

Pantheon Report

Generated at 2018-05-22 09:50:09 (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.

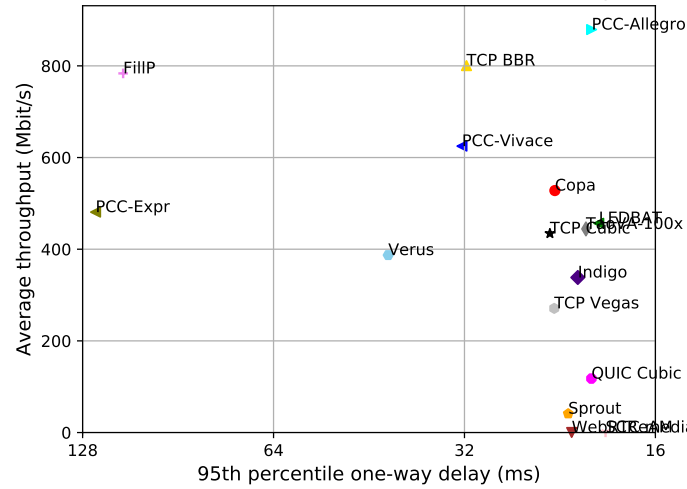
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

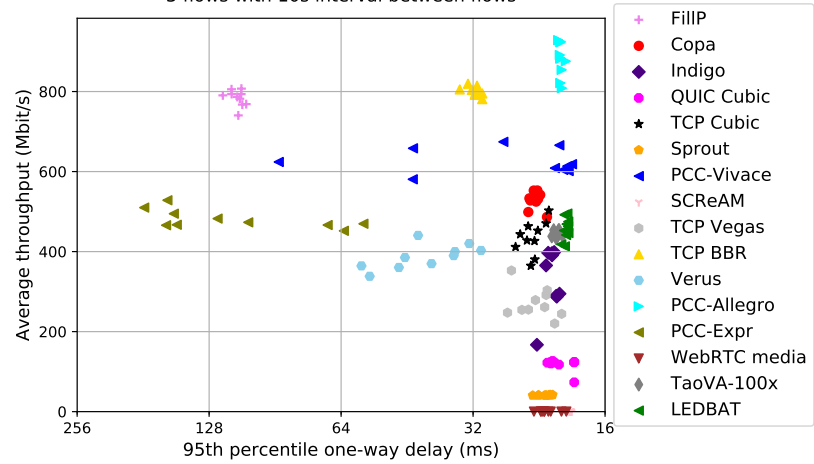
Git summary:

```
branch: master @ 2d1d4407e851ba626e5ca4626a306105793df686
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-quirk @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
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 Ethernet to Stanford Ethernet, 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 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	467.67	352.24	295.33	32.97	25.55	20.36	5.75	9.62	12.12
Copa	10	285.23	252.05	225.16	22.21	23.10	24.48	0.01	0.03	0.03
TCP Cubic	10	233.03	206.73	191.11	23.02	24.58	23.06	0.09	0.12	0.12
FillP	10	470.27	348.48	256.17	110.16	100.95	125.67	12.10	18.80	21.05
Indigo	10	158.81	185.62	172.62	21.47	21.11	20.90	0.00	0.01	0.01
LEDBAT	10	279.21	194.76	143.27	19.65	19.62	19.56	0.02	0.04	0.06
PCC-Allegro	10	759.22	144.23	73.13	20.13	19.52	19.94	0.30	0.32	0.38
PCC-Expr	10	284.90	249.17	91.84	105.55	140.51	26.90	0.17	0.91	0.09
QUIC Cubic	10	60.94	58.98	53.35	19.36	19.92	21.41	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.22	18.96	18.70	18.88	0.00	0.00	0.00
Sprout	10	20.56	20.87	20.41	21.90	21.68	22.23	0.01	0.01	0.01
TaoVA-100x	10	232.42	224.57	187.24	19.49	20.52	22.21	0.00	0.01	0.01
TCP Vegas	10	137.39	114.67	171.80	21.94	21.51	24.92	0.03	0.13	0.13
Verus	10	193.93	198.80	186.52	42.81	44.03	38.85	19.90	22.20	20.18
PCC-Vivace	10	378.53	325.99	89.50	33.11	37.25	19.99	0.18	0.41	0.33
WebRTC media	10	0.05	0.05	0.05	21.32	21.36	21.19	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-05-22 03:32:53

End at: 2018-05-22 03:33:23

Local clock offset: 0.238 ms

Remote clock offset: 0.272 ms

Below is generated by plot.py at 2018-05-22 07:52:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 791.93 Mbit/s

95th percentile per-packet one-way delay: 31.711 ms

Loss rate: 7.55%

-- Flow 1:

Average throughput: 454.83 Mbit/s

95th percentile per-packet one-way delay: 32.691 ms

Loss rate: 5.64%

-- Flow 2:

Average throughput: 356.40 Mbit/s

95th percentile per-packet one-way delay: 26.610 ms

Loss rate: 9.67%

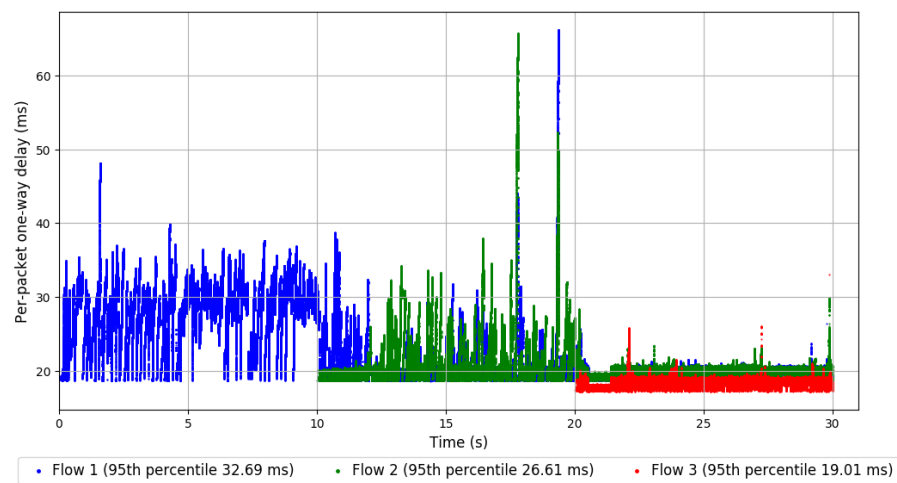
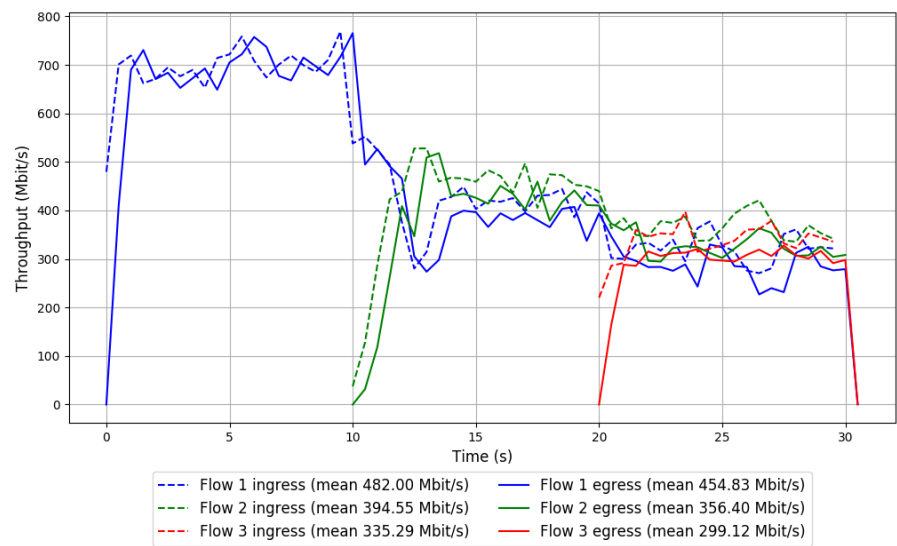
-- Flow 3:

Average throughput: 299.12 Mbit/s

95th percentile per-packet one-way delay: 19.009 ms

Loss rate: 10.79%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-05-22 03:58:40

End at: 2018-05-22 03:59:10

Local clock offset: 0.396 ms

Remote clock offset: 0.982 ms

Below is generated by plot.py at 2018-05-22 07:53:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 819.57 Mbit/s

95th percentile per-packet one-way delay: 32.867 ms

Loss rate: 7.49%

-- Flow 1:

Average throughput: 473.86 Mbit/s

95th percentile per-packet one-way delay: 33.654 ms

Loss rate: 5.63%

-- Flow 2:

Average throughput: 350.96 Mbit/s

95th percentile per-packet one-way delay: 26.162 ms

Loss rate: 9.43%

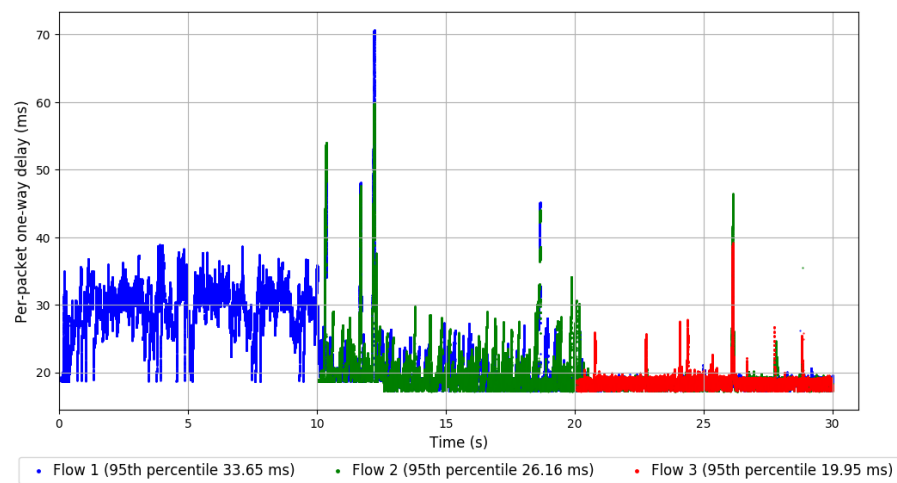
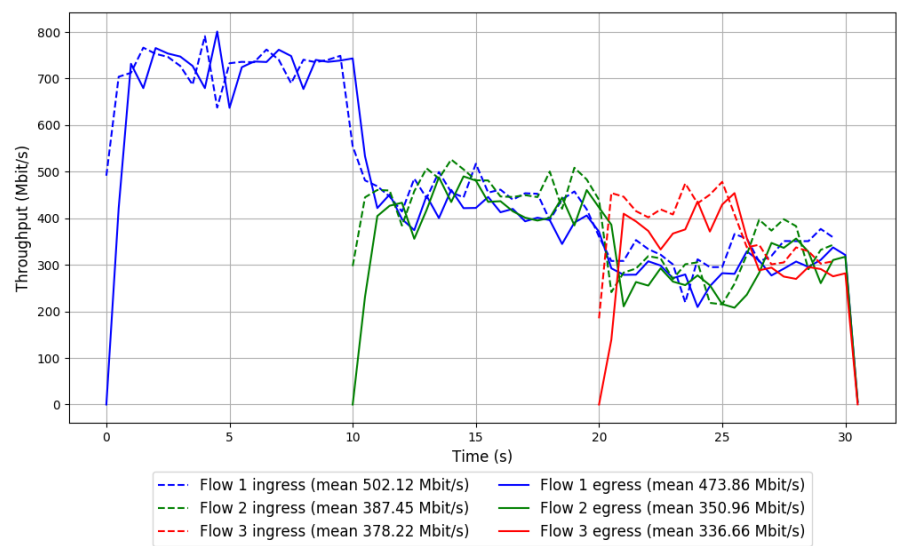
-- Flow 3:

Average throughput: 336.66 Mbit/s

95th percentile per-packet one-way delay: 19.954 ms

Loss rate: 10.98%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-05-22 04:24:15

End at: 2018-05-22 04:24:45

Local clock offset: 0.383 ms

Remote clock offset: 0.581 ms

Below is generated by plot.py at 2018-05-22 07:53:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 805.33 Mbit/s

95th percentile per-packet one-way delay: 34.323 ms

Loss rate: 8.36%

-- Flow 1:

Average throughput: 468.25 Mbit/s

95th percentile per-packet one-way delay: 35.251 ms

Loss rate: 6.32%

-- Flow 2:

Average throughput: 350.23 Mbit/s

95th percentile per-packet one-way delay: 25.632 ms

Loss rate: 10.53%

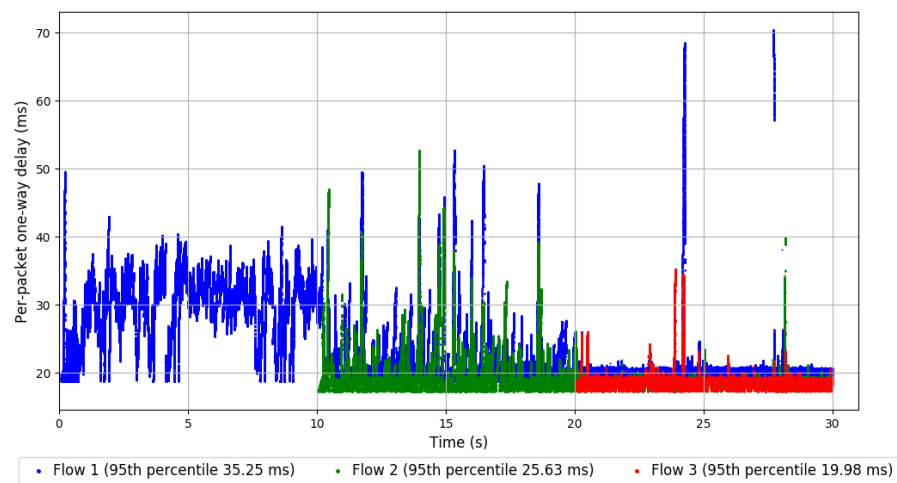
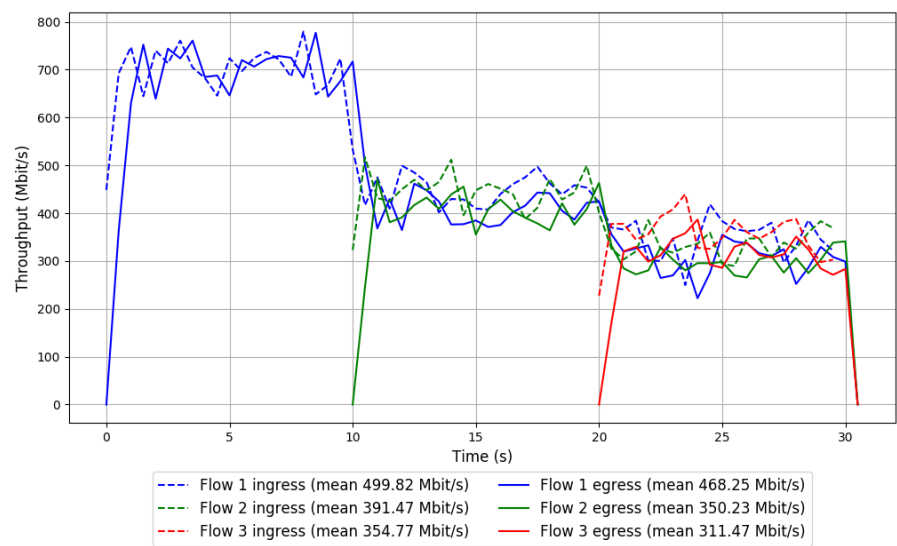
-- Flow 3:

Average throughput: 311.47 Mbit/s

95th percentile per-packet one-way delay: 19.980 ms

Loss rate: 12.21%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-05-22 04:49:52

End at: 2018-05-22 04:50:22

Local clock offset: 0.759 ms

Remote clock offset: 0.235 ms

Below is generated by plot.py at 2018-05-22 07:53:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 804.52 Mbit/s

95th percentile per-packet one-way delay: 31.362 ms

Loss rate: 7.49%

-- Flow 1:

Average throughput: 473.31 Mbit/s

95th percentile per-packet one-way delay: 32.408 ms

Loss rate: 5.10%

-- Flow 2:

Average throughput: 340.10 Mbit/s

95th percentile per-packet one-way delay: 25.037 ms

Loss rate: 10.24%

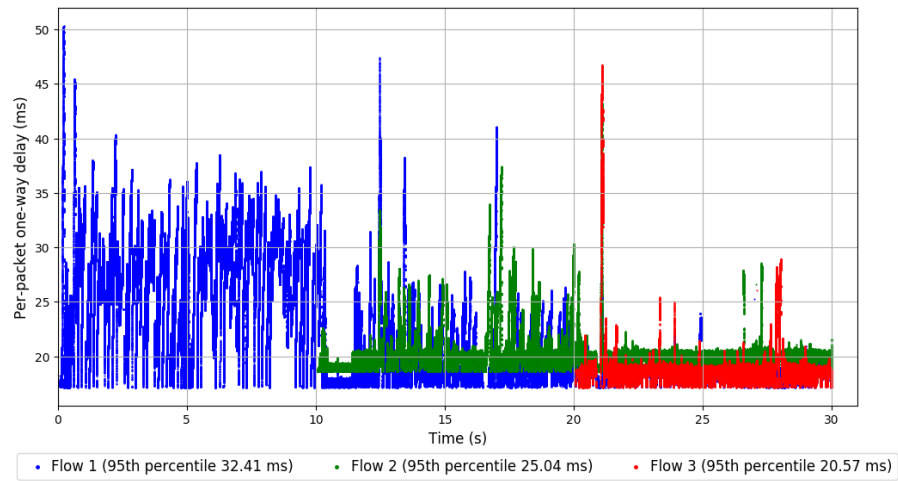
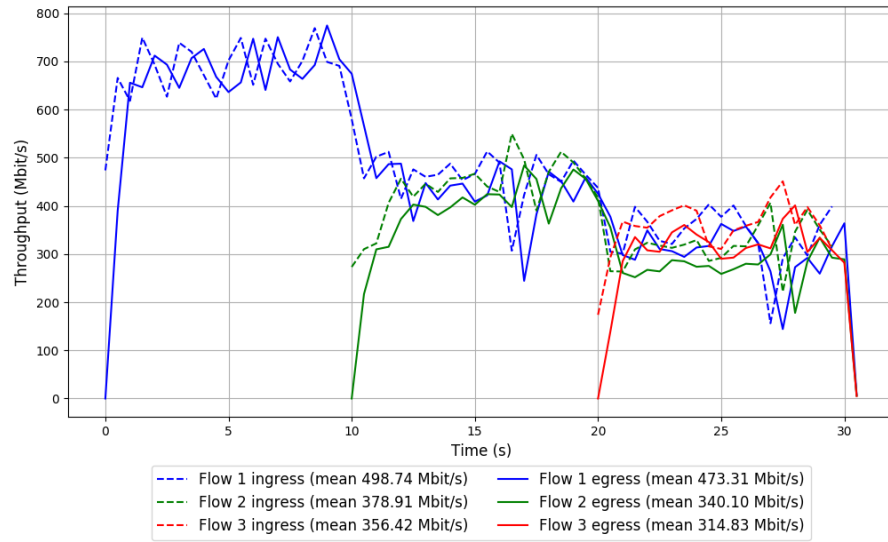
-- Flow 3:

Average throughput: 314.83 Mbit/s

95th percentile per-packet one-way delay: 20.565 ms

Loss rate: 11.66%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-05-22 05:15:23

End at: 2018-05-22 05:15:53

Local clock offset: 0.333 ms

Remote clock offset: 0.173 ms

Below is generated by plot.py at 2018-05-22 07:53:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 804.00 Mbit/s

95th percentile per-packet one-way delay: 32.217 ms

Loss rate: 7.77%

-- Flow 1:

Average throughput: 475.10 Mbit/s

95th percentile per-packet one-way delay: 33.626 ms

Loss rate: 5.65%

-- Flow 2:

Average throughput: 360.57 Mbit/s

95th percentile per-packet one-way delay: 25.067 ms

Loss rate: 9.72%

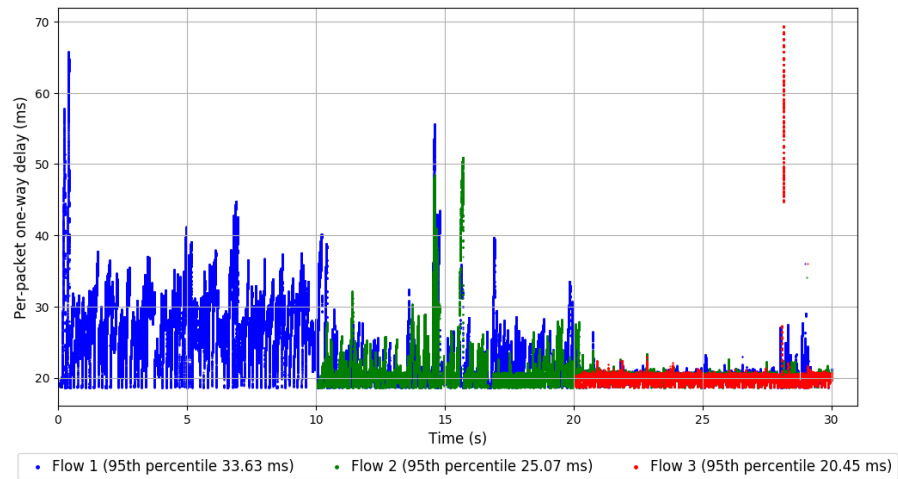
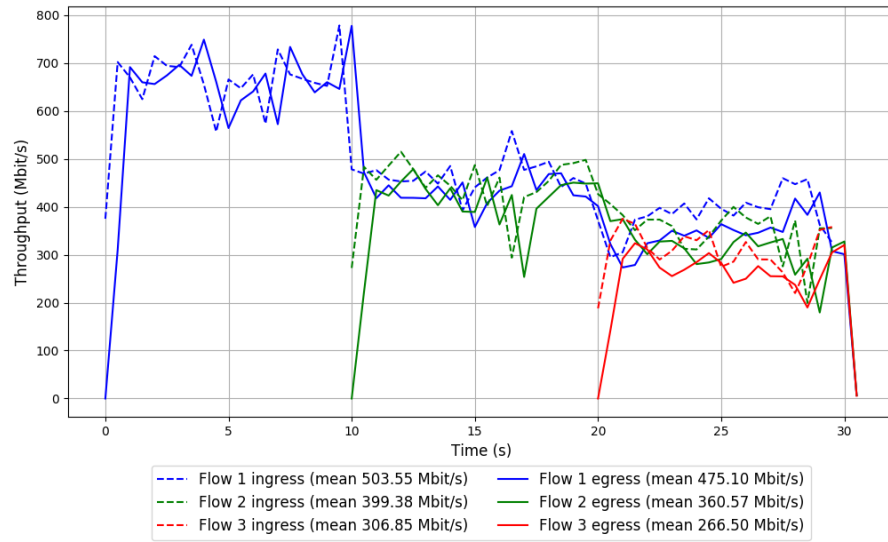
-- Flow 3:

Average throughput: 266.50 Mbit/s

95th percentile per-packet one-way delay: 20.447 ms

Loss rate: 13.15%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-05-22 05:40:56

End at: 2018-05-22 05:41:26

Local clock offset: 0.259 ms

Remote clock offset: 0.105 ms

Below is generated by plot.py at 2018-05-22 07:53:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 795.47 Mbit/s

95th percentile per-packet one-way delay: 31.669 ms

Loss rate: 7.81%

-- Flow 1:

Average throughput: 472.40 Mbit/s

95th percentile per-packet one-way delay: 32.710 ms

Loss rate: 5.91%

-- Flow 2:

Average throughput: 341.17 Mbit/s

95th percentile per-packet one-way delay: 25.238 ms

Loss rate: 9.30%

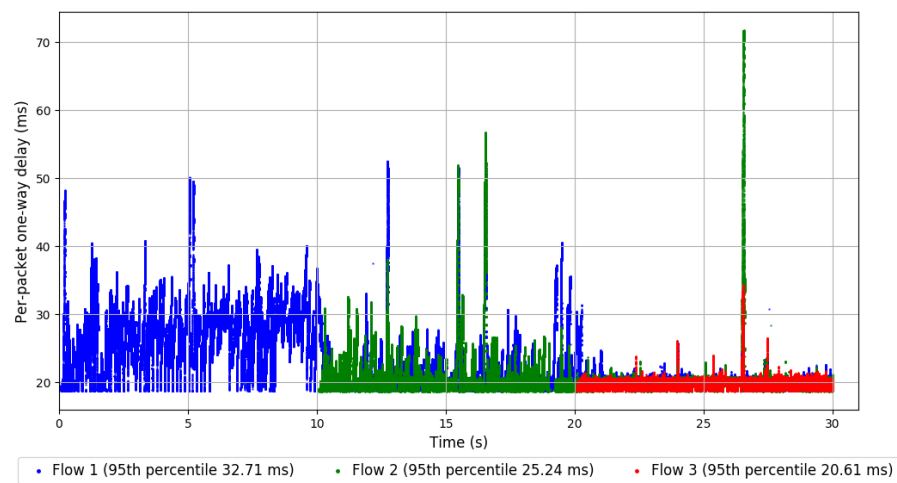
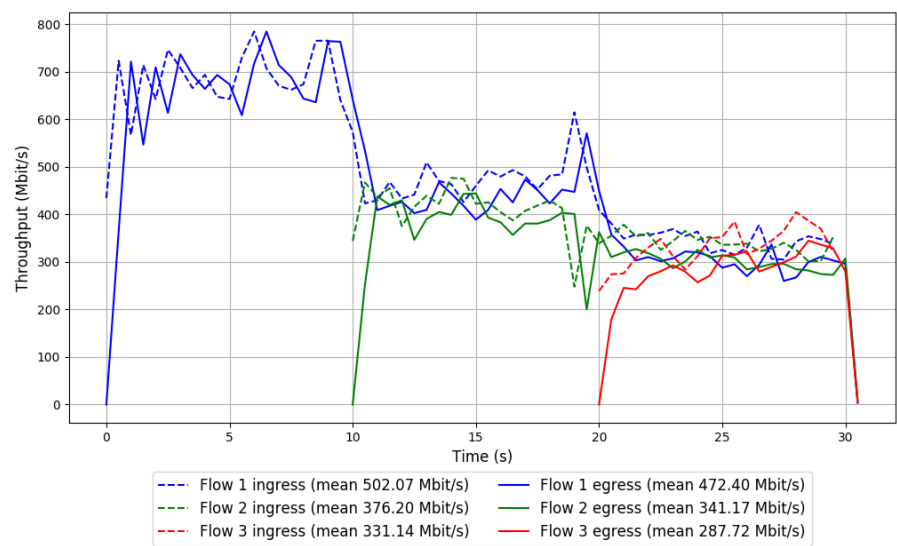
-- Flow 3:

Average throughput: 287.72 Mbit/s

95th percentile per-packet one-way delay: 20.610 ms

Loss rate: 13.10%

Run 6: Report of TCP BBR — Data Link

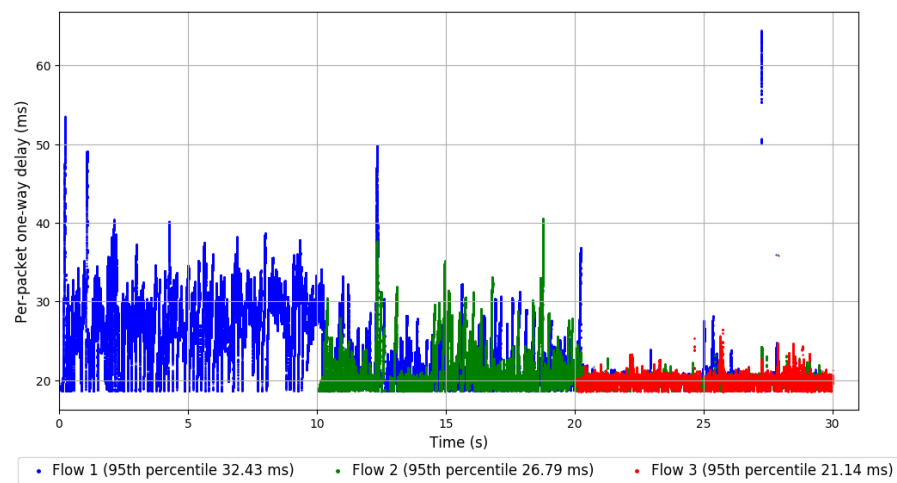
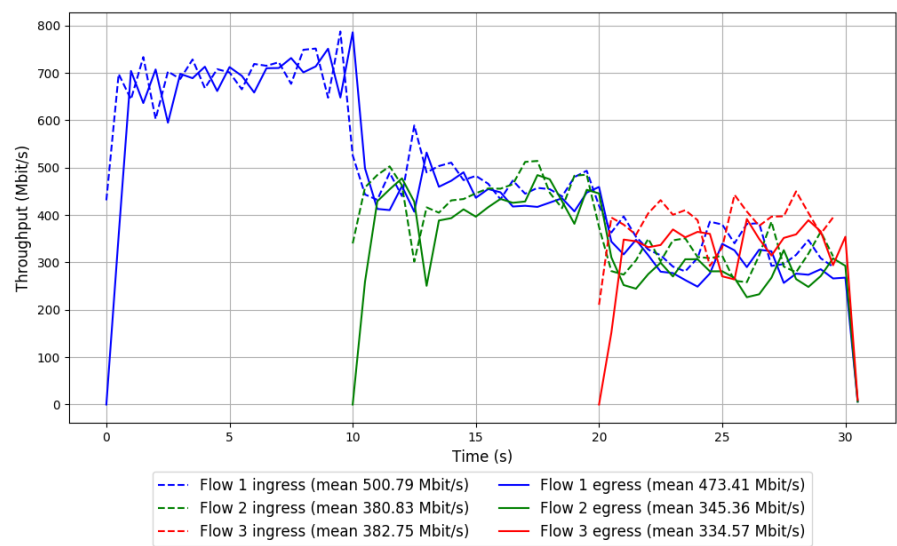


Run 7: Statistics of TCP BBR

Start at: 2018-05-22 06:06:27
End at: 2018-05-22 06:06:57
Local clock offset: 0.038 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2018-05-22 07:53:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 814.73 Mbit/s
95th percentile per-packet one-way delay: 31.344 ms
Loss rate: 7.60%
-- Flow 1:
Average throughput: 473.41 Mbit/s
95th percentile per-packet one-way delay: 32.426 ms
Loss rate: 5.46%
-- Flow 2:
Average throughput: 345.36 Mbit/s
95th percentile per-packet one-way delay: 26.791 ms
Loss rate: 9.31%
-- Flow 3:
Average throughput: 334.57 Mbit/s
95th percentile per-packet one-way delay: 21.135 ms
Loss rate: 12.57%

Run 7: Report of TCP BBR — Data Link

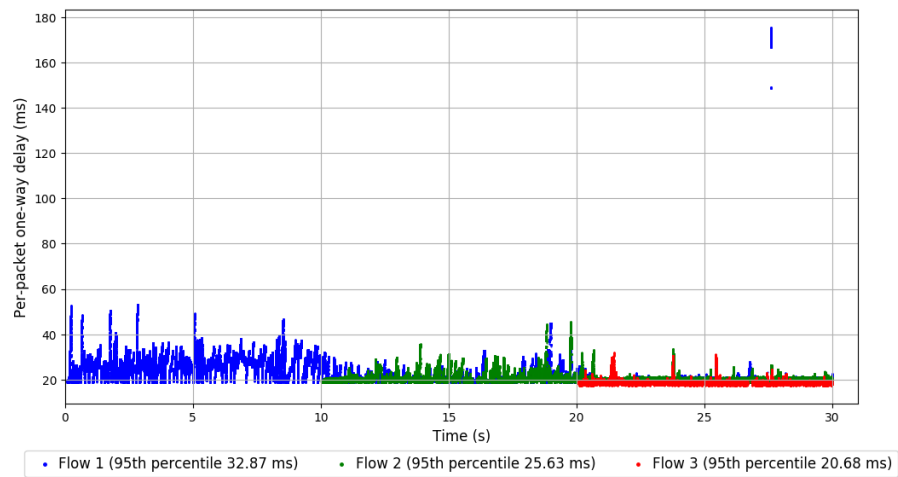
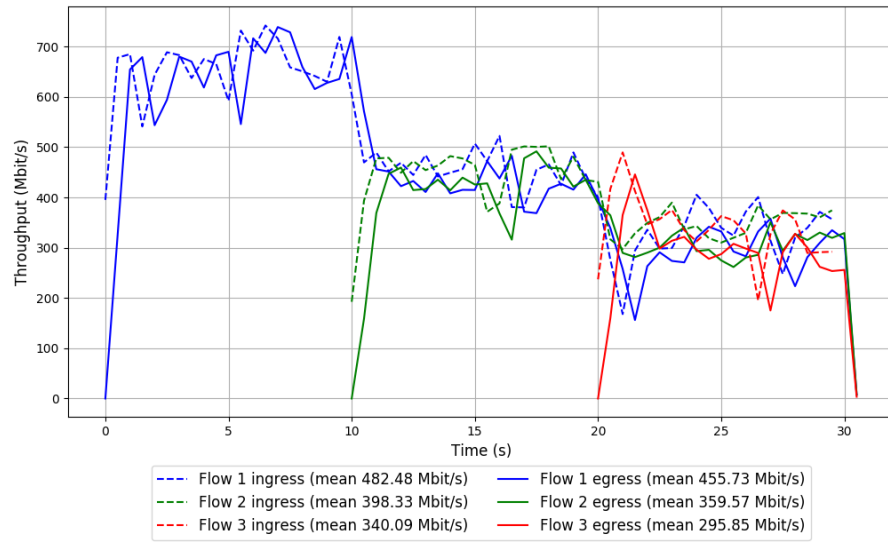


Run 8: Statistics of TCP BBR

Start at: 2018-05-22 06:31:58
End at: 2018-05-22 06:32:28
Local clock offset: -0.085 ms
Remote clock offset: -0.203 ms

Below is generated by plot.py at 2018-05-22 07:53:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 793.79 Mbit/s
95th percentile per-packet one-way delay: 31.170 ms
Loss rate: 7.81%
-- Flow 1:
Average throughput: 455.73 Mbit/s
95th percentile per-packet one-way delay: 32.865 ms
Loss rate: 5.54%
-- Flow 2:
Average throughput: 359.57 Mbit/s
95th percentile per-packet one-way delay: 25.630 ms
Loss rate: 9.73%
-- Flow 3:
Average throughput: 295.85 Mbit/s
95th percentile per-packet one-way delay: 20.678 ms
Loss rate: 13.02%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-05-22 06:57:27

End at: 2018-05-22 06:57:57

Local clock offset: 0.098 ms

Remote clock offset: 0.57 ms

Below is generated by plot.py at 2018-05-22 08:02:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 795.28 Mbit/s

95th percentile per-packet one-way delay: 30.489 ms

Loss rate: 7.34%

-- Flow 1:

Average throughput: 468.09 Mbit/s

95th percentile per-packet one-way delay: 31.815 ms

Loss rate: 5.55%

-- Flow 2:

Average throughput: 380.87 Mbit/s

95th percentile per-packet one-way delay: 24.888 ms

Loss rate: 9.02%

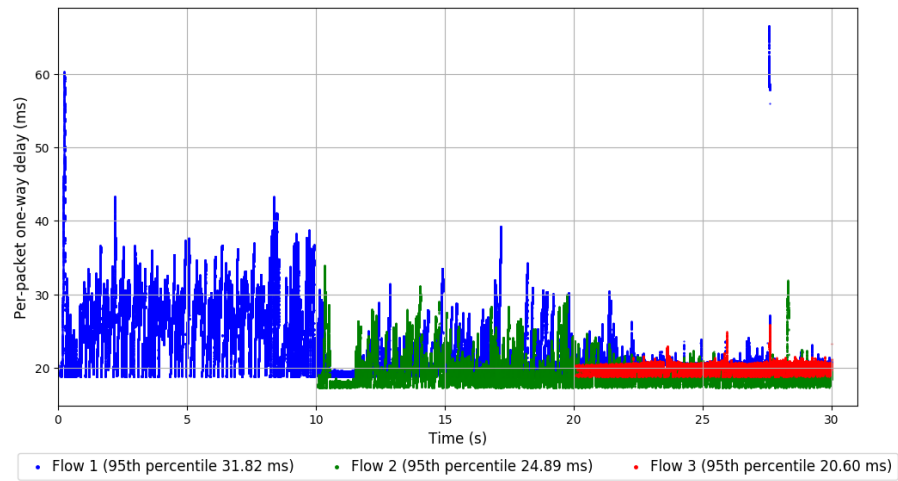
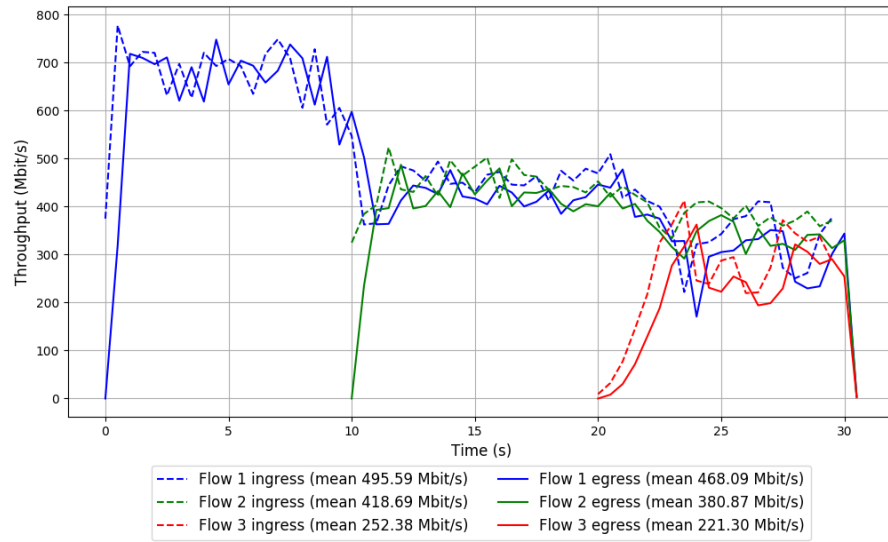
-- Flow 3:

Average throughput: 221.30 Mbit/s

95th percentile per-packet one-way delay: 20.601 ms

Loss rate: 12.28%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-05-22 07:22:56

End at: 2018-05-22 07:23:26

Local clock offset: 0.809 ms

Remote clock offset: 1.515 ms

Below is generated by plot.py at 2018-05-22 08:02:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 781.09 Mbit/s

95th percentile per-packet one-way delay: 30.507 ms

Loss rate: 8.02%

-- Flow 1:

Average throughput: 461.71 Mbit/s

95th percentile per-packet one-way delay: 32.288 ms

Loss rate: 6.69%

-- Flow 2:

Average throughput: 337.16 Mbit/s

95th percentile per-packet one-way delay: 24.471 ms

Loss rate: 9.21%

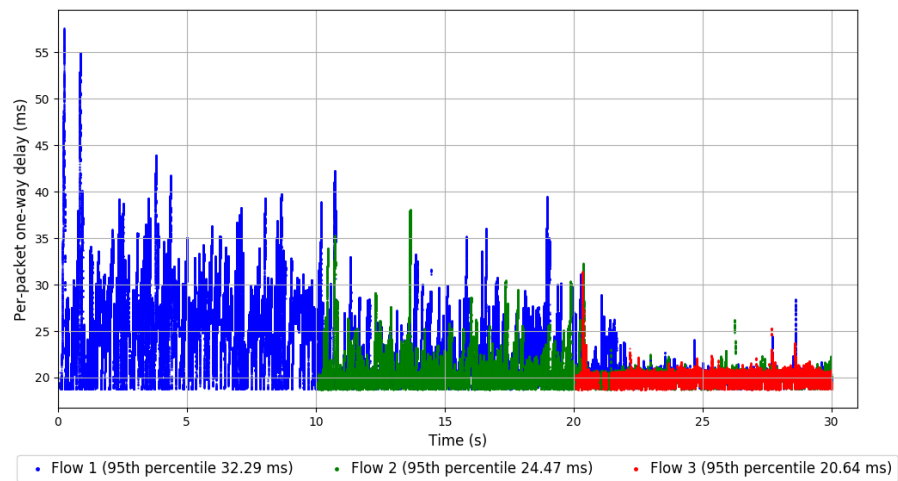
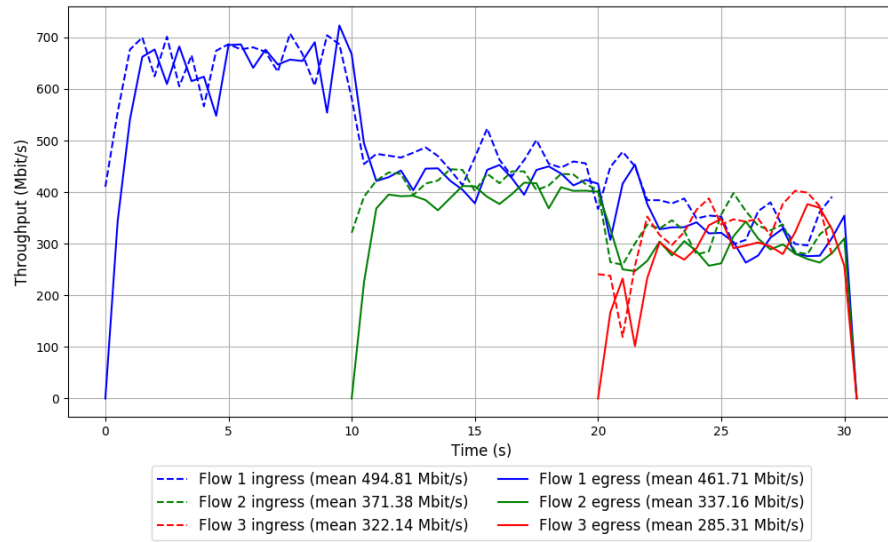
-- Flow 3:

Average throughput: 285.31 Mbit/s

95th percentile per-packet one-way delay: 20.644 ms

Loss rate: 11.44%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-05-22 03:20:18

End at: 2018-05-22 03:20:48

Local clock offset: 0.148 ms

Remote clock offset: 0.027 ms

Below is generated by plot.py at 2018-05-22 08:04:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 541.80 Mbit/s

95th percentile per-packet one-way delay: 22.496 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 293.20 Mbit/s

95th percentile per-packet one-way delay: 21.010 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 257.32 Mbit/s

95th percentile per-packet one-way delay: 23.682 ms

Loss rate: 0.02%

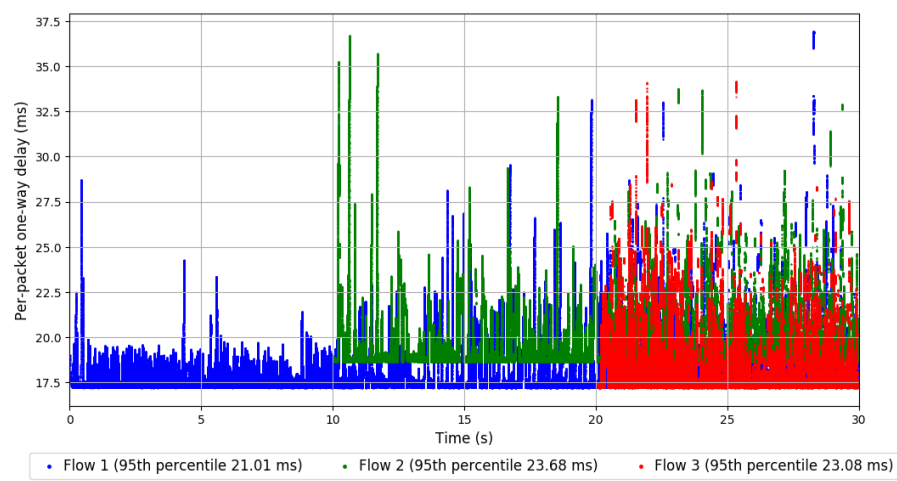
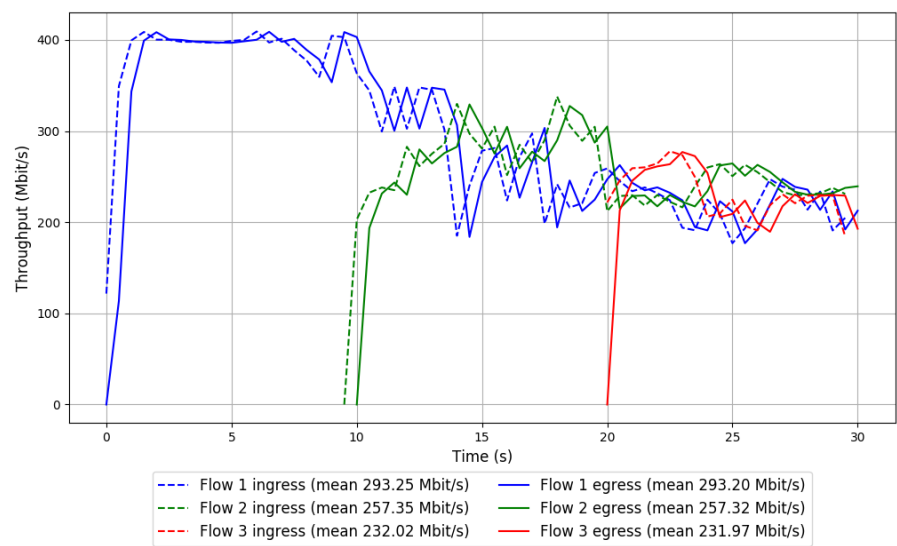
-- Flow 3:

Average throughput: 231.97 Mbit/s

95th percentile per-packet one-way delay: 23.081 ms

Loss rate: 0.02%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-05-22 03:45:57

End at: 2018-05-22 03:46:27

Local clock offset: 0.322 ms

Remote clock offset: 0.595 ms

Below is generated by plot.py at 2018-05-22 08:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 552.56 Mbit/s

95th percentile per-packet one-way delay: 23.270 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 293.66 Mbit/s

95th percentile per-packet one-way delay: 22.056 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 277.71 Mbit/s

95th percentile per-packet one-way delay: 24.014 ms

Loss rate: 0.07%

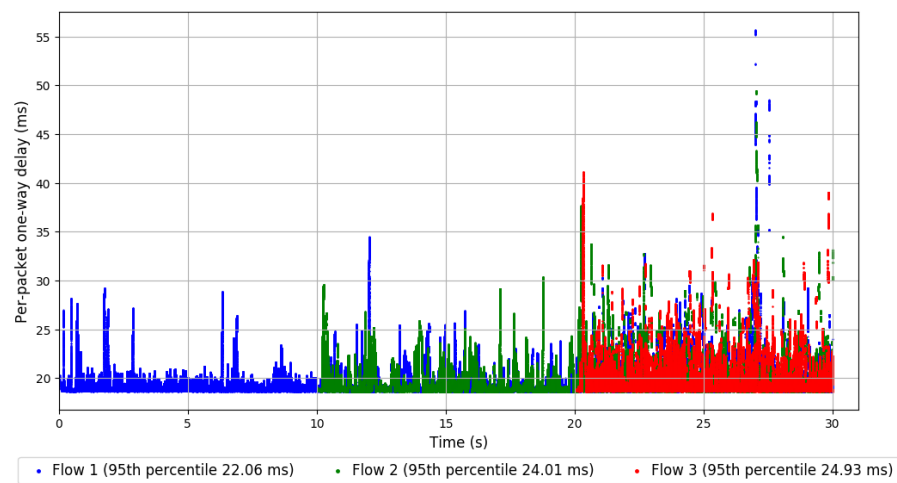
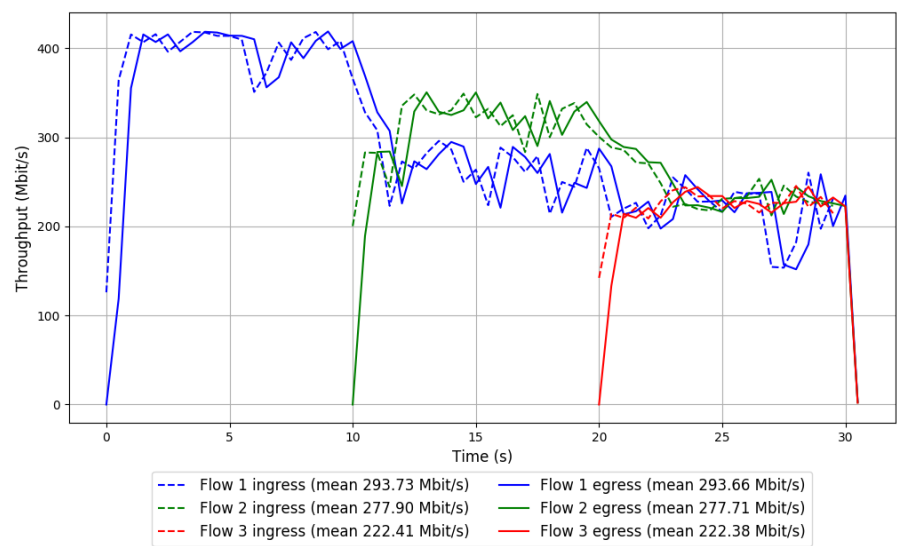
-- Flow 3:

Average throughput: 222.38 Mbit/s

95th percentile per-packet one-way delay: 24.928 ms

Loss rate: 0.02%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-05-22 04:11:38

End at: 2018-05-22 04:12:08

Local clock offset: 0.315 ms

Remote clock offset: 0.585 ms

Below is generated by plot.py at 2018-05-22 08:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 531.41 Mbit/s

95th percentile per-packet one-way delay: 22.750 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 281.57 Mbit/s

95th percentile per-packet one-way delay: 20.200 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 248.86 Mbit/s

95th percentile per-packet one-way delay: 24.054 ms

Loss rate: 0.04%

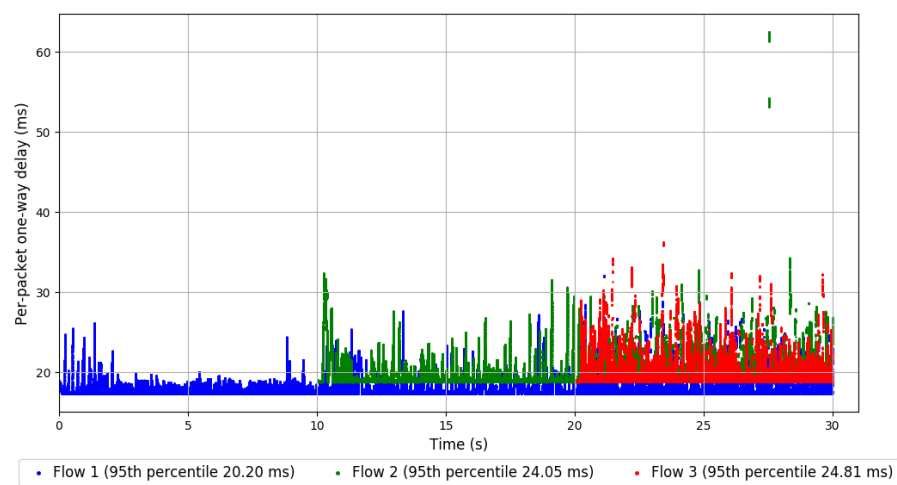
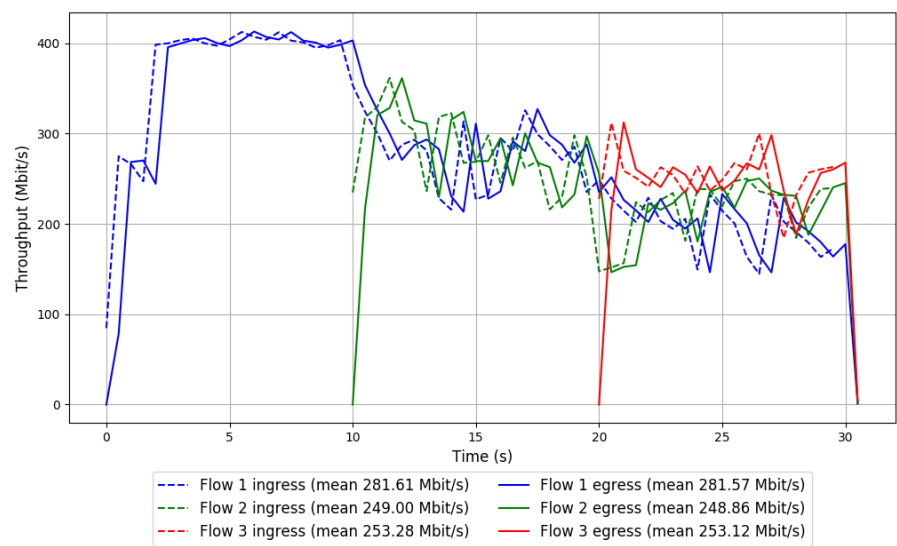
-- Flow 3:

Average throughput: 253.12 Mbit/s

95th percentile per-packet one-way delay: 24.806 ms

Loss rate: 0.06%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-05-22 04:37:14

End at: 2018-05-22 04:37:44

Local clock offset: 0.639 ms

Remote clock offset: 0.586 ms

Below is generated by plot.py at 2018-05-22 08:05:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 552.72 Mbit/s

95th percentile per-packet one-way delay: 22.832 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 303.30 Mbit/s

95th percentile per-packet one-way delay: 21.985 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 267.55 Mbit/s

95th percentile per-packet one-way delay: 23.604 ms

Loss rate: 0.02%

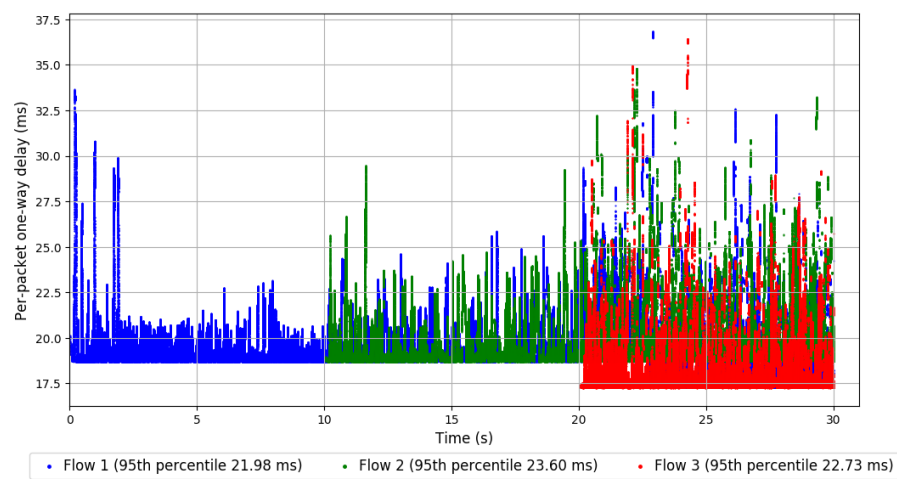
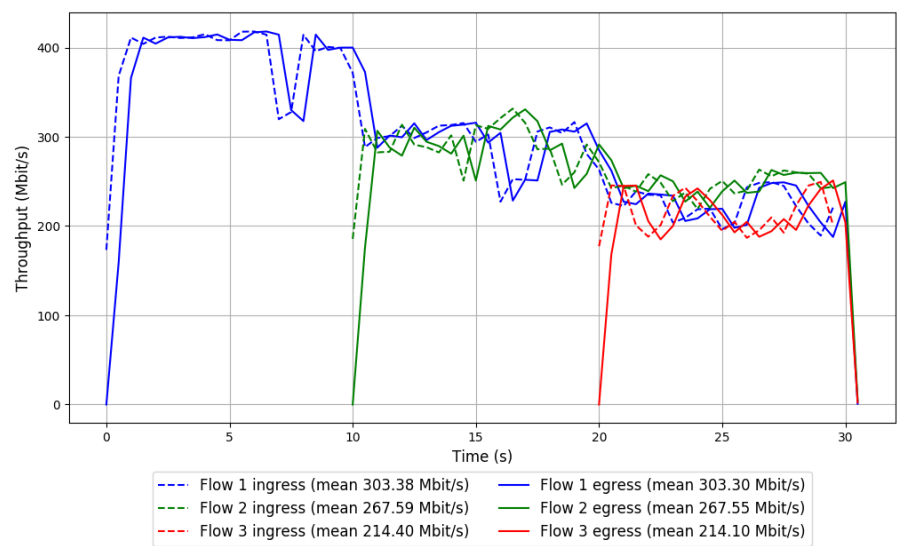
-- Flow 3:

Average throughput: 214.10 Mbit/s

95th percentile per-packet one-way delay: 22.725 ms

Loss rate: 0.10%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-05-22 05:02:52

End at: 2018-05-22 05:03:22

Local clock offset: 0.452 ms

Remote clock offset: 0.365 ms

Below is generated by plot.py at 2018-05-22 08:05:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.05 Mbit/s

95th percentile per-packet one-way delay: 23.010 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 297.30 Mbit/s

95th percentile per-packet one-way delay: 23.584 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 241.57 Mbit/s

95th percentile per-packet one-way delay: 21.635 ms

Loss rate: 0.06%

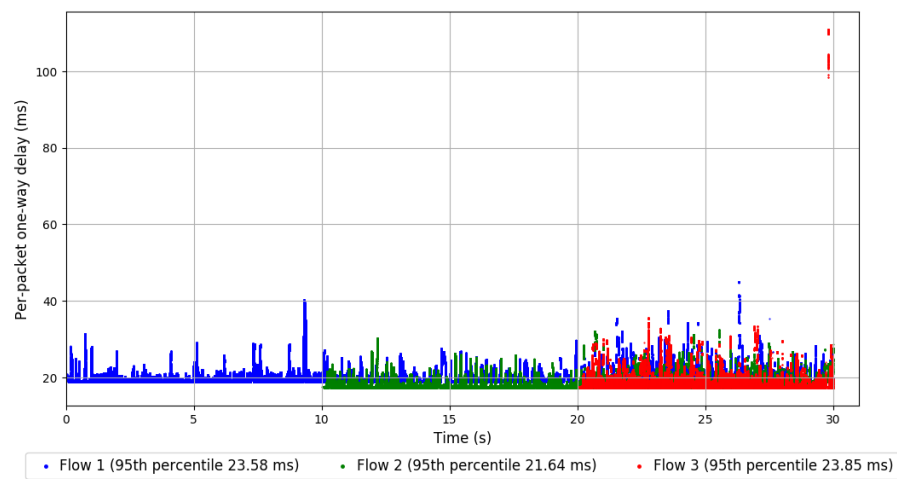
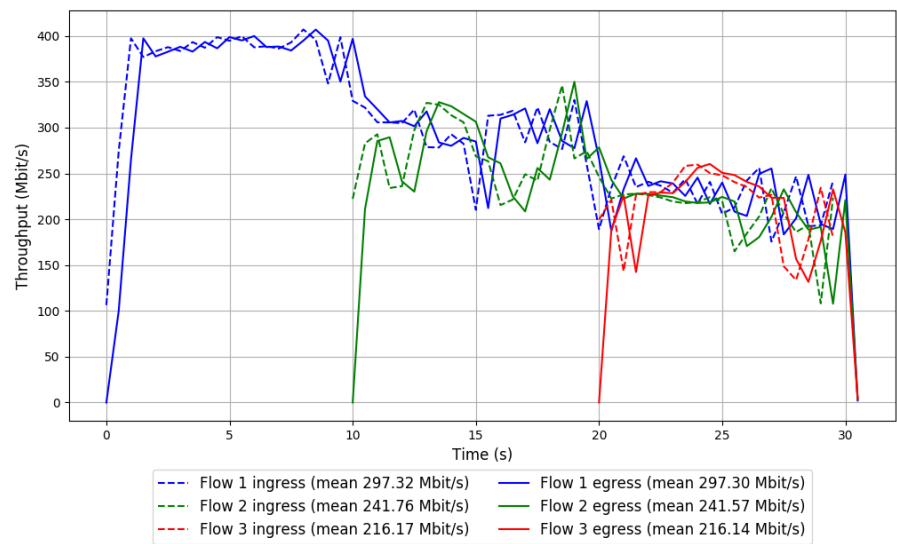
-- Flow 3:

Average throughput: 216.14 Mbit/s

95th percentile per-packet one-way delay: 23.849 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-05-22 05:28:20

End at: 2018-05-22 05:28:50

Local clock offset: 0.357 ms

Remote clock offset: 0.14 ms

Below is generated by plot.py at 2018-05-22 08:05:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 498.83 Mbit/s

95th percentile per-packet one-way delay: 23.944 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 257.04 Mbit/s

95th percentile per-packet one-way delay: 23.128 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 249.09 Mbit/s

95th percentile per-packet one-way delay: 24.410 ms

Loss rate: 0.01%

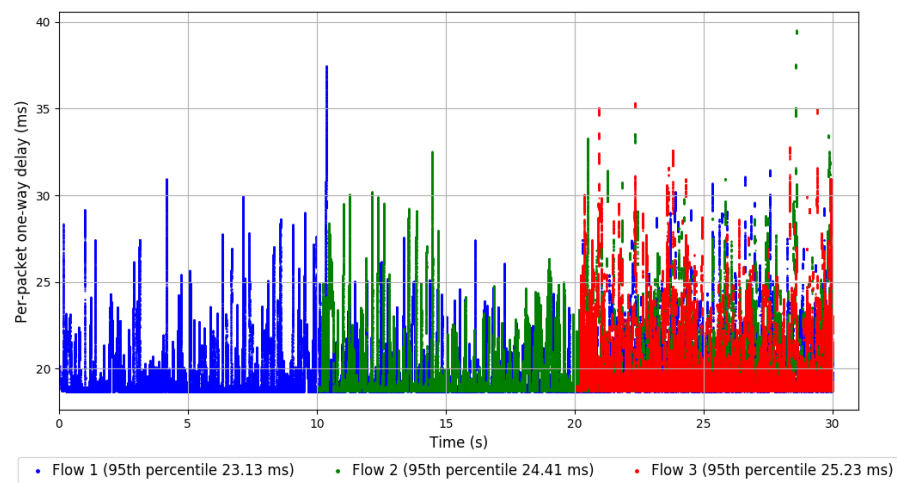
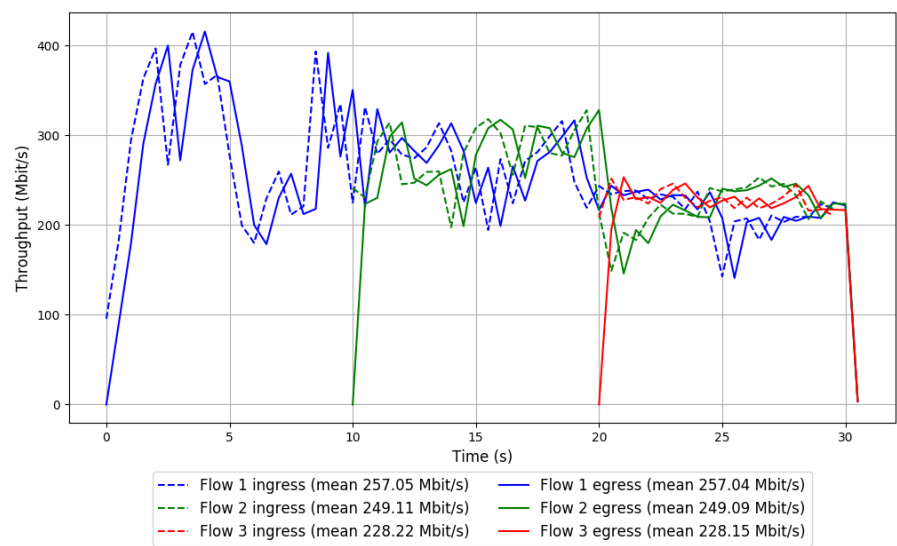
-- Flow 3:

Average throughput: 228.15 Mbit/s

95th percentile per-packet one-way delay: 25.230 ms

Loss rate: 0.03%

Run 6: Report of Copa — Data Link

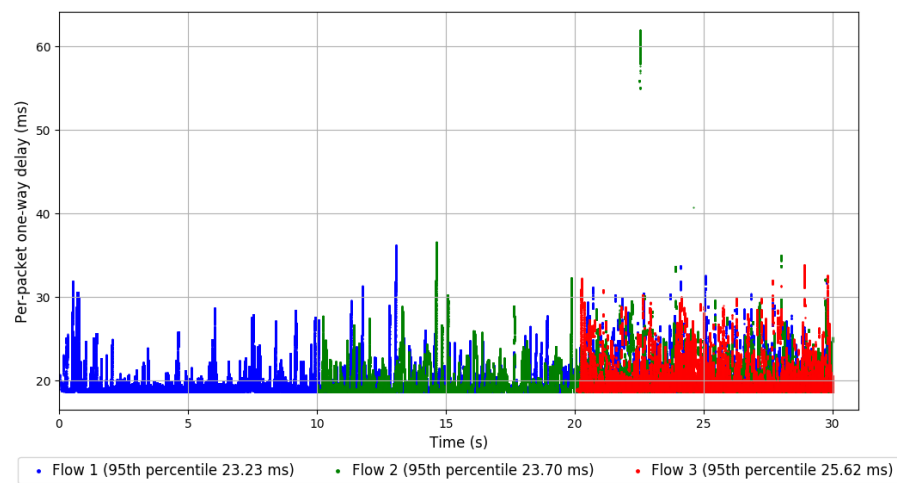
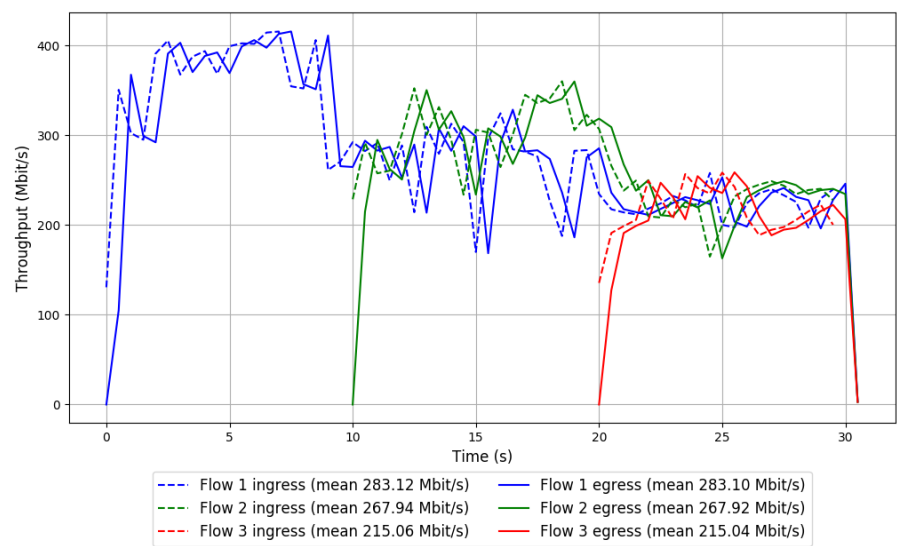


Run 7: Statistics of Copa

Start at: 2018-05-22 05:53:52
End at: 2018-05-22 05:54:22
Local clock offset: 0.123 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2018-05-22 08:15:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 533.00 Mbit/s
95th percentile per-packet one-way delay: 23.805 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 283.10 Mbit/s
95th percentile per-packet one-way delay: 23.228 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 267.92 Mbit/s
95th percentile per-packet one-way delay: 23.698 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 215.04 Mbit/s
95th percentile per-packet one-way delay: 25.624 ms
Loss rate: 0.01%

Run 7: Report of Copa — Data Link

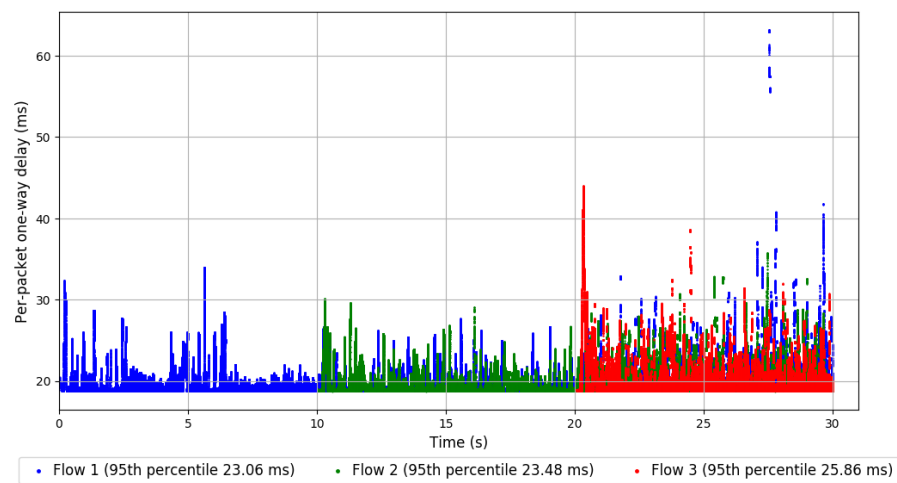
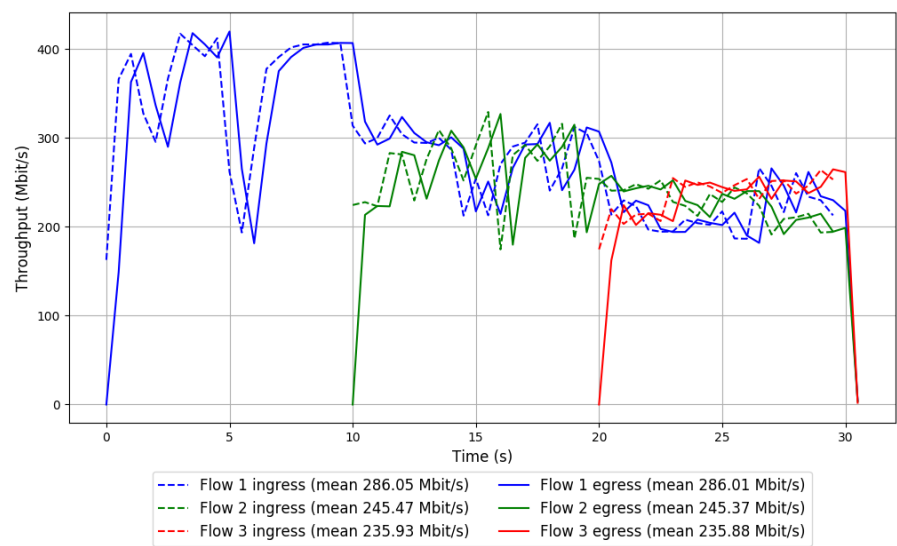


Run 8: Statistics of Copa

Start at: 2018-05-22 06:19:24
End at: 2018-05-22 06:19:54
Local clock offset: -0.228 ms
Remote clock offset: -0.153 ms

Below is generated by plot.py at 2018-05-22 08:15:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 527.83 Mbit/s
95th percentile per-packet one-way delay: 23.682 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 286.01 Mbit/s
95th percentile per-packet one-way delay: 23.059 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 245.37 Mbit/s
95th percentile per-packet one-way delay: 23.481 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 235.88 Mbit/s
95th percentile per-packet one-way delay: 25.861 ms
Loss rate: 0.01%

Run 8: Report of Copa — Data Link

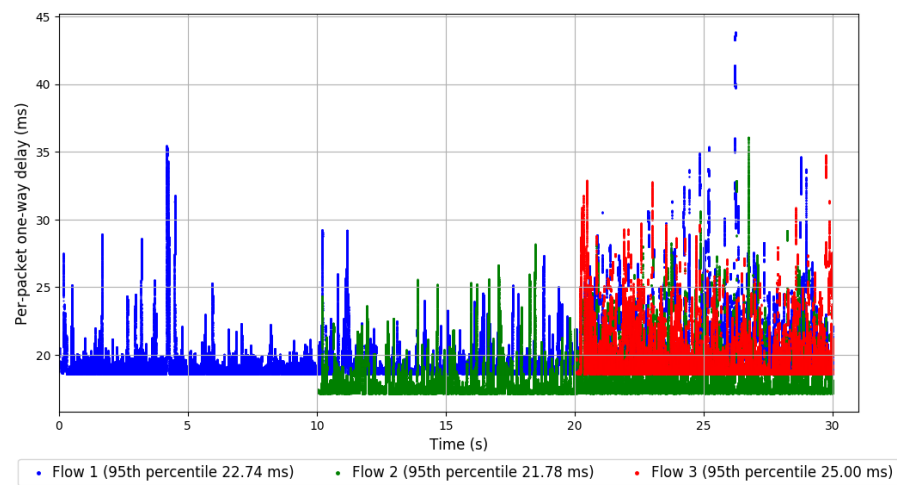
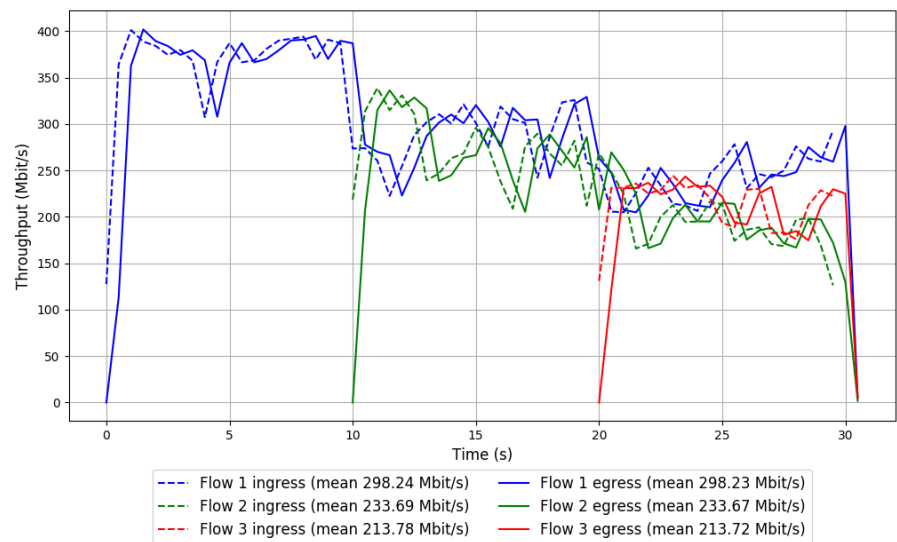


Run 9: Statistics of Copa

Start at: 2018-05-22 06:44:49
End at: 2018-05-22 06:45:19
Local clock offset: 0.142 ms
Remote clock offset: -0.373 ms

Below is generated by plot.py at 2018-05-22 08:16:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 524.90 Mbit/s
95th percentile per-packet one-way delay: 22.981 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 298.23 Mbit/s
95th percentile per-packet one-way delay: 22.744 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 233.67 Mbit/s
95th percentile per-packet one-way delay: 21.783 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 213.72 Mbit/s
95th percentile per-packet one-way delay: 25.005 ms
