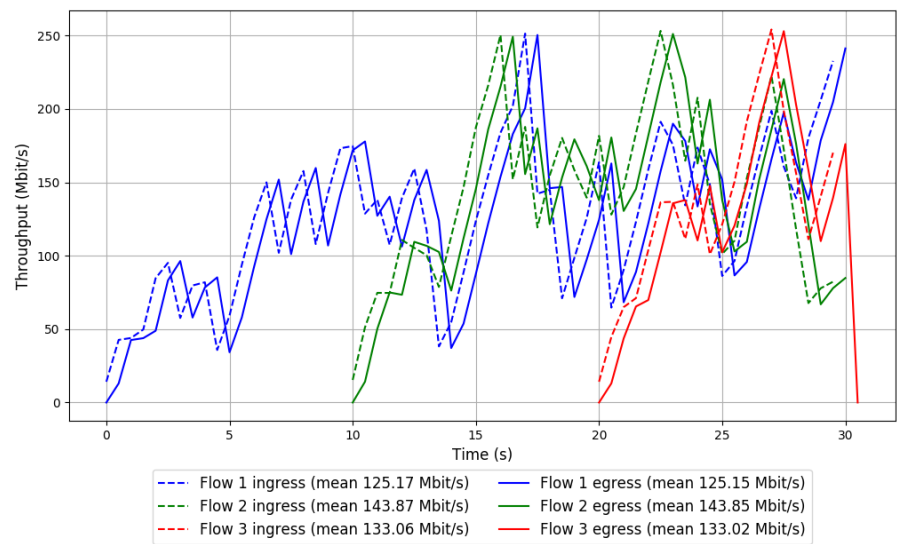
Average throughput: 133.02 Mbit/s

95th percentile per-packet one-way delay: 19.293 ms

Loss rate: 0.02%



Run 7: Report of LEDBAT — Data Link

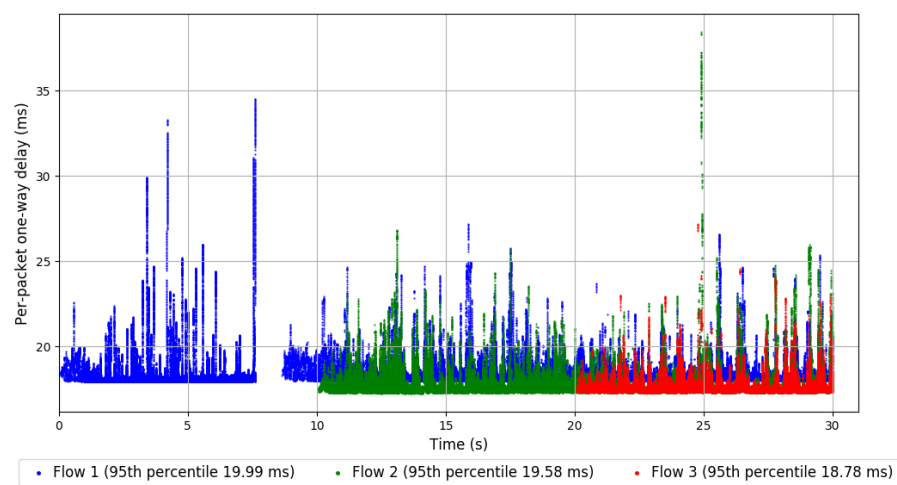
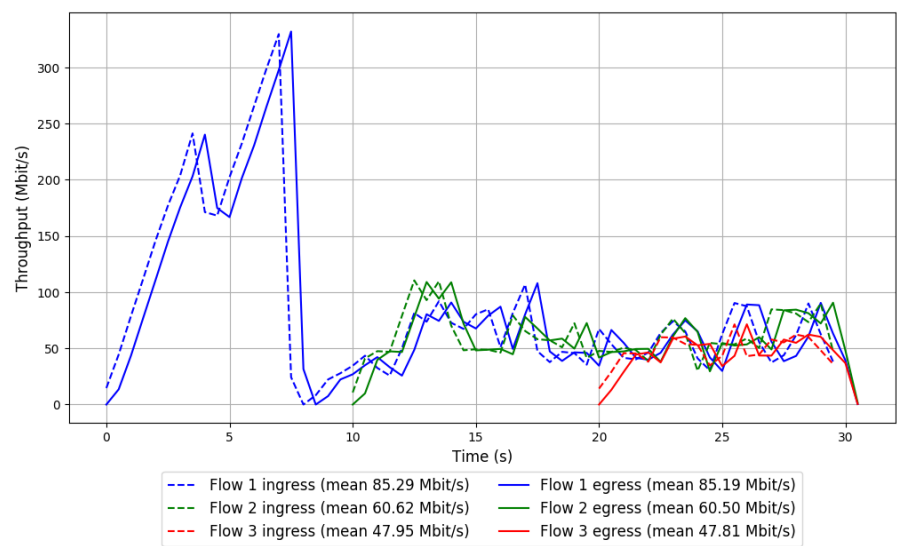


Run 8: Statistics of LEDBAT

Start at: 2018-06-18 19:19:52  
End at: 2018-06-18 19:20:22  
Local clock offset: 3.827 ms  
Remote clock offset: -0.662 ms

# Below is generated by plot.py at 2018-06-18 21:46:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 141.37 Mbit/s  
95th percentile per-packet one-way delay: 19.756 ms  
Loss rate: 0.16%  
-- Flow 1:  
Average throughput: 85.19 Mbit/s  
95th percentile per-packet one-way delay: 19.989 ms  
Loss rate: 0.12%  
-- Flow 2:  
Average throughput: 60.50 Mbit/s  
95th percentile per-packet one-way delay: 19.577 ms  
Loss rate: 0.19%  
-- Flow 3:  
Average throughput: 47.81 Mbit/s  
95th percentile per-packet one-way delay: 18.777 ms  
Loss rate: 0.29%

Run 8: Report of LEDBAT — Data Link

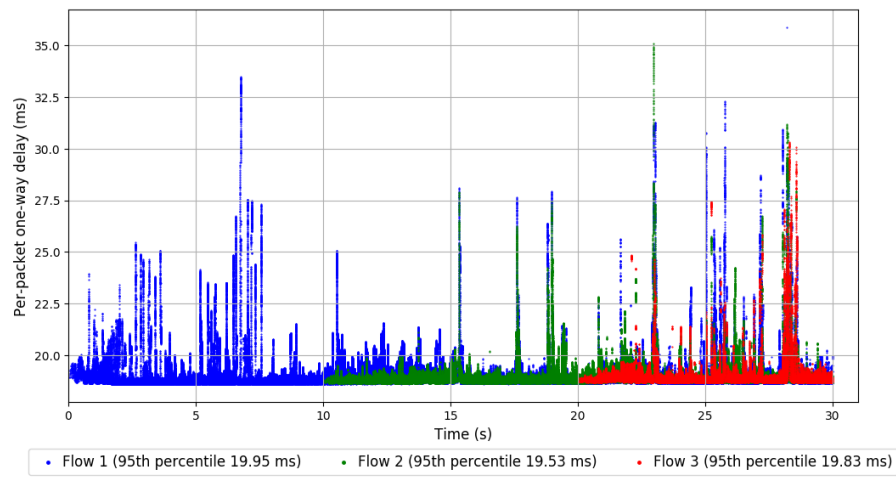
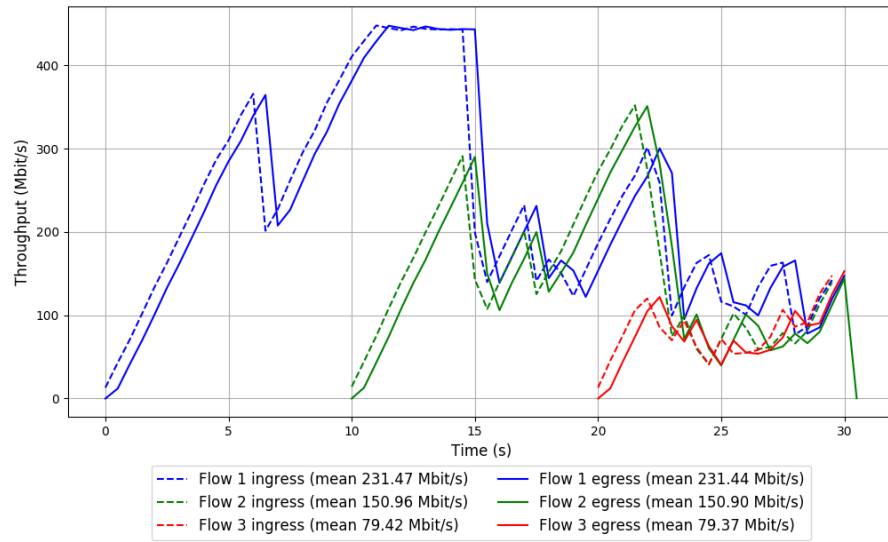


Run 9: Statistics of LEDBAT

Start at: 2018-06-18 19:45:01  
End at: 2018-06-18 19:45:31  
Local clock offset: 3.904 ms  
Remote clock offset: -3.415 ms

# Below is generated by plot.py at 2018-06-18 21:47:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 358.28 Mbit/s  
95th percentile per-packet one-way delay: 19.810 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 231.44 Mbit/s  
95th percentile per-packet one-way delay: 19.954 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 150.90 Mbit/s  
95th percentile per-packet one-way delay: 19.533 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 79.37 Mbit/s  
95th percentile per-packet one-way delay: 19.827 ms  
Loss rate: 0.06%

# Run 9: Report of LEDBAT — Data Link

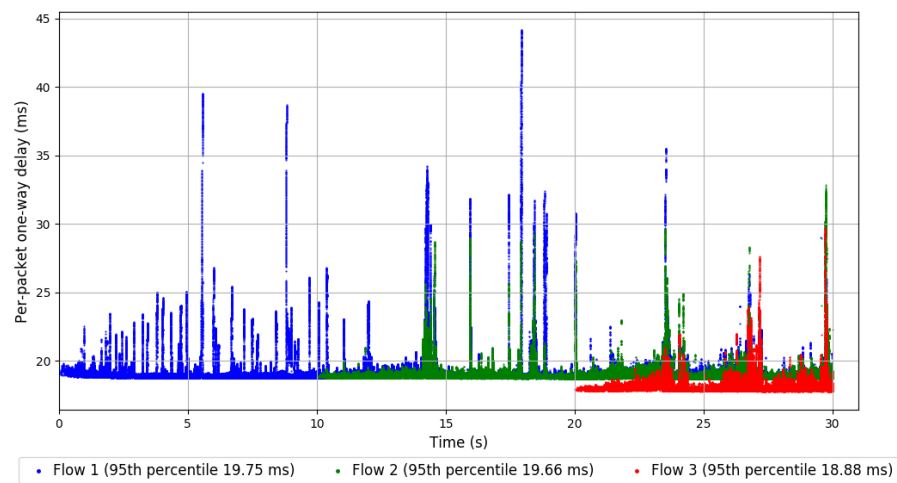
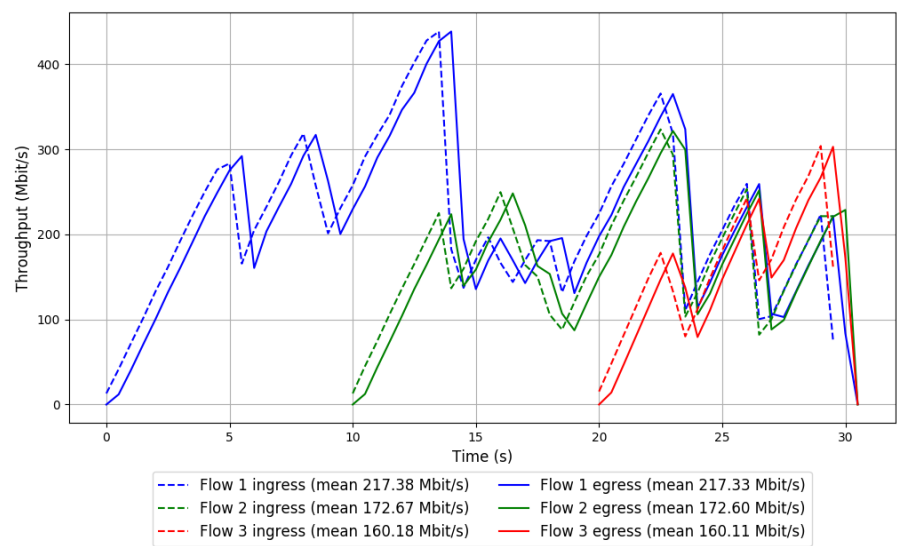


Run 10: Statistics of LEDBAT

Start at: 2018-06-18 20:10:22  
End at: 2018-06-18 20:10:52  
Local clock offset: 3.699 ms  
Remote clock offset: -4.794 ms

# Below is generated by plot.py at 2018-06-18 21:48:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 385.64 Mbit/s  
95th percentile per-packet one-way delay: 19.645 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 217.33 Mbit/s  
95th percentile per-packet one-way delay: 19.751 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 172.60 Mbit/s  
95th percentile per-packet one-way delay: 19.658 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 160.11 Mbit/s  
95th percentile per-packet one-way delay: 18.879 ms  
Loss rate: 0.04%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-06-18 16:36:27

End at: 2018-06-18 16:36:57

Local clock offset: 4.507 ms

Remote clock offset: 0.594 ms

# Below is generated by plot.py at 2018-06-18 21:55:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 930.39 Mbit/s

95th percentile per-packet one-way delay: 22.376 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 785.90 Mbit/s

95th percentile per-packet one-way delay: 23.510 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 175.41 Mbit/s

95th percentile per-packet one-way delay: 20.352 ms

Loss rate: 0.40%

-- Flow 3:

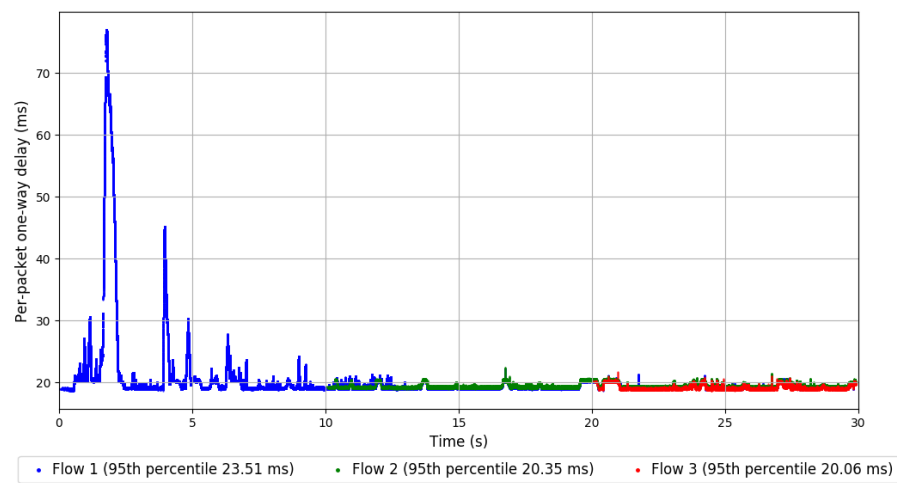
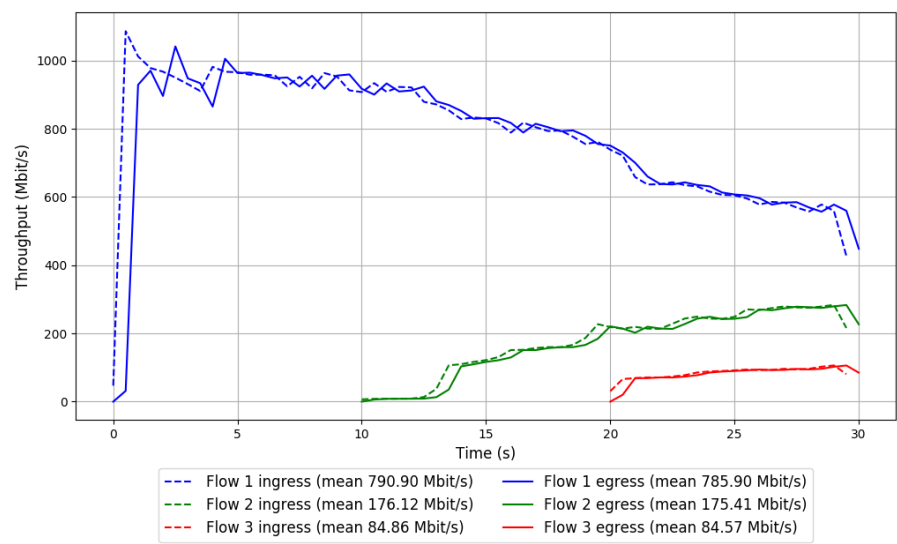
Average throughput: 84.57 Mbit/s

95th percentile per-packet one-way delay: 20.060 ms

Loss rate: 0.35%



Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-18 17:02:05

End at: 2018-06-18 17:02:35

Local clock offset: 4.506 ms

Remote clock offset: 0.538 ms

# Below is generated by plot.py at 2018-06-18 21:55:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 926.41 Mbit/s

95th percentile per-packet one-way delay: 20.326 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 743.16 Mbit/s

95th percentile per-packet one-way delay: 19.868 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 233.16 Mbit/s

95th percentile per-packet one-way delay: 20.355 ms

Loss rate: 0.39%

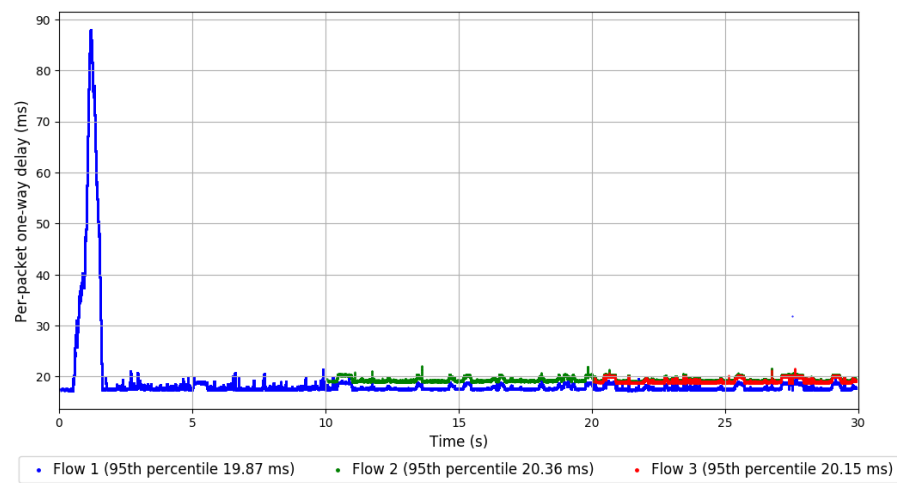
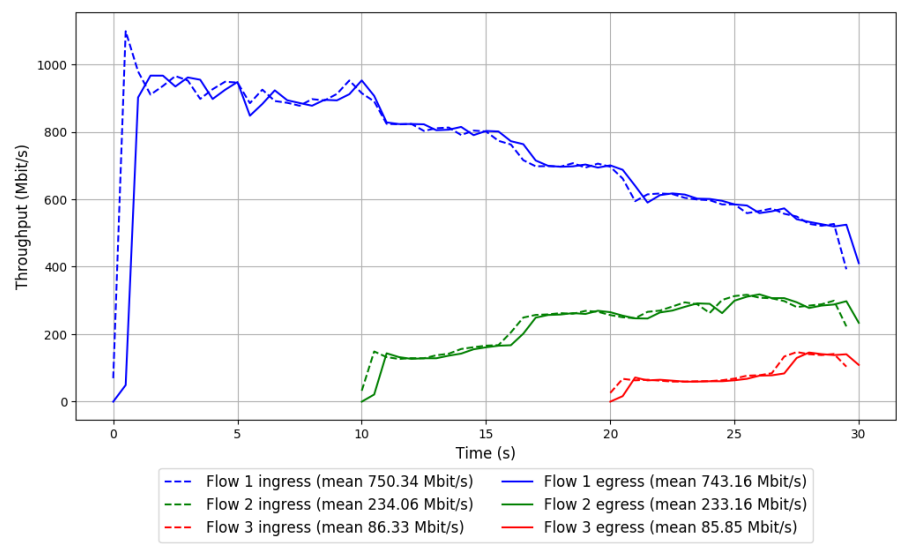
-- Flow 3:

Average throughput: 85.85 Mbit/s

95th percentile per-packet one-way delay: 20.154 ms

Loss rate: 0.56%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-06-18 17:27:55

End at: 2018-06-18 17:28:25

Local clock offset: 3.647 ms

Remote clock offset: 0.36 ms

# Below is generated by plot.py at 2018-06-18 21:56:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 895.40 Mbit/s

95th percentile per-packet one-way delay: 19.457 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 821.66 Mbit/s

95th percentile per-packet one-way delay: 19.466 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 100.14 Mbit/s

95th percentile per-packet one-way delay: 18.597 ms

Loss rate: 0.25%

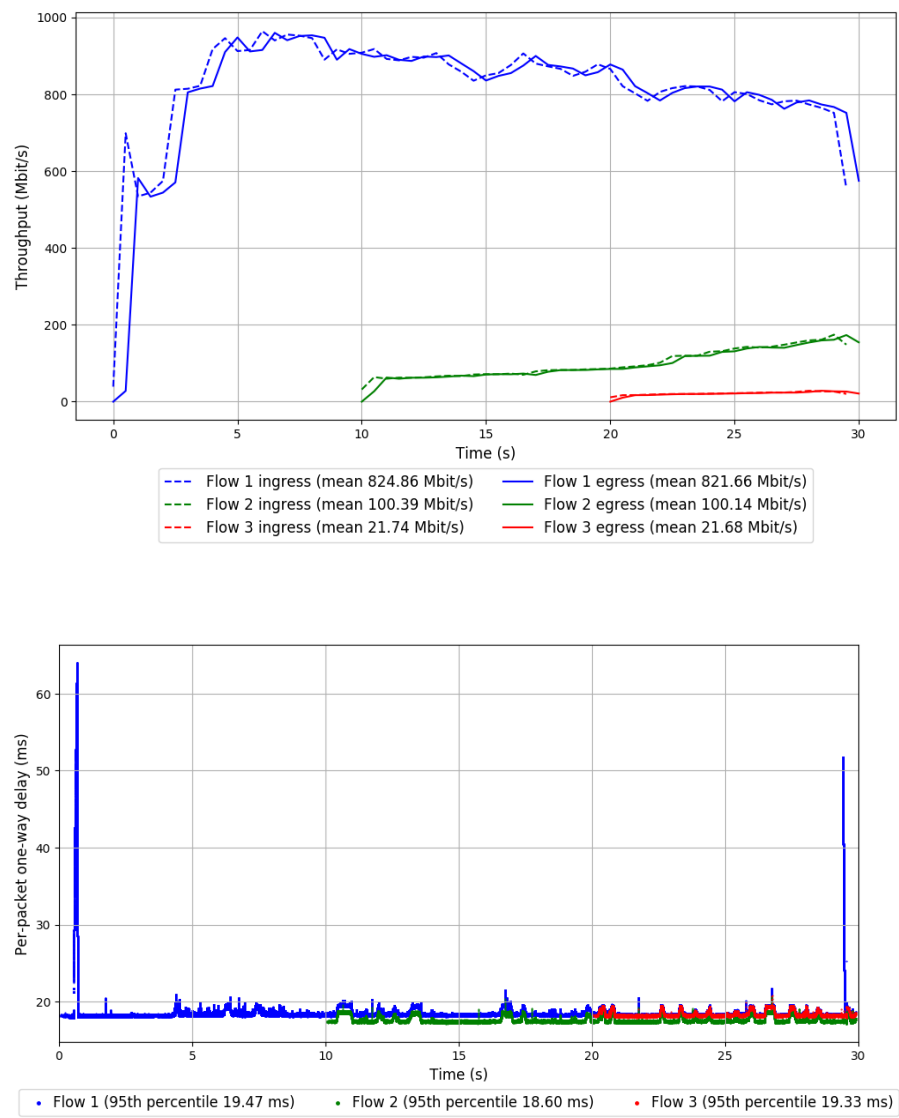
-- Flow 3:

Average throughput: 21.68 Mbit/s

95th percentile per-packet one-way delay: 19.326 ms

Loss rate: 0.29%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-06-18 17:53:23

End at: 2018-06-18 17:53:53

Local clock offset: 3.765 ms

Remote clock offset: 1.081 ms

# Below is generated by plot.py at 2018-06-18 21:56:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 873.76 Mbit/s

95th percentile per-packet one-way delay: 20.062 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 772.88 Mbit/s

95th percentile per-packet one-way delay: 20.076 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 100.10 Mbit/s

95th percentile per-packet one-way delay: 19.936 ms

Loss rate: 0.57%

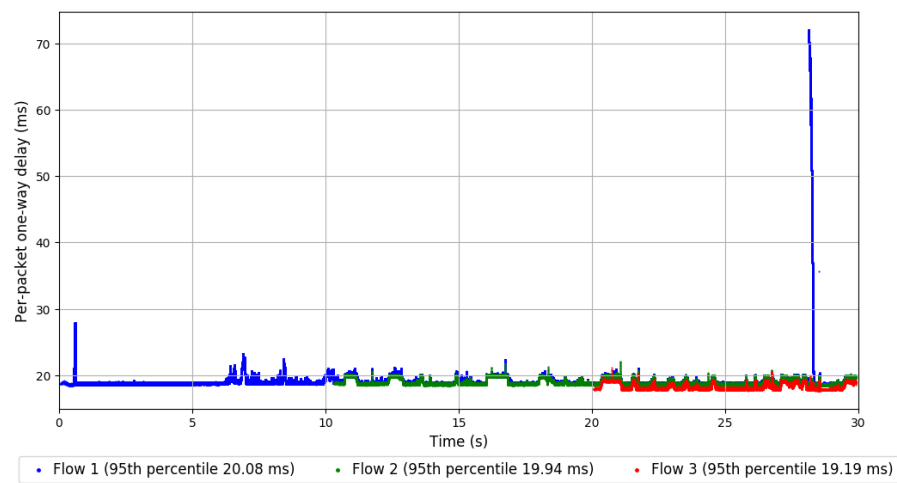
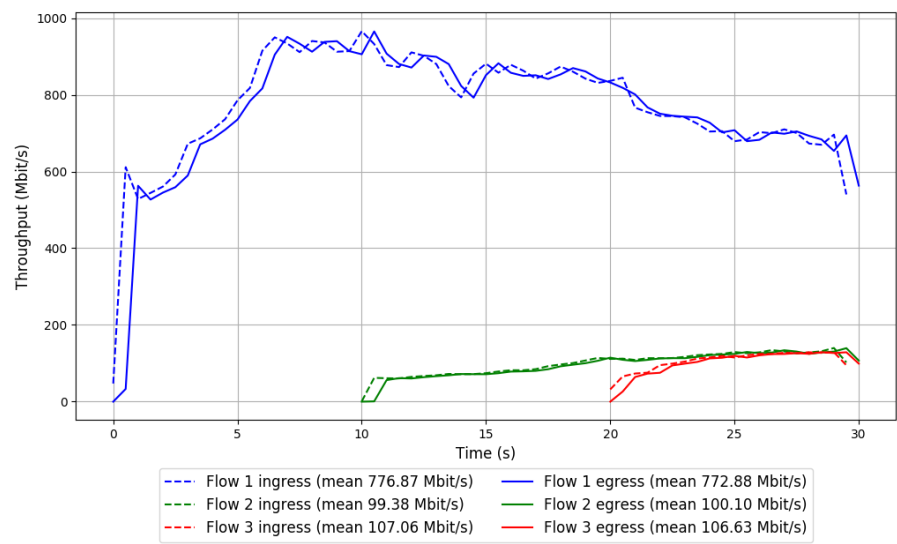
-- Flow 3:

Average throughput: 106.63 Mbit/s

95th percentile per-packet one-way delay: 19.186 ms

Loss rate: 0.39%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-06-18 18:18:53

End at: 2018-06-18 18:19:23

Local clock offset: 3.789 ms

Remote clock offset: 4.353 ms

# Below is generated by plot.py at 2018-06-18 21:56:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 903.57 Mbit/s

95th percentile per-packet one-way delay: 20.085 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 809.97 Mbit/s

95th percentile per-packet one-way delay: 20.075 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 102.77 Mbit/s

95th percentile per-packet one-way delay: 20.186 ms

Loss rate: 0.42%

-- Flow 3:

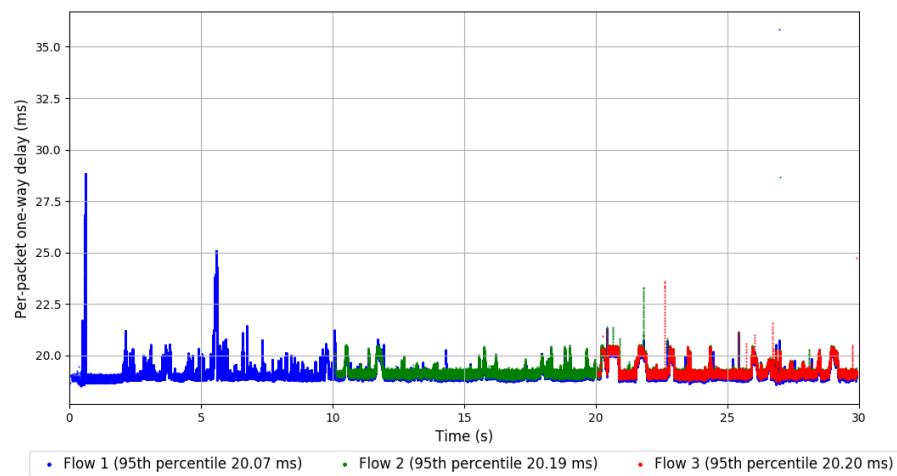
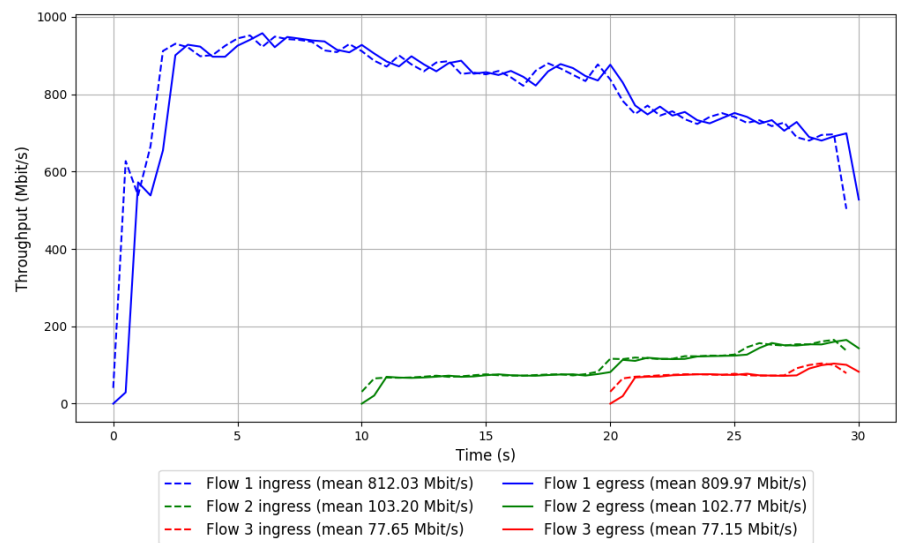
Average throughput: 77.15 Mbit/s

95th percentile per-packet one-way delay: 20.197 ms

Loss rate: 0.60%



Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-06-18 18:44:27

End at: 2018-06-18 18:44:57

Local clock offset: 3.776 ms

Remote clock offset: 5.872 ms

# Below is generated by plot.py at 2018-06-18 21:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 918.73 Mbit/s

95th percentile per-packet one-way delay: 20.854 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 874.70 Mbit/s

95th percentile per-packet one-way delay: 20.925 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 65.03 Mbit/s

95th percentile per-packet one-way delay: 20.129 ms

Loss rate: 0.29%

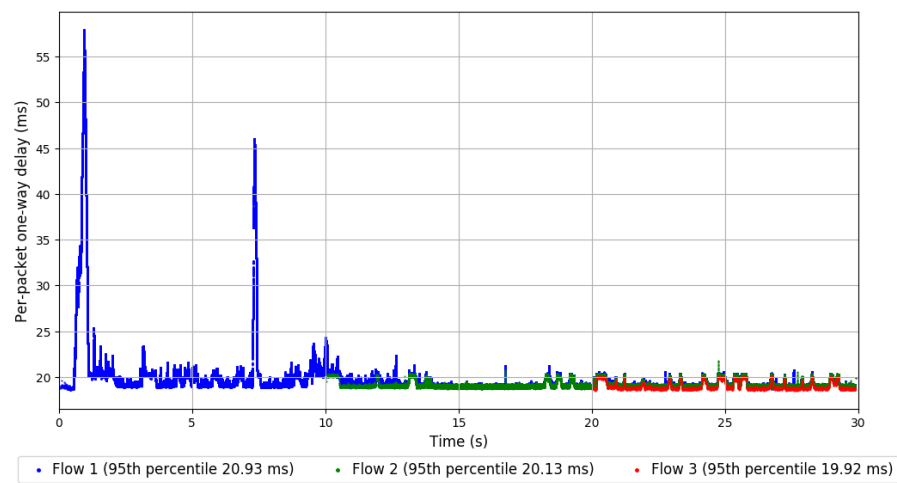
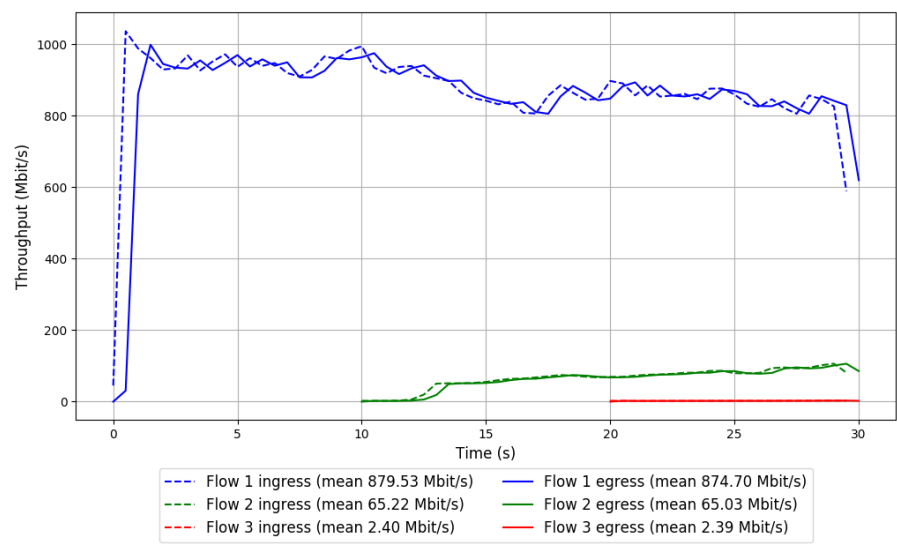
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 19.923 ms

Loss rate: 0.49%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-18 19:09:45

End at: 2018-06-18 19:10:15

Local clock offset: 3.822 ms

Remote clock offset: 1.476 ms

# Below is generated by plot.py at 2018-06-18 21:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 840.70 Mbit/s

95th percentile per-packet one-way delay: 20.634 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 687.84 Mbit/s

95th percentile per-packet one-way delay: 20.647 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 184.73 Mbit/s

95th percentile per-packet one-way delay: 20.326 ms

Loss rate: 0.54%

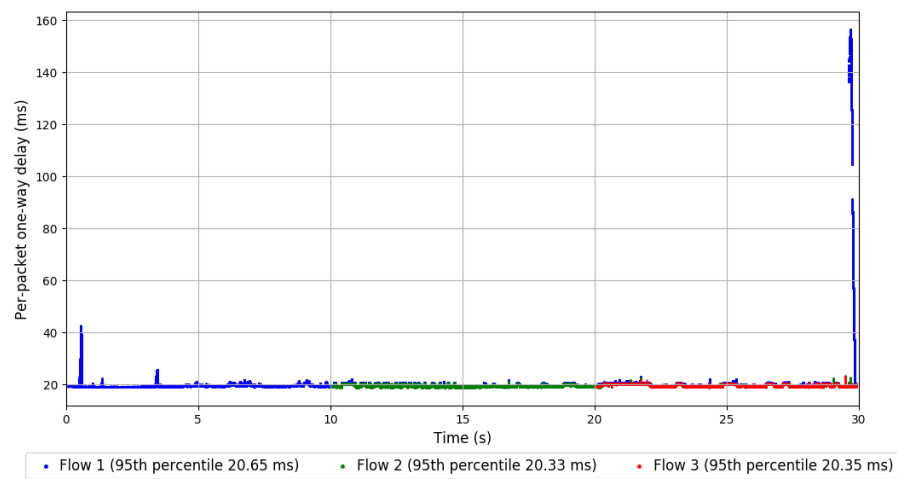
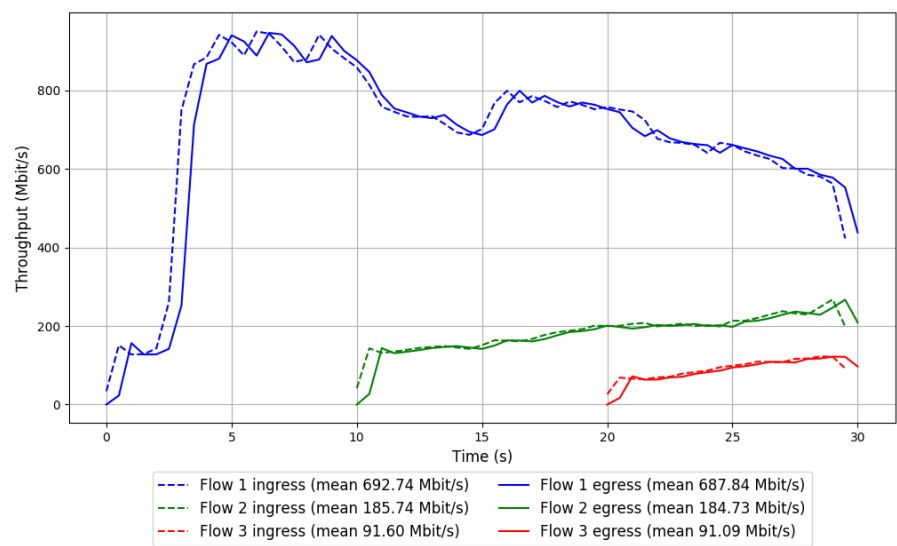
-- Flow 3:

Average throughput: 91.09 Mbit/s

95th percentile per-packet one-way delay: 20.351 ms

Loss rate: 0.55%

Run 7: Report of PCC-Allegro — Data Link

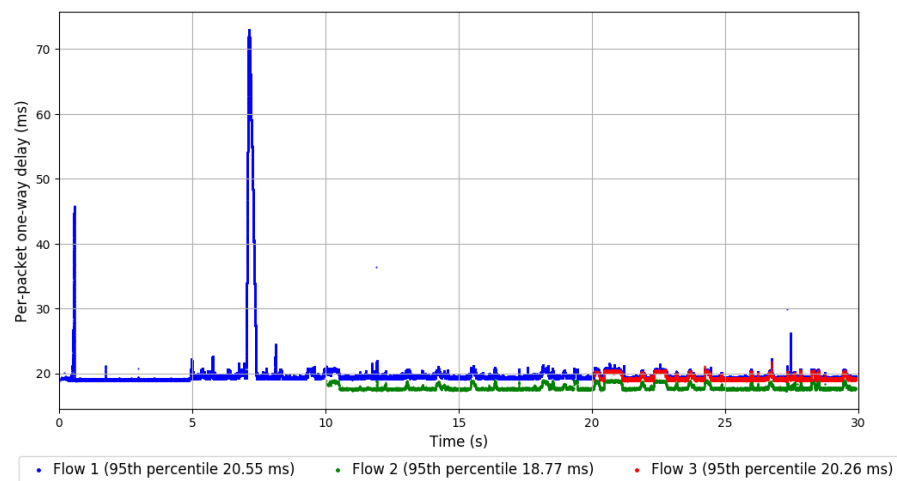
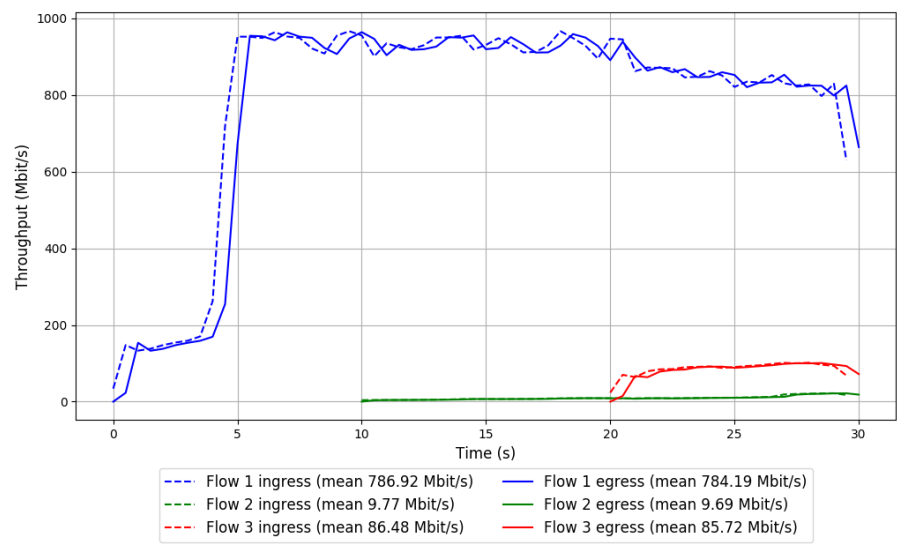


Run 8: Statistics of PCC-Allegro

Start at: 2018-06-18 19:34:51  
End at: 2018-06-18 19:35:21  
Local clock offset: 3.796 ms  
Remote clock offset: -2.332 ms

# Below is generated by plot.py at 2018-06-18 21:58:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 818.90 Mbit/s  
95th percentile per-packet one-way delay: 20.548 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 784.19 Mbit/s  
95th percentile per-packet one-way delay: 20.553 ms  
Loss rate: 0.35%  
-- Flow 2:  
Average throughput: 9.69 Mbit/s  
95th percentile per-packet one-way delay: 18.771 ms  
Loss rate: 0.79%  
-- Flow 3:  
Average throughput: 85.72 Mbit/s  
95th percentile per-packet one-way delay: 20.261 ms  
Loss rate: 0.88%

Run 8: Report of PCC-Allegro — Data Link



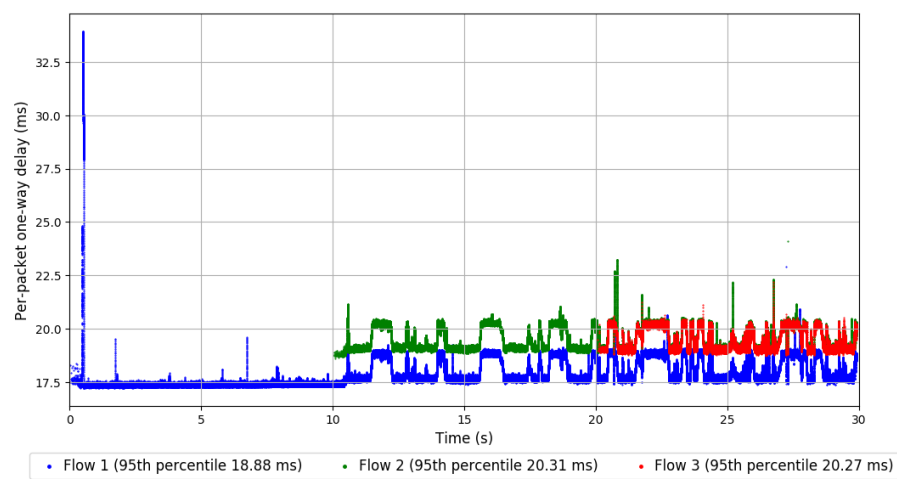
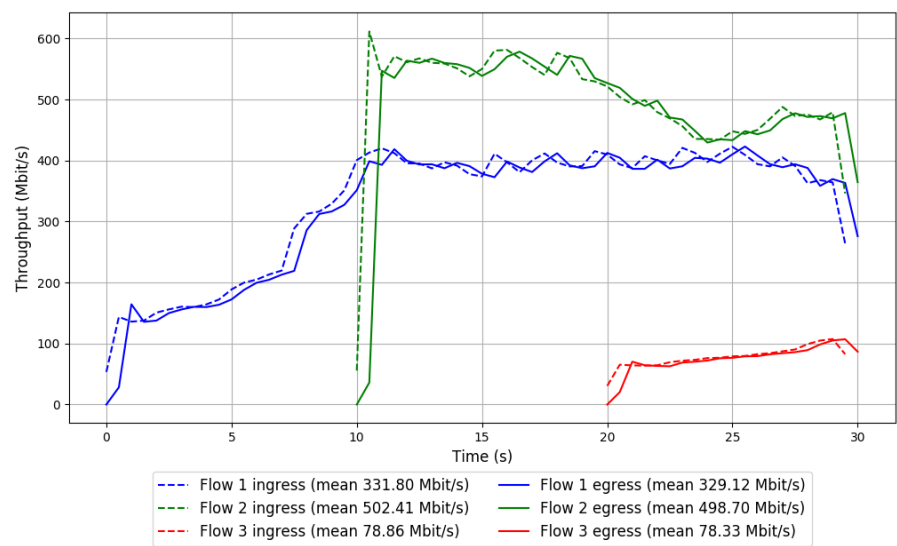
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-18 20:00:15  
End at: 2018-06-18 20:00:45  
Local clock offset: 3.894 ms  
Remote clock offset: -4.699 ms

# Below is generated by plot.py at 2018-06-18 22:02:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 686.52 Mbit/s  
95th percentile per-packet one-way delay: 20.280 ms  
Loss rate: 0.77%  
-- Flow 1:  
Average throughput: 329.12 Mbit/s  
95th percentile per-packet one-way delay: 18.877 ms  
Loss rate: 0.81%  
-- Flow 2:  
Average throughput: 498.70 Mbit/s  
95th percentile per-packet one-way delay: 20.310 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 78.33 Mbit/s  
95th percentile per-packet one-way delay: 20.273 ms  
Loss rate: 0.68%



Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-18 20:25:35

End at: 2018-06-18 20:26:05

Local clock offset: 3.626 ms

Remote clock offset: -3.61 ms

# Below is generated by plot.py at 2018-06-18 22:04:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 804.80 Mbit/s

95th percentile per-packet one-way delay: 19.459 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 640.97 Mbit/s

95th percentile per-packet one-way delay: 19.459 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 206.57 Mbit/s

95th percentile per-packet one-way delay: 19.385 ms

Loss rate: 0.34%

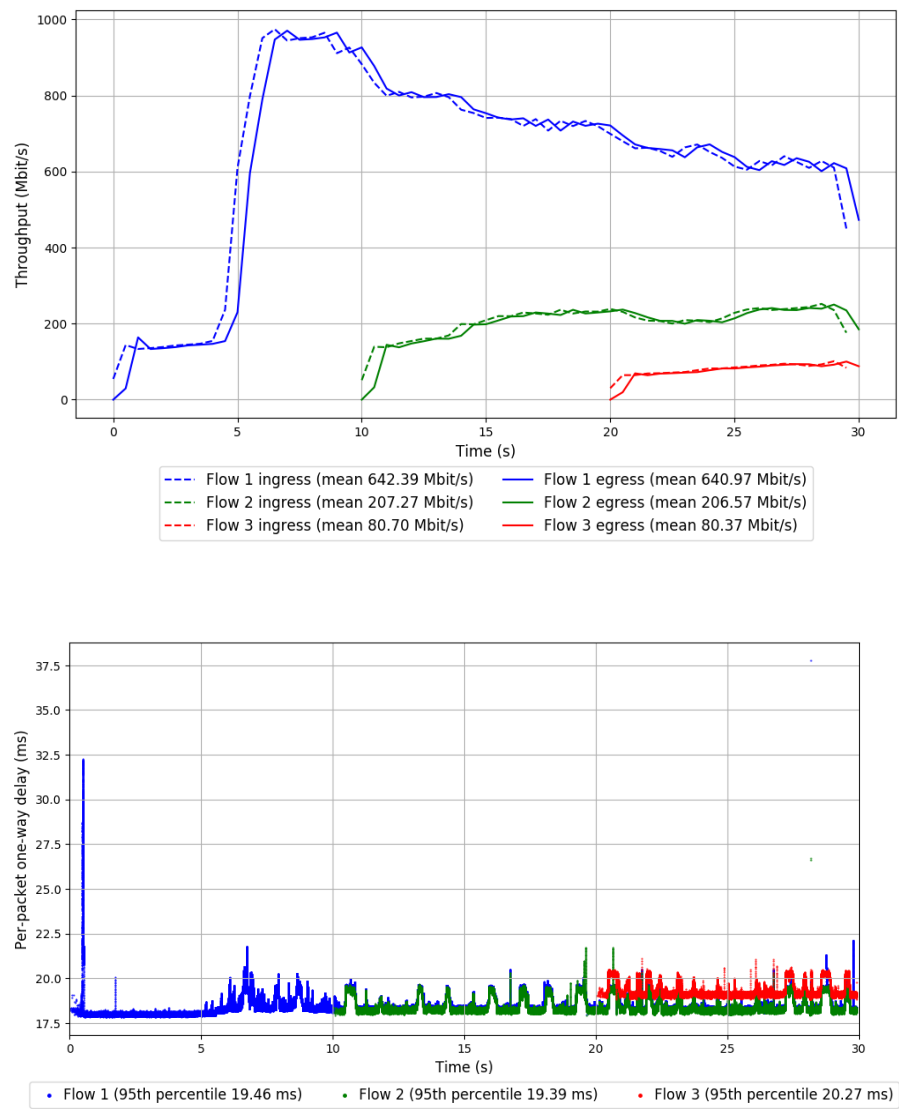
-- Flow 3:

Average throughput: 80.37 Mbit/s

95th percentile per-packet one-way delay: 20.273 ms

Loss rate: 0.40%

Run 10: Report of PCC-Allegro — Data Link

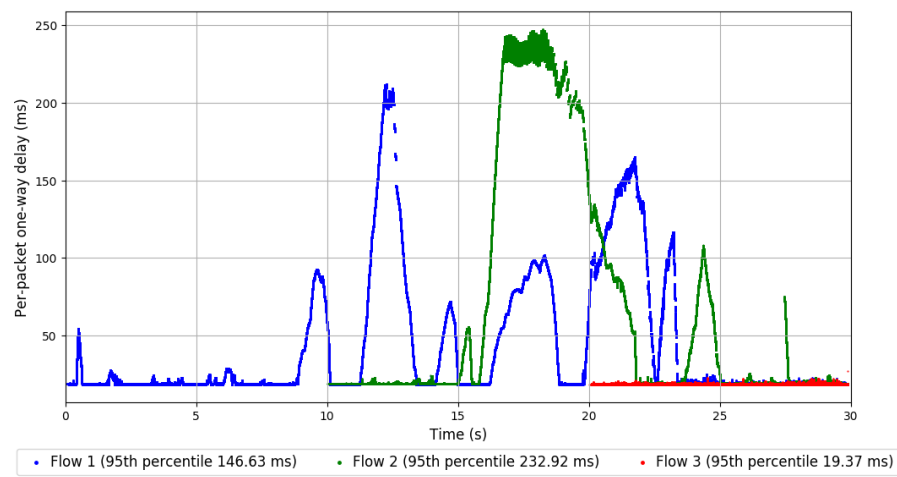
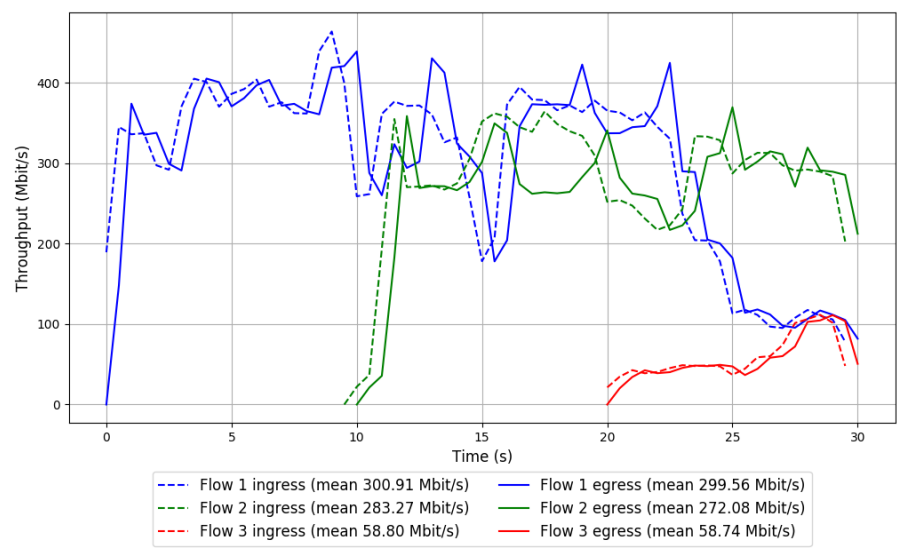


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-18 16:39:53
End at: 2018-06-18 16:40:23
Local clock offset: 4.58 ms
Remote clock offset: 0.668 ms

# Below is generated by plot.py at 2018-06-18 22:06:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.93 Mbit/s
95th percentile per-packet one-way delay: 204.765 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 299.56 Mbit/s
95th percentile per-packet one-way delay: 146.633 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 272.08 Mbit/s
95th percentile per-packet one-way delay: 232.916 ms
Loss rate: 3.95%
-- Flow 3:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 19.371 ms
Loss rate: 0.01%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-06-18 17:05:31

End at: 2018-06-18 17:06:01

Local clock offset: 4.501 ms

Remote clock offset: 0.598 ms

# Below is generated by plot.py at 2018-06-18 22:07:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 524.10 Mbit/s

95th percentile per-packet one-way delay: 197.095 ms

Loss rate: 5.03%

-- Flow 1:

Average throughput: 288.83 Mbit/s

95th percentile per-packet one-way delay: 205.629 ms

Loss rate: 2.10%

-- Flow 2:

Average throughput: 324.84 Mbit/s

95th percentile per-packet one-way delay: 193.611 ms

Loss rate: 9.06%

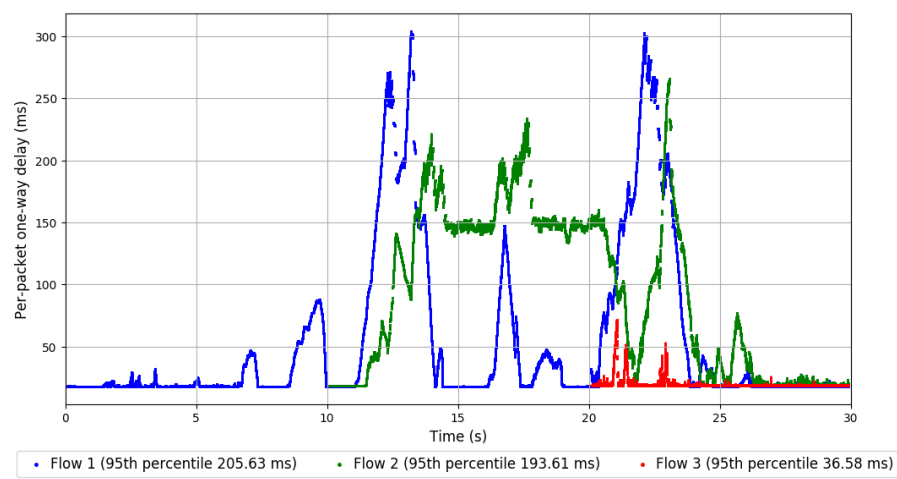
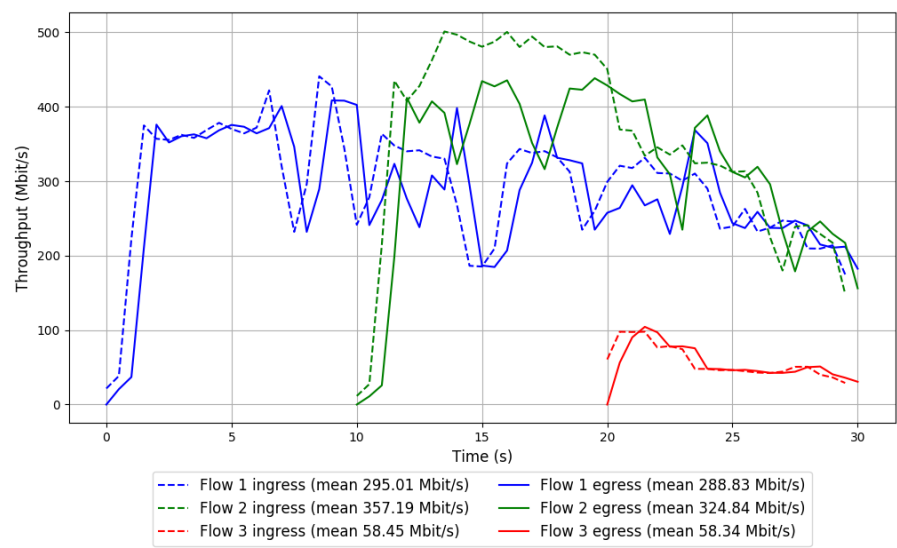
-- Flow 3:

Average throughput: 58.34 Mbit/s

95th percentile per-packet one-way delay: 36.581 ms

Loss rate: 0.20%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-06-18 17:31:18

End at: 2018-06-18 17:31:48

Local clock offset: 3.612 ms

Remote clock offset: 0.318 ms

# Below is generated by plot.py at 2018-06-18 22:07:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 496.49 Mbit/s

95th percentile per-packet one-way delay: 229.842 ms

Loss rate: 6.69%

-- Flow 1:

Average throughput: 311.16 Mbit/s

95th percentile per-packet one-way delay: 234.588 ms

Loss rate: 9.15%

-- Flow 2:

Average throughput: 250.79 Mbit/s

95th percentile per-packet one-way delay: 141.472 ms

Loss rate: 2.47%

-- Flow 3:

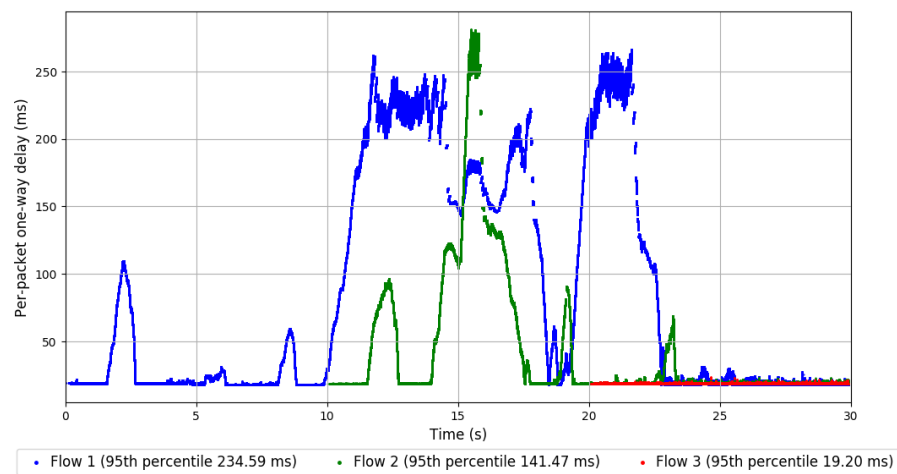
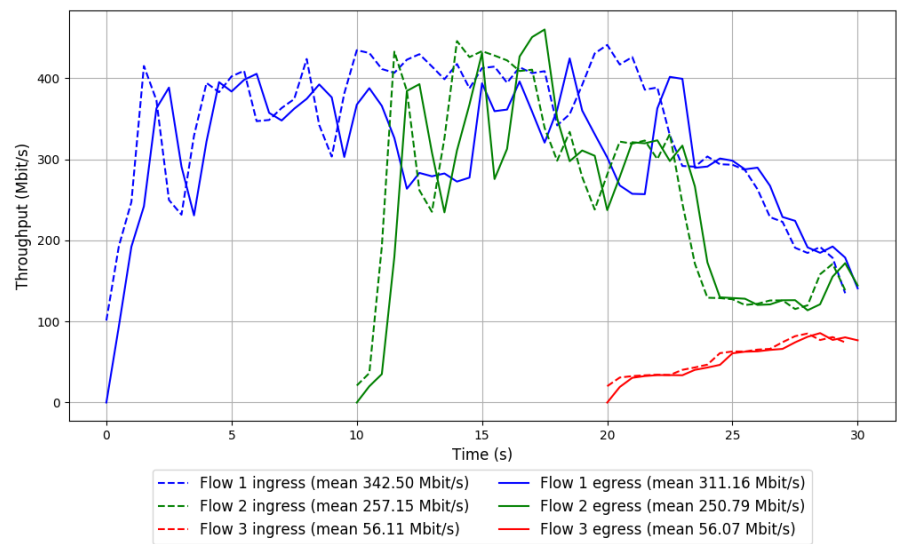
Average throughput: 56.07 Mbit/s

95th percentile per-packet one-way delay: 19.199 ms

Loss rate: 0.08%



Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-06-18 17:56:46

End at: 2018-06-18 17:57:16

Local clock offset: 3.661 ms

Remote clock offset: 1.807 ms

# Below is generated by plot.py at 2018-06-18 22:07:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 456.54 Mbit/s

95th percentile per-packet one-way delay: 166.168 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 245.41 Mbit/s

95th percentile per-packet one-way delay: 108.115 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 239.65 Mbit/s

95th percentile per-packet one-way delay: 208.407 ms

Loss rate: 1.54%

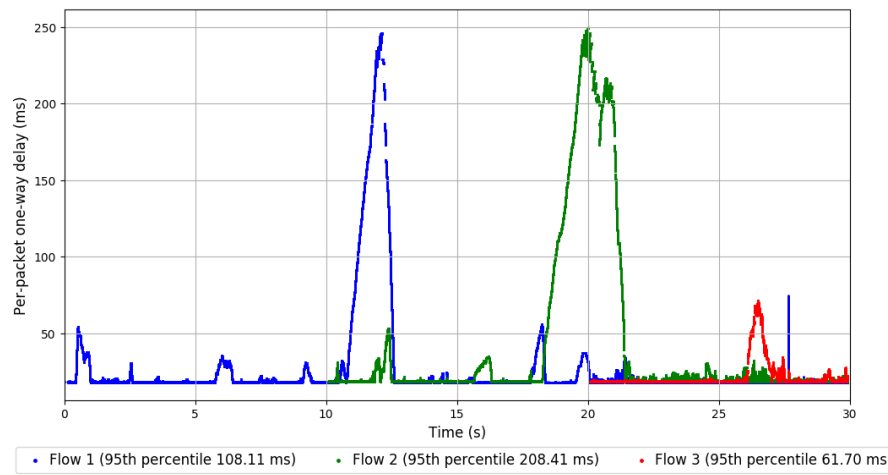
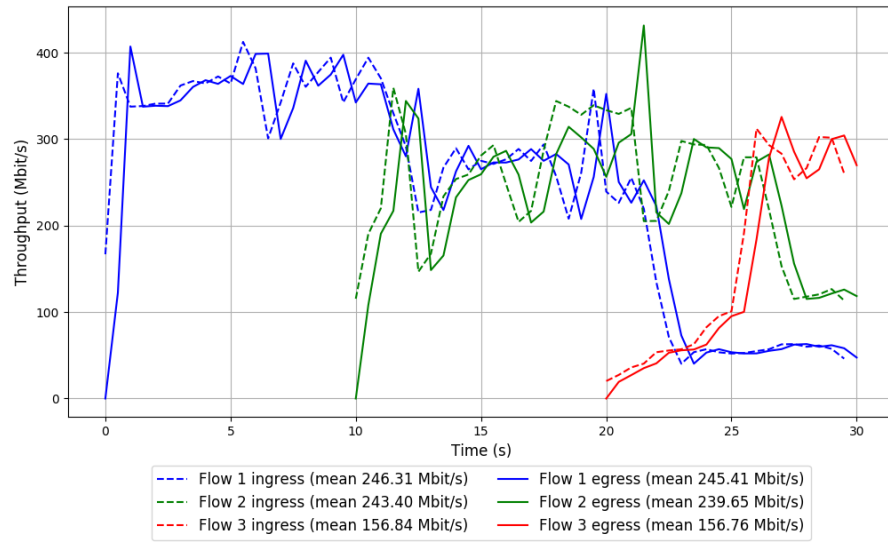
-- Flow 3:

Average throughput: 156.76 Mbit/s

95th percentile per-packet one-way delay: 61.696 ms

Loss rate: 0.04%

#### Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-06-18 18:22:16

End at: 2018-06-18 18:22:46

Local clock offset: 3.692 ms

Remote clock offset: 4.581 ms

# Below is generated by plot.py at 2018-06-18 22:08:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 488.39 Mbit/s

95th percentile per-packet one-way delay: 97.666 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 289.33 Mbit/s

95th percentile per-packet one-way delay: 108.092 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 225.01 Mbit/s

95th percentile per-packet one-way delay: 73.225 ms

Loss rate: 0.05%

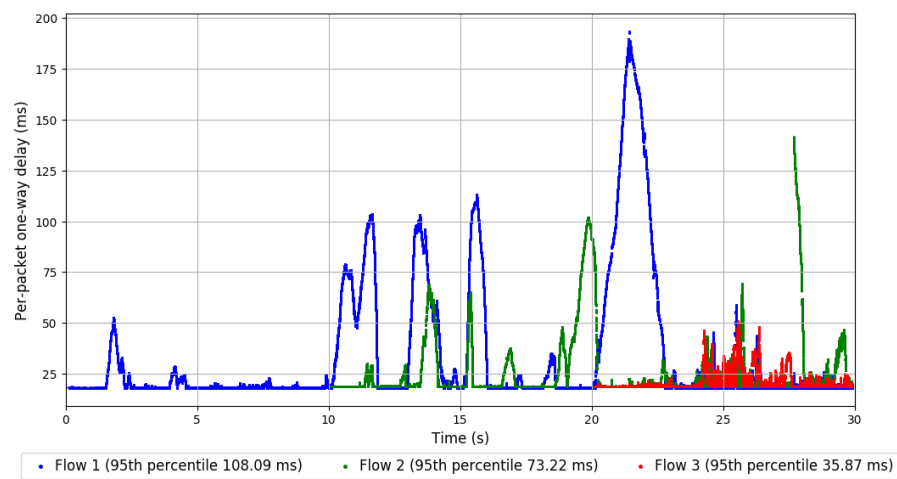
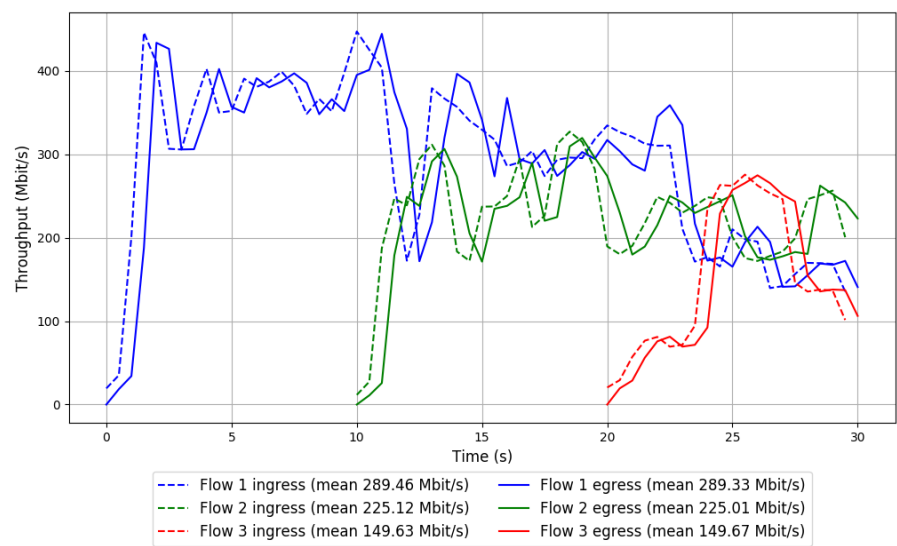
-- Flow 3:

Average throughput: 149.67 Mbit/s

95th percentile per-packet one-way delay: 35.874 ms

Loss rate: 0.04%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-18 18:47:53

End at: 2018-06-18 18:48:23

Local clock offset: 3.685 ms

Remote clock offset: 6.129 ms

# Below is generated by plot.py at 2018-06-18 22:09:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 490.40 Mbit/s

95th percentile per-packet one-way delay: 126.068 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 285.46 Mbit/s

95th percentile per-packet one-way delay: 156.162 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 254.80 Mbit/s

95th percentile per-packet one-way delay: 114.437 ms

Loss rate: 0.77%

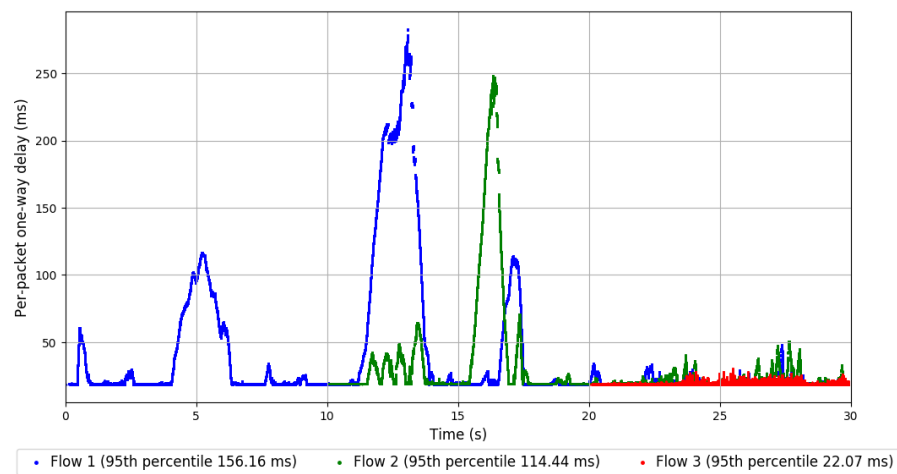
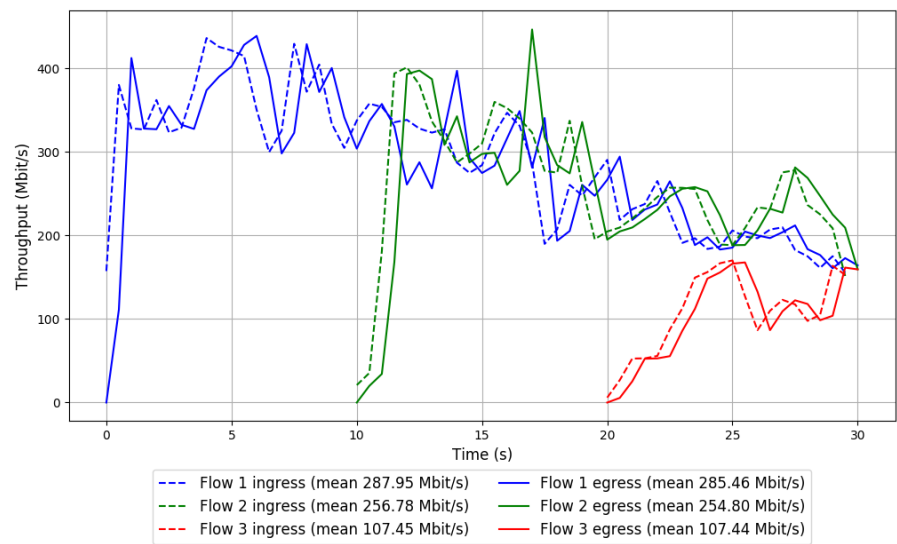
-- Flow 3:

Average throughput: 107.44 Mbit/s

95th percentile per-packet one-way delay: 22.075 ms

Loss rate: 0.01%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-06-18 19:13:07

End at: 2018-06-18 19:13:37

Local clock offset: 3.802 ms

Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2018-06-18 22:14:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 459.98 Mbit/s

95th percentile per-packet one-way delay: 87.893 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 287.41 Mbit/s

95th percentile per-packet one-way delay: 104.594 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 211.99 Mbit/s

95th percentile per-packet one-way delay: 67.843 ms

Loss rate: 0.01%

-- Flow 3:

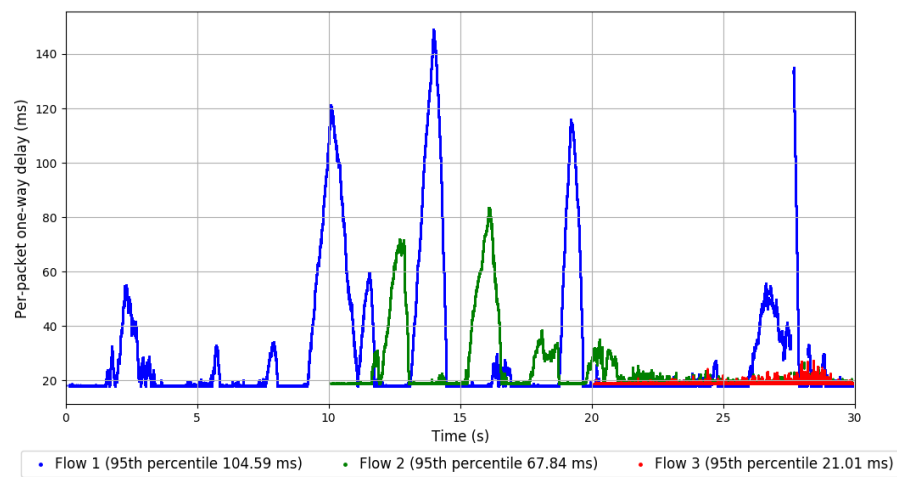
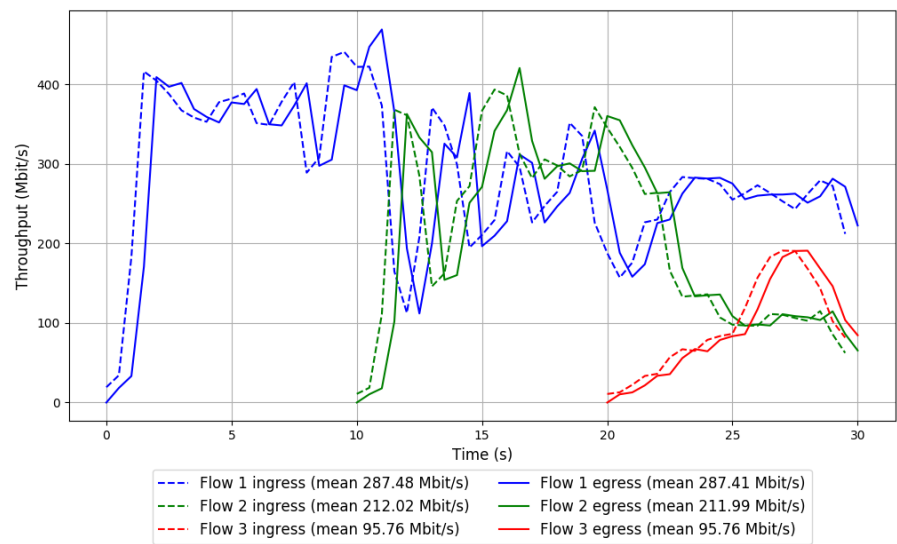
Average throughput: 95.76 Mbit/s

95th percentile per-packet one-way delay: 21.012 ms

Loss rate: 0.00%



Run 7: Report of PCC-Expr — Data Link

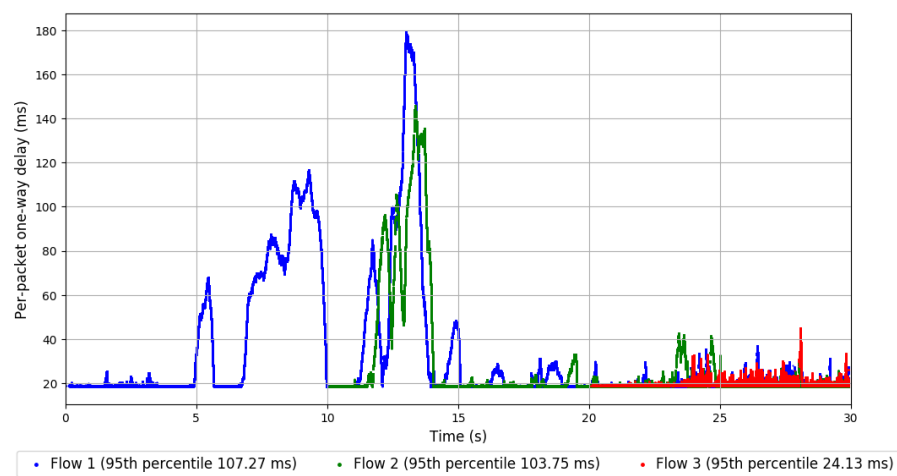
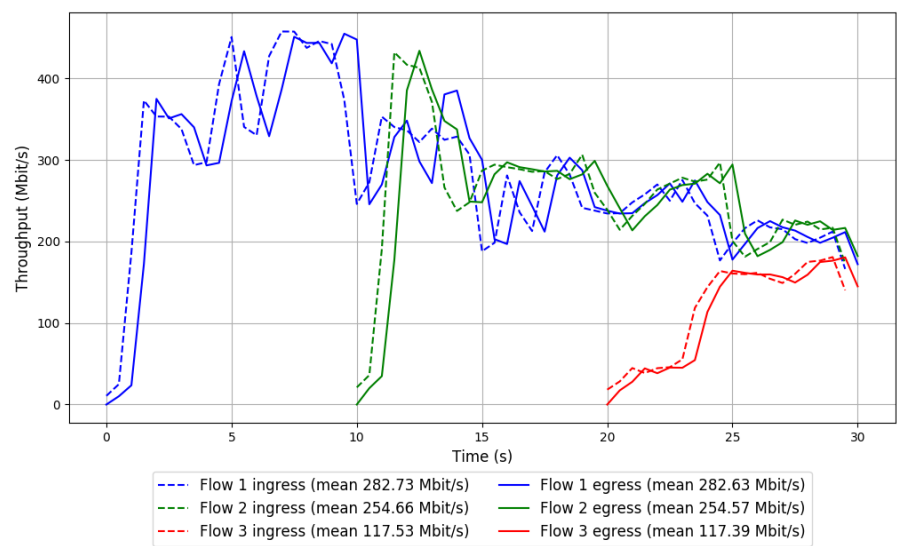


Run 8: Statistics of PCC-Expr

Start at: 2018-06-18 19:38:13  
End at: 2018-06-18 19:38:43  
Local clock offset: 3.895 ms  
Remote clock offset: -2.749 ms

# Below is generated by plot.py at 2018-06-18 22:16:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 490.74 Mbit/s  
95th percentile per-packet one-way delay: 105.404 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 282.63 Mbit/s  
95th percentile per-packet one-way delay: 107.269 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 254.57 Mbit/s  
95th percentile per-packet one-way delay: 103.755 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 117.39 Mbit/s  
95th percentile per-packet one-way delay: 24.127 ms  
Loss rate: 0.12%

Run 8: Report of PCC-Expr — Data Link

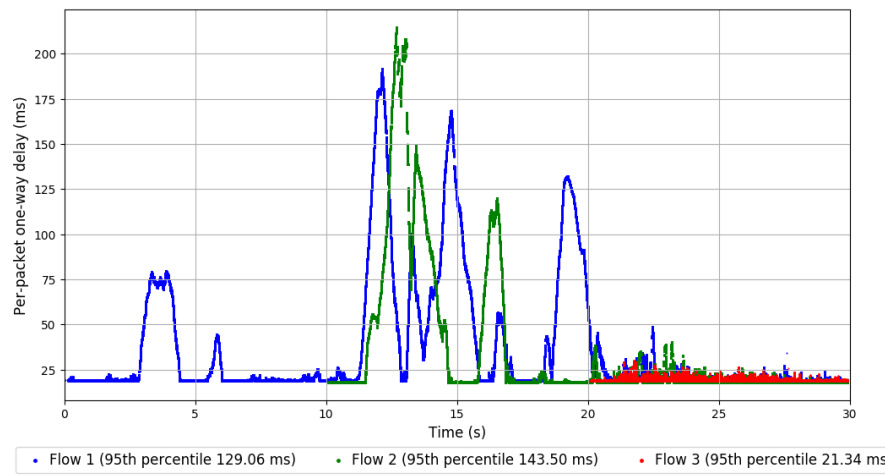
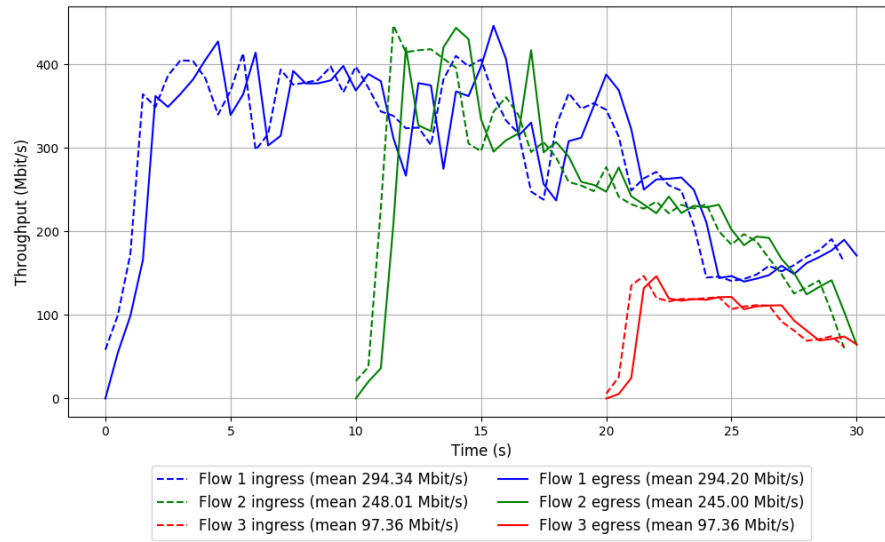


Run 9: Statistics of PCC-Expr

Start at: 2018-06-18 20:03:37  
End at: 2018-06-18 20:04:07  
Local clock offset: 3.993 ms  
Remote clock offset: -5.011 ms

# Below is generated by plot.py at 2018-06-18 22:17:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 489.29 Mbit/s  
95th percentile per-packet one-way delay: 131.142 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 294.20 Mbit/s  
95th percentile per-packet one-way delay: 129.055 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 245.00 Mbit/s  
95th percentile per-packet one-way delay: 143.502 ms  
Loss rate: 1.22%  
-- Flow 3:  
Average throughput: 97.36 Mbit/s  
95th percentile per-packet one-way delay: 21.335 ms  
Loss rate: 0.01%

# Run 9: Report of PCC-Expr — Data Link

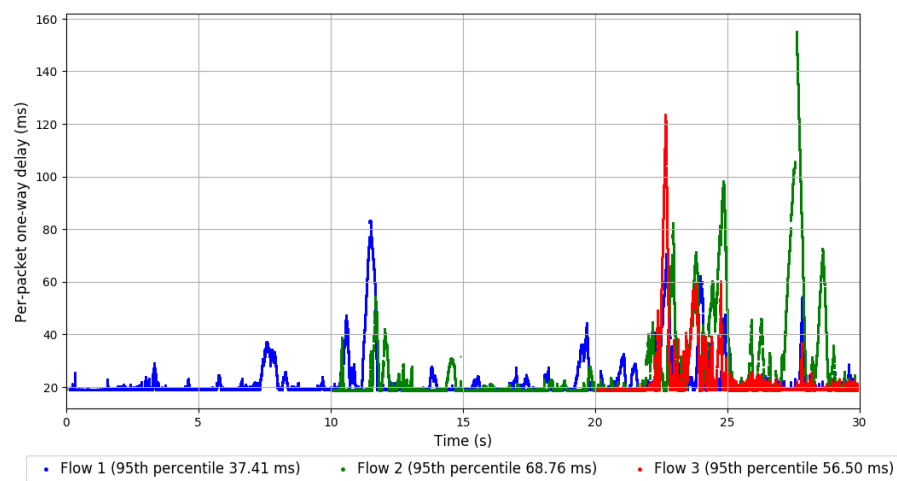
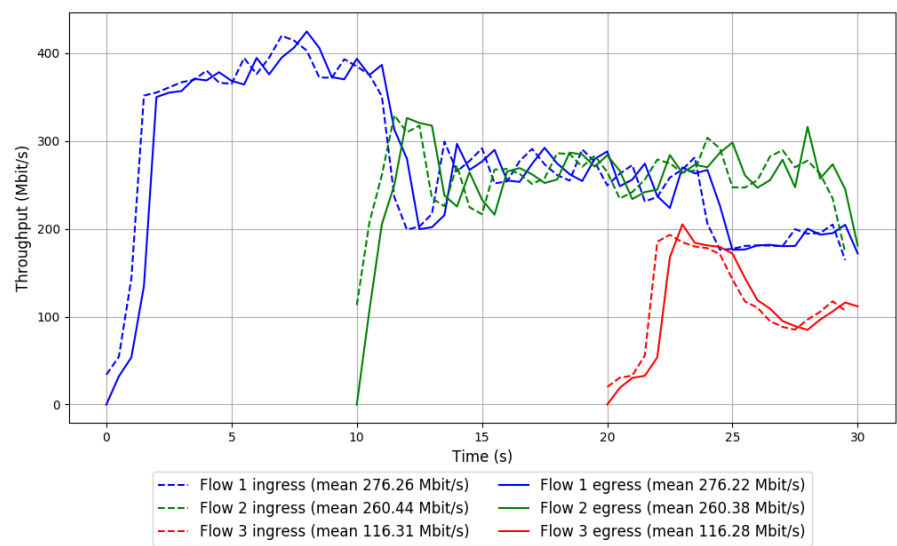


Run 10: Statistics of PCC-Expr

Start at: 2018-06-18 20:28:59  
End at: 2018-06-18 20:29:29  
Local clock offset: 3.619 ms  
Remote clock offset: -3.581 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 487.83 Mbit/s  
95th percentile per-packet one-way delay: 53.167 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 276.22 Mbit/s  
95th percentile per-packet one-way delay: 37.413 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 260.38 Mbit/s  
95th percentile per-packet one-way delay: 68.757 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 116.28 Mbit/s  
95th percentile per-packet one-way delay: 56.501 ms  
Loss rate: 0.03%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-18 16:41:42

End at: 2018-06-18 16:42:12

Local clock offset: 4.576 ms

Remote clock offset: 0.783 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 72.66 Mbit/s

95th percentile per-packet one-way delay: 18.917 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 18.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.26 Mbit/s

95th percentile per-packet one-way delay: 18.938 ms

Loss rate: 0.01%

-- Flow 3:

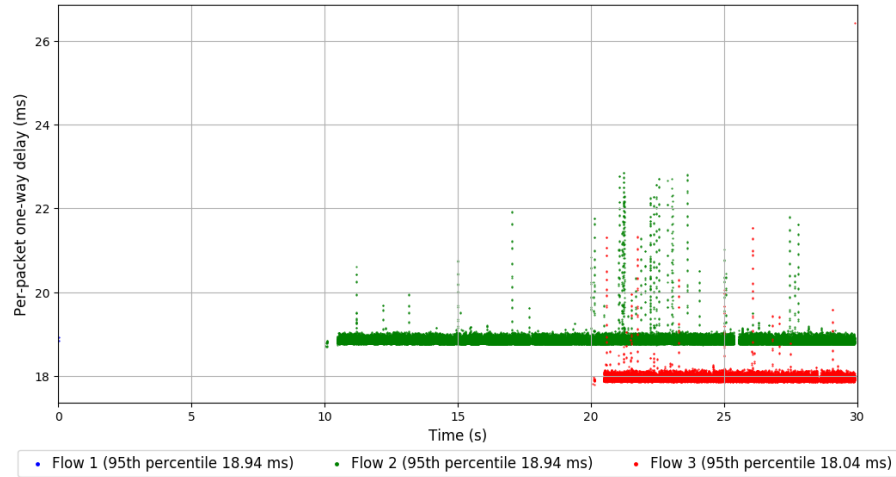
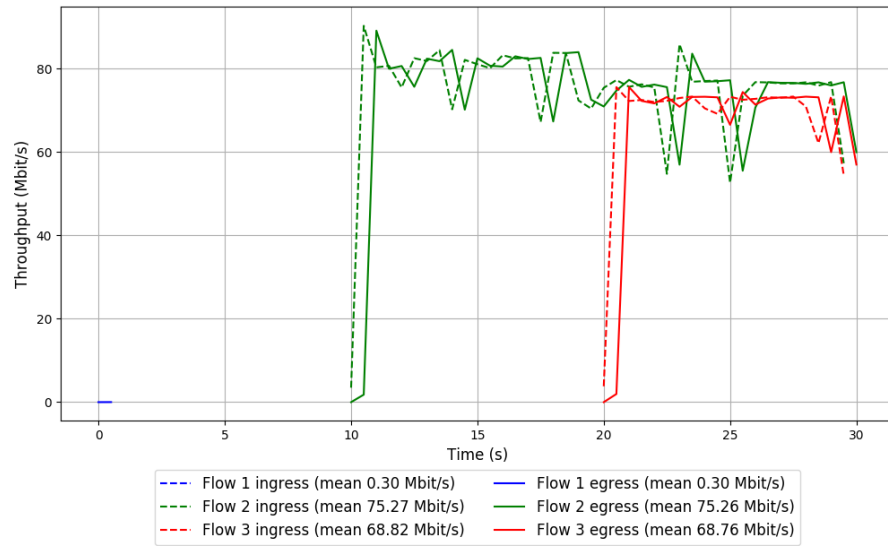
Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 18.039 ms

Loss rate: 0.01%



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



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-18 17:07:21

End at: 2018-06-18 17:07:51

Local clock offset: 4.342 ms

Remote clock offset: 0.647 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.03 Mbit/s

95th percentile per-packet one-way delay: 18.821 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 70.06 Mbit/s

95th percentile per-packet one-way delay: 17.987 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 54.93 Mbit/s

95th percentile per-packet one-way delay: 18.653 ms

Loss rate: 0.02%

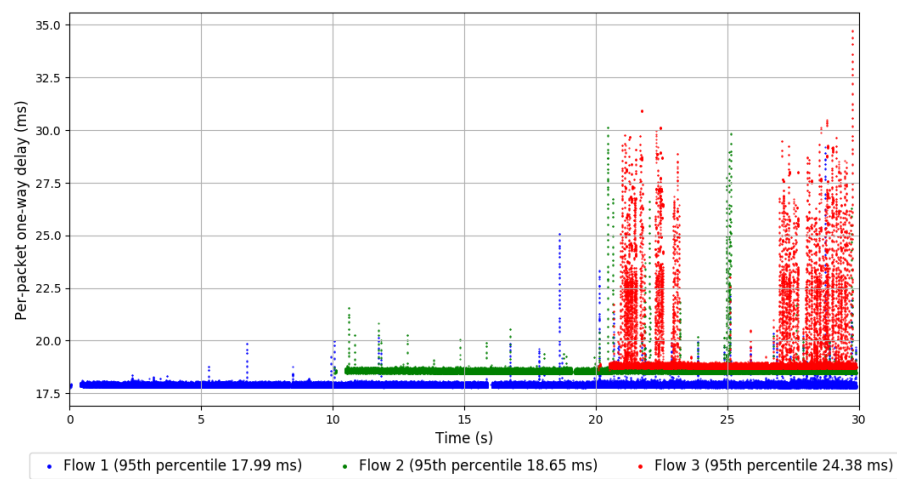
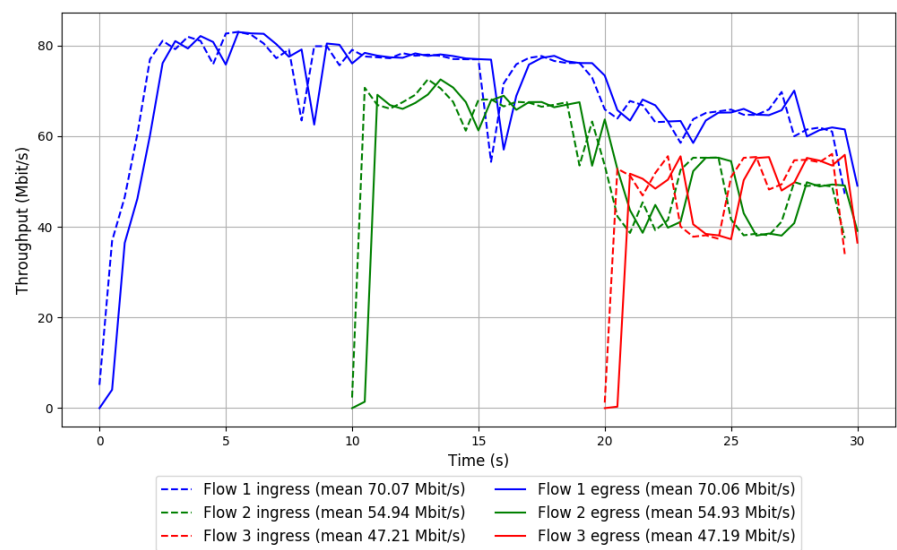
-- Flow 3:

Average throughput: 47.19 Mbit/s

95th percentile per-packet one-way delay: 24.381 ms

Loss rate: 0.04%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-06-18 17:33:07

End at: 2018-06-18 17:33:37

Local clock offset: 3.491 ms

Remote clock offset: 0.353 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.52 Mbit/s

95th percentile per-packet one-way delay: 19.084 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.26 Mbit/s

95th percentile per-packet one-way delay: 18.912 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.03 Mbit/s

95th percentile per-packet one-way delay: 18.400 ms

Loss rate: 0.00%

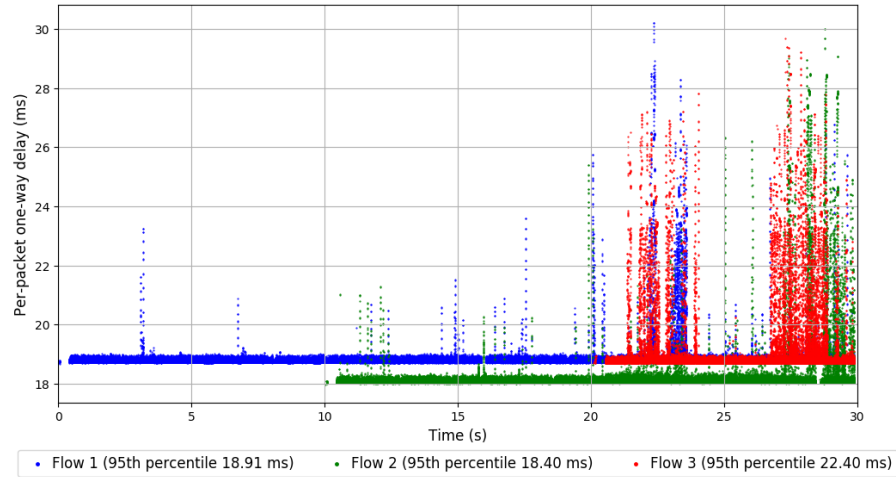
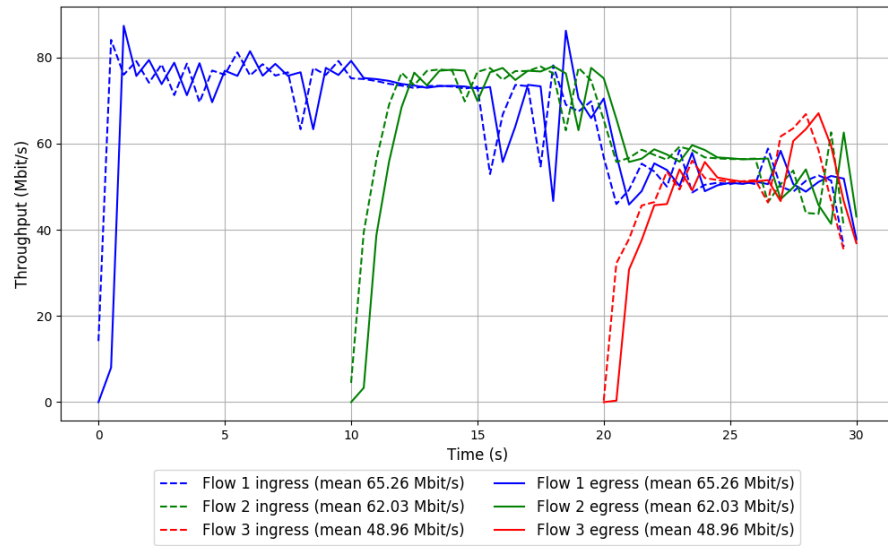
-- Flow 3:

Average throughput: 48.96 Mbit/s

95th percentile per-packet one-way delay: 22.403 ms

Loss rate: 0.01%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-06-18 17:58:33

End at: 2018-06-18 17:59:03

Local clock offset: 3.767 ms

Remote clock offset: 2.209 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.00 Mbit/s

95th percentile per-packet one-way delay: 20.960 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.08 Mbit/s

95th percentile per-packet one-way delay: 19.171 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.83 Mbit/s

95th percentile per-packet one-way delay: 20.760 ms

Loss rate: 0.01%

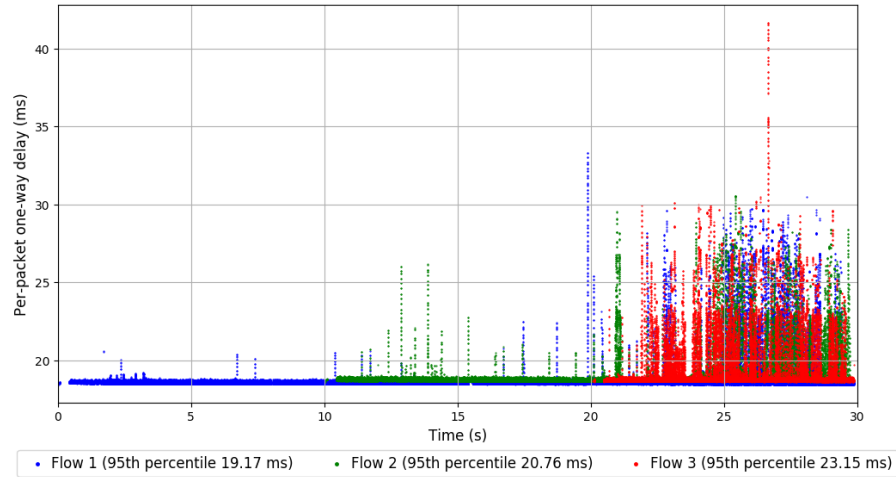
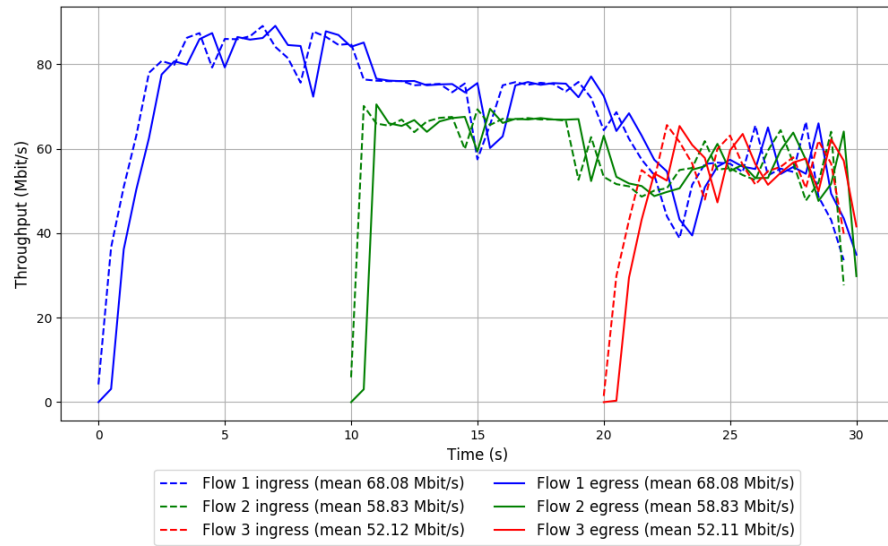
-- Flow 3:

Average throughput: 52.11 Mbit/s

95th percentile per-packet one-way delay: 23.154 ms

Loss rate: 0.00%

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



Run 5: Statistics of QUIC Cubic

Start at: 2018-06-18 18:24:05

End at: 2018-06-18 18:24:35

Local clock offset: 3.787 ms

Remote clock offset: 4.627 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.46 Mbit/s

95th percentile per-packet one-way delay: 19.776 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.80 Mbit/s

95th percentile per-packet one-way delay: 19.098 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.13 Mbit/s

95th percentile per-packet one-way delay: 18.534 ms

Loss rate: 0.00%

-- Flow 3:

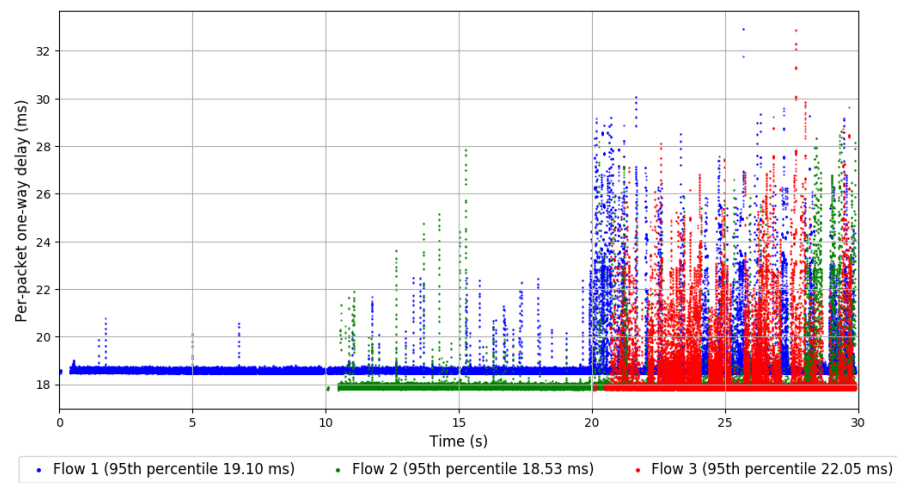
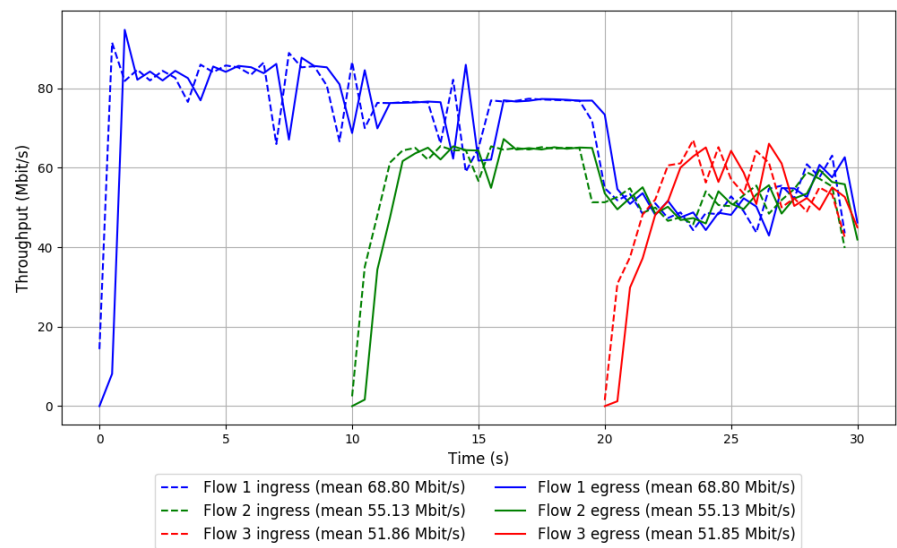
Average throughput: 51.85 Mbit/s

95th percentile per-packet one-way delay: 22.050 ms

Loss rate: 0.00%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-18 18:49:42

End at: 2018-06-18 18:50:12

Local clock offset: 3.776 ms

Remote clock offset: 6.24 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.15 Mbit/s

95th percentile per-packet one-way delay: 21.492 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 66.04 Mbit/s

95th percentile per-packet one-way delay: 21.106 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.97 Mbit/s

95th percentile per-packet one-way delay: 20.750 ms

Loss rate: 0.00%

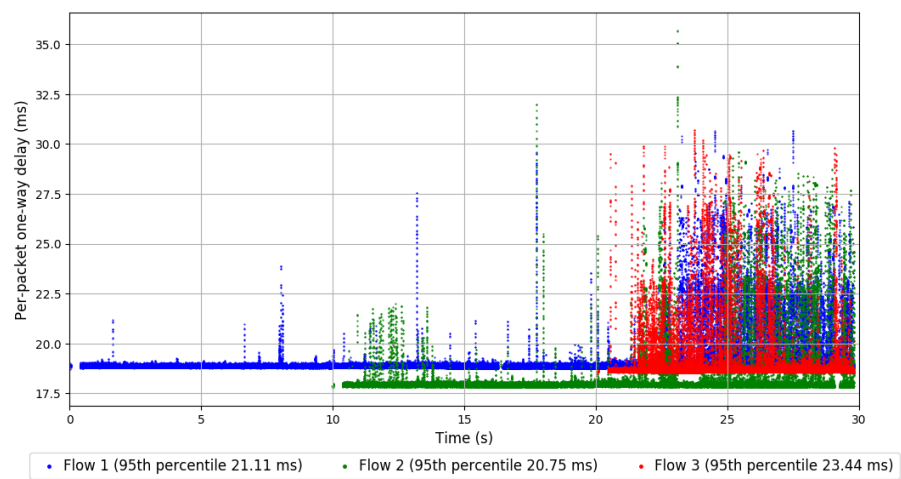
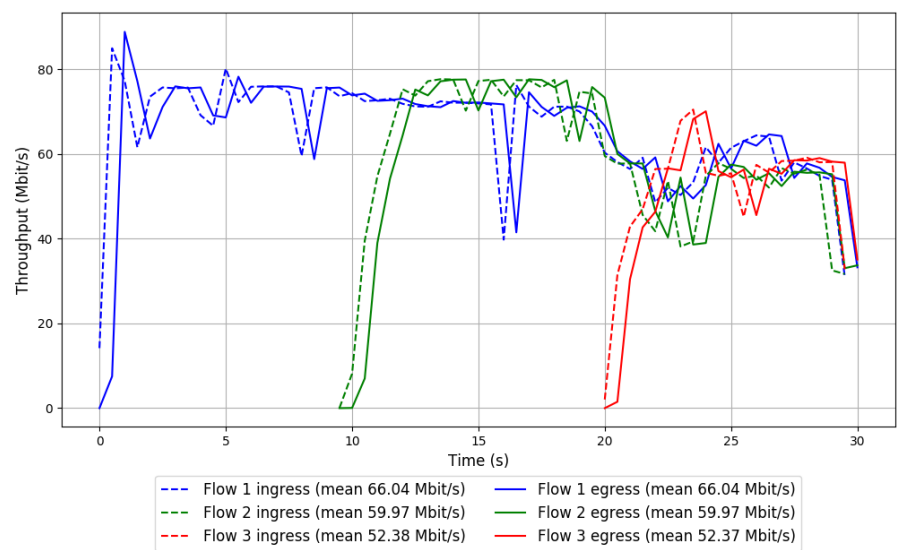
-- Flow 3:

Average throughput: 52.37 Mbit/s

95th percentile per-packet one-way delay: 23.439 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-18 19:14:54

End at: 2018-06-18 19:15:24

Local clock offset: 3.82 ms

Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.84 Mbit/s

95th percentile per-packet one-way delay: 21.217 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.59 Mbit/s

95th percentile per-packet one-way delay: 19.133 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.60 Mbit/s

95th percentile per-packet one-way delay: 19.404 ms

Loss rate: 0.00%

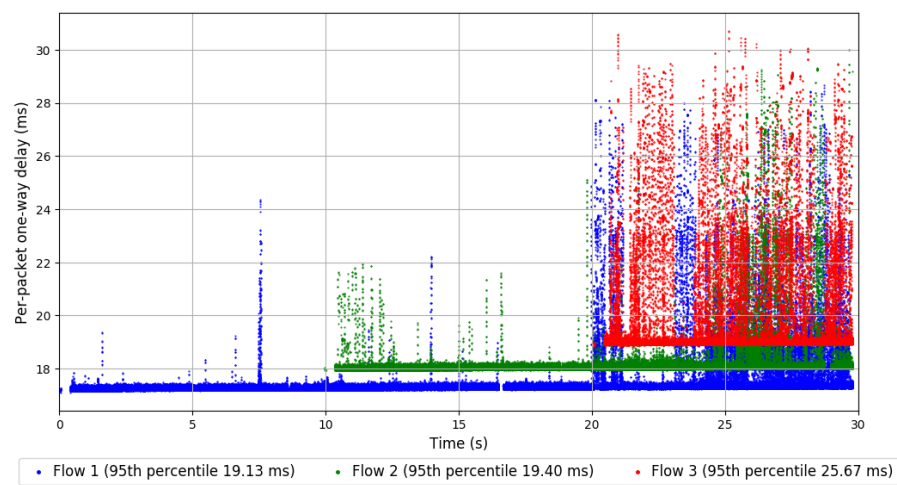
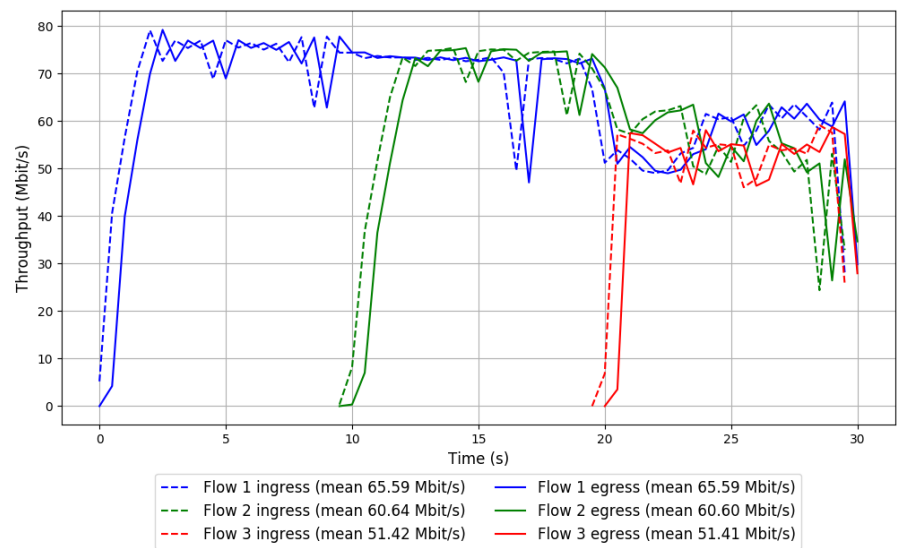
-- Flow 3:

Average throughput: 51.41 Mbit/s

95th percentile per-packet one-way delay: 25.667 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link

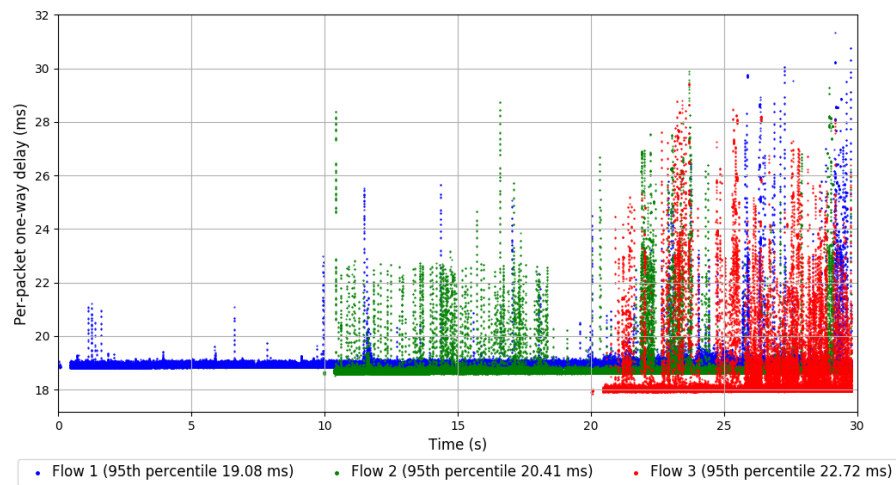
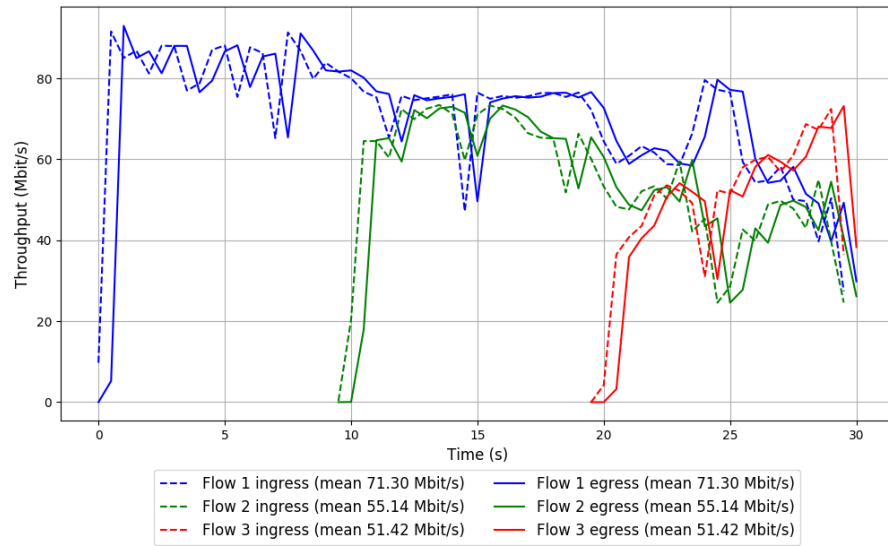


Run 8: Statistics of QUIC Cubic

Start at: 2018-06-18 19:40:02  
End at: 2018-06-18 19:40:32  
Local clock offset: 3.868 ms  
Remote clock offset: -2.976 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 124.95 Mbit/s  
95th percentile per-packet one-way delay: 19.790 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 71.30 Mbit/s  
95th percentile per-packet one-way delay: 19.084 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 55.14 Mbit/s  
95th percentile per-packet one-way delay: 20.406 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 51.42 Mbit/s  
95th percentile per-packet one-way delay: 22.722 ms  
Loss rate: 0.00%

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



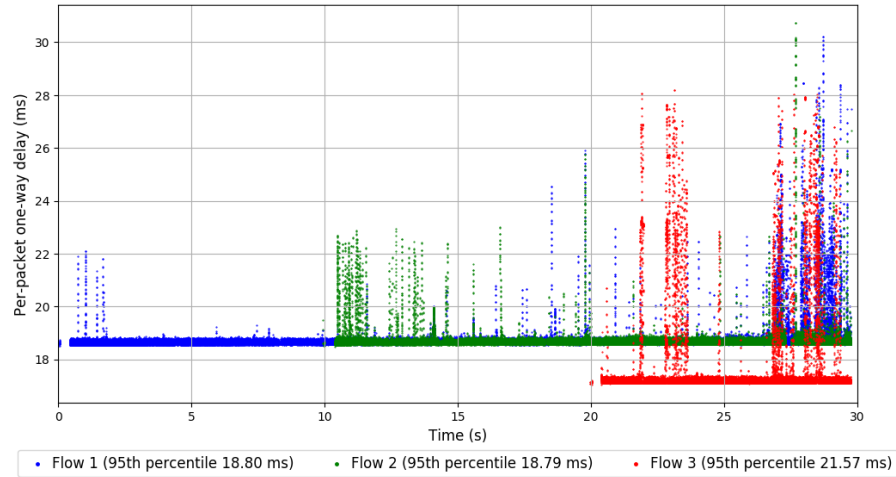
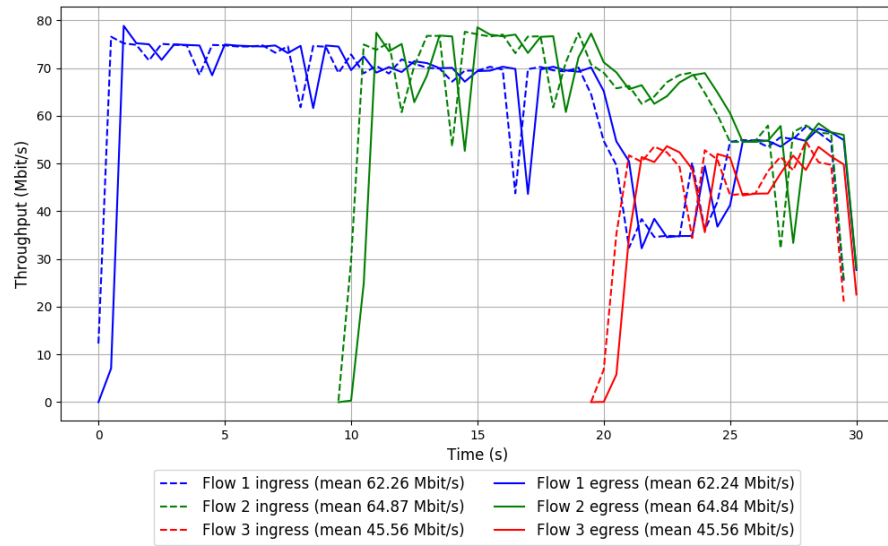
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-18 20:05:25  
End at: 2018-06-18 20:05:55  
Local clock offset: 3.964 ms  
Remote clock offset: -5.163 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 120.49 Mbit/s  
95th percentile per-packet one-way delay: 18.806 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 62.24 Mbit/s  
95th percentile per-packet one-way delay: 18.795 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 64.84 Mbit/s  
95th percentile per-packet one-way delay: 18.788 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 45.56 Mbit/s  
95th percentile per-packet one-way delay: 21.566 ms  
Loss rate: 0.00%



# Run 9: Report of QUIC Cubic — Data Link

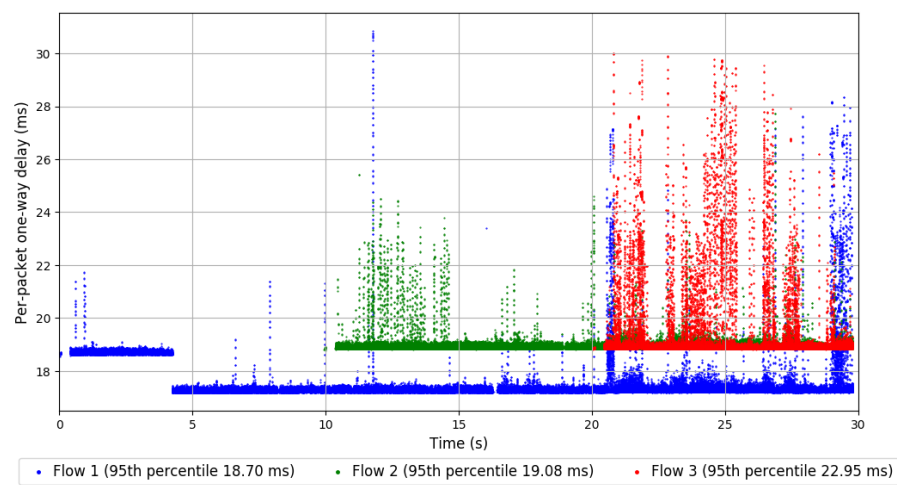
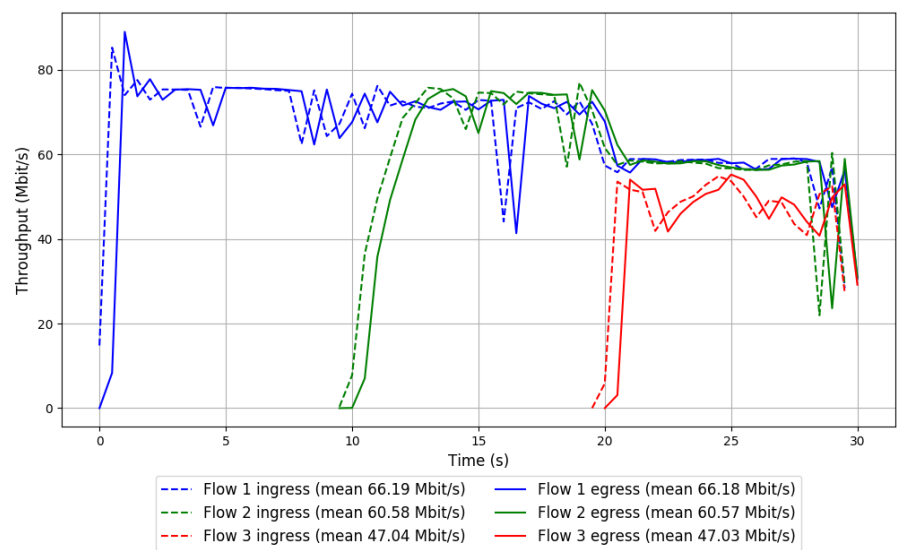


Run 10: Statistics of QUIC Cubic

Start at: 2018-06-18 20:30:47  
End at: 2018-06-18 20:31:18  
Local clock offset: 3.639 ms  
Remote clock offset: -3.554 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 121.97 Mbit/s  
95th percentile per-packet one-way delay: 19.084 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 66.18 Mbit/s  
95th percentile per-packet one-way delay: 18.695 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 60.57 Mbit/s  
95th percentile per-packet one-way delay: 19.083 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 47.03 Mbit/s  
95th percentile per-packet one-way delay: 22.951 ms  
Loss rate: 0.02%

Run 10: Report of QUIC Cubic — Data Link

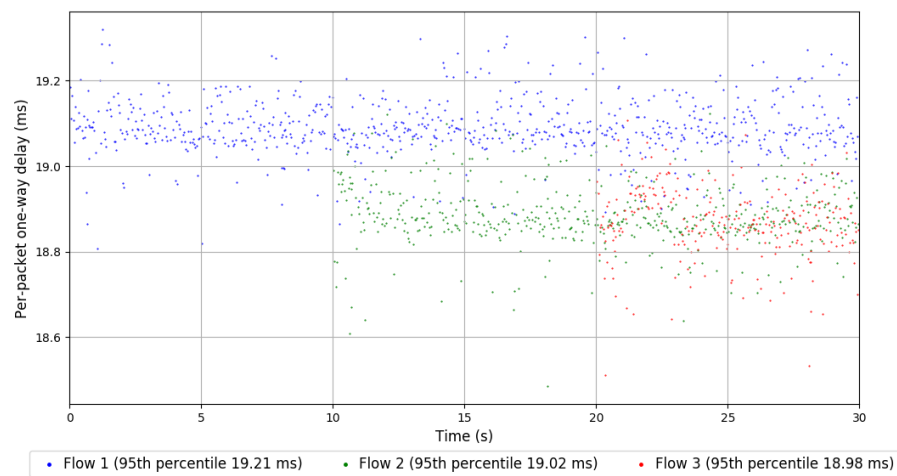
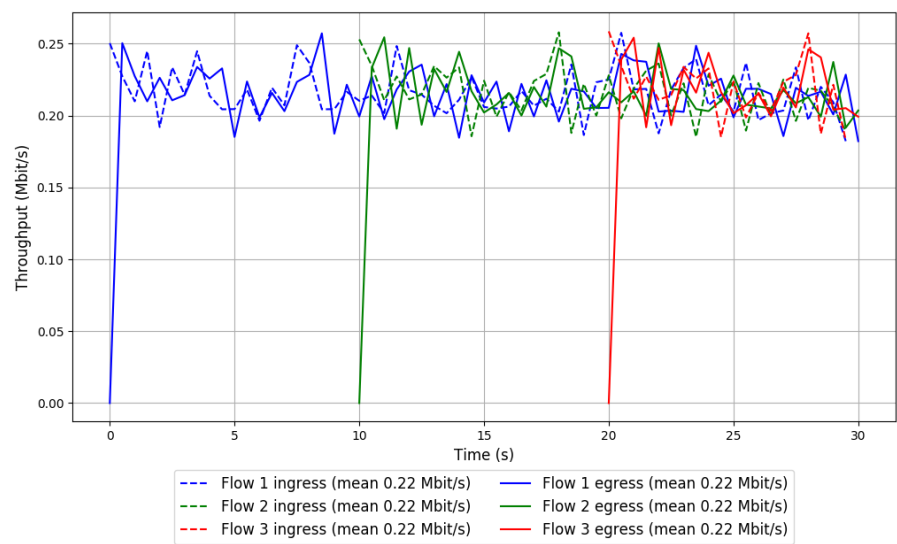


```
Run 1: Statistics of SReAM

Start at: 2018-06-18 16:26:01
End at: 2018-06-18 16:26:31
Local clock offset: 4.52 ms
Remote clock offset: 0.241 ms

# Below is generated by plot.py at 2018-06-18 22:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.176 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.208 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.017 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.985 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

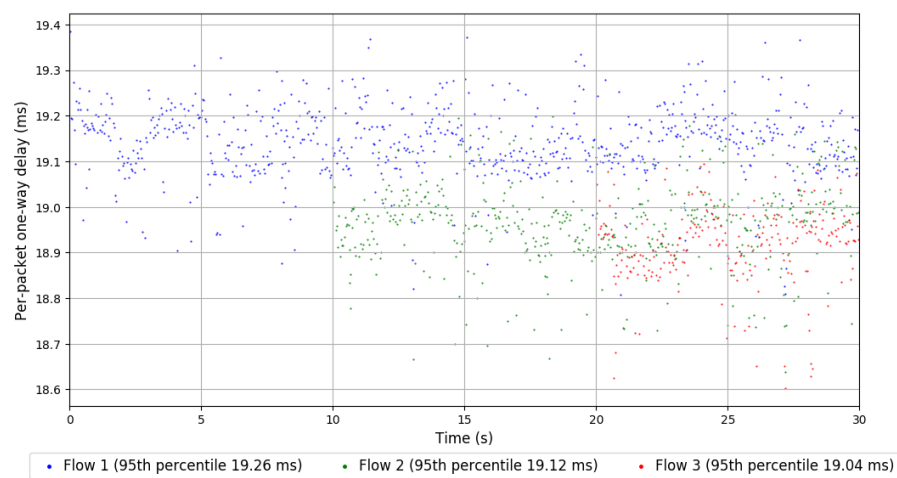
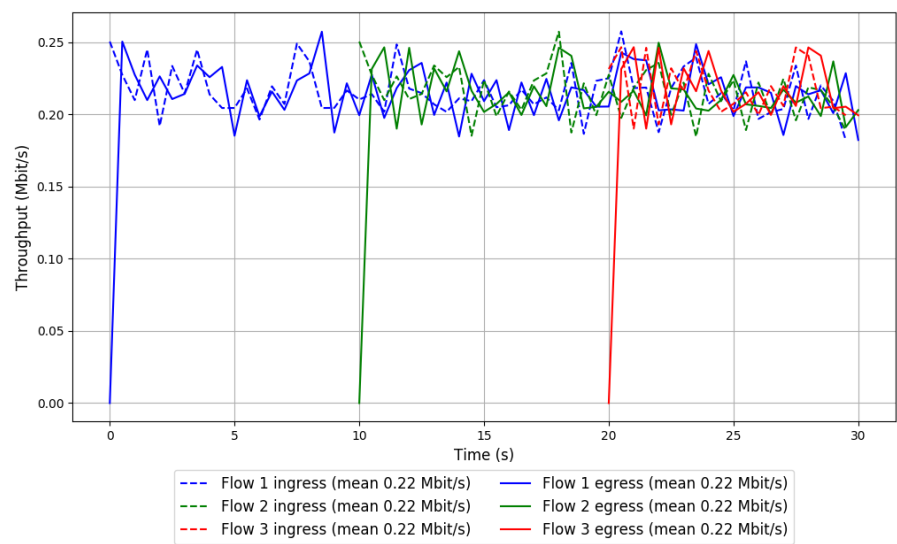


```
Run 2: Statistics of SReAM

Start at: 2018-06-18 16:51:46
End at: 2018-06-18 16:52:16
Local clock offset: 4.571 ms
Remote clock offset: 0.526 ms

# Below is generated by plot.py at 2018-06-18 22:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.125 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.039 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-06-18 17:17:29

End at: 2018-06-18 17:17:59

Local clock offset: 3.867 ms

Remote clock offset: 0.85 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 18.953 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.325 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.623 ms

Loss rate: 0.00%

-- Flow 3:

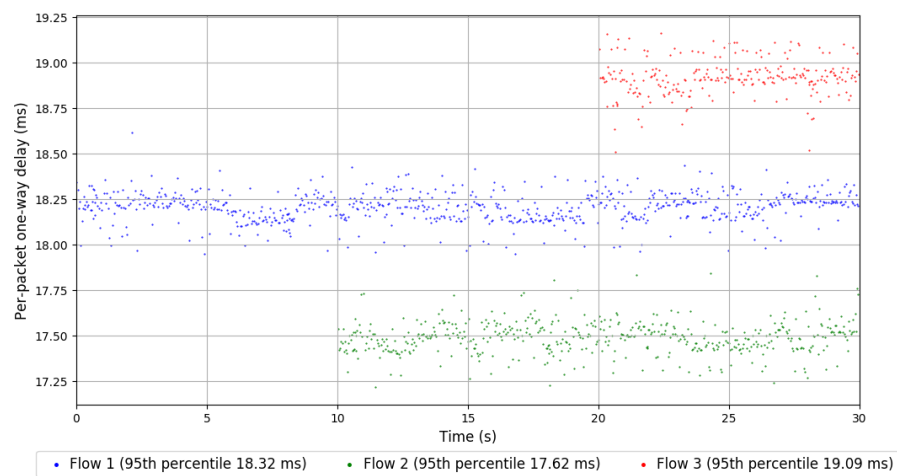
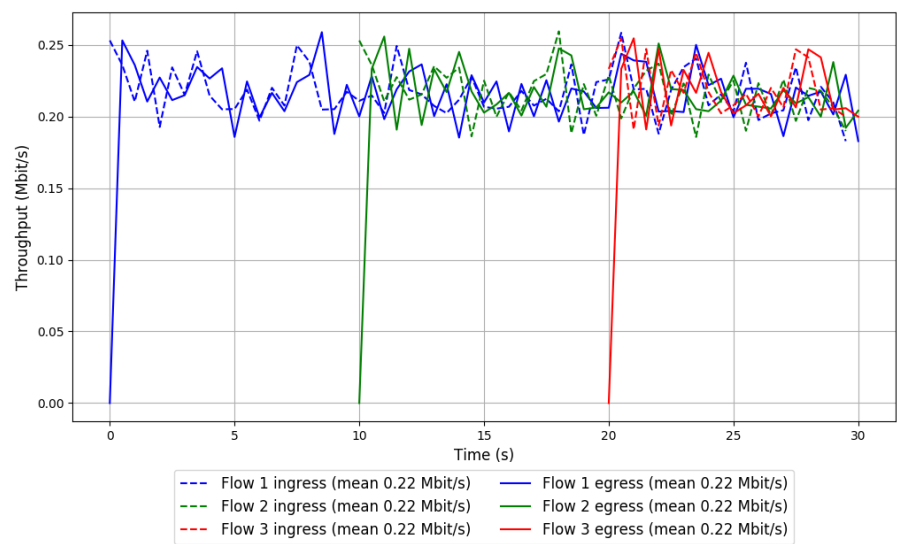
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.085 ms

Loss rate: 0.00%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-06-18 17:43:08

End at: 2018-06-18 17:43:38

Local clock offset: 3.641 ms

Remote clock offset: 0.377 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.159 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.217 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.459 ms

Loss rate: 0.00%

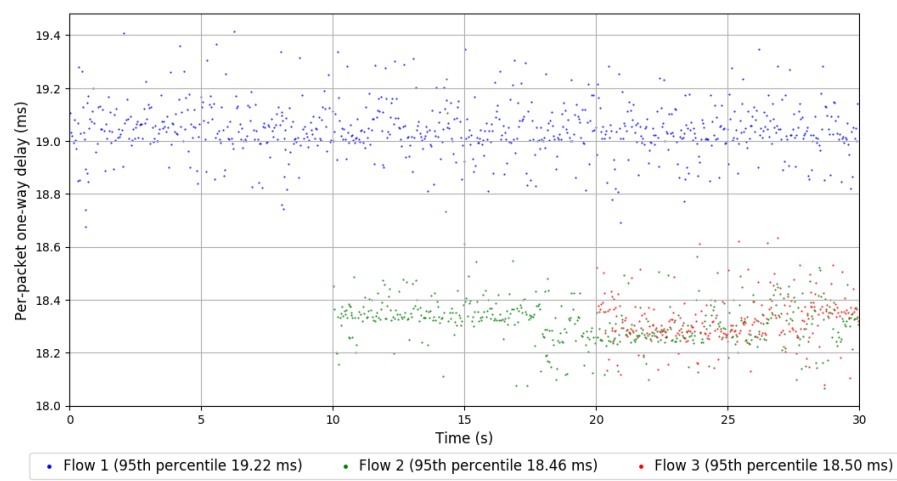
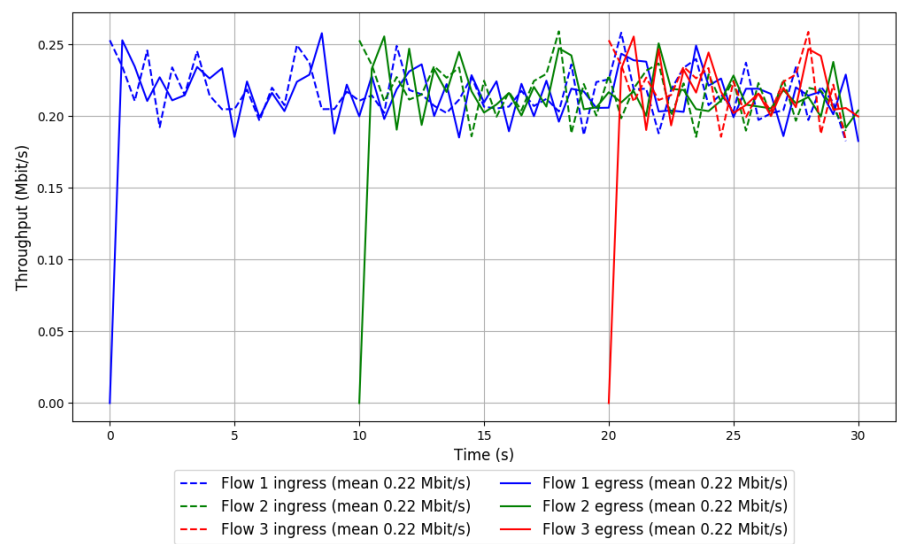
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.497 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-06-18 18:08:36

End at: 2018-06-18 18:09:06

Local clock offset: 3.772 ms

Remote clock offset: 3.531 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.038 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.022 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.101 ms

Loss rate: 0.00%

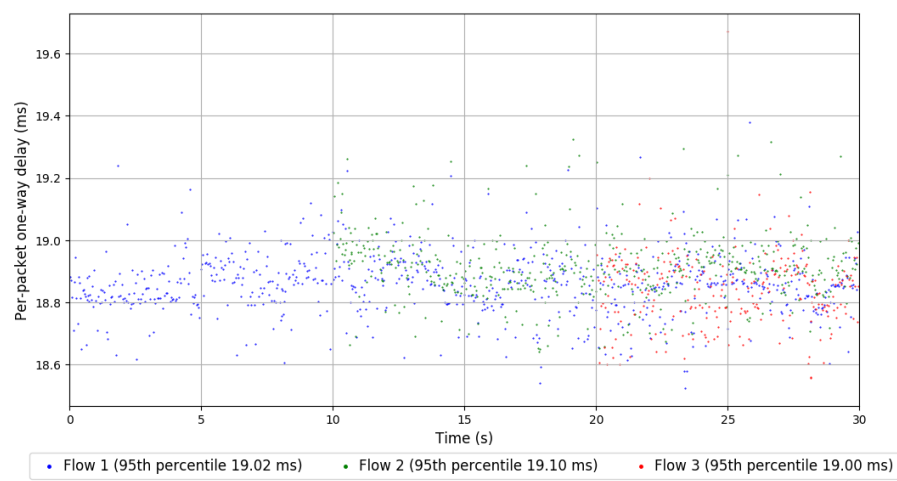
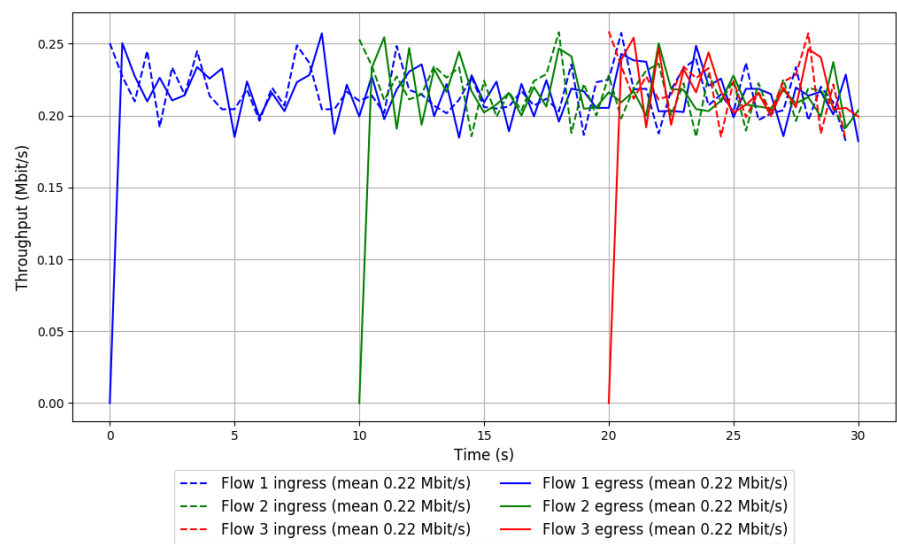
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.999 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-06-18 18:34:10

End at: 2018-06-18 18:34:40

Local clock offset: 3.801 ms

Remote clock offset: 5.343 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 18.974 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.042 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.403 ms