Loss rate: 0.02%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-05-22 07:10:23

End at: 2018-05-22 07:10:53

Local clock offset: 0.65 ms

Remote clock offset: 1.173 ms

Below is generated by plot.py at 2018-05-22 08:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 486.53 Mbit/s

95th percentile per-packet one-way delay: 21.708 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 258.91 Mbit/s

95th percentile per-packet one-way delay: 21.079 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 231.46 Mbit/s

95th percentile per-packet one-way delay: 20.625 ms

Loss rate: 0.00%

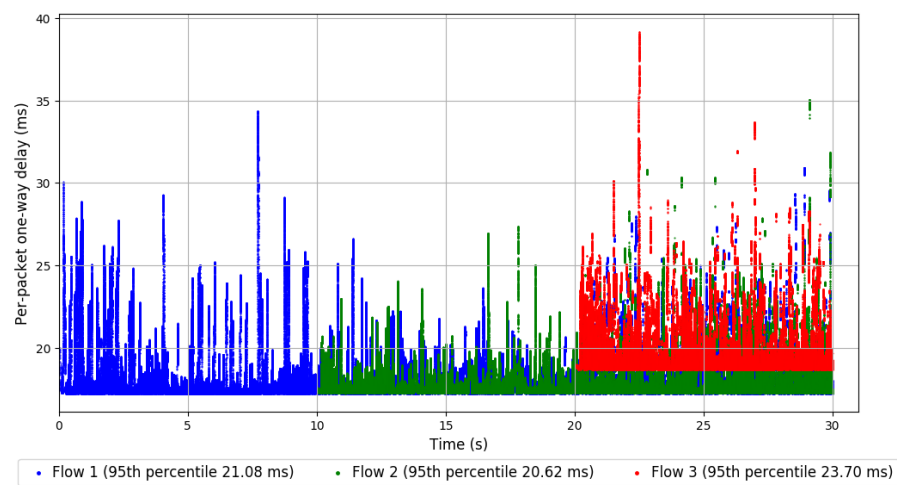
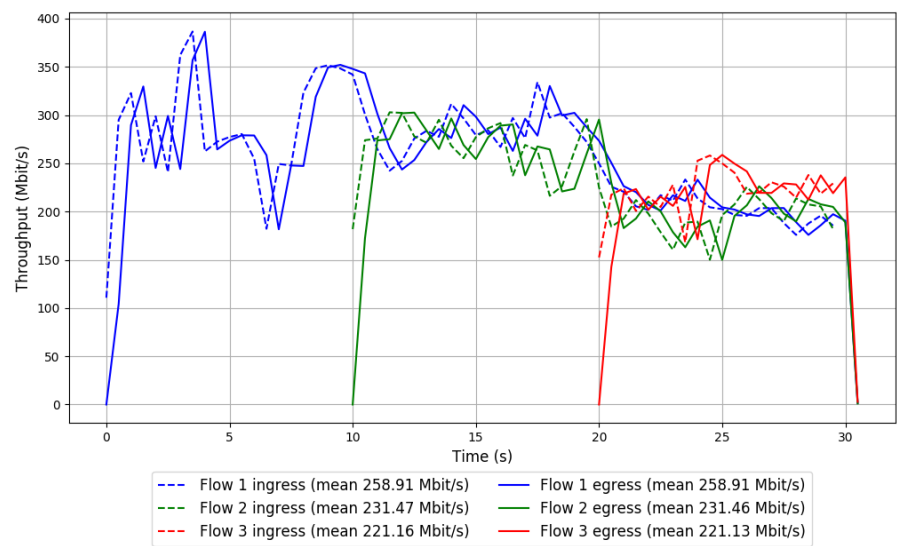
-- Flow 3:

Average throughput: 221.13 Mbit/s

95th percentile per-packet one-way delay: 23.705 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-05-22 03:25:41

End at: 2018-05-22 03:26:11

Local clock offset: 0.165 ms

Remote clock offset: 0.135 ms

Below is generated by plot.py at 2018-05-22 08:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 443.34 Mbit/s

95th percentile per-packet one-way delay: 24.983 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 288.34 Mbit/s

95th percentile per-packet one-way delay: 26.010 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 170.42 Mbit/s

95th percentile per-packet one-way delay: 23.455 ms

Loss rate: 0.03%

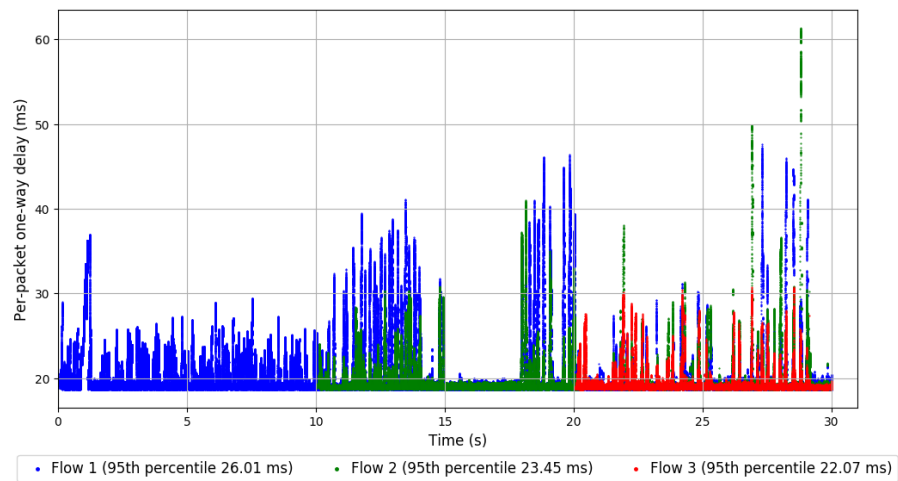
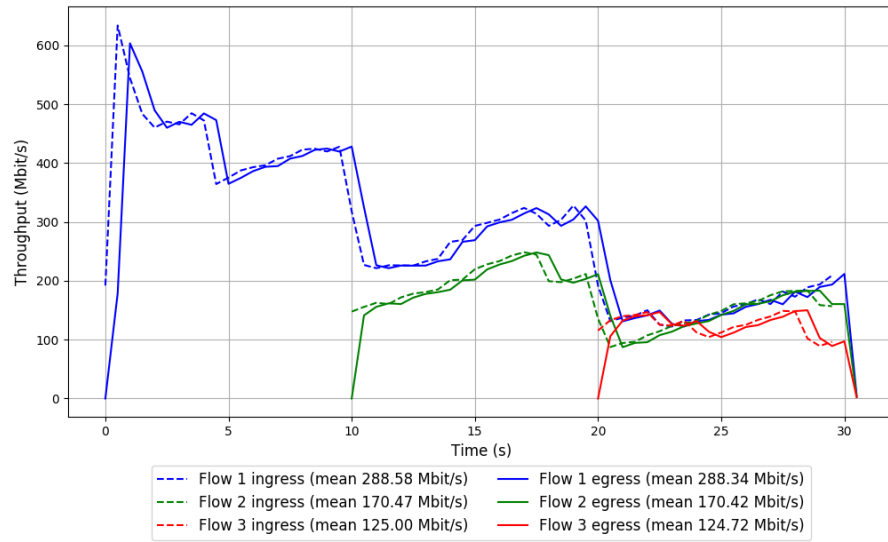
-- Flow 3:

Average throughput: 124.72 Mbit/s

95th percentile per-packet one-way delay: 22.071 ms

Loss rate: 0.23%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-05-22 03:51:24

End at: 2018-05-22 03:51:54

Local clock offset: 0.335 ms

Remote clock offset: 0.747 ms

Below is generated by plot.py at 2018-05-22 08:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 452.29 Mbit/s

95th percentile per-packet one-way delay: 22.775 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 263.22 Mbit/s

95th percentile per-packet one-way delay: 22.662 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 191.05 Mbit/s

95th percentile per-packet one-way delay: 23.737 ms

Loss rate: 0.20%

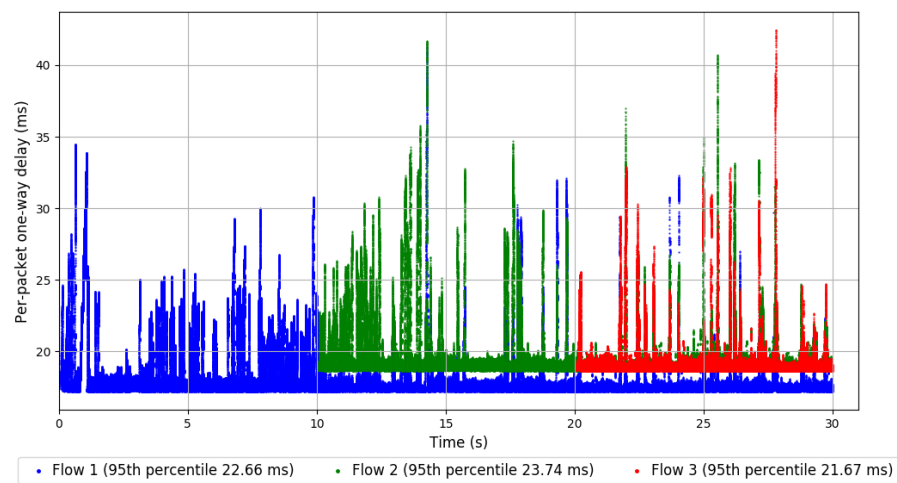
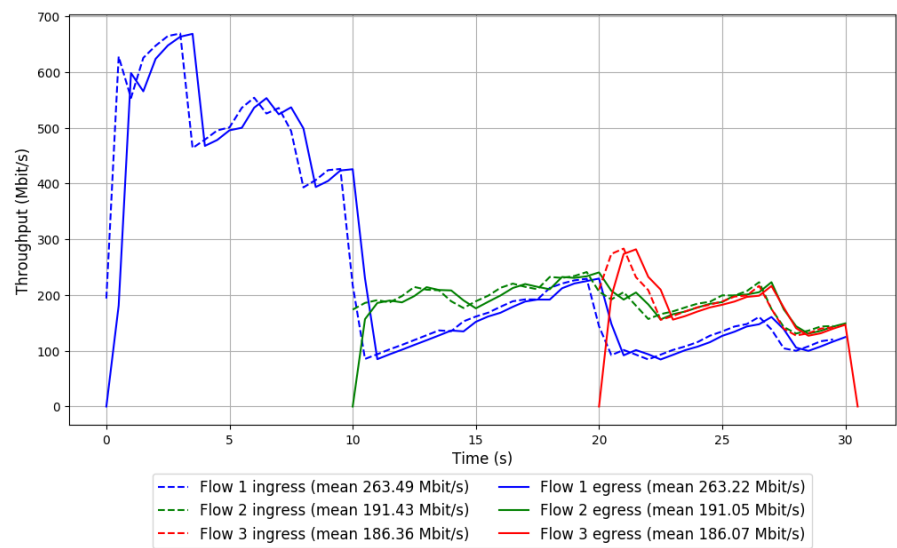
-- Flow 3:

Average throughput: 186.07 Mbit/s

95th percentile per-packet one-way delay: 21.674 ms

Loss rate: 0.16%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-05-22 04:17:01

End at: 2018-05-22 04:17:31

Local clock offset: 0.43 ms

Remote clock offset: 0.602 ms

Below is generated by plot.py at 2018-05-22 08:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 463.28 Mbit/s

95th percentile per-packet one-way delay: 23.960 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 271.91 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 234.92 Mbit/s

95th percentile per-packet one-way delay: 26.699 ms

Loss rate: 0.11%

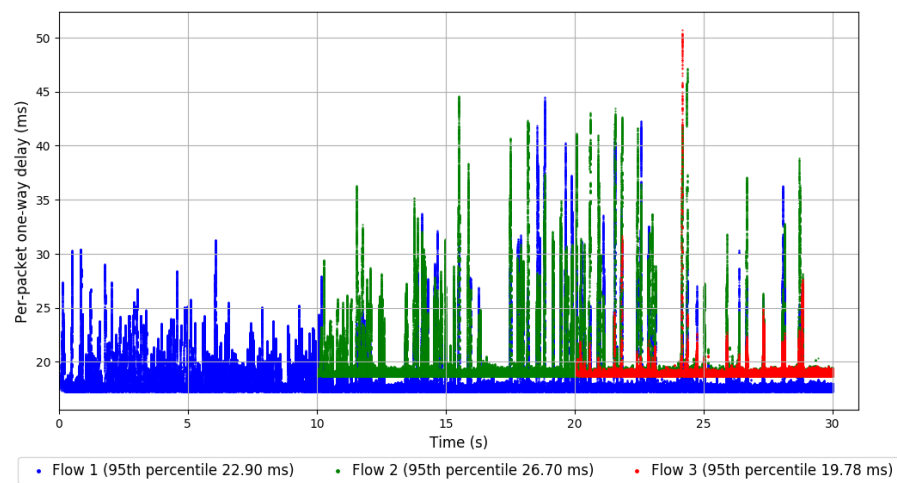
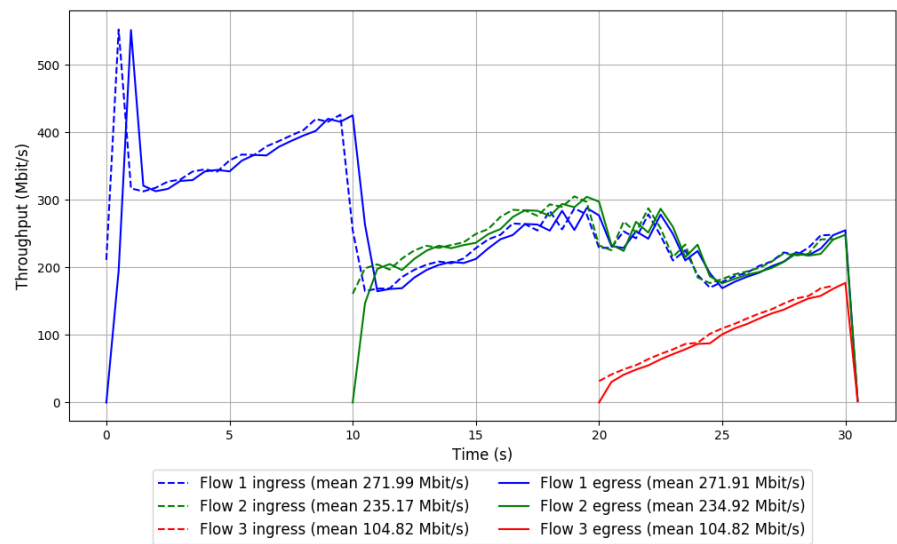
-- Flow 3:

Average throughput: 104.82 Mbit/s

95th percentile per-packet one-way delay: 19.779 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-05-22 04:42:38

End at: 2018-05-22 04:43:08

Local clock offset: 0.597 ms

Remote clock offset: 0.343 ms

Below is generated by plot.py at 2018-05-22 08:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 411.64 Mbit/s

95th percentile per-packet one-way delay: 25.601 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 196.04 Mbit/s

95th percentile per-packet one-way delay: 23.049 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 203.33 Mbit/s

95th percentile per-packet one-way delay: 28.713 ms

Loss rate: 0.14%

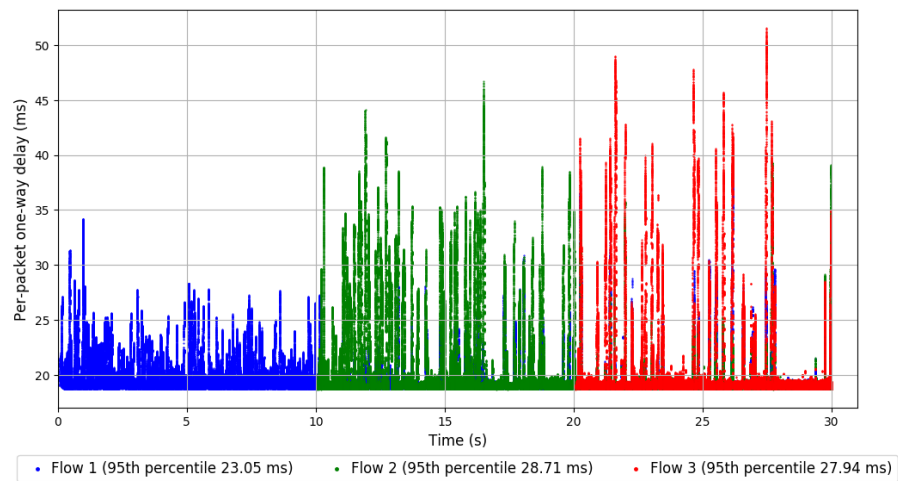
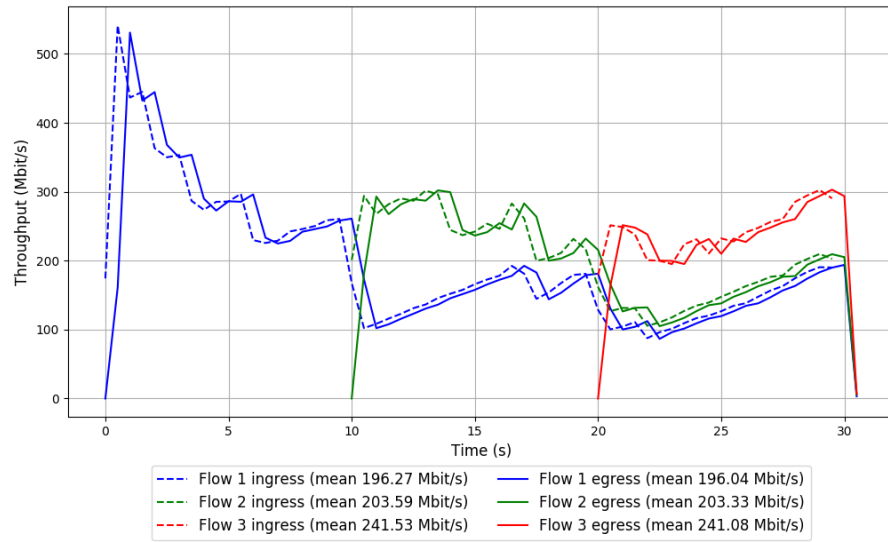
-- Flow 3:

Average throughput: 241.08 Mbit/s

95th percentile per-packet one-way delay: 27.940 ms

Loss rate: 0.19%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-05-22 05:08:17

End at: 2018-05-22 05:08:47

Local clock offset: 0.434 ms

Remote clock offset: 0.35 ms

Below is generated by plot.py at 2018-05-22 08:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.90 Mbit/s

95th percentile per-packet one-way delay: 24.109 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 239.65 Mbit/s

95th percentile per-packet one-way delay: 23.615 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 195.09 Mbit/s

95th percentile per-packet one-way delay: 25.320 ms

Loss rate: 0.10%

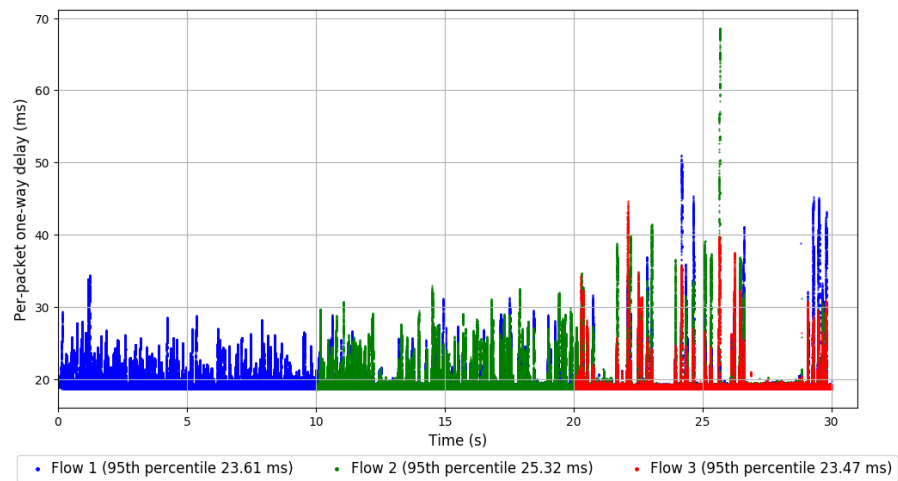
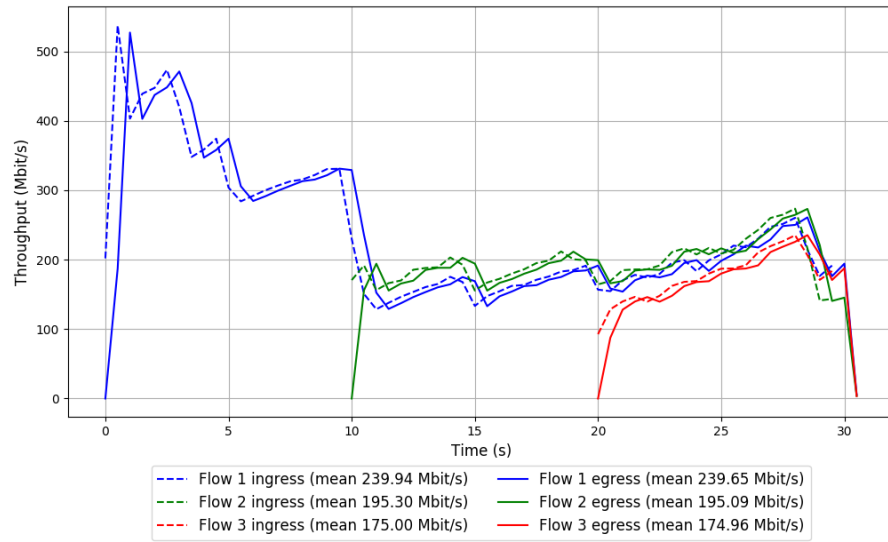
-- Flow 3:

Average throughput: 174.96 Mbit/s

95th percentile per-packet one-way delay: 23.471 ms

Loss rate: 0.02%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-05-22 05:33:40

End at: 2018-05-22 05:34:10

Local clock offset: 0.405 ms

Remote clock offset: 0.14 ms

Below is generated by plot.py at 2018-05-22 08:16:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 502.56 Mbit/s

95th percentile per-packet one-way delay: 21.496 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 212.87 Mbit/s

95th percentile per-packet one-way delay: 21.549 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 366.67 Mbit/s

95th percentile per-packet one-way delay: 22.066 ms

Loss rate: 0.10%

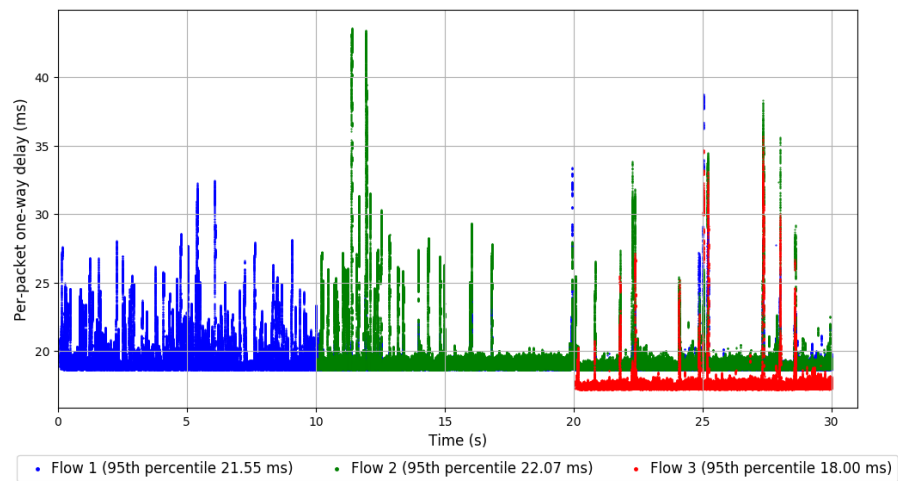
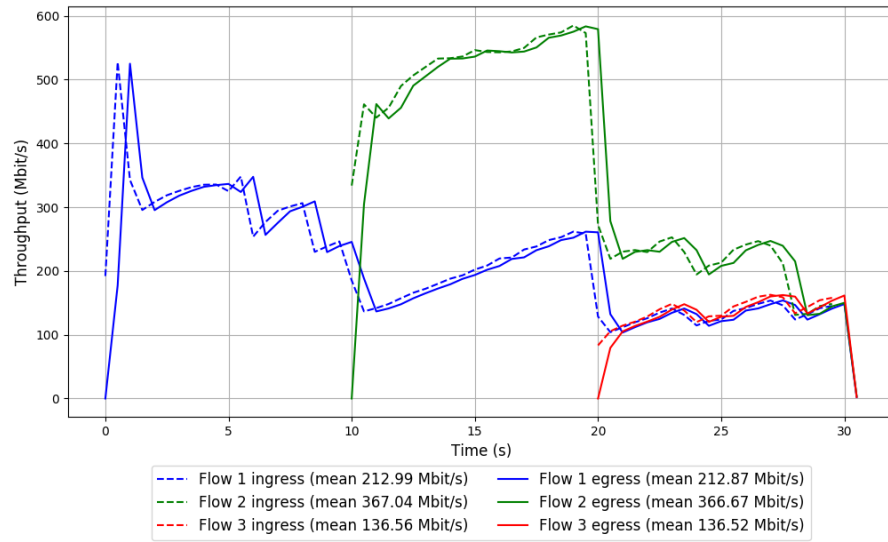
-- Flow 3:

Average throughput: 136.52 Mbit/s

95th percentile per-packet one-way delay: 18.000 ms

Loss rate: 0.03%

Run 6: Report of TCP Cubic — Data Link

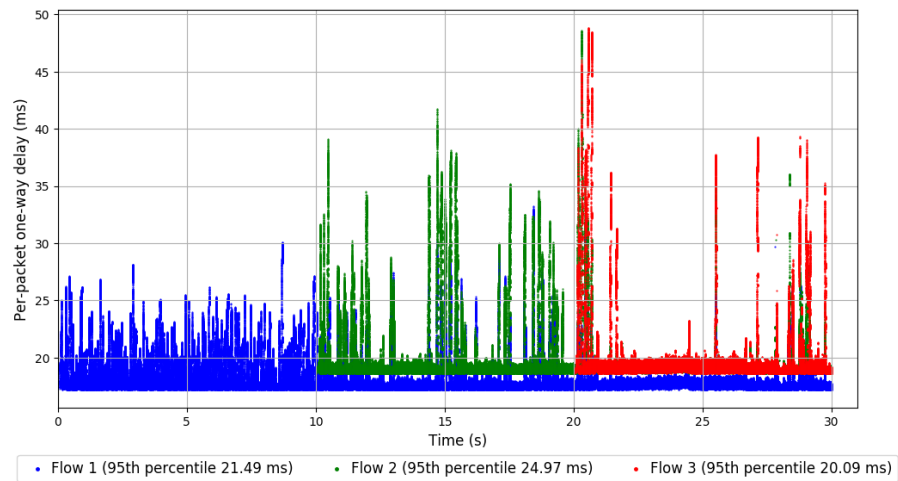
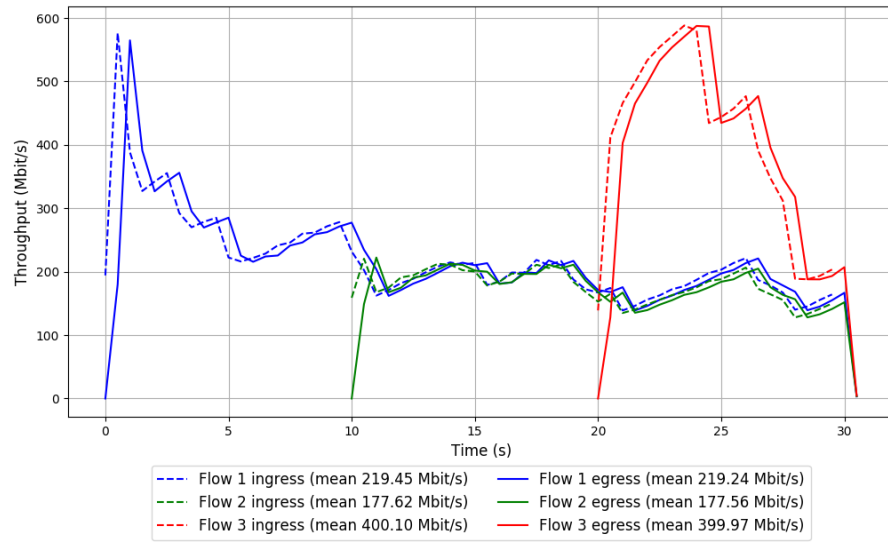


Run 7: Statistics of TCP Cubic

Start at: 2018-05-22 05:59:15
End at: 2018-05-22 05:59:45
Local clock offset: 0.145 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2018-05-22 08:16:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 470.49 Mbit/s
95th percentile per-packet one-way delay: 21.811 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 219.24 Mbit/s
95th percentile per-packet one-way delay: 21.490 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 177.56 Mbit/s
95th percentile per-packet one-way delay: 24.966 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 399.97 Mbit/s
95th percentile per-packet one-way delay: 20.087 ms
Loss rate: 0.03%

Run 7: Report of TCP Cubic — Data Link

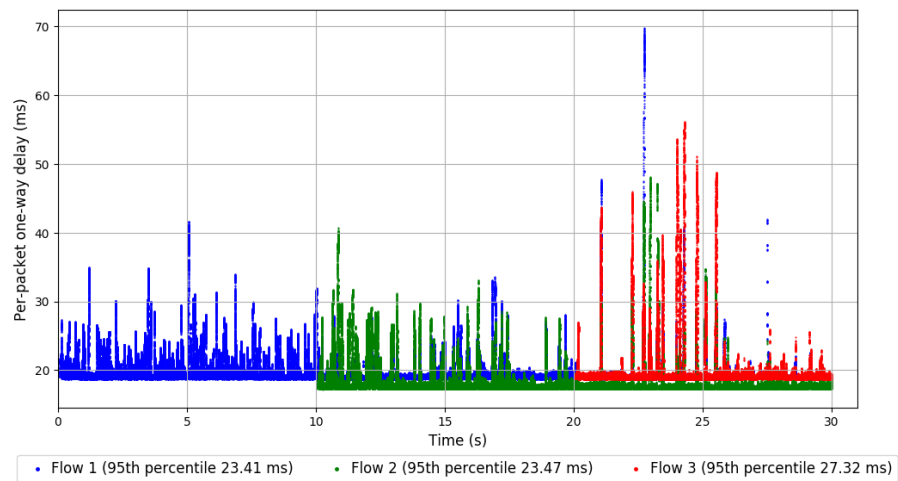
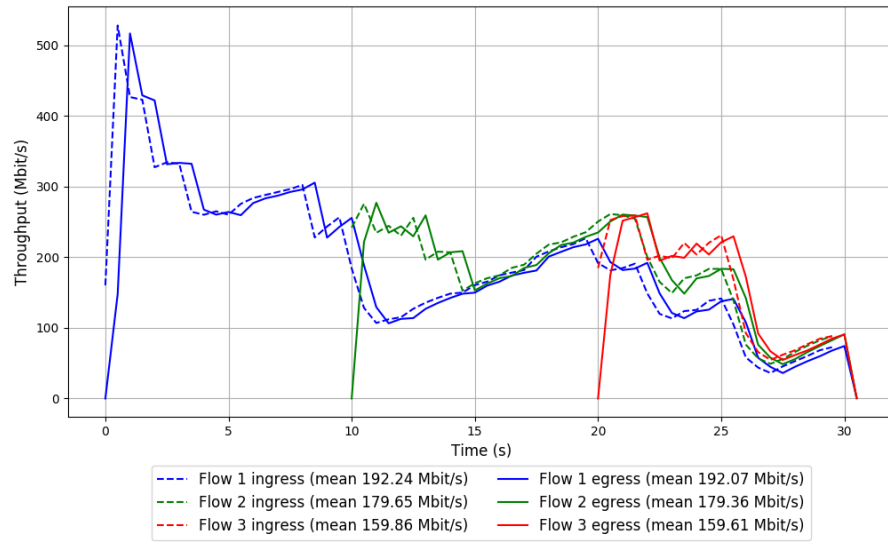


Run 8: Statistics of TCP Cubic

Start at: 2018-05-22 06:24:50
End at: 2018-05-22 06:25:20
Local clock offset: -0.267 ms
Remote clock offset: -0.216 ms

Below is generated by plot.py at 2018-05-22 08:16:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 364.63 Mbit/s
95th percentile per-packet one-way delay: 23.626 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 192.07 Mbit/s
95th percentile per-packet one-way delay: 23.407 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 179.36 Mbit/s
95th percentile per-packet one-way delay: 23.466 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 159.61 Mbit/s
95th percentile per-packet one-way delay: 27.324 ms
Loss rate: 0.15%

Run 8: Report of TCP Cubic — Data Link

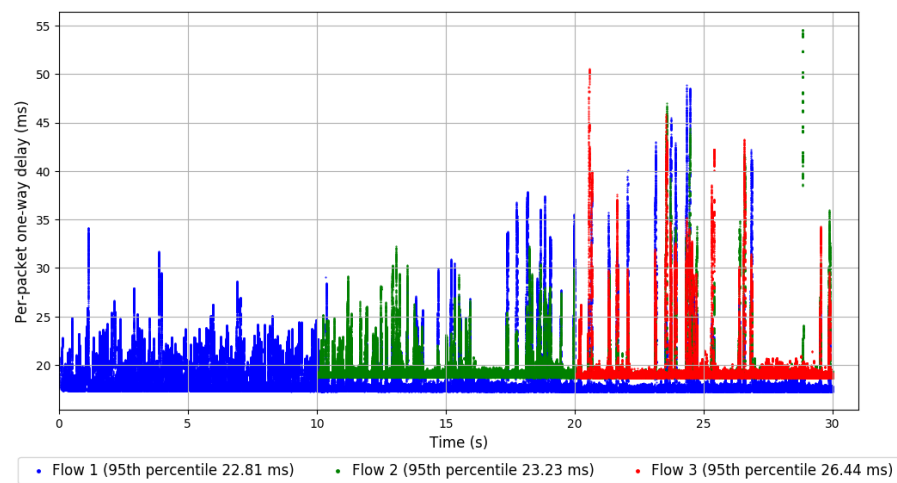
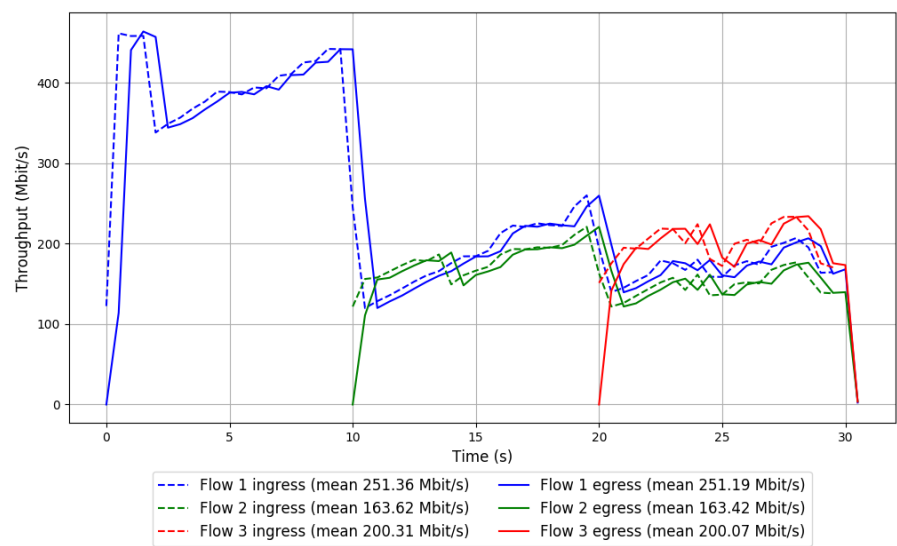


Run 9: Statistics of TCP Cubic

Start at: 2018-05-22 06:50:11
End at: 2018-05-22 06:50:41
Local clock offset: 0.049 ms
Remote clock offset: -0.277 ms

Below is generated by plot.py at 2018-05-22 08:19:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 426.57 Mbit/s
95th percentile per-packet one-way delay: 23.177 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 251.19 Mbit/s
95th percentile per-packet one-way delay: 22.807 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 163.42 Mbit/s
95th percentile per-packet one-way delay: 23.234 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 200.07 Mbit/s
95th percentile per-packet one-way delay: 26.437 ms
Loss rate: 0.12%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-05-22 07:15:44

End at: 2018-05-22 07:16:14

Local clock offset: 0.73 ms

Remote clock offset: 1.262 ms

Below is generated by plot.py at 2018-05-22 08:19:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.29 Mbit/s

95th percentile per-packet one-way delay: 23.136 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 195.73 Mbit/s

95th percentile per-packet one-way delay: 22.705 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 185.51 Mbit/s

95th percentile per-packet one-way delay: 24.185 ms

Loss rate: 0.17%

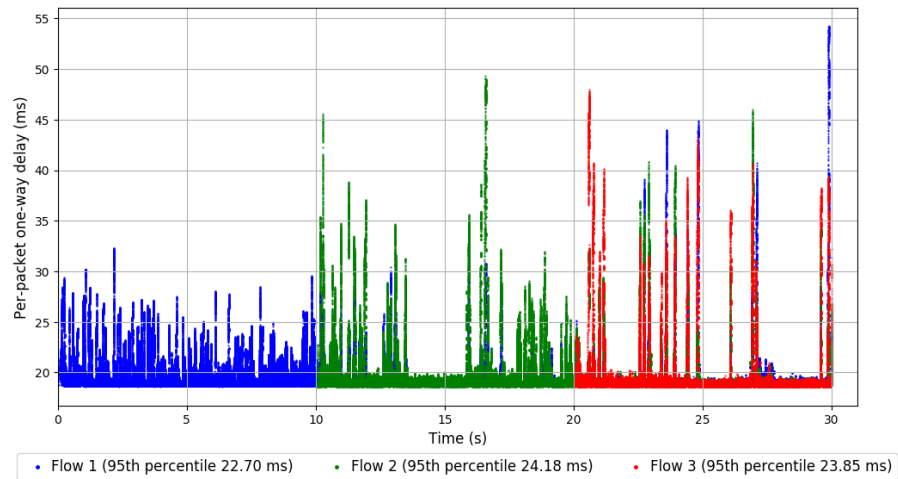
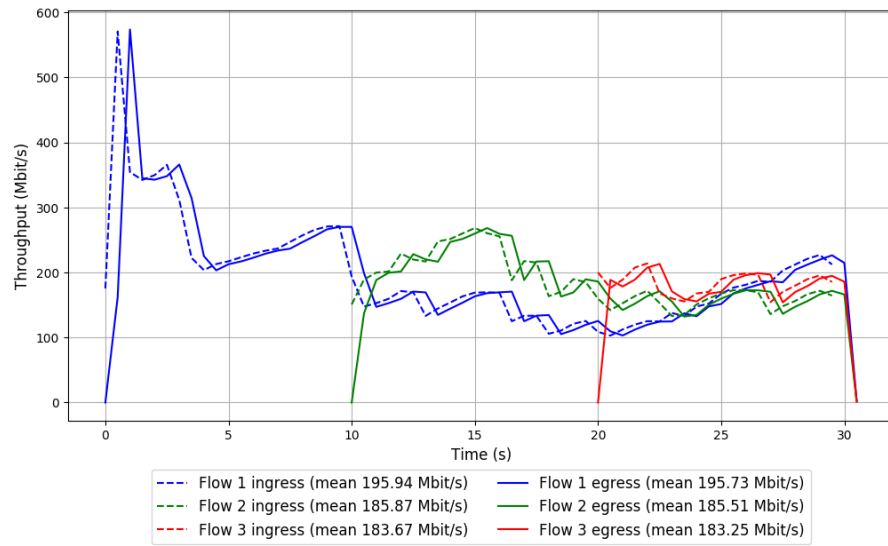
-- Flow 3:

Average throughput: 183.25 Mbit/s

95th percentile per-packet one-way delay: 23.851 ms

Loss rate: 0.22%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-05-22 03:44:11

End at: 2018-05-22 03:44:41

Local clock offset: 0.326 ms

Remote clock offset: 0.548 ms

Below is generated by plot.py at 2018-05-22 08:26:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 740.35 Mbit/s

95th percentile per-packet one-way delay: 109.817 ms

Loss rate: 17.10%

-- Flow 1:

Average throughput: 417.57 Mbit/s

95th percentile per-packet one-way delay: 107.689 ms

Loss rate: 13.11%

-- Flow 2:

Average throughput: 357.86 Mbit/s

95th percentile per-packet one-way delay: 128.871 ms

Loss rate: 20.22%

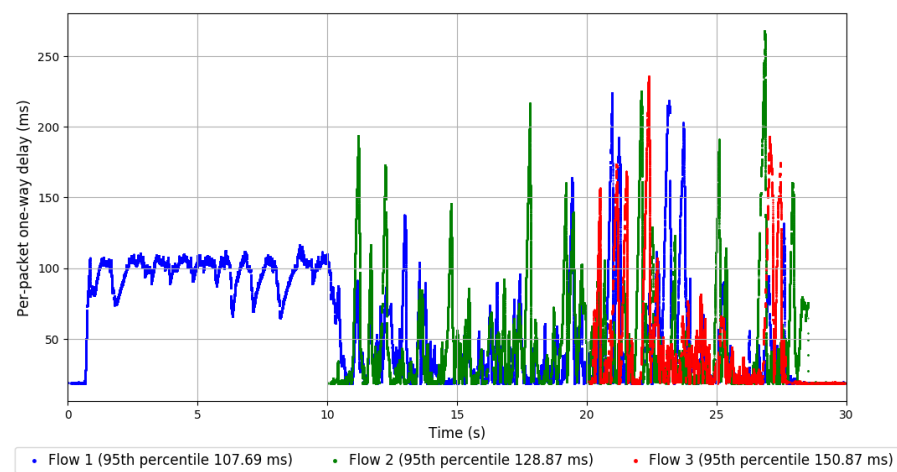
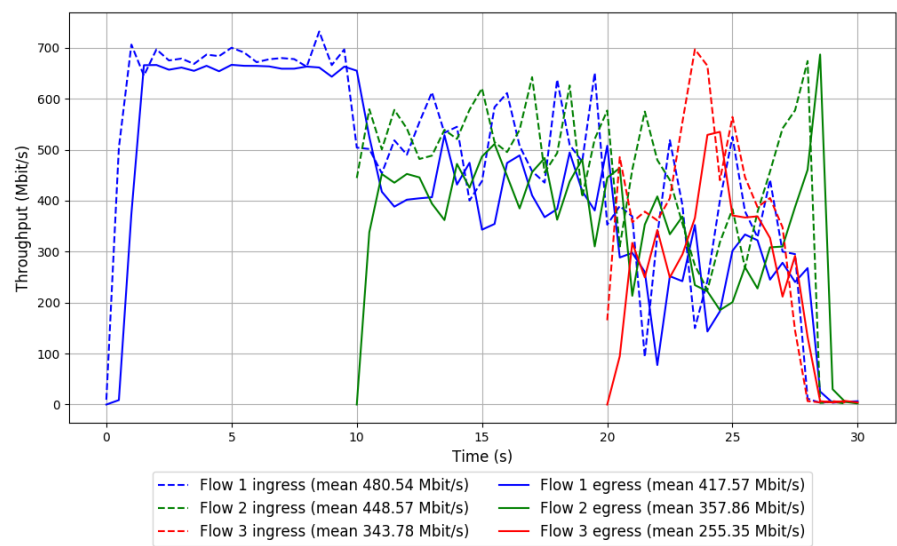
-- Flow 3:

Average throughput: 255.35 Mbit/s

95th percentile per-packet one-way delay: 150.865 ms

Loss rate: 25.73%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-05-22 04:09:53

End at: 2018-05-22 04:10:23

Local clock offset: 0.403 ms

Remote clock offset: 0.571 ms

Below is generated by plot.py at 2018-05-22 08:27:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 793.60 Mbit/s

95th percentile per-packet one-way delay: 108.172 ms

Loss rate: 13.74%

-- Flow 1:

Average throughput: 514.53 Mbit/s

95th percentile per-packet one-way delay: 107.610 ms

Loss rate: 12.00%

-- Flow 2:

Average throughput: 276.20 Mbit/s

95th percentile per-packet one-way delay: 58.124 ms

Loss rate: 16.53%

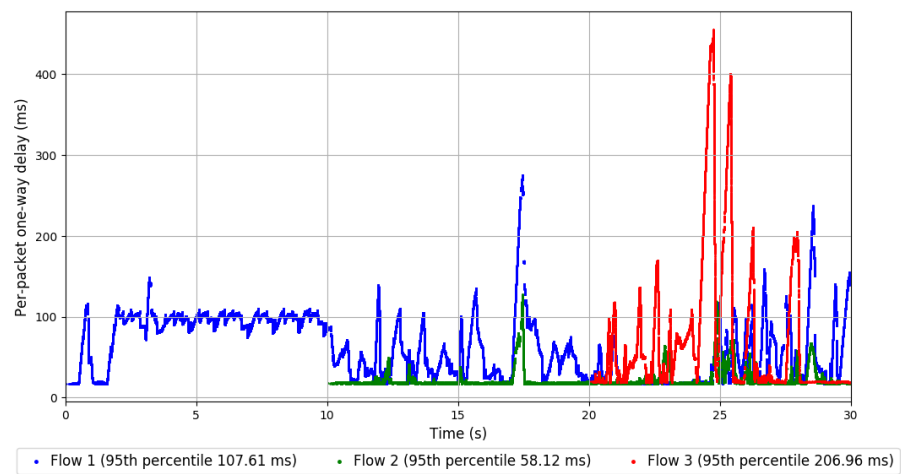
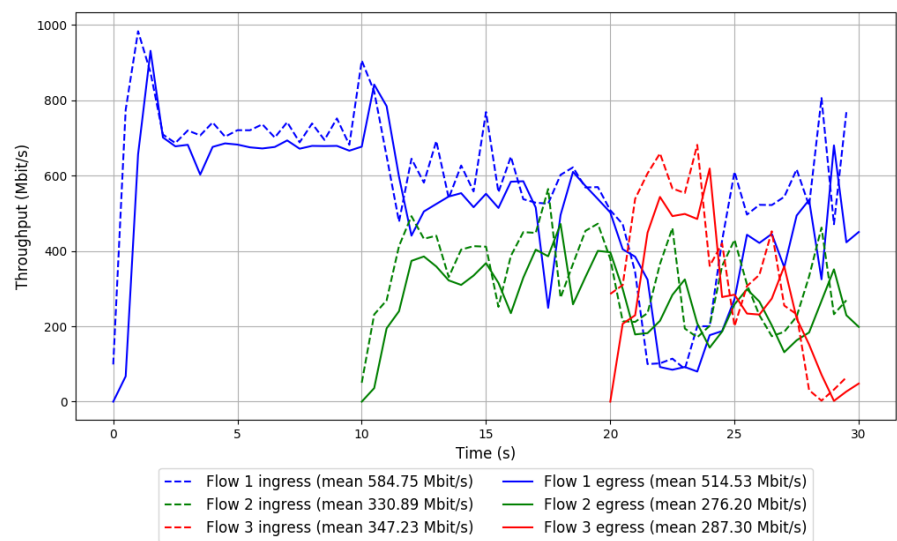
-- Flow 3:

Average throughput: 287.30 Mbit/s

95th percentile per-packet one-way delay: 206.957 ms

Loss rate: 17.26%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-05-22 04:35:28

End at: 2018-05-22 04:35:58

Local clock offset: 0.508 ms

Remote clock offset: 0.651 ms

Below is generated by plot.py at 2018-05-22 08:27:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 786.57 Mbit/s

95th percentile per-packet one-way delay: 110.430 ms

Loss rate: 13.90%

-- Flow 1:

Average throughput: 539.54 Mbit/s

95th percentile per-packet one-way delay: 111.077 ms

Loss rate: 10.67%

-- Flow 2:

Average throughput: 280.12 Mbit/s

95th percentile per-packet one-way delay: 77.274 ms

Loss rate: 19.82%

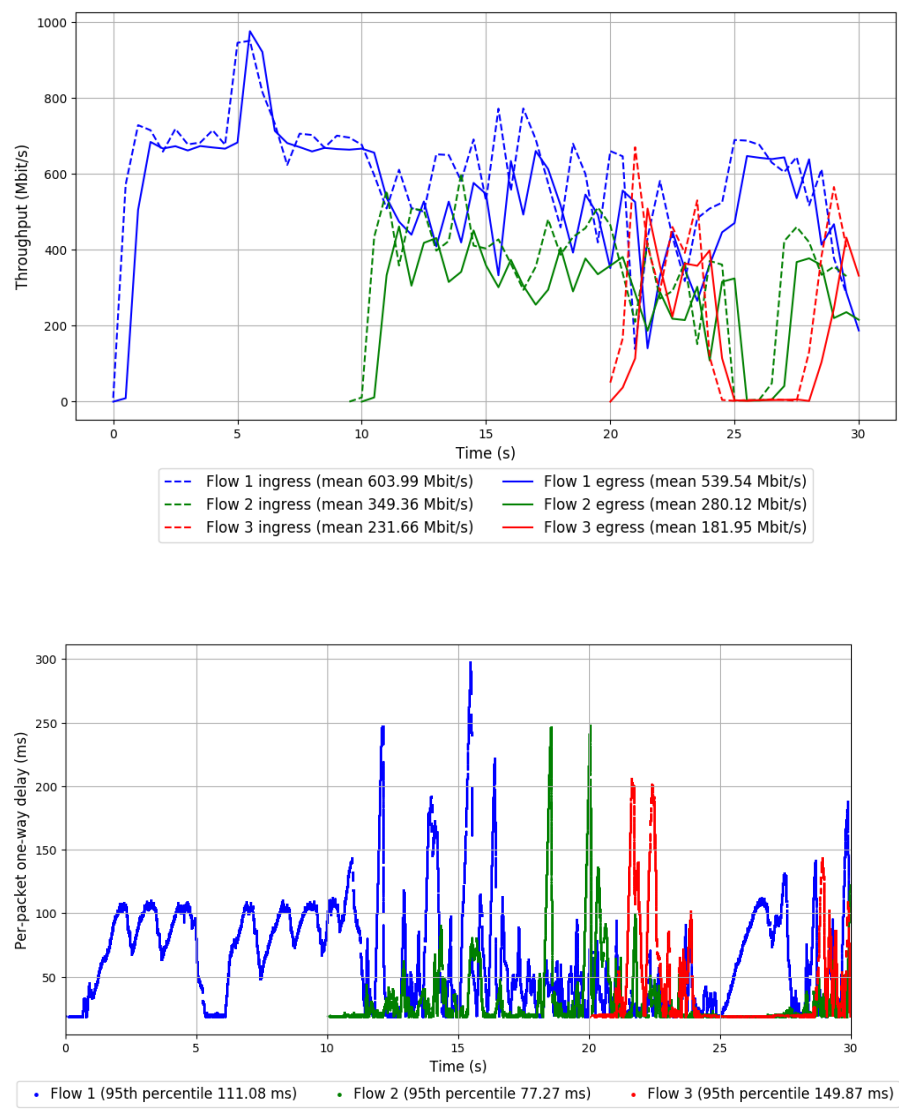
-- Flow 3:

Average throughput: 181.95 Mbit/s

95th percentile per-packet one-way delay: 149.873 ms

Loss rate: 21.45%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-05-22 05:01:05

End at: 2018-05-22 05:01:35

Local clock offset: 0.587 ms

Remote clock offset: 0.251 ms

Below is generated by plot.py at 2018-05-22 08:27:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 807.28 Mbit/s

95th percentile per-packet one-way delay: 108.043 ms

Loss rate: 18.06%

-- Flow 1:

Average throughput: 516.76 Mbit/s

95th percentile per-packet one-way delay: 108.990 ms

Loss rate: 13.18%

-- Flow 2:

Average throughput: 302.07 Mbit/s

95th percentile per-packet one-way delay: 55.798 ms

Loss rate: 22.30%

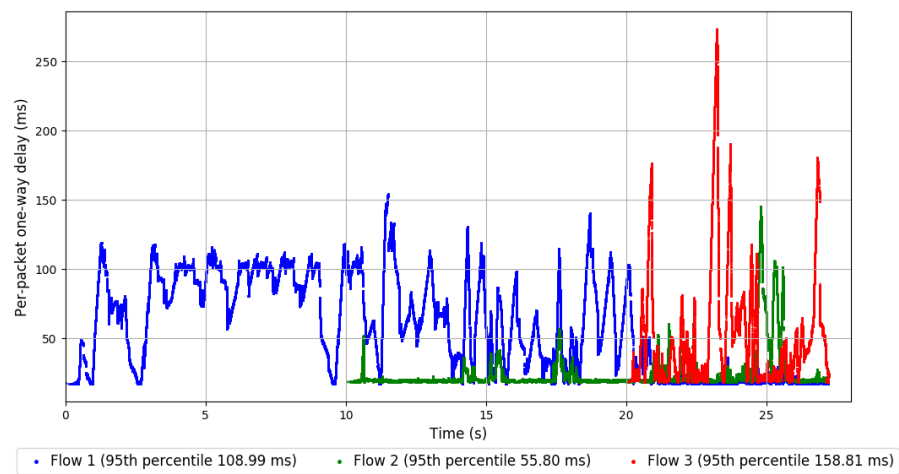
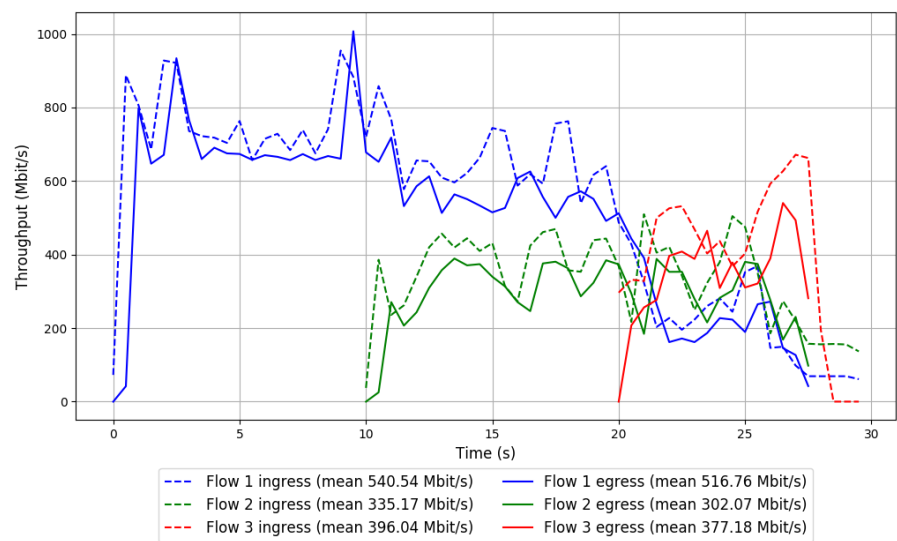
-- Flow 3:

Average throughput: 377.18 Mbit/s

95th percentile per-packet one-way delay: 158.806 ms

Loss rate: 31.00%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-05-22 05:26:36

End at: 2018-05-22 05:27:06

Local clock offset: 0.332 ms

Remote clock offset: 0.075 ms

Below is generated by plot.py at 2018-05-22 08:28:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 767.36 Mbit/s

95th percentile per-packet one-way delay: 107.533 ms

Loss rate: 13.71%

-- Flow 1:

Average throughput: 419.74 Mbit/s

95th percentile per-packet one-way delay: 103.281 ms

Loss rate: 11.49%

-- Flow 2:

Average throughput: 434.02 Mbit/s

95th percentile per-packet one-way delay: 110.405 ms

Loss rate: 14.77%

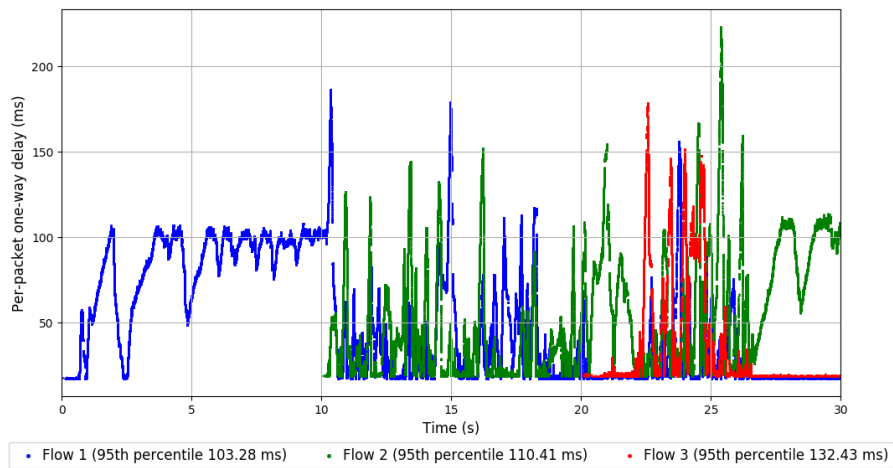
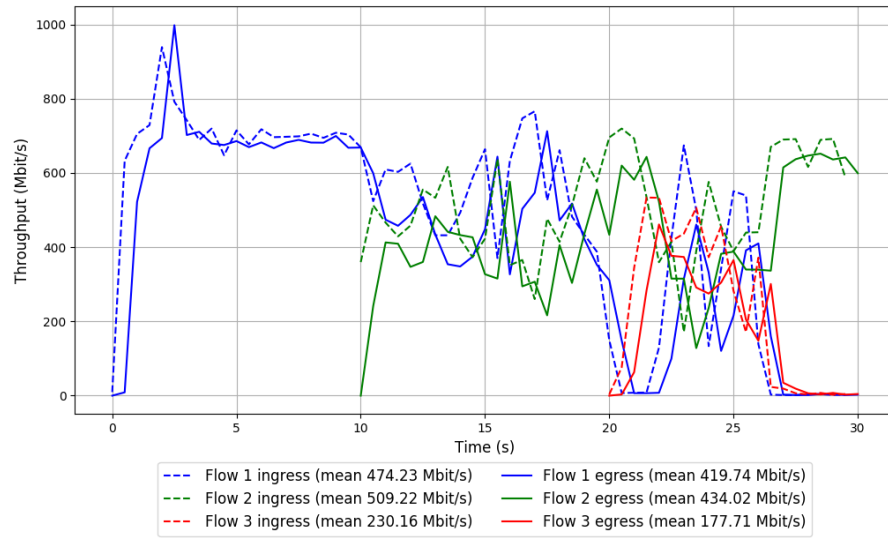
-- Flow 3:

Average throughput: 177.71 Mbit/s

95th percentile per-packet one-way delay: 132.433 ms

Loss rate: 22.79%

Run 5: Report of FillP — Data Link

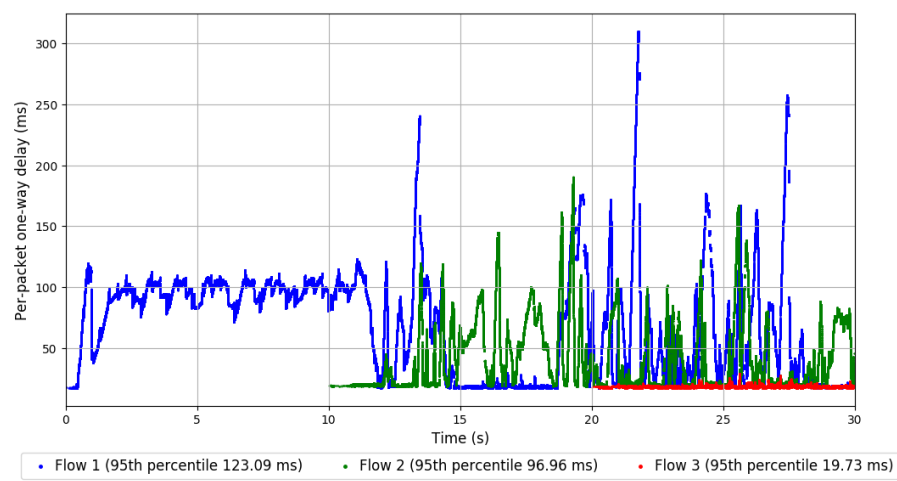
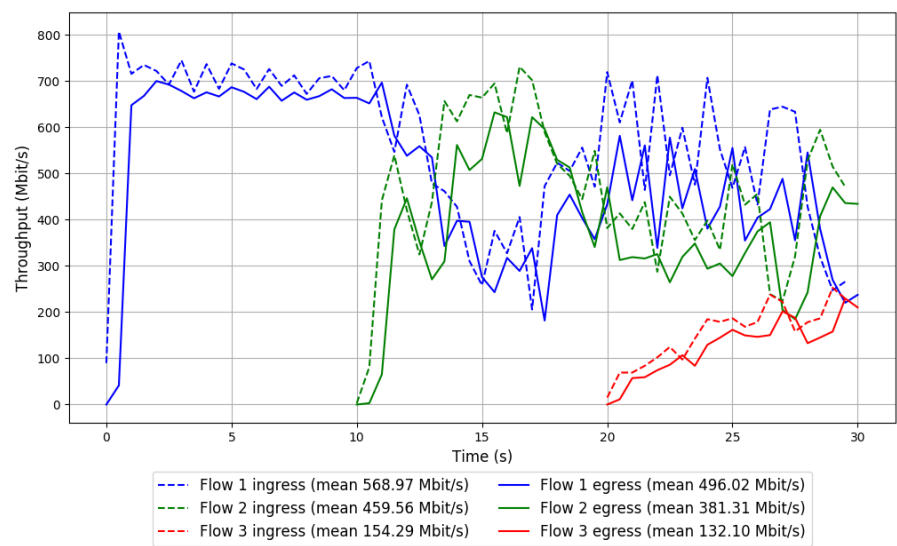


Run 6: Statistics of FillP

Start at: 2018-05-22 05:52:06
End at: 2018-05-22 05:52:36
Local clock offset: 0.229 ms
Remote clock offset: -0.024 ms

Below is generated by plot.py at 2018-05-22 08:29:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 793.73 Mbit/s
95th percentile per-packet one-way delay: 113.747 ms
Loss rate: 14.29%
-- Flow 1:
Average throughput: 496.02 Mbit/s
95th percentile per-packet one-way delay: 123.089 ms
Loss rate: 12.82%
-- Flow 2:
Average throughput: 381.31 Mbit/s
95th percentile per-packet one-way delay: 96.958 ms
Loss rate: 17.02%
-- Flow 3:
Average throughput: 132.10 Mbit/s
95th percentile per-packet one-way delay: 19.725 ms
Loss rate: 14.37%

Run 6: Report of FillP — Data Link

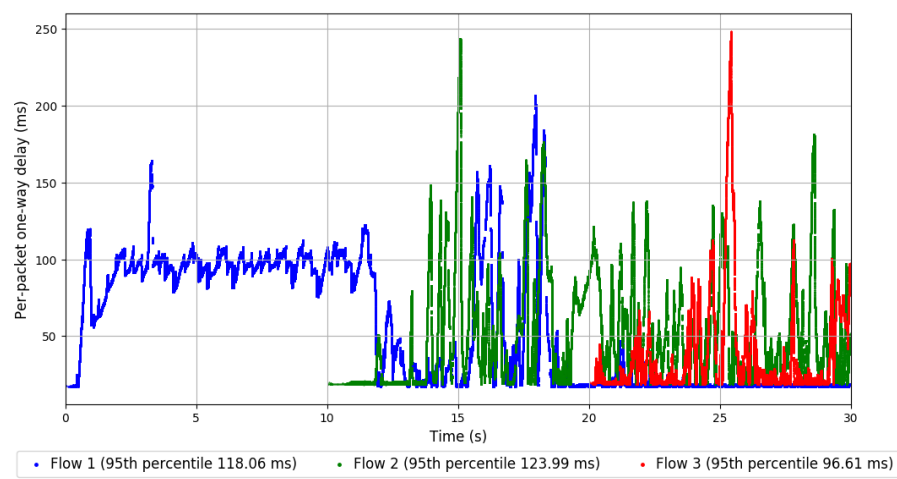
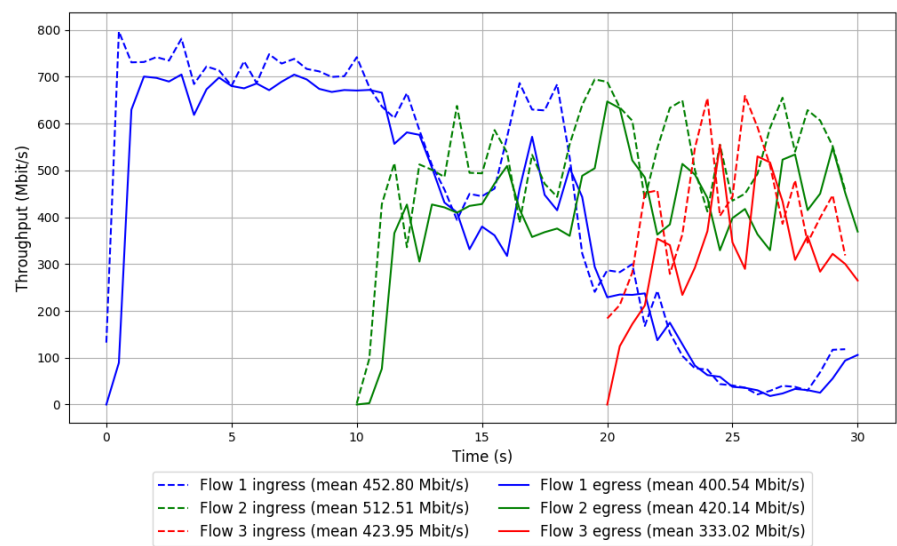


Run 7: Statistics of FillP

Start at: 2018-05-22 06:17:38
End at: 2018-05-22 06:18:08
Local clock offset: -0.105 ms
Remote clock offset: -0.112 ms

Below is generated by plot.py at 2018-05-22 08:32:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 790.44 Mbit/s
95th percentile per-packet one-way delay: 119.110 ms
Loss rate: 15.39%
-- Flow 1:
Average throughput: 400.54 Mbit/s
95th percentile per-packet one-way delay: 118.062 ms
Loss rate: 11.54%
-- Flow 2:
Average throughput: 420.14 Mbit/s
95th percentile per-packet one-way delay: 123.986 ms
Loss rate: 18.02%
-- Flow 3:
Average throughput: 333.02 Mbit/s
95th percentile per-packet one-way delay: 96.605 ms
Loss rate: 21.44%

Run 7: Report of FillP — Data Link

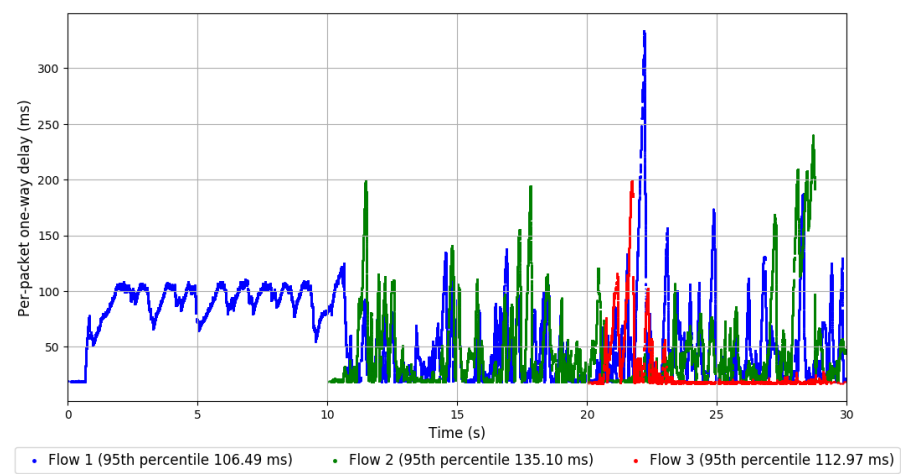
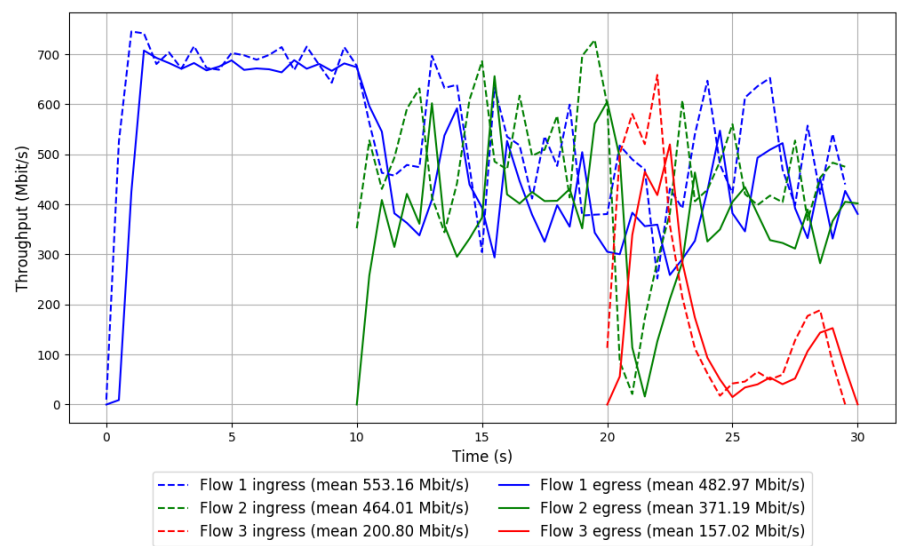


Run 8: Statistics of FillP

Start at: 2018-05-22 06:43:03
End at: 2018-05-22 06:43:33
Local clock offset: 0.135 ms
Remote clock offset: -0.253 ms

Below is generated by plot.py at 2018-05-22 08:33:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 782.00 Mbit/s
95th percentile per-packet one-way delay: 108.937 ms
Loss rate: 15.77%
-- Flow 1:
Average throughput: 482.97 Mbit/s
95th percentile per-packet one-way delay: 106.490 ms
Loss rate: 12.69%
-- Flow 2:
Average throughput: 371.19 Mbit/s
95th percentile per-packet one-way delay: 135.100 ms
Loss rate: 20.00%
-- Flow 3:
Average throughput: 157.02 Mbit/s
95th percentile per-packet one-way delay: 112.966 ms
Loss rate: 21.79%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-05-22 07:08:37

End at: 2018-05-22 07:09:07

Local clock offset: 0.635 ms

Remote clock offset: 1.071 ms

Below is generated by plot.py at 2018-05-22 08:39:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 768.56 Mbit/s

95th percentile per-packet one-way delay: 105.342 ms

Loss rate: 13.84%

-- Flow 1:

Average throughput: 480.27 Mbit/s

95th percentile per-packet one-way delay: 104.349 ms

Loss rate: 11.48%

-- Flow 2:

Average throughput: 285.33 Mbit/s

95th percentile per-packet one-way delay: 95.509 ms

Loss rate: 19.96%

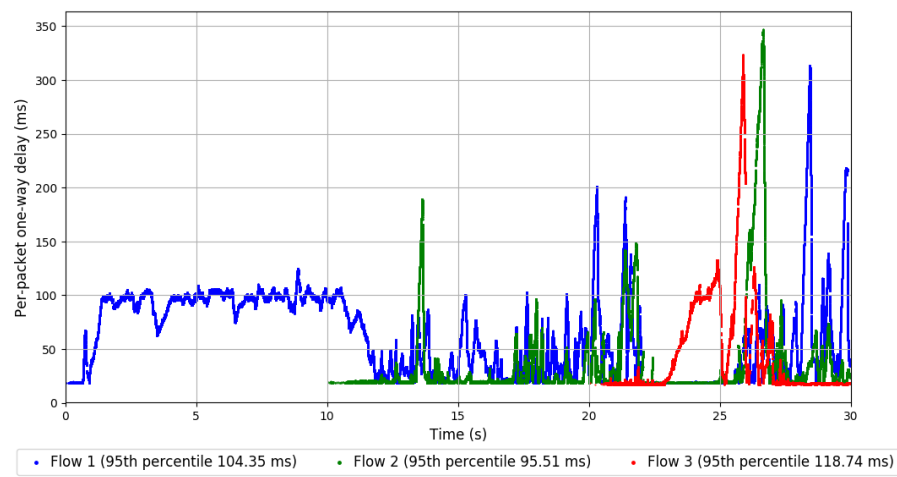
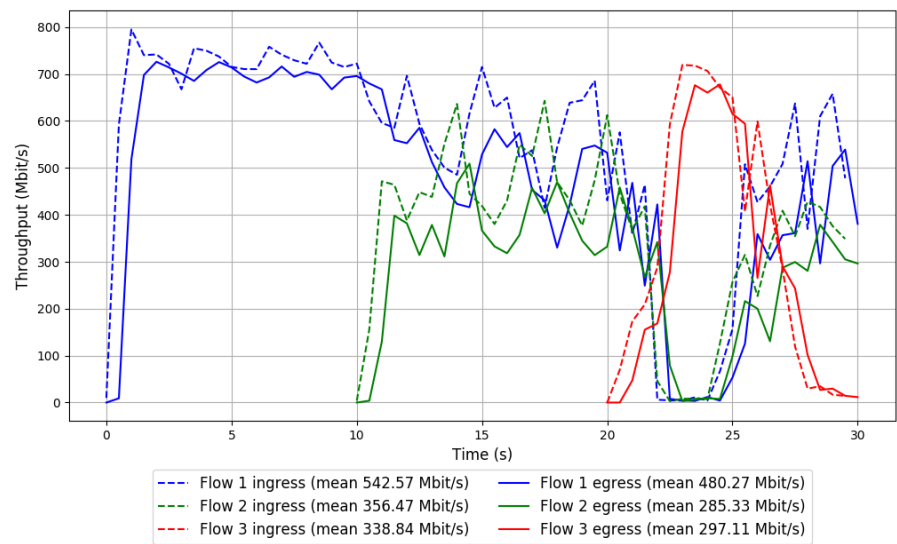
-- Flow 3:

Average throughput: 297.11 Mbit/s

95th percentile per-packet one-way delay: 118.736 ms

Loss rate: 12.33%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-05-22 07:34:05

End at: 2018-05-22 07:34:35

Local clock offset: 0.531 ms

Remote clock offset: 1.669 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 805.72 Mbit/s

95th percentile per-packet one-way delay: 113.799 ms

Loss rate: 16.06%

-- Flow 1:

Average throughput: 434.76 Mbit/s

95th percentile per-packet one-way delay: 110.967 ms

Loss rate: 12.04%

-- Flow 2:

Average throughput: 376.59 Mbit/s

95th percentile per-packet one-way delay: 127.481 ms

Loss rate: 19.33%

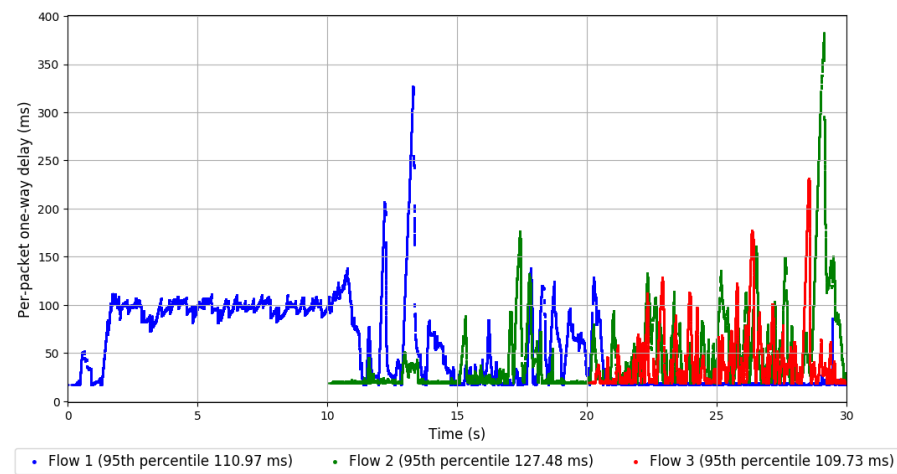
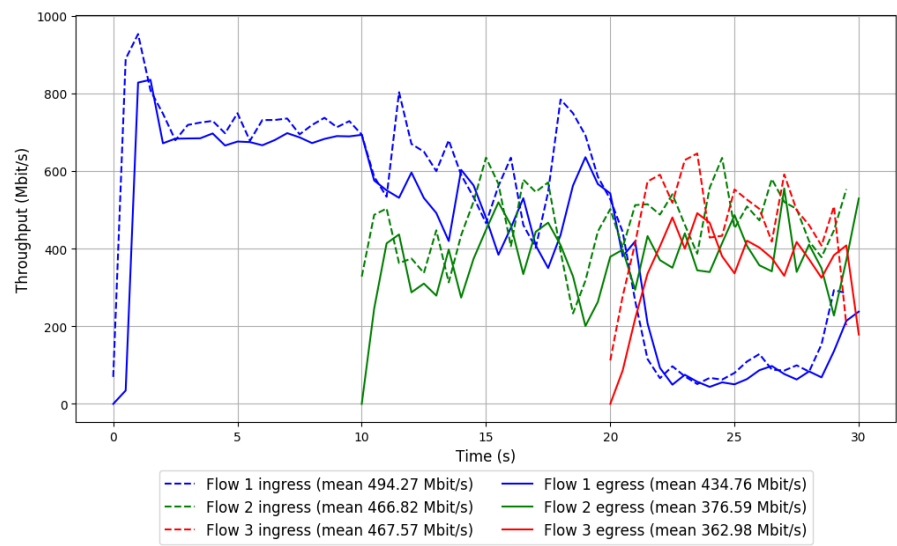
-- Flow 3:

Average throughput: 362.98 Mbit/s

95th percentile per-packet one-way delay: 109.733 ms

Loss rate: 22.32%

Run 10: Report of FillP — Data Link

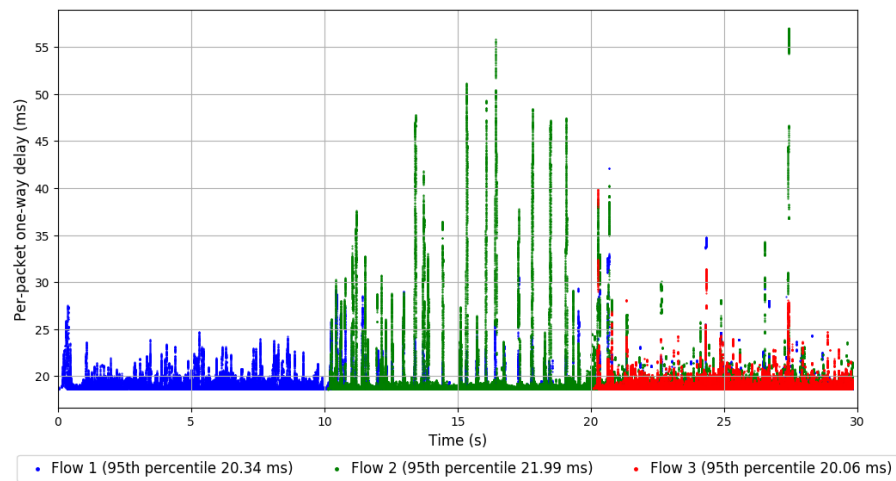
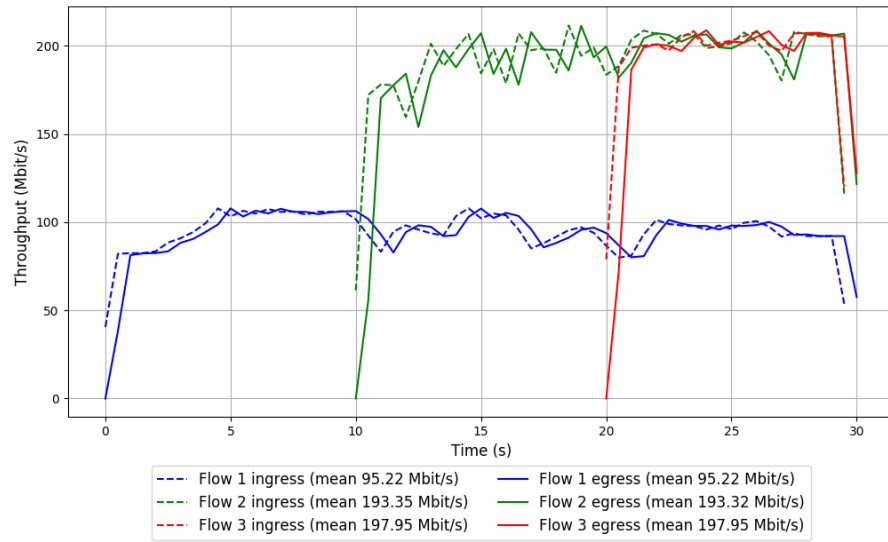


```
Run 1: Statistics of Indigo

Start at: 2018-05-22 03:28:31
End at: 2018-05-22 03:29:01
Local clock offset: 0.188 ms
Remote clock offset: 0.166 ms

# Below is generated by plot.py at 2018-05-22 08:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.39 Mbit/s
95th percentile per-packet one-way delay: 20.620 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 20.345 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.32 Mbit/s
95th percentile per-packet one-way delay: 21.989 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 197.95 Mbit/s
95th percentile per-packet one-way delay: 20.063 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-05-22 03:54:15

End at: 2018-05-22 03:54:45

Local clock offset: 0.257 ms

Remote clock offset: 0.829 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.18 Mbit/s

95th percentile per-packet one-way delay: 20.998 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 203.09 Mbit/s

95th percentile per-packet one-way delay: 21.417 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 198.44 Mbit/s

95th percentile per-packet one-way delay: 20.764 ms

Loss rate: 0.01%

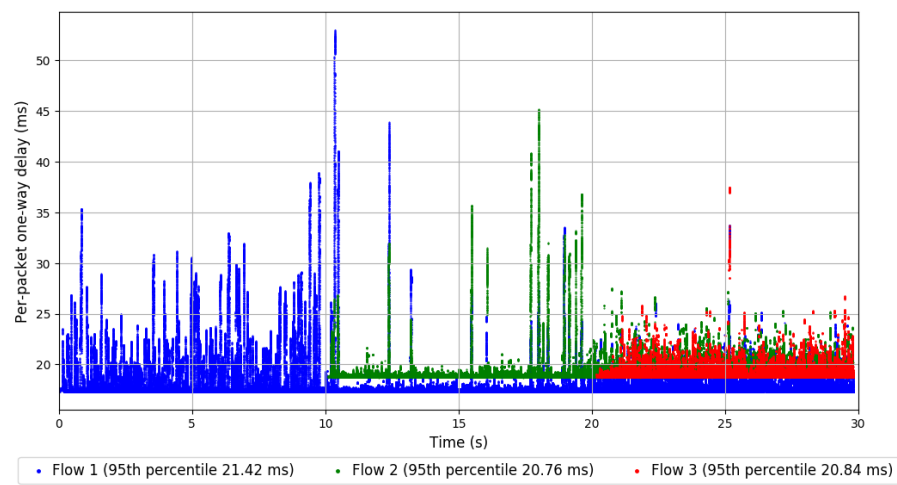
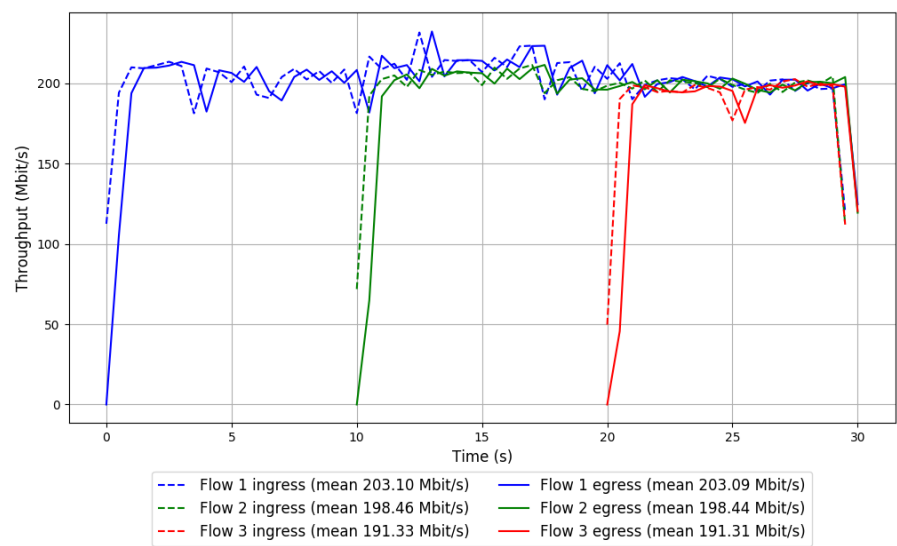
-- Flow 3:

Average throughput: 191.31 Mbit/s

95th percentile per-packet one-way delay: 20.843 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-05-22 04:19:52

End at: 2018-05-22 04:20:22

Local clock offset: 0.459 ms

Remote clock offset: 0.566 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 365.40 Mbit/s

95th percentile per-packet one-way delay: 21.810 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 198.63 Mbit/s

95th percentile per-packet one-way delay: 23.722 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.64 Mbit/s

95th percentile per-packet one-way delay: 19.277 ms

Loss rate: 0.00%

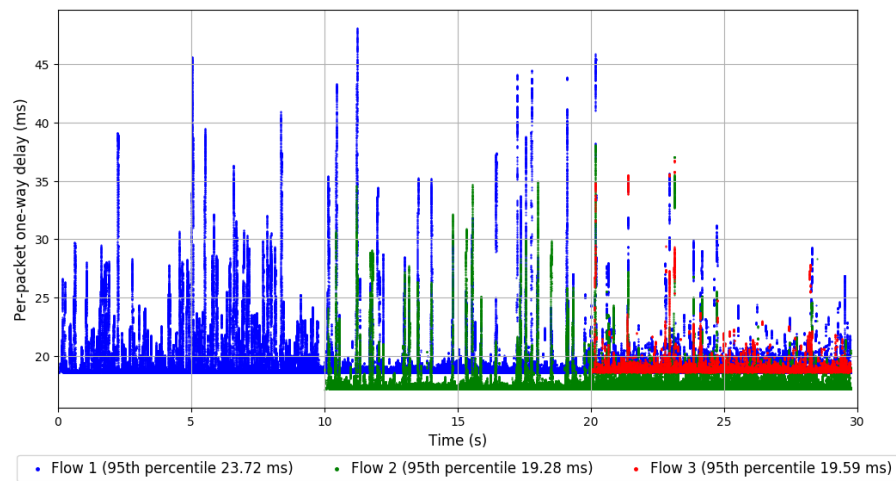
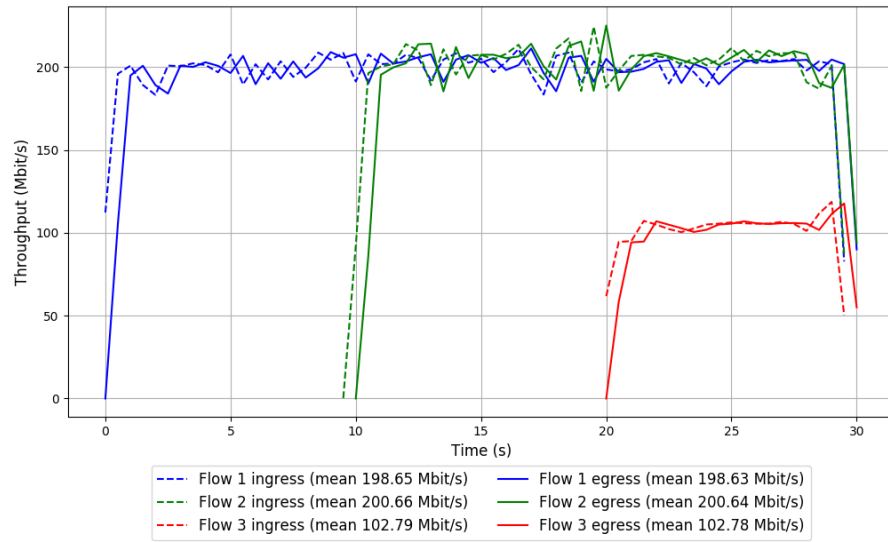
-- Flow 3:

Average throughput: 102.78 Mbit/s

95th percentile per-packet one-way delay: 19.590 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-05-22 04:45:27

End at: 2018-05-22 04:45:57

Local clock offset: 0.705 ms

Remote clock offset: 0.354 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 397.06 Mbit/s

95th percentile per-packet one-way delay: 21.569 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 199.63 Mbit/s

95th percentile per-packet one-way delay: 22.824 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 202.93 Mbit/s

95th percentile per-packet one-way delay: 19.670 ms

Loss rate: 0.00%

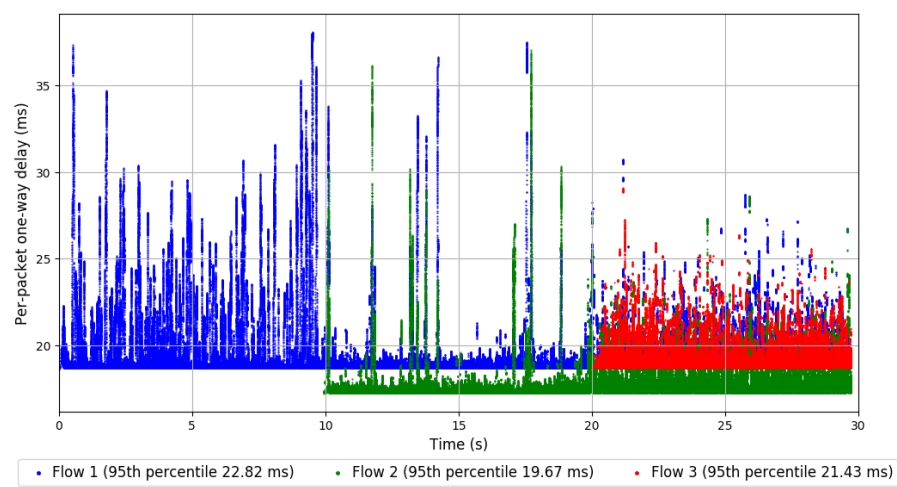
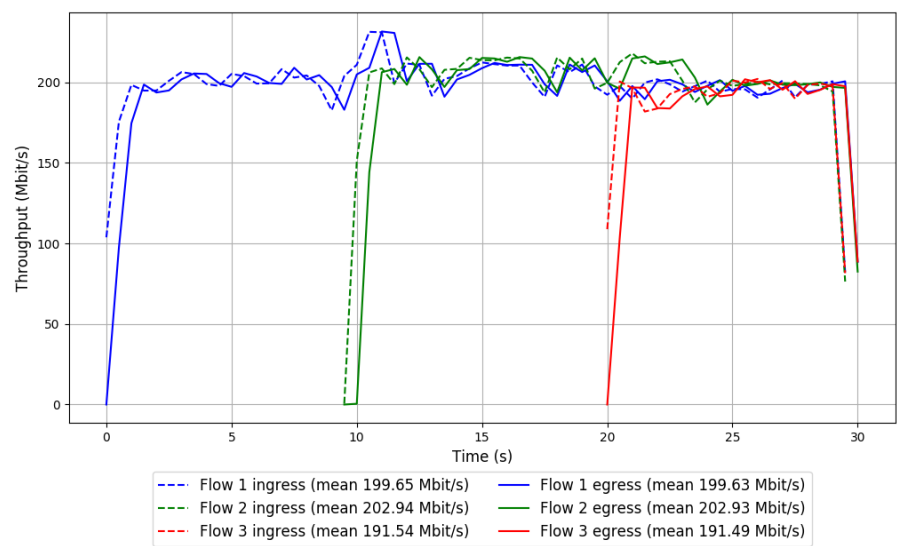
-- Flow 3:

Average throughput: 191.49 Mbit/s

95th percentile per-packet one-way delay: 21.429 ms

Loss rate: 0.03%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-05-22 05:11:08

End at: 2018-05-22 05:11:38

Local clock offset: 0.367 ms

Remote clock offset: 0.221 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 167.11 Mbit/s

95th percentile per-packet one-way delay: 22.885 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 87.78 Mbit/s

95th percentile per-packet one-way delay: 22.166 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.17 Mbit/s

95th percentile per-packet one-way delay: 23.708 ms

Loss rate: 0.02%

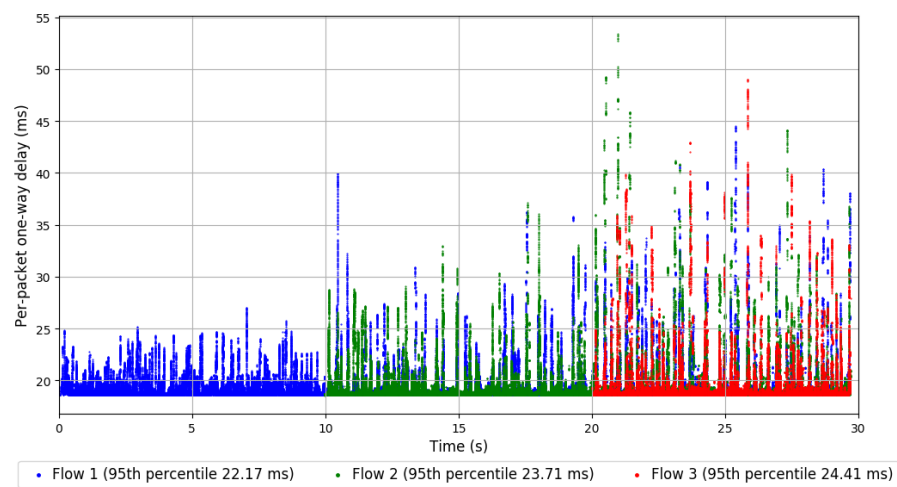
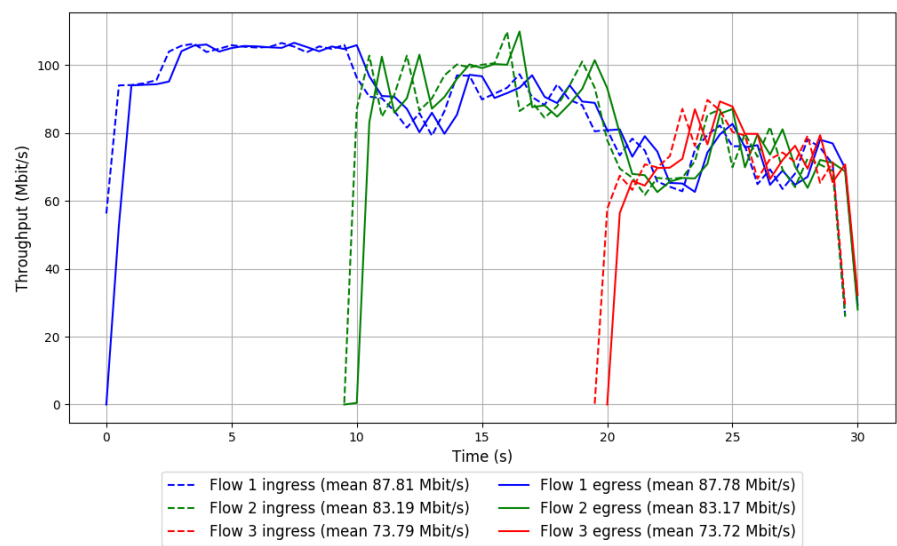
-- Flow 3:

Average throughput: 73.72 Mbit/s

95th percentile per-packet one-way delay: 24.407 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-05-22 05:36:32

End at: 2018-05-22 05:37:02

Local clock offset: 0.28 ms

Remote clock offset: 0.109 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.94 Mbit/s

95th percentile per-packet one-way delay: 21.155 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 200.99 Mbit/s

95th percentile per-packet one-way delay: 21.718 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.07 Mbit/s

95th percentile per-packet one-way delay: 20.568 ms

Loss rate: 0.00%

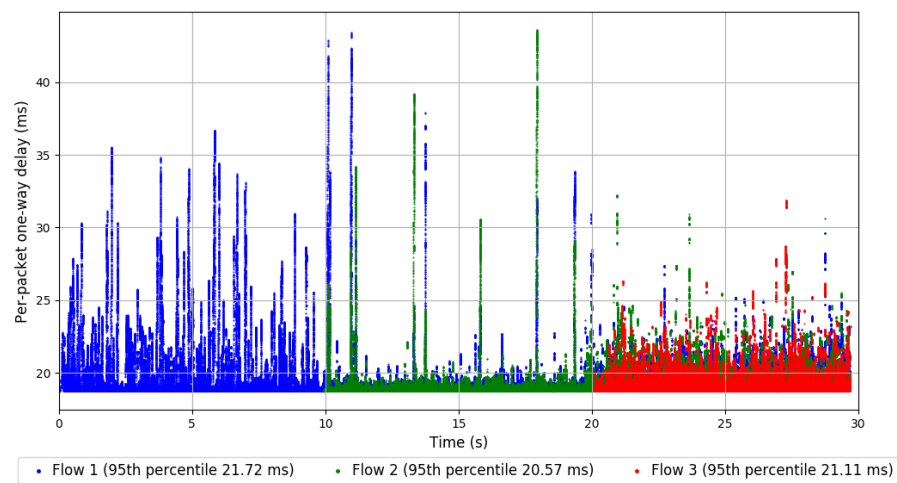
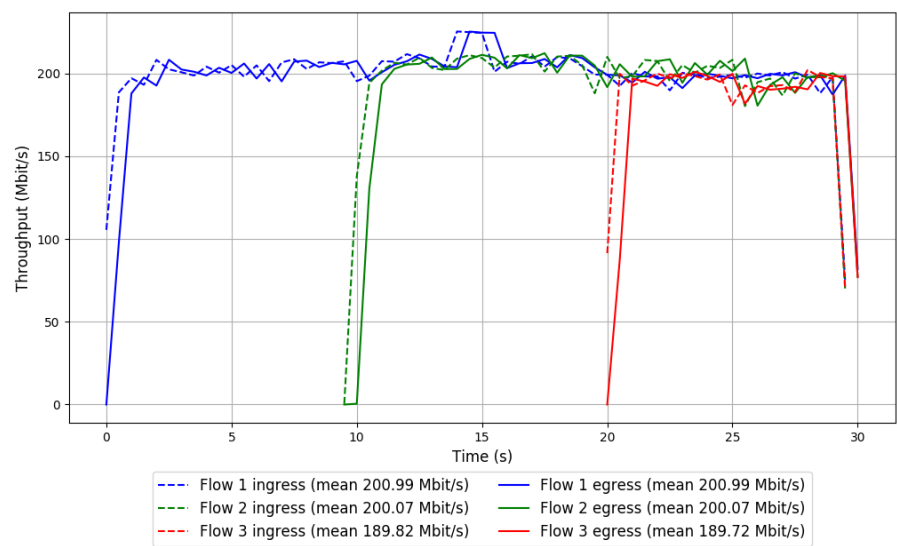
-- Flow 3:

Average throughput: 189.72 Mbit/s

95th percentile per-packet one-way delay: 21.113 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link

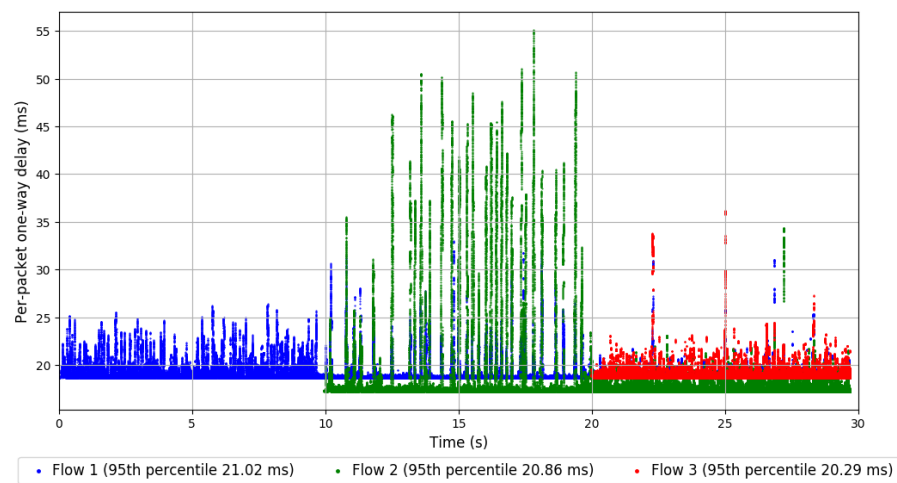
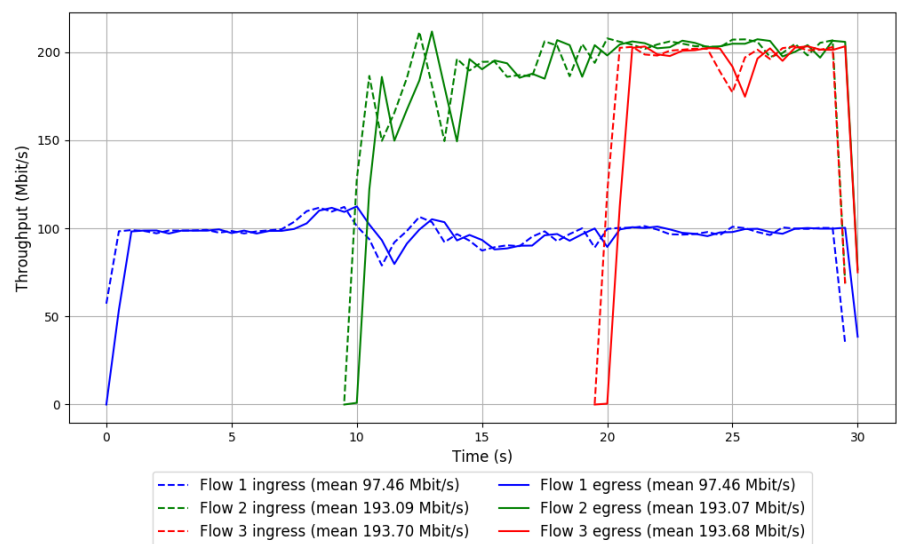


Run 7: Statistics of Indigo

Start at: 2018-05-22 06:02:06
End at: 2018-05-22 06:02:36
Local clock offset: 0.09 ms
Remote clock offset: -0.053 ms

Below is generated by plot.py at 2018-05-22 08:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 289.56 Mbit/s
95th percentile per-packet one-way delay: 20.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 21.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.07 Mbit/s
95th percentile per-packet one-way delay: 20.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 193.68 Mbit/s
95th percentile per-packet one-way delay: 20.285 ms
Loss rate: 0.00%

Run 7: Report of Indigo — Data Link

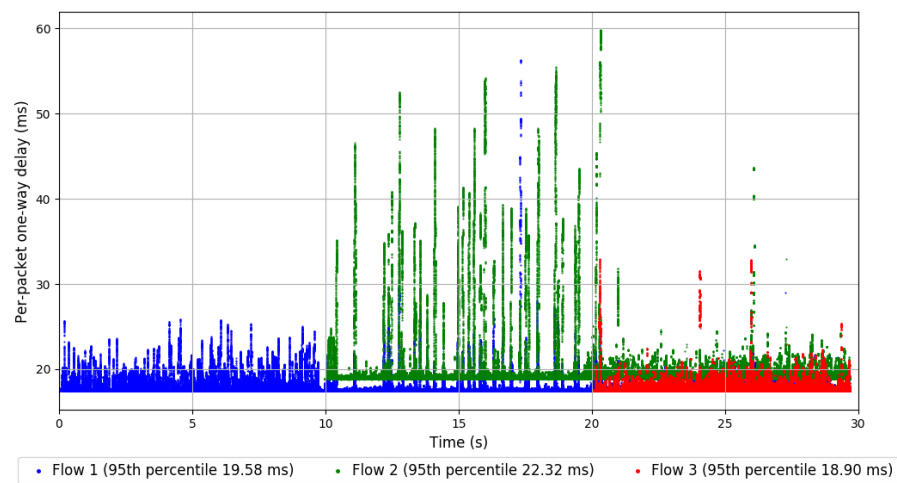
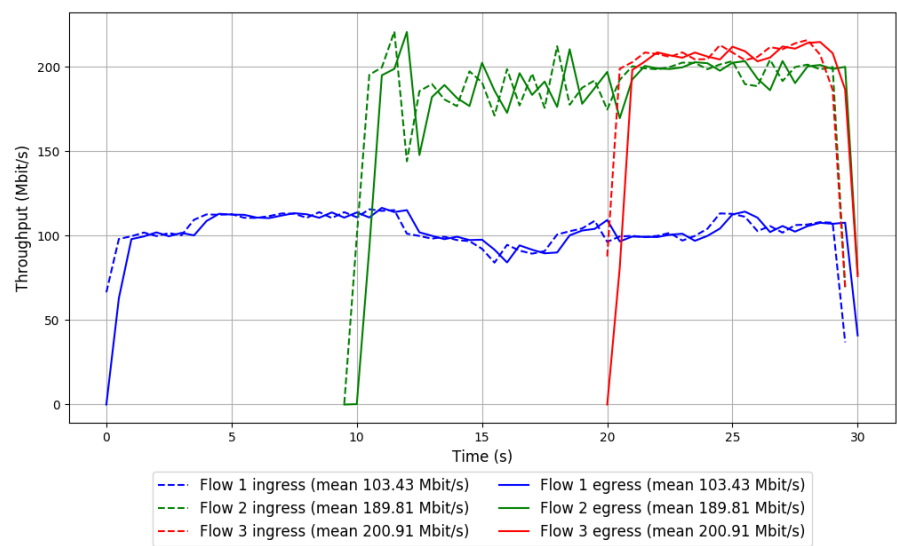


Run 8: Statistics of Indigo

Start at: 2018-05-22 06:27:38
End at: 2018-05-22 06:28:08
Local clock offset: -0.248 ms
Remote clock offset: -0.184 ms

Below is generated by plot.py at 2018-05-22 08:41:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 294.75 Mbit/s
95th percentile per-packet one-way delay: 20.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.43 Mbit/s
95th percentile per-packet one-way delay: 19.580 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.81 Mbit/s
95th percentile per-packet one-way delay: 22.323 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 200.91 Mbit/s
95th percentile per-packet one-way delay: 18.902 ms
Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-05-22 06:53:01

End at: 2018-05-22 06:53:31

Local clock offset: 0.133 ms

Remote clock offset: 0.141 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 390.69 Mbit/s

95th percentile per-packet one-way delay: 21.141 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 198.12 Mbit/s

95th percentile per-packet one-way delay: 21.114 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 194.72 Mbit/s

95th percentile per-packet one-way delay: 21.223 ms

Loss rate: 0.01%

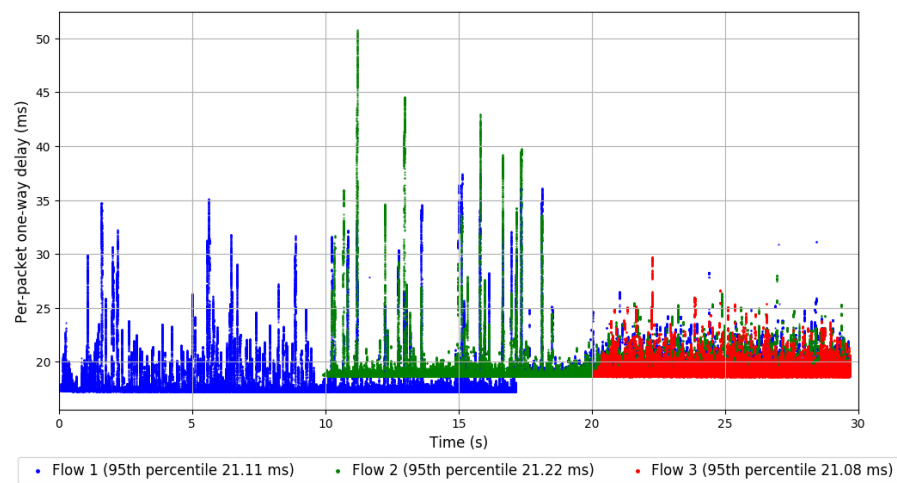
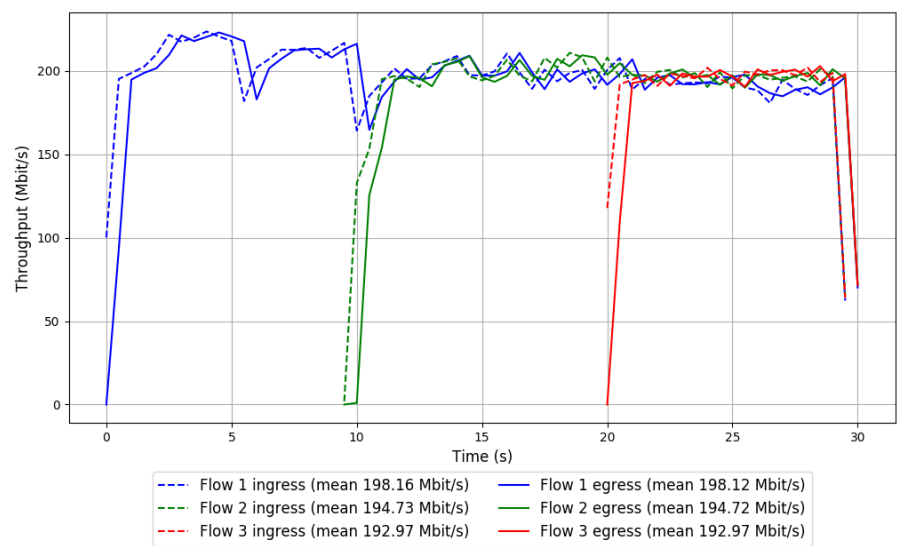
-- Flow 3:

Average throughput: 192.97 Mbit/s

95th percentile per-packet one-way delay: 21.079 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-05-22 07:18:33

End at: 2018-05-22 07:19:03

Local clock offset: 0.687 ms

Remote clock offset: 1.367 ms

Below is generated by plot.py at 2018-05-22 08:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 398.89 Mbit/s

95th percentile per-packet one-way delay: 20.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 203.75 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.03 Mbit/s

95th percentile per-packet one-way delay: 20.758 ms

Loss rate: 0.01%

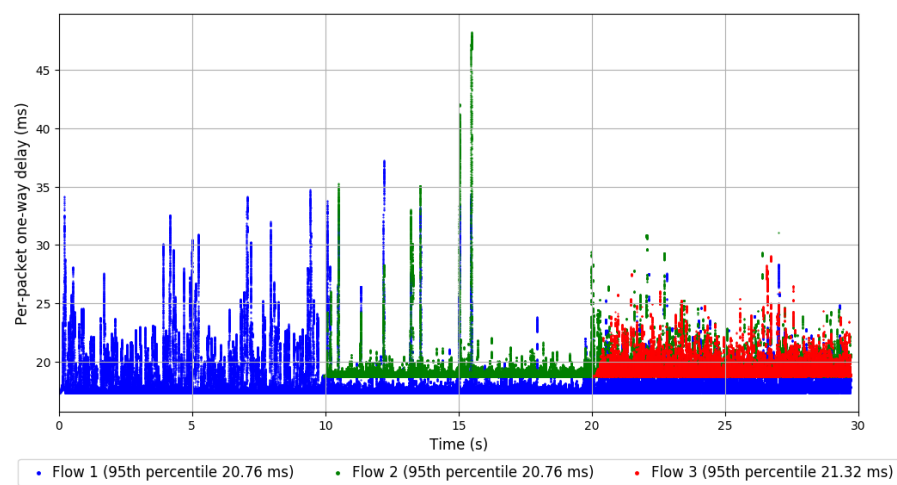
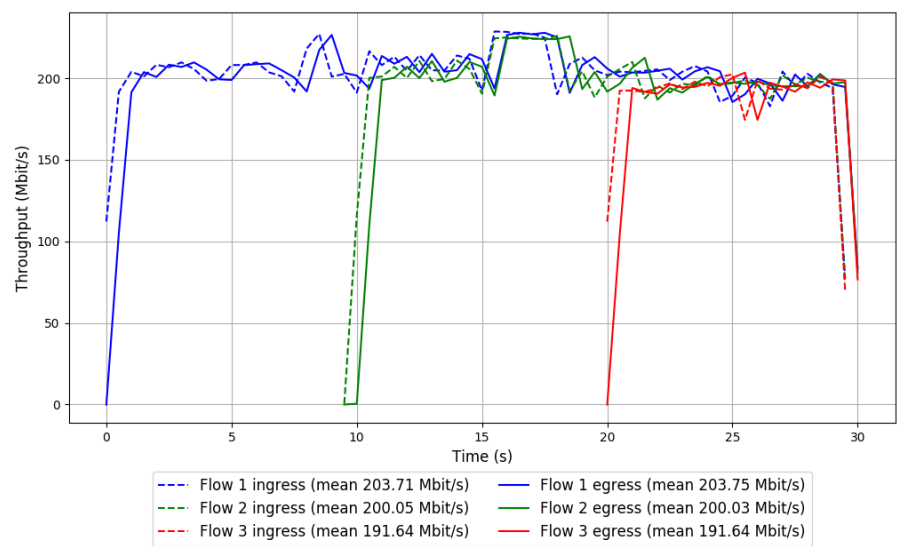
-- Flow 3:

Average throughput: 191.64 Mbit/s

95th percentile per-packet one-way delay: 21.320 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