Loss rate: 0.00%

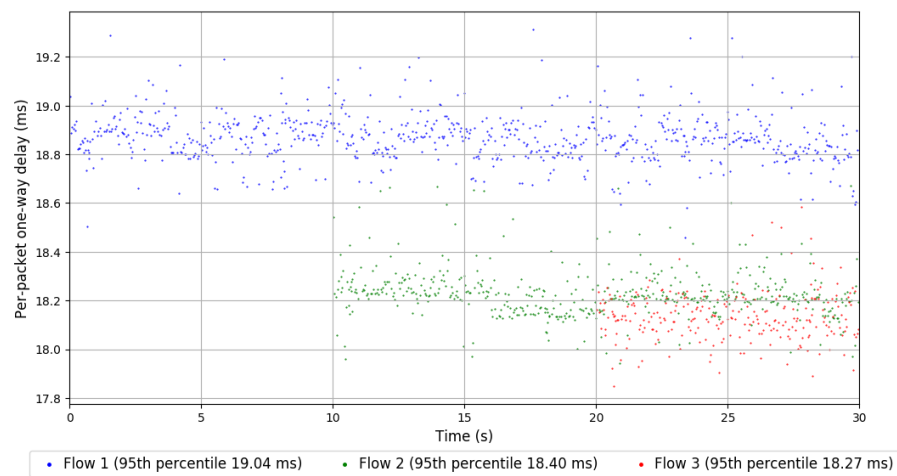
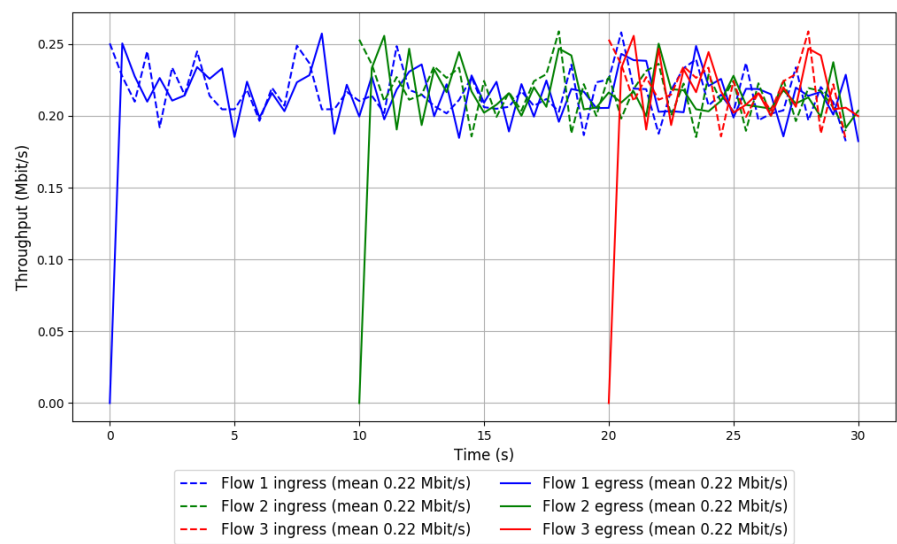
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.268 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-06-18 18:59:32

End at: 2018-06-18 19:00:02

Local clock offset: 3.804 ms

Remote clock offset: 6.772 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.704 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.131 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 18.231 ms

Loss rate: 0.00%

-- Flow 3:

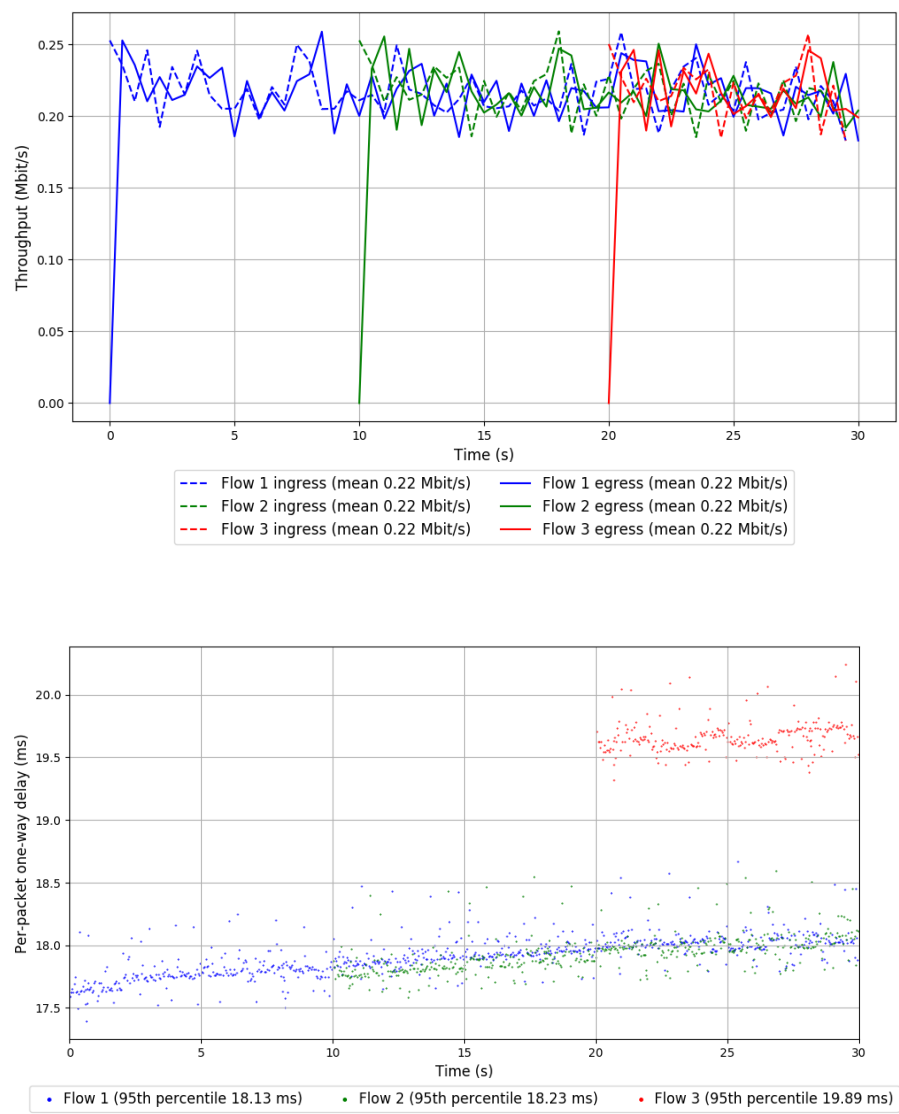
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.885 ms

Loss rate: 0.00%



Run 7: Report of SReAM — Data Link

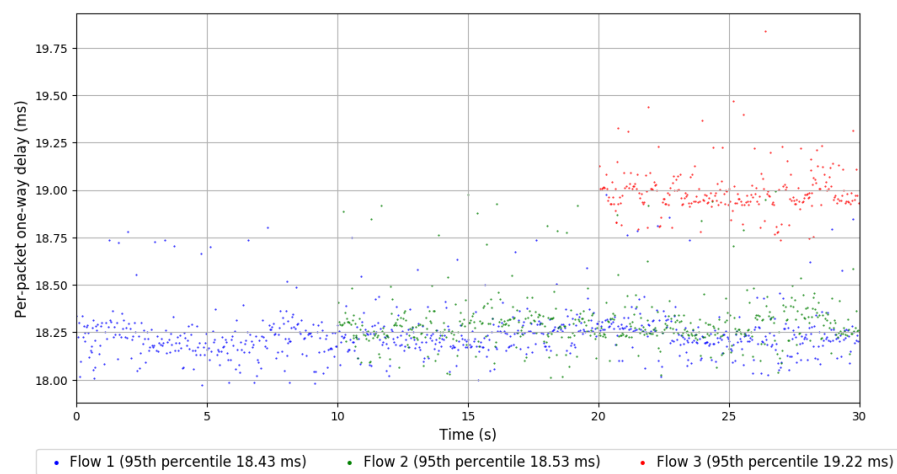
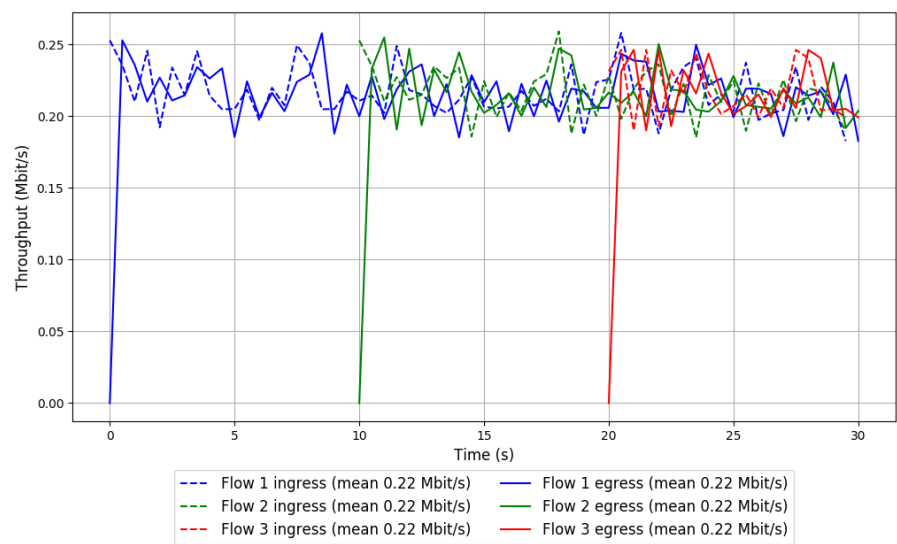


Run 8: Statistics of SReAM

Start at: 2018-06-18 19:24:33  
End at: 2018-06-18 19:25:03  
Local clock offset: 3.842 ms  
Remote clock offset: -1.278 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.011 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 18.430 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 18.534 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.222 ms  
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-06-18 19:49:58

End at: 2018-06-18 19:50:28

Local clock offset: 3.924 ms

Remote clock offset: -3.85 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.287 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.194 ms

Loss rate: 0.00%

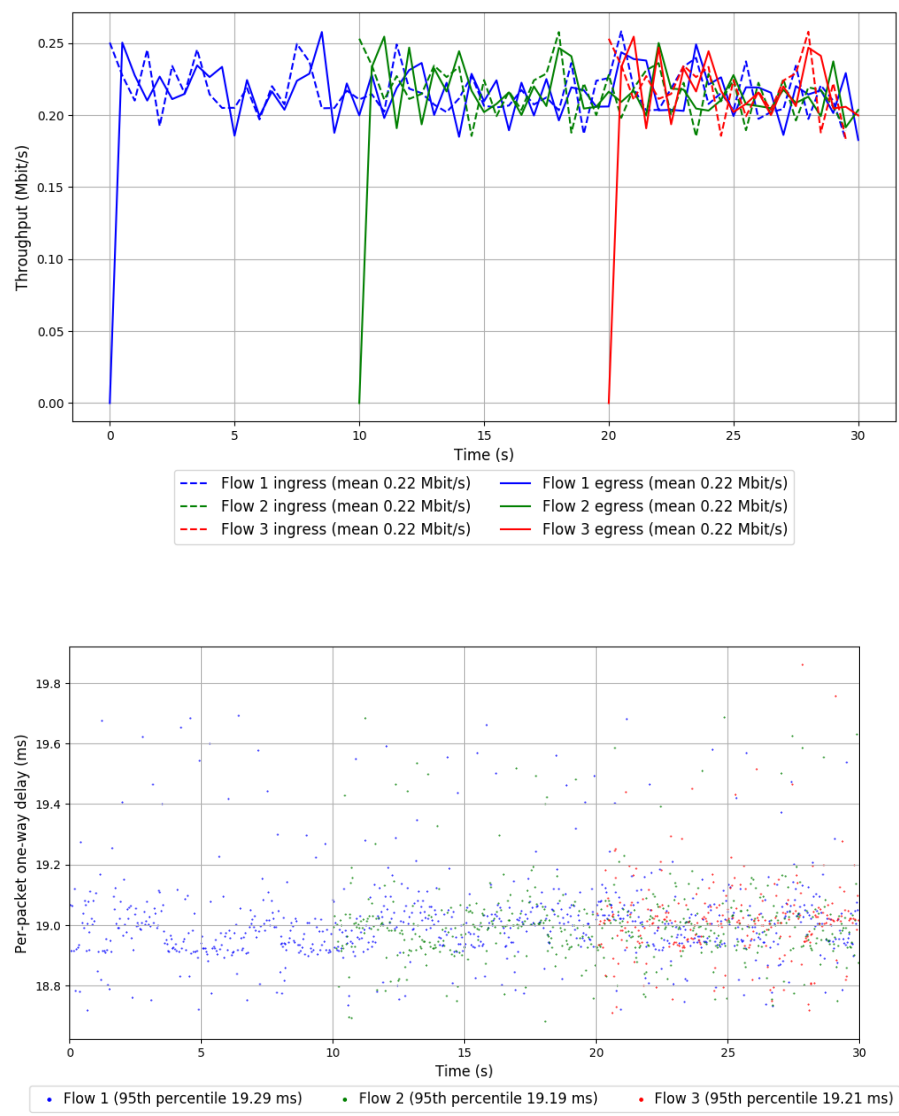
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.209 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

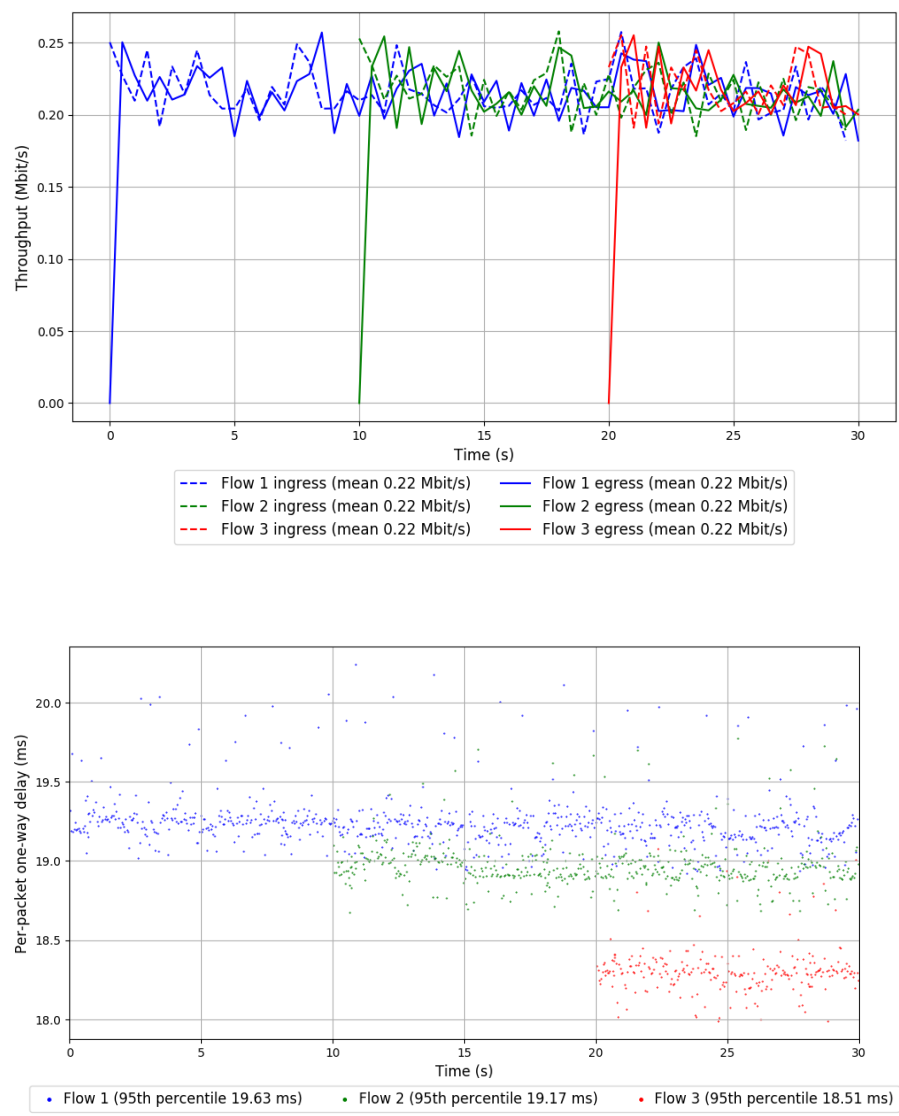


Run 10: Statistics of SReAM

Start at: 2018-06-18 20:15:17  
End at: 2018-06-18 20:15:47  
Local clock offset: 3.616 ms  
Remote clock offset: -4.013 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.399 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.629 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.174 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 18.506 ms  
Loss rate: 0.00%

Run 10: Report of SCRaM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-06-18 16:35:07

End at: 2018-06-18 16:35:37

Local clock offset: 4.611 ms

Remote clock offset: 0.514 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 21.179 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.14 Mbit/s

95th percentile per-packet one-way delay: 20.754 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.43 Mbit/s

95th percentile per-packet one-way delay: 21.688 ms

Loss rate: 0.00%

-- Flow 3:

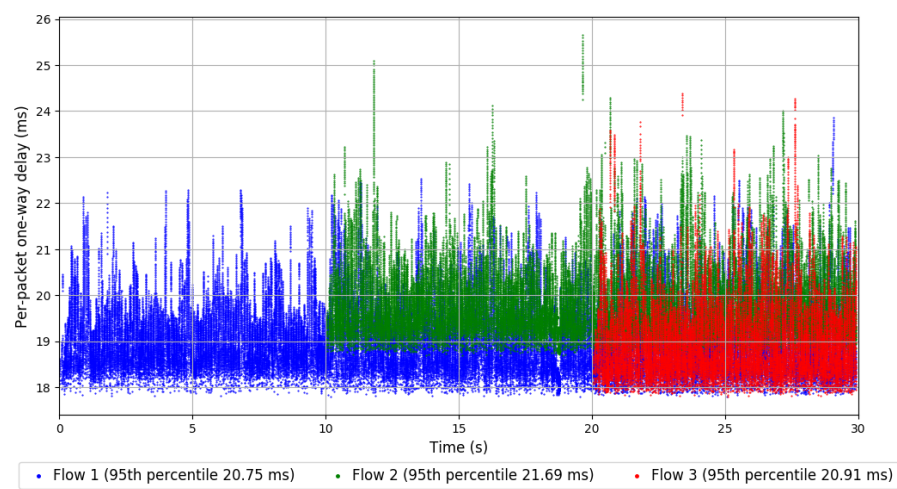
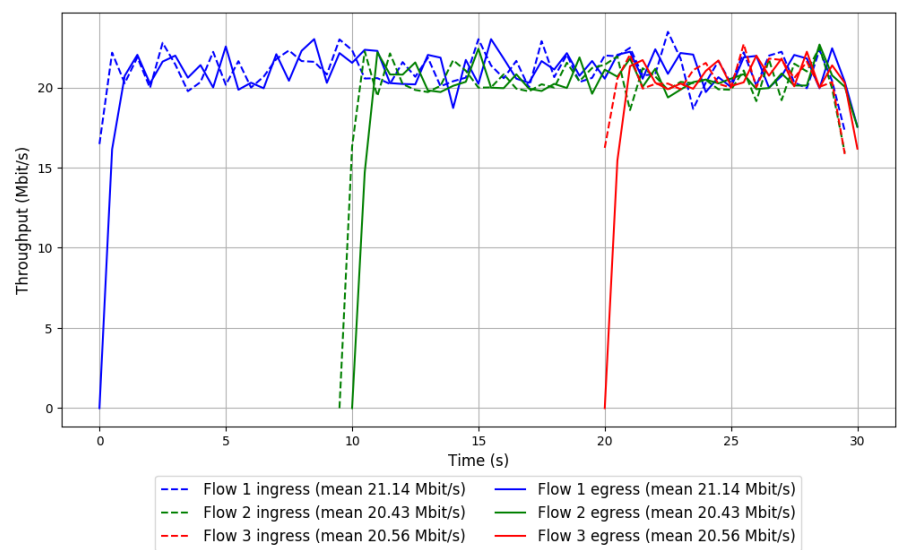
Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 20.905 ms

Loss rate: 0.00%



Run 1: Report of Sprout — Data Link



## Run 2: Statistics of Sprout

Start at: 2018-06-18 17:00:45

End at: 2018-06-18 17:01:15

Local clock offset: 4.603 ms

Remote clock offset: 0.511 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 42.11 Mbit/s

95th percentile per-packet one-way delay: 20.702 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 21.07 Mbit/s

95th percentile per-packet one-way delay: 20.719 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 21.05 Mbit/s

95th percentile per-packet one-way delay: 20.771 ms

Loss rate: 0.07%

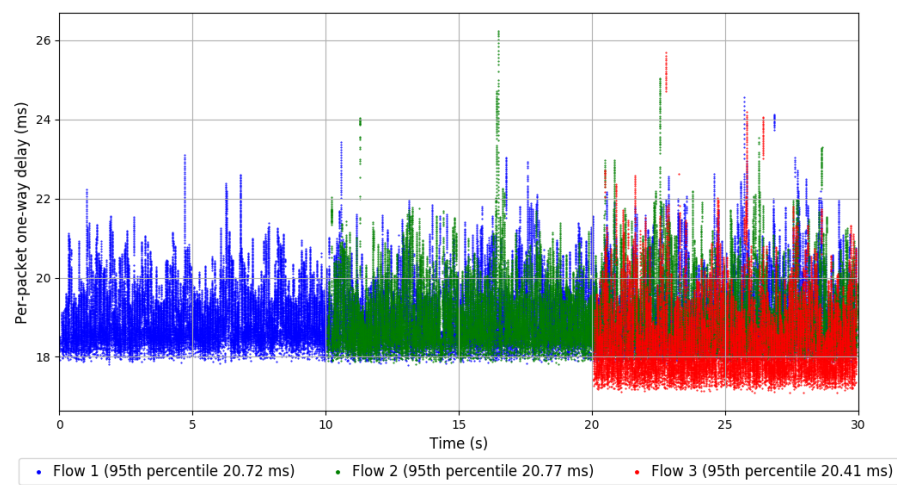
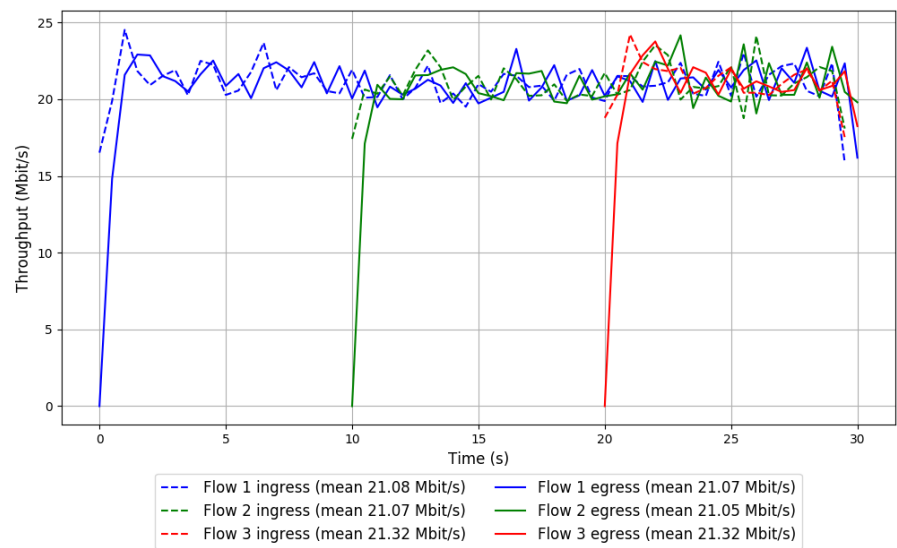
-- Flow 3:

Average throughput: 21.32 Mbit/s

95th percentile per-packet one-way delay: 20.409 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



### Run 3: Statistics of Sprout

Start at: 2018-06-18 17:26:35

End at: 2018-06-18 17:27:05

Local clock offset: 3.589 ms

Remote clock offset: 0.378 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.30 Mbit/s

95th percentile per-packet one-way delay: 21.247 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 21.399 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 20.71 Mbit/s

95th percentile per-packet one-way delay: 21.212 ms

Loss rate: 0.00%

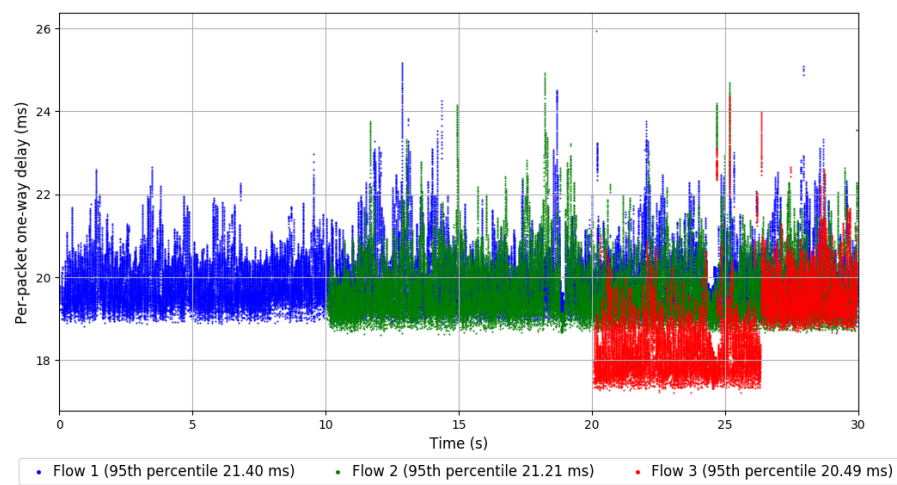
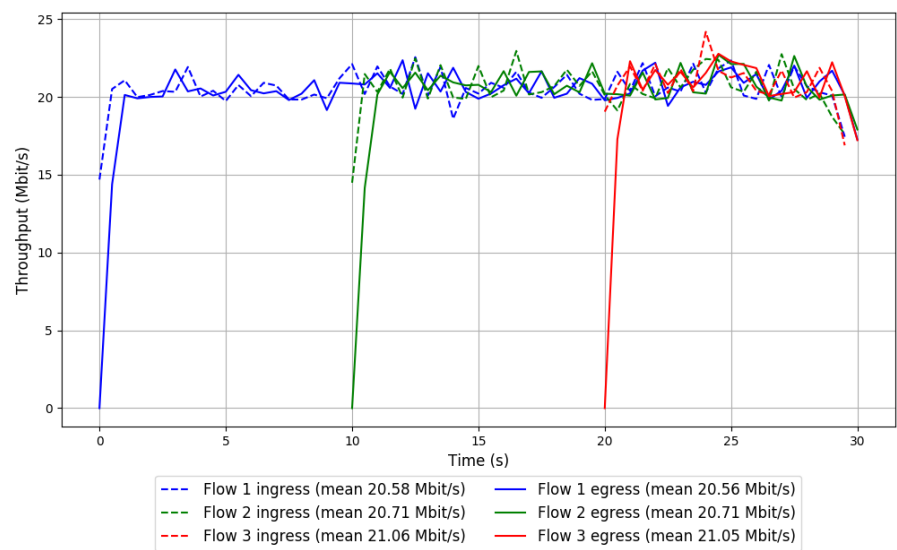
-- Flow 3:

Average throughput: 21.05 Mbit/s

95th percentile per-packet one-way delay: 20.493 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



#### Run 4: Statistics of Sprout

Start at: 2018-06-18 17:52:03

End at: 2018-06-18 17:52:33

Local clock offset: 3.677 ms

Remote clock offset: 0.785 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 21.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.55 Mbit/s

95th percentile per-packet one-way delay: 21.291 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.23 Mbit/s

95th percentile per-packet one-way delay: 20.717 ms

Loss rate: 0.00%

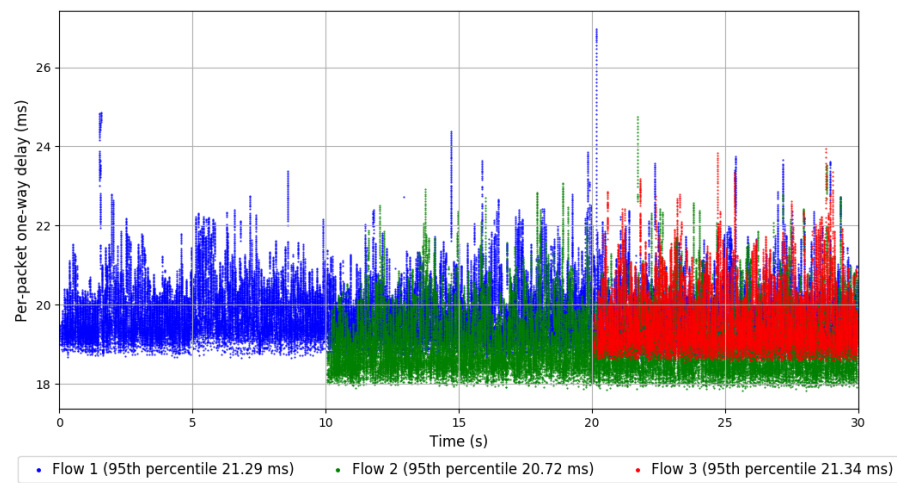
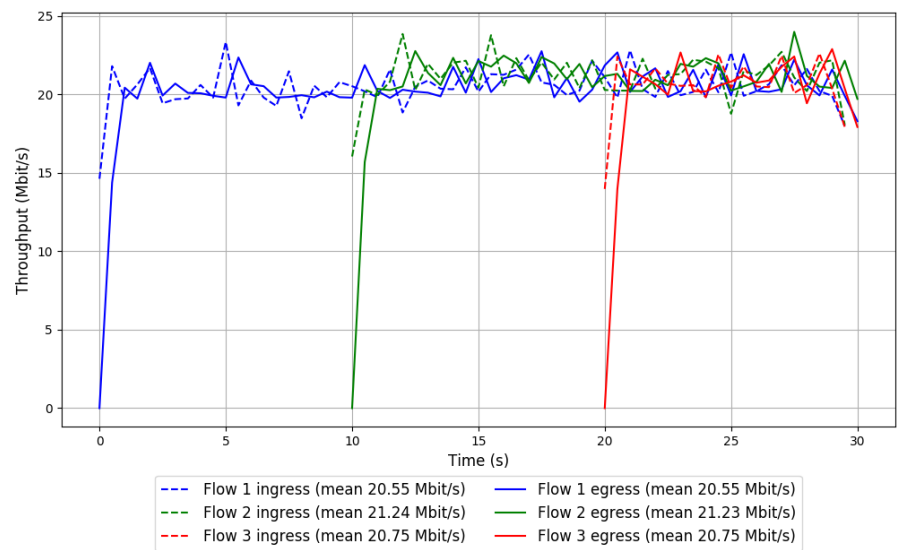
-- Flow 3:

Average throughput: 20.75 Mbit/s

95th percentile per-packet one-way delay: 21.335 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-06-18 18:17:33

End at: 2018-06-18 18:18:03

Local clock offset: 3.789 ms

Remote clock offset: 4.224 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.65 Mbit/s

95th percentile per-packet one-way delay: 21.305 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 20.96 Mbit/s

95th percentile per-packet one-way delay: 20.868 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 20.62 Mbit/s

95th percentile per-packet one-way delay: 21.734 ms

Loss rate: 0.05%

-- Flow 3:

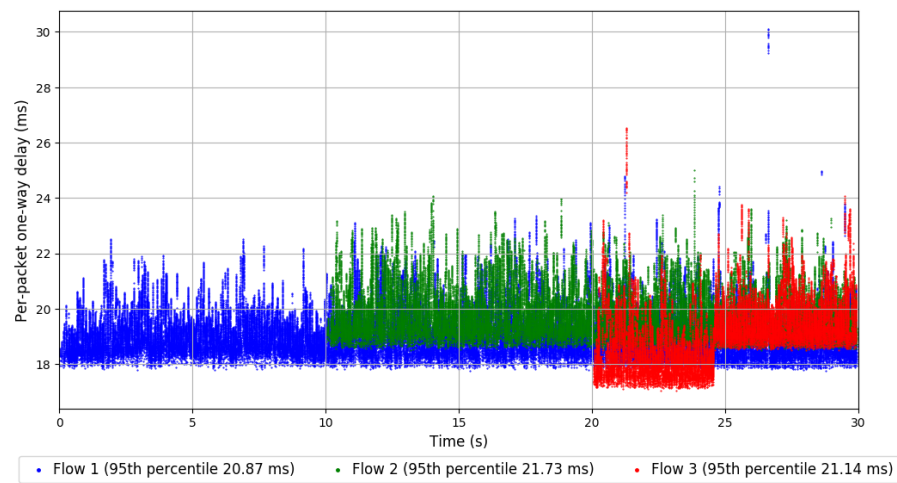
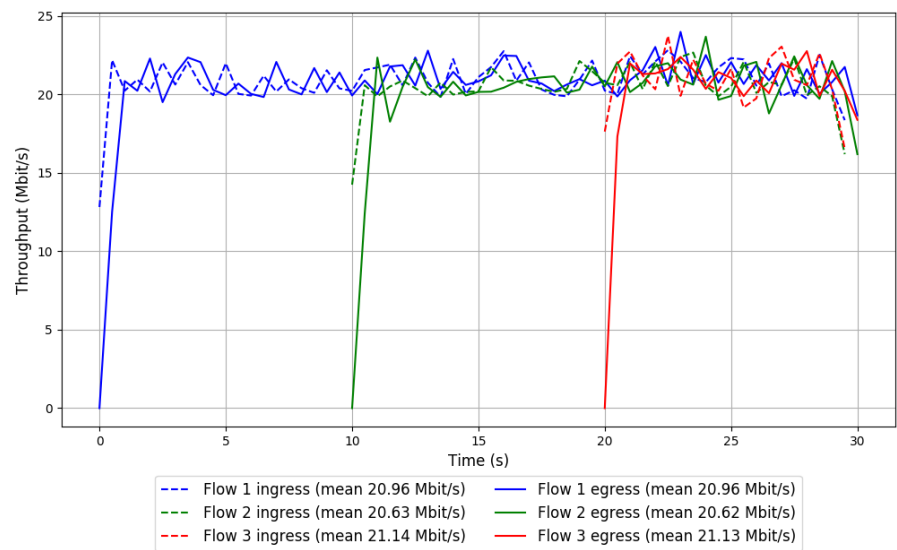
Average throughput: 21.13 Mbit/s

95th percentile per-packet one-way delay: 21.140 ms

Loss rate: 0.00%



Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-06-18 18:43:07

End at: 2018-06-18 18:43:37

Local clock offset: 3.756 ms

Remote clock offset: 5.878 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.01 Mbit/s

95th percentile per-packet one-way delay: 21.589 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.63 Mbit/s

95th percentile per-packet one-way delay: 20.963 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 21.981 ms

Loss rate: 0.00%

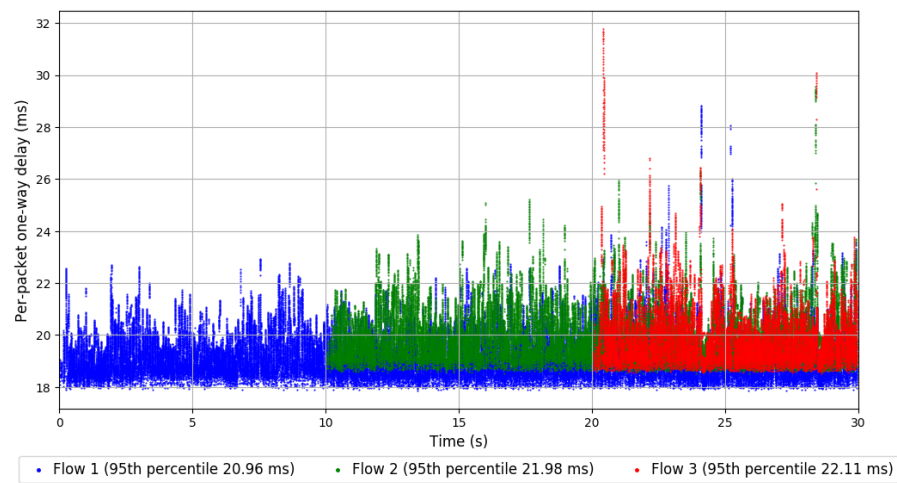
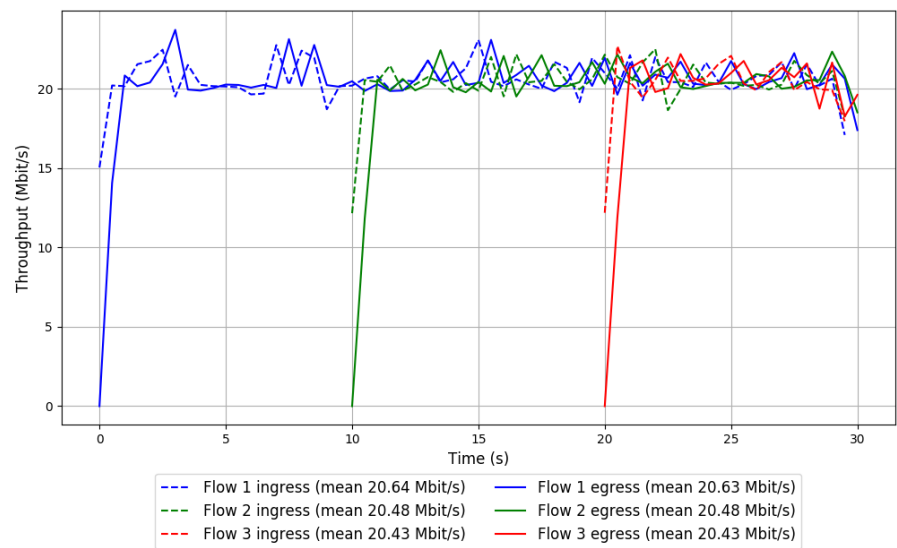
-- Flow 3:

Average throughput: 20.43 Mbit/s

95th percentile per-packet one-way delay: 22.111 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-06-18 19:08:25

End at: 2018-06-18 19:08:55

Local clock offset: 3.711 ms

Remote clock offset: 1.709 ms

# Below is generated by plot.py at 2018-06-18 22:18:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.36 Mbit/s

95th percentile per-packet one-way delay: 22.364 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 20.61 Mbit/s

95th percentile per-packet one-way delay: 22.387 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 20.79 Mbit/s

95th percentile per-packet one-way delay: 22.483 ms

Loss rate: 0.03%

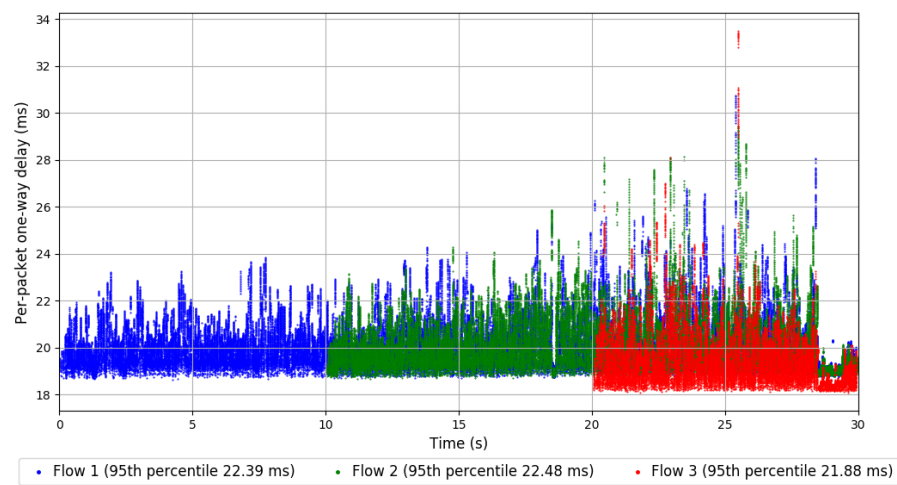
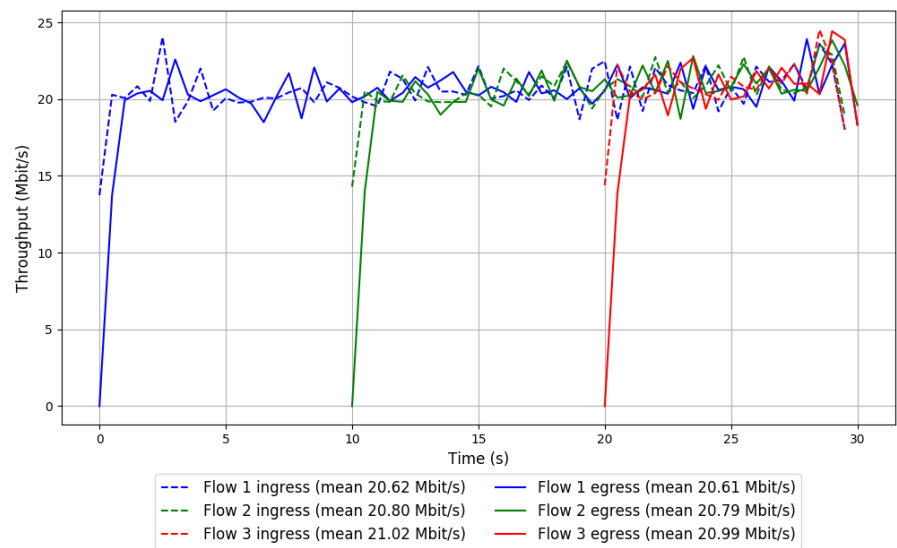
-- Flow 3:

Average throughput: 20.99 Mbit/s

95th percentile per-packet one-way delay: 21.883 ms

Loss rate: 0.17%

Run 7: Report of Sprout — Data Link

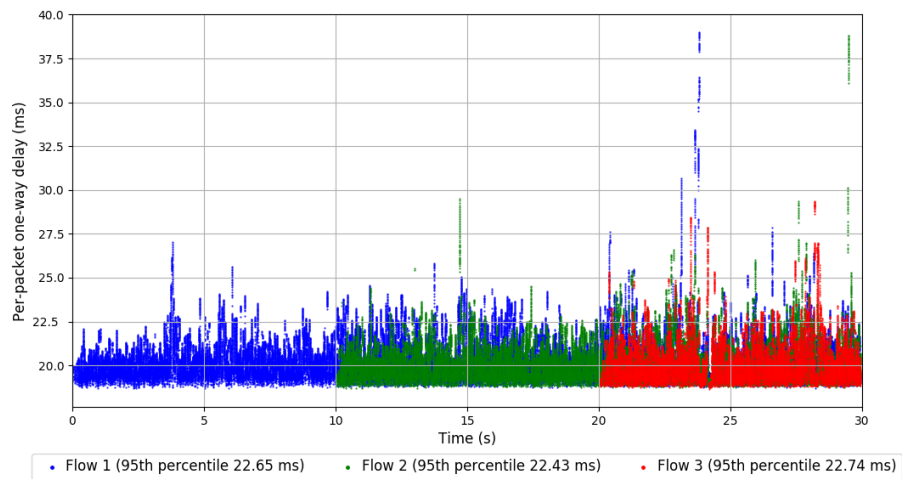
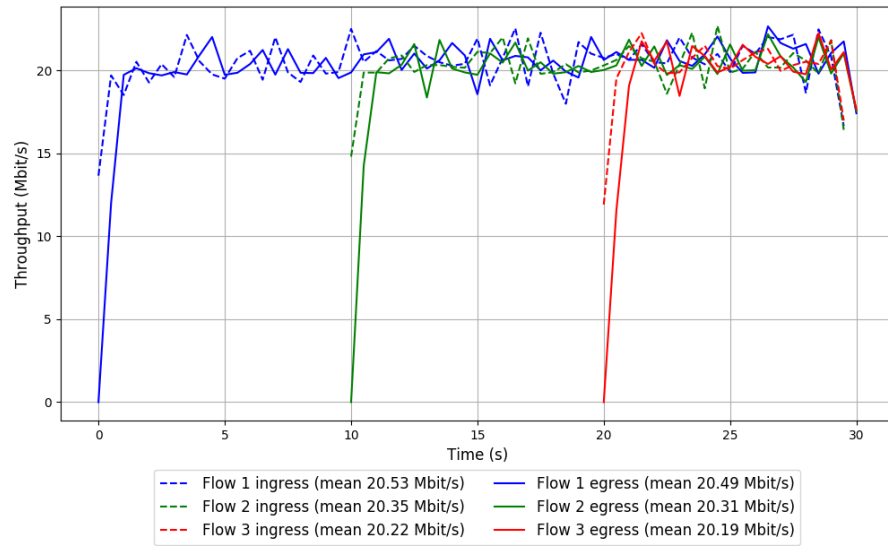


Run 8: Statistics of Sprout

Start at: 2018-06-18 19:33:31  
End at: 2018-06-18 19:34:01  
Local clock offset: 3.81 ms  
Remote clock offset: -2.162 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 40.69 Mbit/s  
95th percentile per-packet one-way delay: 22.593 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 20.49 Mbit/s  
95th percentile per-packet one-way delay: 22.647 ms  
Loss rate: 0.18%  
-- Flow 2:  
Average throughput: 20.31 Mbit/s  
95th percentile per-packet one-way delay: 22.427 ms  
Loss rate: 0.19%  
-- Flow 3:  
Average throughput: 20.19 Mbit/s  
95th percentile per-packet one-way delay: 22.741 ms  
Loss rate: 0.12%