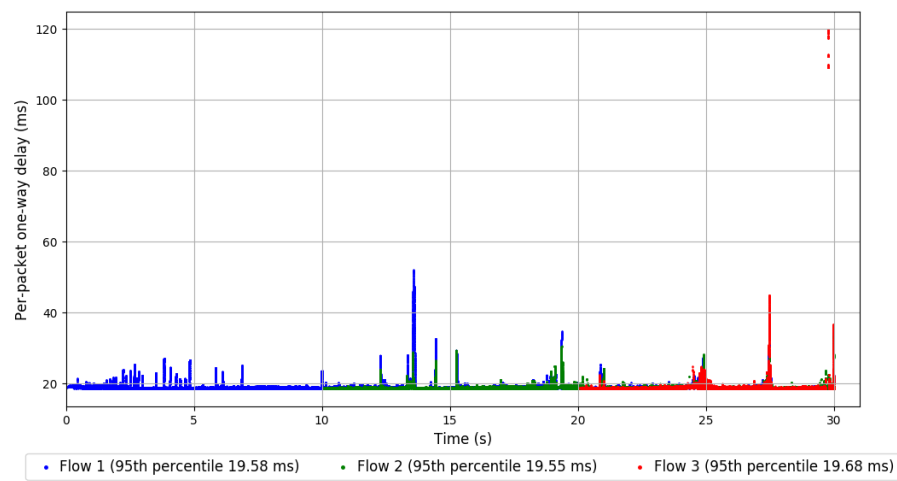
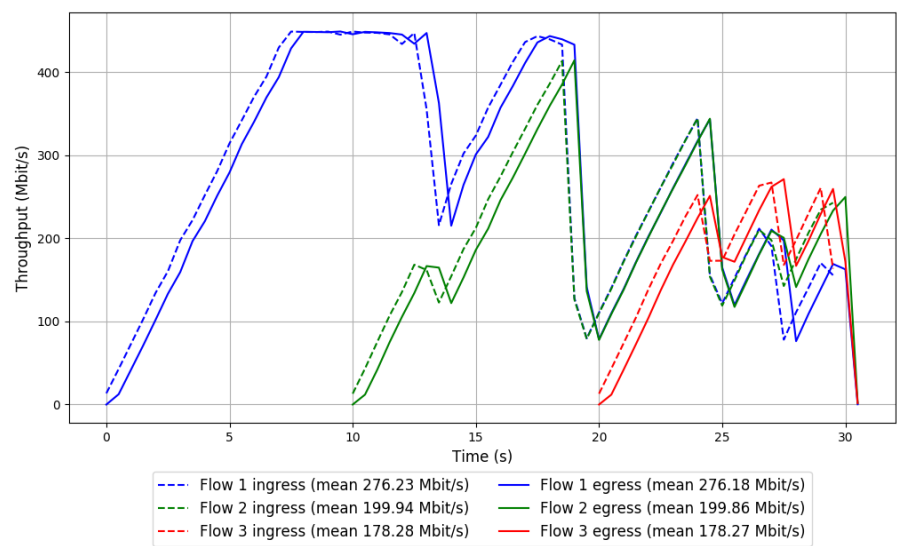


```
Run 1: Statistics of LEDBAT

Start at: 2018-05-22 03:37:45
End at: 2018-05-22 03:38:15
Local clock offset: 0.28 ms
Remote clock offset: 0.435 ms

# Below is generated by plot.py at 2018-05-22 08:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.57 Mbit/s
95th percentile per-packet one-way delay: 19.586 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 276.18 Mbit/s
95th percentile per-packet one-way delay: 19.584 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 199.86 Mbit/s
95th percentile per-packet one-way delay: 19.545 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 178.27 Mbit/s
95th percentile per-packet one-way delay: 19.678 ms
Loss rate: 0.01%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-05-22 04:03:33

End at: 2018-05-22 04:04:03

Local clock offset: 0.393 ms

Remote clock offset: 0.729 ms

Below is generated by plot.py at 2018-05-22 08:42:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.02 Mbit/s

95th percentile per-packet one-way delay: 19.506 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 294.51 Mbit/s

95th percentile per-packet one-way delay: 19.417 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 229.44 Mbit/s

95th percentile per-packet one-way delay: 19.605 ms

Loss rate: 0.01%

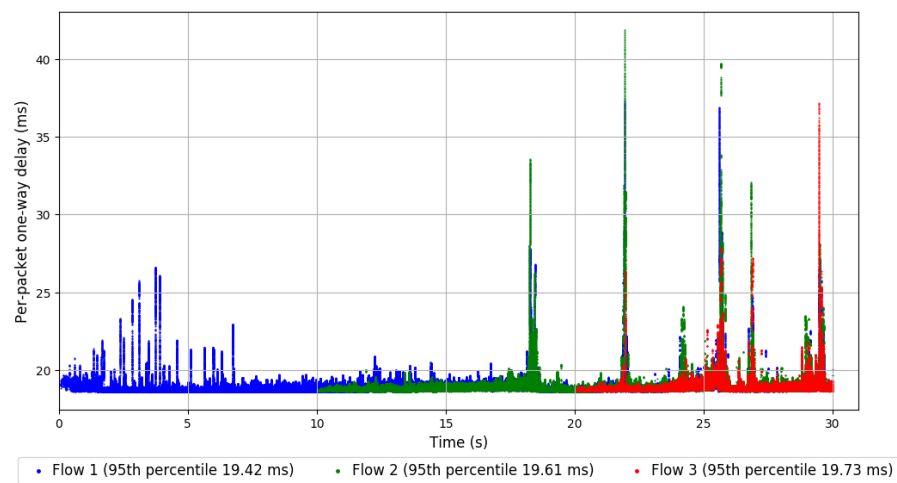
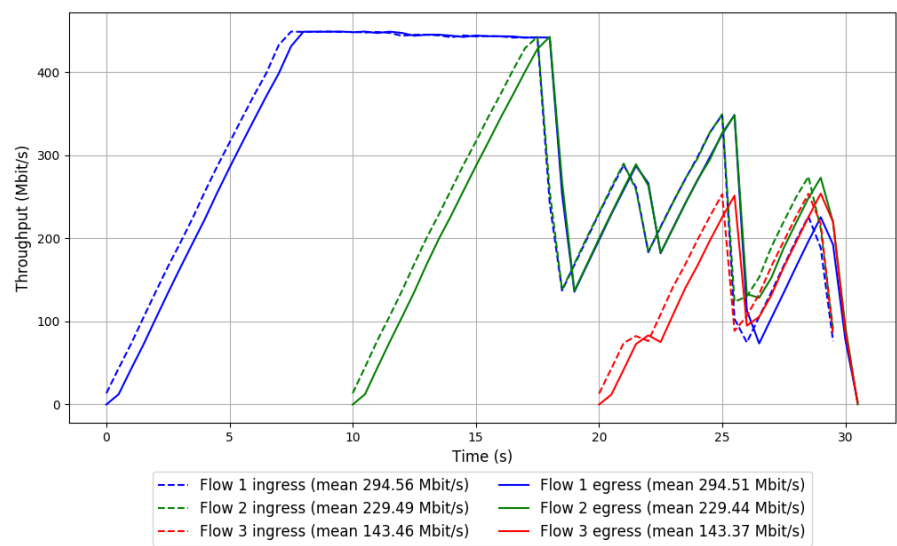
-- Flow 3:

Average throughput: 143.37 Mbit/s

95th percentile per-packet one-way delay: 19.730 ms

Loss rate: 0.06%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-05-22 04:29:09

End at: 2018-05-22 04:29:39

Local clock offset: 0.534 ms

Remote clock offset: 0.748 ms

Below is generated by plot.py at 2018-05-22 08:42:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.46 Mbit/s

95th percentile per-packet one-way delay: 19.636 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 277.26 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 181.59 Mbit/s

95th percentile per-packet one-way delay: 19.527 ms

Loss rate: 0.04%

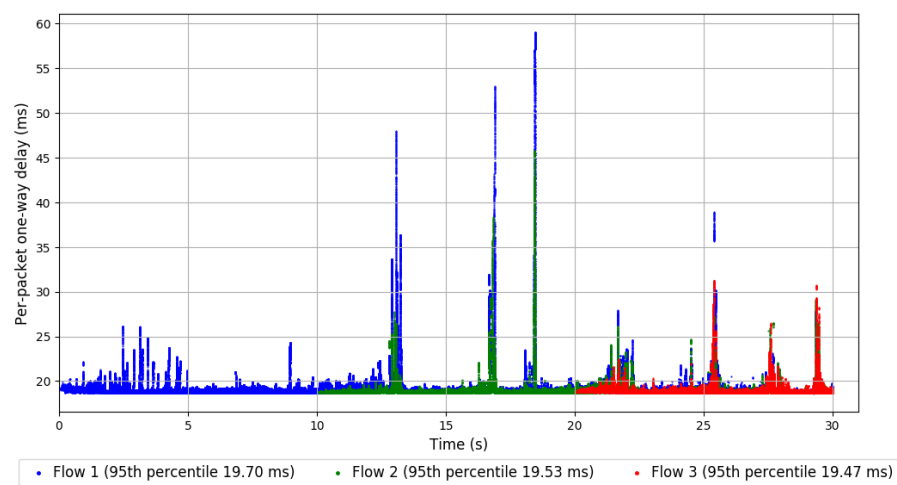
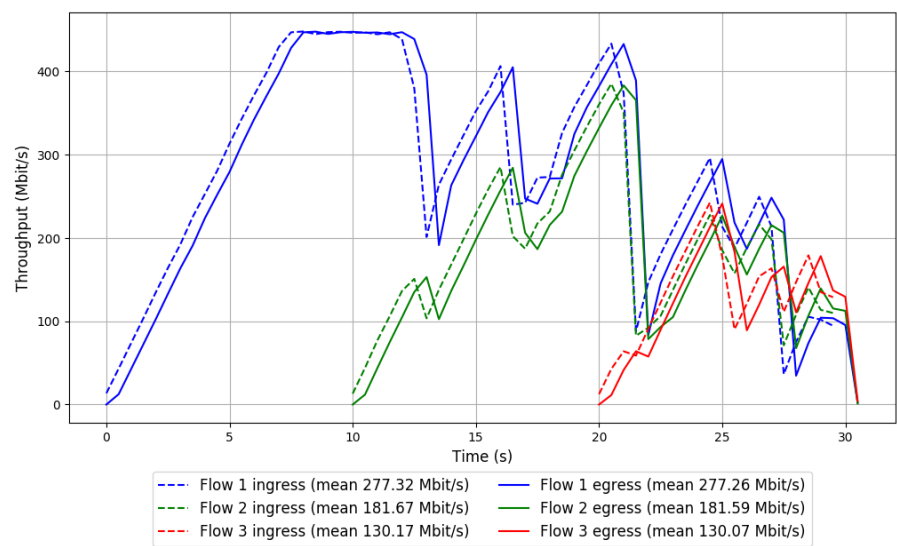
-- Flow 3:

Average throughput: 130.07 Mbit/s

95th percentile per-packet one-way delay: 19.474 ms

Loss rate: 0.07%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-05-22 04:54:45

End at: 2018-05-22 04:55:15

Local clock offset: 0.795 ms

Remote clock offset: 0.246 ms

Below is generated by plot.py at 2018-05-22 08:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.41 Mbit/s

95th percentile per-packet one-way delay: 19.400 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 281.65 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 178.66 Mbit/s

95th percentile per-packet one-way delay: 19.300 ms

Loss rate: 0.04%

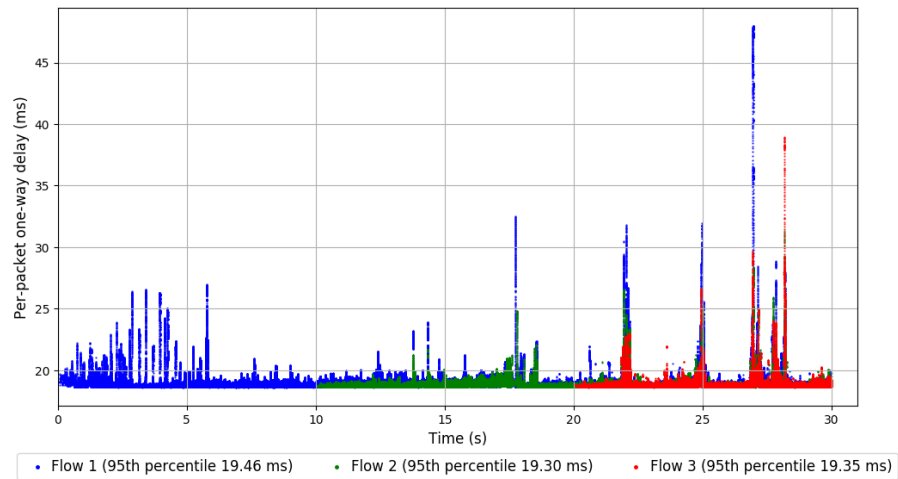
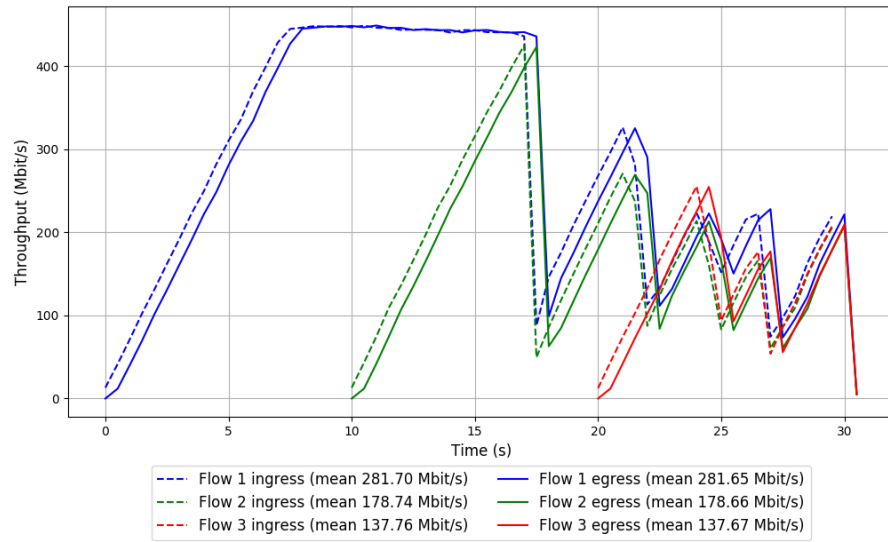
-- Flow 3:

Average throughput: 137.67 Mbit/s

95th percentile per-packet one-way delay: 19.348 ms

Loss rate: 0.06%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-05-22 05:20:16

End at: 2018-05-22 05:20:46

Local clock offset: 0.333 ms

Remote clock offset: 0.133 ms

Below is generated by plot.py at 2018-05-22 08:43:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 474.93 Mbit/s

95th percentile per-packet one-way delay: 19.418 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 282.23 Mbit/s

95th percentile per-packet one-way delay: 19.418 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 215.81 Mbit/s

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

Loss rate: 0.06%

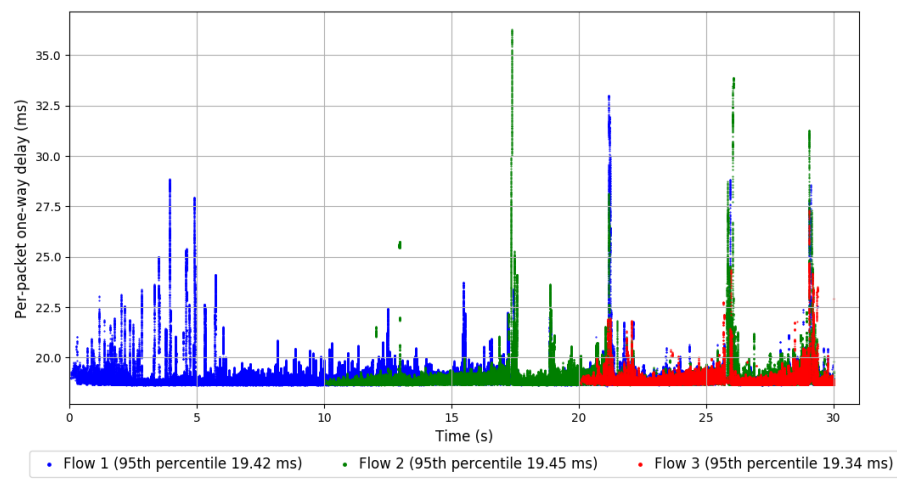
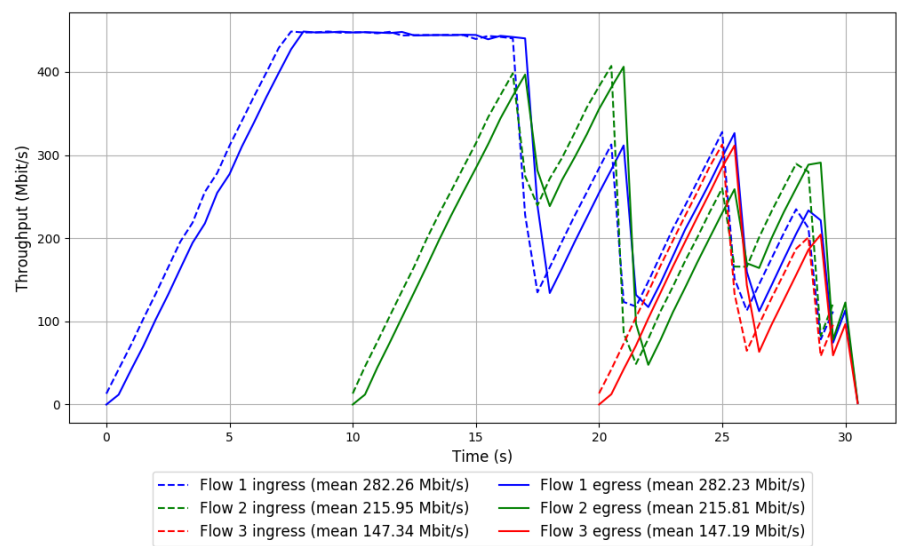
-- Flow 3:

Average throughput: 147.19 Mbit/s

95th percentile per-packet one-way delay: 19.342 ms

Loss rate: 0.08%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-05-22 05:45:49

End at: 2018-05-22 05:46:19

Local clock offset: 0.308 ms

Remote clock offset: 0.059 ms

Below is generated by plot.py at 2018-05-22 08:44:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 452.71 Mbit/s

95th percentile per-packet one-way delay: 19.854 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 267.48 Mbit/s

95th percentile per-packet one-way delay: 19.498 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 191.17 Mbit/s

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

Loss rate: 0.05%

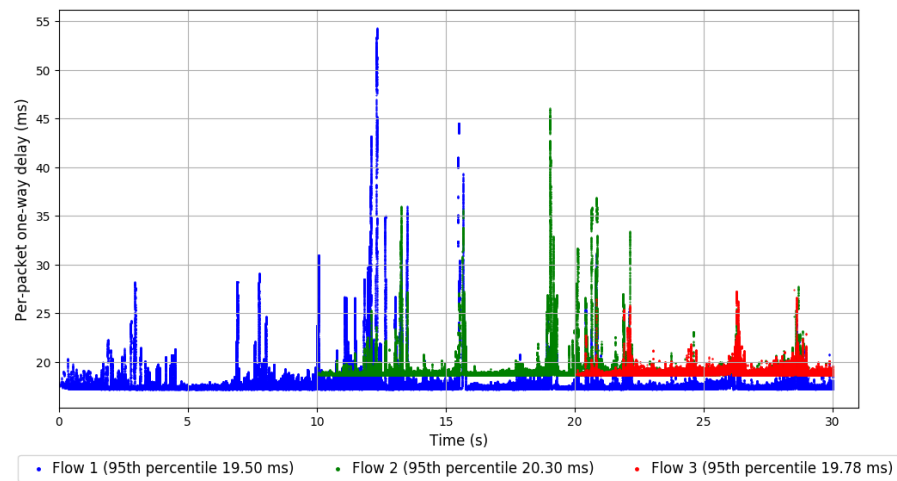
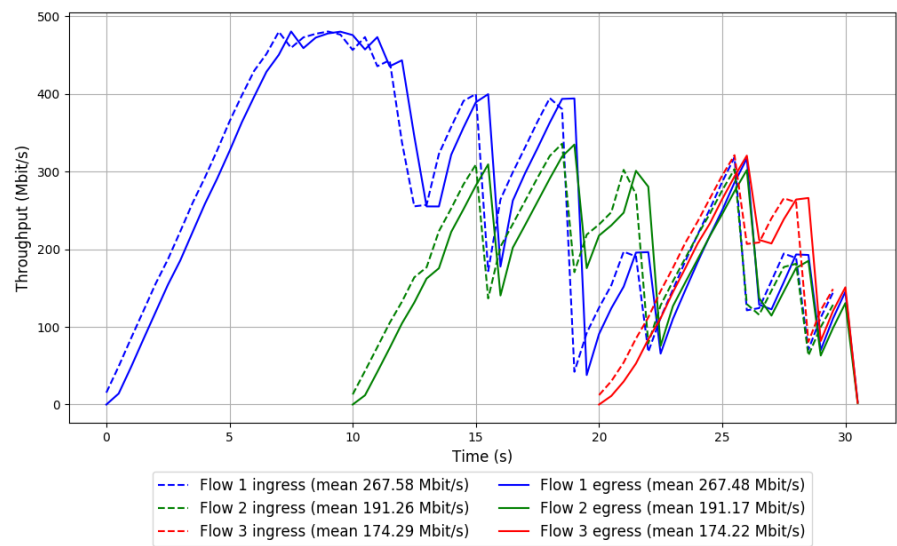
-- Flow 3:

Average throughput: 174.22 Mbit/s

95th percentile per-packet one-way delay: 19.780 ms

Loss rate: 0.05%

Run 6: Report of LEDBAT — Data Link

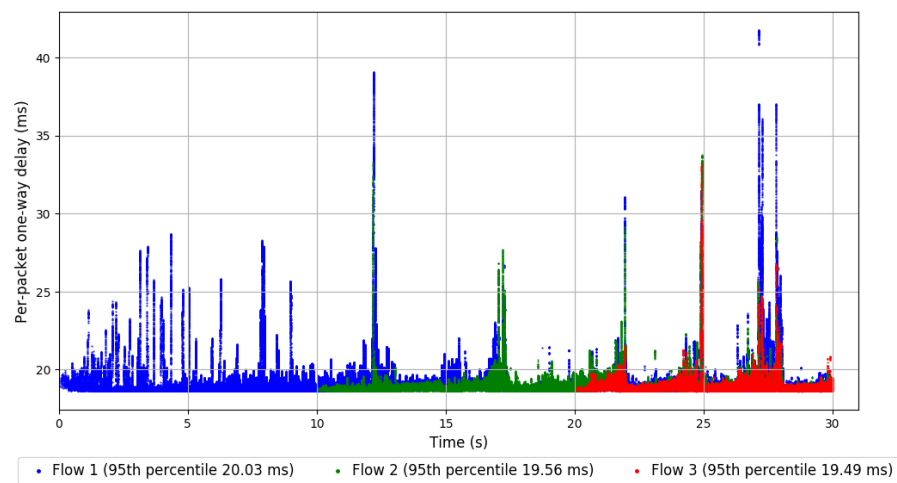
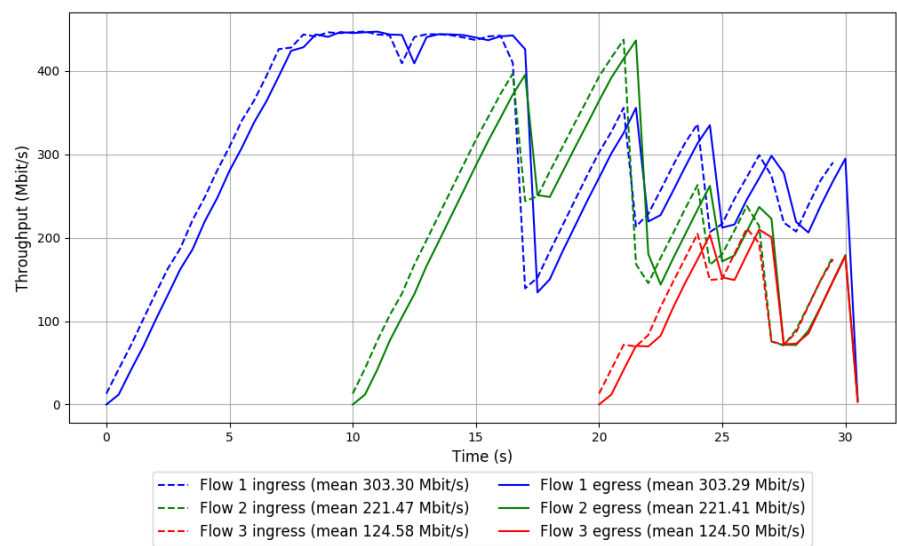


Run 7: Statistics of LEDBAT

Start at: 2018-05-22 06:11:20
End at: 2018-05-22 06:11:50
Local clock offset: -0.039 ms
Remote clock offset: -0.111 ms

Below is generated by plot.py at 2018-05-22 08:46:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 492.18 Mbit/s
95th percentile per-packet one-way delay: 19.809 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 303.29 Mbit/s
95th percentile per-packet one-way delay: 20.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 221.41 Mbit/s
95th percentile per-packet one-way delay: 19.559 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 124.50 Mbit/s
95th percentile per-packet one-way delay: 19.487 ms
Loss rate: 0.06%

Run 7: Report of LEDBAT — Data Link

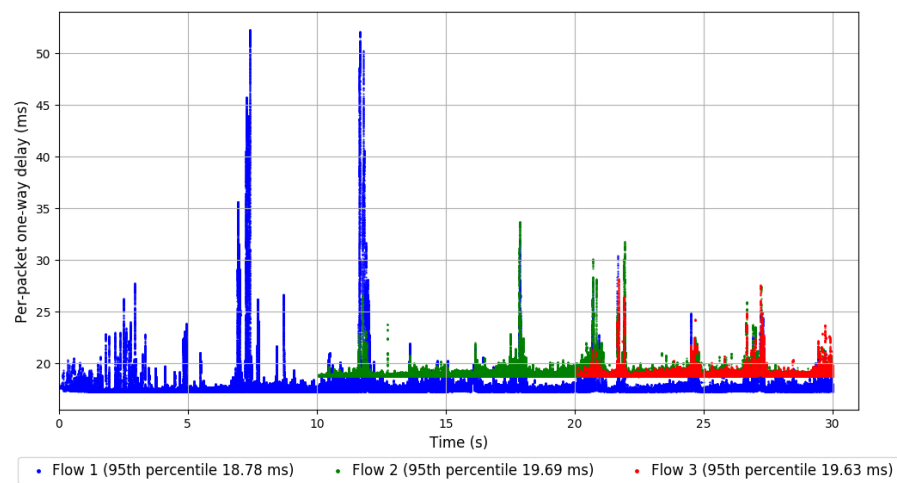
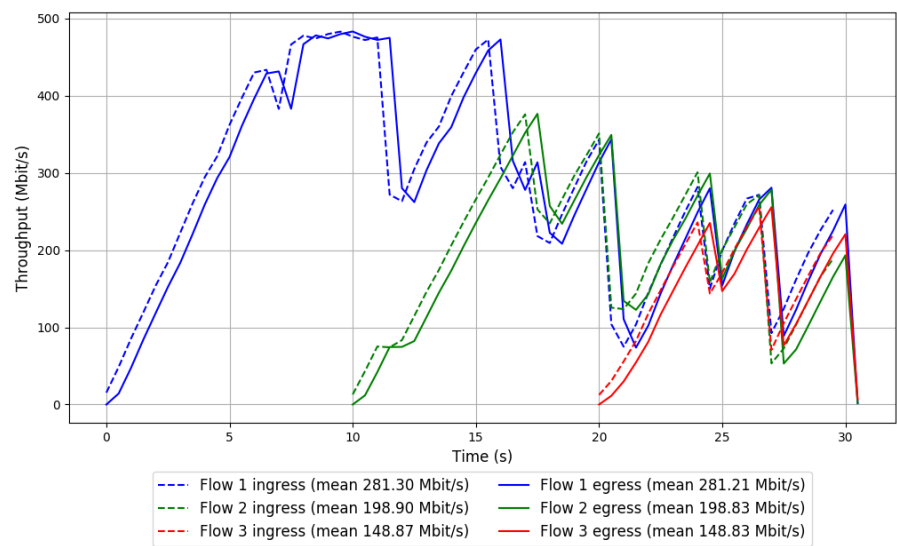


Run 8: Statistics of LEDBAT

Start at: 2018-05-22 06:36:47
End at: 2018-05-22 06:37:17
Local clock offset: 0.088 ms
Remote clock offset: -0.235 ms

Below is generated by plot.py at 2018-05-22 08:46:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 463.01 Mbit/s
95th percentile per-packet one-way delay: 19.440 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 281.21 Mbit/s
95th percentile per-packet one-way delay: 18.781 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 198.83 Mbit/s
95th percentile per-packet one-way delay: 19.692 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 148.83 Mbit/s
95th percentile per-packet one-way delay: 19.628 ms
Loss rate: 0.03%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-05-22 07:02:17

End at: 2018-05-22 07:02:47

Local clock offset: 0.348 ms

Remote clock offset: 0.837 ms

Below is generated by plot.py at 2018-05-22 08:46:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.07 Mbit/s

95th percentile per-packet one-way delay: 20.139 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 263.04 Mbit/s

95th percentile per-packet one-way delay: 20.572 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 165.60 Mbit/s

95th percentile per-packet one-way delay: 19.849 ms

Loss rate: 0.06%

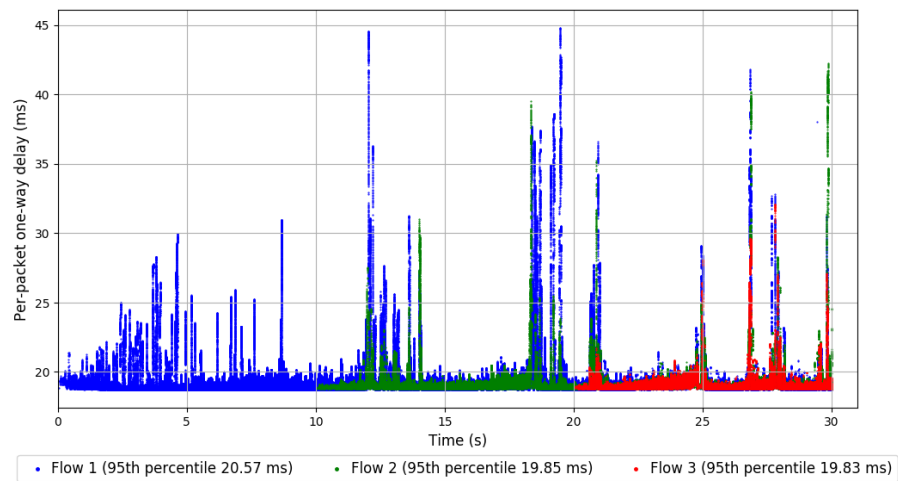
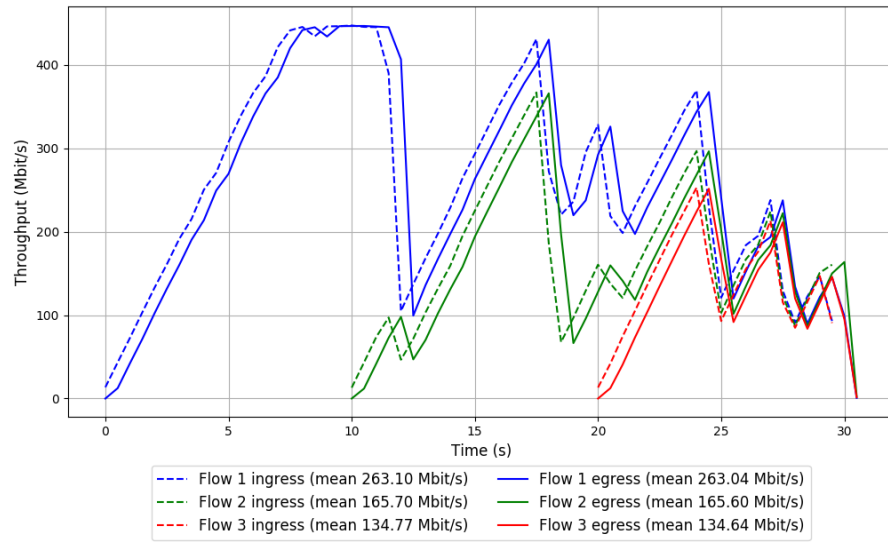
-- Flow 3:

Average throughput: 134.64 Mbit/s

95th percentile per-packet one-way delay: 19.830 ms

Loss rate: 0.09%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-05-22 07:27:50

End at: 2018-05-22 07:28:20

Local clock offset: 0.778 ms

Remote clock offset: 1.503 ms

Below is generated by plot.py at 2018-05-22 08:47:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 413.09 Mbit/s

95th percentile per-packet one-way delay: 19.763 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 265.25 Mbit/s

95th percentile per-packet one-way delay: 20.054 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 165.26 Mbit/s

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

Loss rate: 0.08%

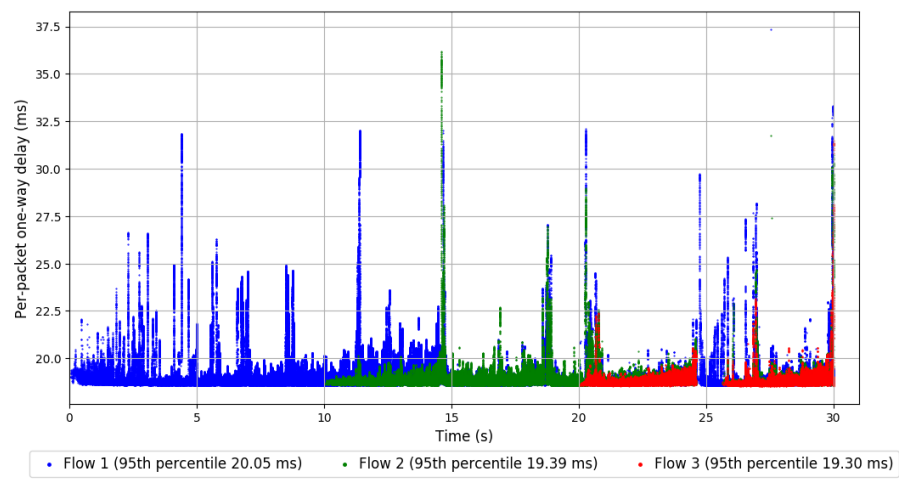
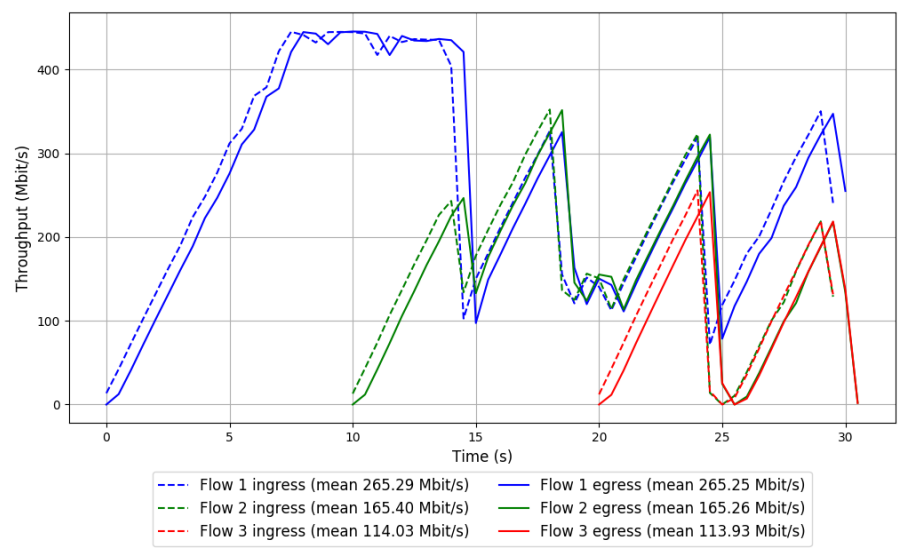
-- Flow 3:

Average throughput: 113.93 Mbit/s

95th percentile per-packet one-way delay: 19.299 ms

Loss rate: 0.09%

Run 10: Report of LEDBAT — Data Link

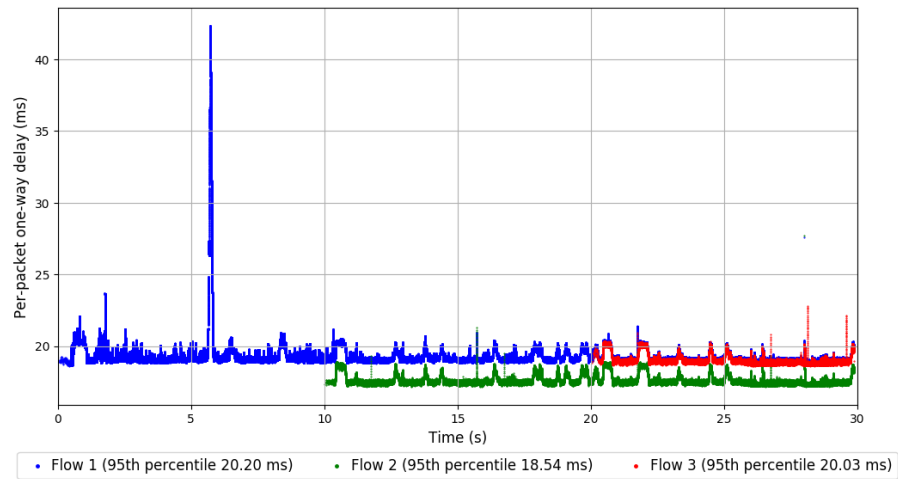
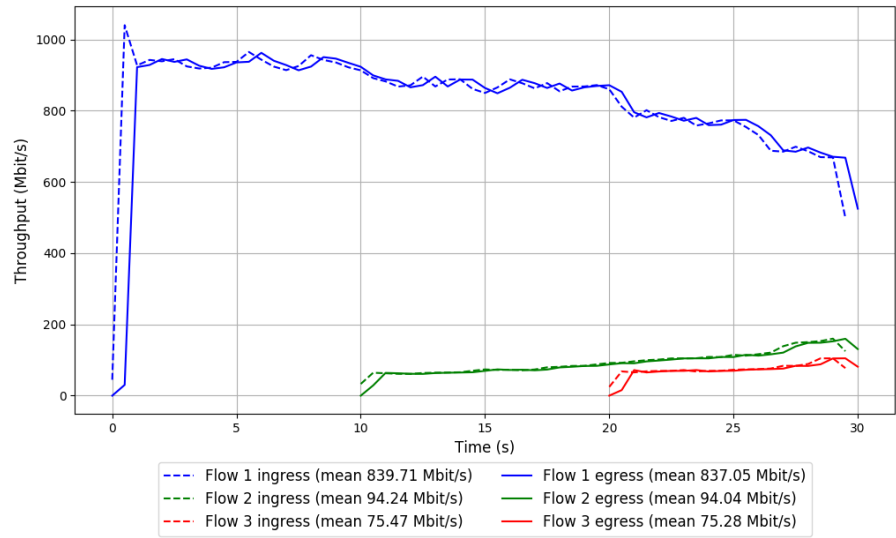


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-22 03:34:44
End at: 2018-05-22 03:35:14
Local clock offset: 0.261 ms
Remote clock offset: 0.321 ms

# Below is generated by plot.py at 2018-05-22 08:54:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.40 Mbit/s
95th percentile per-packet one-way delay: 20.186 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 837.05 Mbit/s
95th percentile per-packet one-way delay: 20.201 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 94.04 Mbit/s
95th percentile per-packet one-way delay: 18.536 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 75.28 Mbit/s
95th percentile per-packet one-way delay: 20.027 ms
Loss rate: 0.25%
```


Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-05-22 04:00:33

End at: 2018-05-22 04:01:03

Local clock offset: 0.387 ms

Remote clock offset: 0.876 ms

Below is generated by plot.py at 2018-05-22 08:54:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 882.30 Mbit/s

95th percentile per-packet one-way delay: 20.247 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 759.85 Mbit/s

95th percentile per-packet one-way delay: 20.261 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 106.36 Mbit/s

95th percentile per-packet one-way delay: 20.140 ms

Loss rate: 0.29%

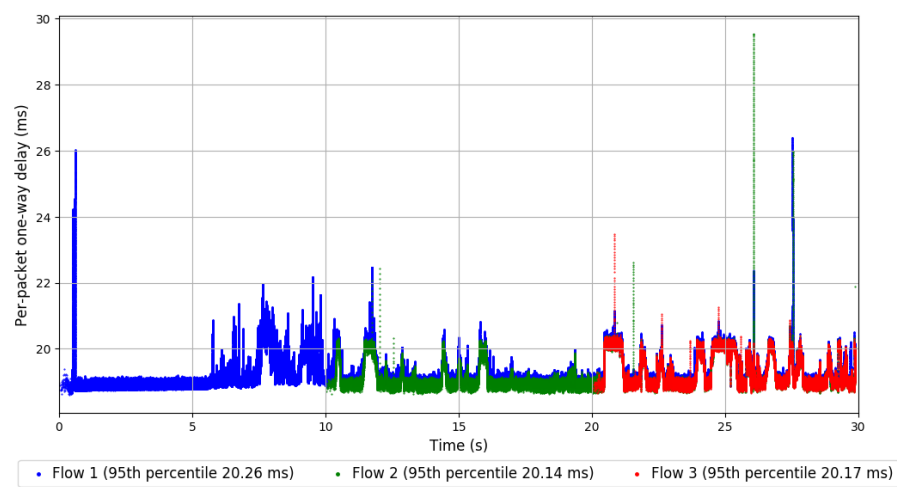
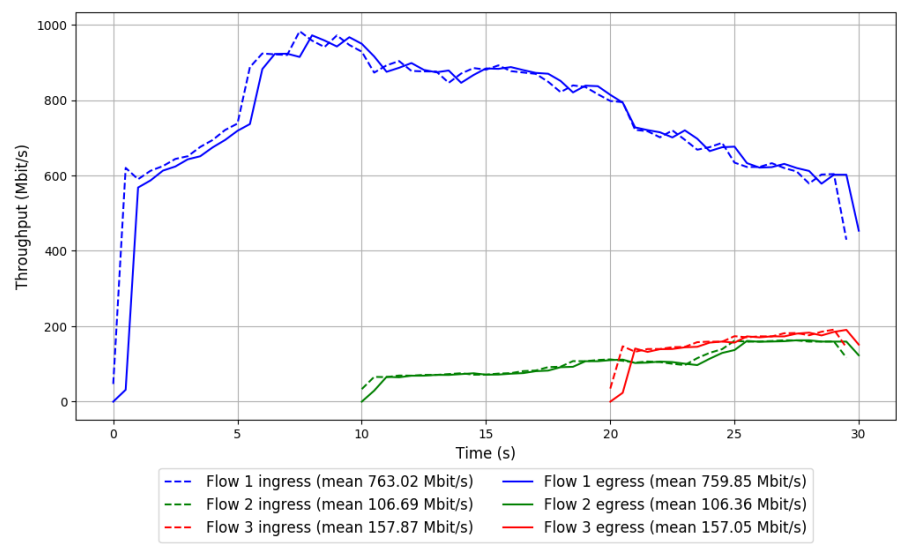
-- Flow 3:

Average throughput: 157.05 Mbit/s

95th percentile per-packet one-way delay: 20.168 ms

Loss rate: 0.52%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-05-22 04:26:09

End at: 2018-05-22 04:26:39

Local clock offset: 0.503 ms

Remote clock offset: 0.66 ms

Below is generated by plot.py at 2018-05-22 08:55:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 928.49 Mbit/s

95th percentile per-packet one-way delay: 20.464 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 800.38 Mbit/s

95th percentile per-packet one-way delay: 20.707 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 152.68 Mbit/s

95th percentile per-packet one-way delay: 20.134 ms

Loss rate: 0.28%

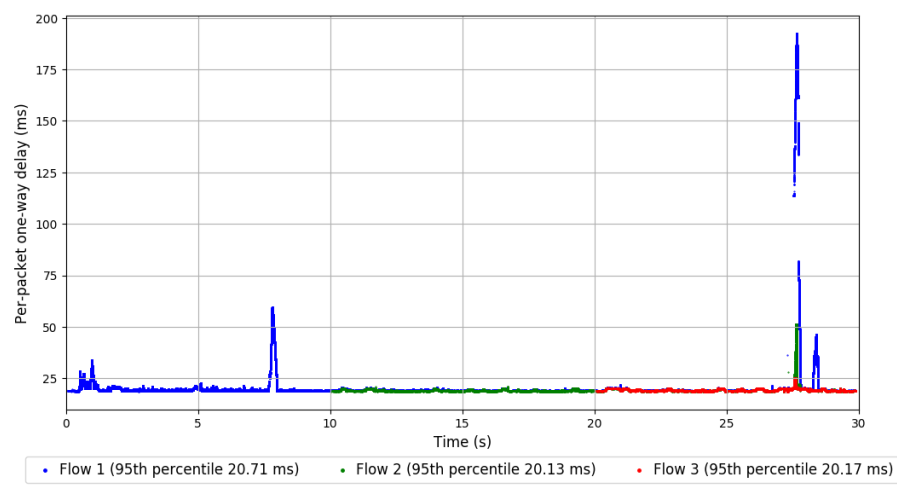
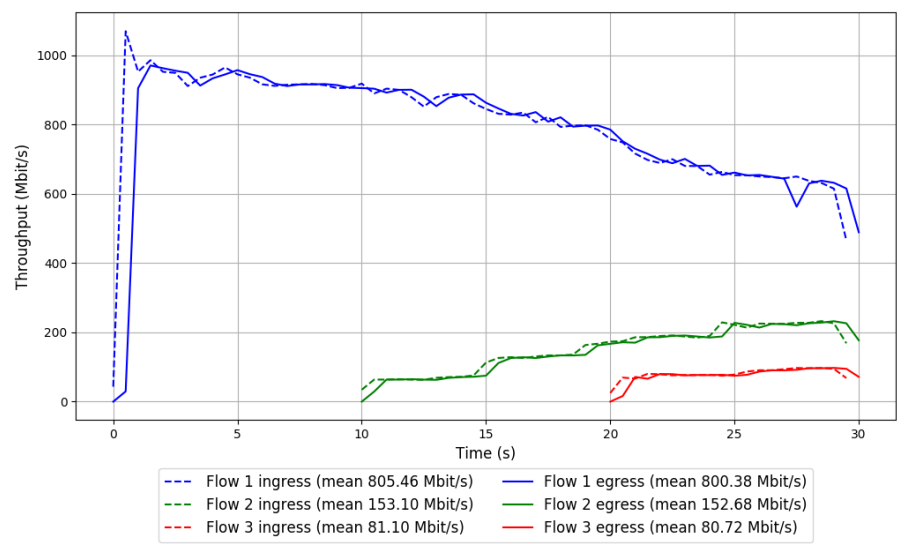
-- Flow 3:

Average throughput: 80.72 Mbit/s

95th percentile per-packet one-way delay: 20.170 ms

Loss rate: 0.47%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-05-22 04:51:46

End at: 2018-05-22 04:52:16

Local clock offset: 0.755 ms

Remote clock offset: 0.294 ms

Below is generated by plot.py at 2018-05-22 08:55:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 891.24 Mbit/s

95th percentile per-packet one-way delay: 20.289 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 763.82 Mbit/s

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

Loss rate: 0.21%

-- Flow 2:

Average throughput: 119.65 Mbit/s

95th percentile per-packet one-way delay: 20.066 ms

Loss rate: 0.30%

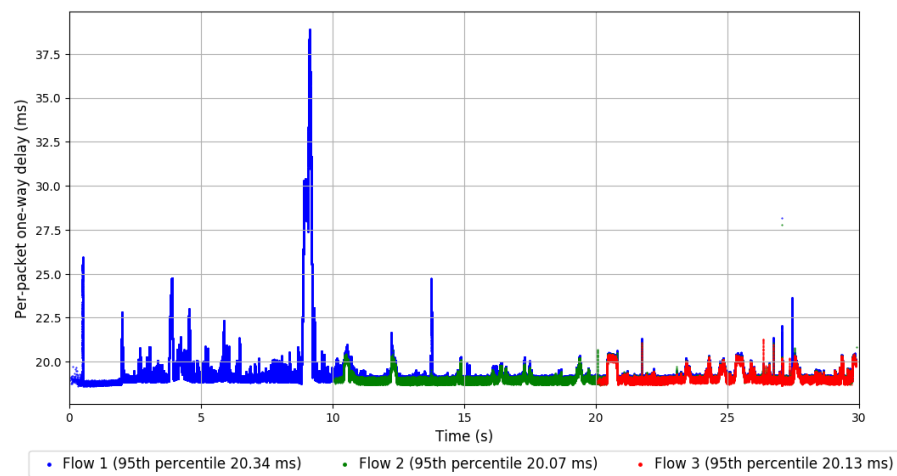
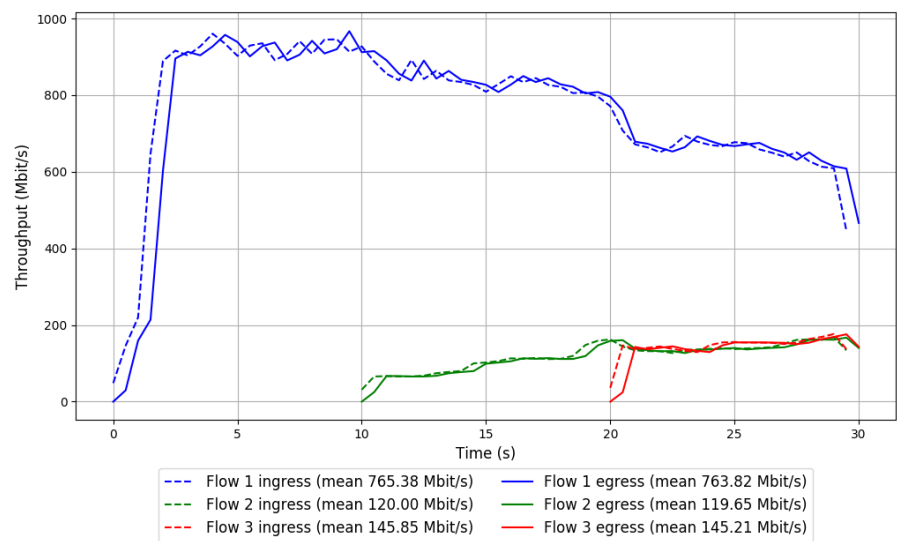
-- Flow 3:

Average throughput: 145.21 Mbit/s

95th percentile per-packet one-way delay: 20.127 ms

Loss rate: 0.44%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-05-22 05:17:17

End at: 2018-05-22 05:17:47

Local clock offset: 0.35 ms

Remote clock offset: 0.17 ms

Below is generated by plot.py at 2018-05-22 08:57:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 883.28 Mbit/s

95th percentile per-packet one-way delay: 20.198 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 802.96 Mbit/s

95th percentile per-packet one-way delay: 20.211 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 110.10 Mbit/s

95th percentile per-packet one-way delay: 20.028 ms

Loss rate: 0.15%

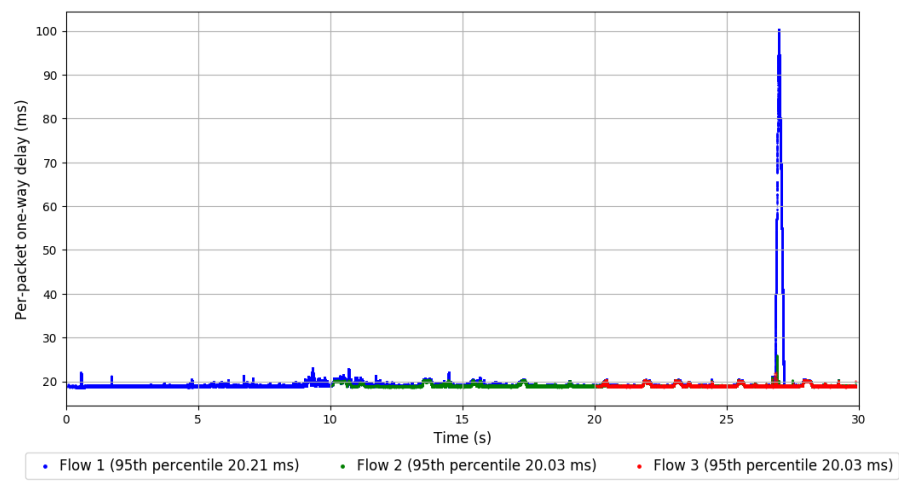
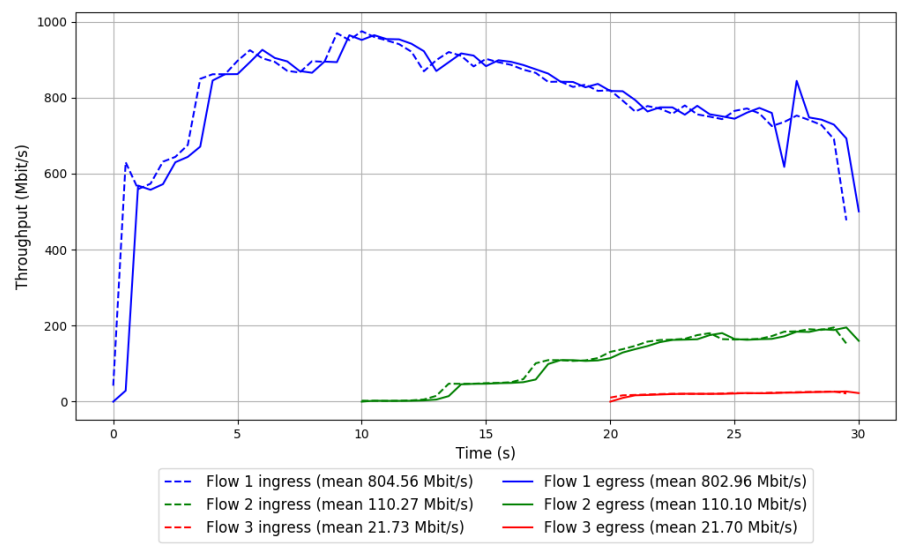
-- Flow 3:

Average throughput: 21.70 Mbit/s

95th percentile per-packet one-way delay: 20.033 ms

Loss rate: 0.12%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-05-22 05:42:52

End at: 2018-05-22 05:43:22

Local clock offset: 0.331 ms

Remote clock offset: 0.153 ms

Below is generated by plot.py at 2018-05-22 08:57:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 808.35 Mbit/s

95th percentile per-packet one-way delay: 20.072 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 734.96 Mbit/s

95th percentile per-packet one-way delay: 20.116 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 106.93 Mbit/s

95th percentile per-packet one-way delay: 18.586 ms

Loss rate: 0.21%

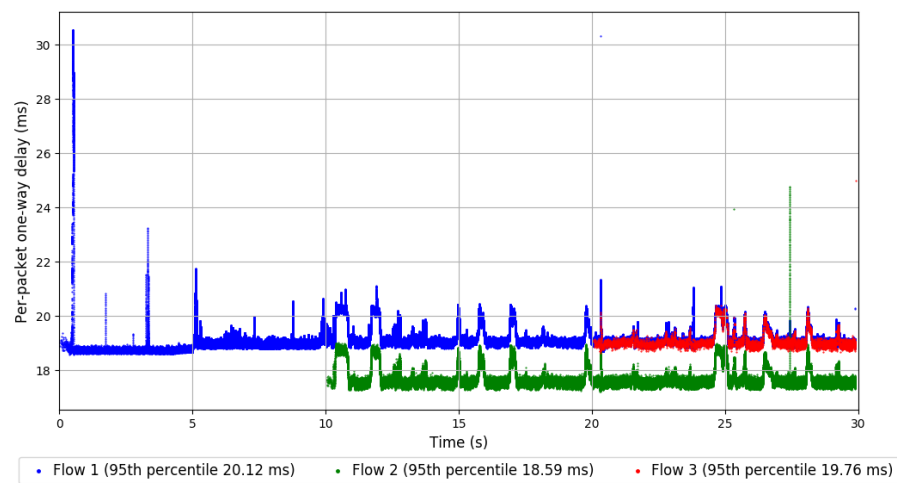
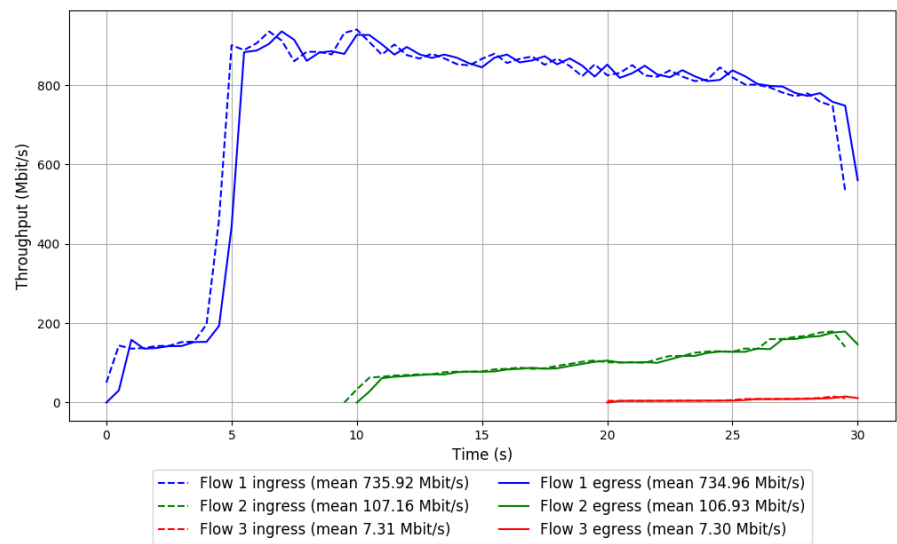
-- Flow 3:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 19.763 ms

Loss rate: 0.12%

Run 6: Report of PCC-Allegro — Data Link

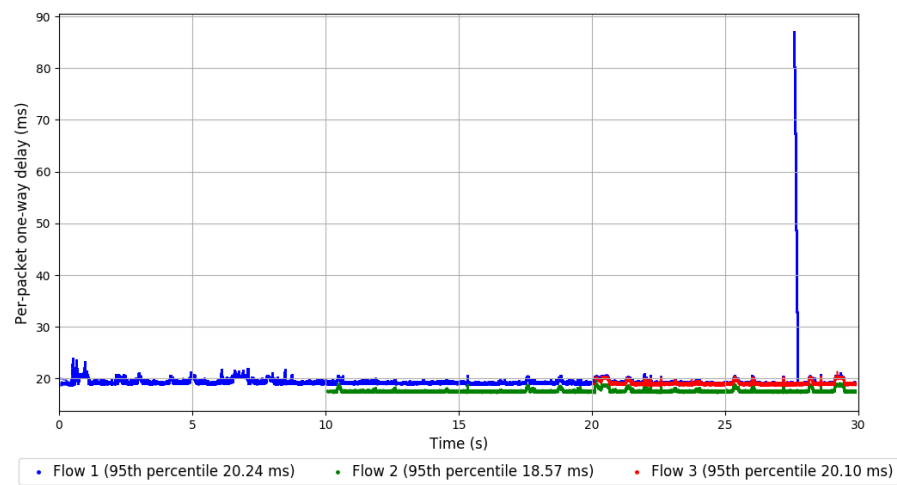
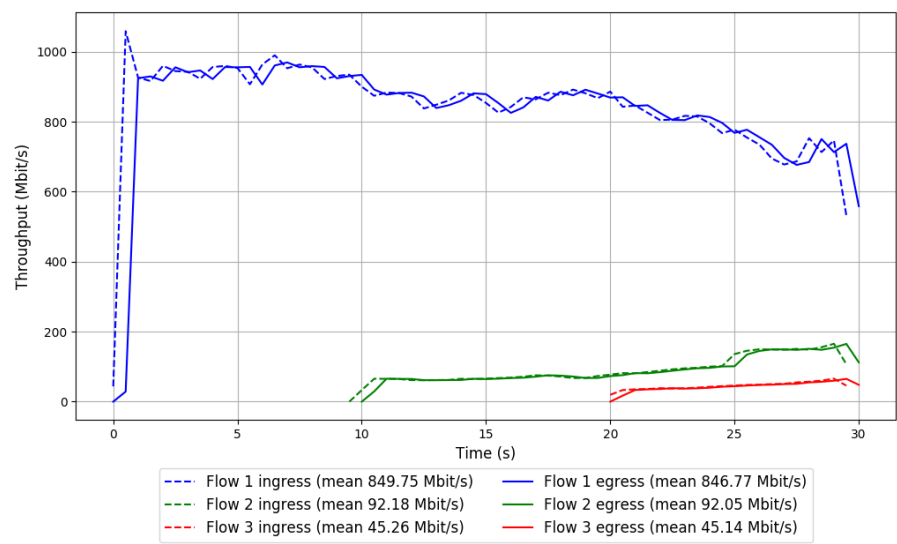


Run 7: Statistics of PCC-Allegro

Start at: 2018-05-22 06:08:19
End at: 2018-05-22 06:08:49
Local clock offset: 0.015 ms
Remote clock offset: -0.068 ms

Below is generated by plot.py at 2018-05-22 08:58:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 922.89 Mbit/s
95th percentile per-packet one-way delay: 20.229 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 846.77 Mbit/s
95th percentile per-packet one-way delay: 20.240 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 18.567 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 45.14 Mbit/s
95th percentile per-packet one-way delay: 20.096 ms
Loss rate: 0.27%

Run 7: Report of PCC-Allegro — Data Link

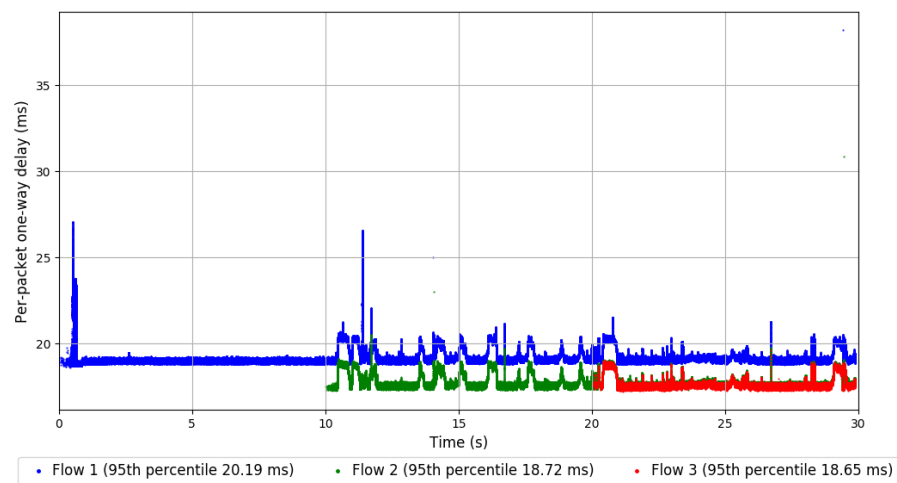
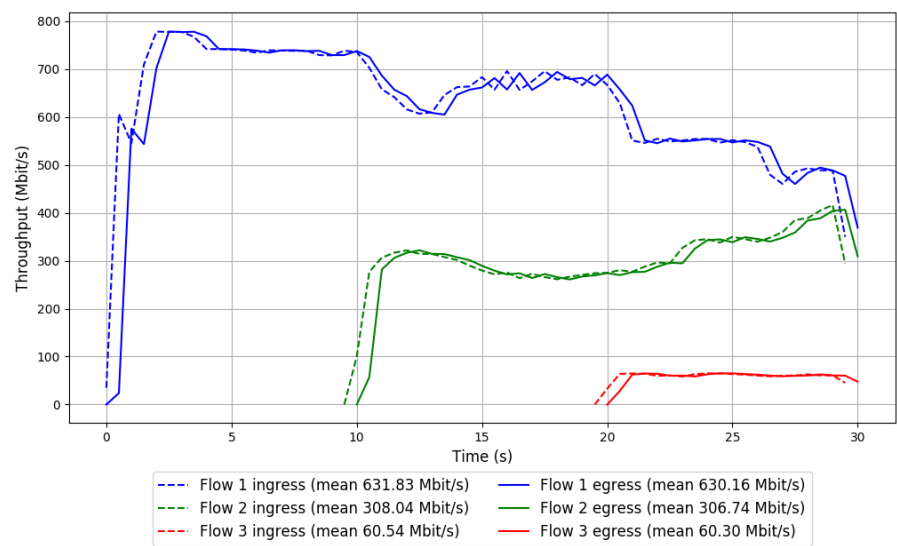


Run 8: Statistics of PCC-Allegro

Start at: 2018-05-22 06:33:48
End at: 2018-05-22 06:34:18
Local clock offset: 0.048 ms
Remote clock offset: -0.235 ms

Below is generated by plot.py at 2018-05-22 08:58:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 854.22 Mbit/s
95th percentile per-packet one-way delay: 20.094 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 630.16 Mbit/s
95th percentile per-packet one-way delay: 20.190 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 306.74 Mbit/s
95th percentile per-packet one-way delay: 18.723 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 60.30 Mbit/s
95th percentile per-packet one-way delay: 18.651 ms
Loss rate: 0.40%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-05-22 06:59:19

End at: 2018-05-22 06:59:49

Local clock offset: 0.302 ms

Remote clock offset: 0.705 ms

Below is generated by plot.py at 2018-05-22 09:04:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 821.17 Mbit/s

95th percentile per-packet one-way delay: 20.238 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 683.28 Mbit/s

95th percentile per-packet one-way delay: 20.247 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 171.80 Mbit/s

95th percentile per-packet one-way delay: 20.188 ms

Loss rate: 0.49%

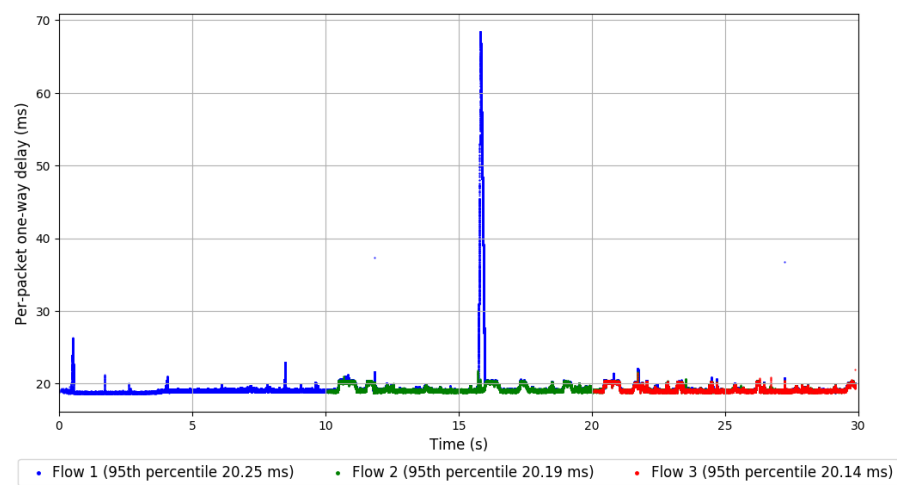
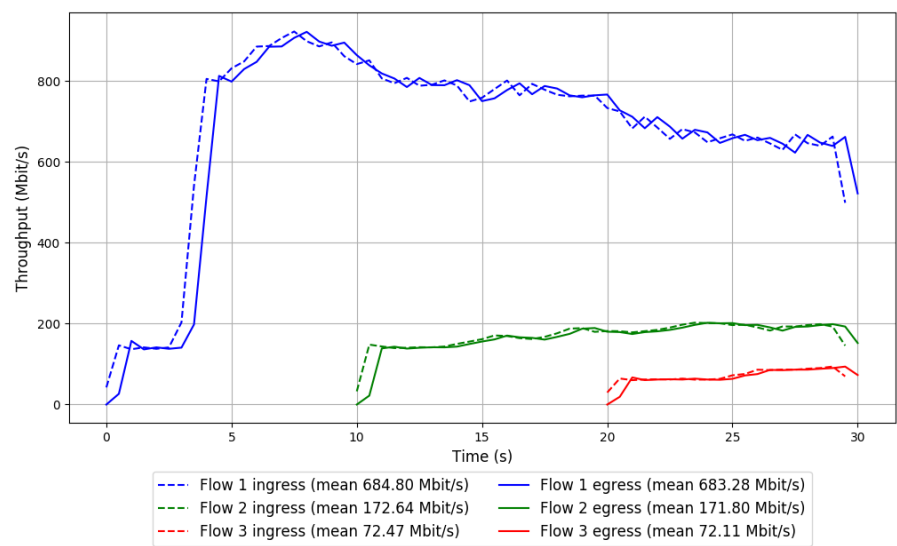
-- Flow 3:

Average throughput: 72.11 Mbit/s

95th percentile per-packet one-way delay: 20.137 ms

Loss rate: 0.48%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-05-22 07:24:49

End at: 2018-05-22 07:25:19

Local clock offset: 0.843 ms

Remote clock offset: 1.532 ms

Below is generated by plot.py at 2018-05-22 09:05:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 875.79 Mbit/s

95th percentile per-packet one-way delay: 19.664 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 732.93 Mbit/s

95th percentile per-packet one-way delay: 18.803 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 181.91 Mbit/s

95th percentile per-packet one-way delay: 20.200 ms

Loss rate: 0.76%

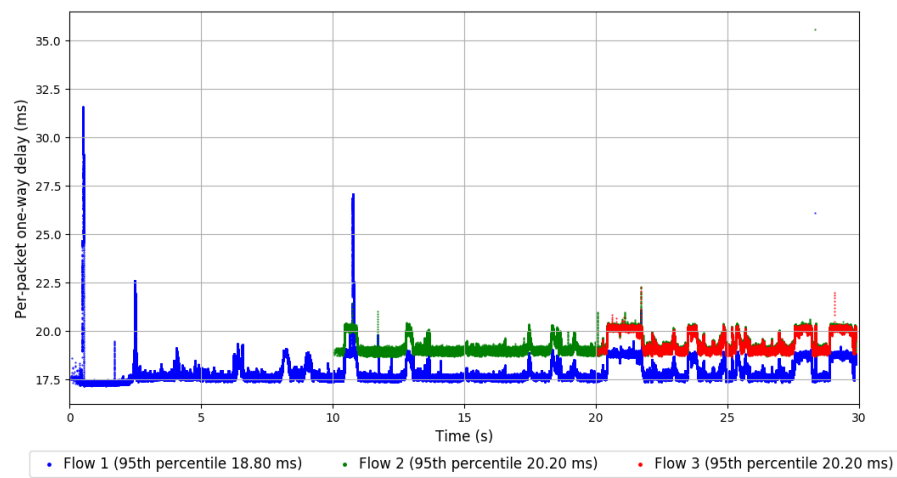
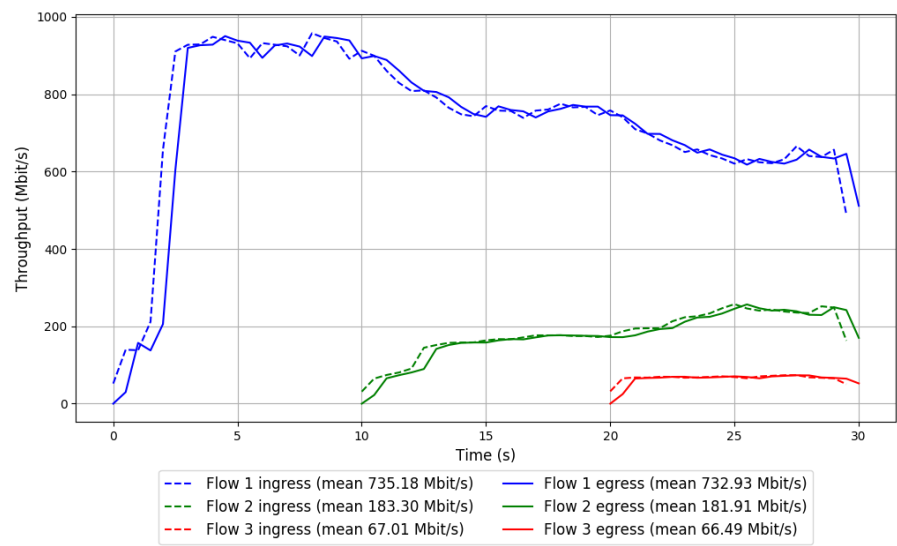
-- Flow 3:

Average throughput: 66.49 Mbit/s

95th percentile per-packet one-way delay: 20.195 ms

Loss rate: 0.77%

Run 10: Report of PCC-Allegro — Data Link

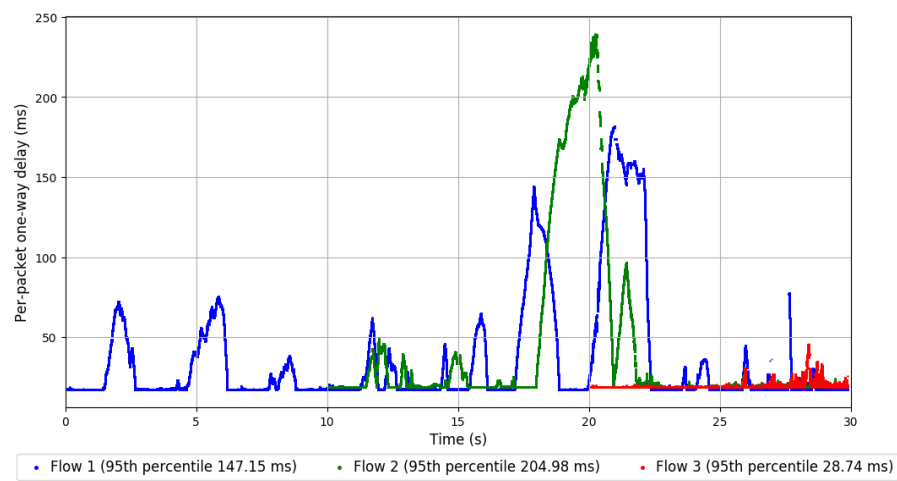
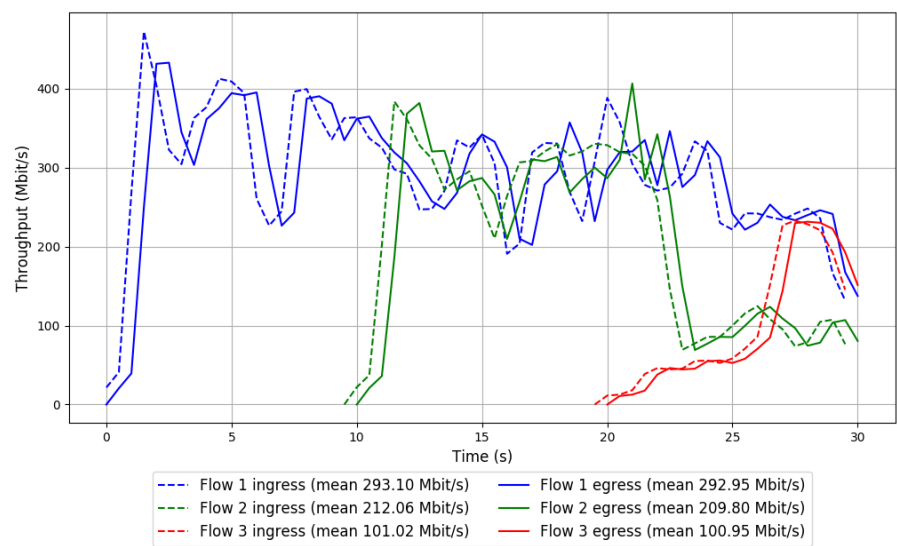


```
Run 1: Statistics of PCC-Expr

Start at: 2018-05-22 03:23:54
End at: 2018-05-22 03:24:24
Local clock offset: 0.07 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-05-22 09:05:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.89 Mbit/s
95th percentile per-packet one-way delay: 160.510 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 292.95 Mbit/s
95th percentile per-packet one-way delay: 147.154 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 209.80 Mbit/s
95th percentile per-packet one-way delay: 204.981 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 100.95 Mbit/s
95th percentile per-packet one-way delay: 28.742 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link

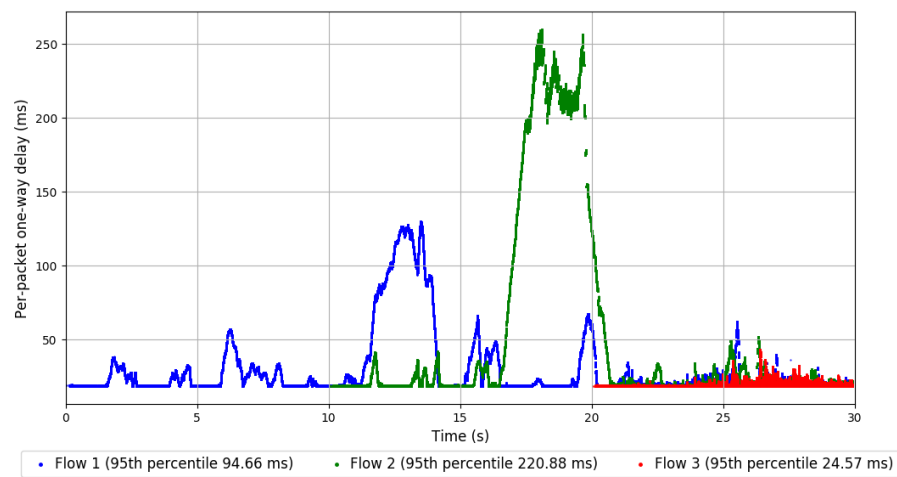
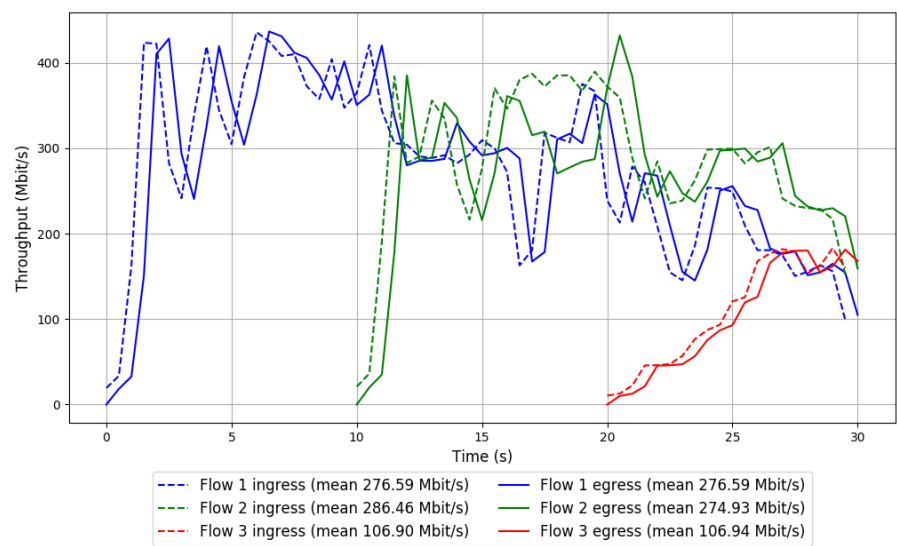


```
Run 2: Statistics of PCC-Expr

Start at: 2018-05-22 03:49:35
End at: 2018-05-22 03:50:06
Local clock offset: 0.345 ms
Remote clock offset: 0.76 ms

# Below is generated by plot.py at 2018-05-22 09:07:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 494.74 Mbit/s
95th percentile per-packet one-way delay: 154.125 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 276.59 Mbit/s
95th percentile per-packet one-way delay: 94.658 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 274.93 Mbit/s
95th percentile per-packet one-way delay: 220.882 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 106.94 Mbit/s
95th percentile per-packet one-way delay: 24.568 ms
Loss rate: 0.01%
```

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-05-22 04:15:14

End at: 2018-05-22 04:15:44

Local clock offset: 0.335 ms

Remote clock offset: 0.533 ms

Below is generated by plot.py at 2018-05-22 09:07:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 467.03 Mbit/s

95th percentile per-packet one-way delay: 151.753 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 285.73 Mbit/s

95th percentile per-packet one-way delay: 64.842 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 240.21 Mbit/s

95th percentile per-packet one-way delay: 193.407 ms

Loss rate: 1.09%

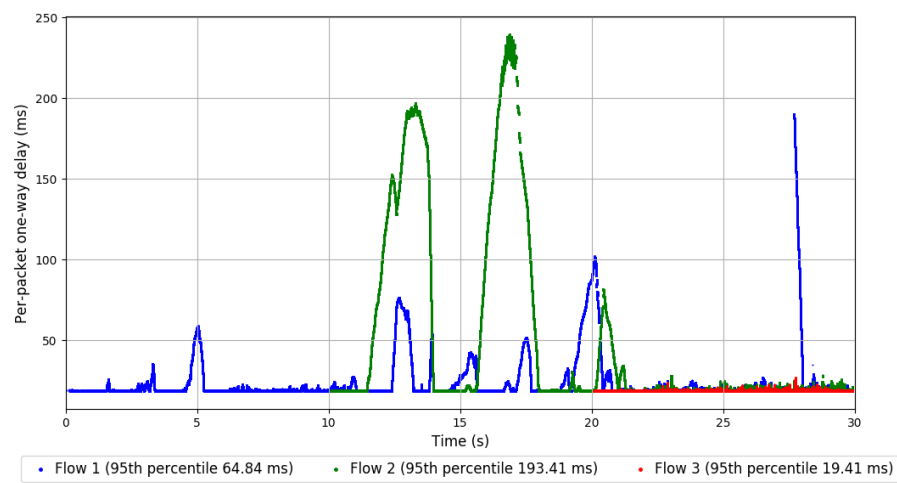
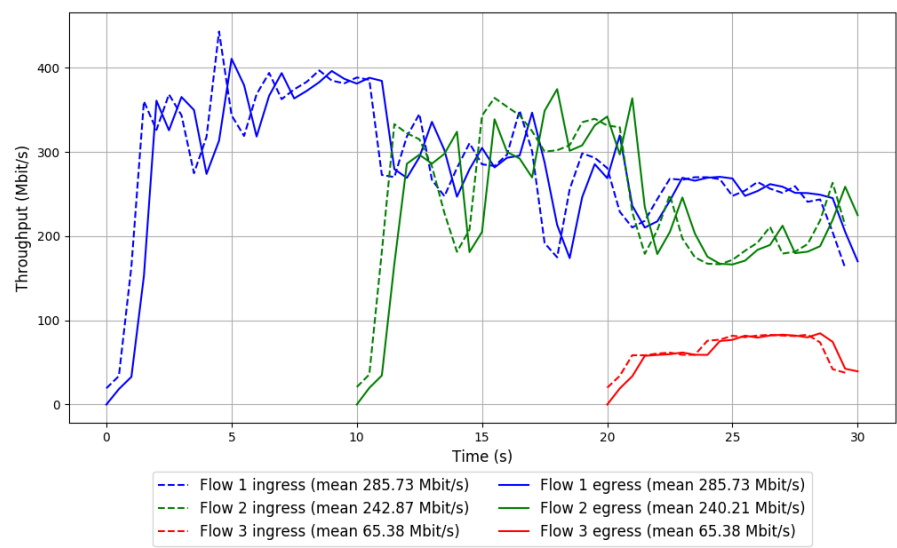
-- Flow 3:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 19.407 ms

Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-05-22 04:40:51

End at: 2018-05-22 04:41:21

Local clock offset: 0.665 ms

Remote clock offset: 0.374 ms

Below is generated by plot.py at 2018-05-22 09:07:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 469.57 Mbit/s

95th percentile per-packet one-way delay: 56.933 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 287.91 Mbit/s

95th percentile per-packet one-way delay: 74.066 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 252.93 Mbit/s

95th percentile per-packet one-way delay: 47.326 ms

Loss rate: 0.00%

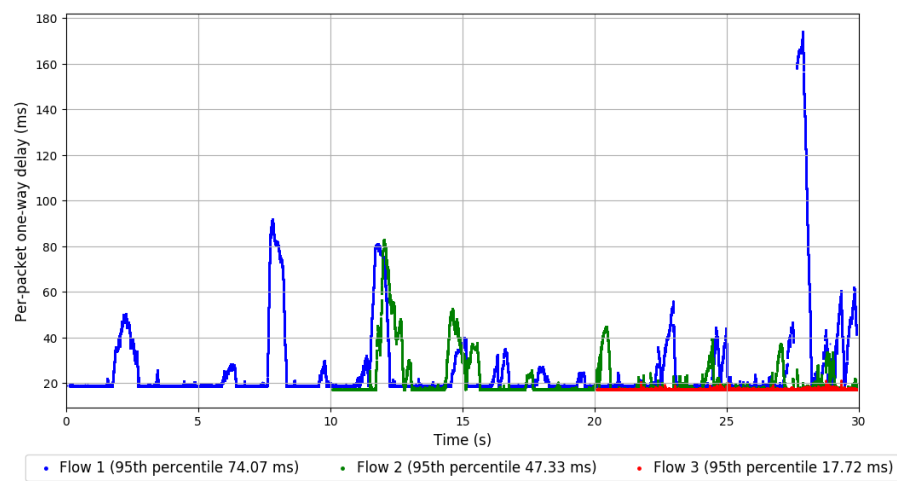
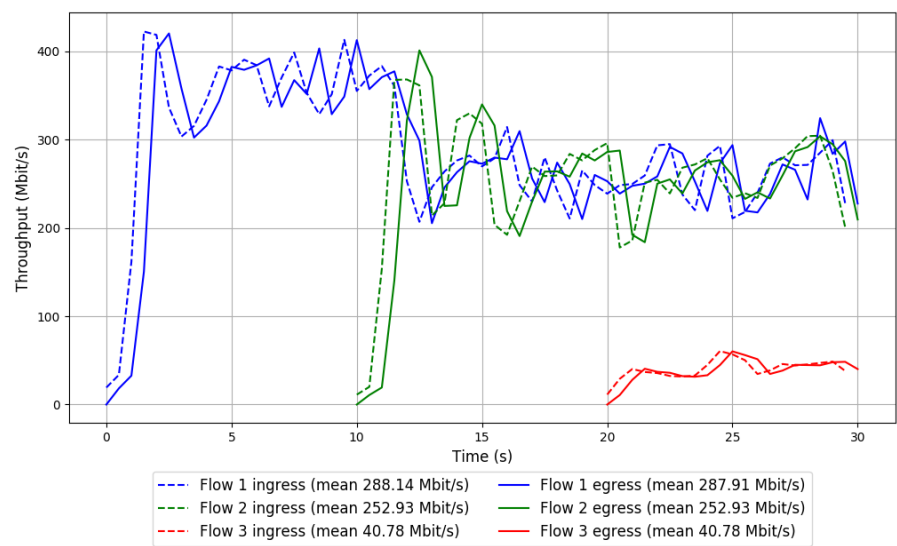
-- Flow 3:

Average throughput: 40.78 Mbit/s

95th percentile per-packet one-way delay: 17.721 ms

Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-05-22 05:06:27

End at: 2018-05-22 05:06:57

Local clock offset: 0.436 ms

Remote clock offset: 0.375 ms

Below is generated by plot.py at 2018-05-22 09:10:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.94 Mbit/s

95th percentile per-packet one-way delay: 180.034 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 301.67 Mbit/s

95th percentile per-packet one-way delay: 152.047 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 279.61 Mbit/s

95th percentile per-packet one-way delay: 217.366 ms

Loss rate: 1.97%

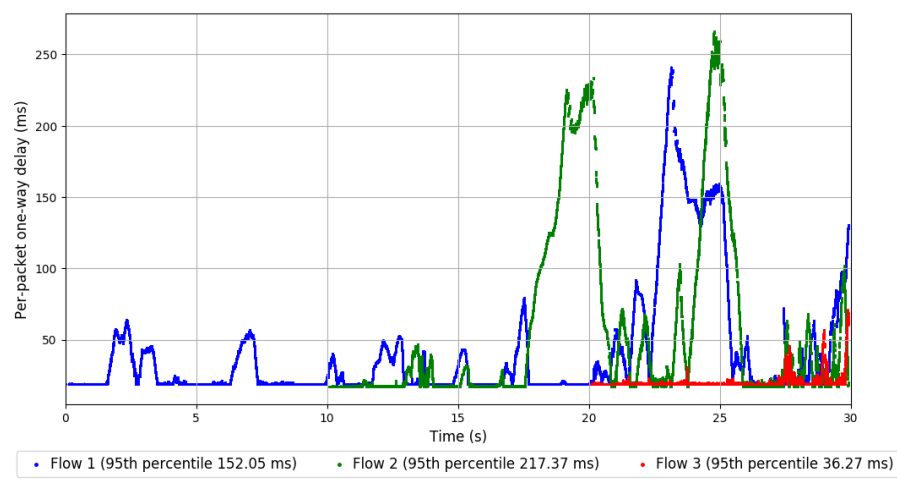
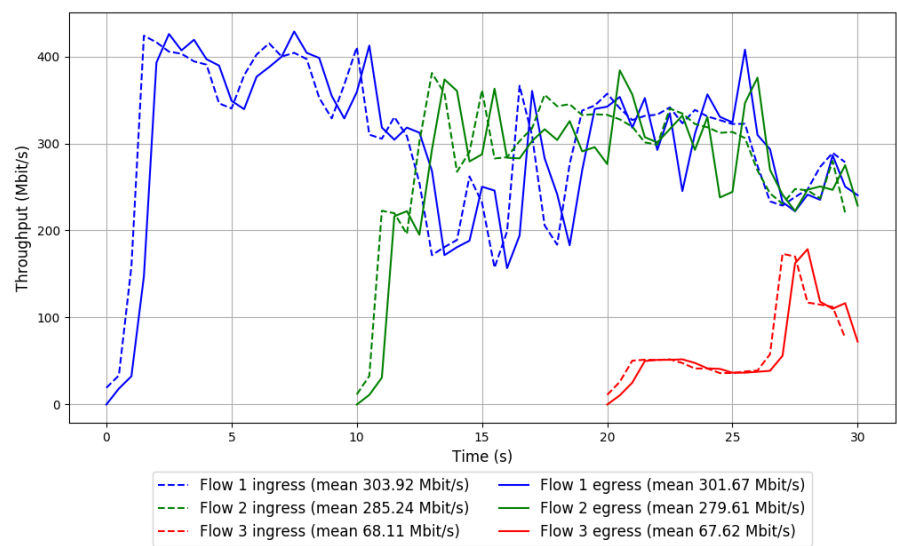
-- Flow 3:

Average throughput: 67.62 Mbit/s

95th percentile per-packet one-way delay: 36.274 ms

Loss rate: 0.72%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-05-22 05:31:54

End at: 2018-05-22 05:32:24

Local clock offset: 0.386 ms

Remote clock offset: 0.056 ms

Below is generated by plot.py at 2018-05-22 09:10:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.94 Mbit/s

95th percentile per-packet one-way delay: 63.100 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 242.46 Mbit/s

95th percentile per-packet one-way delay: 69.314 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 260.04 Mbit/s

95th percentile per-packet one-way delay: 60.834 ms

Loss rate: 0.02%

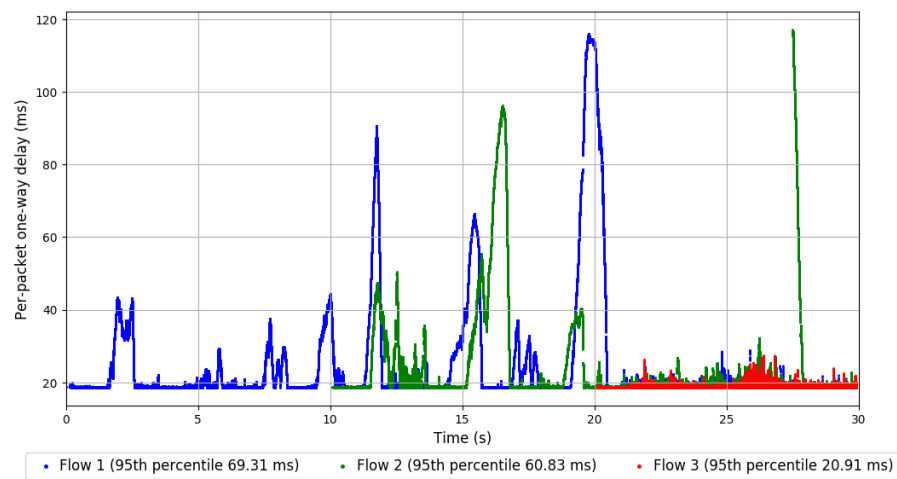
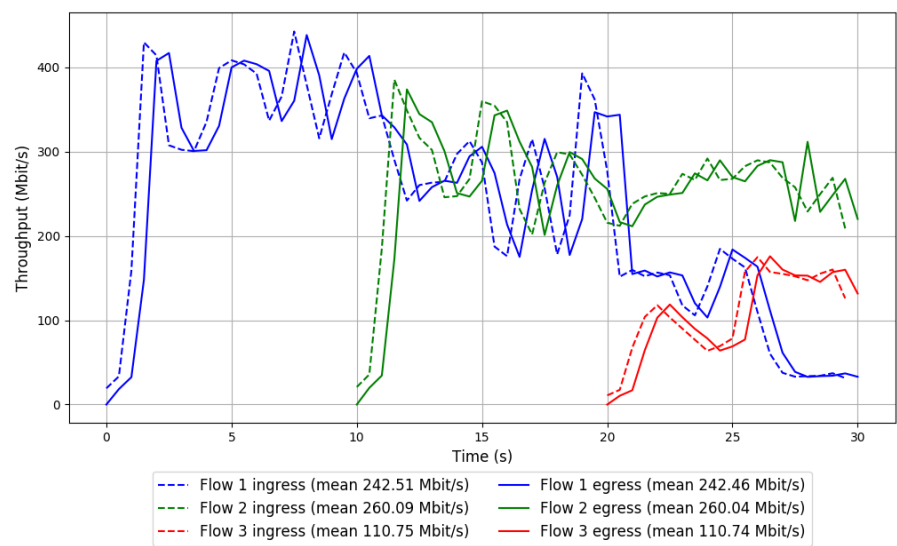
-- Flow 3:

Average throughput: 110.74 Mbit/s

95th percentile per-packet one-way delay: 20.910 ms

Loss rate: 0.00%

Run 6: Report of PCC-Expr — Data Link

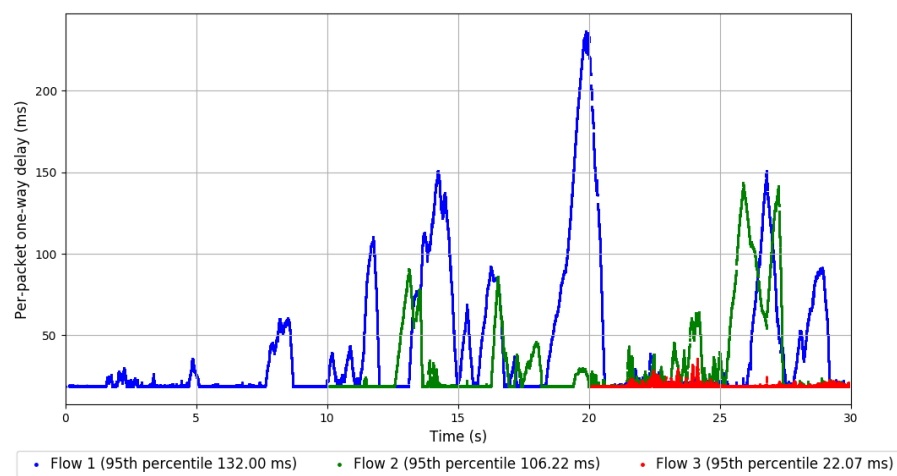
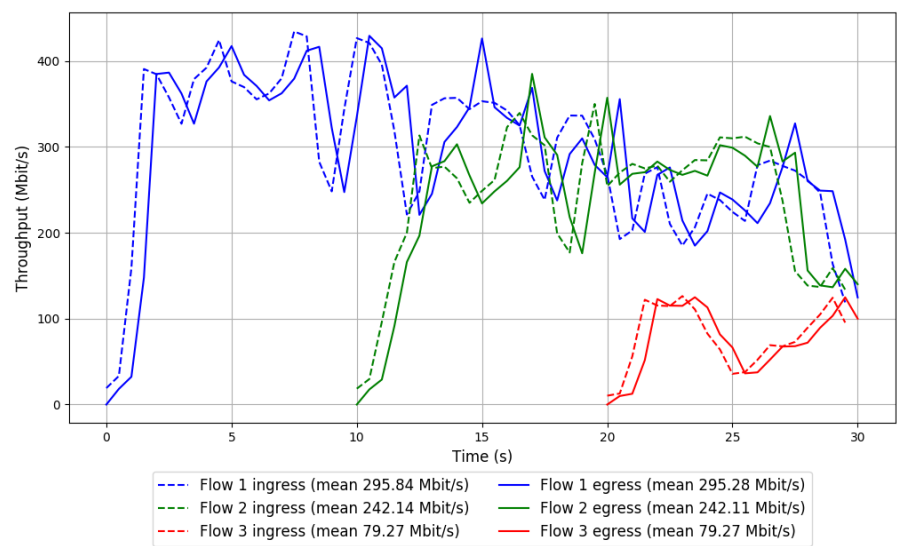


Run 7: Statistics of PCC-Expr

Start at: 2018-05-22 05:57:27
End at: 2018-05-22 05:57:57
Local clock offset: 0.164 ms
Remote clock offset: -0.038 ms

Below is generated by plot.py at 2018-05-22 09:16:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 482.46 Mbit/s
95th percentile per-packet one-way delay: 122.471 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 295.28 Mbit/s
95th percentile per-packet one-way delay: 131.996 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 242.11 Mbit/s
95th percentile per-packet one-way delay: 106.219 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 79.27 Mbit/s
95th percentile per-packet one-way delay: 22.071 ms
Loss rate: 0.03%

Run 7: Report of PCC-Expr — Data Link

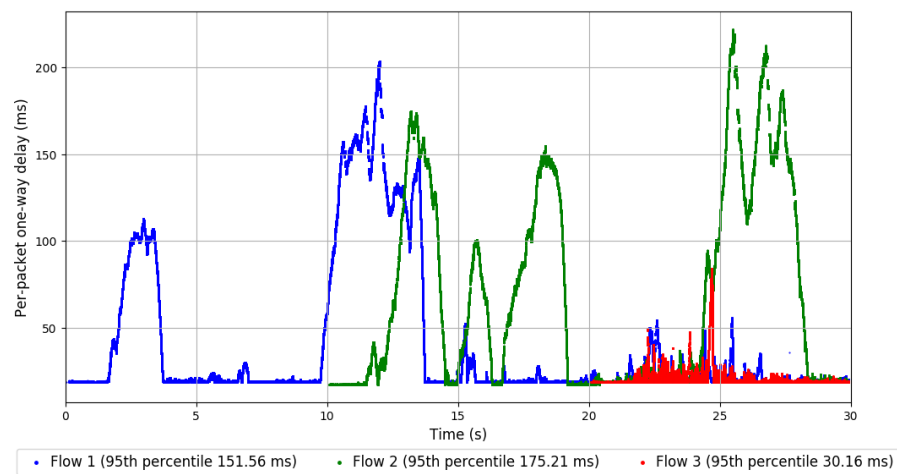
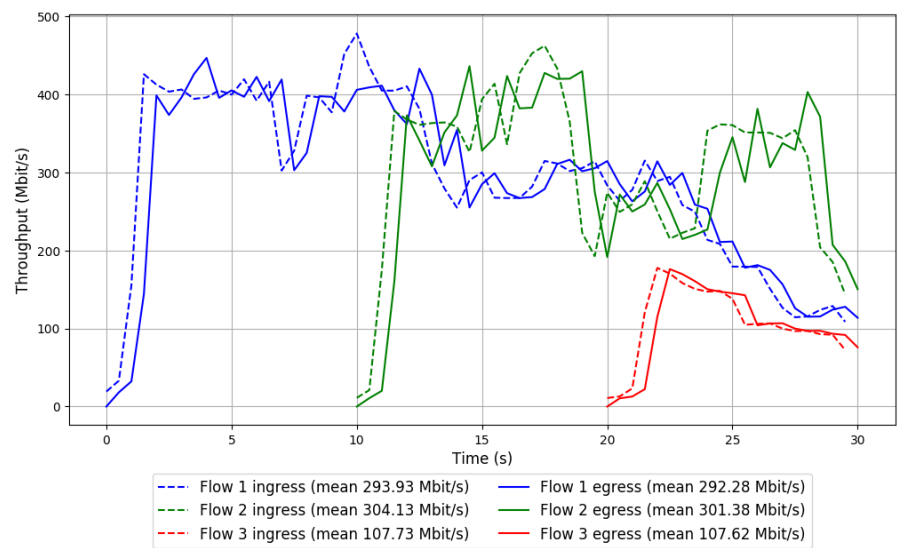


Run 8: Statistics of PCC-Expr

Start at: 2018-05-22 06:23:00
End at: 2018-05-22 06:23:30
Local clock offset: -0.255 ms
Remote clock offset: -0.177 ms

Below is generated by plot.py at 2018-05-22 09:17:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 528.29 Mbit/s
95th percentile per-packet one-way delay: 159.387 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 292.28 Mbit/s
95th percentile per-packet one-way delay: 151.558 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 301.38 Mbit/s
95th percentile per-packet one-way delay: 175.206 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 107.62 Mbit/s
95th percentile per-packet one-way delay: 30.155 ms
Loss rate: 0.11%

Run 8: Report of PCC-Expr — Data Link

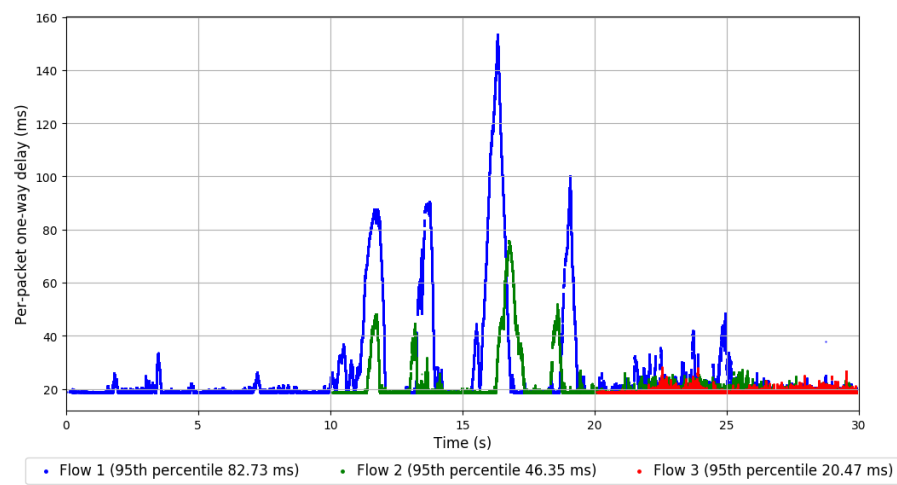
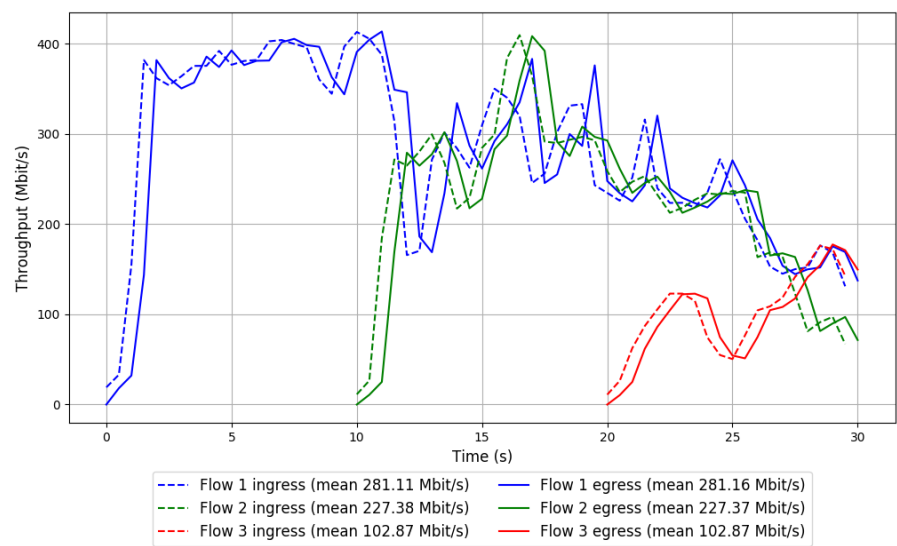


Run 9: Statistics of PCC-Expr

Start at: 2018-05-22 06:48:24
End at: 2018-05-22 06:48:54
Local clock offset: 0.15 ms
Remote clock offset: -0.295 ms

Below is generated by plot.py at 2018-05-22 09:17:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 466.37 Mbit/s
95th percentile per-packet one-way delay: 68.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 281.16 Mbit/s
95th percentile per-packet one-way delay: 82.726 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 227.37 Mbit/s
95th percentile per-packet one-way delay: 46.348 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 102.87 Mbit/s
95th percentile per-packet one-way delay: 20.468 ms
Loss rate: 0.00%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-05-22 07:13:56

End at: 2018-05-22 07:14:26

Local clock offset: 0.719 ms

Remote clock offset: 1.272 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 473.12 Mbit/s

95th percentile per-packet one-way delay: 104.246 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 292.98 Mbit/s

95th percentile per-packet one-way delay: 87.155 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 203.30 Mbit/s

95th percentile per-packet one-way delay: 132.547 ms

Loss rate: 0.03%

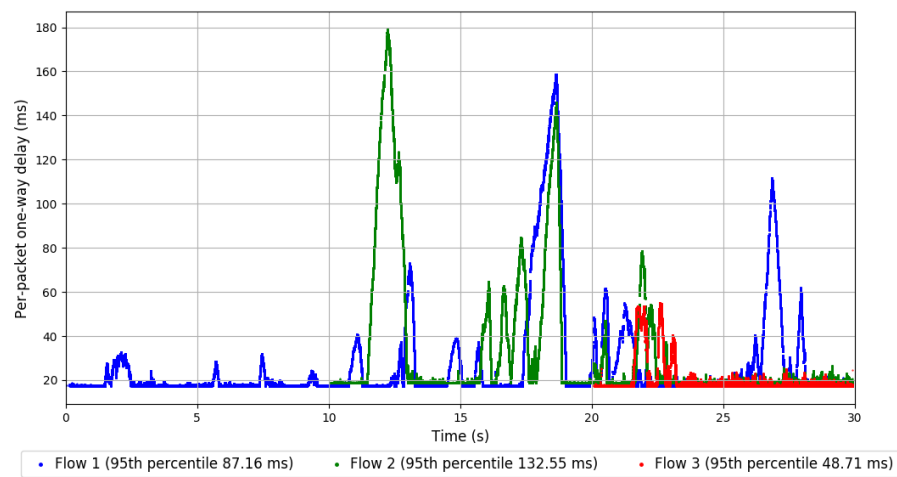
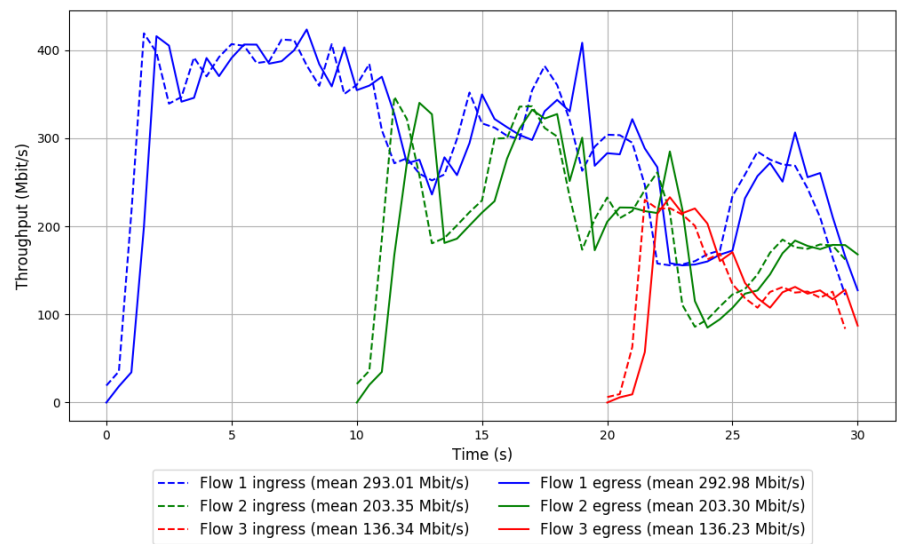
-- Flow 3:

Average throughput: 136.23 Mbit/s

95th percentile per-packet one-way delay: 48.712 ms

Loss rate: 0.01%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-05-22 03:30:02

End at: 2018-05-22 03:30:32

Local clock offset: 0.127 ms

Remote clock offset: 0.174 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.33 Mbit/s

95th percentile per-packet one-way delay: 18.816 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 17.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.47 Mbit/s

95th percentile per-packet one-way delay: 18.828 ms

Loss rate: 0.00%

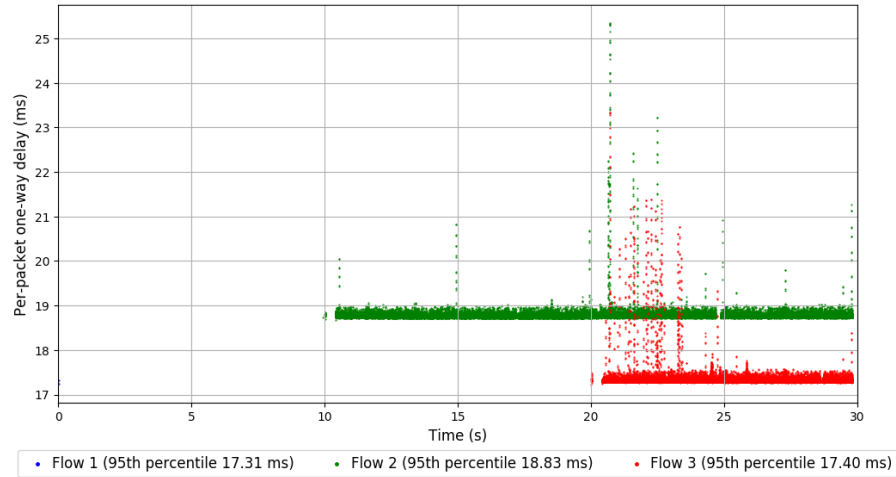
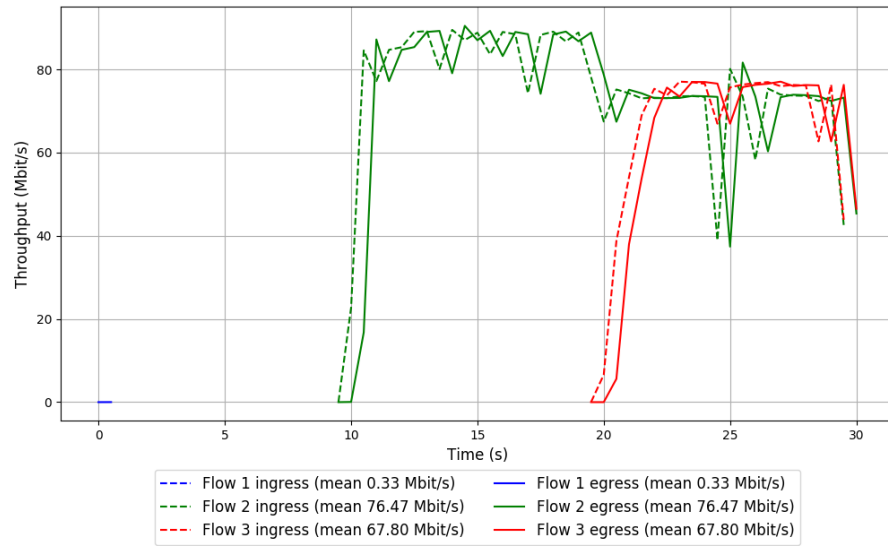
-- Flow 3:

Average throughput: 67.80 Mbit/s

95th percentile per-packet one-way delay: 17.401 ms

Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-05-22 03:55:51

End at: 2018-05-22 03:56:21

Local clock offset: 0.379 ms

Remote clock offset: 0.875 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.39 Mbit/s

95th percentile per-packet one-way delay: 18.798 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.33 Mbit/s

95th percentile per-packet one-way delay: 18.801 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.36 Mbit/s

95th percentile per-packet one-way delay: 18.742 ms

Loss rate: 0.00%

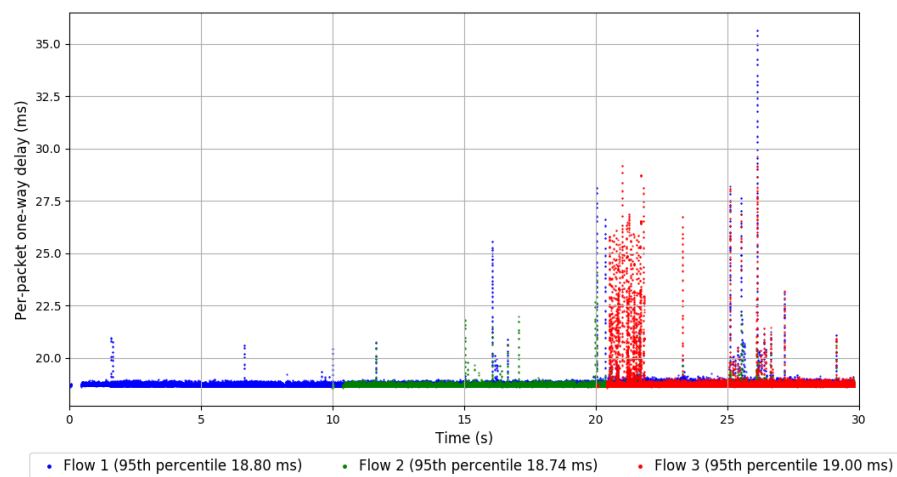
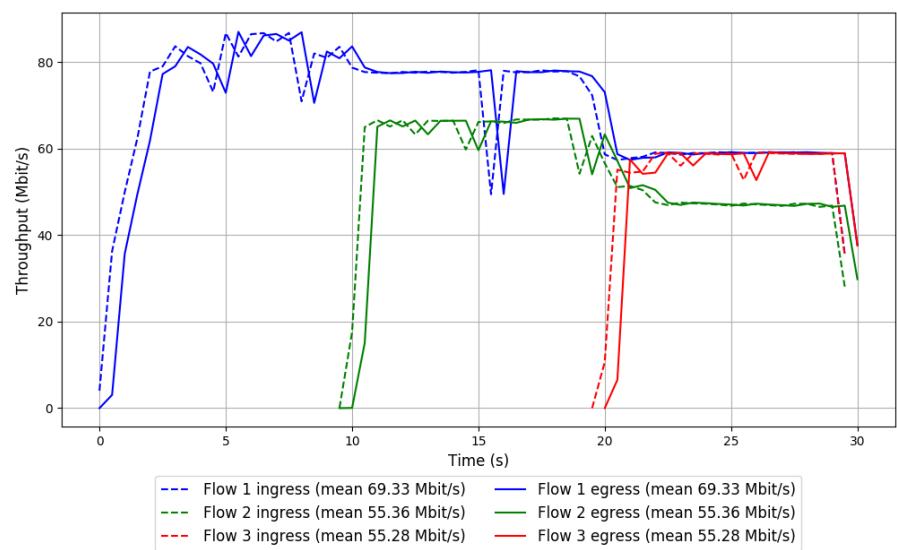
-- Flow 3:

Average throughput: 55.28 Mbit/s

95th percentile per-packet one-way delay: 18.995 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-05-22 04:21:26

End at: 2018-05-22 04:21:56

Local clock offset: 0.462 ms

Remote clock offset: 0.681 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.64 Mbit/s

95th percentile per-packet one-way delay: 20.381 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.37 Mbit/s

95th percentile per-packet one-way delay: 20.173 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 19.365 ms

Loss rate: 0.00%

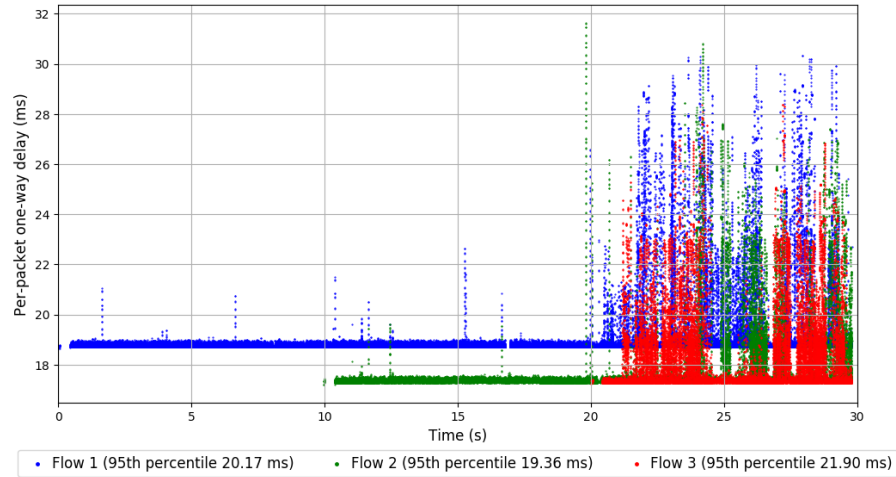
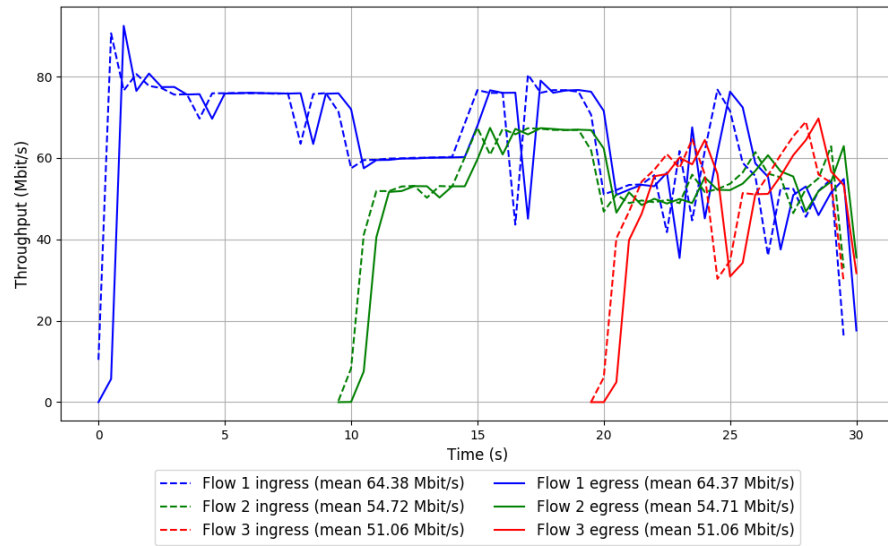
-- Flow 3:

Average throughput: 51.06 Mbit/s

95th percentile per-packet one-way delay: 21.902 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-05-22 04:47:02

End at: 2018-05-22 04:47:32

Local clock offset: 0.719 ms

Remote clock offset: 0.318 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.32 Mbit/s

95th percentile per-packet one-way delay: 21.667 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.45 Mbit/s

95th percentile per-packet one-way delay: 20.307 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.55 Mbit/s

95th percentile per-packet one-way delay: 22.112 ms

Loss rate: 0.00%

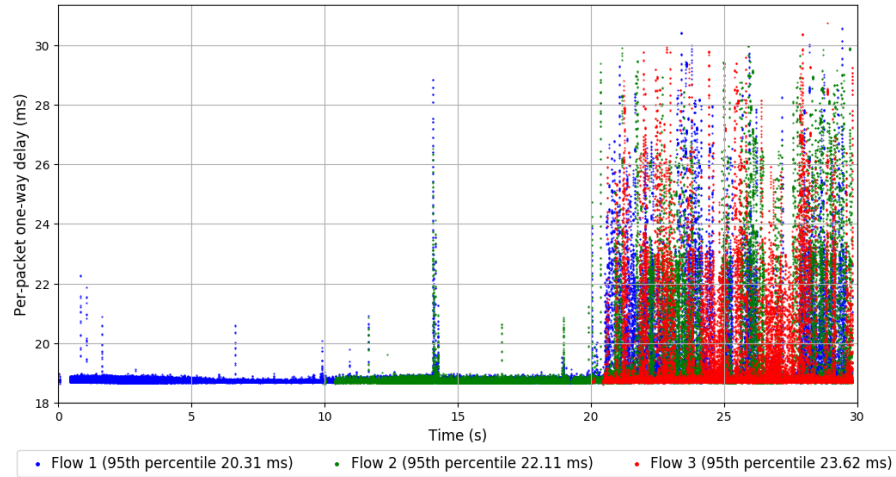
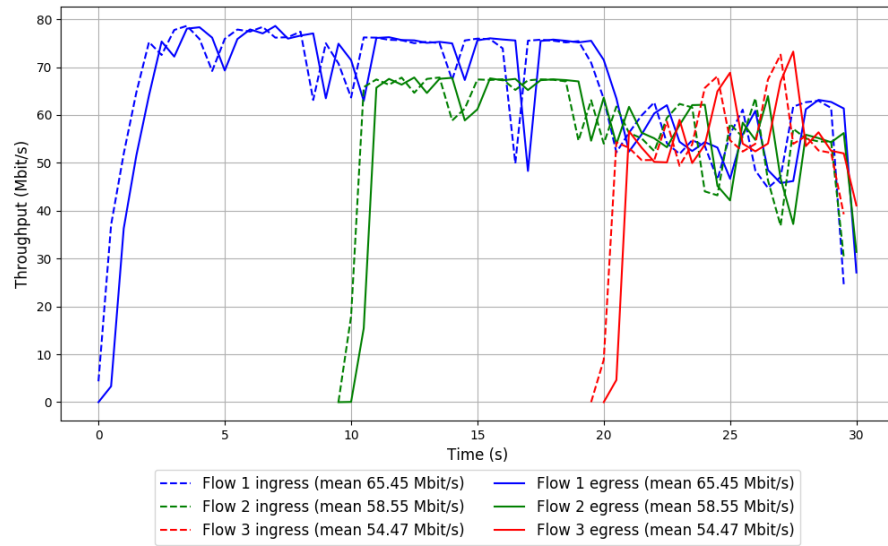
-- Flow 3:

Average throughput: 54.47 Mbit/s

95th percentile per-packet one-way delay: 23.617 ms

Loss rate: 0.02%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-05-22 05:12:33

End at: 2018-05-22 05:13:03

Local clock offset: 0.358 ms

Remote clock offset: 0.183 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.78 Mbit/s

95th percentile per-packet one-way delay: 21.080 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.68 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.25 Mbit/s

95th percentile per-packet one-way delay: 21.474 ms

Loss rate: 0.00%

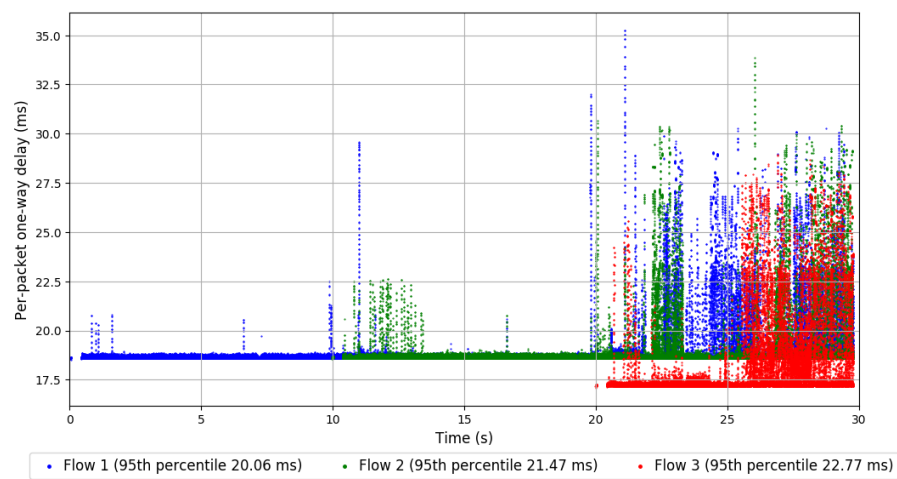
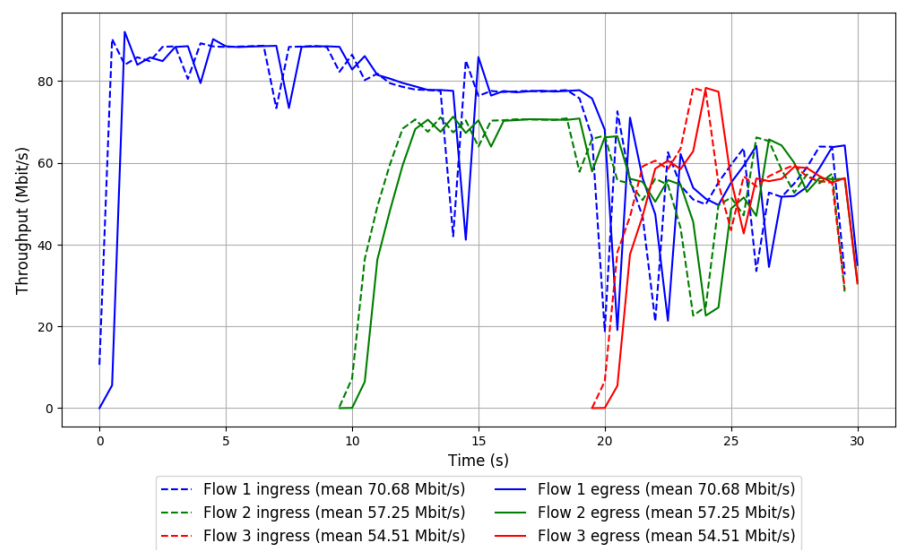
-- Flow 3:

Average throughput: 54.51 Mbit/s

95th percentile per-packet one-way delay: 22.769 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-05-22 05:38:07

End at: 2018-05-22 05:38:37

Local clock offset: 0.354 ms

Remote clock offset: 0.112 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.08 Mbit/s

95th percentile per-packet one-way delay: 18.831 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.55 Mbit/s

95th percentile per-packet one-way delay: 18.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.44 Mbit/s

95th percentile per-packet one-way delay: 18.978 ms

Loss rate: 0.00%

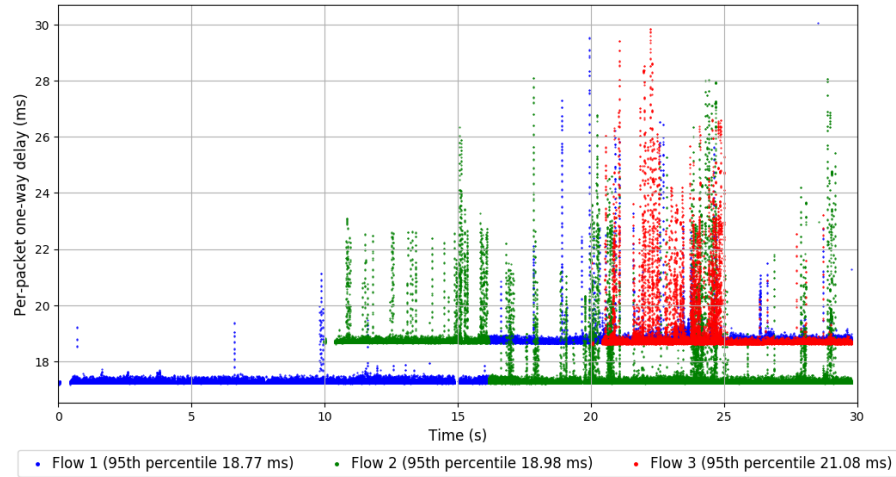
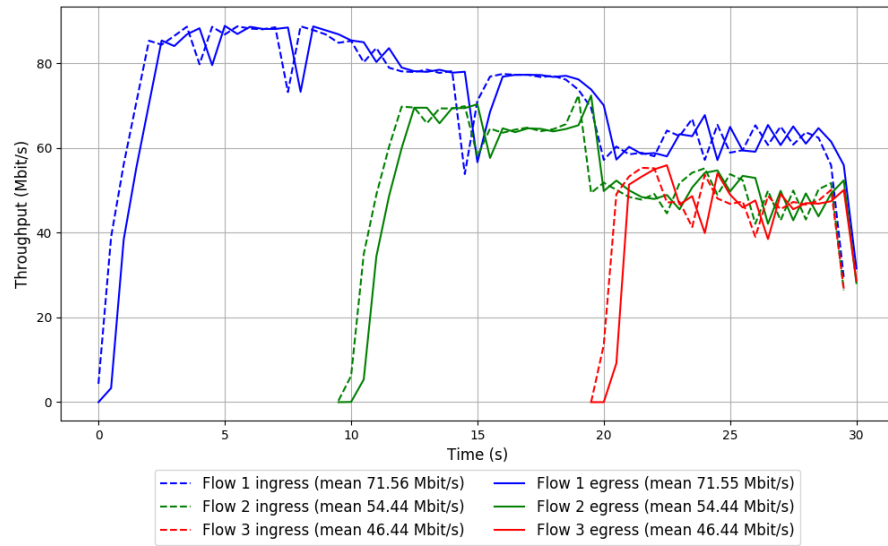
-- Flow 3:

Average throughput: 46.44 Mbit/s

95th percentile per-packet one-way delay: 21.077 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-05-22 06:03:36

End at: 2018-05-22 06:04:06

Local clock offset: -0.021 ms

Remote clock offset: -0.09 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.66 Mbit/s

95th percentile per-packet one-way delay: 20.837 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.50 Mbit/s

95th percentile per-packet one-way delay: 20.365 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.34 Mbit/s

95th percentile per-packet one-way delay: 18.991 ms

Loss rate: 0.00%

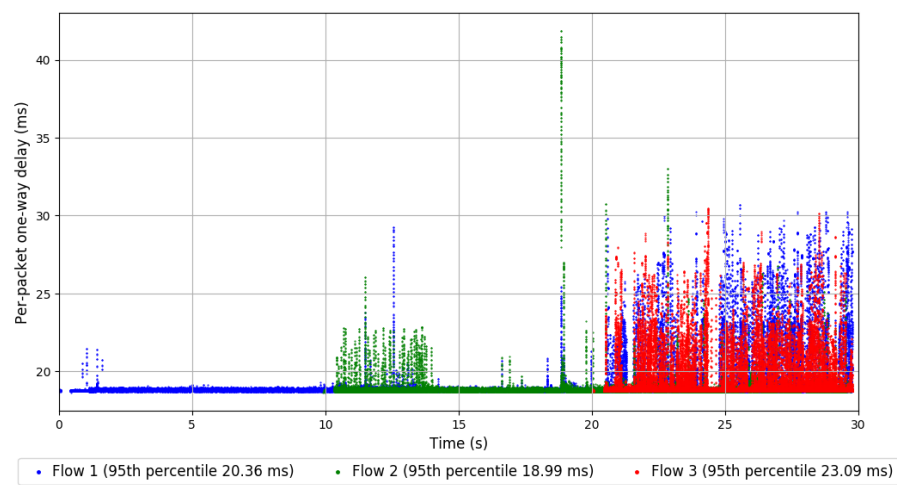
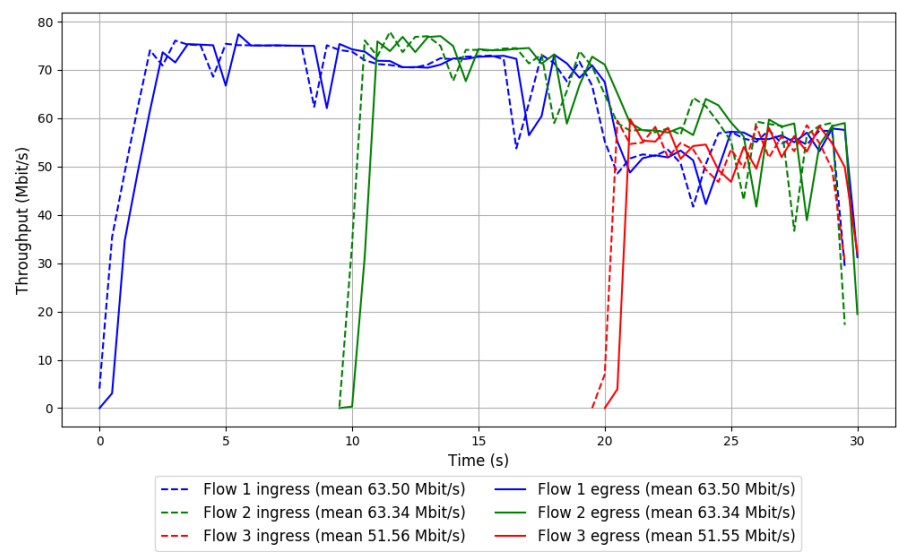
-- Flow 3:

Average throughput: 51.55 Mbit/s

95th percentile per-packet one-way delay: 23.088 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-05-22 06:29:09

End at: 2018-05-22 06:29:39

Local clock offset: -0.092 ms

Remote clock offset: -0.28 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.58 Mbit/s

95th percentile per-packet one-way delay: 21.343 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.08 Mbit/s

95th percentile per-packet one-way delay: 18.838 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.33 Mbit/s

95th percentile per-packet one-way delay: 22.882 ms

Loss rate: 0.01%

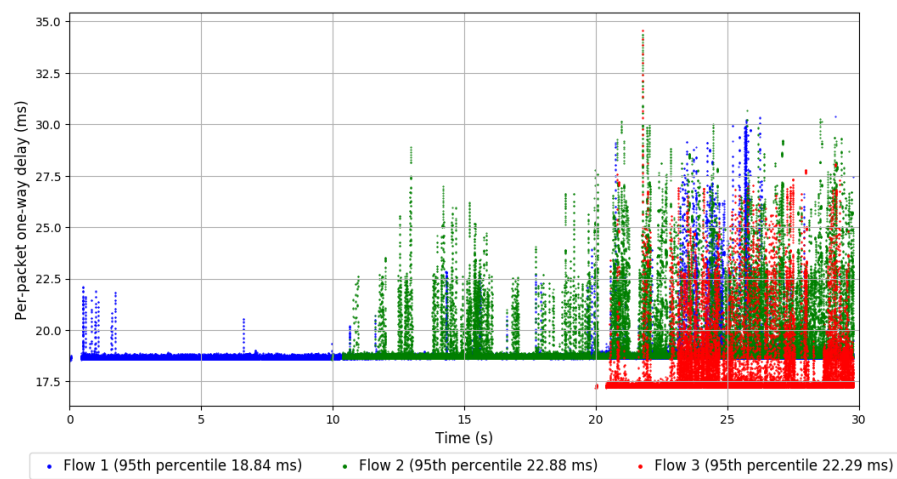
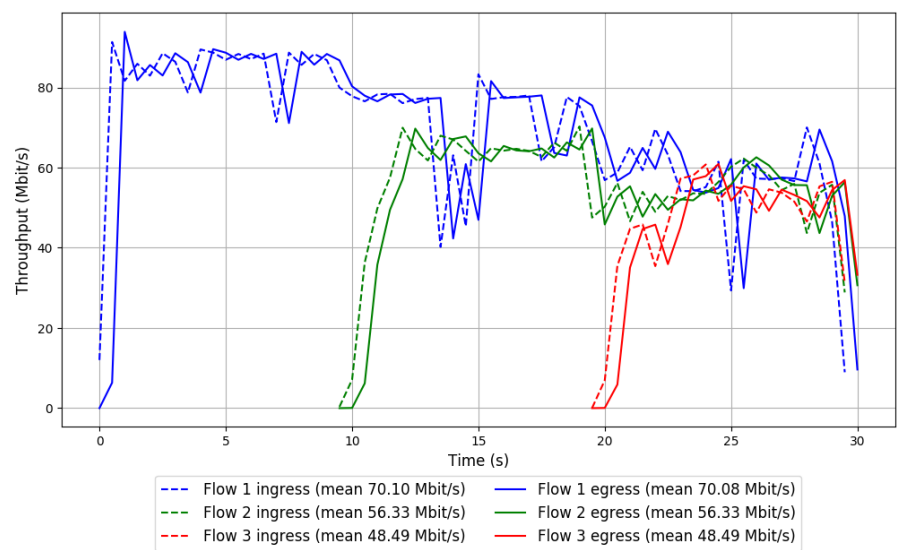
-- Flow 3:

Average throughput: 48.49 Mbit/s

95th percentile per-packet one-way delay: 22.286 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-05-22 06:54:37

End at: 2018-05-22 06:55:07

Local clock offset: 0.131 ms

Remote clock offset: 0.24 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.68 Mbit/s

95th percentile per-packet one-way delay: 18.822 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.54 Mbit/s

95th percentile per-packet one-way delay: 18.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 17.395 ms

Loss rate: 0.00%

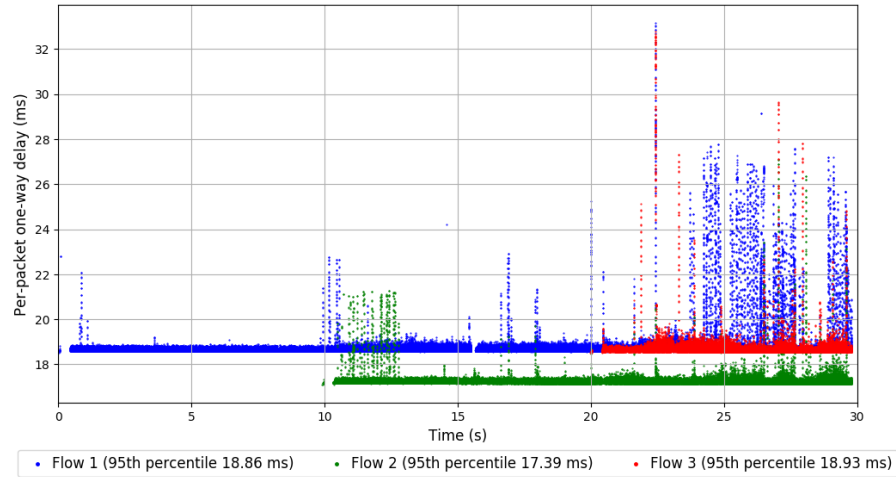
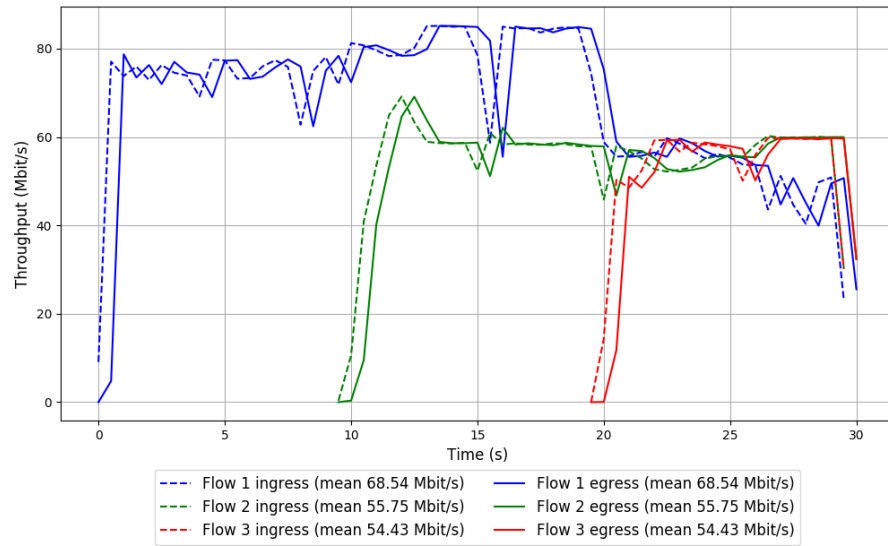
-- Flow 3:

Average throughput: 54.43 Mbit/s

95th percentile per-packet one-way delay: 18.926 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-05-22 07:20:08

End at: 2018-05-22 07:20:38

Local clock offset: 0.776 ms

Remote clock offset: 1.449 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.30 Mbit/s

95th percentile per-packet one-way delay: 21.272 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.61 Mbit/s

95th percentile per-packet one-way delay: 20.073 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.59 Mbit/s

95th percentile per-packet one-way delay: 20.430 ms

Loss rate: 0.00%

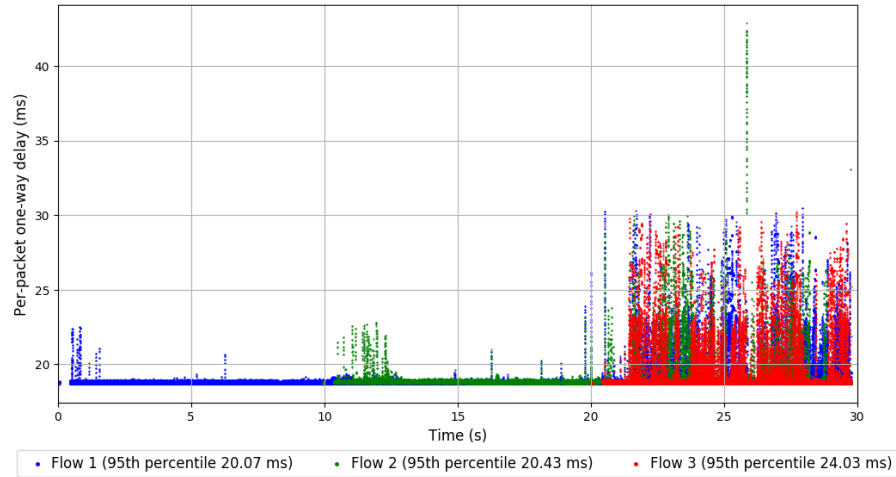
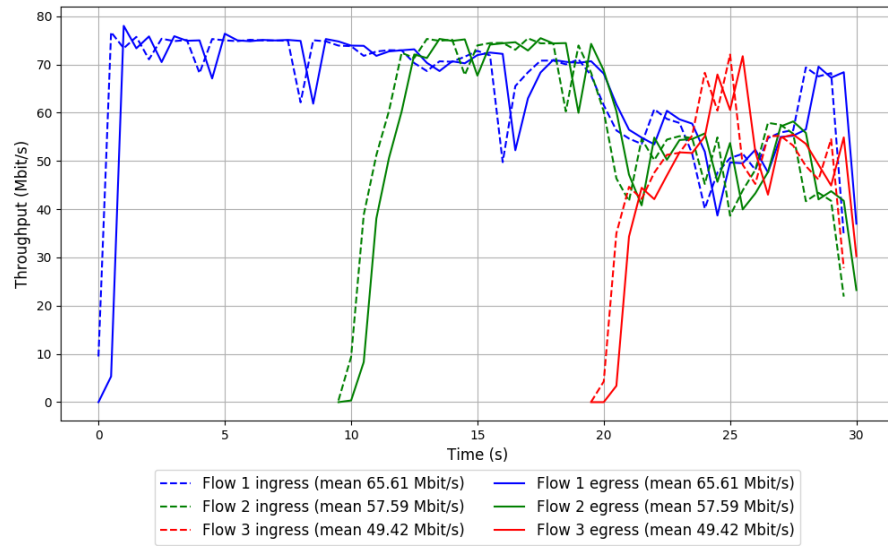
-- Flow 3:

Average throughput: 49.42 Mbit/s

95th percentile per-packet one-way delay: 24.031 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

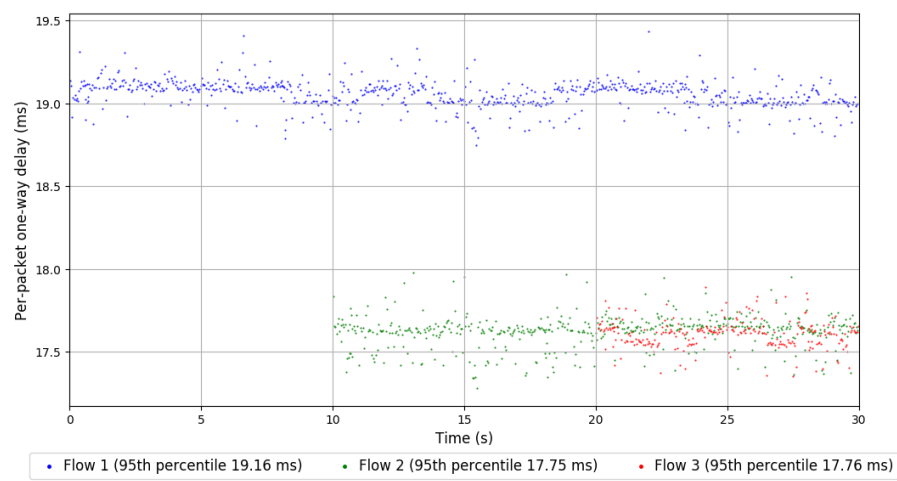
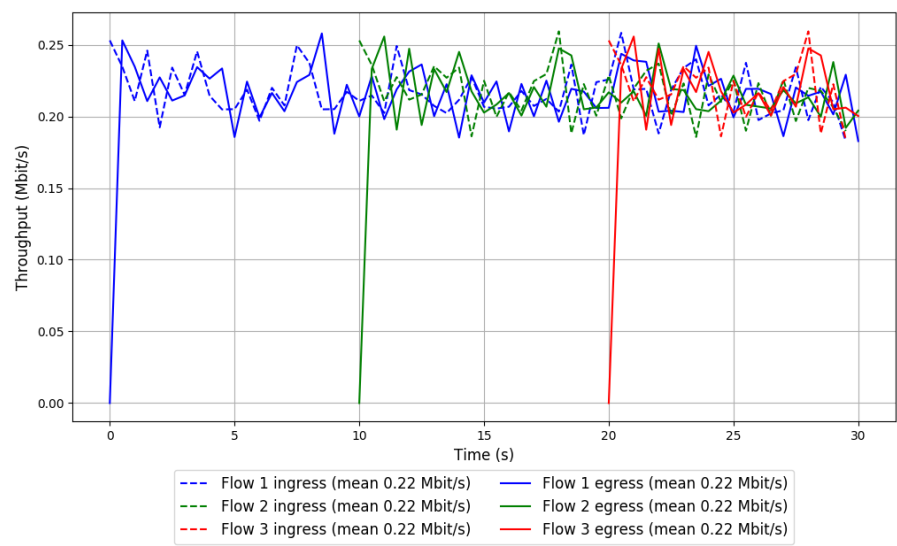