## Run 8: Report of Sprout — Data Link



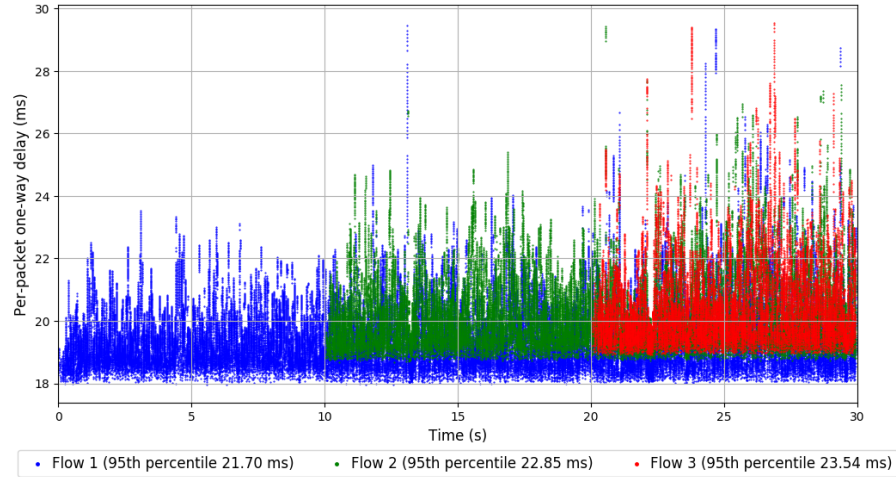
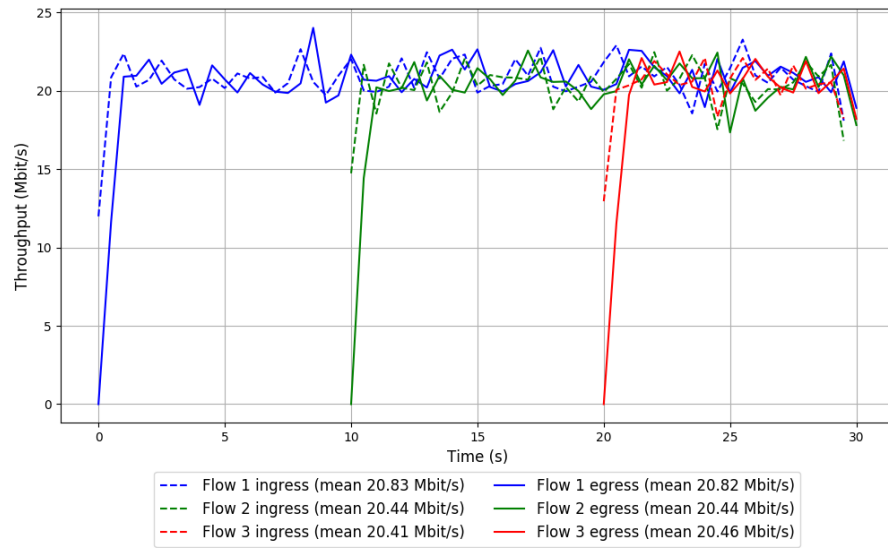
Run 9: Statistics of Sprout

Start at: 2018-06-18 19:58:55  
End at: 2018-06-18 19:59:25  
Local clock offset: 3.88 ms  
Remote clock offset: -4.647 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 41.17 Mbit/s  
95th percentile per-packet one-way delay: 22.509 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 20.82 Mbit/s  
95th percentile per-packet one-way delay: 21.704 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 20.44 Mbit/s  
95th percentile per-packet one-way delay: 22.846 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 20.46 Mbit/s  
95th percentile per-packet one-way delay: 23.536 ms  
Loss rate: 0.05%



## Run 9: Report of Sprout — Data Link

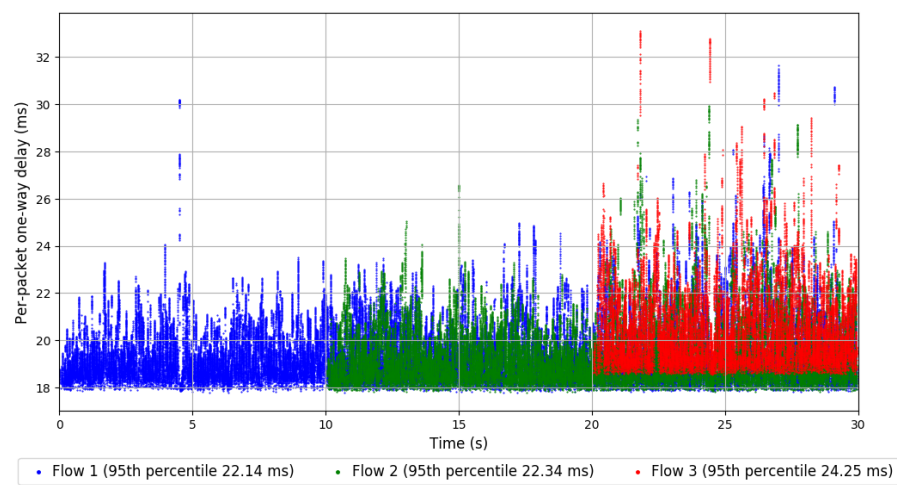
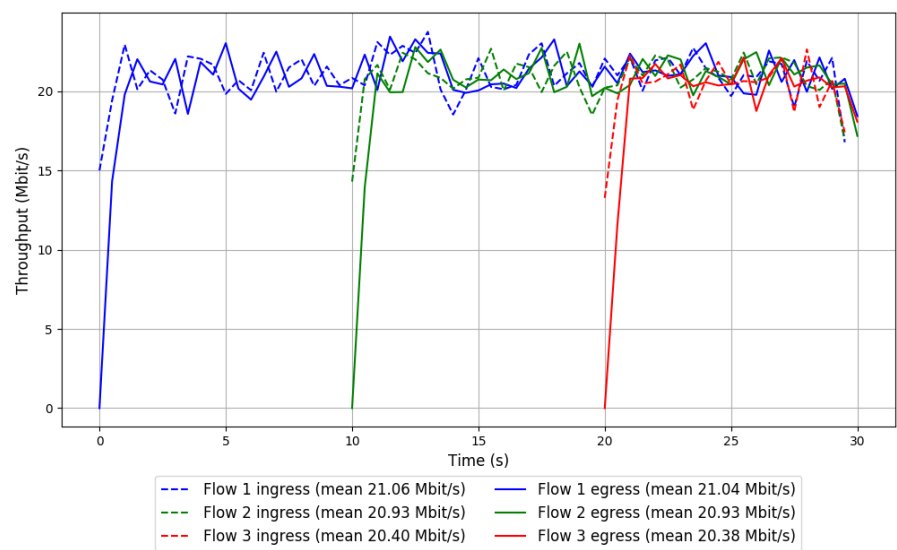


Run 10: Statistics of Sprout

Start at: 2018-06-18 20:24:15  
End at: 2018-06-18 20:24:45  
Local clock offset: 3.648 ms  
Remote clock offset: -3.695 ms

# Below is generated by plot.py at 2018-06-18 22:18:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 41.70 Mbit/s  
95th percentile per-packet one-way delay: 22.620 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 21.04 Mbit/s  
95th percentile per-packet one-way delay: 22.139 ms  
Loss rate: 0.07%  
-- Flow 2:  
Average throughput: 20.93 Mbit/s  
95th percentile per-packet one-way delay: 22.344 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 20.38 Mbit/s  
95th percentile per-packet one-way delay: 24.254 ms  
Loss rate: 0.07%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-06-18 16:38:07

End at: 2018-06-18 16:38:37

Local clock offset: 4.487 ms

Remote clock offset: 0.673 ms

# Below is generated by plot.py at 2018-06-18 22:23:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 452.03 Mbit/s

95th percentile per-packet one-way delay: 19.453 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 230.47 Mbit/s

95th percentile per-packet one-way delay: 19.279 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 236.31 Mbit/s

95th percentile per-packet one-way delay: 19.010 ms

Loss rate: 0.01%

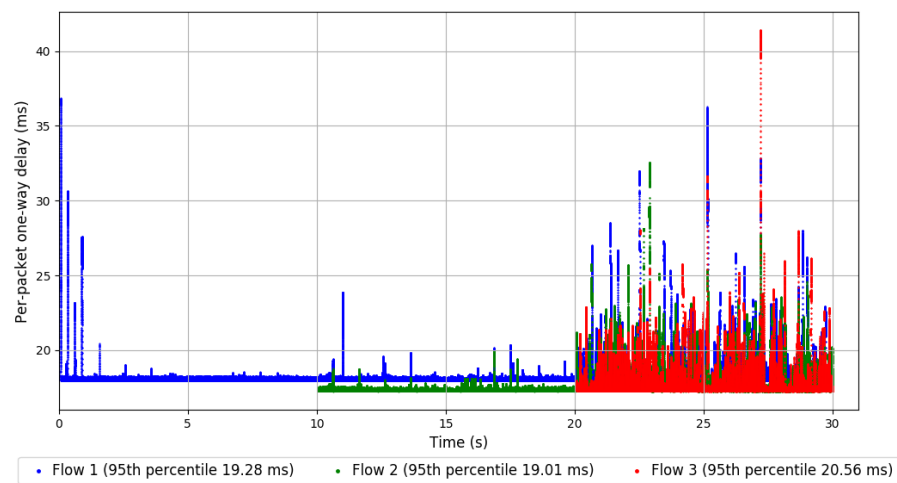
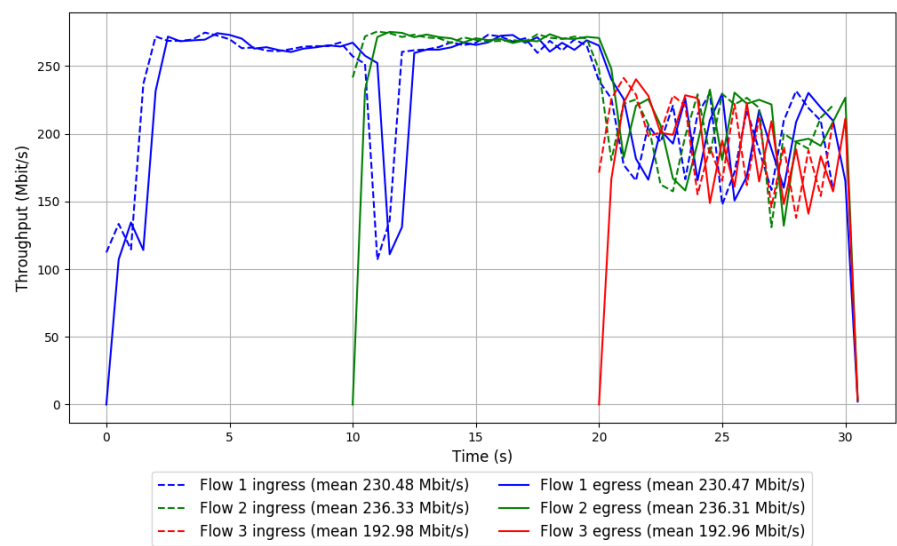
-- Flow 3:

Average throughput: 192.96 Mbit/s

95th percentile per-packet one-way delay: 20.556 ms

Loss rate: 0.01%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-18 17:03:45

End at: 2018-06-18 17:04:15

Local clock offset: 4.619 ms

Remote clock offset: 0.565 ms

# Below is generated by plot.py at 2018-06-18 22:23:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 453.63 Mbit/s

95th percentile per-packet one-way delay: 19.559 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 233.17 Mbit/s

95th percentile per-packet one-way delay: 18.877 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 232.31 Mbit/s

95th percentile per-packet one-way delay: 19.449 ms

Loss rate: 0.04%

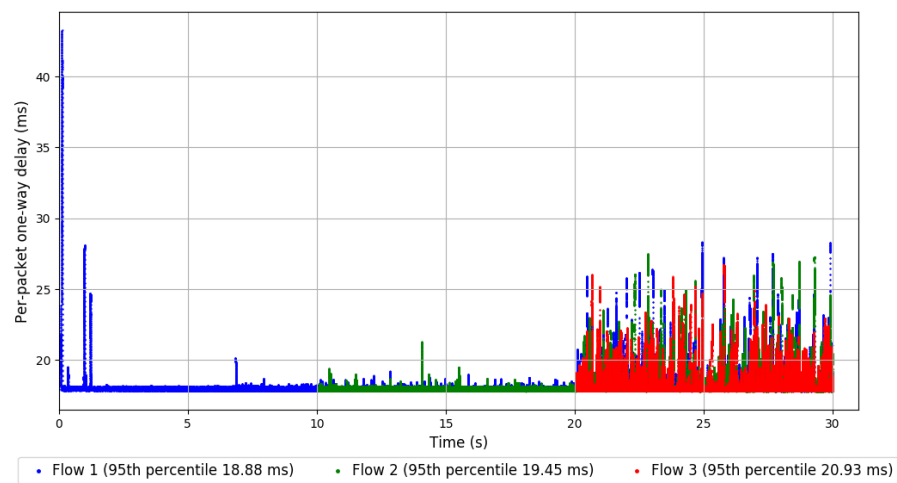
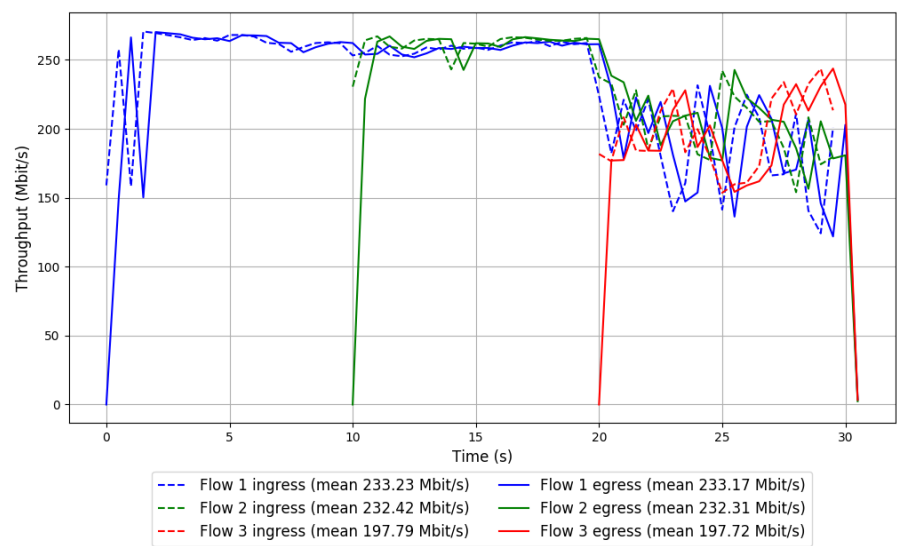
-- Flow 3:

Average throughput: 197.72 Mbit/s

95th percentile per-packet one-way delay: 20.928 ms

Loss rate: 0.04%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-06-18 17:29:34

End at: 2018-06-18 17:30:04

Local clock offset: 3.645 ms

Remote clock offset: 0.343 ms

# Below is generated by plot.py at 2018-06-18 22:23:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 426.72 Mbit/s

95th percentile per-packet one-way delay: 19.373 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 215.82 Mbit/s

95th percentile per-packet one-way delay: 19.322 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 223.09 Mbit/s

95th percentile per-packet one-way delay: 18.865 ms

Loss rate: 0.01%

-- Flow 3:

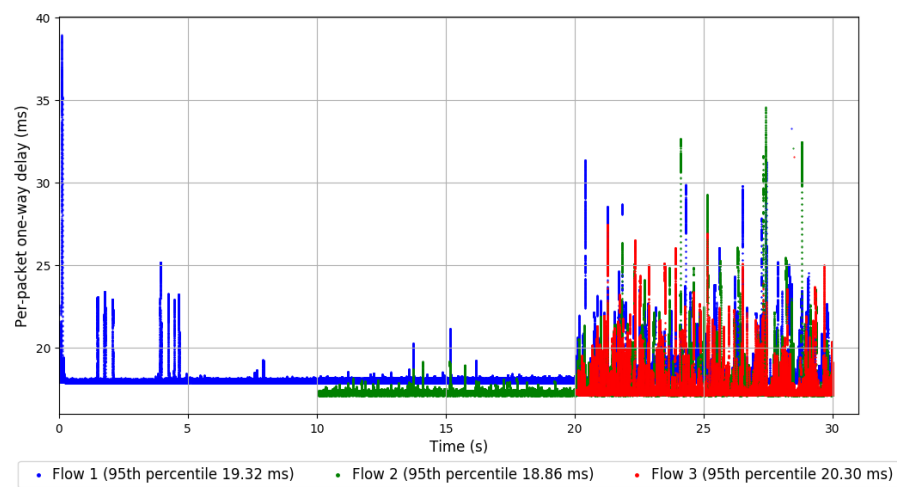
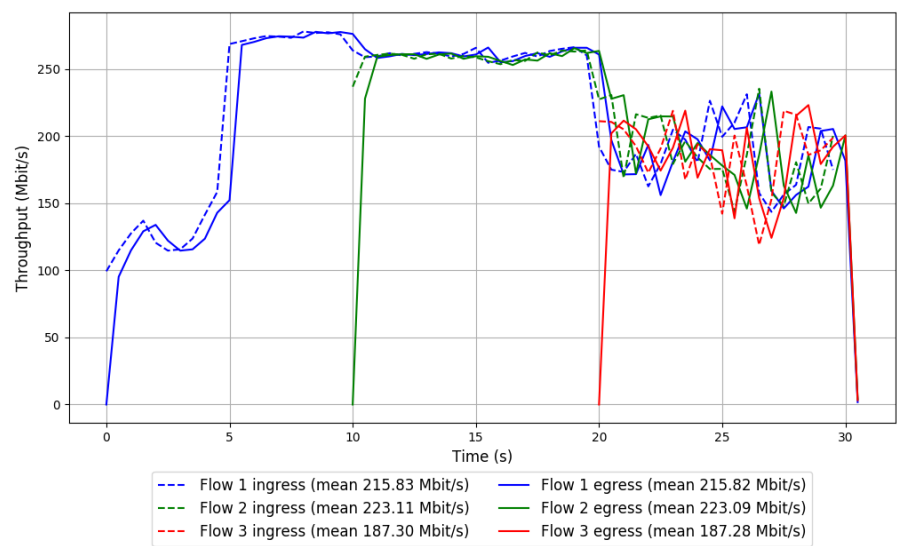
Average throughput: 187.28 Mbit/s

95th percentile per-packet one-way delay: 20.303 ms

Loss rate: 0.01%



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



Run 4: Statistics of TaoVA-100x

Start at: 2018-06-18 17:55:02

End at: 2018-06-18 17:55:32

Local clock offset: 3.767 ms

Remote clock offset: 1.526 ms

# Below is generated by plot.py at 2018-06-18 22:23:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 438.68 Mbit/s

95th percentile per-packet one-way delay: 20.362 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 219.26 Mbit/s

95th percentile per-packet one-way delay: 18.409 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 229.19 Mbit/s

95th percentile per-packet one-way delay: 20.571 ms

Loss rate: 0.00%

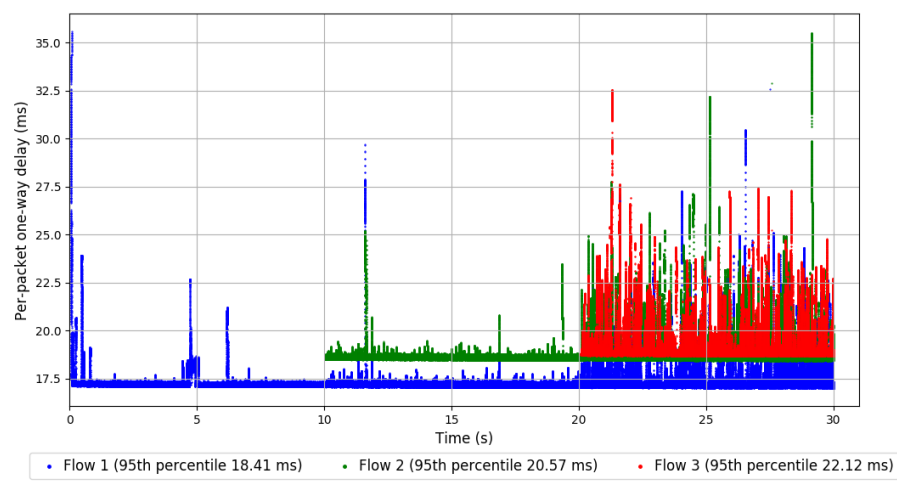
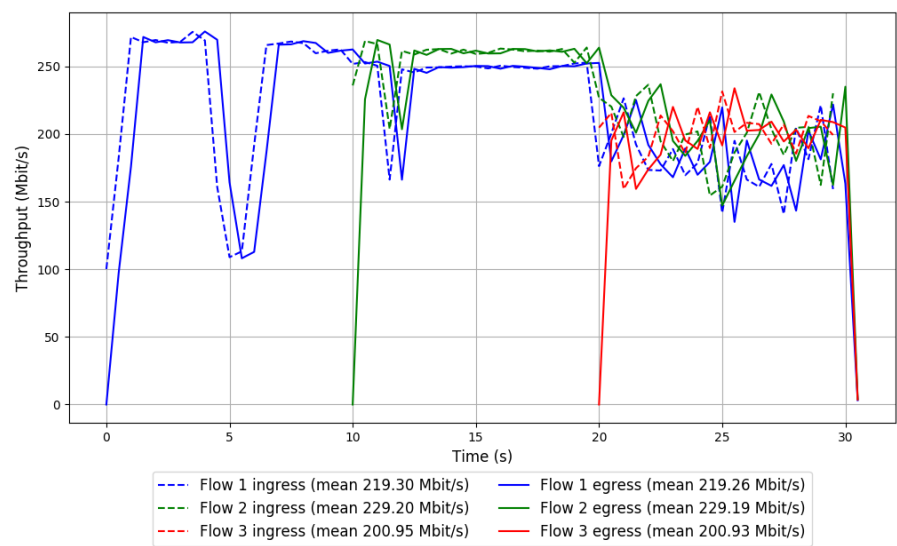
-- Flow 3:

Average throughput: 200.93 Mbit/s

95th percentile per-packet one-way delay: 22.119 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-06-18 18:20:33

End at: 2018-06-18 18:21:03

Local clock offset: 3.782 ms

Remote clock offset: 4.482 ms

# Below is generated by plot.py at 2018-06-18 22:23:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 413.88 Mbit/s

95th percentile per-packet one-way delay: 18.837 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 177.79 Mbit/s

95th percentile per-packet one-way delay: 18.793 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 241.67 Mbit/s

95th percentile per-packet one-way delay: 19.061 ms

Loss rate: 0.01%

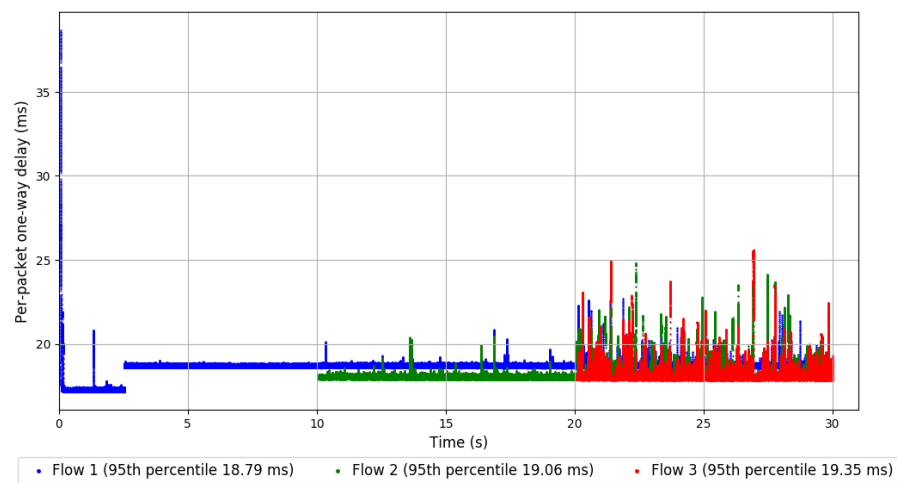
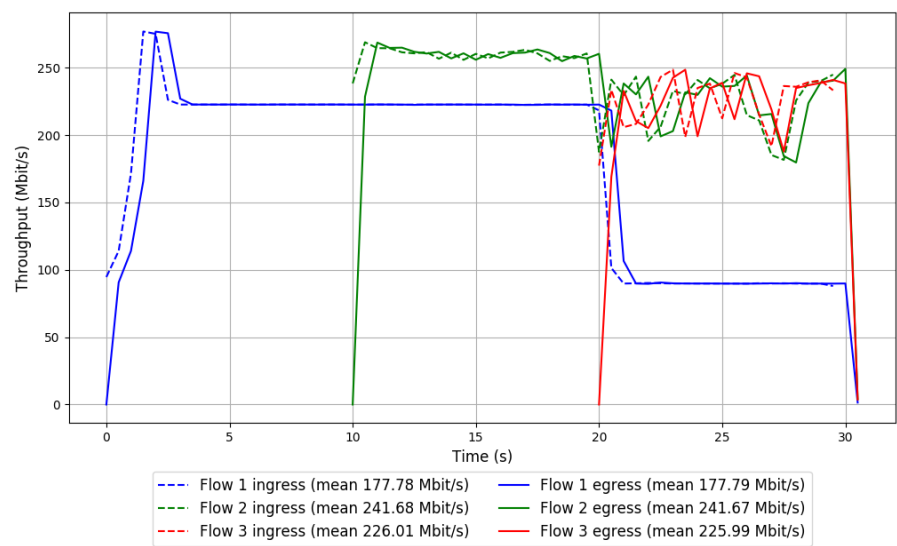
-- Flow 3:

Average throughput: 225.99 Mbit/s

95th percentile per-packet one-way delay: 19.351 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-06-18 18:46:08

End at: 2018-06-18 18:46:38

Local clock offset: 3.753 ms

Remote clock offset: 6.059 ms

# Below is generated by plot.py at 2018-06-18 22:26:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 446.92 Mbit/s

95th percentile per-packet one-way delay: 20.400 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 240.50 Mbit/s

95th percentile per-packet one-way delay: 20.253 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 221.42 Mbit/s

95th percentile per-packet one-way delay: 19.932 ms

Loss rate: 0.00%

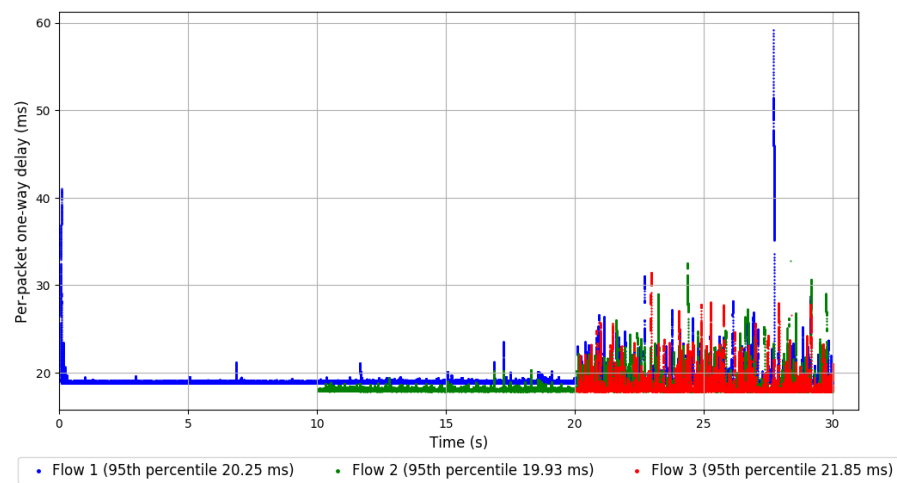
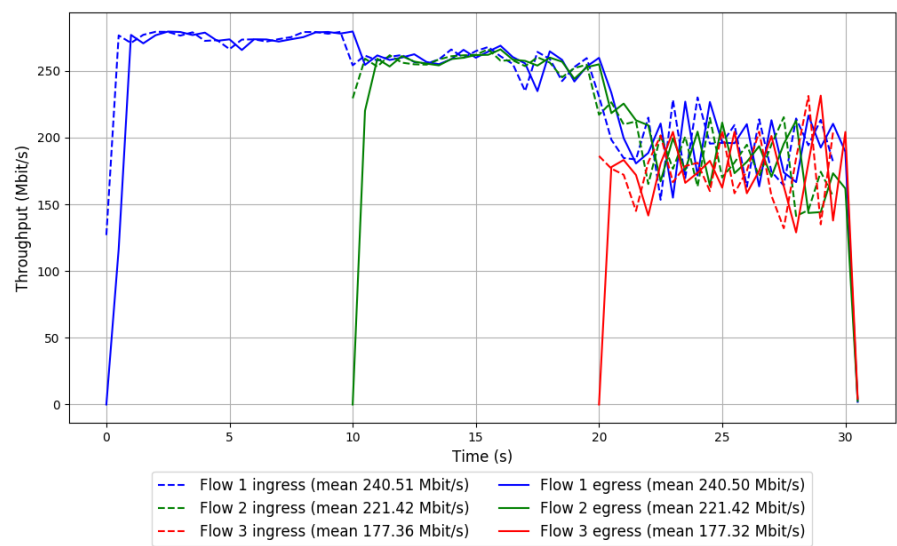
-- Flow 3:

Average throughput: 177.32 Mbit/s

95th percentile per-packet one-way delay: 21.846 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-06-18 19:11:23

End at: 2018-06-18 19:11:53

Local clock offset: 3.807 ms

Remote clock offset: 0.937 ms

# Below is generated by plot.py at 2018-06-18 22:27:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 424.16 Mbit/s

95th percentile per-packet one-way delay: 20.509 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 212.71 Mbit/s

95th percentile per-packet one-way delay: 19.544 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 222.20 Mbit/s

95th percentile per-packet one-way delay: 19.675 ms

Loss rate: 0.02%

-- Flow 3:

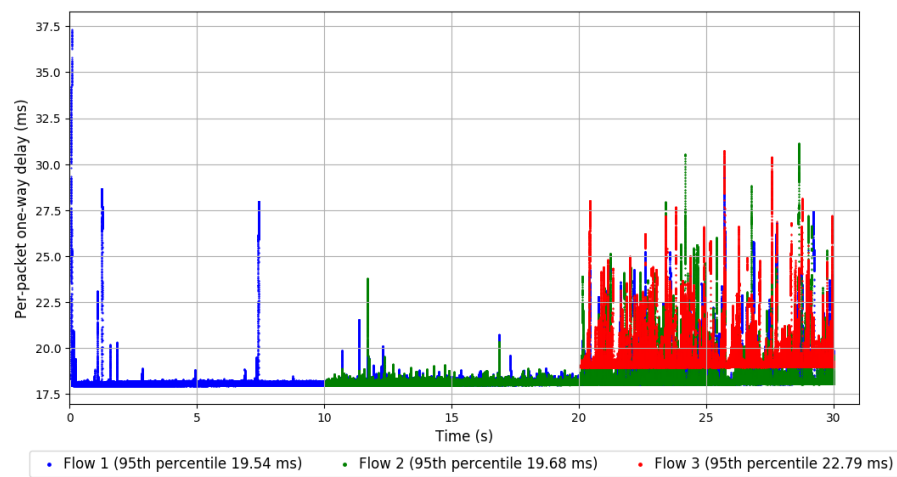
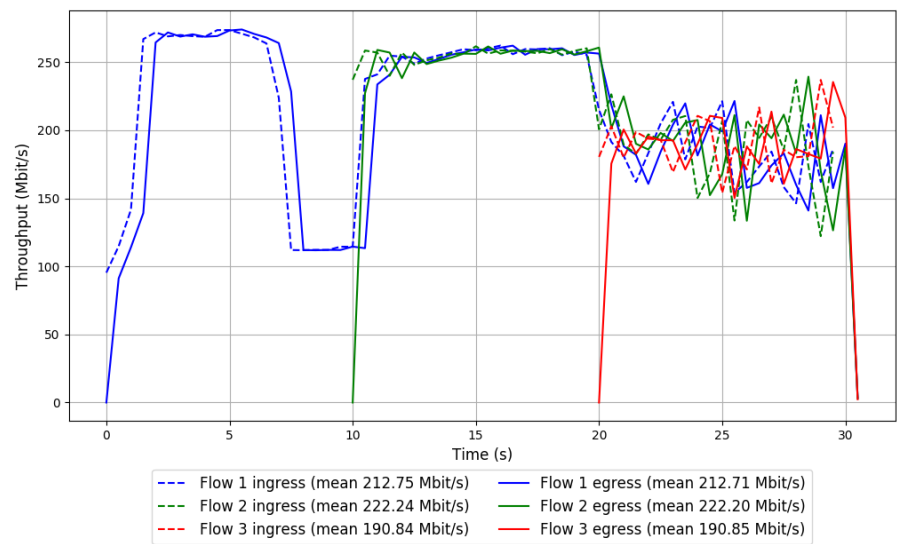
Average throughput: 190.85 Mbit/s

95th percentile per-packet one-way delay: 22.792 ms

Loss rate: 0.00%



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



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-18 19:36:29

End at: 2018-06-18 19:36:59

Local clock offset: 3.904 ms

Remote clock offset: -2.55 ms

# Below is generated by plot.py at 2018-06-18 22:28:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 432.44 Mbit/s

95th percentile per-packet one-way delay: 19.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 227.65 Mbit/s

95th percentile per-packet one-way delay: 20.096 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 203.93 Mbit/s

95th percentile per-packet one-way delay: 18.570 ms

Loss rate: 0.00%

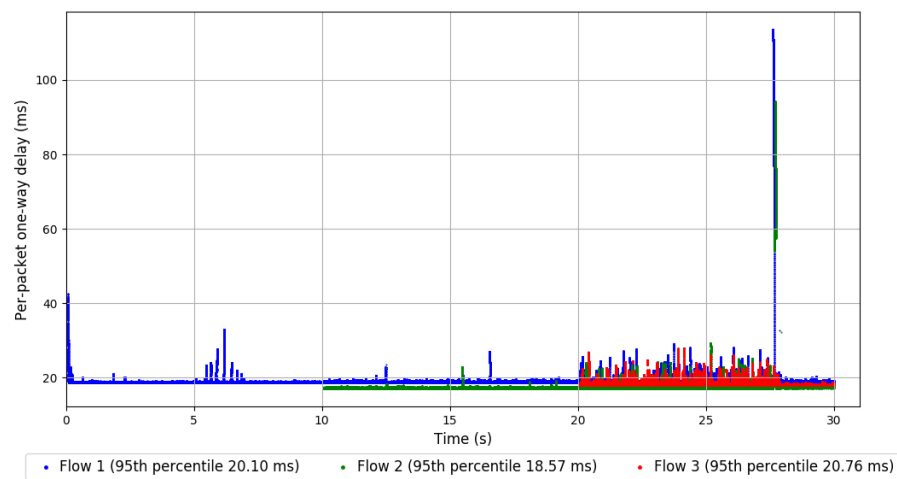
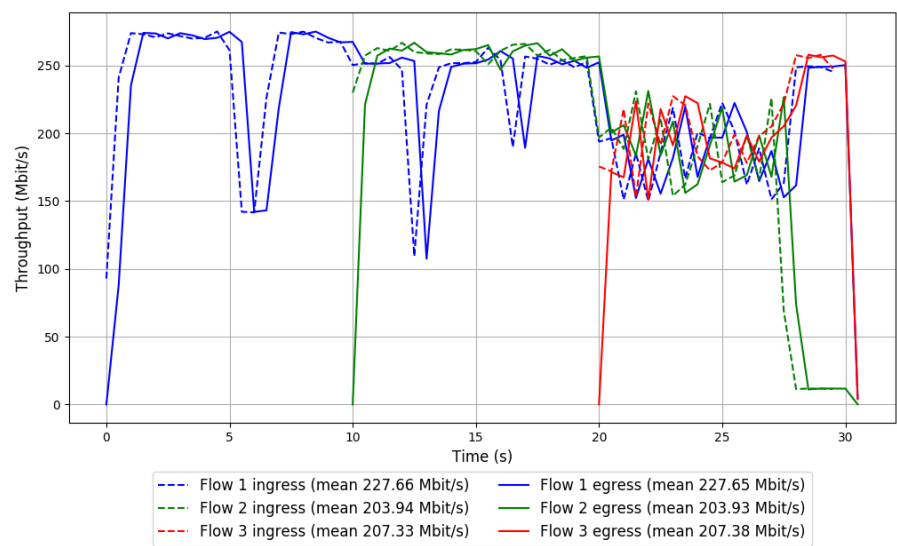
-- Flow 3:

Average throughput: 207.38 Mbit/s

95th percentile per-packet one-way delay: 20.762 ms

Loss rate: 0.00%

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

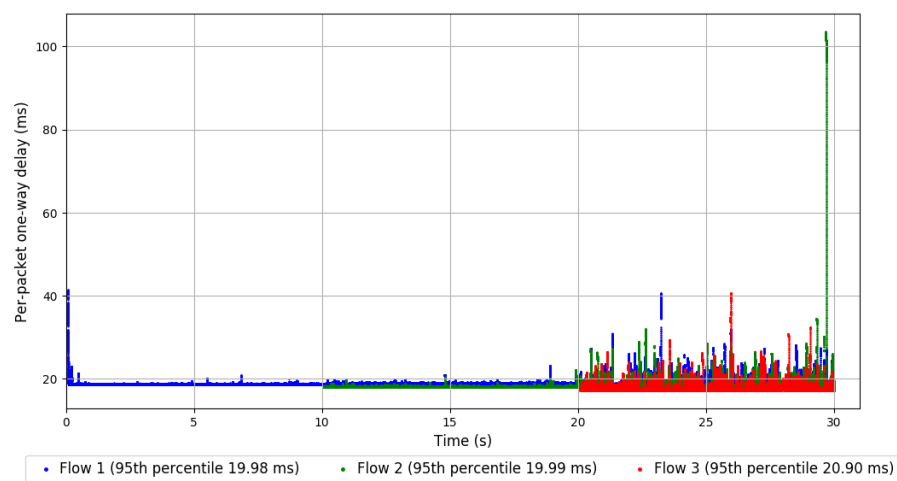
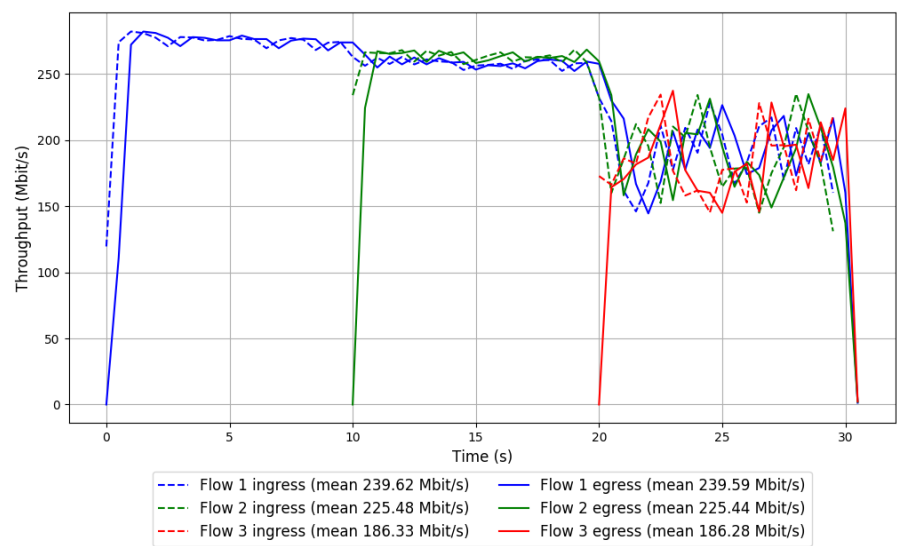


Run 9: Statistics of TaoVA-100x

Start at: 2018-06-18 20:01:50  
End at: 2018-06-18 20:02:20  
Local clock offset: 3.999 ms  
Remote clock offset: -4.908 ms

# Below is generated by plot.py at 2018-06-18 22:33:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 451.59 Mbit/s  
95th percentile per-packet one-way delay: 20.097 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 239.59 Mbit/s  
95th percentile per-packet one-way delay: 19.976 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 225.44 Mbit/s  
95th percentile per-packet one-way delay: 19.989 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 186.28 Mbit/s  
95th percentile per-packet one-way delay: 20.902 ms  
Loss rate: 0.02%

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

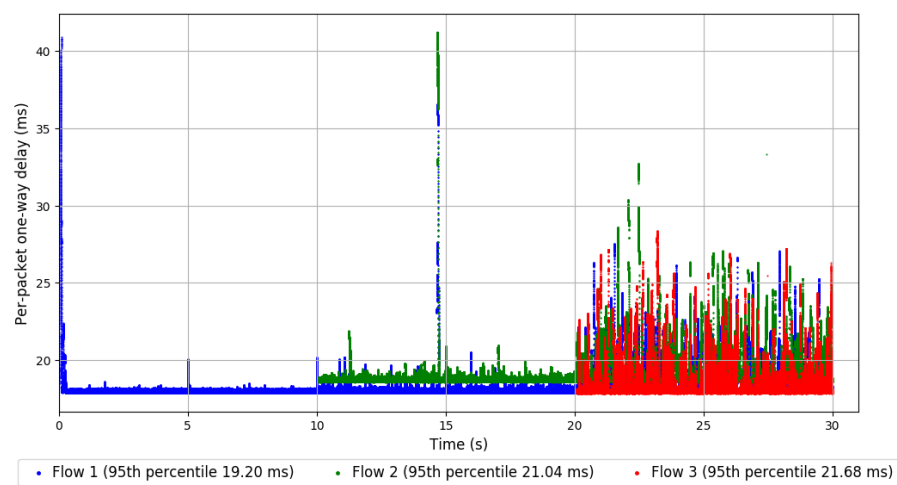
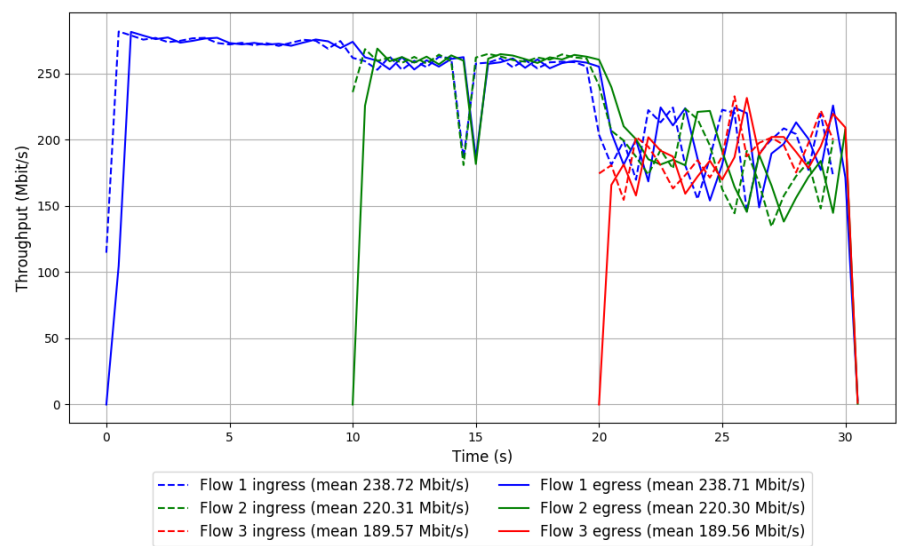


Run 10: Statistics of TaoVA-100x

Start at: 2018-06-18 20:27:14  
End at: 2018-06-18 20:27:44  
Local clock offset: 3.647 ms  
Remote clock offset: -3.597 ms

# Below is generated by plot.py at 2018-06-18 22:33:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 448.43 Mbit/s  
95th percentile per-packet one-way delay: 20.338 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 238.71 Mbit/s  
95th percentile per-packet one-way delay: 19.204 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 220.30 Mbit/s  
95th percentile per-packet one-way delay: 21.040 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 189.56 Mbit/s  
95th percentile per-packet one-way delay: 21.676 ms  
Loss rate: 0.01%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-06-18 16:28:55

End at: 2018-06-18 16:29:25

Local clock offset: 4.491 ms

Remote clock offset: 0.349 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 285.72 Mbit/s

95th percentile per-packet one-way delay: 22.903 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 101.01 Mbit/s

95th percentile per-packet one-way delay: 21.415 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 248.54 Mbit/s

95th percentile per-packet one-way delay: 23.877 ms

Loss rate: 0.01%

-- Flow 3:

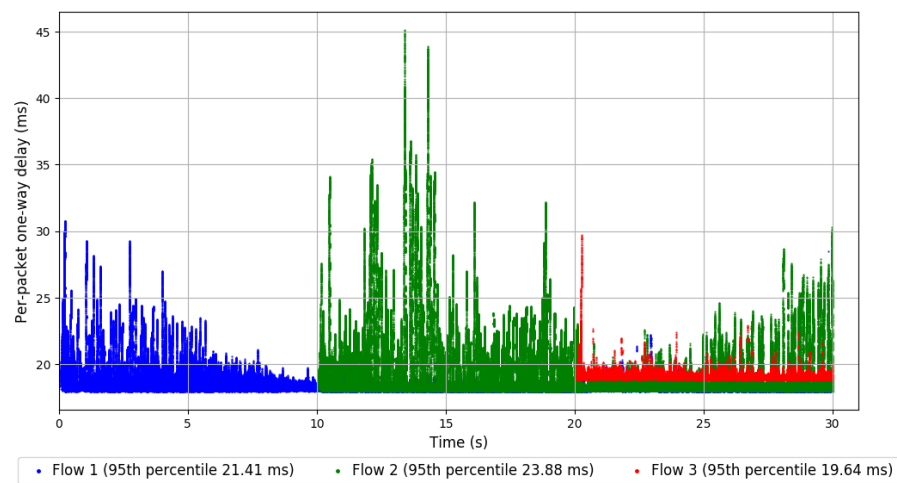
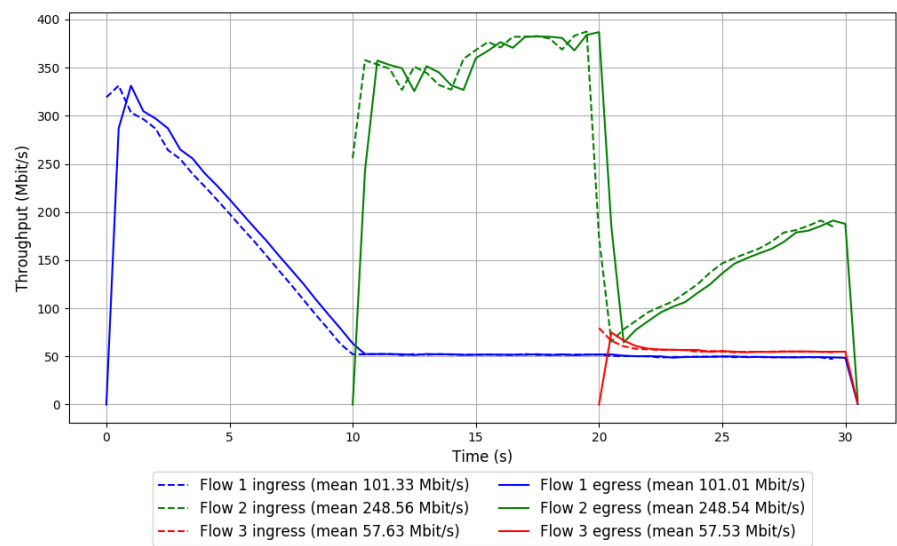
Average throughput: 57.53 Mbit/s