```
Run 1: Statistics of SReAM

Start at: 2018-05-22 03:27:13
End at: 2018-05-22 03:27:43
Local clock offset: 0.161 ms
Remote clock offset: 0.18 ms

# Below is generated by plot.py at 2018-05-22 09:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 19.137 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.162 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.746 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.764 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

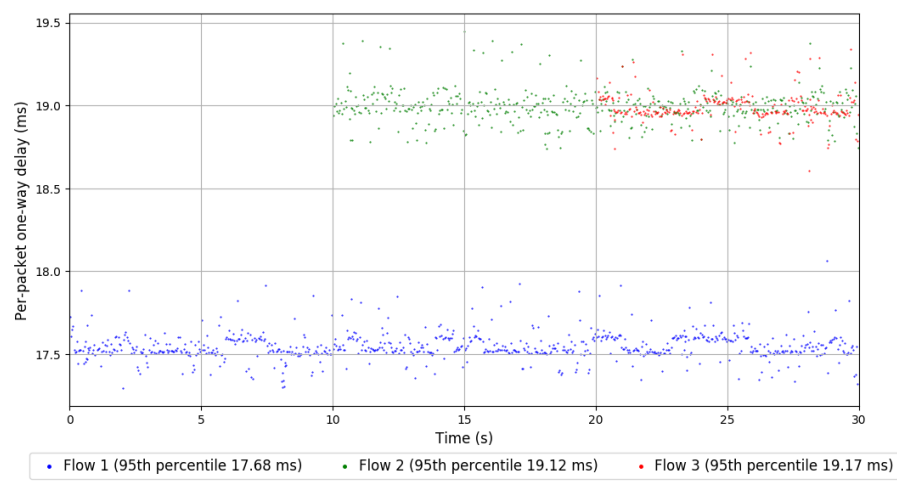
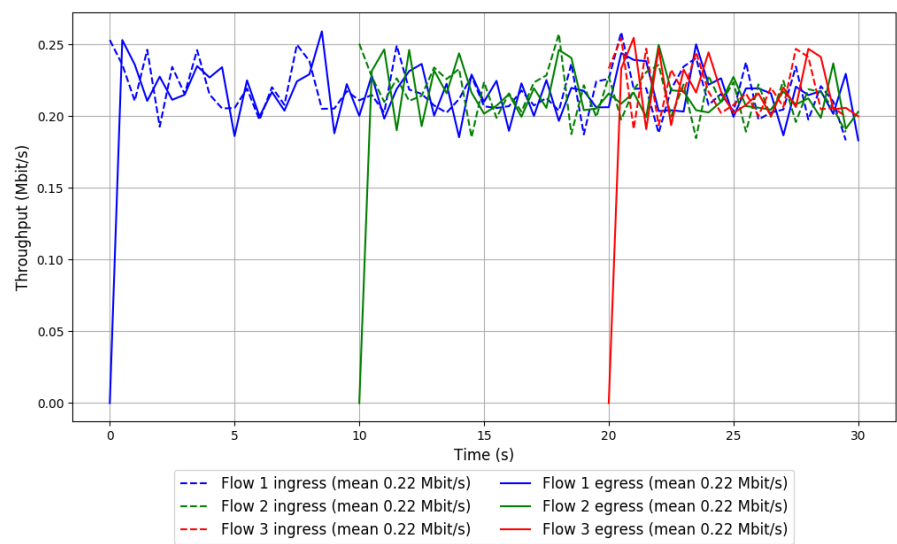


```
Run 2: Statistics of SReAM

Start at: 2018-05-22 03:52:57
End at: 2018-05-22 03:53:27
Local clock offset: 0.354 ms
Remote clock offset: 0.814 ms

# Below is generated by plot.py at 2018-05-22 09:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.084 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.679 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.117 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.166 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-05-22 04:18:34

End at: 2018-05-22 04:19:04

Local clock offset: 0.342 ms

Remote clock offset: 0.575 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.233 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.240 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

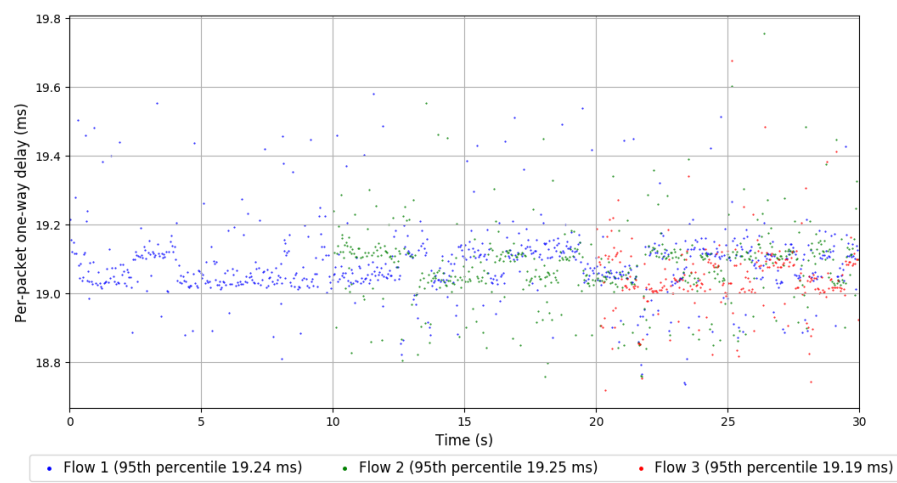
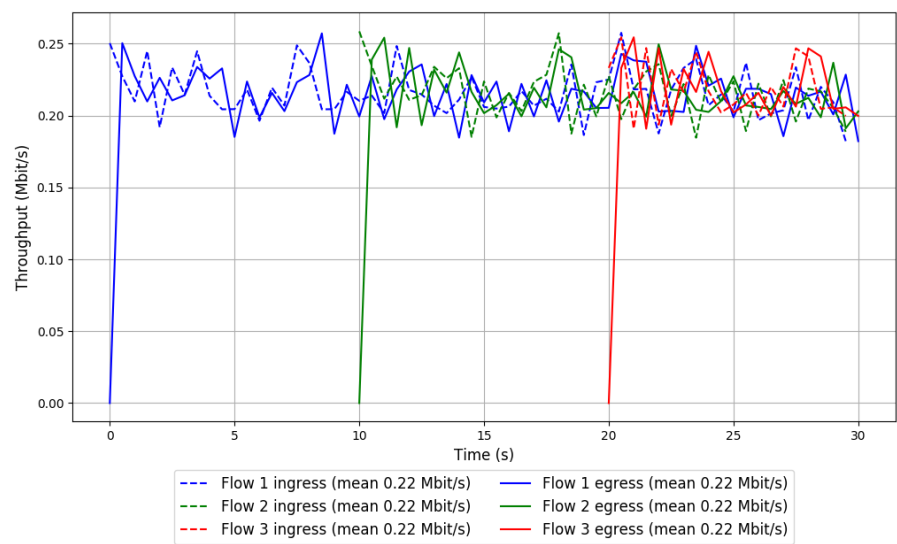
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-05-22 04:44:09

End at: 2018-05-22 04:44:39

Local clock offset: 0.687 ms

Remote clock offset: 0.365 ms

Below is generated by plot.py at 2018-05-22 09:18:06

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: 19.317 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.792 ms

Loss rate: 0.00%

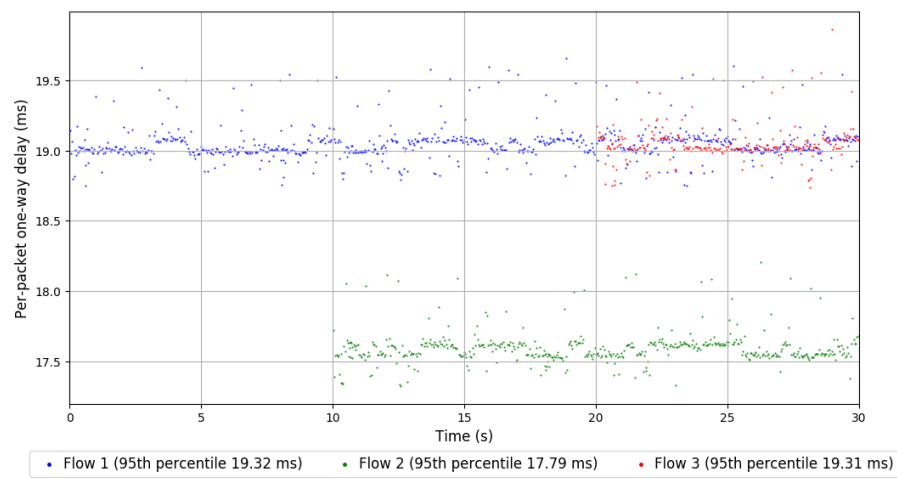
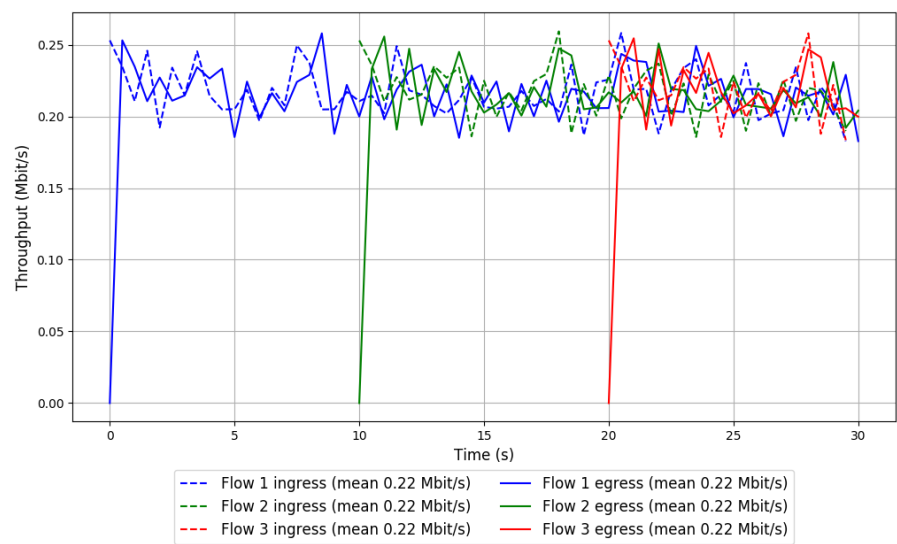
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.314 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-05-22 05:09:50

End at: 2018-05-22 05:10:20

Local clock offset: 0.394 ms

Remote clock offset: 0.316 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.202 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.229 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.192 ms

Loss rate: 0.00%

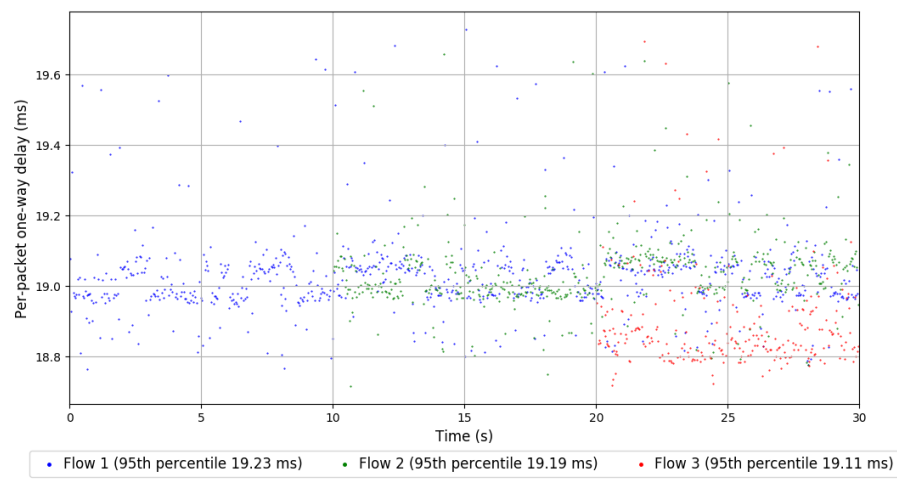
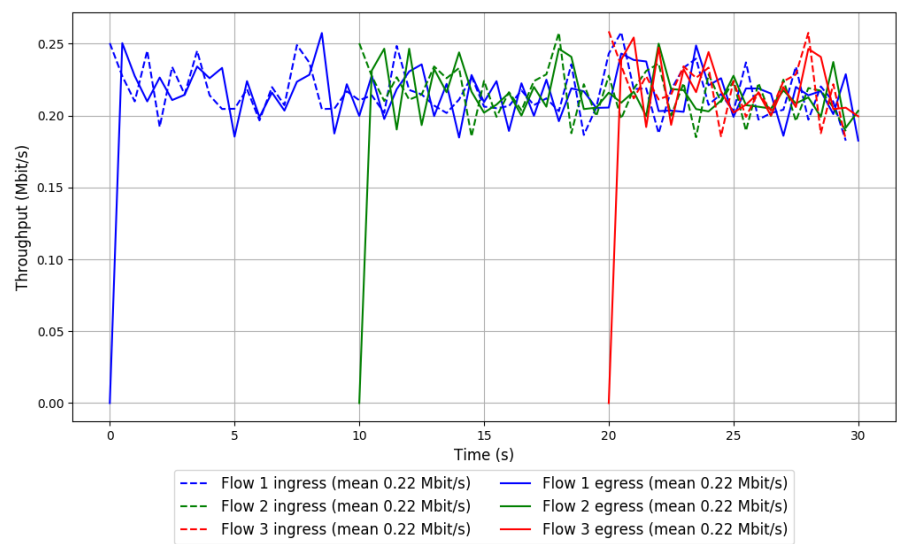
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.111 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-05-22 05:35:14

End at: 2018-05-22 05:35:44

Local clock offset: 0.29 ms

Remote clock offset: 0.099 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 19.131 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.874 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.289 ms

Loss rate: 0.00%

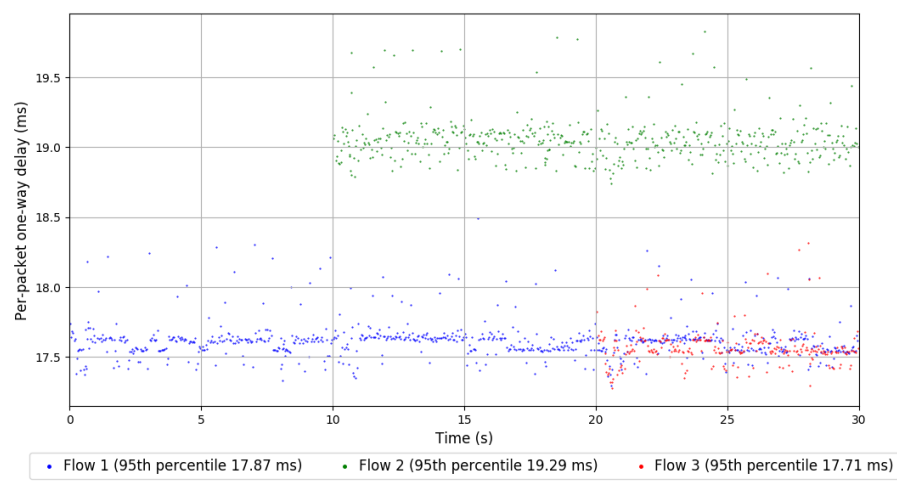
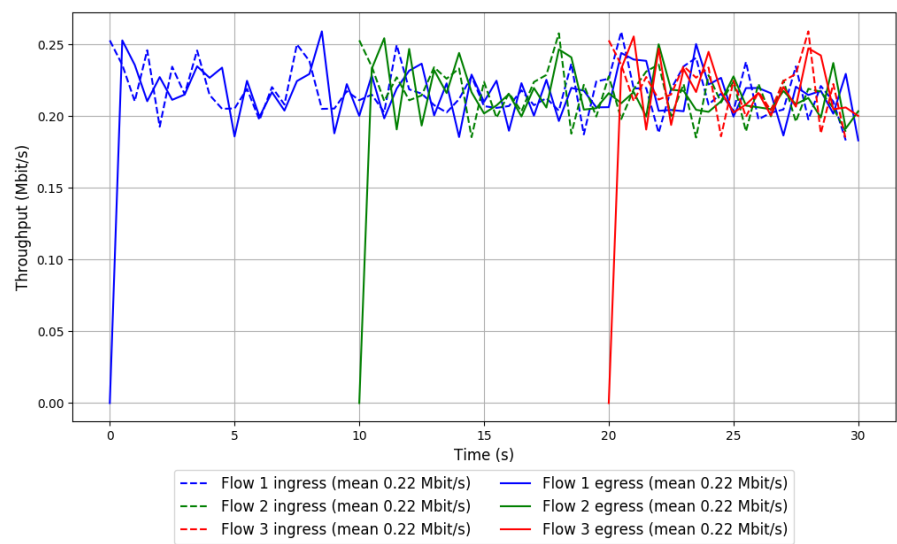
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.706 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

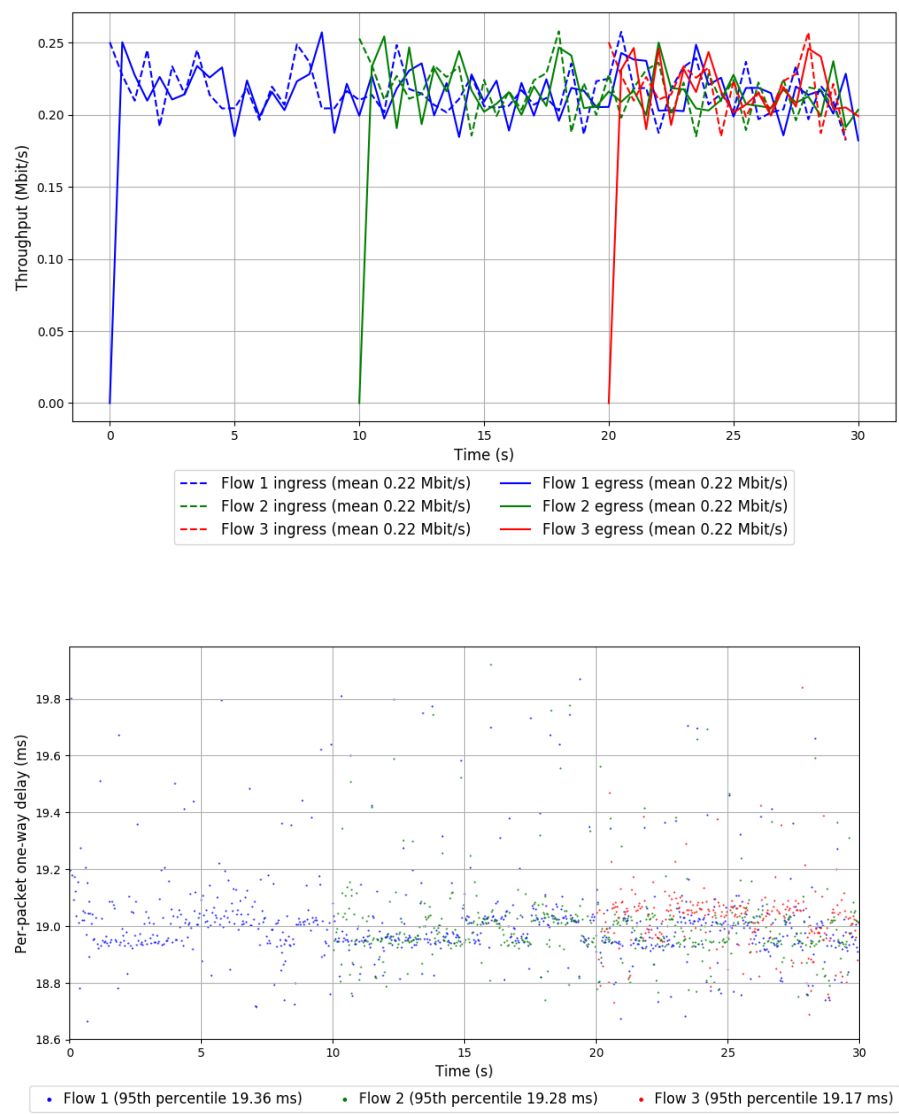


Run 7: Statistics of SReAM

Start at: 2018-05-22 06:00:48
End at: 2018-05-22 06:01:18
Local clock offset: 0.094 ms
Remote clock offset: -0.048 ms

Below is generated by plot.py at 2018-05-22 09:18:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.302 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.358 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.281 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.172 ms
Loss rate: 0.00%

Run 7: Report of SReAM — Data Link

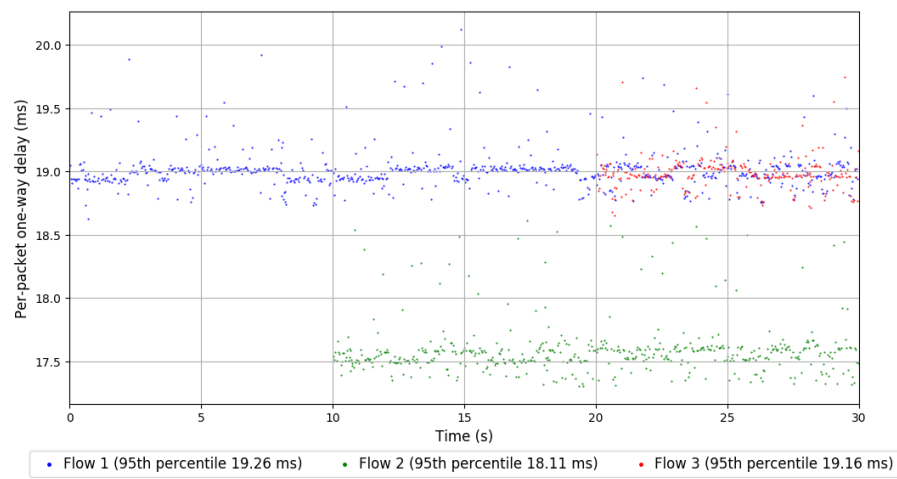
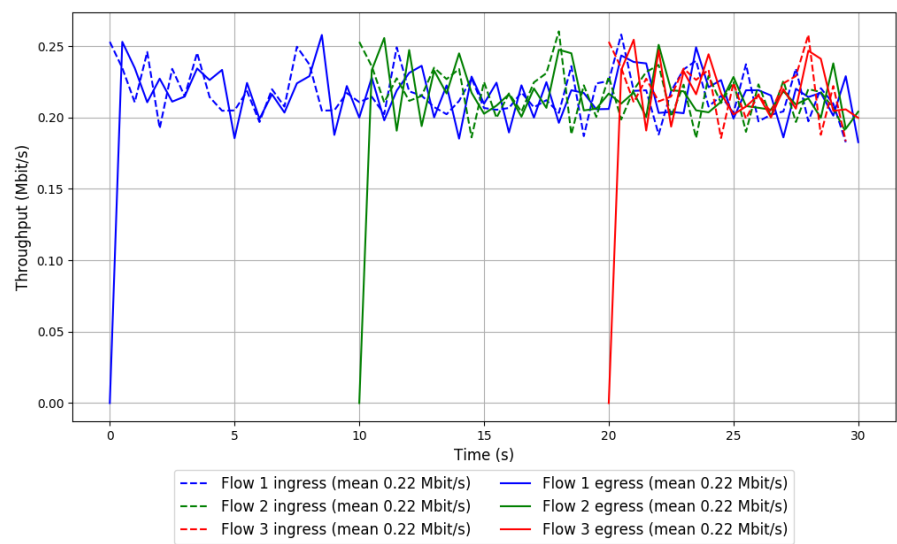


Run 8: Statistics of SReAM

Start at: 2018-05-22 06:26:20
End at: 2018-05-22 06:26:50
Local clock offset: -0.195 ms
Remote clock offset: -0.212 ms

Below is generated by plot.py at 2018-05-22 09:18:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.260 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.114 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.161 ms
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

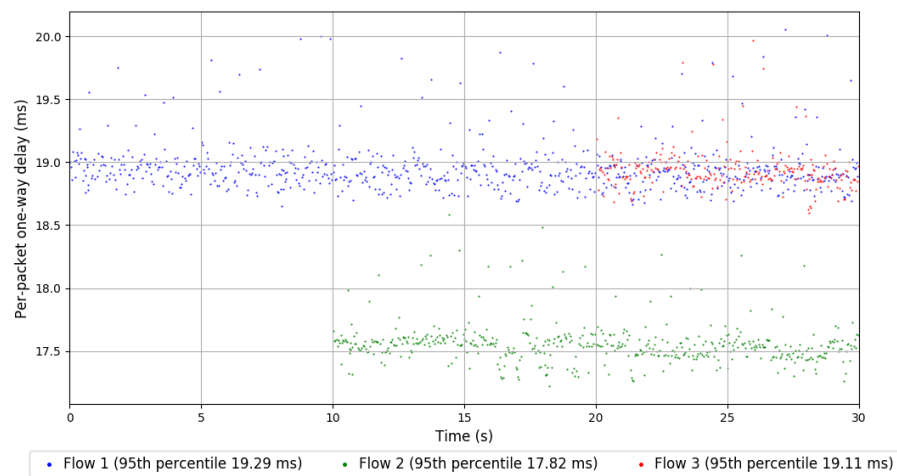
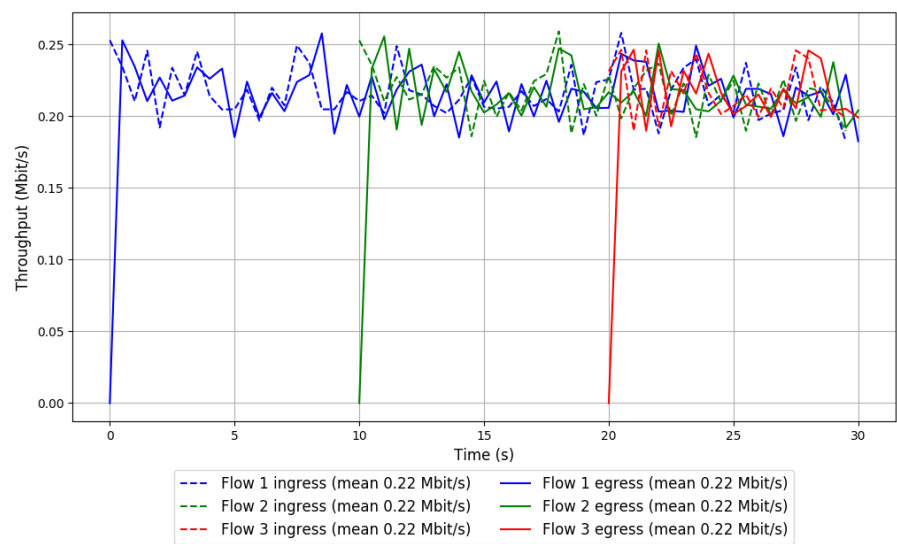


Run 9: Statistics of SReAM

Start at: 2018-05-22 06:51:43
End at: 2018-05-22 06:52:13
Local clock offset: 0.142 ms
Remote clock offset: -0.067 ms

Below is generated by plot.py at 2018-05-22 09:18:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.116 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.292 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 17.821 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.109 ms
Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-05-22 07:17:14

End at: 2018-05-22 07:17:44

Local clock offset: 0.764 ms

Remote clock offset: 1.343 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 19.226 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.214 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.365 ms

Loss rate: 0.00%

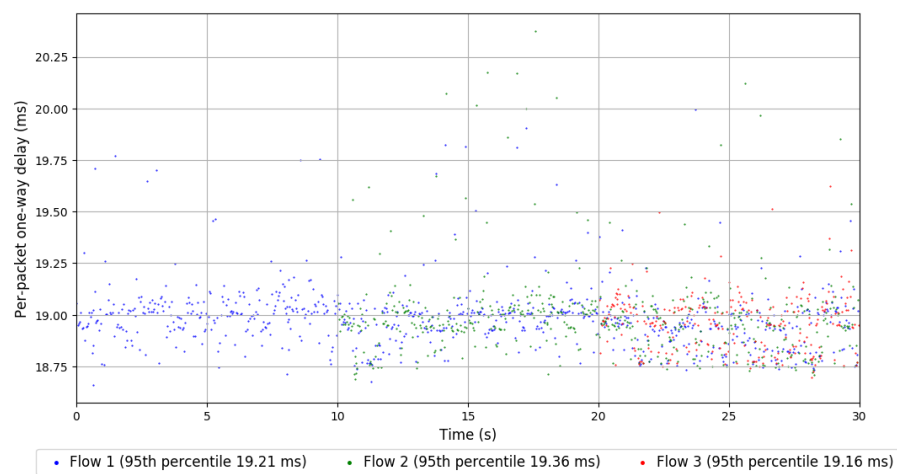
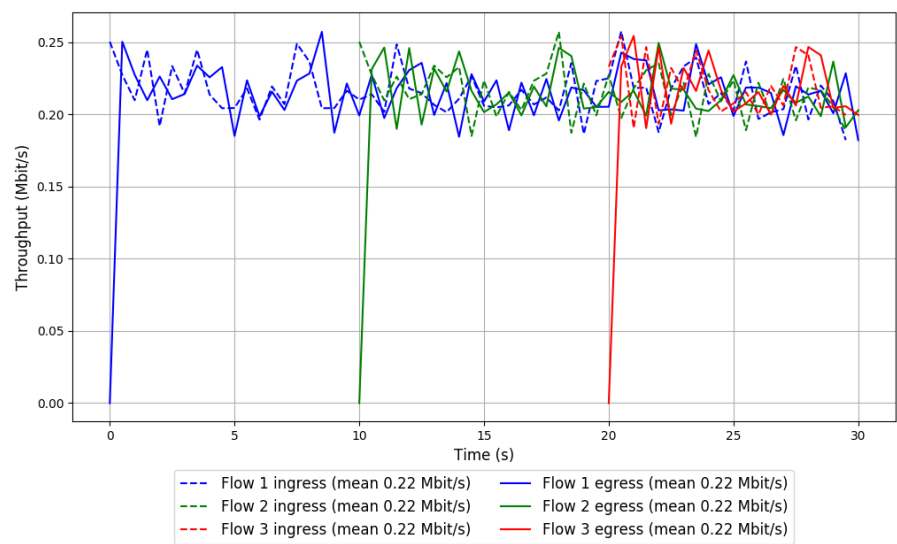
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.157 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-05-22 03:36:25

End at: 2018-05-22 03:36:55

Local clock offset: 0.2 ms

Remote clock offset: 0.355 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.89 Mbit/s

95th percentile per-packet one-way delay: 21.299 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 20.24 Mbit/s

95th percentile per-packet one-way delay: 21.533 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 20.99 Mbit/s

95th percentile per-packet one-way delay: 20.237 ms

Loss rate: 0.00%

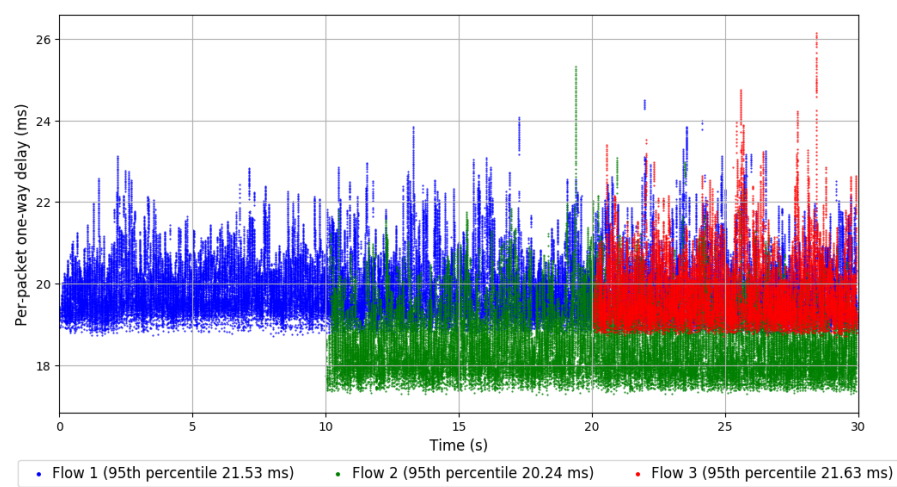
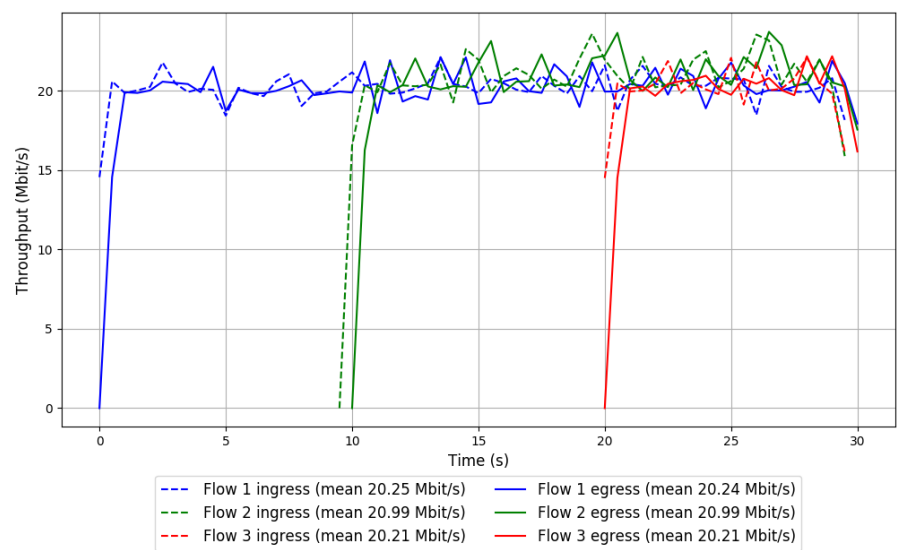
-- Flow 3:

Average throughput: 20.21 Mbit/s

95th percentile per-packet one-way delay: 21.629 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

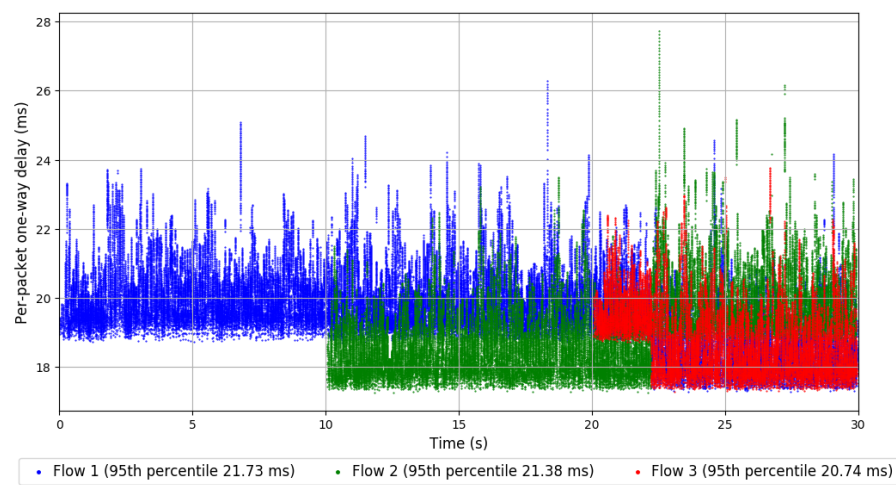
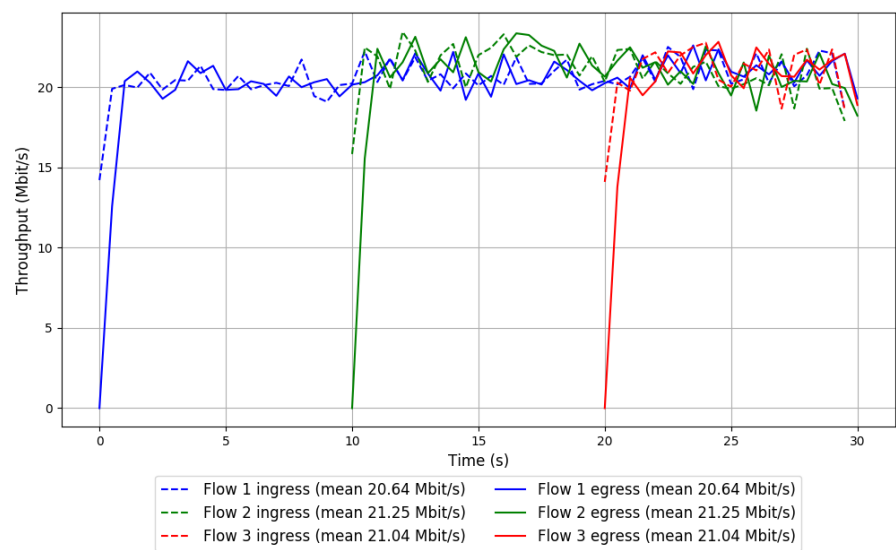


Run 2: Statistics of Sprout

Start at: 2018-05-22 04:02:13
End at: 2018-05-22 04:02:43
Local clock offset: 0.382 ms
Remote clock offset: 0.864 ms

```
# Below is generated by plot.py at 2018-05-22 09:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.72 Mbit/s
95th percentile per-packet one-way delay: 21.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 20.64 Mbit/s
95th percentile per-packet one-way delay: 21.726 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.25 Mbit/s
95th percentile per-packet one-way delay: 21.382 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 20.740 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-05-22 04:27:49

End at: 2018-05-22 04:28:19

Local clock offset: 0.417 ms

Remote clock offset: 0.725 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.84 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 22.042 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.45 Mbit/s

95th percentile per-packet one-way delay: 22.034 ms

Loss rate: 0.00%

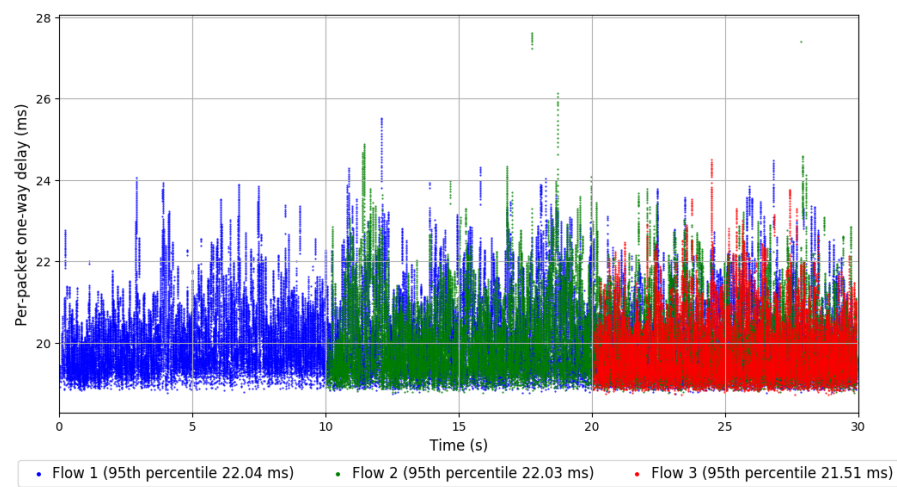
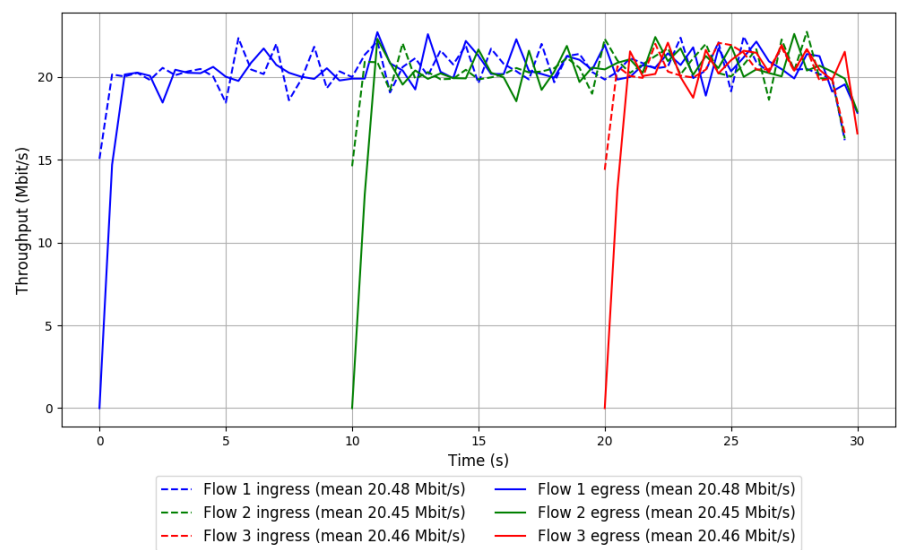
-- Flow 3:

Average throughput: 20.46 Mbit/s

95th percentile per-packet one-way delay: 21.508 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

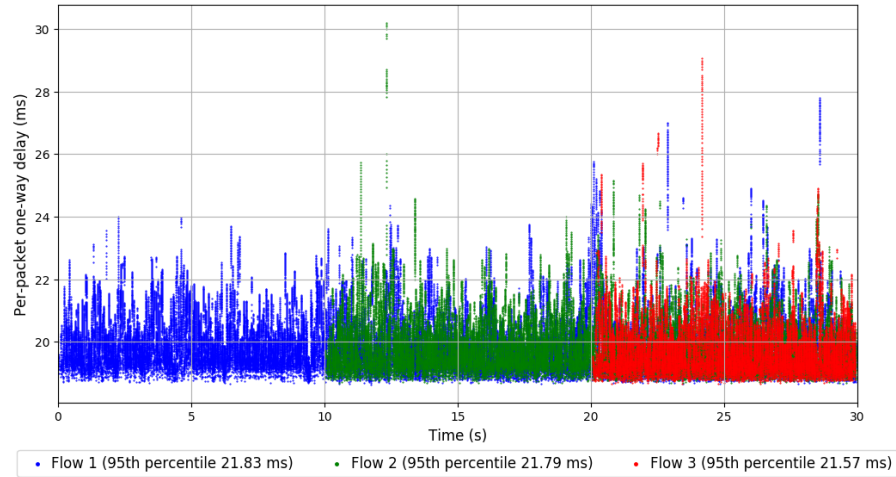
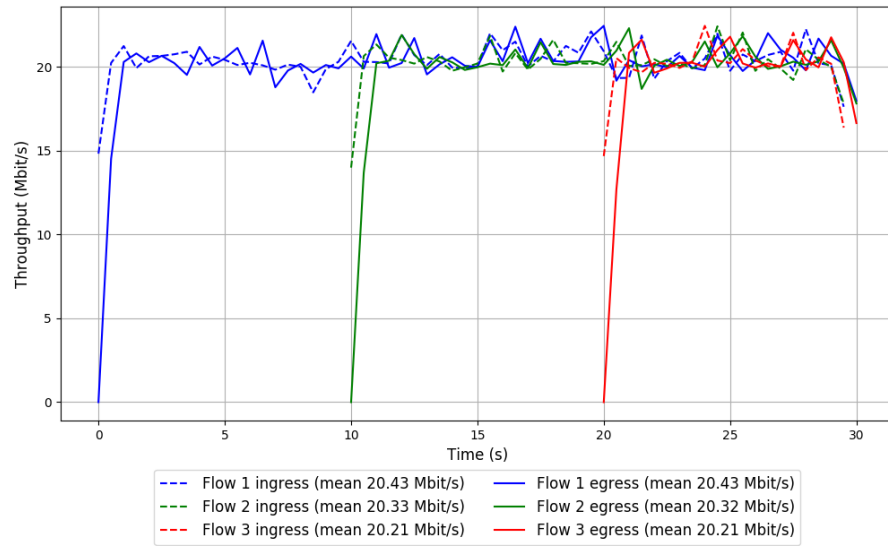