95th percentile per-packet one-way delay: 19.644 ms

Loss rate: 0.16%



Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-18 16:54:42

End at: 2018-06-18 16:55:12

Local clock offset: 4.508 ms

Remote clock offset: 0.469 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 183.16 Mbit/s

95th percentile per-packet one-way delay: 21.817 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 109.37 Mbit/s

95th percentile per-packet one-way delay: 20.999 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 77.24 Mbit/s

95th percentile per-packet one-way delay: 21.614 ms

Loss rate: 0.02%

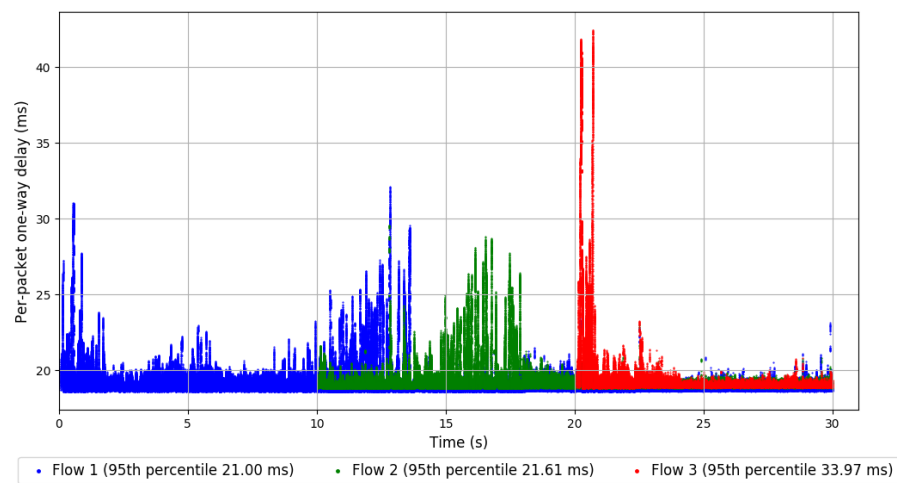
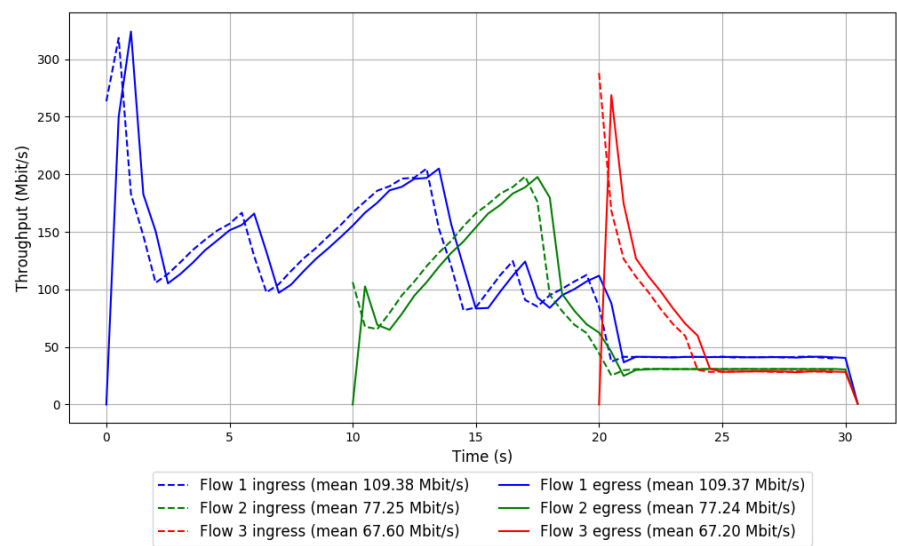
-- Flow 3:

Average throughput: 67.20 Mbit/s

95th percentile per-packet one-way delay: 33.967 ms

Loss rate: 0.60%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-18 17:20:24

End at: 2018-06-18 17:20:54

Local clock offset: 3.796 ms

Remote clock offset: 0.546 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 350.68 Mbit/s

95th percentile per-packet one-way delay: 24.715 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 179.47 Mbit/s

95th percentile per-packet one-way delay: 24.384 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 192.92 Mbit/s

95th percentile per-packet one-way delay: 26.243 ms

Loss rate: 0.03%

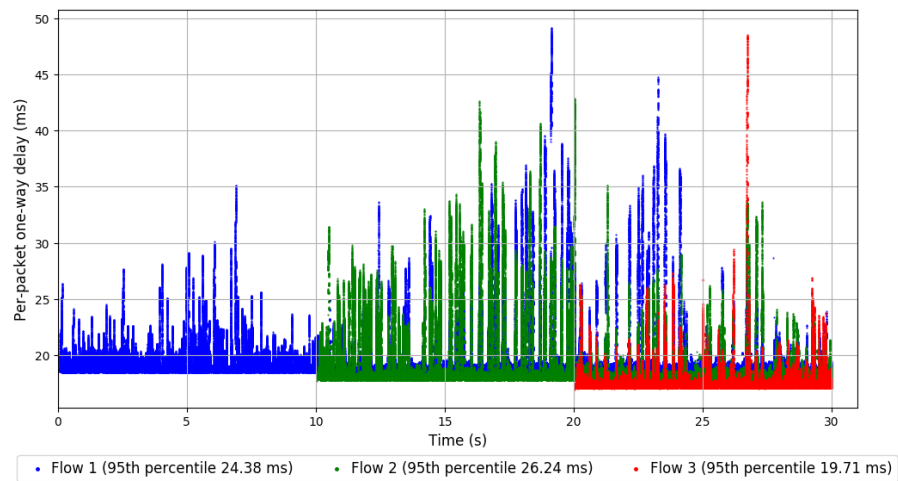
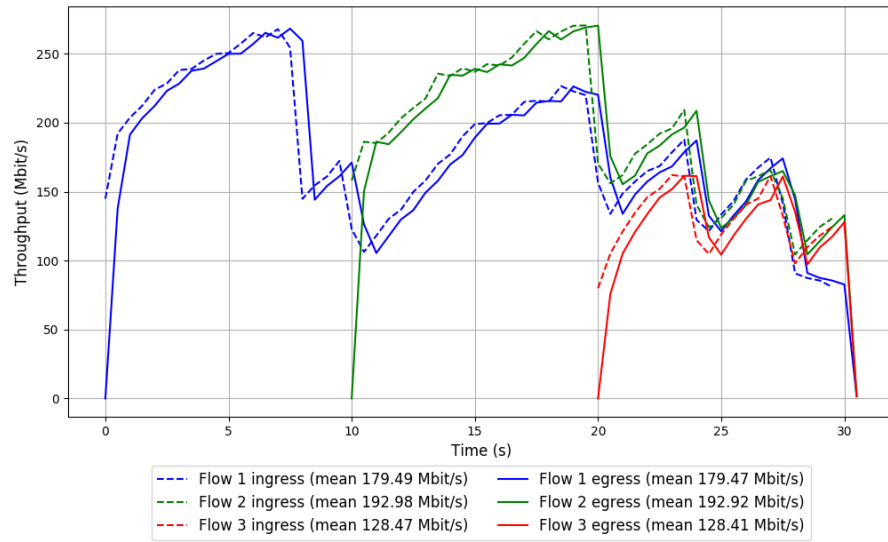
-- Flow 3:

Average throughput: 128.41 Mbit/s

95th percentile per-packet one-way delay: 19.708 ms

Loss rate: 0.04%

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



Run 4: Statistics of TCP Vegas

Start at: 2018-06-18 17:46:02

End at: 2018-06-18 17:46:32

Local clock offset: 3.747 ms

Remote clock offset: 0.428 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 218.02 Mbit/s

95th percentile per-packet one-way delay: 20.684 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 42.65 Mbit/s

95th percentile per-packet one-way delay: 19.575 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 162.99 Mbit/s

95th percentile per-packet one-way delay: 20.645 ms

Loss rate: 0.02%

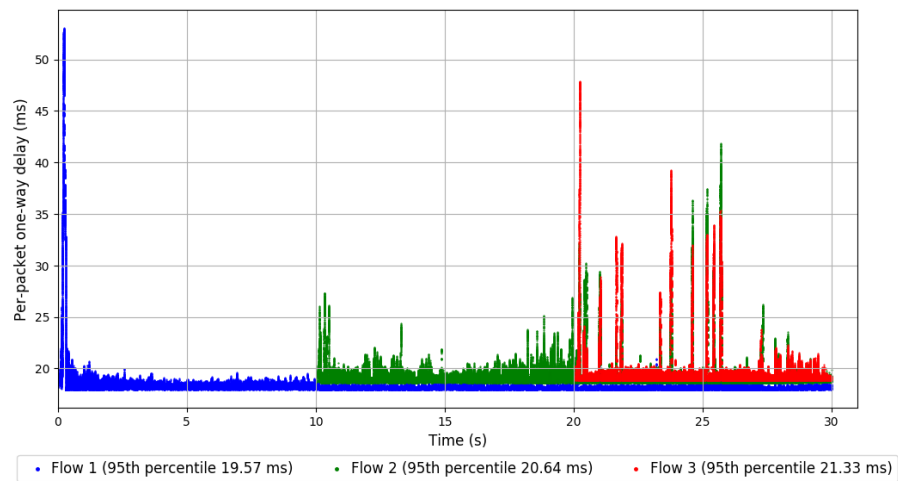
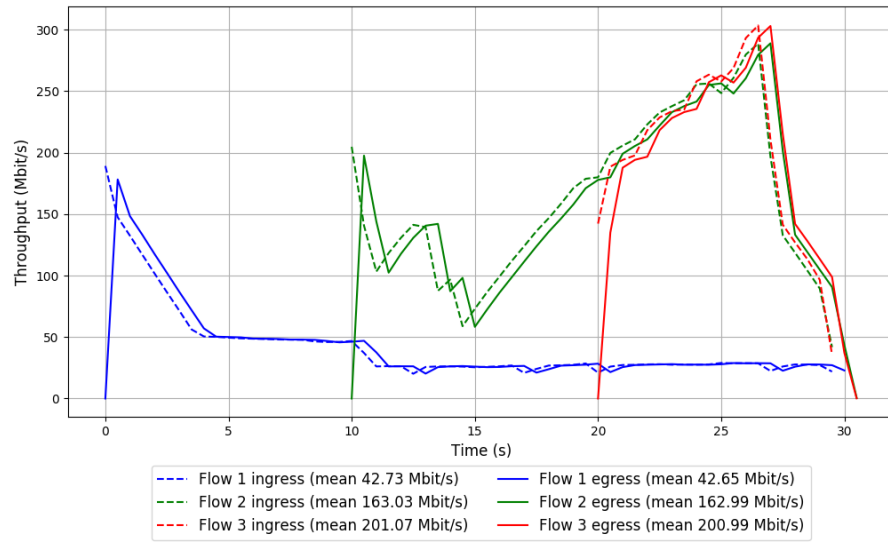
-- Flow 3:

Average throughput: 200.99 Mbit/s

95th percentile per-packet one-way delay: 21.327 ms

Loss rate: 0.03%

# Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-06-18 18:11:30

End at: 2018-06-18 18:12:00

Local clock offset: 3.786 ms

Remote clock offset: 3.792 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 225.82 Mbit/s

95th percentile per-packet one-way delay: 22.104 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 114.57 Mbit/s

95th percentile per-packet one-way delay: 20.525 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 99.19 Mbit/s

95th percentile per-packet one-way delay: 23.518 ms

Loss rate: 0.01%

-- Flow 3:

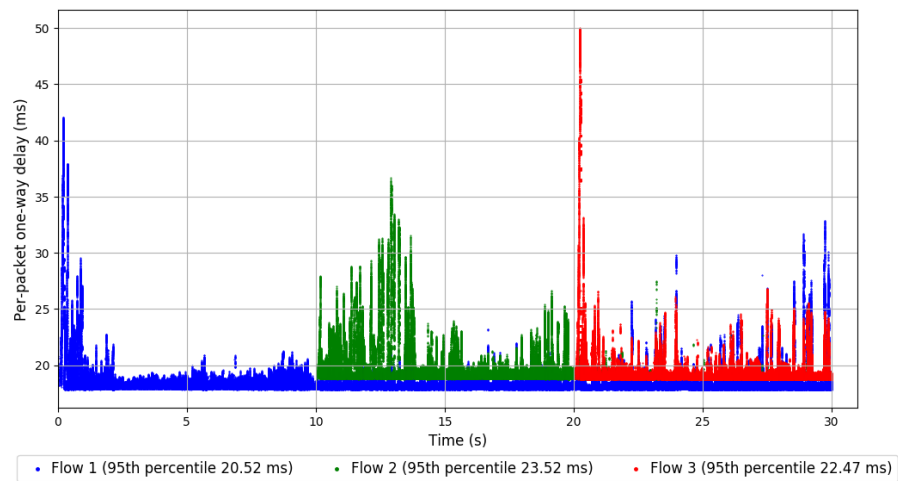
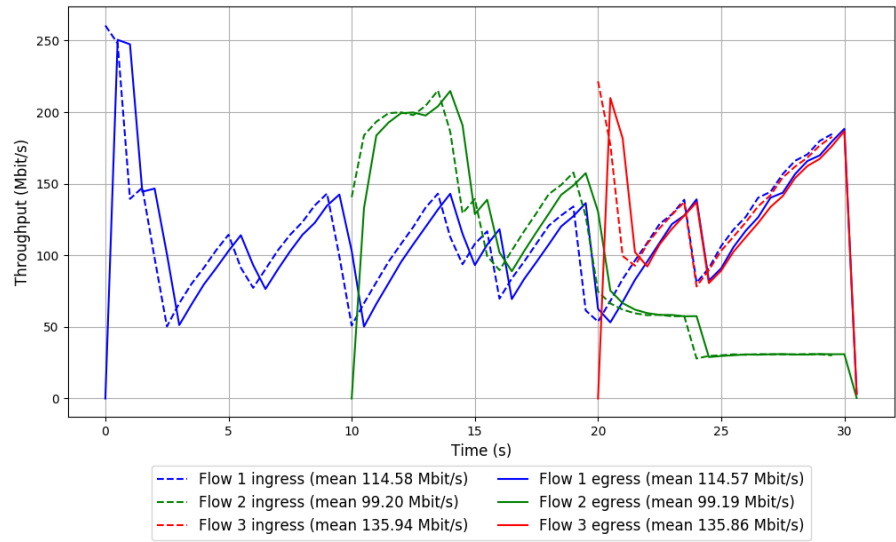
Average throughput: 135.86 Mbit/s

95th percentile per-packet one-way delay: 22.474 ms

Loss rate: 0.06%



# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-06-18 18:37:07

End at: 2018-06-18 18:37:37

Local clock offset: 3.789 ms

Remote clock offset: 5.569 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 159.59 Mbit/s

95th percentile per-packet one-way delay: 20.651 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 20.577 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 44.58 Mbit/s

95th percentile per-packet one-way delay: 19.602 ms

Loss rate: 0.12%

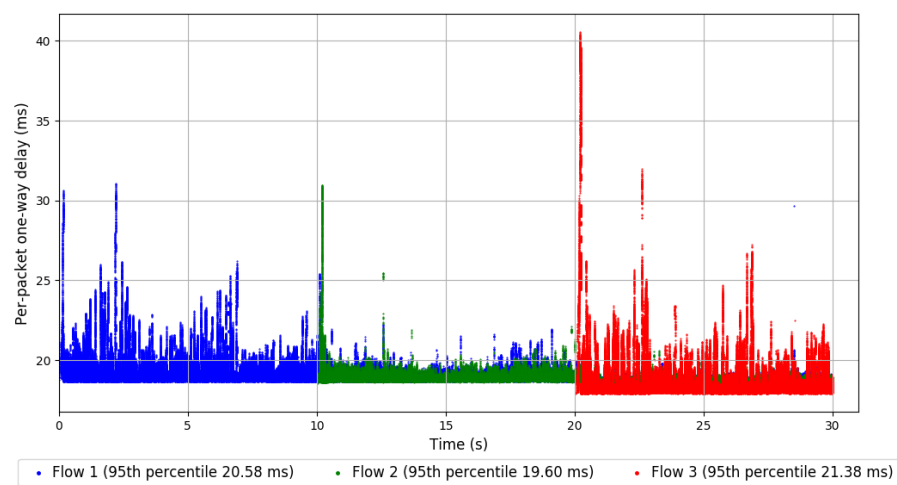
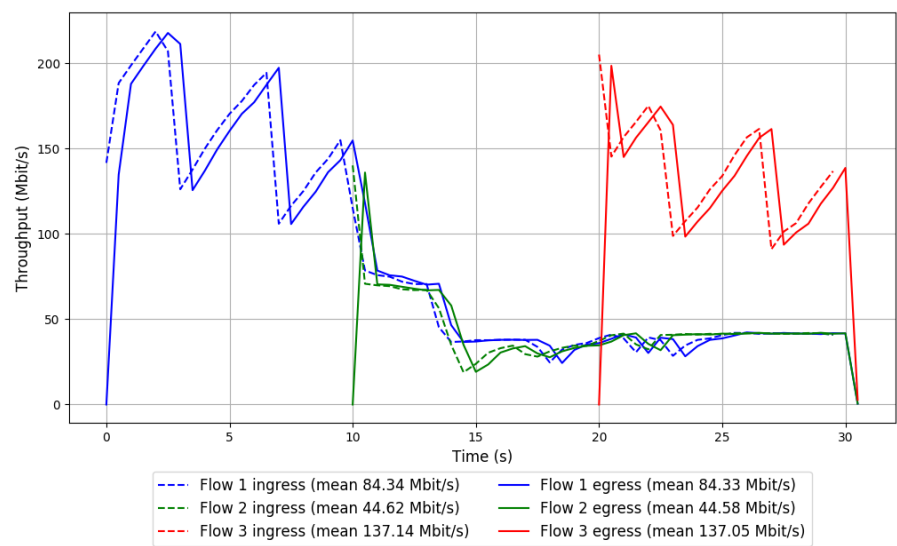
-- Flow 3:

Average throughput: 137.05 Mbit/s

95th percentile per-packet one-way delay: 21.380 ms

Loss rate: 0.05%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-06-18 19:02:25

End at: 2018-06-18 19:02:55

Local clock offset: 3.824 ms

Remote clock offset: 4.631 ms

# Below is generated by plot.py at 2018-06-18 22:33:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 189.03 Mbit/s

95th percentile per-packet one-way delay: 22.713 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 75.12 Mbit/s

95th percentile per-packet one-way delay: 21.472 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 77.45 Mbit/s

95th percentile per-packet one-way delay: 22.941 ms

Loss rate: 0.05%

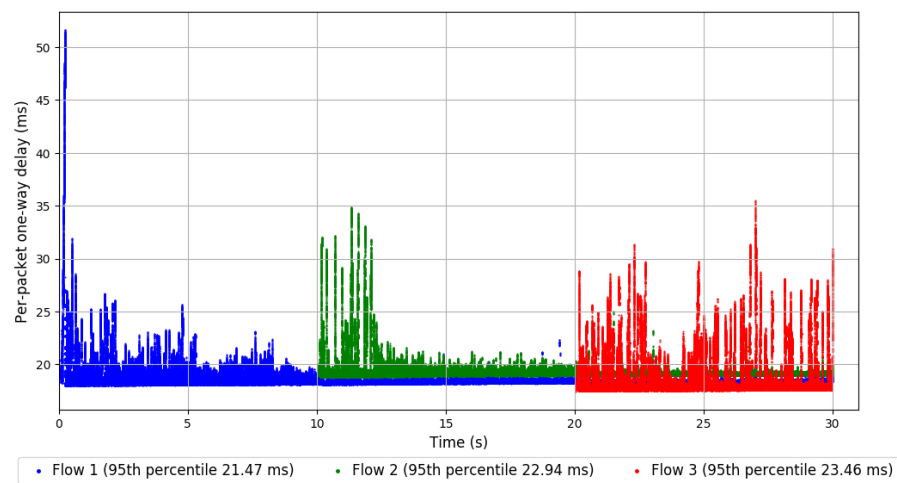
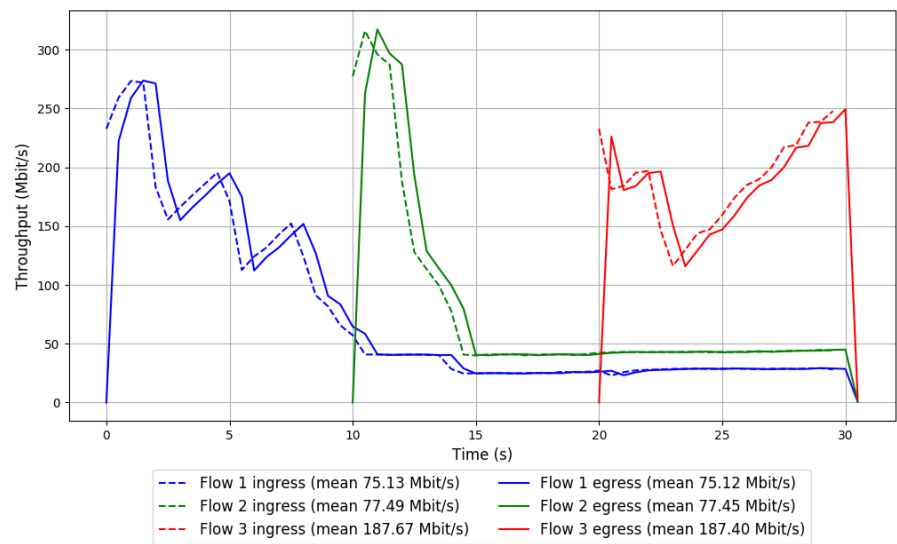
-- Flow 3:

Average throughput: 187.40 Mbit/s

95th percentile per-packet one-way delay: 23.462 ms

Loss rate: 0.12%

Run 7: Report of TCP Vegas — Data Link

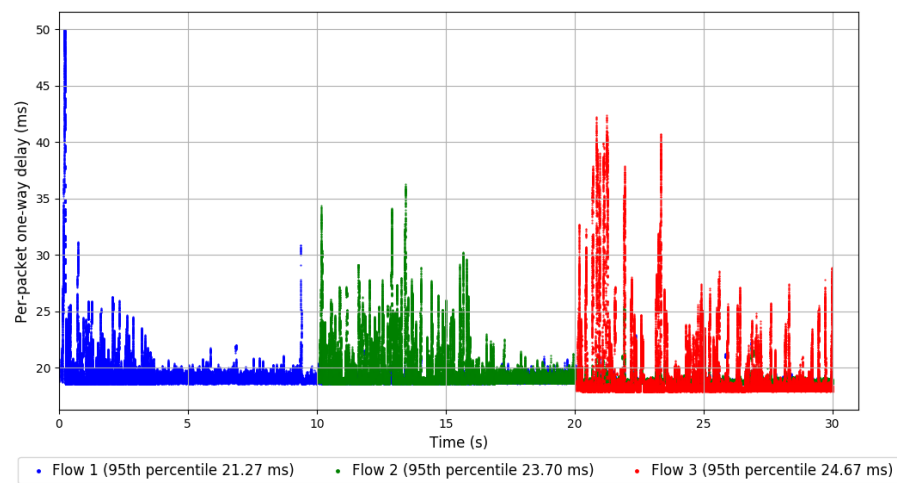
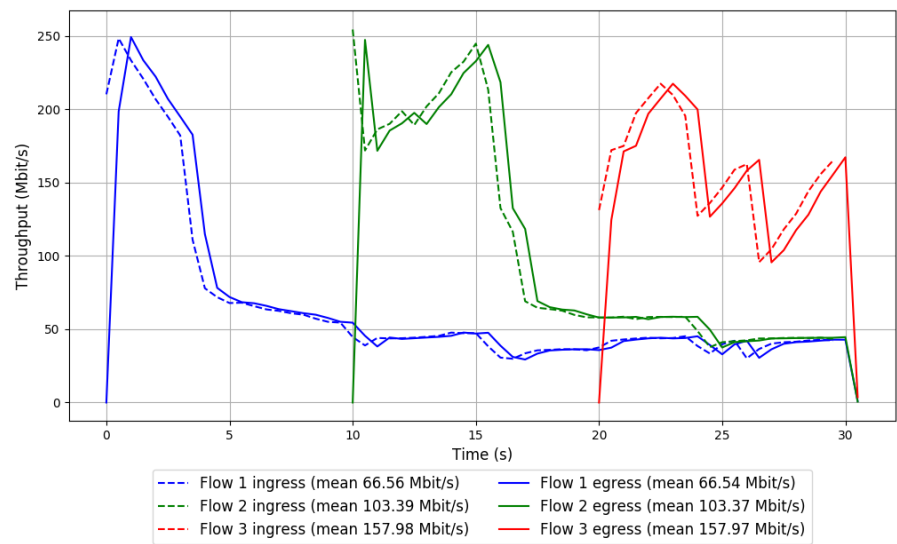


Run 8: Statistics of TCP Vegas

Start at: 2018-06-18 19:27:29  
End at: 2018-06-18 19:27:59  
Local clock offset: 3.863 ms  
Remote clock offset: -1.662 ms

# Below is generated by plot.py at 2018-06-18 22:33:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 187.93 Mbit/s  
95th percentile per-packet one-way delay: 23.324 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 66.54 Mbit/s  
95th percentile per-packet one-way delay: 21.271 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 103.37 Mbit/s  
95th percentile per-packet one-way delay: 23.696 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 157.97 Mbit/s  
95th percentile per-packet one-way delay: 24.672 ms  
Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



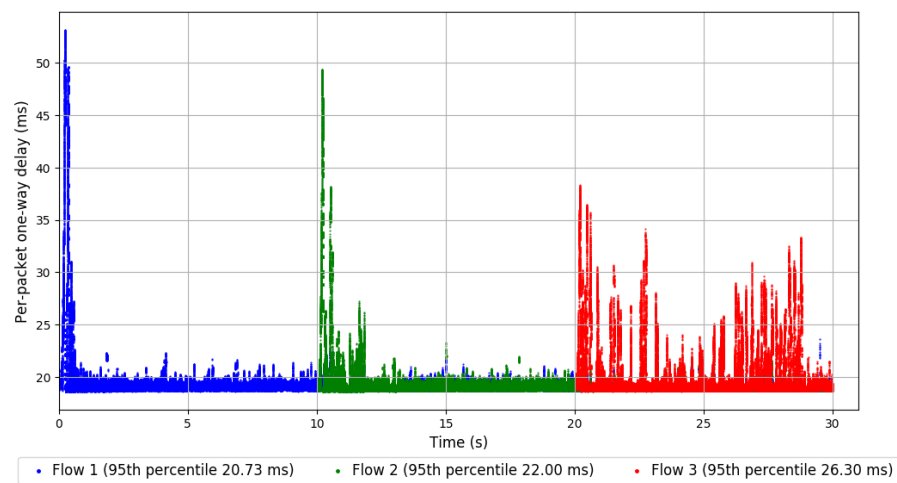
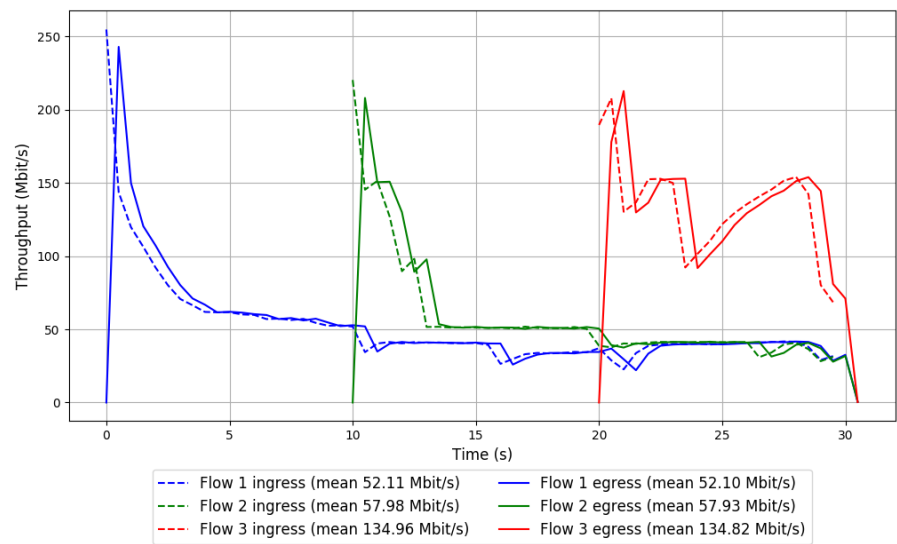
Run 9: Statistics of TCP Vegas

Start at: 2018-06-18 19:52:54  
End at: 2018-06-18 19:53:24  
Local clock offset: 3.94 ms  
Remote clock offset: -4.104 ms

# Below is generated by plot.py at 2018-06-18 22:33:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 135.57 Mbit/s  
95th percentile per-packet one-way delay: 24.282 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 52.10 Mbit/s  
95th percentile per-packet one-way delay: 20.733 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 57.93 Mbit/s  
95th percentile per-packet one-way delay: 21.997 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 134.82 Mbit/s  
95th percentile per-packet one-way delay: 26.297 ms  
Loss rate: 0.10%



Run 9: Report of TCP Vegas — Data Link

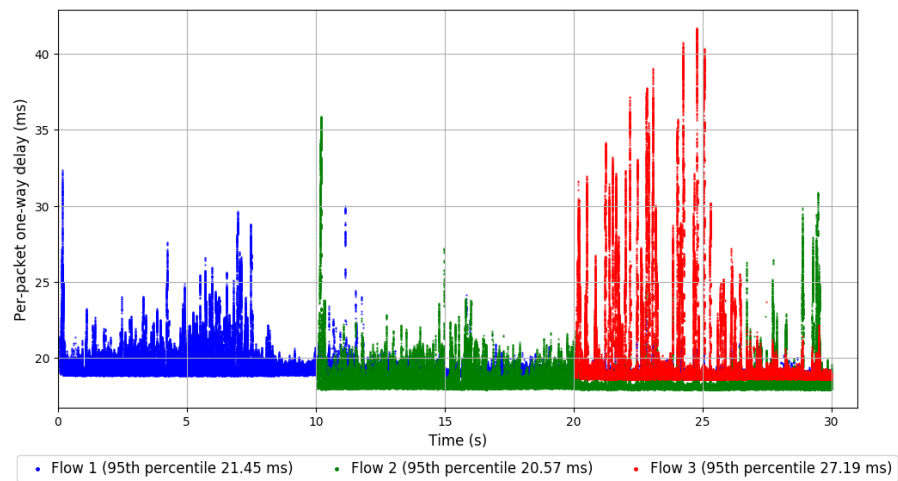
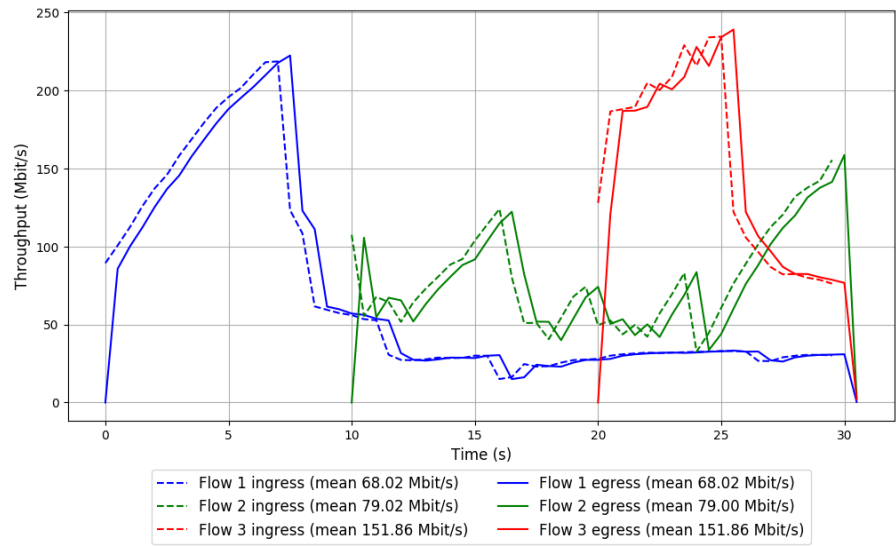


Run 10: Statistics of TCP Vegas

Start at: 2018-06-18 20:18:14  
End at: 2018-06-18 20:18:44  
Local clock offset: 3.586 ms  
Remote clock offset: -3.846 ms

# Below is generated by plot.py at 2018-06-18 22:33:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 171.16 Mbit/s  
95th percentile per-packet one-way delay: 22.796 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 68.02 Mbit/s  
95th percentile per-packet one-way delay: 21.452 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 79.00 Mbit/s  
95th percentile per-packet one-way delay: 20.568 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 151.86 Mbit/s  
95th percentile per-packet one-way delay: 27.190 ms  
Loss rate: 0.00%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-06-18 16:27:19

End at: 2018-06-18 16:27:49

Local clock offset: 4.475 ms

Remote clock offset: 0.324 ms

# Below is generated by plot.py at 2018-06-18 22:33:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 376.86 Mbit/s

95th percentile per-packet one-way delay: 47.011 ms

Loss rate: 24.07%

-- Flow 1:

Average throughput: 165.20 Mbit/s

95th percentile per-packet one-way delay: 50.687 ms

Loss rate: 29.26%

-- Flow 2:

Average throughput: 235.70 Mbit/s

95th percentile per-packet one-way delay: 41.513 ms

Loss rate: 18.25%

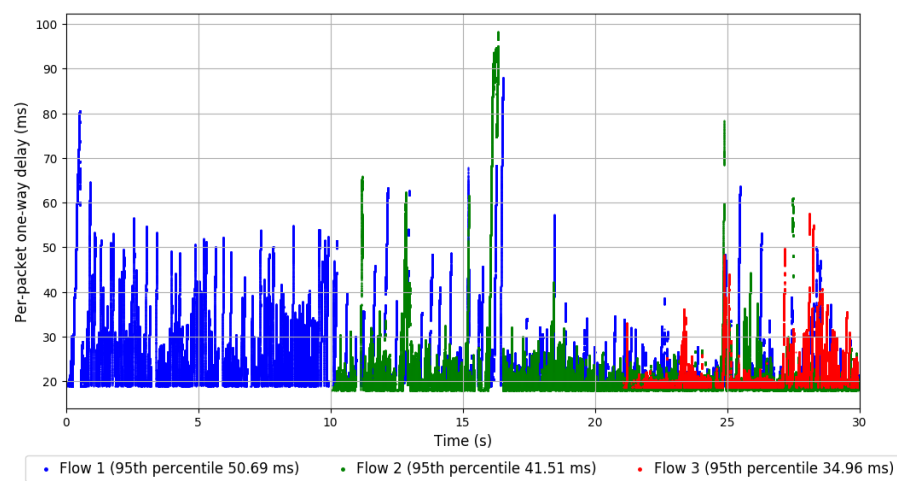
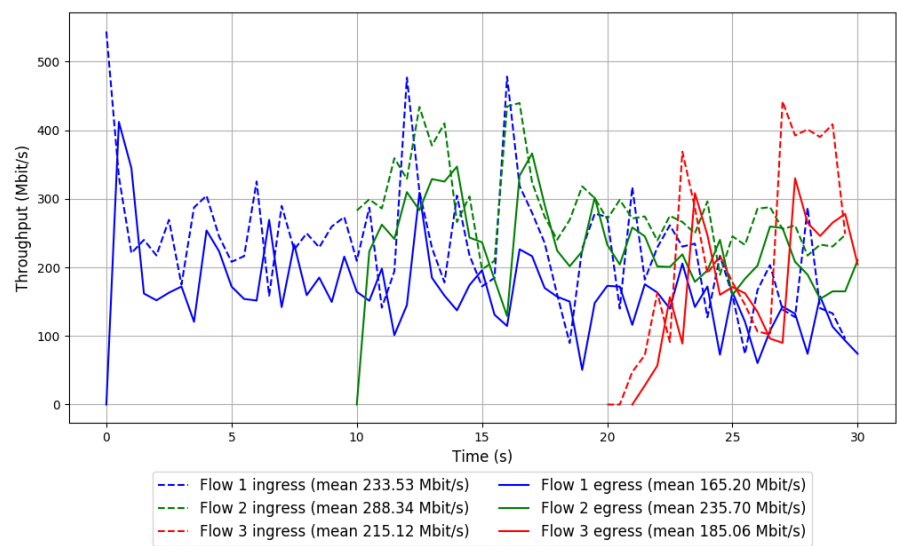
-- Flow 3:

Average throughput: 185.06 Mbit/s

95th percentile per-packet one-way delay: 34.958 ms

Loss rate: 22.68%

Run 1: Report of Verus — Data Link

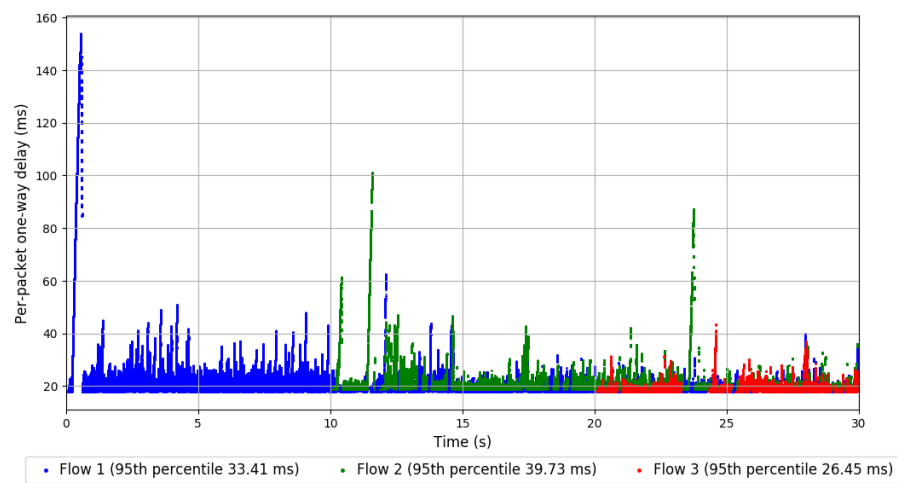
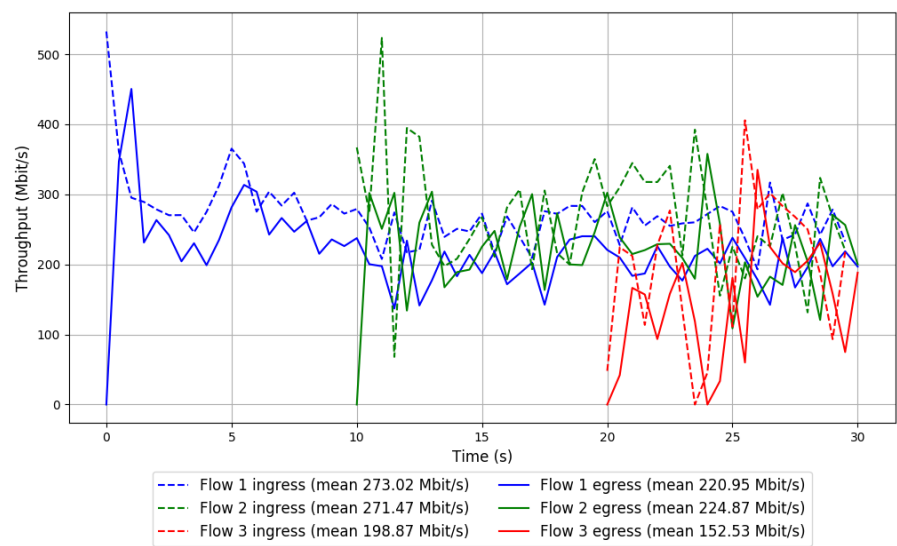


Run 2: Statistics of Verus

Start at: 2018-06-18 16:53:04  
End at: 2018-06-18 16:53:34  
Local clock offset: 4.504 ms  
Remote clock offset: 0.44 ms

# Below is generated by plot.py at 2018-06-18 22:35:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 420.95 Mbit/s  
95th percentile per-packet one-way delay: 34.416 ms  
Loss rate: 18.91%  
-- Flow 1:  
Average throughput: 220.95 Mbit/s  
95th percentile per-packet one-way delay: 33.415 ms  
Loss rate: 19.02%  
-- Flow 2:  
Average throughput: 224.87 Mbit/s  
95th percentile per-packet one-way delay: 39.735 ms  
Loss rate: 17.15%  
-- Flow 3:  
Average throughput: 152.53 Mbit/s  
95th percentile per-packet one-way delay: 26.446 ms  
Loss rate: 23.28%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-06-18 17:18:46

End at: 2018-06-18 17:19:16

Local clock offset: 3.741 ms

Remote clock offset: 0.704 ms

# Below is generated by plot.py at 2018-06-18 22:35:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 409.79 Mbit/s

95th percentile per-packet one-way delay: 40.751 ms

Loss rate: 26.31%

-- Flow 1:

Average throughput: 192.76 Mbit/s

95th percentile per-packet one-way delay: 48.010 ms

Loss rate: 23.36%

-- Flow 2:

Average throughput: 219.12 Mbit/s

95th percentile per-packet one-way delay: 30.687 ms

Loss rate: 26.42%

-- Flow 3:

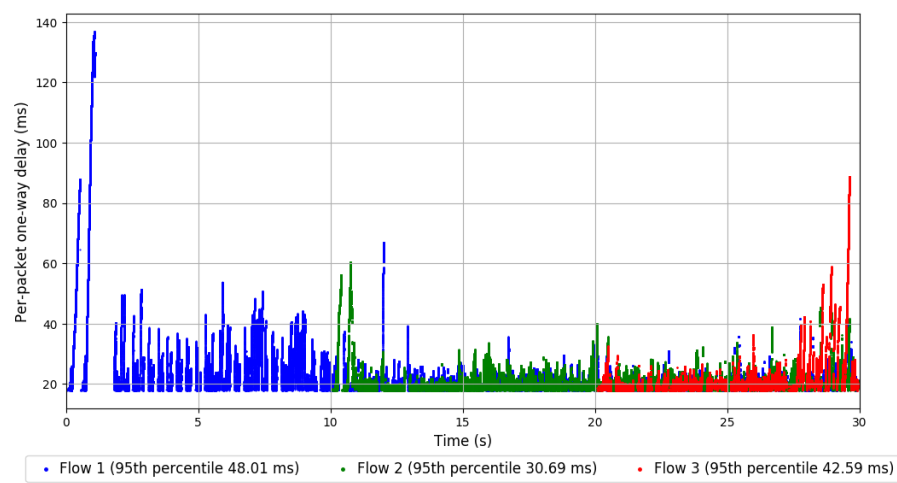
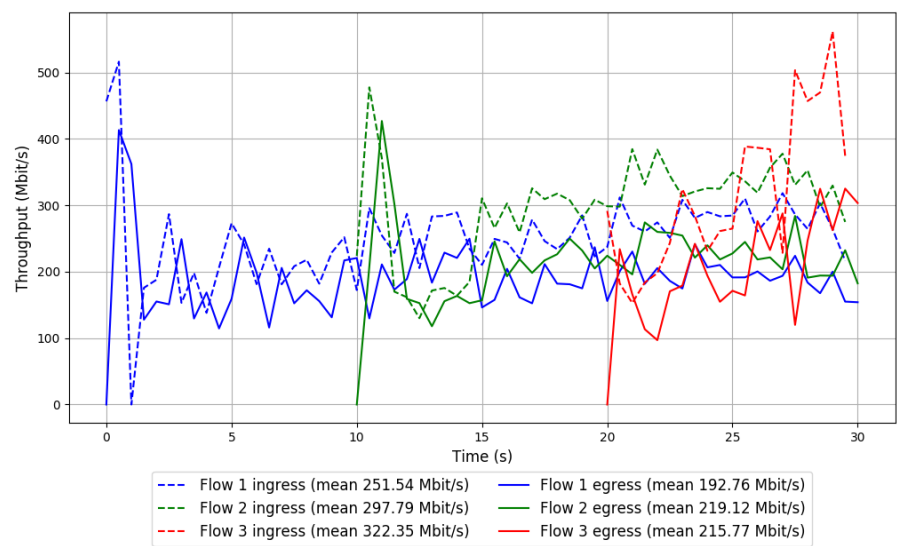
Average throughput: 215.77 Mbit/s

95th percentile per-packet one-way delay: 42.589 ms

Loss rate: 33.06%



Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-06-18 17:44:26

End at: 2018-06-18 17:44:56

Local clock offset: 3.646 ms

Remote clock offset: 0.32 ms

# Below is generated by plot.py at 2018-06-18 22:35:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 387.10 Mbit/s

95th percentile per-packet one-way delay: 39.499 ms

Loss rate: 21.41%

-- Flow 1:

Average throughput: 196.73 Mbit/s

95th percentile per-packet one-way delay: 44.364 ms

Loss rate: 20.11%

-- Flow 2:

Average throughput: 174.15 Mbit/s

95th percentile per-packet one-way delay: 31.290 ms

Loss rate: 20.43%

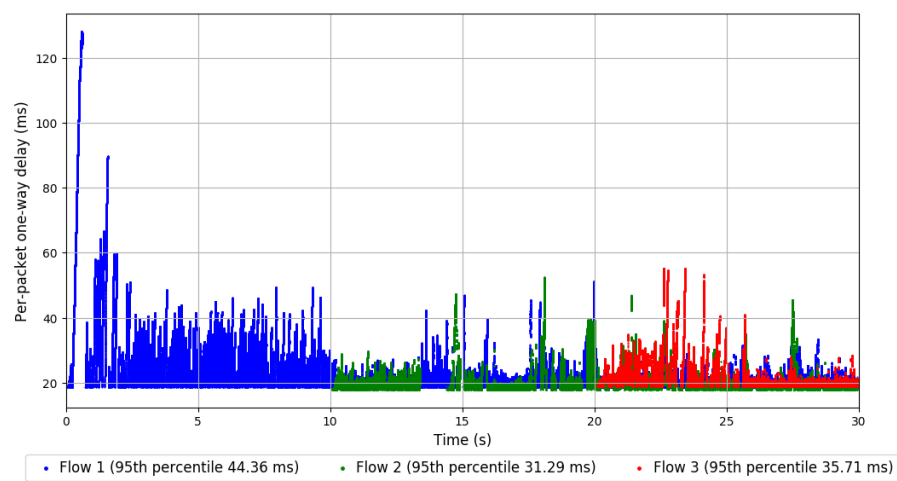
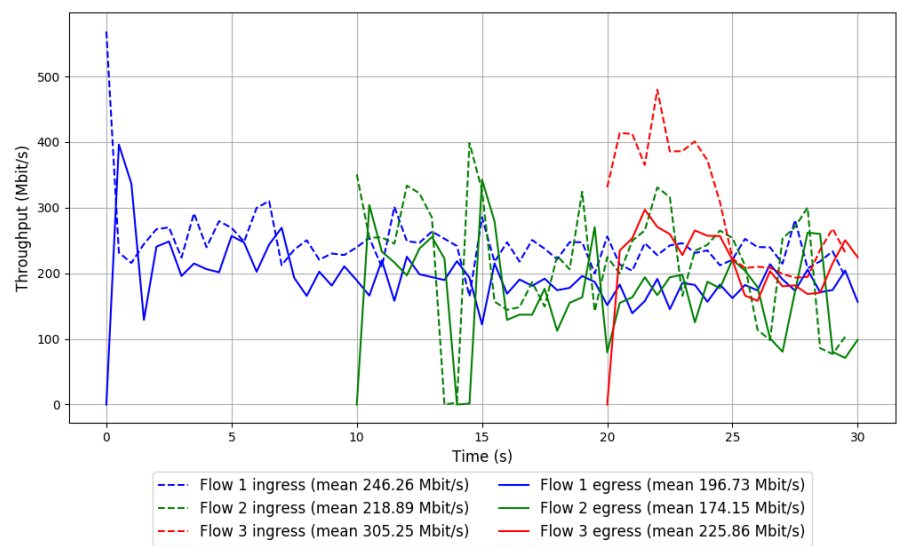
-- Flow 3:

Average throughput: 225.86 Mbit/s

95th percentile per-packet one-way delay: 35.711 ms

Loss rate: 25.99%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-06-18 18:09:54

End at: 2018-06-18 18:10:24

Local clock offset: 3.771 ms

Remote clock offset: 3.59 ms

# Below is generated by plot.py at 2018-06-18 22:35:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 387.25 Mbit/s

95th percentile per-packet one-way delay: 43.000 ms

Loss rate: 21.35%

-- Flow 1:

Average throughput: 180.95 Mbit/s

95th percentile per-packet one-way delay: 41.145 ms

Loss rate: 25.44%

-- Flow 2:

Average throughput: 204.27 Mbit/s

95th percentile per-packet one-way delay: 47.945 ms

Loss rate: 14.96%

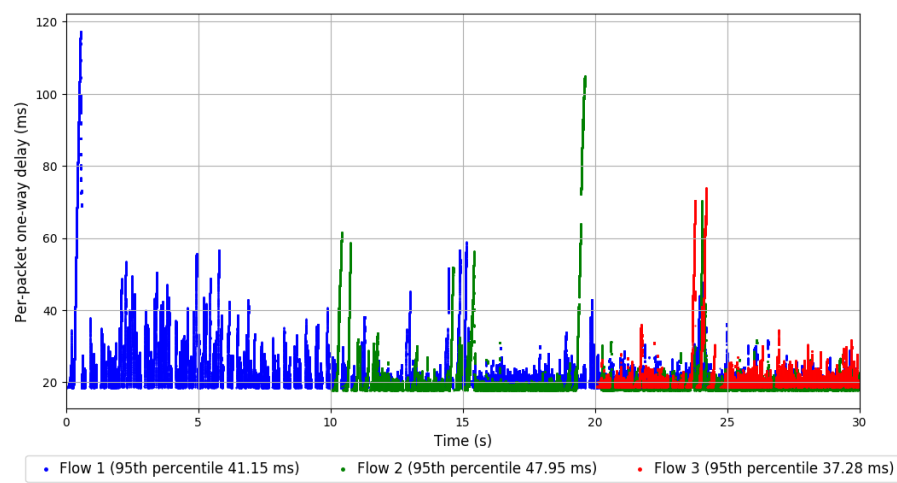
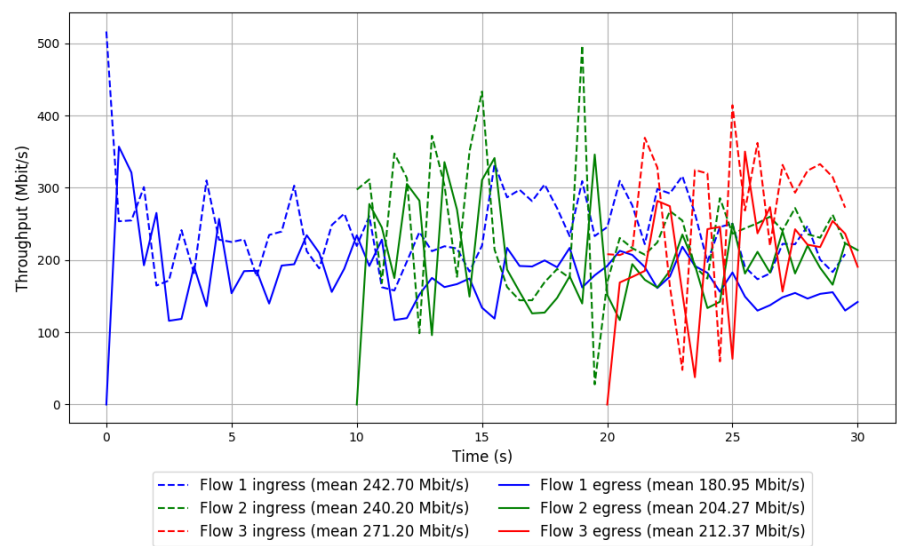
-- Flow 3:

Average throughput: 212.37 Mbit/s

95th percentile per-packet one-way delay: 37.280 ms

Loss rate: 21.68%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-06-18 18:35:28

End at: 2018-06-18 18:35:58

Local clock offset: 3.704 ms

Remote clock offset: 5.422 ms

# Below is generated by plot.py at 2018-06-18 22:36:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 440.38 Mbit/s

95th percentile per-packet one-way delay: 32.014 ms

Loss rate: 26.79%

-- Flow 1:

Average throughput: 224.87 Mbit/s

95th percentile per-packet one-way delay: 34.051 ms

Loss rate: 21.10%

-- Flow 2:

Average throughput: 241.00 Mbit/s

95th percentile per-packet one-way delay: 31.102 ms

Loss rate: 32.15%

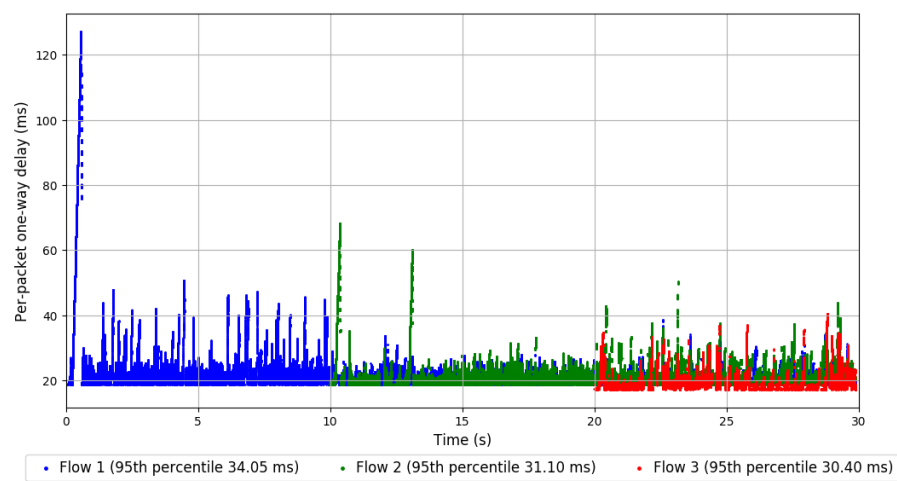
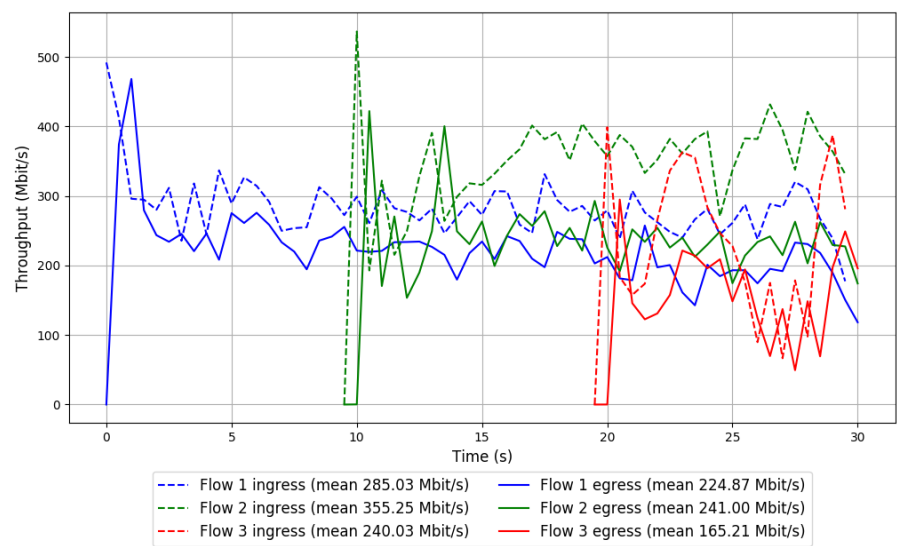
-- Flow 3:

Average throughput: 165.21 Mbit/s

95th percentile per-packet one-way delay: 30.400 ms

Loss rate: 31.18%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-06-18 19:00:50

End at: 2018-06-18 19:01:20

Local clock offset: 3.819 ms

Remote clock offset: 5.694 ms

# Below is generated by plot.py at 2018-06-18 22:37:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 351.87 Mbit/s

95th percentile per-packet one-way delay: 46.281 ms

Loss rate: 20.50%

-- Flow 1:

Average throughput: 183.28 Mbit/s

95th percentile per-packet one-way delay: 45.051 ms

Loss rate: 19.82%

-- Flow 2:

Average throughput: 175.94 Mbit/s

95th percentile per-packet one-way delay: 51.308 ms

Loss rate: 21.82%

-- Flow 3:

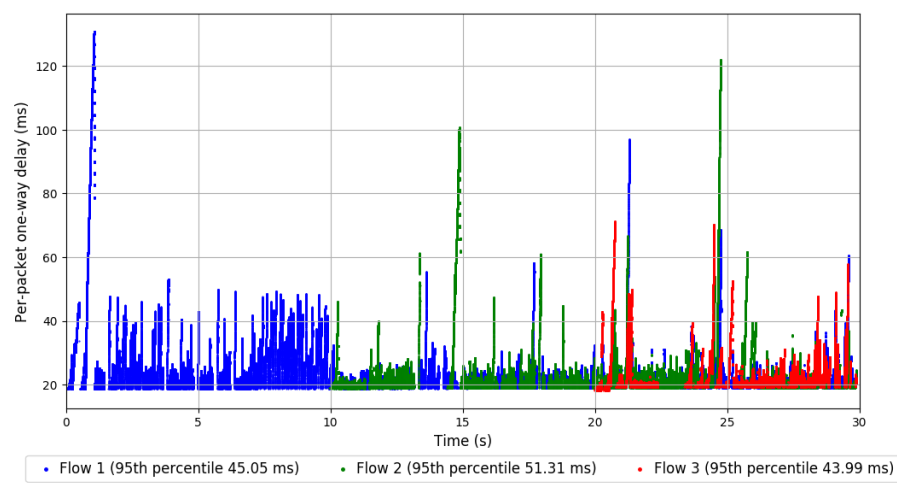
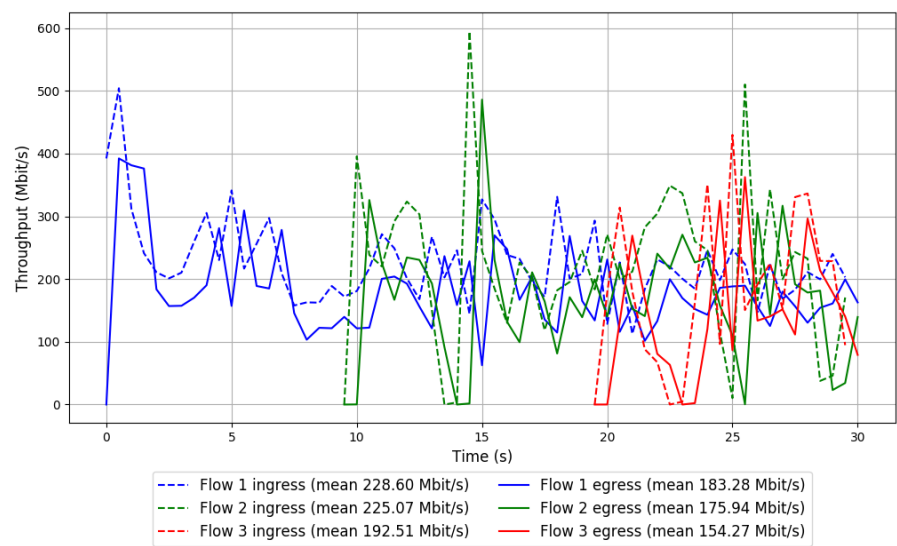
Average throughput: 154.27 Mbit/s

95th percentile per-packet one-way delay: 43.987 ms

Loss rate: 19.84%



Run 7: Report of Verus — Data Link

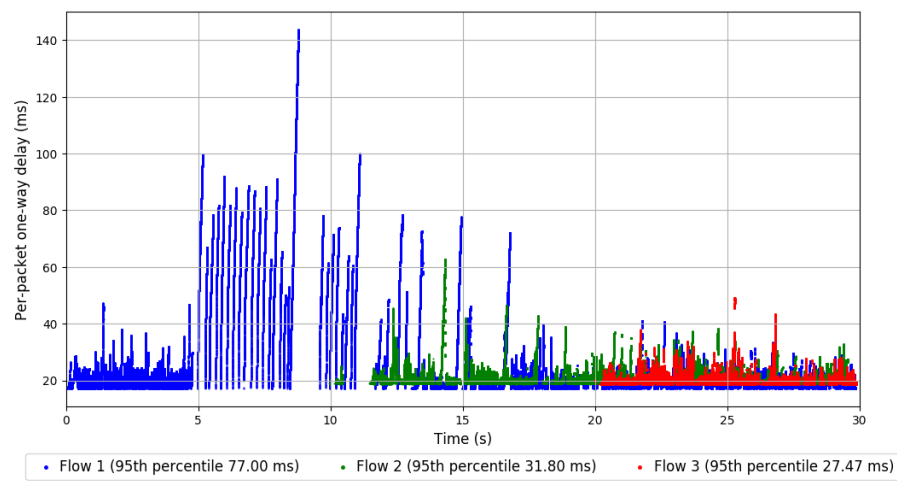
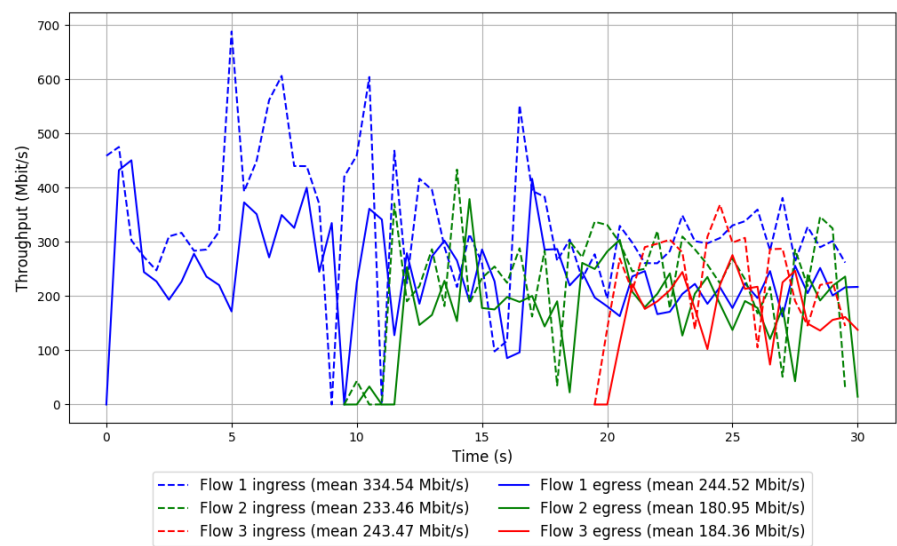


Run 8: Statistics of Verus

Start at: 2018-06-18 19:25:51  
End at: 2018-06-18 19:26:21  
Local clock offset: 3.85 ms  
Remote clock offset: -1.446 ms

# Below is generated by plot.py at 2018-06-18 22:38:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 424.25 Mbit/s  
95th percentile per-packet one-way delay: 70.117 ms  
Loss rate: 25.34%  
-- Flow 1:  
Average throughput: 244.52 Mbit/s  
95th percentile per-packet one-way delay: 76.998 ms  
Loss rate: 26.91%  
-- Flow 2:  
Average throughput: 180.95 Mbit/s  
95th percentile per-packet one-way delay: 31.804 ms  
Loss rate: 22.48%  
-- Flow 3:  
Average throughput: 184.36 Mbit/s  
95th percentile per-packet one-way delay: 27.466 ms  
Loss rate: 24.29%

Run 8: Report of Verus — Data Link

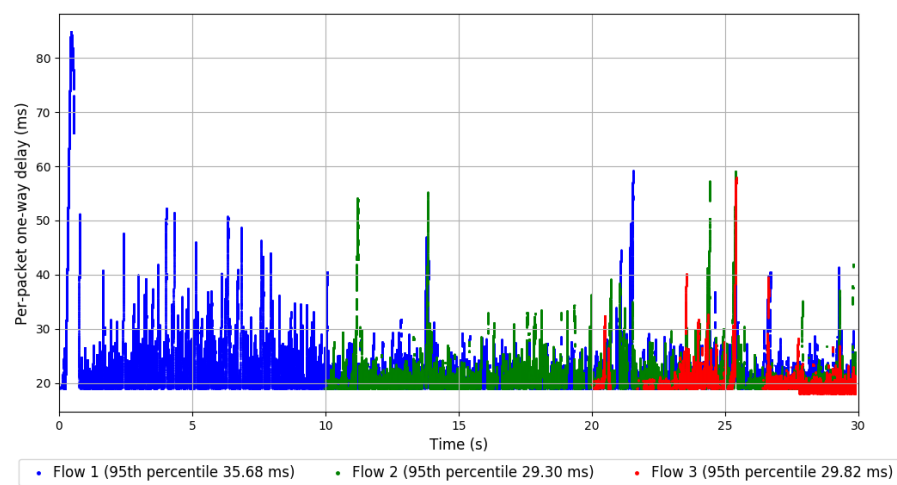
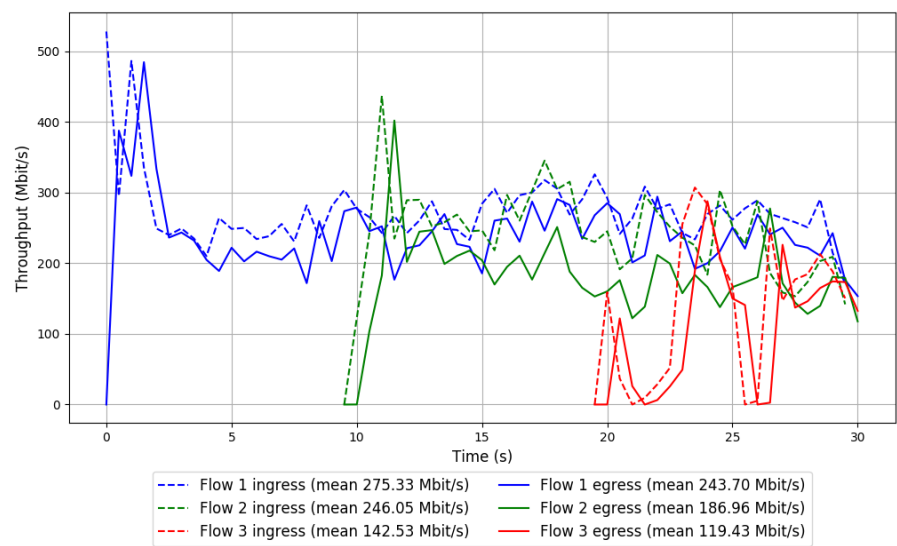


Run 9: Statistics of Verus

Start at: 2018-06-18 19:51:17  
End at: 2018-06-18 19:51:47  
Local clock offset: 3.842 ms  
Remote clock offset: -3.945 ms

# Below is generated by plot.py at 2018-06-18 22:38:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 407.97 Mbit/s  
95th percentile per-packet one-way delay: 32.528 ms  
Loss rate: 16.17%  
-- Flow 1:  
Average throughput: 243.70 Mbit/s  
95th percentile per-packet one-way delay: 35.679 ms  
Loss rate: 11.49%  
-- Flow 2:  
Average throughput: 186.96 Mbit/s  
95th percentile per-packet one-way delay: 29.303 ms  
Loss rate: 24.01%  
-- Flow 3:  
Average throughput: 119.43 Mbit/s  
95th percentile per-packet one-way delay: 29.825 ms  
Loss rate: 16.21%

Run 9: Report of Verus — Data Link

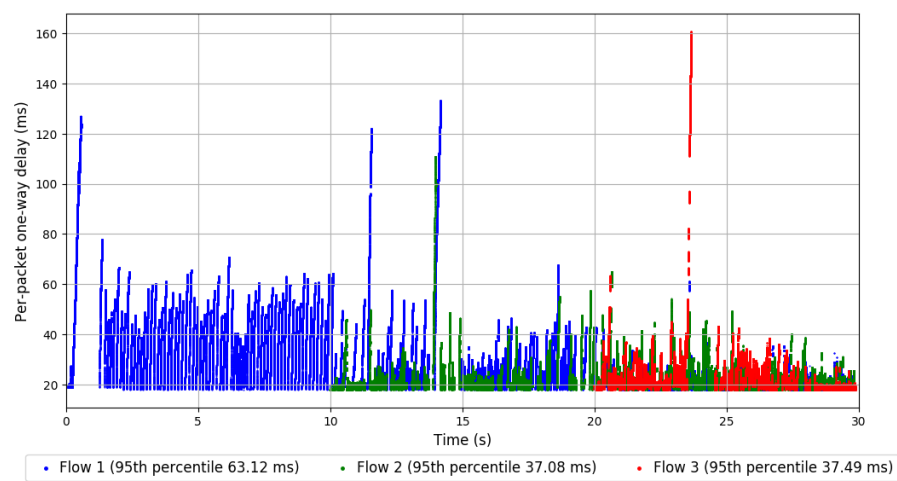
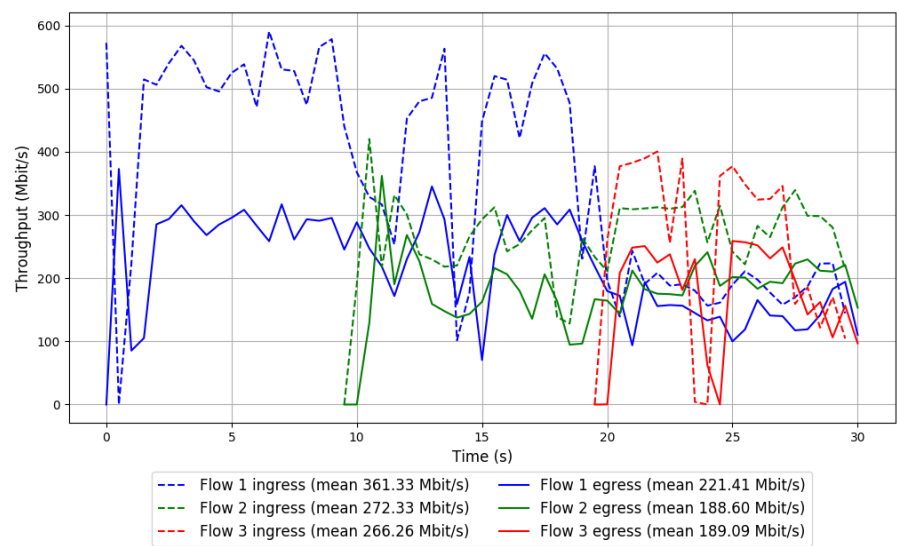


Run 10: Statistics of Verus

Start at: 2018-06-18 20:16:35  
End at: 2018-06-18 20:17:05  
Local clock offset: 3.597 ms  
Remote clock offset: -3.964 ms

# Below is generated by plot.py at 2018-06-18 22:40:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 409.52 Mbit/s  
95th percentile per-packet one-way delay: 56.380 ms  
Loss rate: 35.06%  
-- Flow 1:  
Average throughput: 221.41 Mbit/s  
95th percentile per-packet one-way delay: 63.119 ms  
Loss rate: 38.73%  
-- Flow 2:  
Average throughput: 188.60 Mbit/s  
95th percentile per-packet one-way delay: 37.084 ms  
Loss rate: 30.72%  
-- Flow 3:  
Average throughput: 189.09 Mbit/s  
95th percentile per-packet one-way delay: 37.491 ms  
Loss rate: 28.98%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-18 16:22:38

End at: 2018-06-18 16:23:08

Local clock offset: 4.487 ms

Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2018-06-18 22:42:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 628.09 Mbit/s

95th percentile per-packet one-way delay: 190.907 ms

Loss rate: 4.27%

-- Flow 1:

Average throughput: 333.54 Mbit/s

95th percentile per-packet one-way delay: 60.832 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 285.85 Mbit/s

95th percentile per-packet one-way delay: 20.196 ms

Loss rate: 1.28%

-- Flow 3:

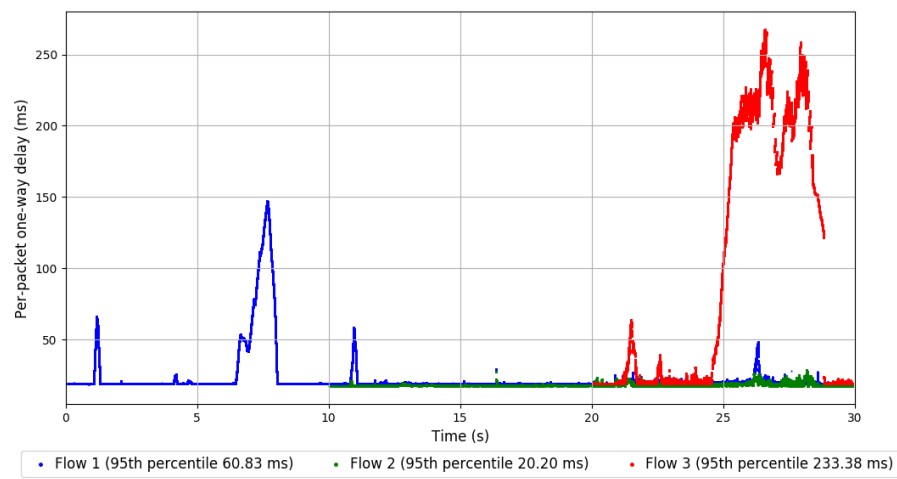
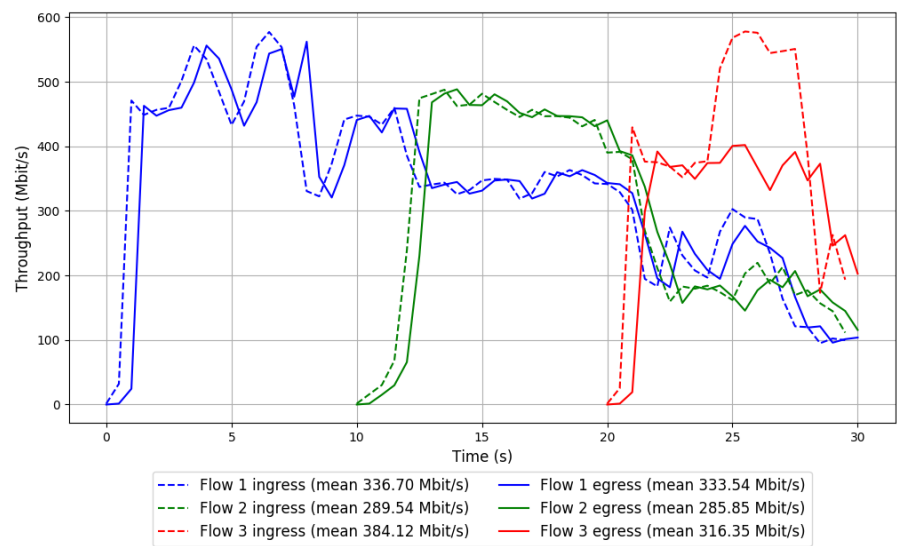
Average throughput: 316.35 Mbit/s

95th percentile per-packet one-way delay: 233.385 ms

Loss rate: 17.65%



Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-18 16:48:24

End at: 2018-06-18 16:48:54

Local clock offset: 4.579 ms

Remote clock offset: 0.502 ms

# Below is generated by plot.py at 2018-06-18 22:42:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 642.34 Mbit/s

95th percentile per-packet one-way delay: 26.551 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 383.44 Mbit/s

95th percentile per-packet one-way delay: 19.235 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 369.25 Mbit/s

95th percentile per-packet one-way delay: 87.437 ms

Loss rate: 0.69%

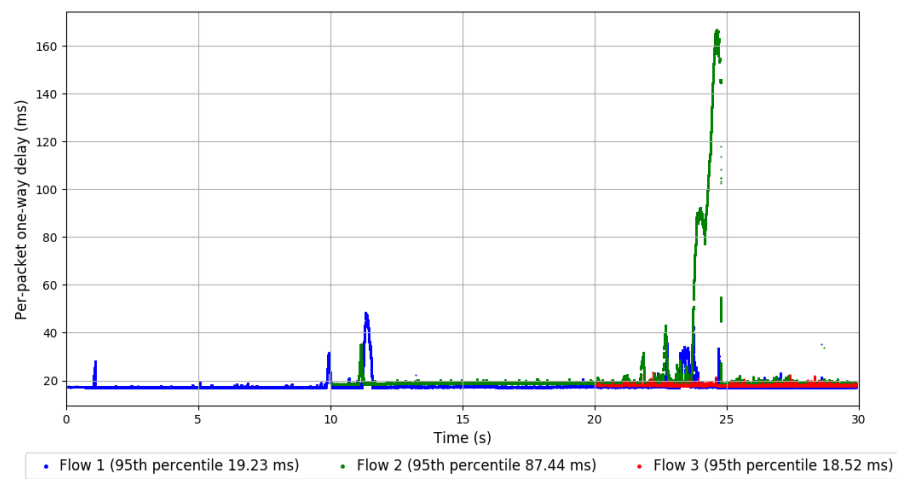
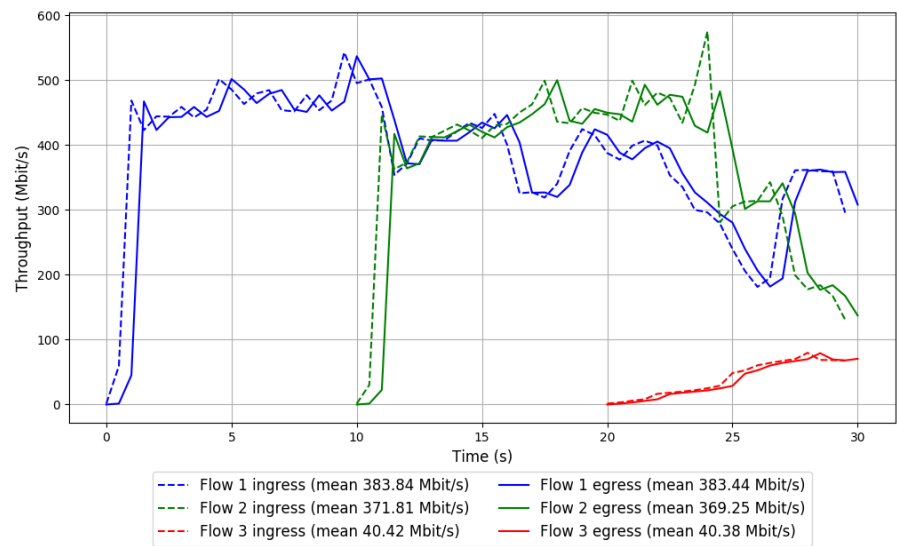
-- Flow 3:

Average throughput: 40.38 Mbit/s

95th percentile per-packet one-way delay: 18.516 ms

Loss rate: 0.10%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-06-18 17:14:06

End at: 2018-06-18 17:14:36

Local clock offset: 3.984 ms

Remote clock offset: 0.845 ms

# Below is generated by plot.py at 2018-06-18 22:42:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 621.12 Mbit/s

95th percentile per-packet one-way delay: 20.000 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 390.98 Mbit/s

95th percentile per-packet one-way delay: 19.744 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 293.27 Mbit/s

95th percentile per-packet one-way delay: 20.136 ms

Loss rate: 0.33%

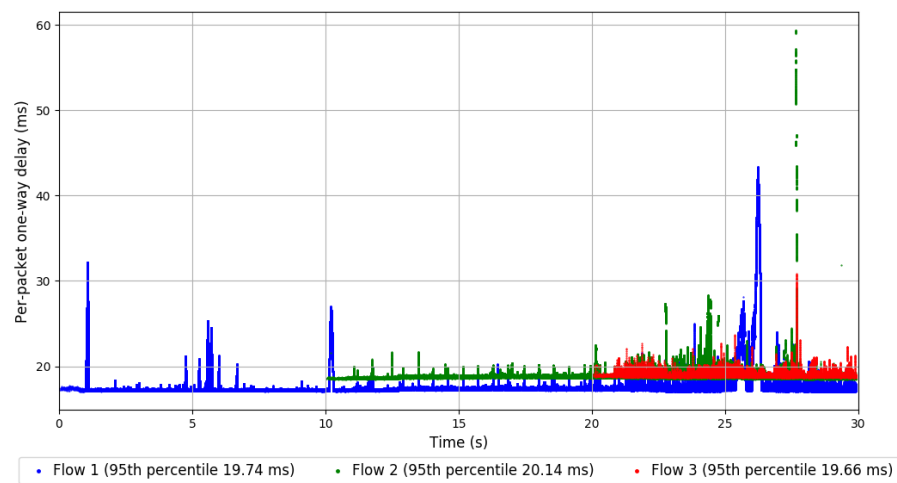
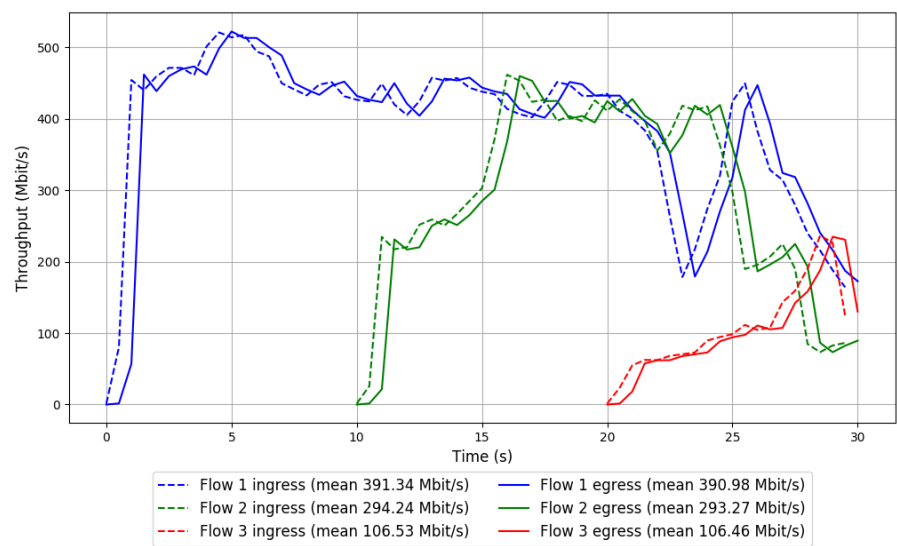
-- Flow 3:

Average throughput: 106.46 Mbit/s

95th percentile per-packet one-way delay: 19.656 ms

Loss rate: 0.10%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-18 17:39:45

End at: 2018-06-18 17:40:15

Local clock offset: 3.704 ms

Remote clock offset: 0.279 ms

# Below is generated by plot.py at 2018-06-18 22:44:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 652.70 Mbit/s

95th percentile per-packet one-way delay: 32.077 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 387.18 Mbit/s

95th percentile per-packet one-way delay: 19.842 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 354.87 Mbit/s

95th percentile per-packet one-way delay: 108.159 ms

Loss rate: 1.71%

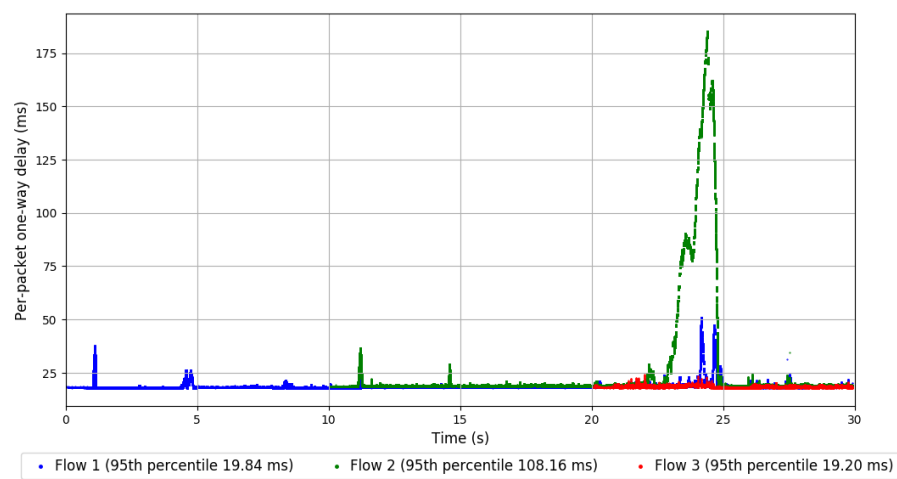
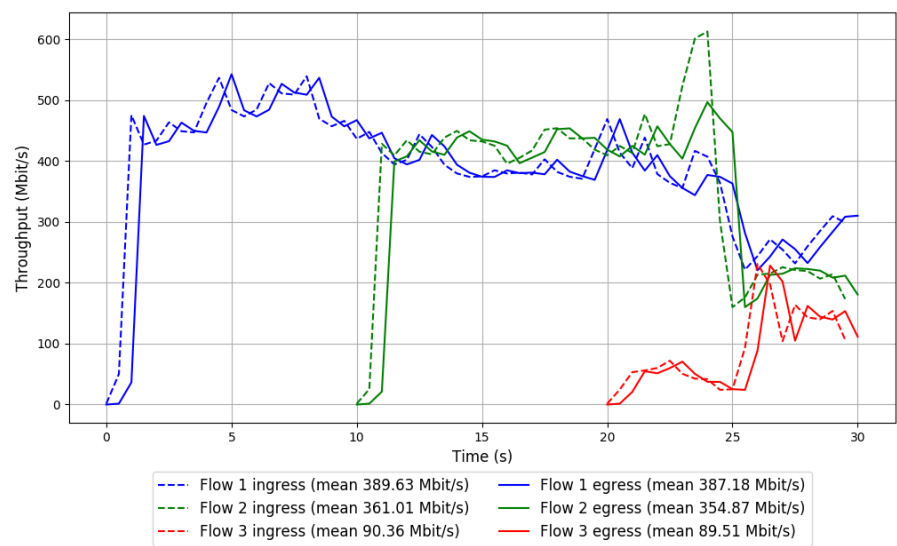
-- Flow 3:

Average throughput: 89.51 Mbit/s

95th percentile per-packet one-way delay: 19.200 ms

Loss rate: 0.96%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-06-18 18:05:12

End at: 2018-06-18 18:05:42

Local clock offset: 3.761 ms

Remote clock offset: 3.161 ms

# Below is generated by plot.py at 2018-06-18 22:45:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 644.73 Mbit/s

95th percentile per-packet one-way delay: 20.929 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 374.87 Mbit/s

95th percentile per-packet one-way delay: 19.747 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 305.24 Mbit/s

95th percentile per-packet one-way delay: 64.939 ms

Loss rate: 0.44%

-- Flow 3:

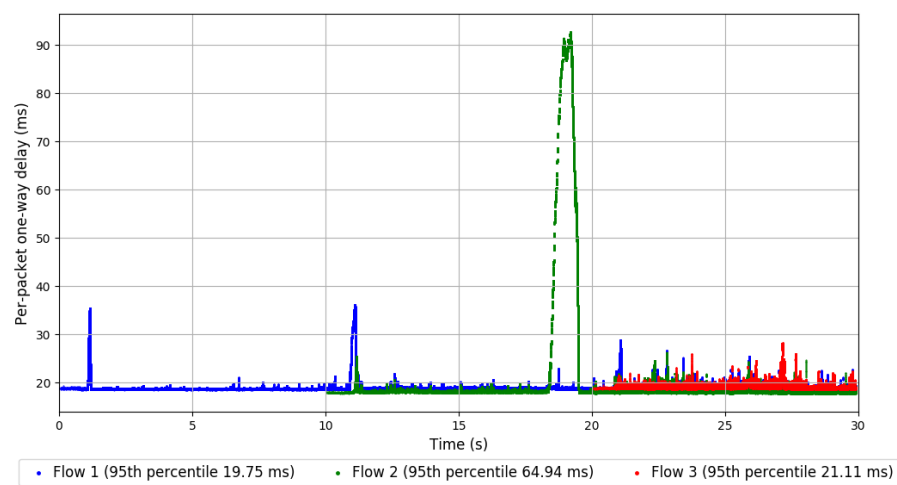
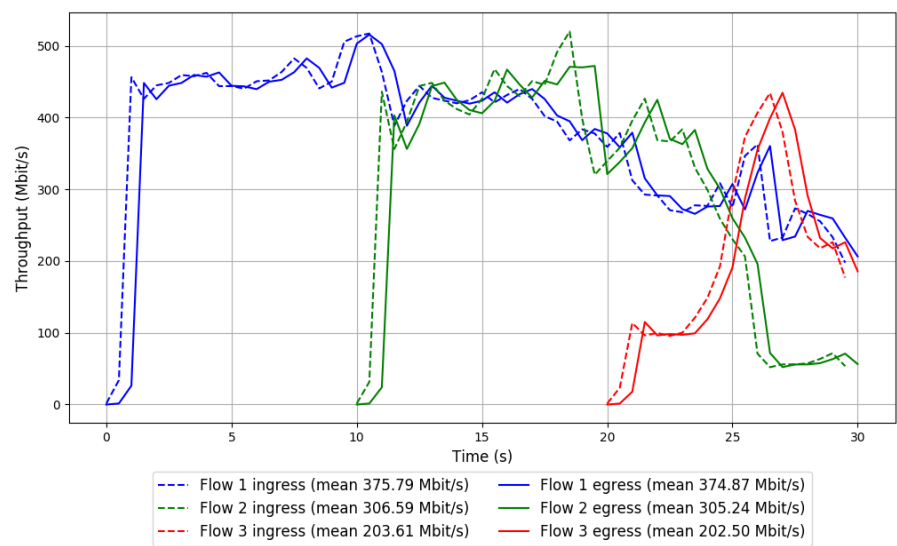
Average throughput: 202.50 Mbit/s

95th percentile per-packet one-way delay: 21.113 ms

Loss rate: 0.55%



Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-06-18 18:30:45

End at: 2018-06-18 18:31:15

Local clock offset: 3.794 ms

Remote clock offset: 5.117 ms

# Below is generated by plot.py at 2018-06-18 22:46:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 672.03 Mbit/s

95th percentile per-packet one-way delay: 43.427 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 405.42 Mbit/s

95th percentile per-packet one-way delay: 27.436 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 363.17 Mbit/s

95th percentile per-packet one-way delay: 87.058 ms

Loss rate: 0.78%

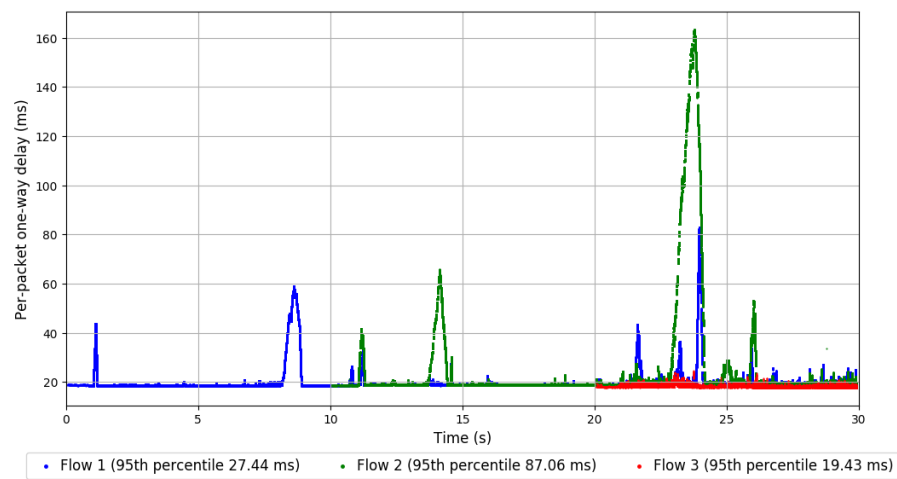
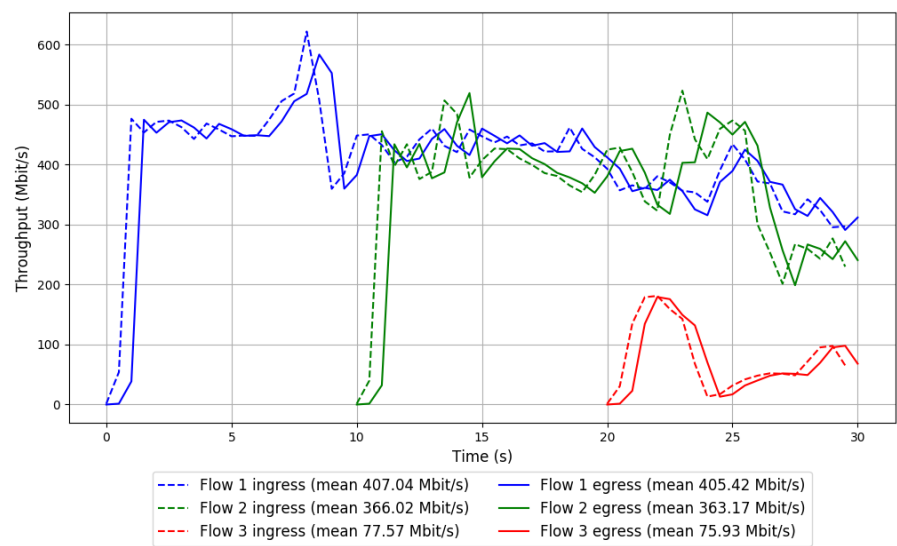
-- Flow 3:

Average throughput: 75.93 Mbit/s

95th percentile per-packet one-way delay: 19.429 ms

Loss rate: 2.11%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-18 18:56:15

End at: 2018-06-18 18:56:45

Local clock offset: 3.799 ms

Remote clock offset: 6.566 ms

# Below is generated by plot.py at 2018-06-18 22:46:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 611.16 Mbit/s

95th percentile per-packet one-way delay: 19.822 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 366.99 Mbit/s

95th percentile per-packet one-way delay: 19.841 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 331.42 Mbit/s

95th percentile per-packet one-way delay: 19.830 ms

Loss rate: 0.37%

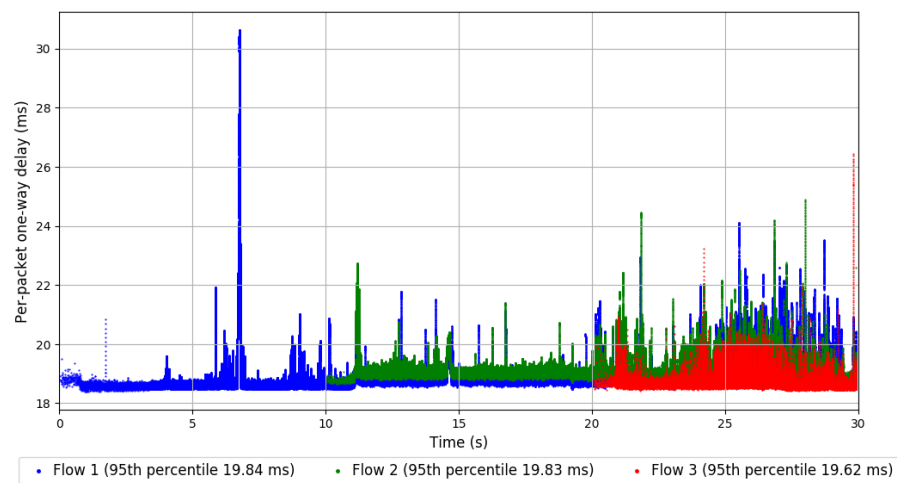
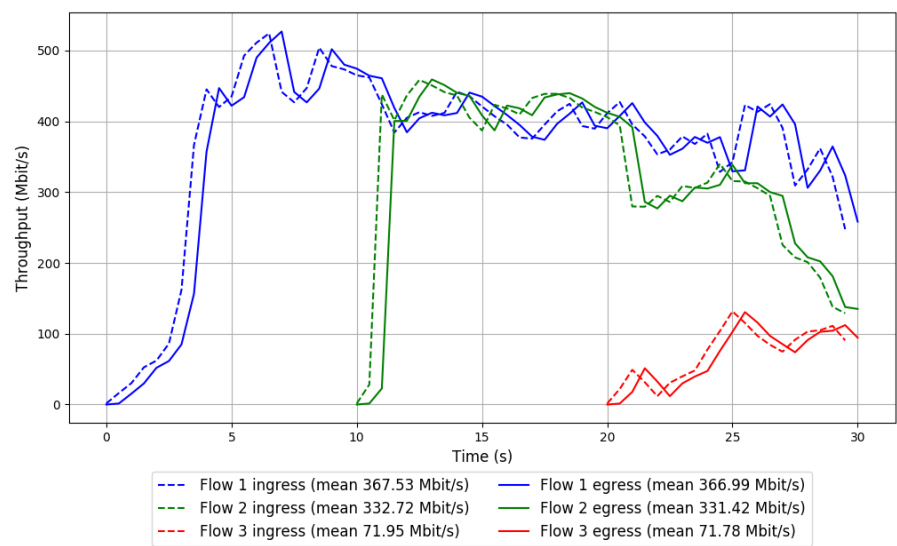
-- Flow 3:

Average throughput: 71.78 Mbit/s

95th percentile per-packet one-way delay: 19.623 ms

Loss rate: 0.23%

Run 7: Report of PCC-Vivace — Data Link

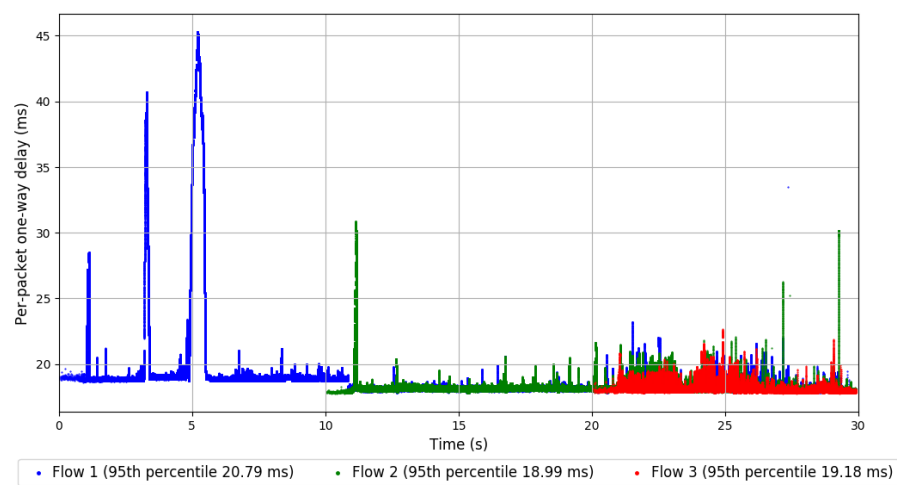
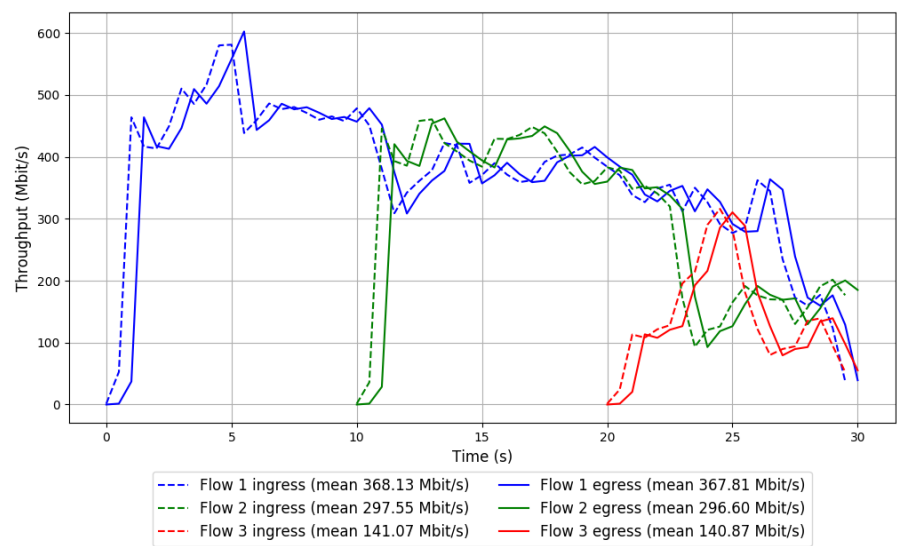


Run 8: Statistics of PCC-Vivace

Start at: 2018-06-18 19:21:16  
End at: 2018-06-18 19:21:46  
Local clock offset: 3.831 ms  
Remote clock offset: -1.001 ms

# Below is generated by plot.py at 2018-06-18 22:46:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 611.56 Mbit/s  
95th percentile per-packet one-way delay: 19.482 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 367.81 Mbit/s  
95th percentile per-packet one-way delay: 20.791 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 296.60 Mbit/s  
95th percentile per-packet one-way delay: 18.992 ms  
Loss rate: 0.32%  
-- Flow 3:  
Average throughput: 140.87 Mbit/s  
95th percentile per-packet one-way delay: 19.176 ms  
Loss rate: 0.19%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-18 19:46:35

End at: 2018-06-18 19:47:05

Local clock offset: 3.901 ms

Remote clock offset: -3.6 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 635.29 Mbit/s

95th percentile per-packet one-way delay: 32.605 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 387.07 Mbit/s

95th percentile per-packet one-way delay: 40.238 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 351.51 Mbit/s

95th percentile per-packet one-way delay: 19.940 ms

Loss rate: 0.27%

-- Flow 3:

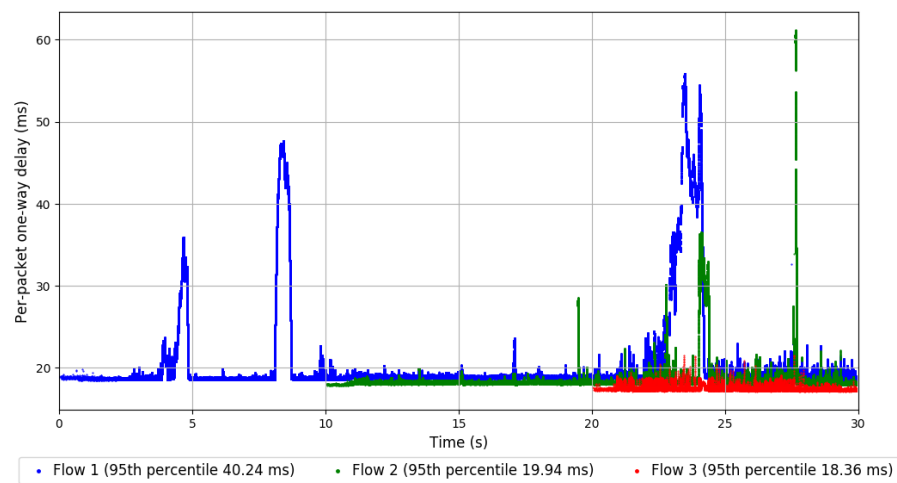
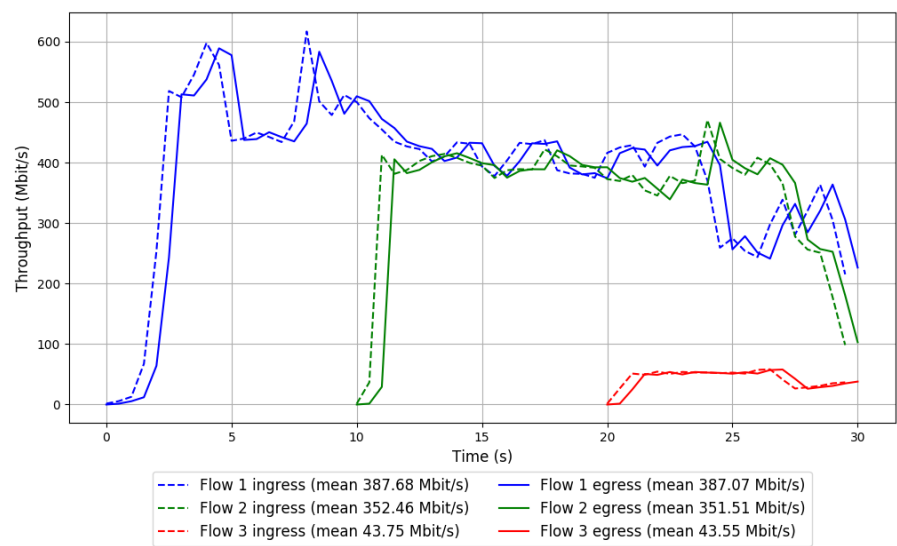
Average throughput: 43.55 Mbit/s

95th percentile per-packet one-way delay: 18.363 ms

Loss rate: 0.46%



Run 9: Report of PCC-Vivace — Data Link

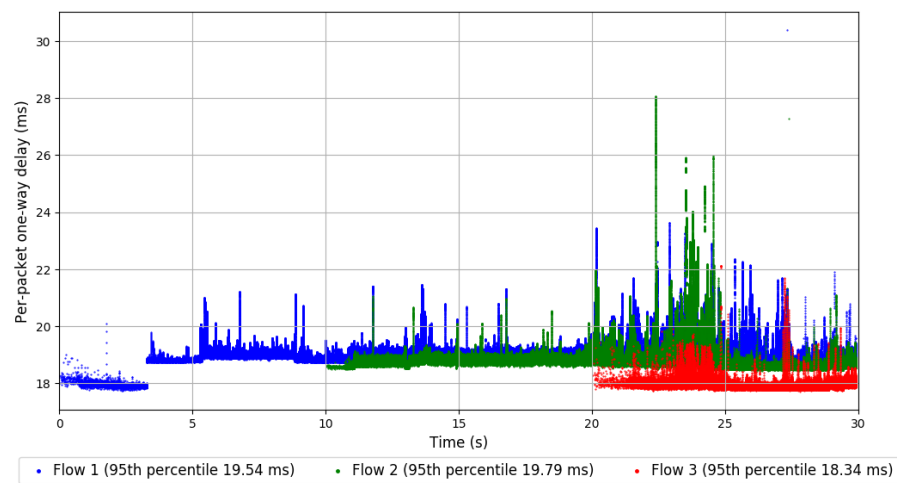
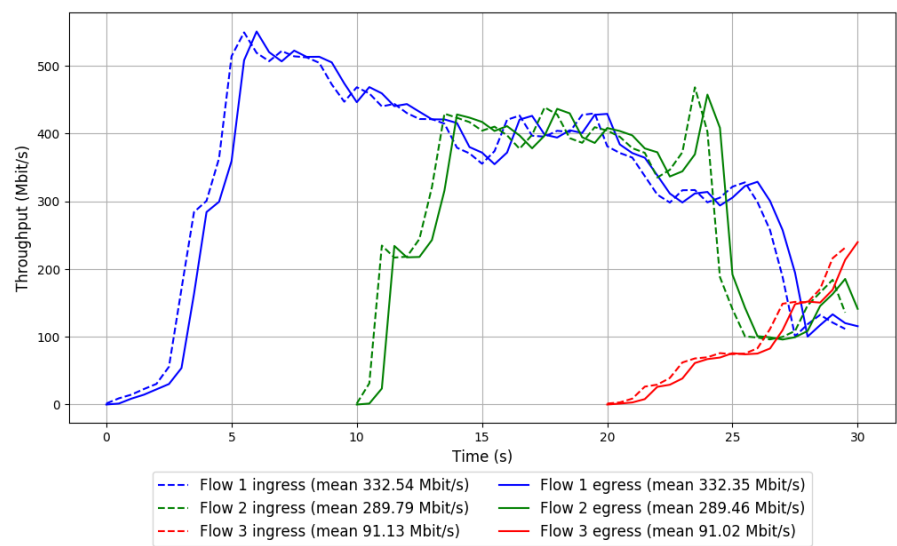


Run 10: Statistics of PCC-Vivace

Start at: 2018-06-18 20:11:57  
End at: 2018-06-18 20:12:27  
Local clock offset: 3.77 ms  
Remote clock offset: -4.424 ms

# Below is generated by plot.py at 2018-06-18 22:47:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 554.92 Mbit/s  
95th percentile per-packet one-way delay: 19.572 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 332.35 Mbit/s  
95th percentile per-packet one-way delay: 19.543 ms  
Loss rate: 0.06%  
-- Flow 2:  
Average throughput: 289.46 Mbit/s  
95th percentile per-packet one-way delay: 19.790 ms  
Loss rate: 0.12%  
-- Flow 3:  
Average throughput: 91.02 Mbit/s  
95th percentile per-packet one-way delay: 18.337 ms  
Loss rate: 0.14%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-06-18 16:30:23

End at: 2018-06-18 16:30:53

Local clock offset: 4.598 ms

Remote clock offset: 0.422 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 20.527 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 20.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 19.506 ms

Loss rate: 0.00%

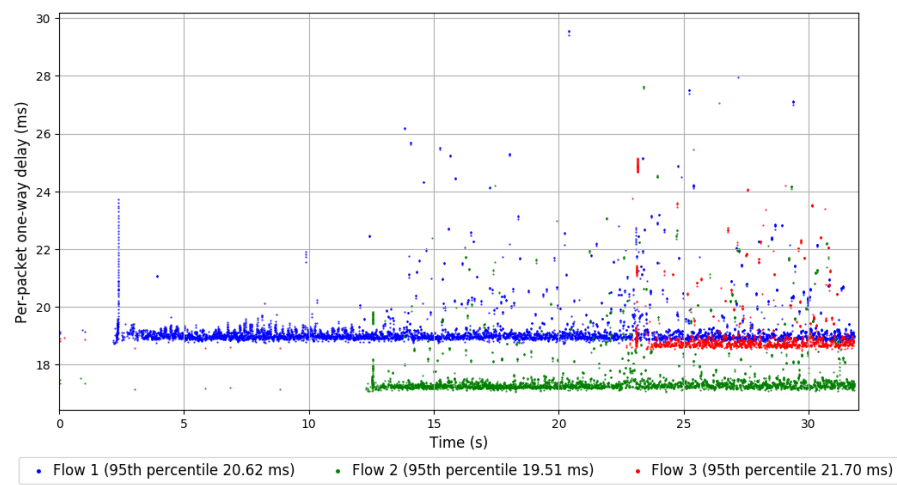
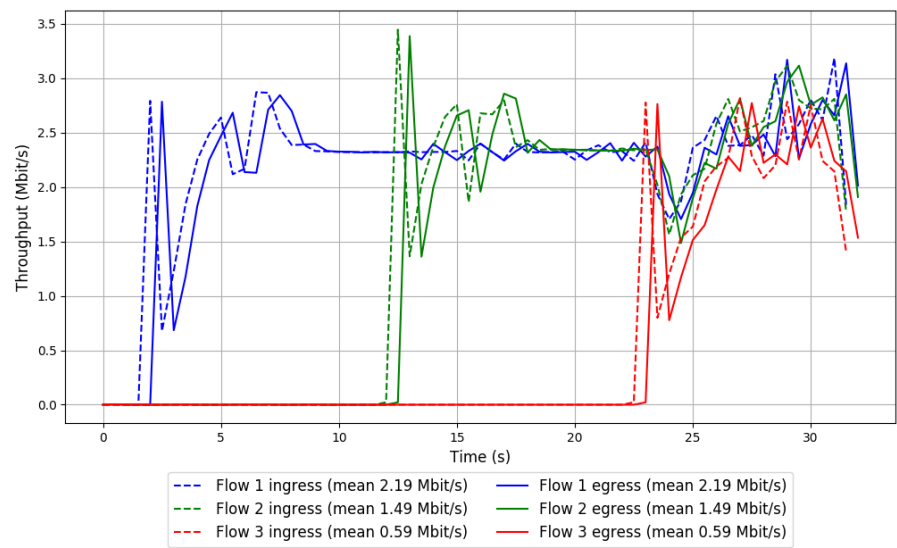
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 21.703 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-18 16:56:06

End at: 2018-06-18 16:56:36

Local clock offset: 4.581 ms

Remote clock offset: 0.473 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 20.068 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 19.611 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 20.647 ms

Loss rate: 0.00%

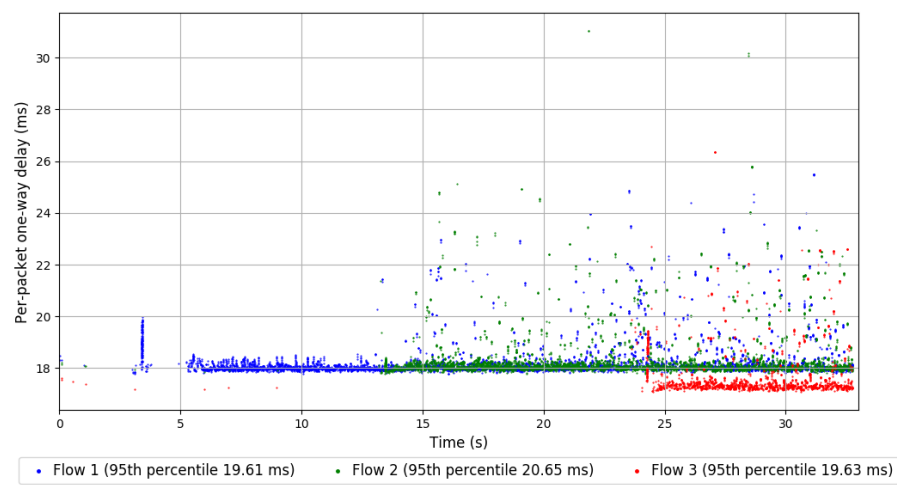
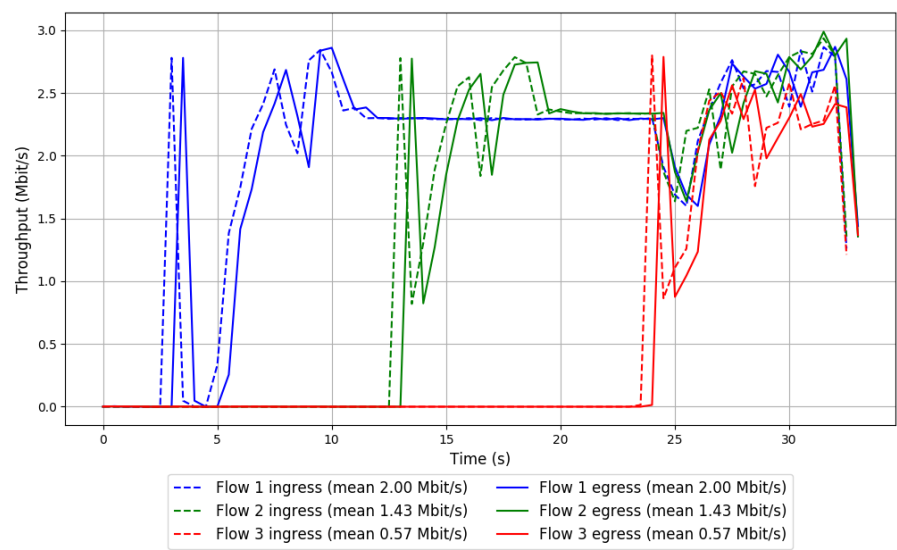
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 19.628 ms

Loss rate: 0.05%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-06-18 17:21:54

End at: 2018-06-18 17:22:24

Local clock offset: 3.763 ms

Remote clock offset: 0.555 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 20.925 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 19.987 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 21.072 ms

Loss rate: 0.00%

-- Flow 3:

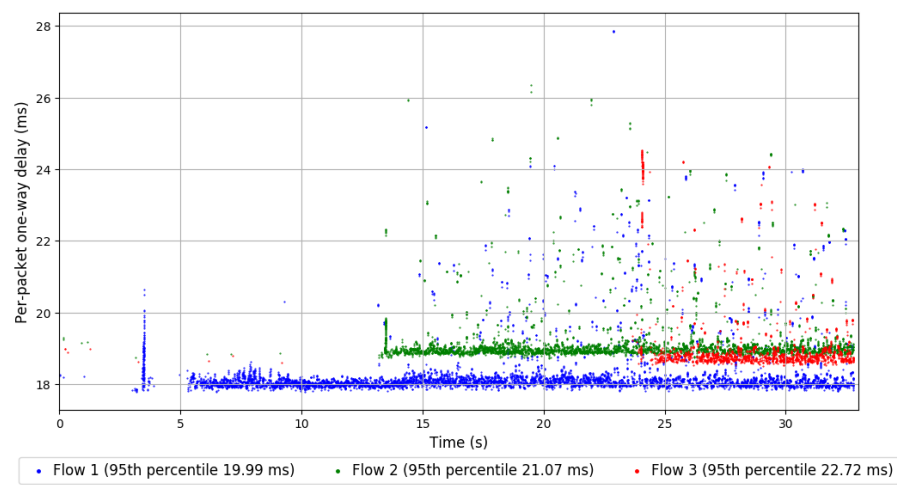
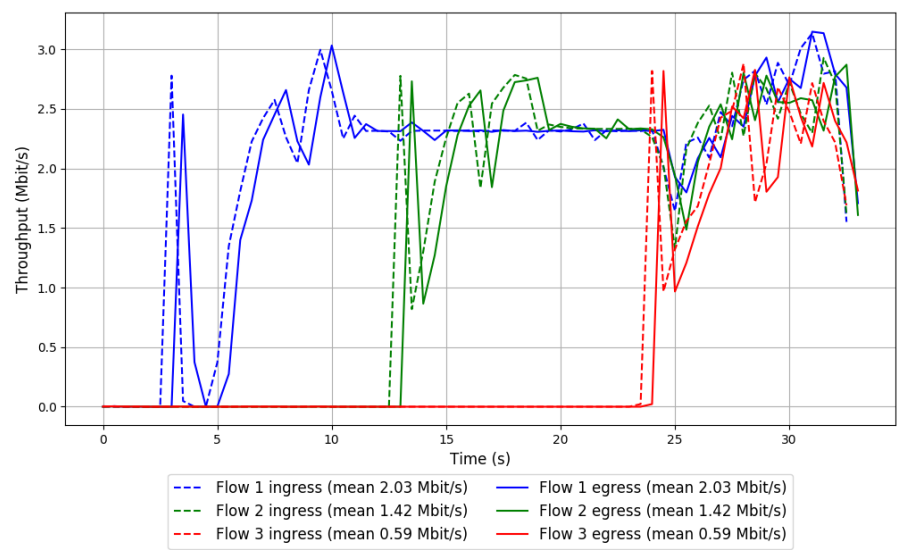
Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 22.724 ms

Loss rate: 0.00%



Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-06-18 17:47:27

End at: 2018-06-18 17:47:57

Local clock offset: 3.759 ms

Remote clock offset: 0.409 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 20.264 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 20.556 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 20.057 ms

Loss rate: 0.00%

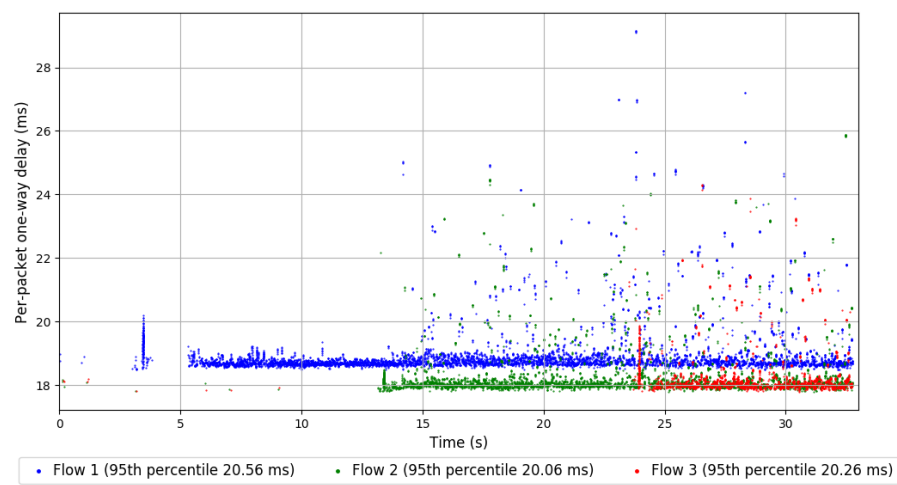
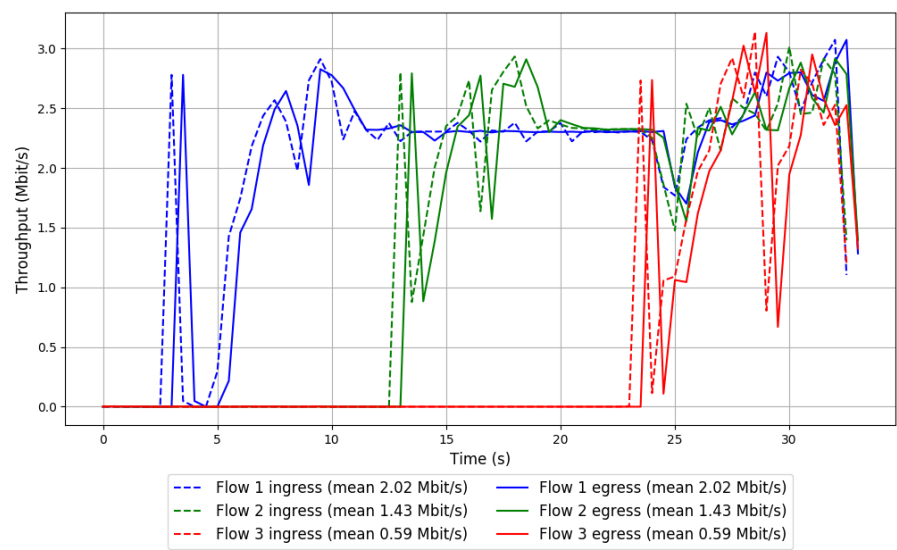
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 20.259 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-06-18 18:12:56

End at: 2018-06-18 18:13:26

Local clock offset: 3.792 ms

Remote clock offset: 3.93 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 20.267 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 19.526 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 20.987 ms

Loss rate: 0.00%

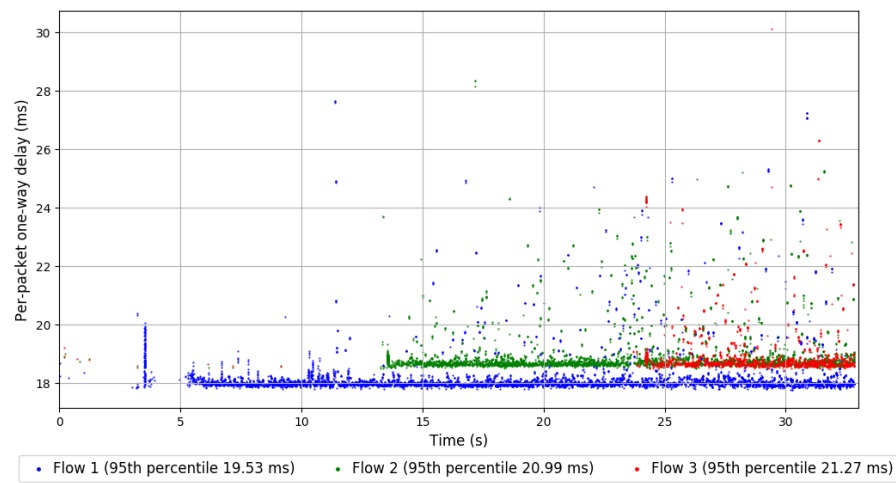
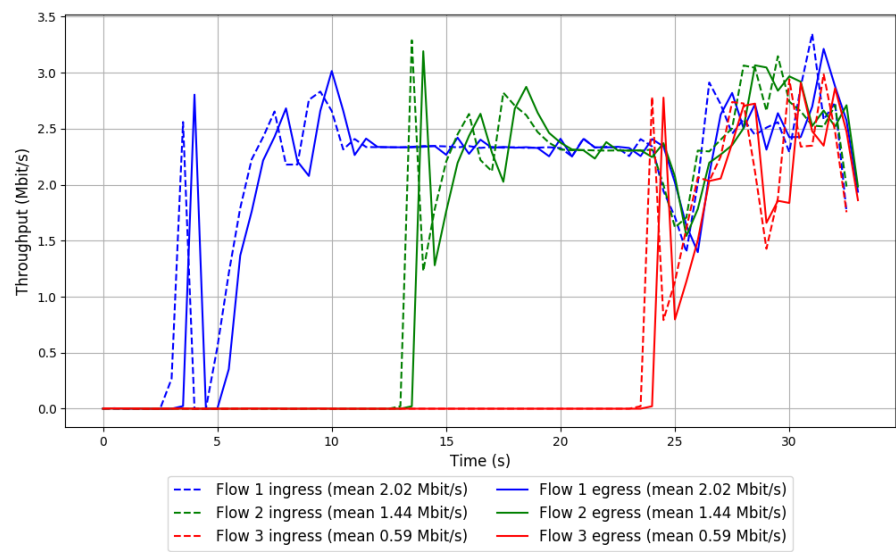
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 21.270 ms

Loss rate: 0.05%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-06-18 18:38:30

End at: 2018-06-18 18:39:00

Local clock offset: 3.778 ms

Remote clock offset: 5.53 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 20.387 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 19.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 20.901 ms

Loss rate: 0.00%

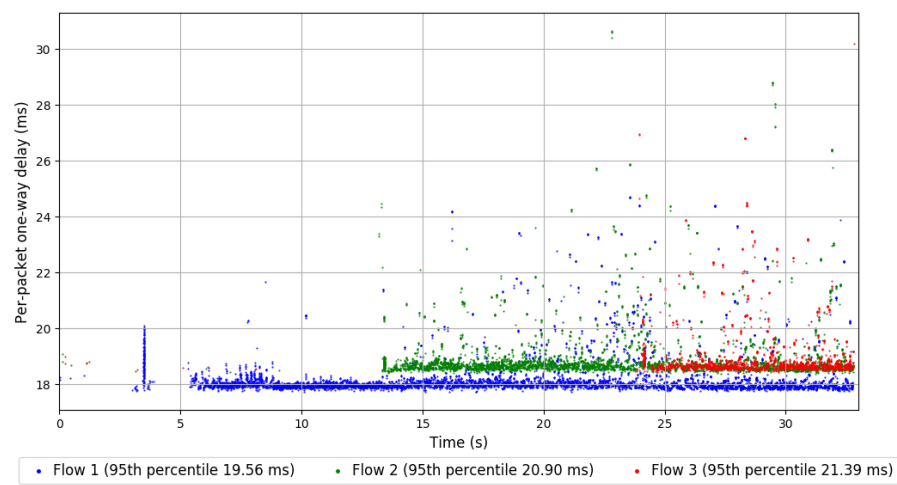
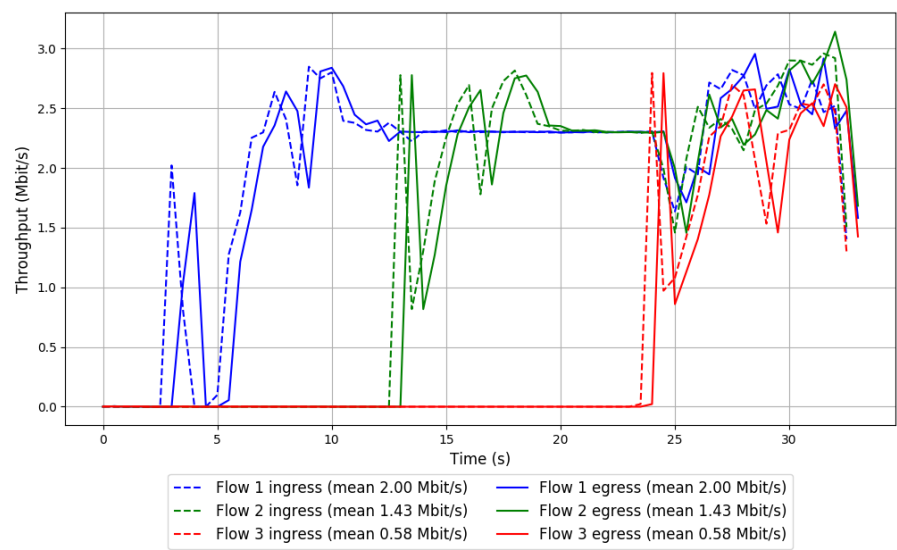
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 21.389 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-06-18 19:03:50

End at: 2018-06-18 19:04:20

Local clock offset: 3.75 ms

Remote clock offset: 3.749 ms

# Below is generated by plot.py at 2018-06-18 22:47:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 20.241 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 19.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 20.390 ms

Loss rate: 0.00%

-- Flow 3:

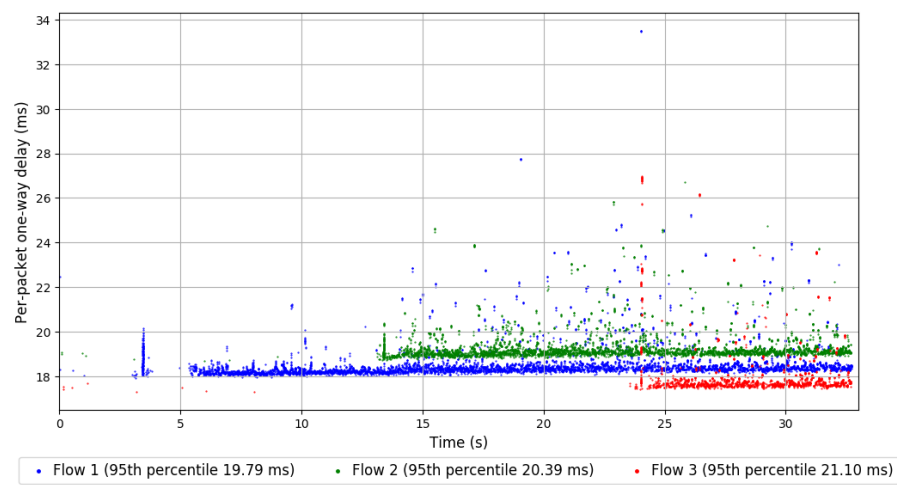
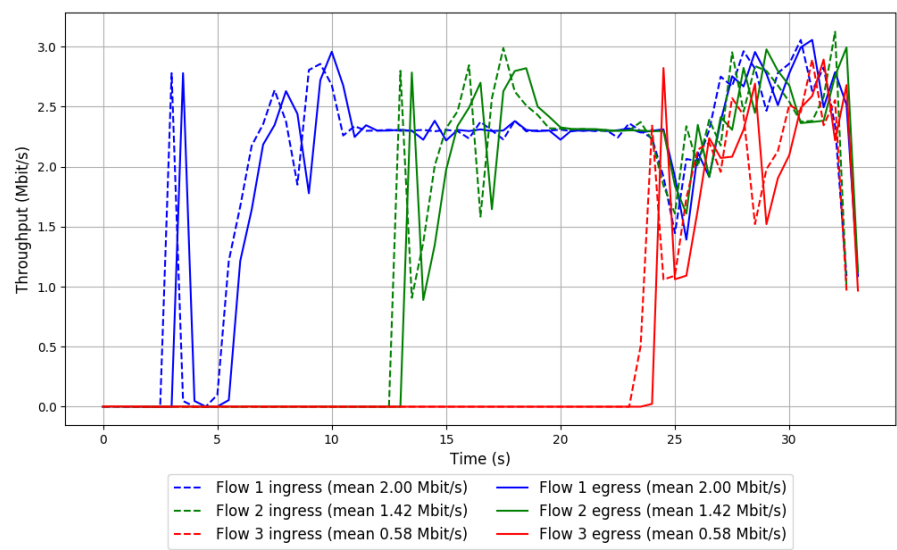
Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 21.096 ms

Loss rate: 0.00%



Run 7: Report of WebRTC media — Data Link

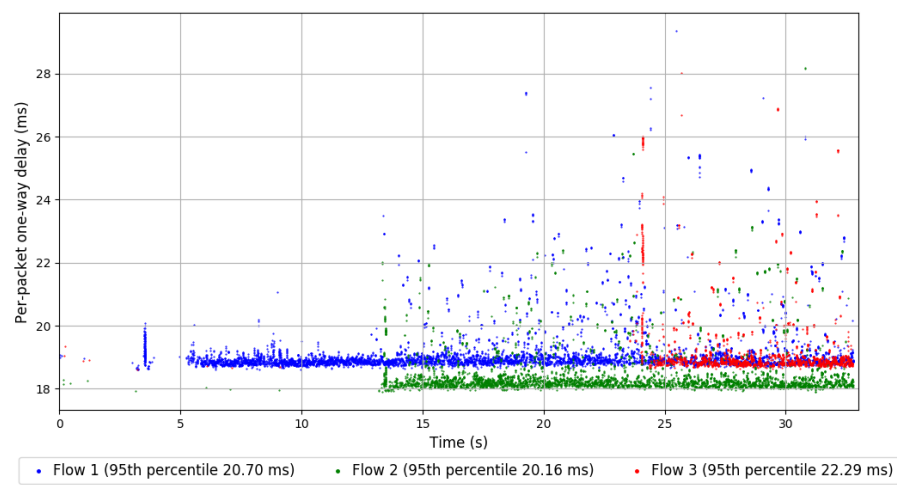
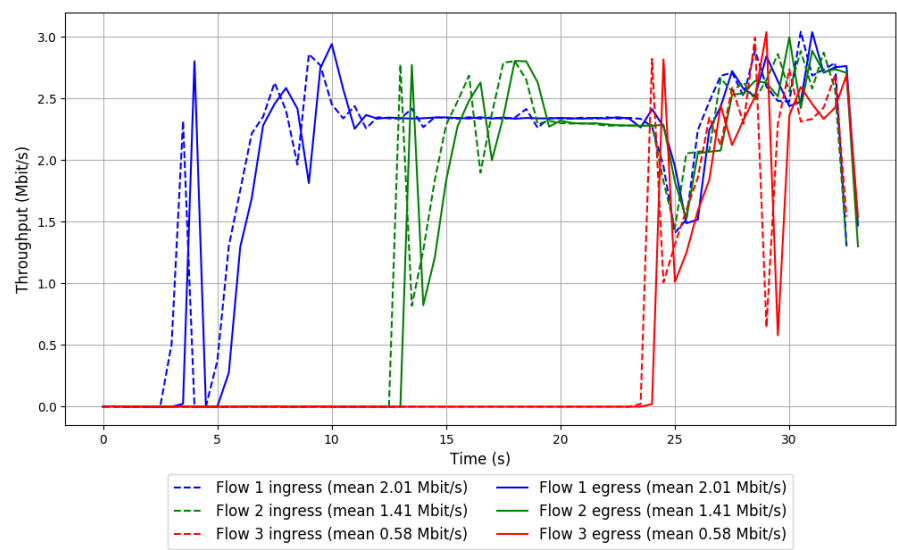


Run 8: Statistics of WebRTC media

Start at: 2018-06-18 19:28:54  
End at: 2018-06-18 19:29:24  
Local clock offset: 3.782 ms  
Remote clock offset: -1.757 ms

# Below is generated by plot.py at 2018-06-18 22:47:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.00 Mbit/s  
95th percentile per-packet one-way delay: 20.741 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.01 Mbit/s  
95th percentile per-packet one-way delay: 20.700 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.41 Mbit/s  
95th percentile per-packet one-way delay: 20.155 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 22.287 ms  
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

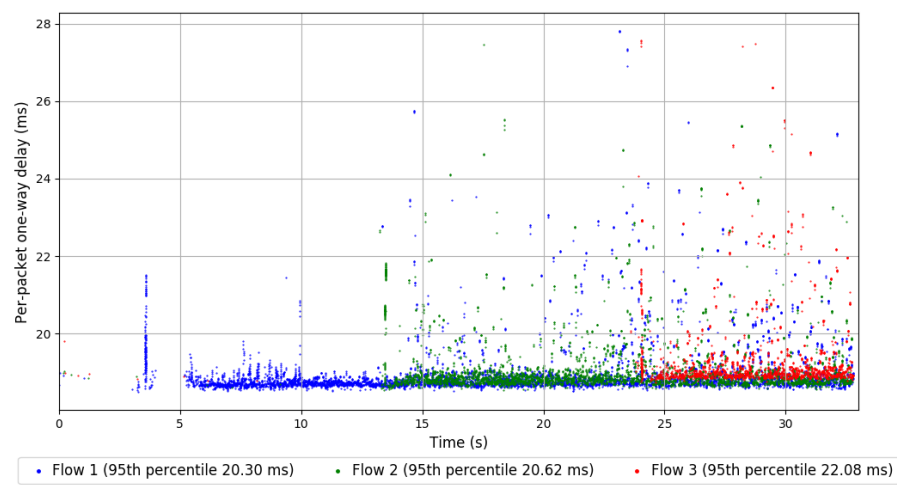
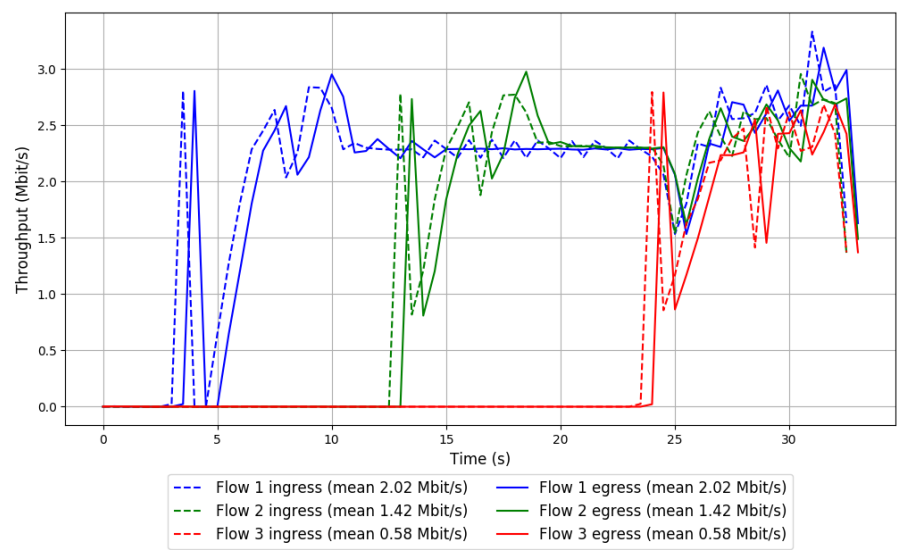


Run 9: Statistics of WebRTC media

Start at: 2018-06-18 19:54:16  
End at: 2018-06-18 19:54:46  
Local clock offset: 3.931 ms  
Remote clock offset: -4.293 ms

# Below is generated by plot.py at 2018-06-18 22:47:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.00 Mbit/s  
95th percentile per-packet one-way delay: 20.693 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.02 Mbit/s  
95th percentile per-packet one-way delay: 20.302 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.42 Mbit/s  
95th percentile per-packet one-way delay: 20.622 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 22.082 ms  
Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-18 20:19:38  
End at: 2018-06-18 20:20:08  
Local clock offset: 3.667 ms  
Remote clock offset: -3.738 ms

# Below is generated by plot.py at 2018-06-18 22:47:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.97 Mbit/s  
95th percentile per-packet one-way delay: 20.794 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 2.00 Mbit/s  
95th percentile per-packet one-way delay: 20.194 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 1.41 Mbit/s  
95th percentile per-packet one-way delay: 21.008 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 21.824 ms  
Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