Run 4: Statistics of Sprout

Start at: 2018-05-22 04:53:25
End at: 2018-05-22 04:53:55
Local clock offset: 0.778 ms
Remote clock offset: 0.304 ms

```
# Below is generated by plot.py at 2018-05-22 09:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 21.783 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 20.43 Mbit/s
95th percentile per-packet one-way delay: 21.833 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.32 Mbit/s
95th percentile per-packet one-way delay: 21.793 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 20.21 Mbit/s
95th percentile per-packet one-way delay: 21.565 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-05-22 05:18:56

End at: 2018-05-22 05:19:26

Local clock offset: 0.321 ms

Remote clock offset: 0.113 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.88 Mbit/s

95th percentile per-packet one-way delay: 21.825 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 20.58 Mbit/s

95th percentile per-packet one-way delay: 21.922 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.41 Mbit/s

95th percentile per-packet one-way delay: 21.746 ms

Loss rate: 0.00%

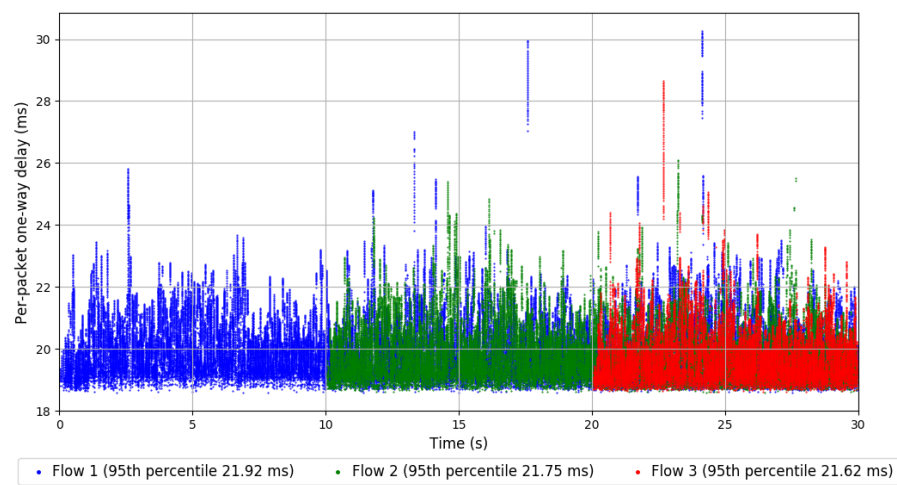
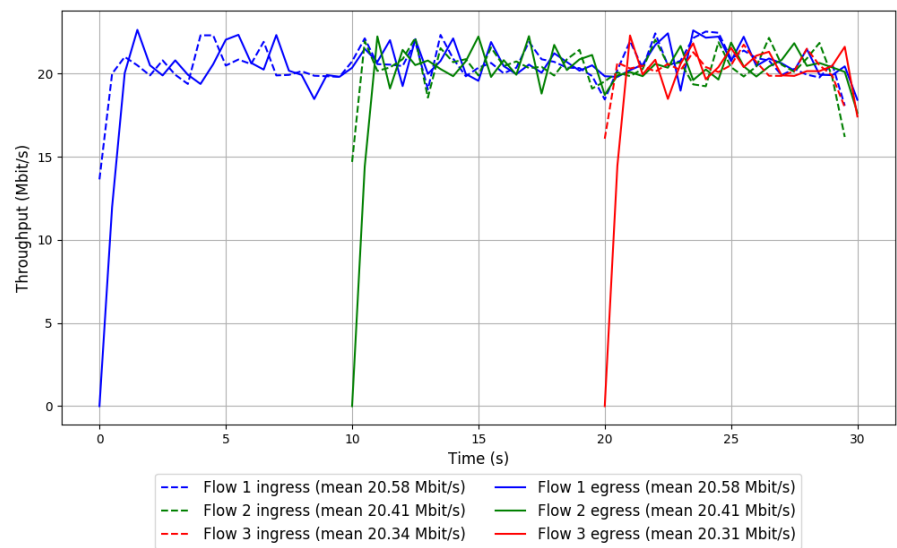
-- Flow 3:

Average throughput: 20.31 Mbit/s

95th percentile per-packet one-way delay: 21.621 ms

Loss rate: 0.14%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-05-22 05:44:29

End at: 2018-05-22 05:44:59

Local clock offset: 0.286 ms

Remote clock offset: 0.088 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 21.070 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.03 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.57 Mbit/s

95th percentile per-packet one-way delay: 20.764 ms

Loss rate: 0.00%

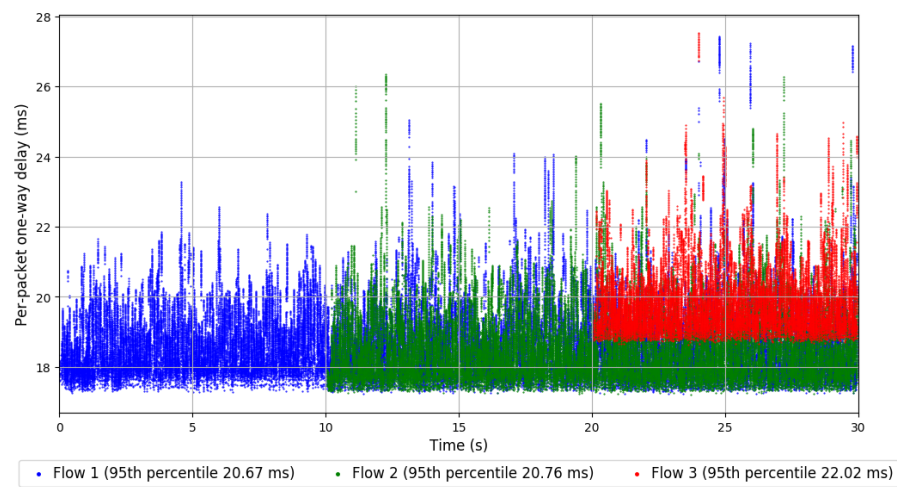
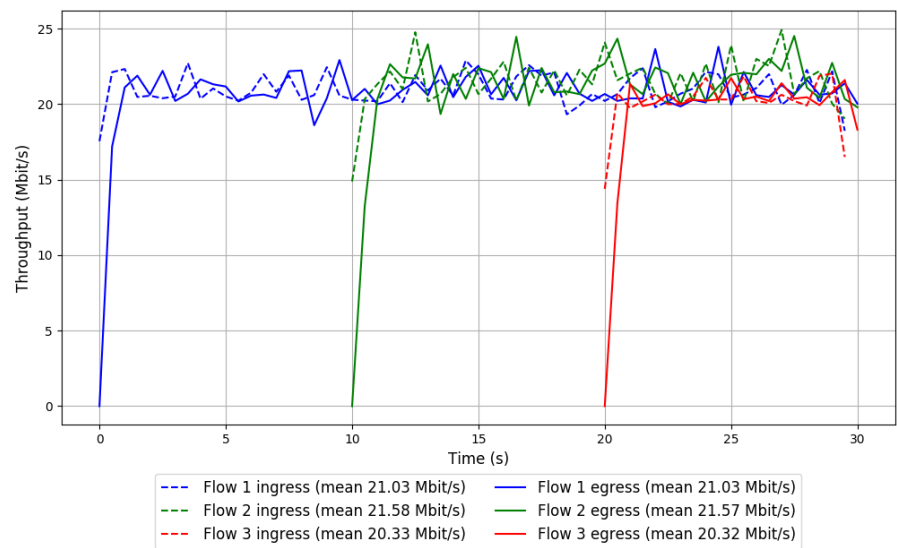
-- Flow 3:

Average throughput: 20.32 Mbit/s

95th percentile per-packet one-way delay: 22.024 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

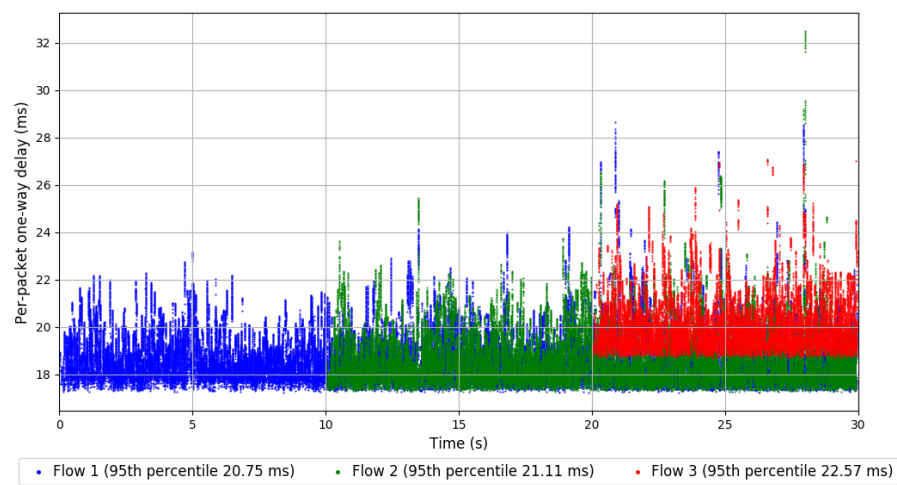
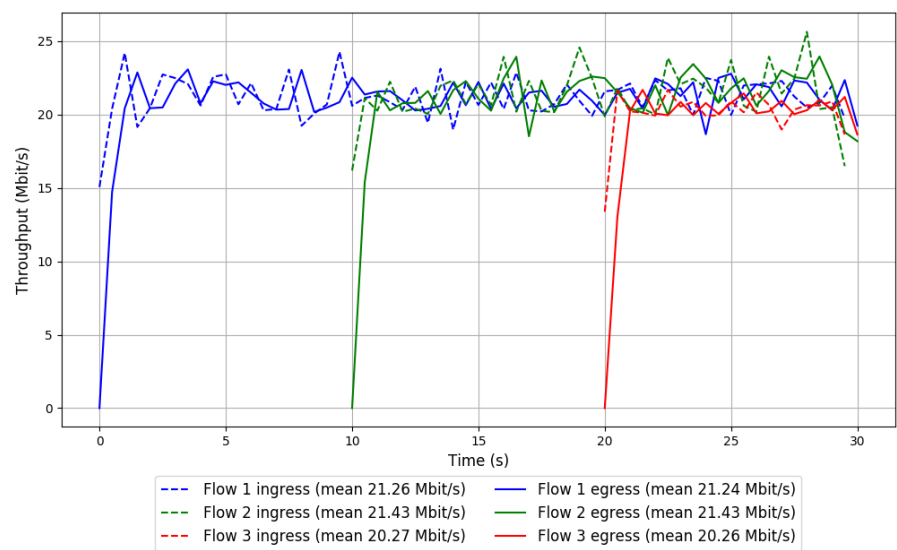


Run 7: Statistics of Sprout

Start at: 2018-05-22 06:10:00
End at: 2018-05-22 06:10:30
Local clock offset: -0.018 ms
Remote clock offset: -0.05 ms

```
# Below is generated by plot.py at 2018-05-22 09:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.20 Mbit/s
95th percentile per-packet one-way delay: 21.334 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 21.24 Mbit/s
95th percentile per-packet one-way delay: 20.752 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 21.106 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.26 Mbit/s
95th percentile per-packet one-way delay: 22.567 ms
Loss rate: 0.00%
```

Run 7: Report of Sprout — Data Link

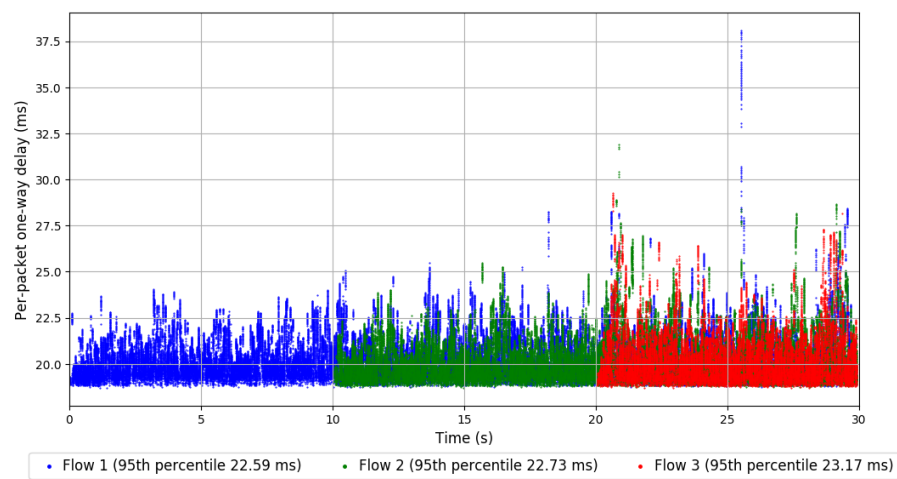
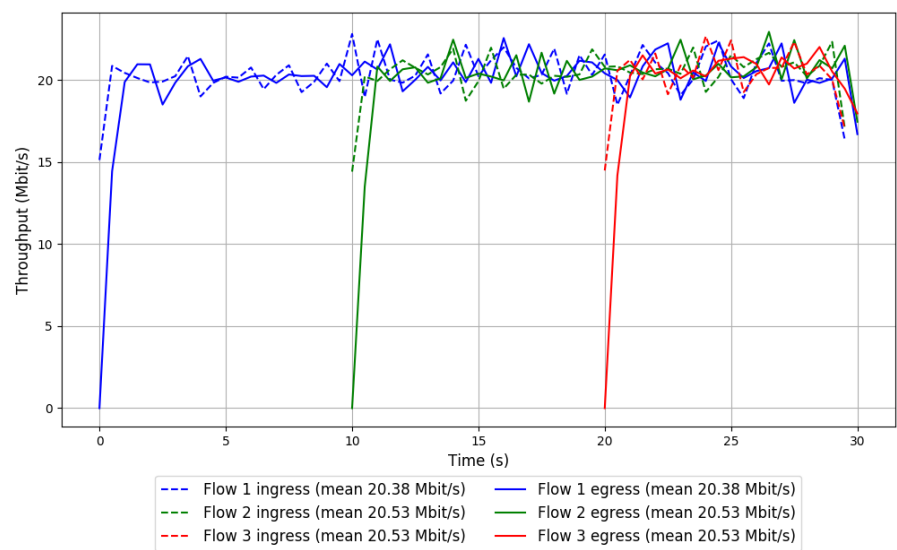


Run 8: Statistics of Sprout

Start at: 2018-05-22 06:35:27
End at: 2018-05-22 06:35:57
Local clock offset: 0.066 ms
Remote clock offset: -0.208 ms

```
# Below is generated by plot.py at 2018-05-22 09:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.81 Mbit/s
95th percentile per-packet one-way delay: 22.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 20.38 Mbit/s
95th percentile per-packet one-way delay: 22.595 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.53 Mbit/s
95th percentile per-packet one-way delay: 22.734 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.53 Mbit/s
95th percentile per-packet one-way delay: 23.173 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-05-22 07:00:57

End at: 2018-05-22 07:01:27

Local clock offset: 0.28 ms

Remote clock offset: 0.767 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.55 Mbit/s

95th percentile per-packet one-way delay: 23.396 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 20.28 Mbit/s

95th percentile per-packet one-way delay: 23.064 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.44 Mbit/s

95th percentile per-packet one-way delay: 23.654 ms

Loss rate: 0.01%

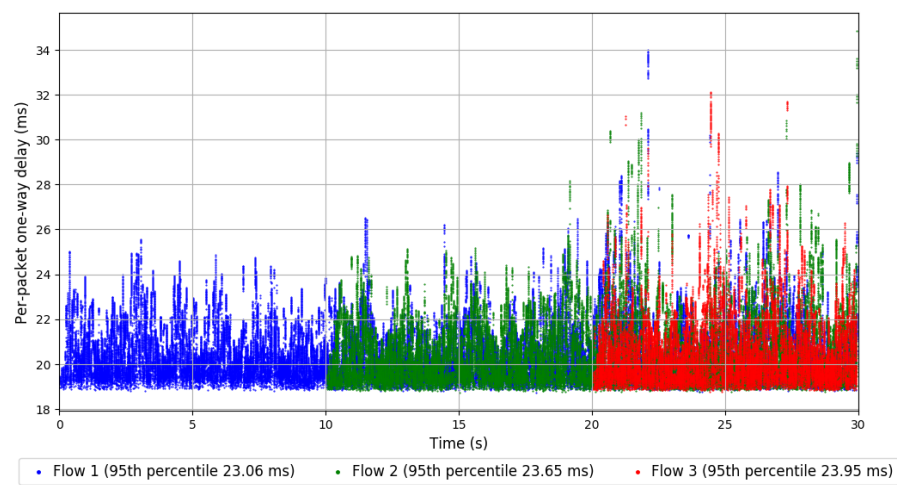
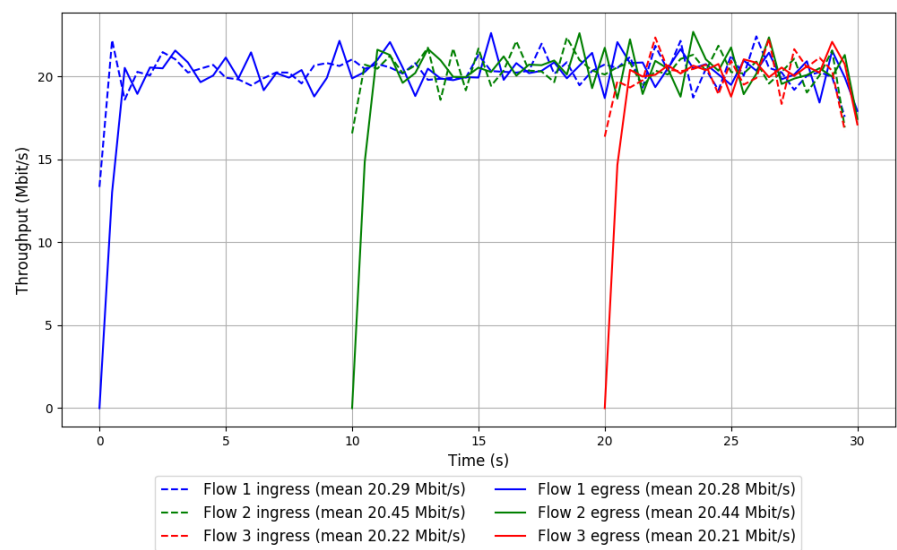
-- Flow 3:

Average throughput: 20.21 Mbit/s

95th percentile per-packet one-way delay: 23.954 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-05-22 07:26:29

End at: 2018-05-22 07:26:59

Local clock offset: 0.744 ms

Remote clock offset: 1.572 ms

Below is generated by plot.py at 2018-05-22 09:18:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.29 Mbit/s

95th percentile per-packet one-way delay: 22.694 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.34 Mbit/s

95th percentile per-packet one-way delay: 22.916 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.30 Mbit/s

95th percentile per-packet one-way delay: 21.383 ms

Loss rate: 0.00%

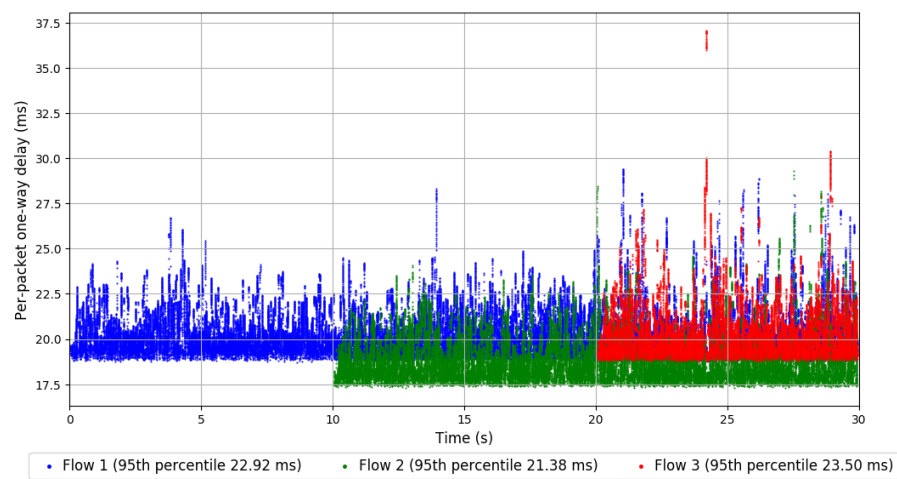
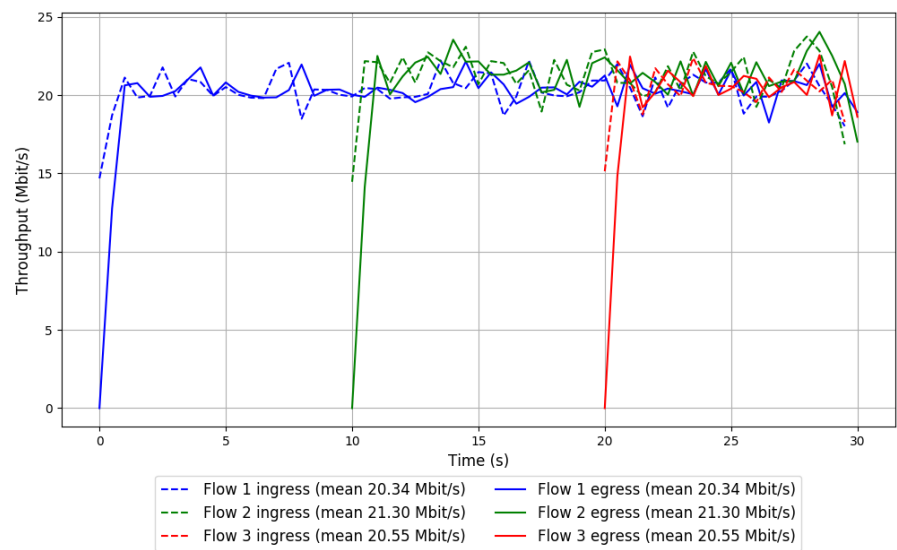
-- Flow 3:

Average throughput: 20.55 Mbit/s

95th percentile per-packet one-way delay: 23.497 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

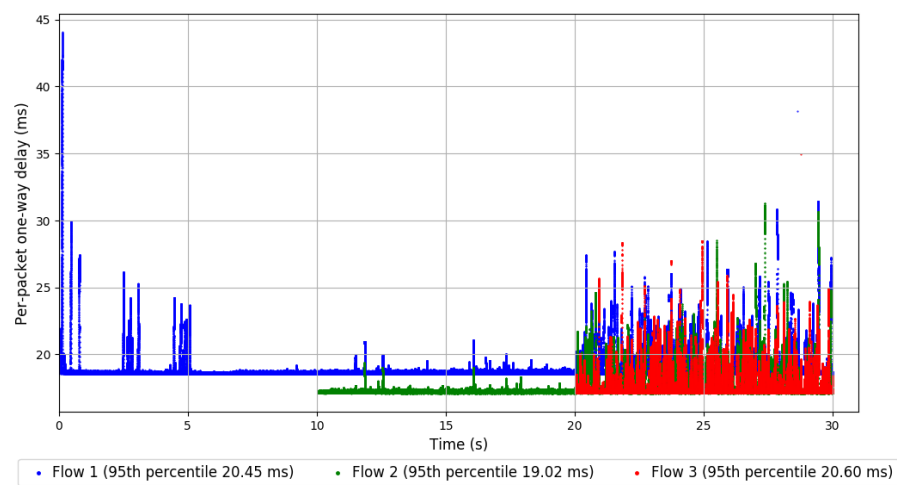
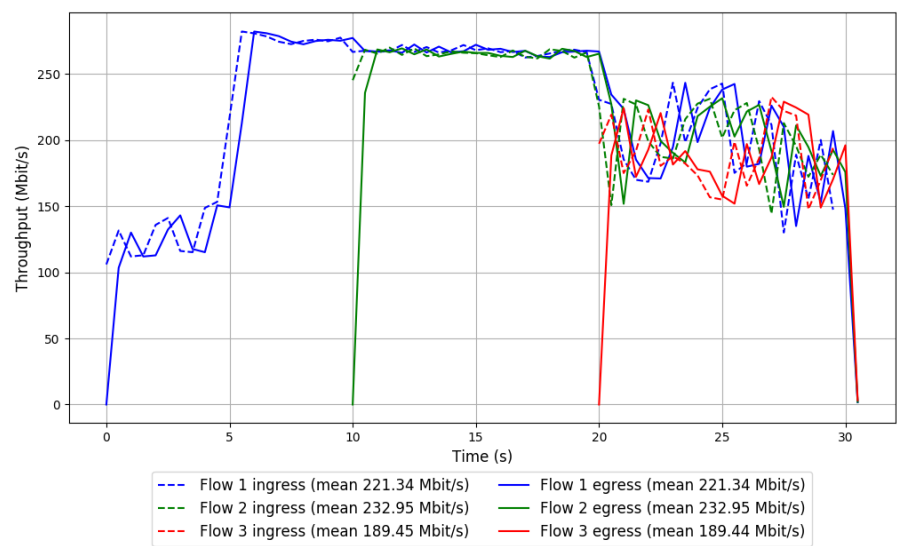


Run 1: Statistics of TaoVA-100x

Start at: 2018-05-22 03:22:09
End at: 2018-05-22 03:22:39
Local clock offset: 0.16 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2018-05-22 09:23:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 439.50 Mbit/s
95th percentile per-packet one-way delay: 20.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.34 Mbit/s
95th percentile per-packet one-way delay: 20.446 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 232.95 Mbit/s
95th percentile per-packet one-way delay: 19.017 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 189.44 Mbit/s
95th percentile per-packet one-way delay: 20.602 ms
Loss rate: 0.00%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-05-22 03:47:49

End at: 2018-05-22 03:48:19

Local clock offset: 0.344 ms

Remote clock offset: 0.616 ms

Below is generated by plot.py at 2018-05-22 09:24:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.71 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 240.68 Mbit/s

95th percentile per-packet one-way delay: 19.999 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 225.49 Mbit/s

95th percentile per-packet one-way delay: 19.060 ms

Loss rate: 0.00%

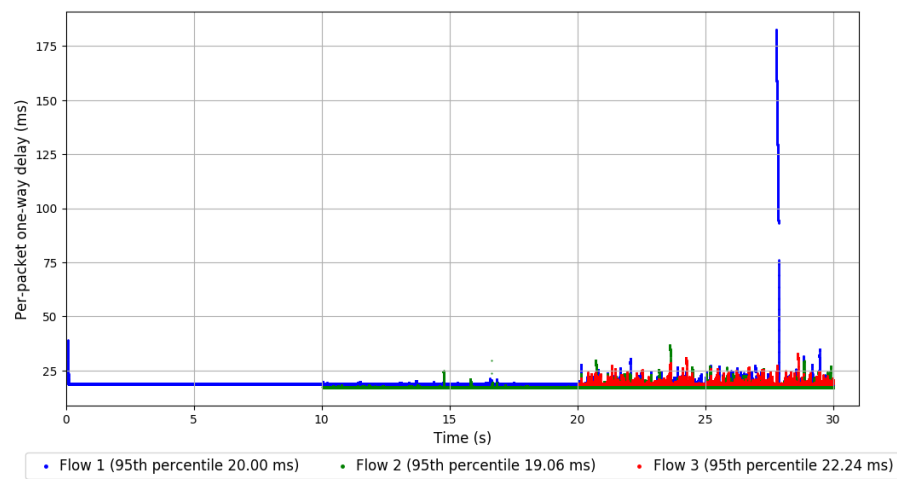
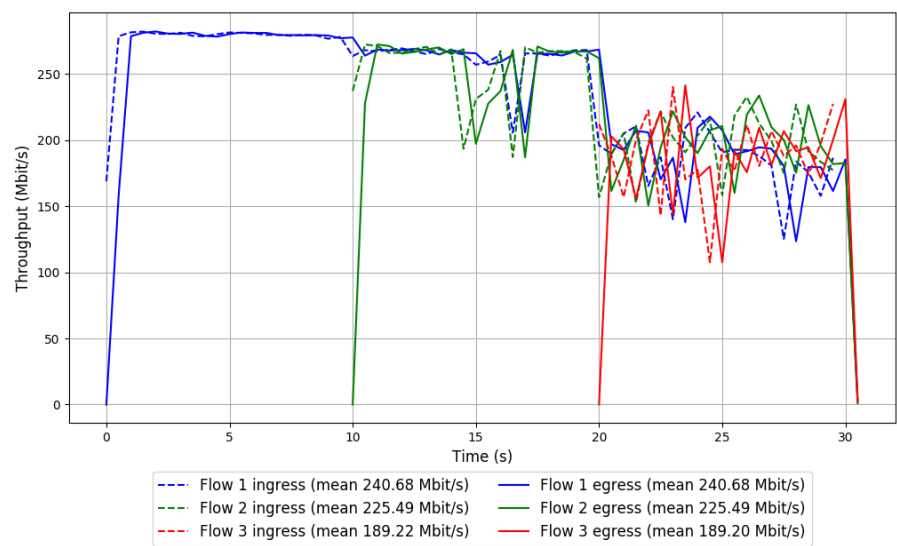
-- Flow 3:

Average throughput: 189.20 Mbit/s

95th percentile per-packet one-way delay: 22.239 ms

Loss rate: 0.02%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-05-22 04:13:28

End at: 2018-05-22 04:13:58

Local clock offset: 0.32 ms

Remote clock offset: 0.535 ms

Below is generated by plot.py at 2018-05-22 09:24:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.65 Mbit/s

95th percentile per-packet one-way delay: 20.418 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 238.00 Mbit/s

95th percentile per-packet one-way delay: 18.455 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 225.89 Mbit/s

95th percentile per-packet one-way delay: 20.809 ms

Loss rate: 0.00%

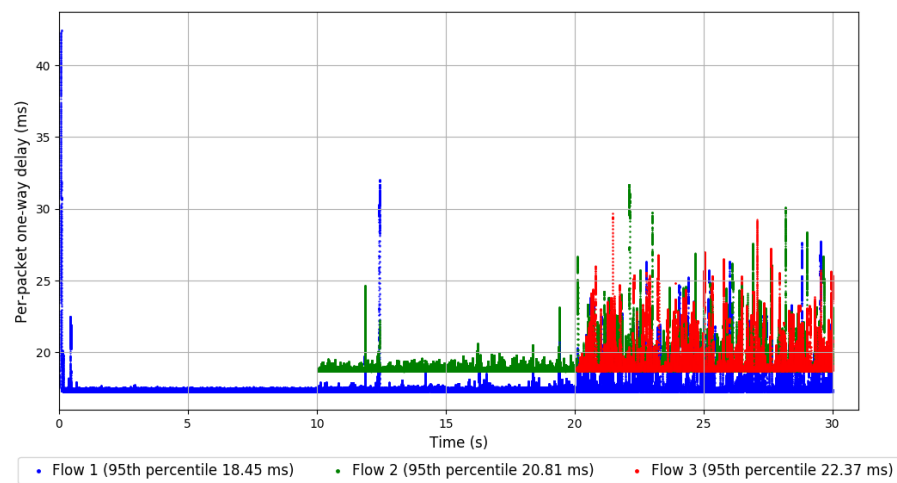
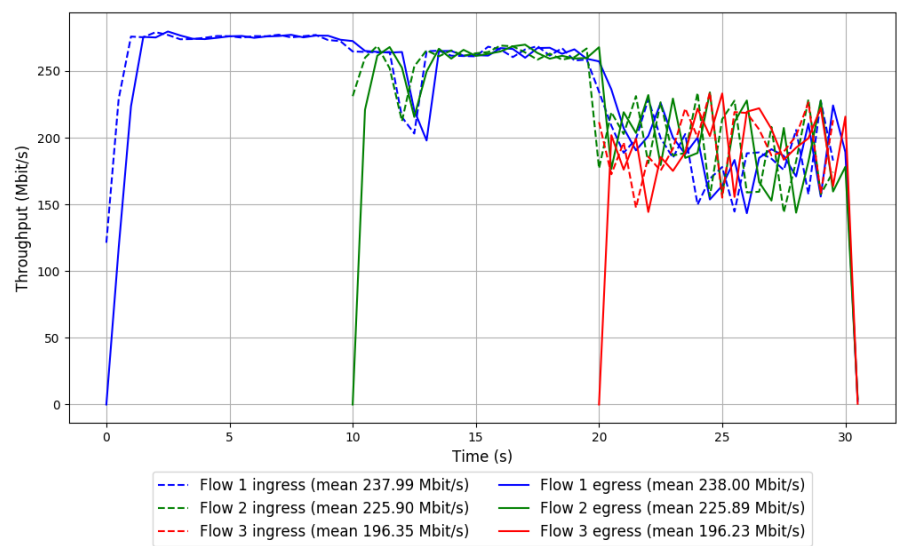
-- Flow 3:

Average throughput: 196.23 Mbit/s

95th percentile per-packet one-way delay: 22.372 ms

Loss rate: 0.07%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-05-22 04:39:05

End at: 2018-05-22 04:39:35

Local clock offset: 0.655 ms

Remote clock offset: 0.517 ms

Below is generated by plot.py at 2018-05-22 09:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.53 Mbit/s

95th percentile per-packet one-way delay: 20.958 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 240.39 Mbit/s

95th percentile per-packet one-way delay: 19.963 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 224.52 Mbit/s

95th percentile per-packet one-way delay: 21.155 ms

Loss rate: 0.00%

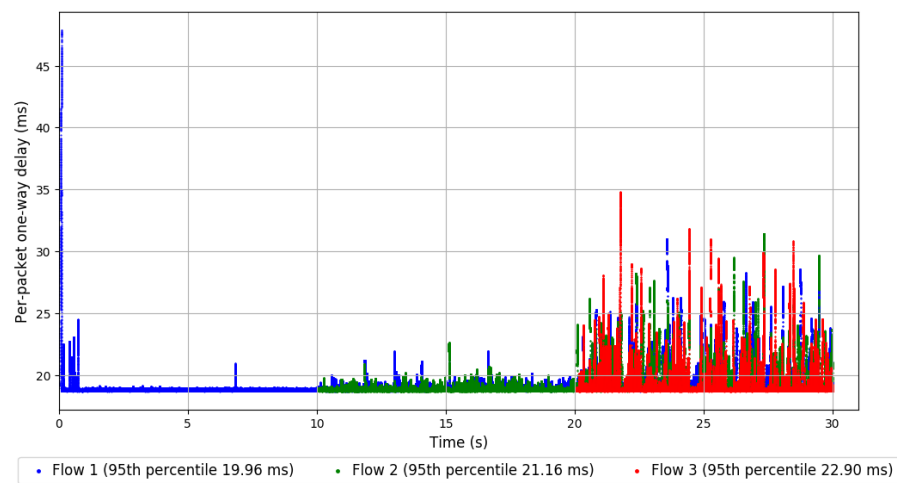
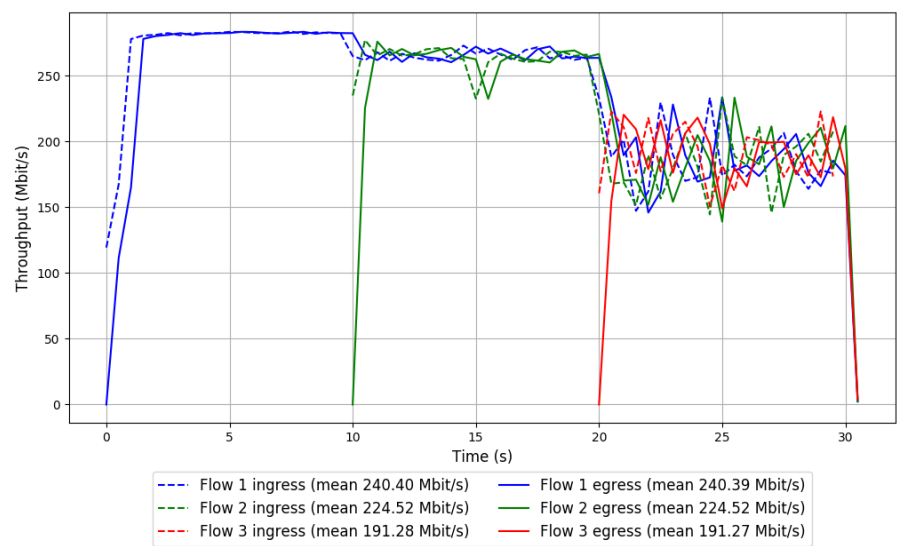
-- Flow 3:

Average throughput: 191.27 Mbit/s

95th percentile per-packet one-way delay: 22.897 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-05-22 05:04:43

End at: 2018-05-22 05:05:13

Local clock offset: 0.398 ms

Remote clock offset: 0.284 ms

Below is generated by plot.py at 2018-05-22 09:26:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 437.99 Mbit/s

95th percentile per-packet one-way delay: 21.171 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 222.17 Mbit/s

95th percentile per-packet one-way delay: 20.656 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 228.75 Mbit/s

95th percentile per-packet one-way delay: 20.785 ms

Loss rate: 0.00%

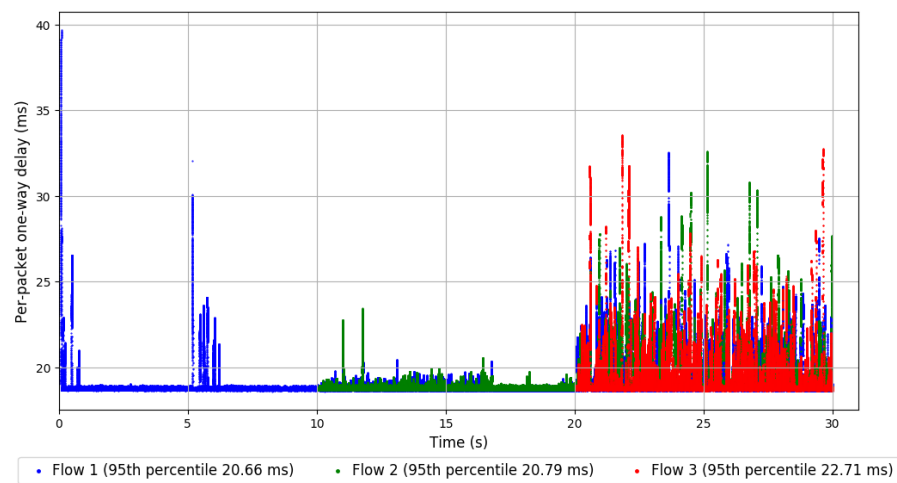
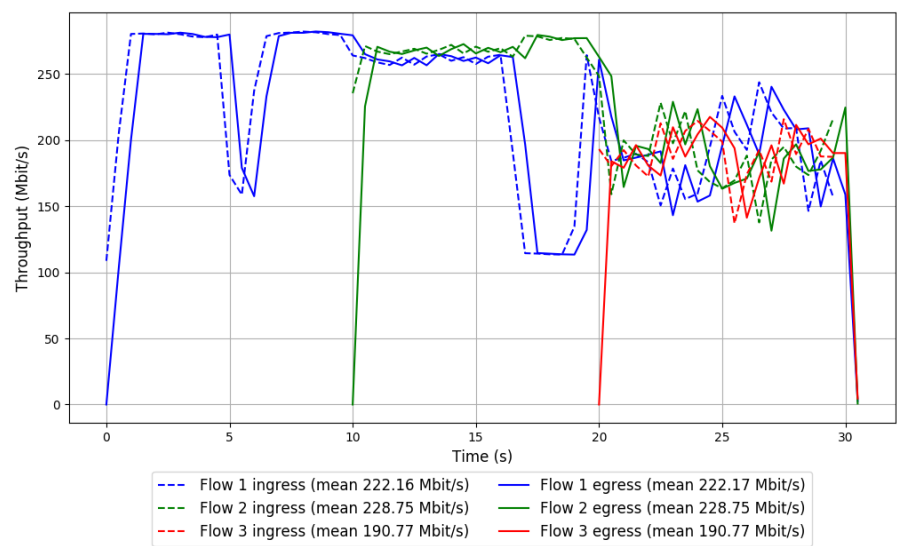
-- Flow 3:

Average throughput: 190.77 Mbit/s

95th percentile per-packet one-way delay: 22.707 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-05-22 05:30:08

End at: 2018-05-22 05:30:39

Local clock offset: 0.399 ms

Remote clock offset: 0.145 ms

Below is generated by plot.py at 2018-05-22 09:27:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.93 Mbit/s

95th percentile per-packet one-way delay: 20.519 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 227.81 Mbit/s

95th percentile per-packet one-way delay: 20.091 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 229.33 Mbit/s

95th percentile per-packet one-way delay: 20.869 ms

Loss rate: 0.00%

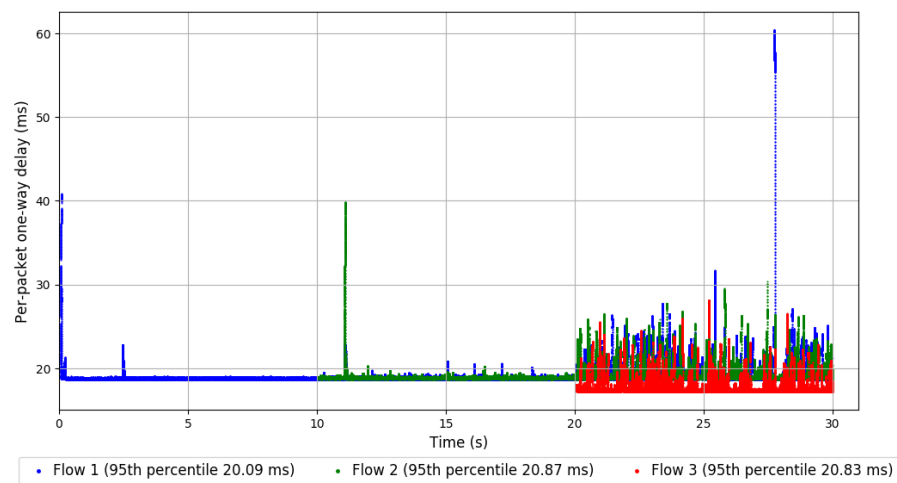
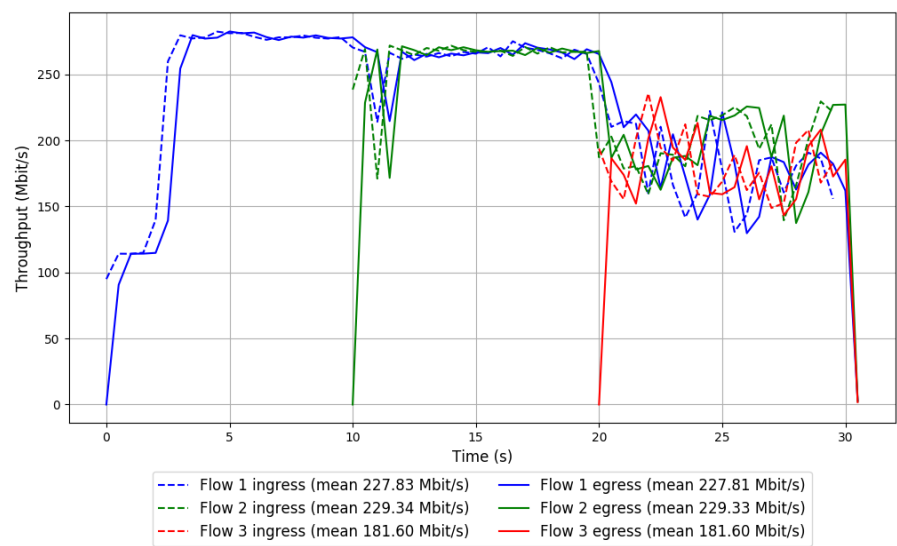
-- Flow 3:

Average throughput: 181.60 Mbit/s

95th percentile per-packet one-way delay: 20.832 ms

Loss rate: 0.00%

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

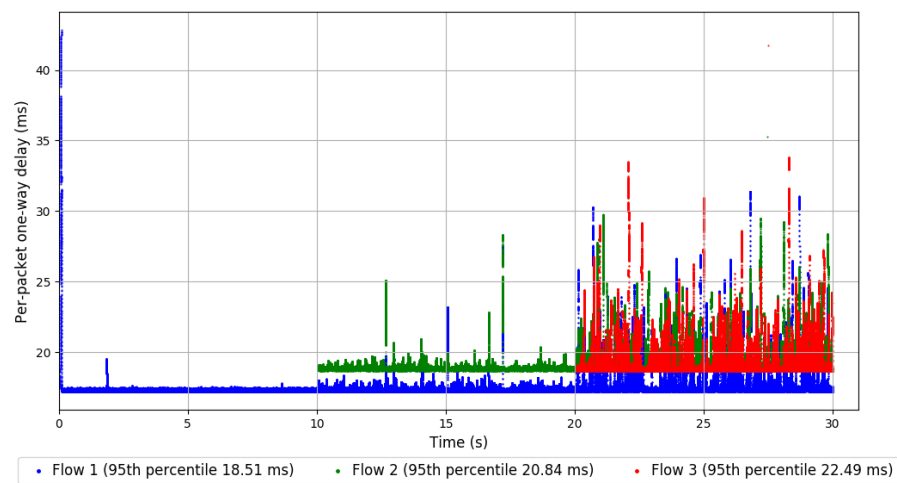
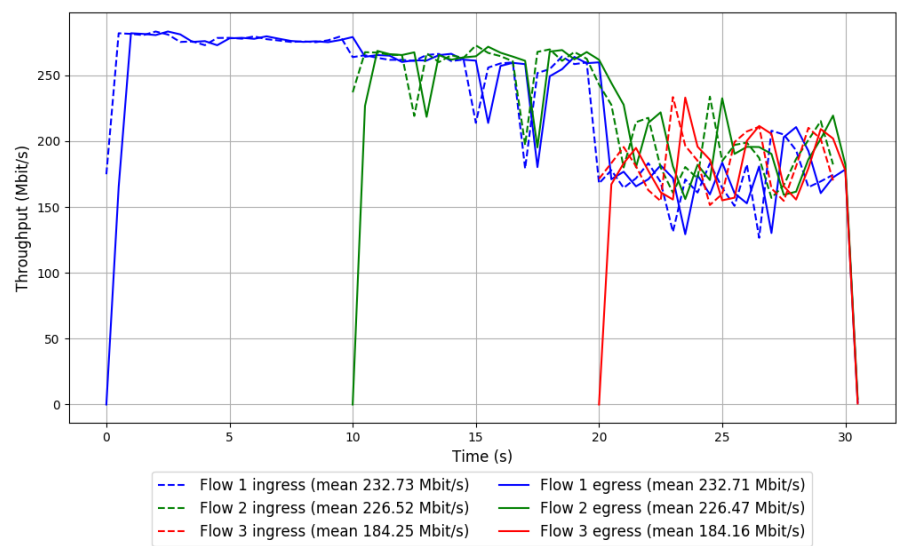


Run 7: Statistics of TaoVA-100x

Start at: 2018-05-22 05:55:42
End at: 2018-05-22 05:56:12
Local clock offset: 0.181 ms
Remote clock offset: -0.017 ms

Below is generated by plot.py at 2018-05-22 09:28:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 444.73 Mbit/s
95th percentile per-packet one-way delay: 20.605 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 232.71 Mbit/s
95th percentile per-packet one-way delay: 18.507 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 226.47 Mbit/s
95th percentile per-packet one-way delay: 20.842 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 184.16 Mbit/s
95th percentile per-packet one-way delay: 22.494 ms
Loss rate: 0.00%

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

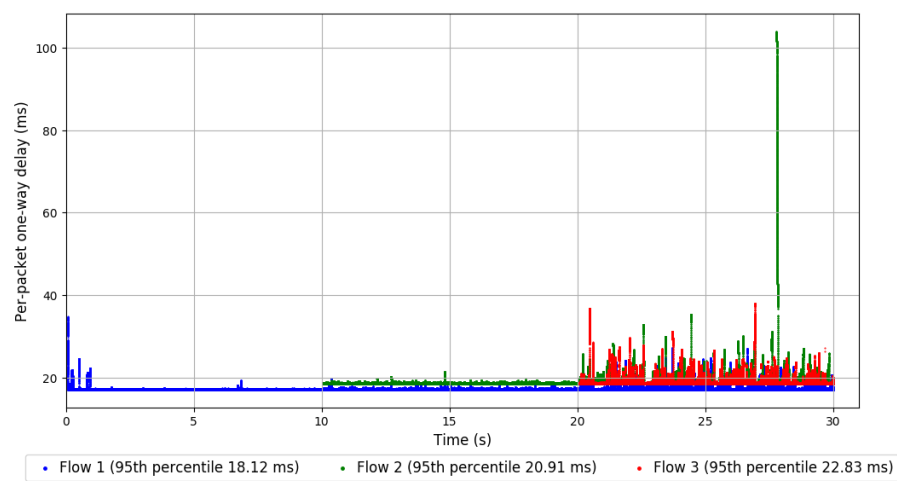
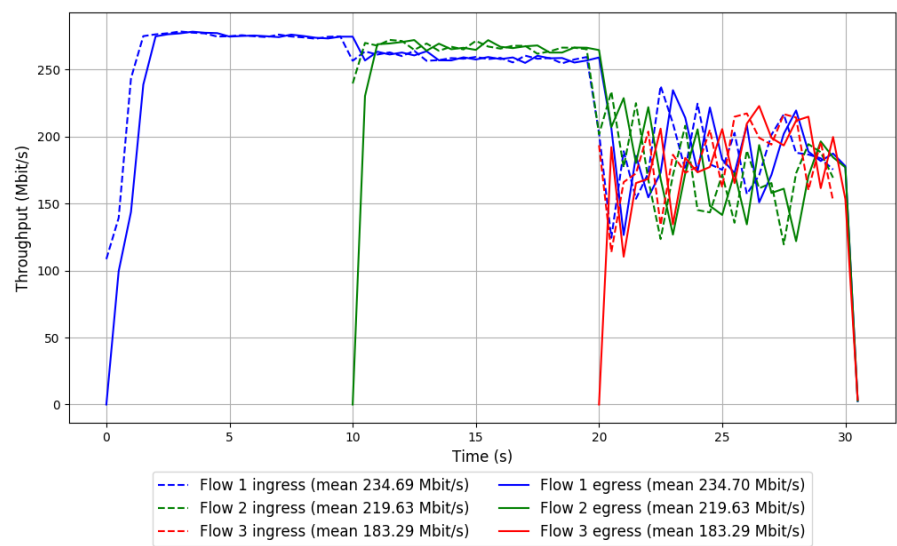


Run 8: Statistics of TaoVA-100x

Start at: 2018-05-22 06:21:15
End at: 2018-05-22 06:21:45
Local clock offset: -0.133 ms
Remote clock offset: -0.231 ms

Below is generated by plot.py at 2018-05-22 09:28:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 441.88 Mbit/s
95th percentile per-packet one-way delay: 20.486 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.70 Mbit/s
95th percentile per-packet one-way delay: 18.121 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.63 Mbit/s
95th percentile per-packet one-way delay: 20.908 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 183.29 Mbit/s
95th percentile per-packet one-way delay: 22.829 ms
Loss rate: 0.00%

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

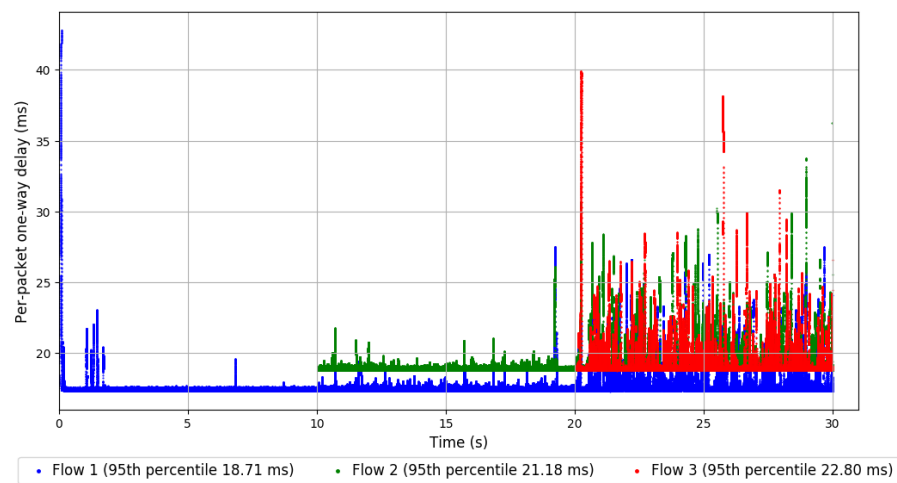
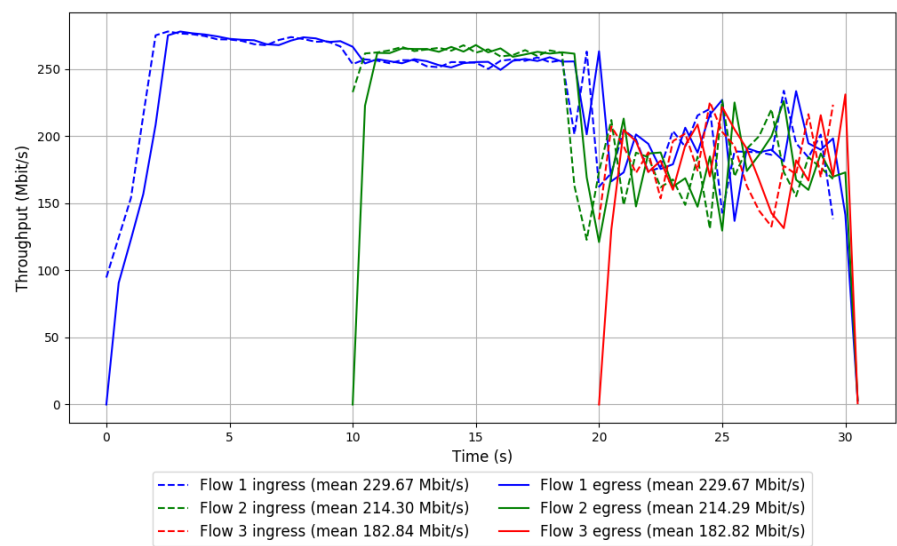


Run 9: Statistics of TaoVA-100x

Start at: 2018-05-22 06:46:39
End at: 2018-05-22 06:47:09
Local clock offset: 0.04 ms
Remote clock offset: -0.308 ms

Below is generated by plot.py at 2018-05-22 09:34:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 433.19 Mbit/s
95th percentile per-packet one-way delay: 20.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.67 Mbit/s
95th percentile per-packet one-way delay: 18.715 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 214.29 Mbit/s
95th percentile per-packet one-way delay: 21.182 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 182.82 Mbit/s
95th percentile per-packet one-way delay: 22.805 ms
Loss rate: 0.01%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-05-22 07:12:11

End at: 2018-05-22 07:12:41

Local clock offset: 0.597 ms

Remote clock offset: 1.174 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 443.25 Mbit/s

95th percentile per-packet one-way delay: 20.685 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 236.73 Mbit/s

95th percentile per-packet one-way delay: 19.971 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 218.43 Mbit/s

95th percentile per-packet one-way delay: 20.575 ms

Loss rate: 0.02%

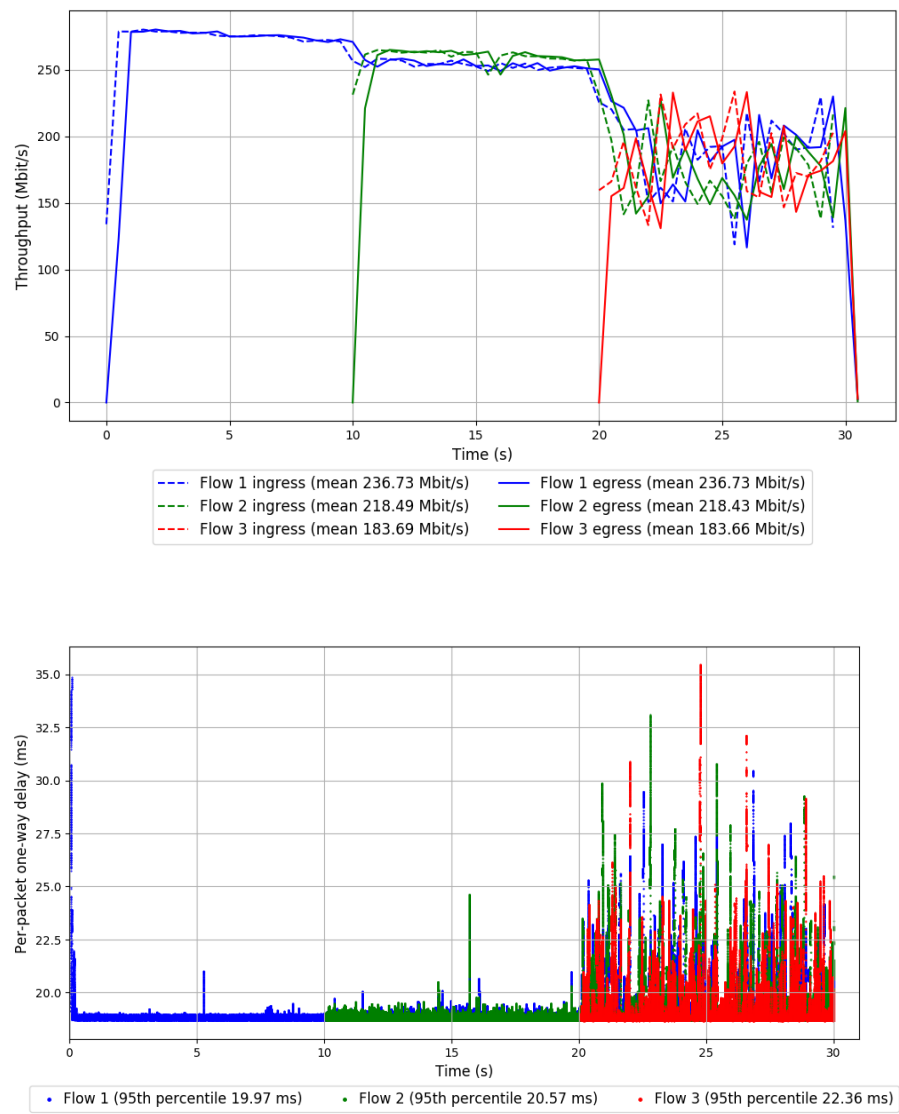
-- Flow 3:

Average throughput: 183.66 Mbit/s

95th percentile per-packet one-way delay: 22.358 ms

Loss rate: 0.01%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-05-22 03:31:23

End at: 2018-05-22 03:31:53

Local clock offset: 0.238 ms

Remote clock offset: 0.218 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.81 Mbit/s

95th percentile per-packet one-way delay: 26.162 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 193.10 Mbit/s

95th percentile per-packet one-way delay: 26.503 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 139.40 Mbit/s

95th percentile per-packet one-way delay: 22.444 ms

Loss rate: 0.02%

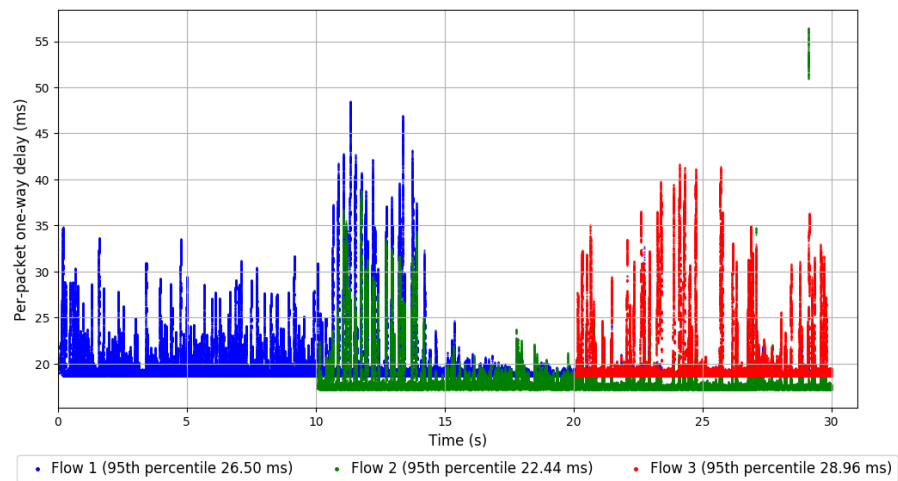
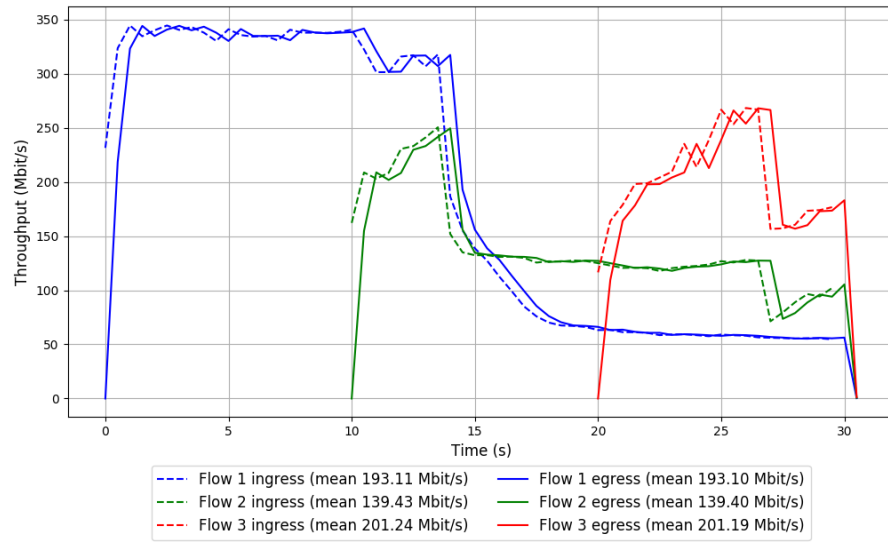
-- Flow 3:

Average throughput: 201.19 Mbit/s

95th percentile per-packet one-way delay: 28.965 ms

Loss rate: 0.02%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-05-22 03:57:14

End at: 2018-05-22 03:57:44

Local clock offset: 0.389 ms

Remote clock offset: 0.882 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.45 Mbit/s

95th percentile per-packet one-way delay: 26.706 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 69.57 Mbit/s

95th percentile per-packet one-way delay: 21.722 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 119.68 Mbit/s

95th percentile per-packet one-way delay: 22.431 ms

Loss rate: 0.32%

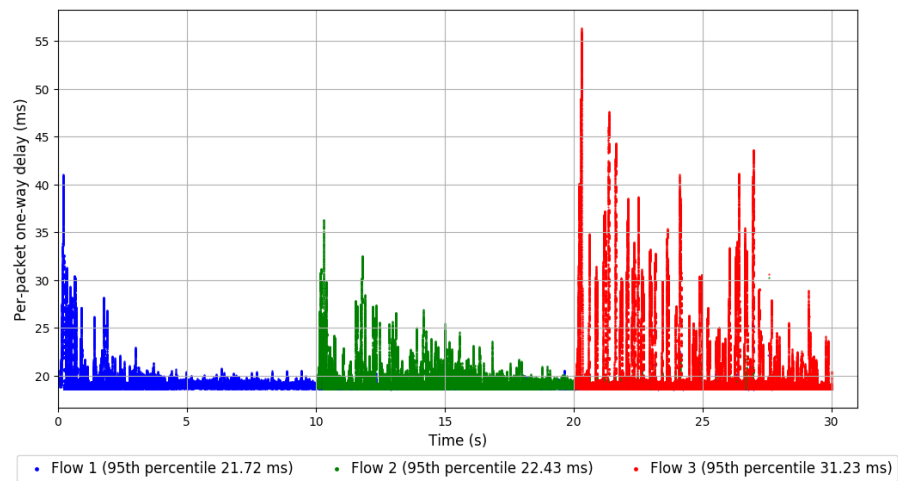
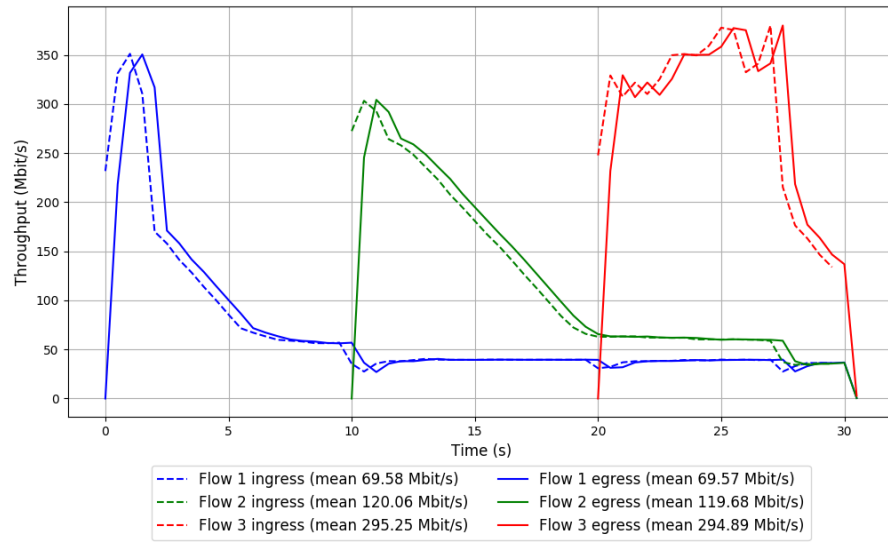
-- Flow 3:

Average throughput: 294.89 Mbit/s

95th percentile per-packet one-way delay: 31.228 ms

Loss rate: 0.10%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-05-22 04:22:49

End at: 2018-05-22 04:23:19

Local clock offset: 0.462 ms

Remote clock offset: 0.634 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.18 Mbit/s

95th percentile per-packet one-way delay: 21.973 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 144.57 Mbit/s

95th percentile per-packet one-way delay: 20.699 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 73.92 Mbit/s

95th percentile per-packet one-way delay: 20.009 ms

Loss rate: 0.23%

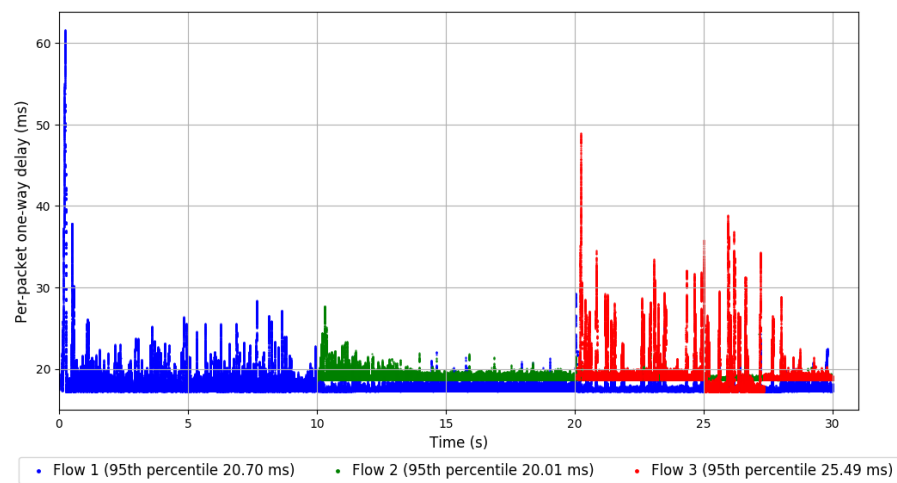
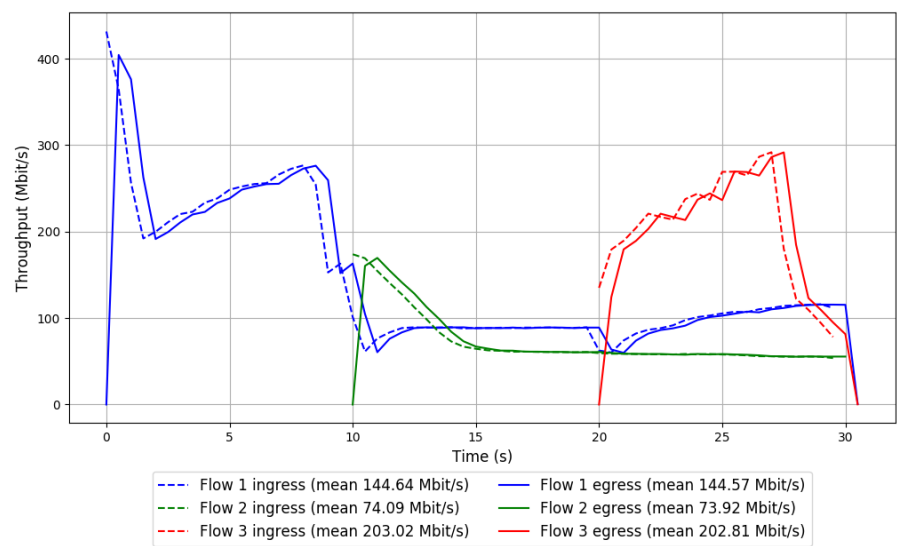
-- Flow 3:

Average throughput: 202.81 Mbit/s

95th percentile per-packet one-way delay: 25.489 ms

Loss rate: 0.10%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-05-22 04:48:24

End at: 2018-05-22 04:48:54

Local clock offset: 0.728 ms

Remote clock offset: 0.293 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.50 Mbit/s

95th percentile per-packet one-way delay: 21.804 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 21.189 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 136.40 Mbit/s

95th percentile per-packet one-way delay: 23.503 ms

Loss rate: 0.05%

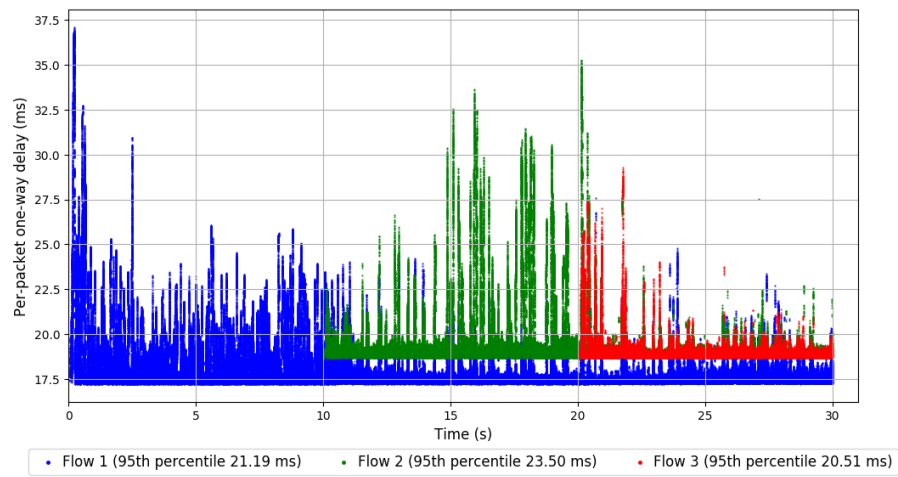
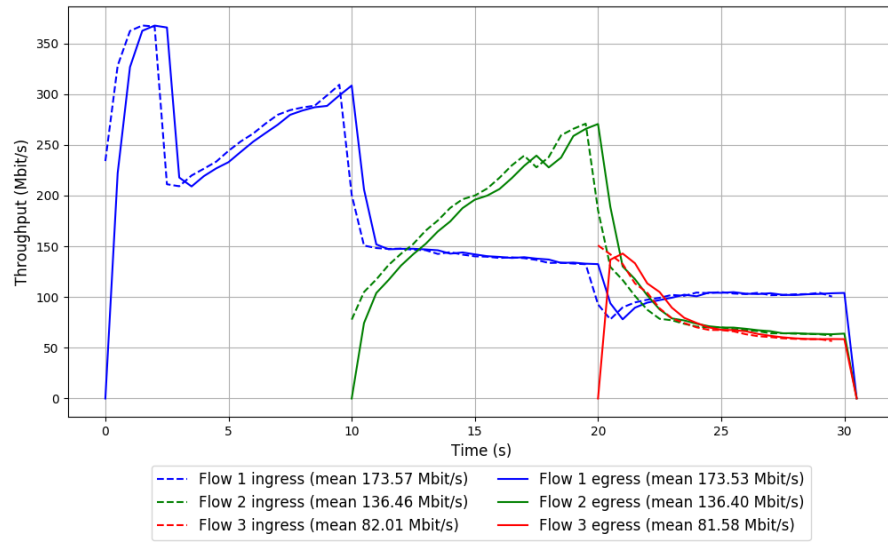
-- Flow 3:

Average throughput: 81.58 Mbit/s

95th percentile per-packet one-way delay: 20.512 ms

Loss rate: 0.51%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-05-22 05:13:56

End at: 2018-05-22 05:14:26

Local clock offset: 0.256 ms

Remote clock offset: 0.193 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.79 Mbit/s

95th percentile per-packet one-way delay: 23.062 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 198.43 Mbit/s

95th percentile per-packet one-way delay: 23.640 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 55.32 Mbit/s

95th percentile per-packet one-way delay: 19.624 ms

Loss rate: 0.39%

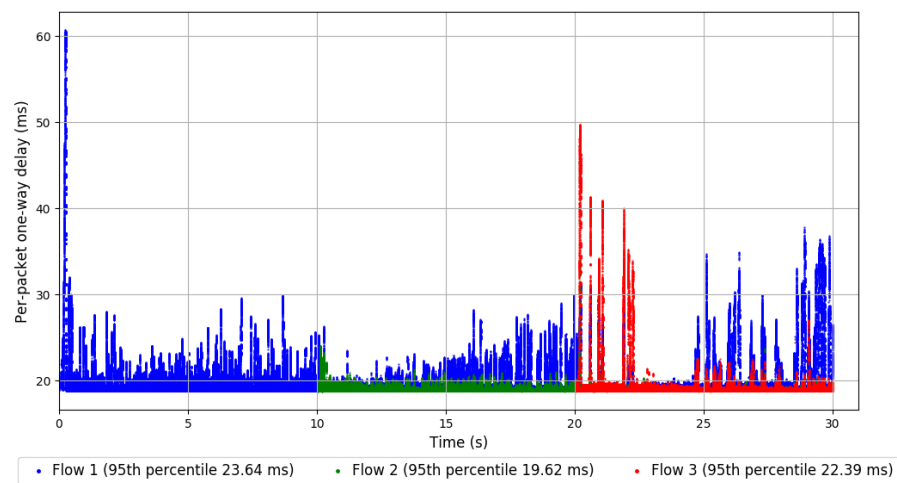
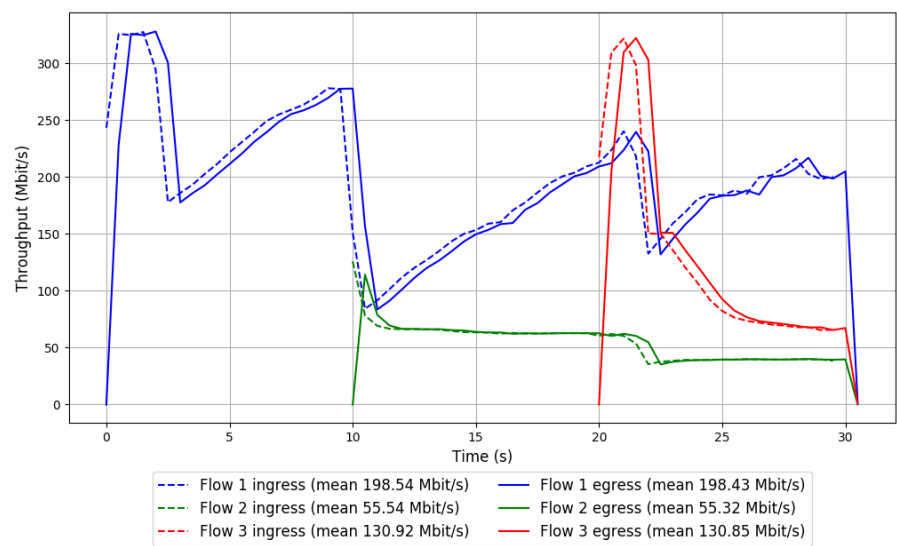
-- Flow 3:

Average throughput: 130.85 Mbit/s

95th percentile per-packet one-way delay: 22.393 ms

Loss rate: 0.05%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-05-22 05:39:30

End at: 2018-05-22 05:40:00

Local clock offset: 0.245 ms

Remote clock offset: 0.122 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.38 Mbit/s

95th percentile per-packet one-way delay: 20.098 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 118.22 Mbit/s

95th percentile per-packet one-way delay: 19.571 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 117.86 Mbit/s

95th percentile per-packet one-way delay: 19.920 ms

Loss rate: 0.02%

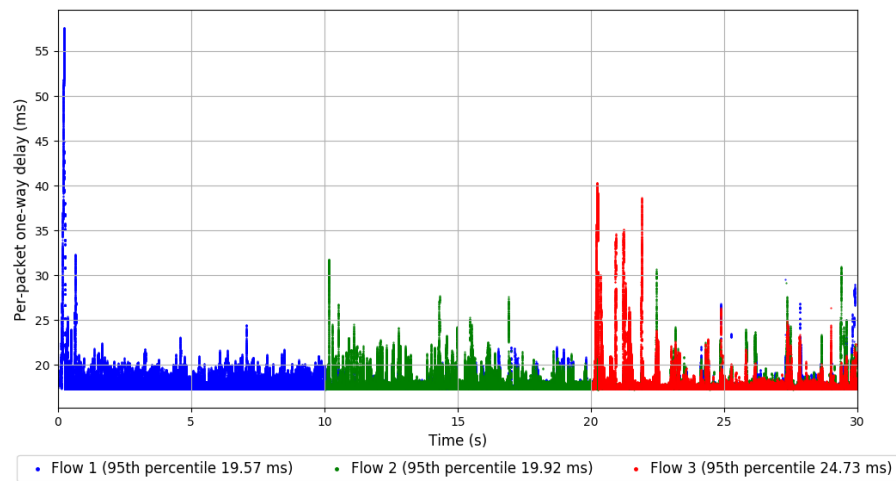
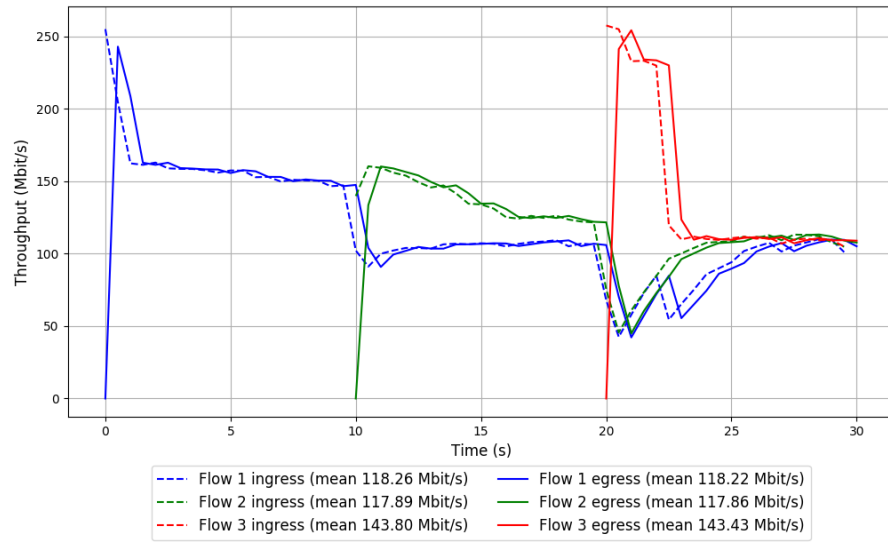
-- Flow 3:

Average throughput: 143.43 Mbit/s

95th percentile per-packet one-way delay: 24.727 ms

Loss rate: 0.25%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-05-22 06:04:59

End at: 2018-05-22 06:05:29

Local clock offset: -0.042 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.38 Mbit/s

95th percentile per-packet one-way delay: 21.682 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 148.06 Mbit/s

95th percentile per-packet one-way delay: 21.318 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 148.71 Mbit/s

95th percentile per-packet one-way delay: 21.899 ms

Loss rate: 0.01%

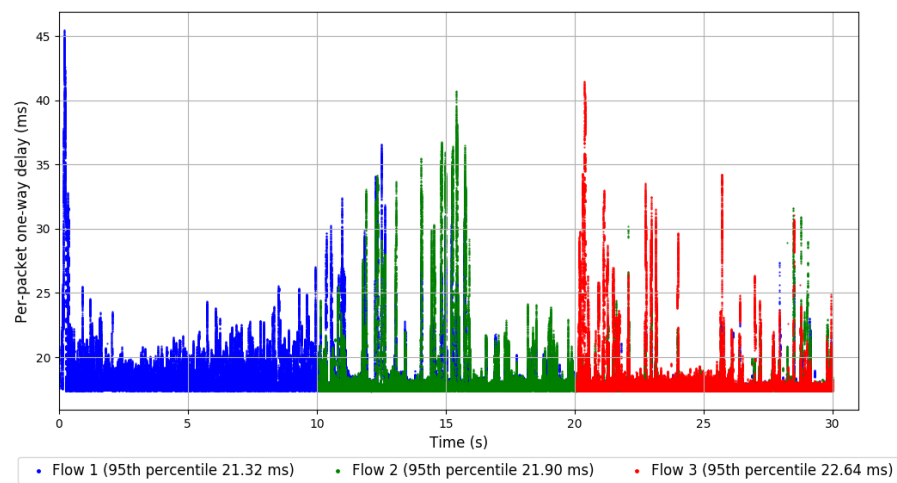
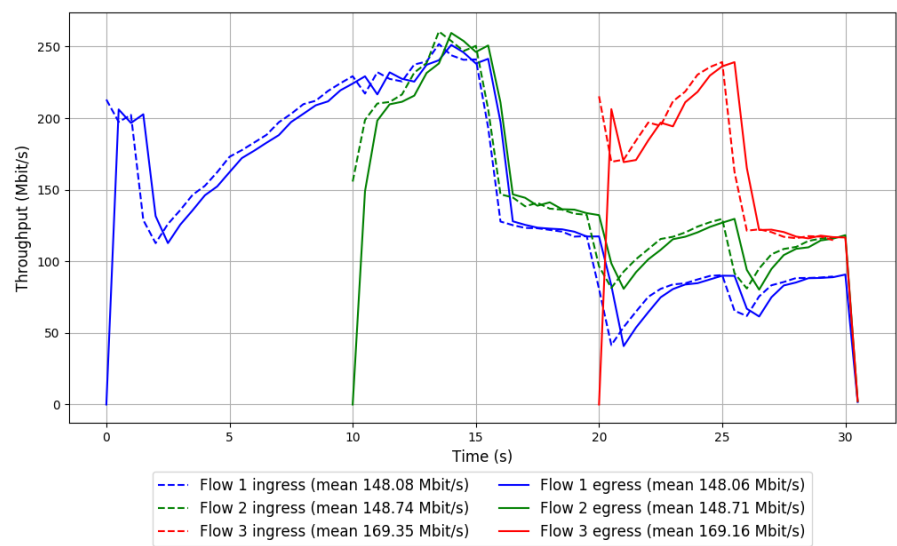
-- Flow 3:

Average throughput: 169.16 Mbit/s

95th percentile per-packet one-way delay: 22.643 ms

Loss rate: 0.10%

Run 7: Report of TCP Vegas — Data Link

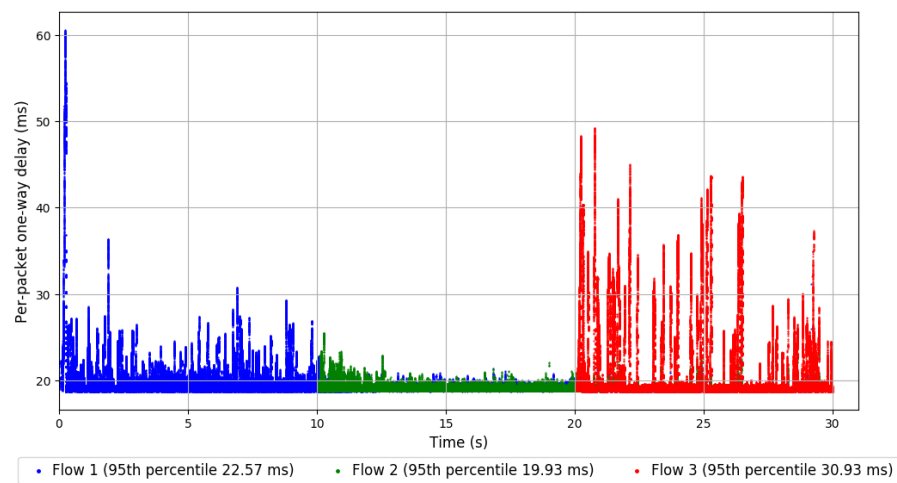
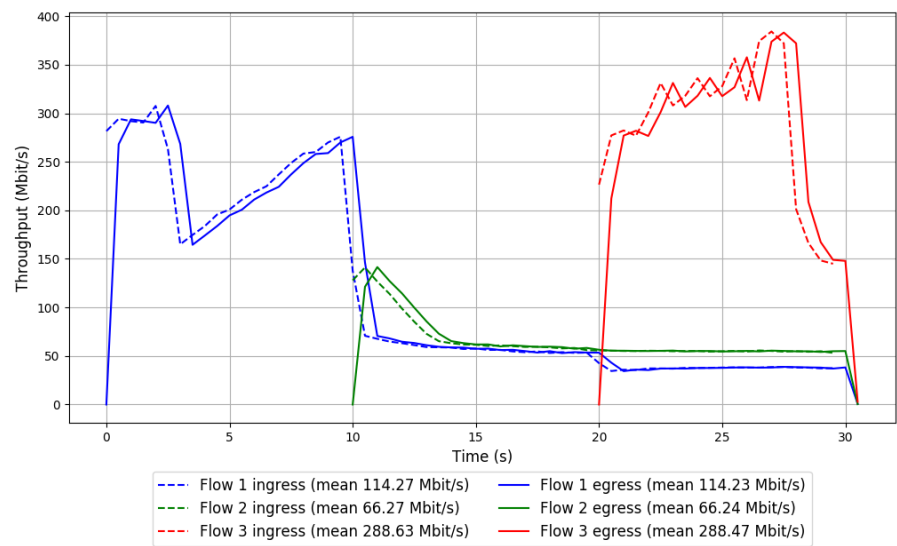


Run 8: Statistics of TCP Vegas

Start at: 2018-05-22 06:30:31
End at: 2018-05-22 06:31:01
Local clock offset: -0.143 ms
Remote clock offset: -0.288 ms

Below is generated by plot.py at 2018-05-22 09:35:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 254.41 Mbit/s
95th percentile per-packet one-way delay: 24.761 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 114.23 Mbit/s
95th percentile per-packet one-way delay: 22.569 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 66.24 Mbit/s
95th percentile per-packet one-way delay: 19.935 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 288.47 Mbit/s
95th percentile per-packet one-way delay: 30.926 ms
Loss rate: 0.06%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-05-22 06:56:00

End at: 2018-05-22 06:56:30

Local clock offset: 0.127 ms

Remote clock offset: 0.404 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.02 Mbit/s

95th percentile per-packet one-way delay: 23.930 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 66.42 Mbit/s

95th percentile per-packet one-way delay: 21.075 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 221.36 Mbit/s

95th percentile per-packet one-way delay: 25.266 ms

Loss rate: 0.01%

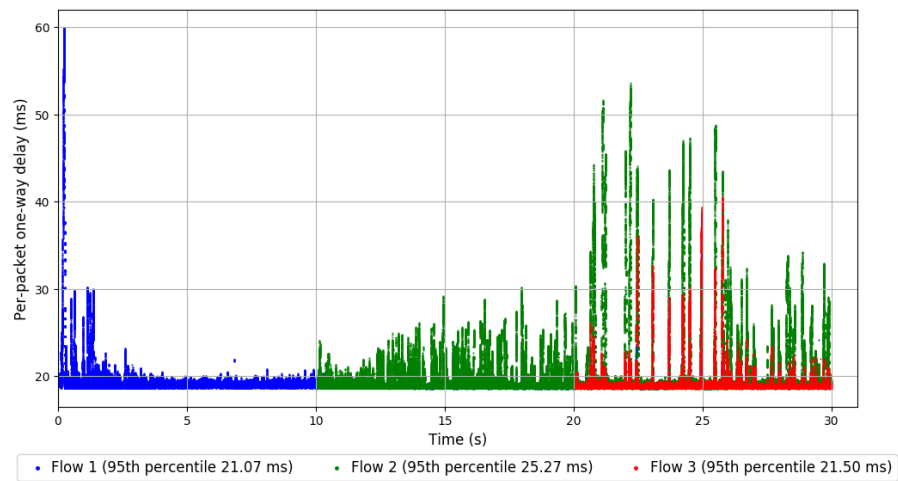
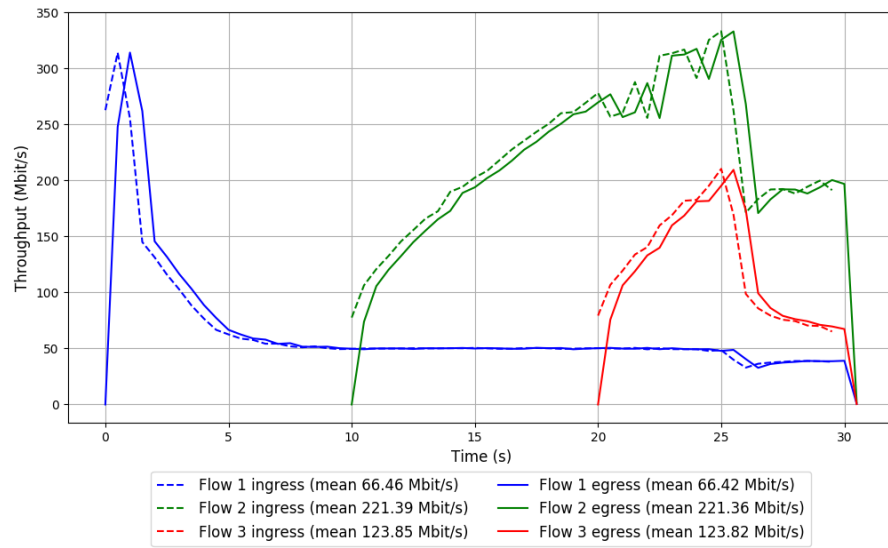
-- Flow 3:

Average throughput: 123.82 Mbit/s

95th percentile per-packet one-way delay: 21.501 ms

Loss rate: 0.02%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-05-22 07:21:31

End at: 2018-05-22 07:22:01

Local clock offset: 0.697 ms

Remote clock offset: 1.435 ms

Below is generated by plot.py at 2018-05-22 09:35:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.16 Mbit/s

95th percentile per-packet one-way delay: 20.850 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 147.80 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 67.80 Mbit/s

95th percentile per-packet one-way delay: 20.058 ms

Loss rate: 0.21%

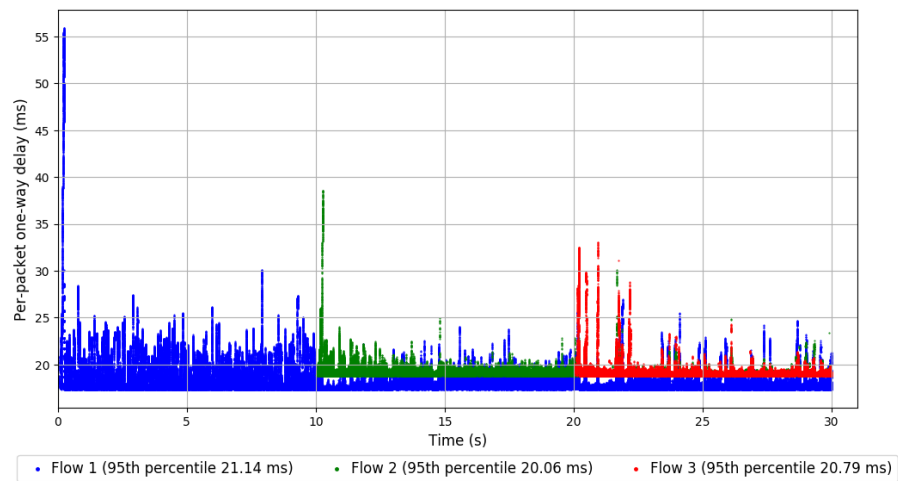
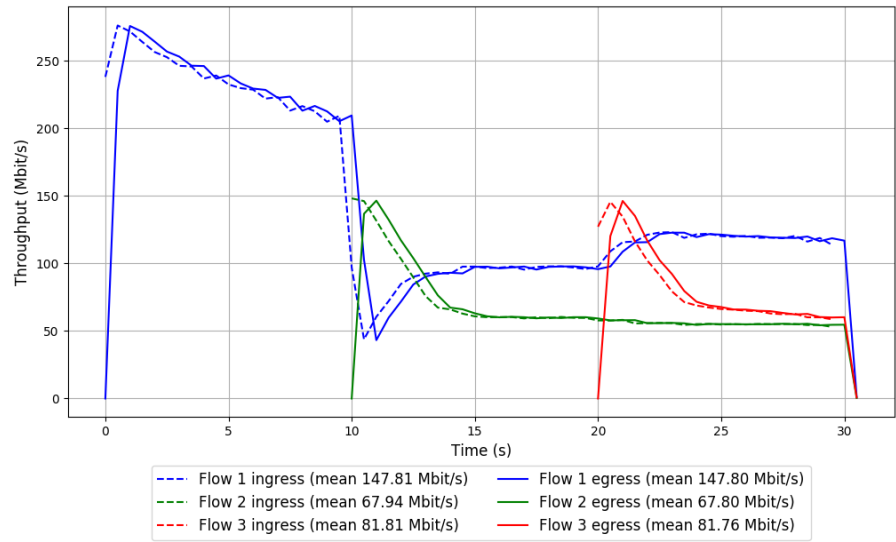
-- Flow 3:

Average throughput: 81.76 Mbit/s

95th percentile per-packet one-way delay: 20.785 ms

Loss rate: 0.06%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-05-22 03:42:33

End at: 2018-05-22 03:43:03

Local clock offset: 0.333 ms

Remote clock offset: 0.471 ms

Below is generated by plot.py at 2018-05-22 09:36:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.85 Mbit/s

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

Loss rate: 20.49%

-- Flow 1:

Average throughput: 221.56 Mbit/s

95th percentile per-packet one-way delay: 32.796 ms

Loss rate: 18.07%

-- Flow 2:

Average throughput: 176.95 Mbit/s

95th percentile per-packet one-way delay: 32.000 ms

Loss rate: 25.63%

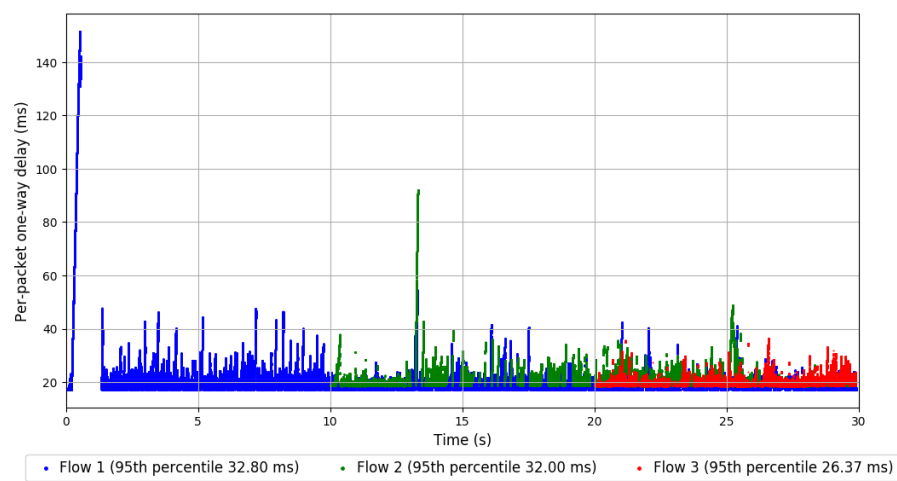
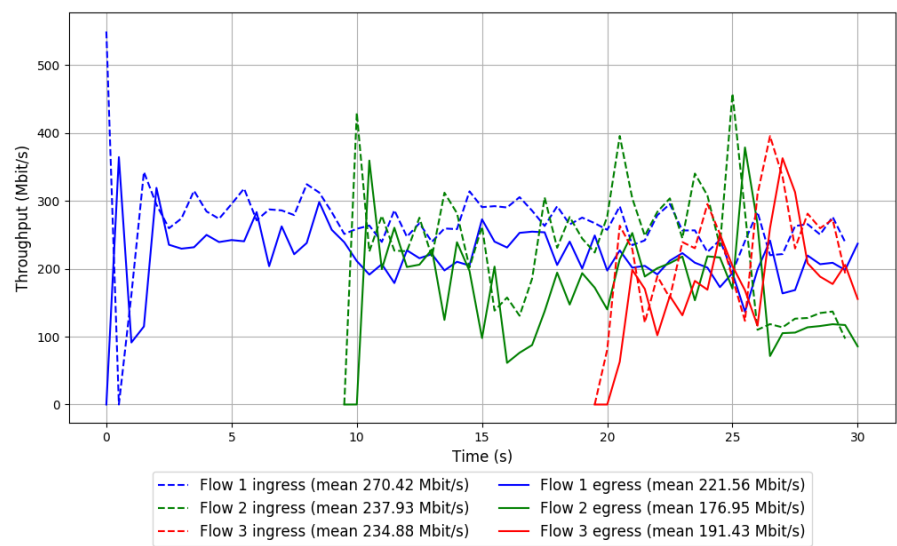
-- Flow 3:

Average throughput: 191.43 Mbit/s

95th percentile per-packet one-way delay: 26.370 ms

Loss rate: 18.46%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-05-22 04:08:17

End at: 2018-05-22 04:08:47

Local clock offset: 0.308 ms

Remote clock offset: 0.596 ms

Below is generated by plot.py at 2018-05-22 09:36:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.24 Mbit/s

95th percentile per-packet one-way delay: 45.765 ms

Loss rate: 19.42%

-- Flow 1:

Average throughput: 201.08 Mbit/s

95th percentile per-packet one-way delay: 47.051 ms

Loss rate: 18.80%

-- Flow 2:

Average throughput: 184.72 Mbit/s

95th percentile per-packet one-way delay: 37.326 ms

Loss rate: 21.31%

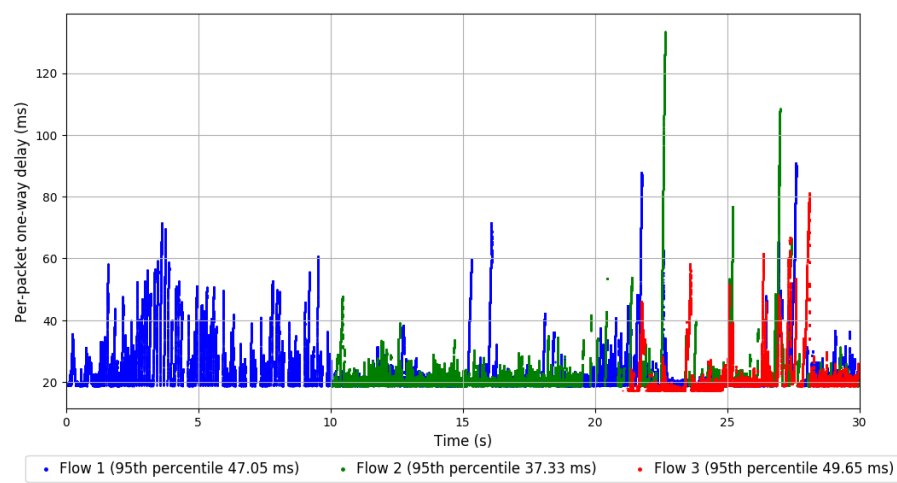
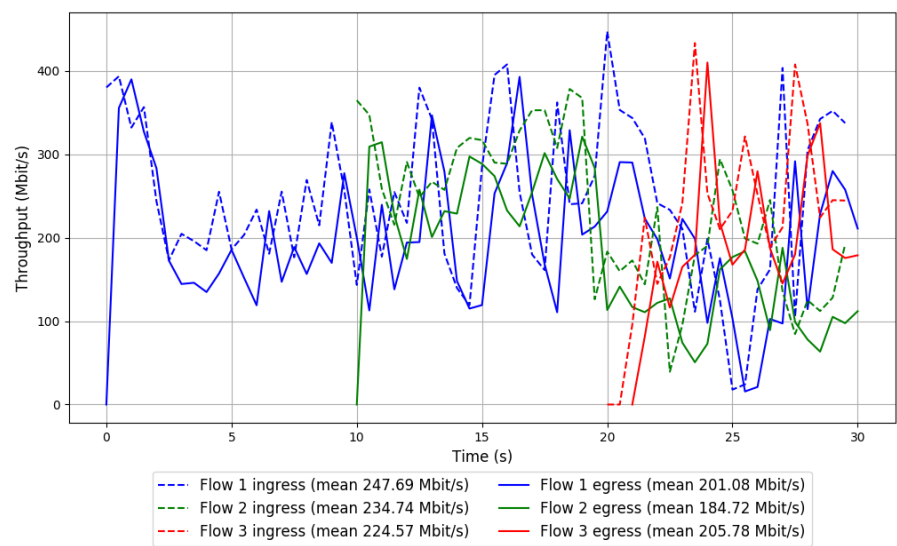
-- Flow 3:

Average throughput: 205.78 Mbit/s

95th percentile per-packet one-way delay: 49.651 ms

Loss rate: 17.54%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-05-22 04:33:53

End at: 2018-05-22 04:34:23

Local clock offset: 0.559 ms

Remote clock offset: 0.736 ms

Below is generated by plot.py at 2018-05-22 09:37:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.35 Mbit/s

95th percentile per-packet one-way delay: 47.248 ms

Loss rate: 22.73%

-- Flow 1:

Average throughput: 201.13 Mbit/s

95th percentile per-packet one-way delay: 46.810 ms

Loss rate: 21.87%

-- Flow 2:

Average throughput: 130.04 Mbit/s

95th percentile per-packet one-way delay: 46.918 ms

Loss rate: 23.56%

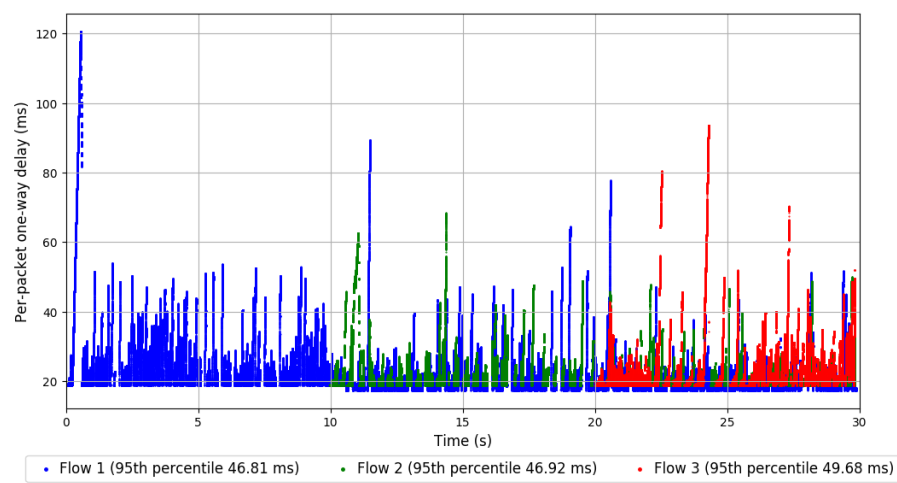
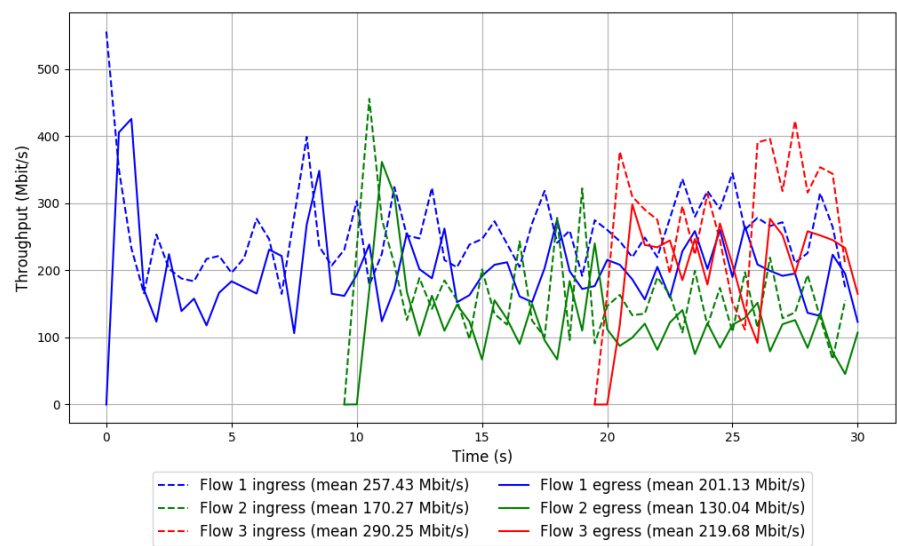
-- Flow 3:

Average throughput: 219.68 Mbit/s

95th percentile per-packet one-way delay: 49.684 ms

Loss rate: 24.06%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-05-22 04:59:27

End at: 2018-05-22 04:59:57

Local clock offset: 0.684 ms

Remote clock offset: 0.29 ms

Below is generated by plot.py at 2018-05-22 09:37:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.91 Mbit/s

95th percentile per-packet one-way delay: 35.197 ms

Loss rate: 21.24%

-- Flow 1:

Average throughput: 215.94 Mbit/s

95th percentile per-packet one-way delay: 36.104 ms

Loss rate: 22.52%

-- Flow 2:

Average throughput: 222.52 Mbit/s

95th percentile per-packet one-way delay: 32.336 ms

Loss rate: 20.04%

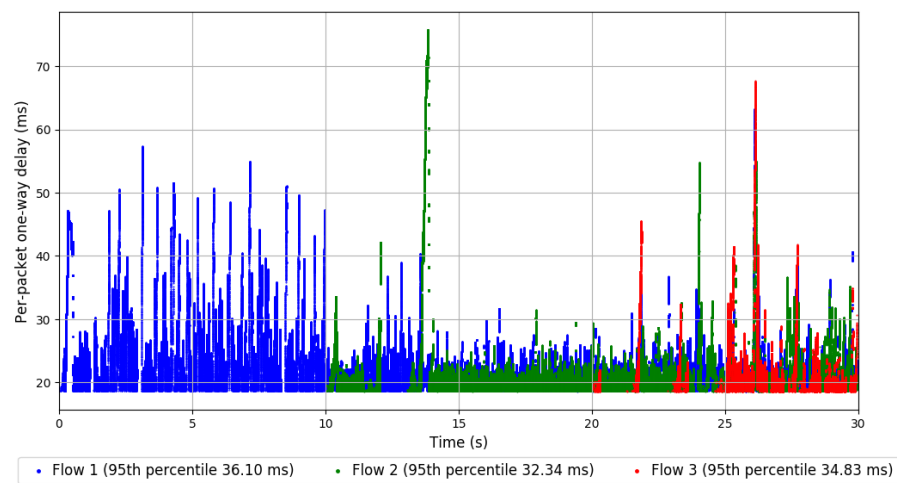
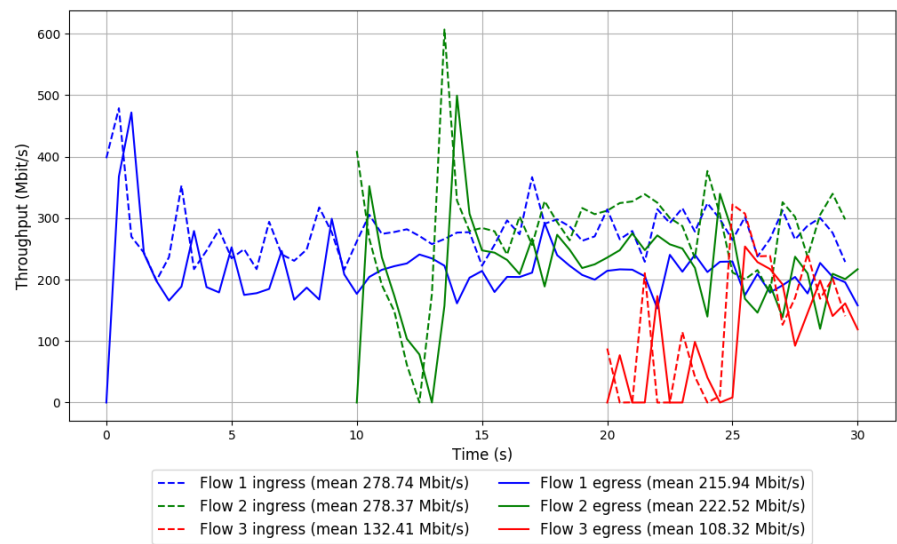
-- Flow 3:

Average throughput: 108.32 Mbit/s

95th percentile per-packet one-way delay: 34.829 ms

Loss rate: 18.10%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-05-22 05:24:58

End at: 2018-05-22 05:25:28

Local clock offset: 0.245 ms

Remote clock offset: 0.134 ms

Below is generated by plot.py at 2018-05-22 09:39:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.17 Mbit/s

95th percentile per-packet one-way delay: 32.655 ms

Loss rate: 19.69%

-- Flow 1:

Average throughput: 221.19 Mbit/s

95th percentile per-packet one-way delay: 32.949 ms

Loss rate: 19.88%

-- Flow 2:

Average throughput: 231.87 Mbit/s

95th percentile per-packet one-way delay: 32.785 ms

Loss rate: 18.92%

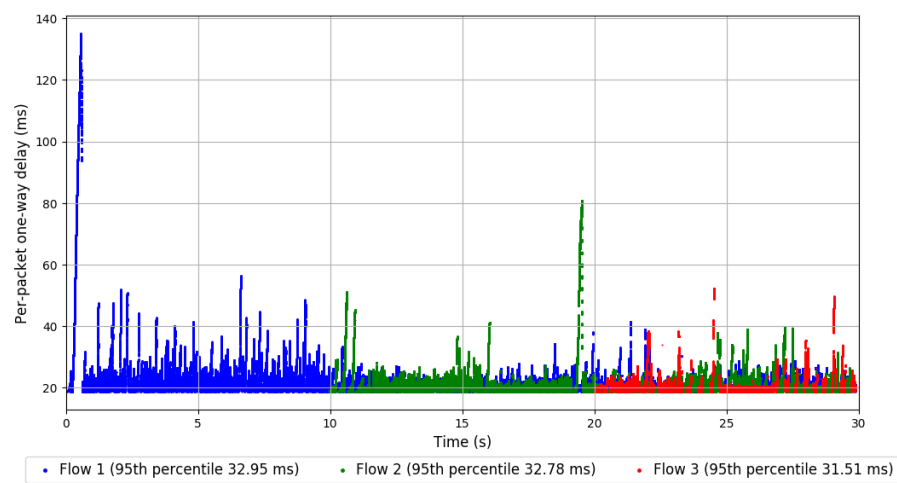
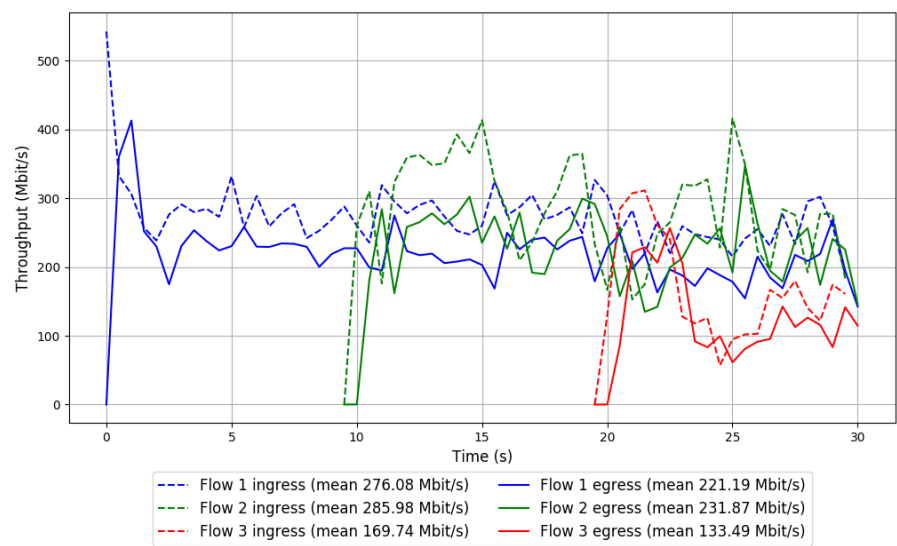
-- Flow 3:

Average throughput: 133.49 Mbit/s

95th percentile per-packet one-way delay: 31.512 ms

Loss rate: 21.34%

Run 5: Report of Verus — Data Link

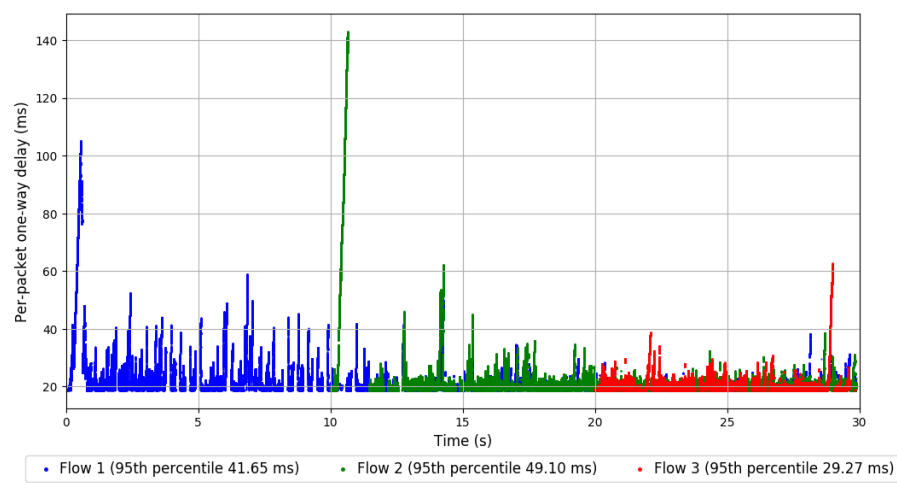
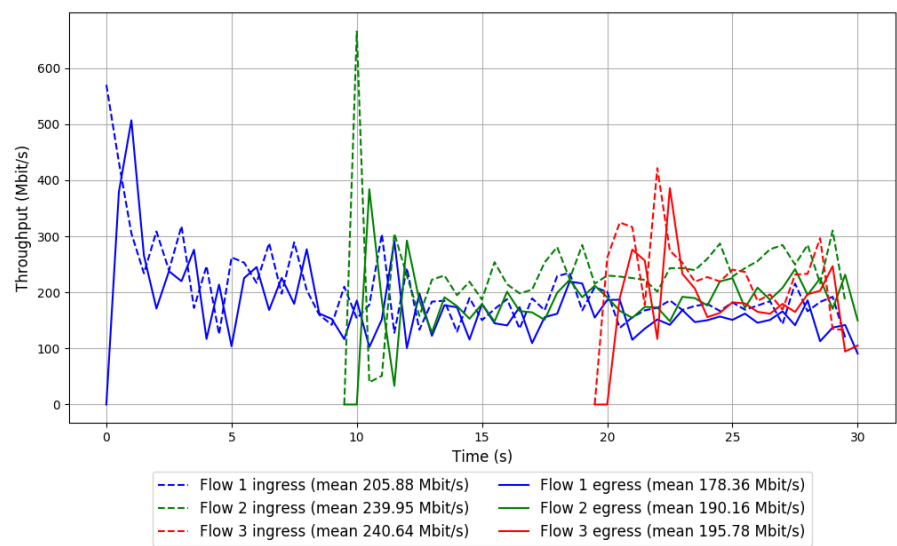


Run 6: Statistics of Verus

Start at: 2018-05-22 05:50:31
End at: 2018-05-22 05:51:01
Local clock offset: 0.214 ms
Remote clock offset: -0.002 ms

Below is generated by plot.py at 2018-05-22 09:39:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 369.86 Mbit/s
95th percentile per-packet one-way delay: 39.805 ms
Loss rate: 16.95%
-- Flow 1:
Average throughput: 178.36 Mbit/s
95th percentile per-packet one-way delay: 41.652 ms
Loss rate: 13.36%
-- Flow 2:
Average throughput: 190.16 Mbit/s
95th percentile per-packet one-way delay: 49.096 ms
Loss rate: 20.74%
-- Flow 3:
Average throughput: 195.78 Mbit/s
95th percentile per-packet one-way delay: 29.273 ms
Loss rate: 18.64%

Run 6: Report of Verus — Data Link

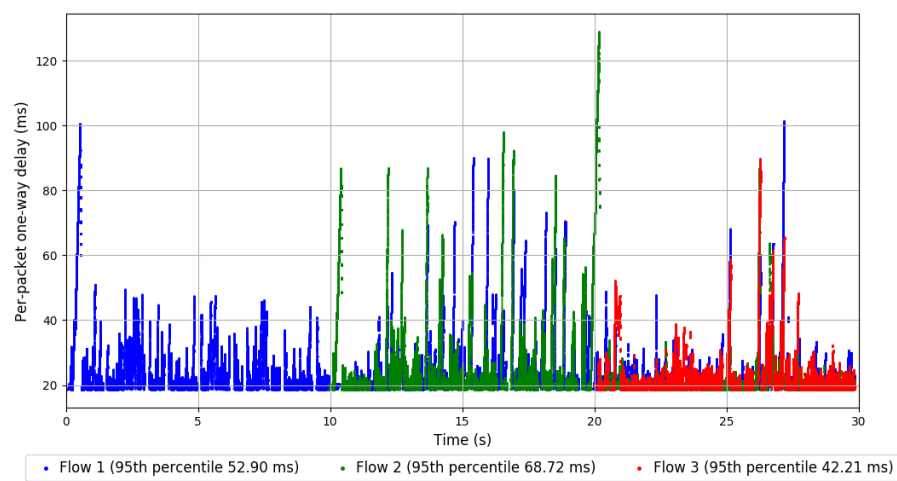
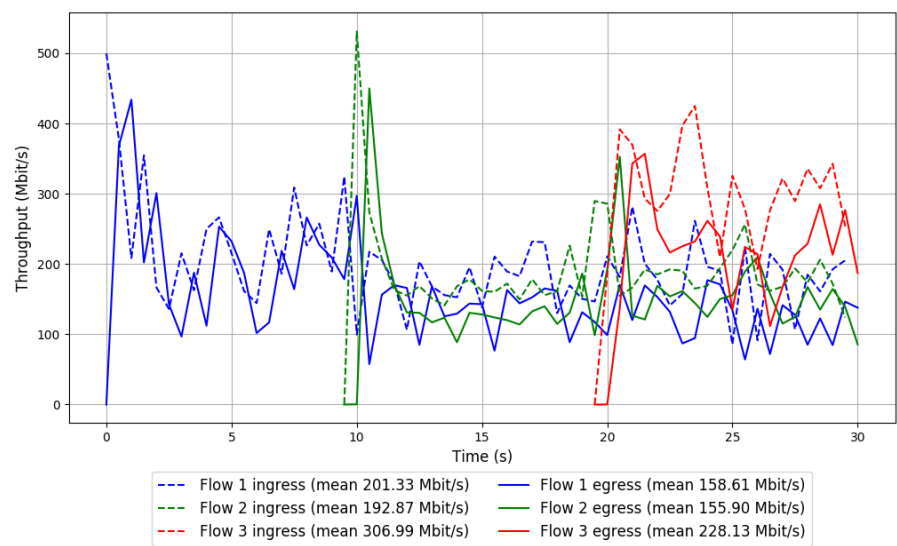


Run 7: Statistics of Verus

Start at: 2018-05-22 06:16:04
End at: 2018-05-22 06:16:34
Local clock offset: -0.088 ms
Remote clock offset: -0.163 ms

Below is generated by plot.py at 2018-05-22 09:39:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 338.31 Mbit/s
95th percentile per-packet one-way delay: 55.074 ms
Loss rate: 21.66%
-- Flow 1:
Average throughput: 158.61 Mbit/s
95th percentile per-packet one-way delay: 52.897 ms
Loss rate: 21.21%
-- Flow 2:
Average throughput: 155.90 Mbit/s
95th percentile per-packet one-way delay: 68.723 ms
Loss rate: 19.17%
-- Flow 3:
Average throughput: 228.13 Mbit/s
95th percentile per-packet one-way delay: 42.213 ms
Loss rate: 25.69%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-05-22 06:41:28

End at: 2018-05-22 06:41:58

Local clock offset: 0.141 ms

Remote clock offset: -0.28 ms

Below is generated by plot.py at 2018-05-22 09:40:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 364.33 Mbit/s

95th percentile per-packet one-way delay: 57.514 ms

Loss rate: 22.70%

-- Flow 1:

Average throughput: 176.35 Mbit/s

95th percentile per-packet one-way delay: 65.818 ms

Loss rate: 25.86%

-- Flow 2:

Average throughput: 191.45 Mbit/s

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

Loss rate: 19.58%

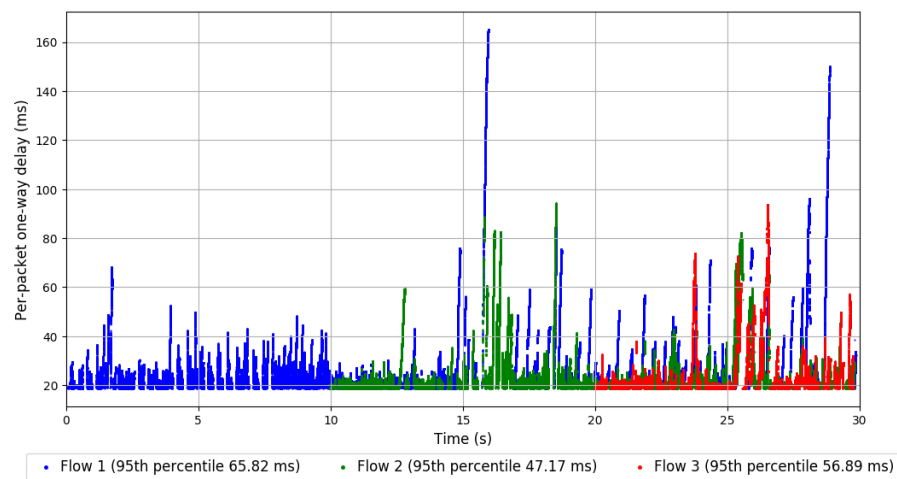
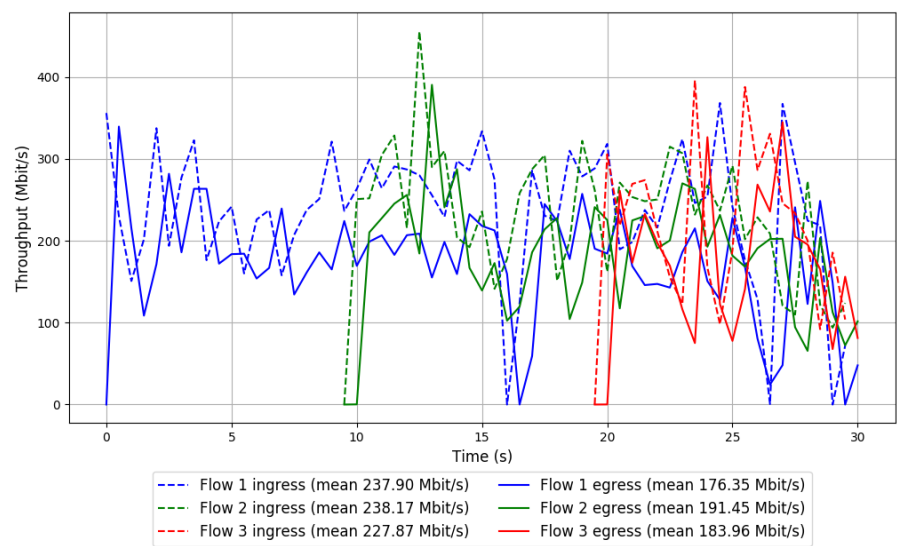
-- Flow 3:

Average throughput: 183.96 Mbit/s

95th percentile per-packet one-way delay: 56.892 ms

Loss rate: 19.25%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-05-22 07:06:58

End at: 2018-05-22 07:07:28

Local clock offset: 0.595 ms

Remote clock offset: 1.034 ms

Below is generated by plot.py at 2018-05-22 09:42:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.49 Mbit/s

95th percentile per-packet one-way delay: 42.714 ms

Loss rate: 23.63%

-- Flow 1:

Average throughput: 212.15 Mbit/s

95th percentile per-packet one-way delay: 31.119 ms

Loss rate: 18.92%

-- Flow 2:

Average throughput: 247.45 Mbit/s

95th percentile per-packet one-way delay: 61.440 ms

Loss rate: 30.50%

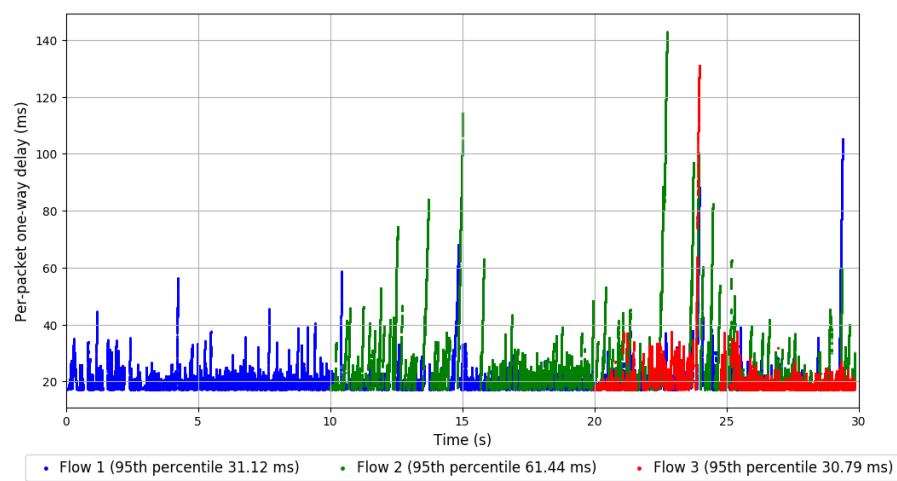
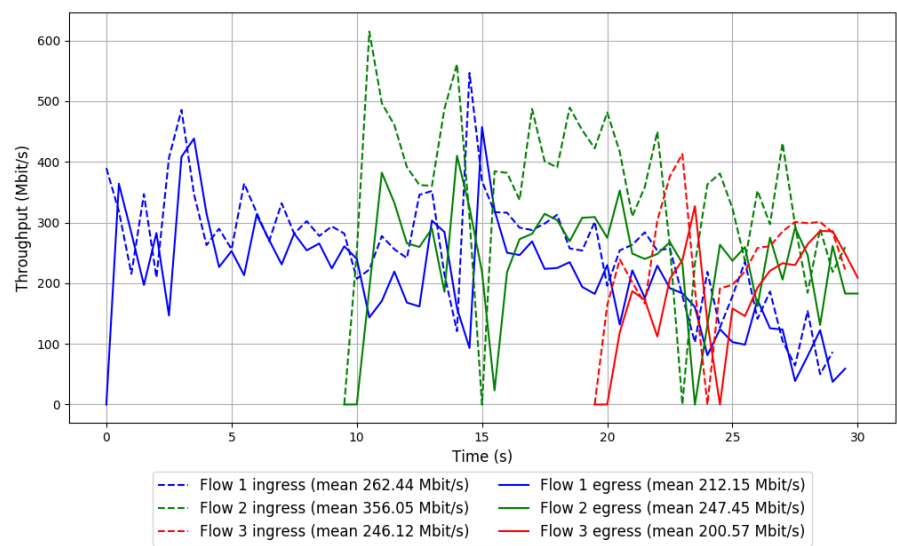
-- Flow 3:

Average throughput: 200.57 Mbit/s

95th percentile per-packet one-way delay: 30.789 ms

Loss rate: 18.50%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-05-22 07:32:28

End at: 2018-05-22 07:32:58

Local clock offset: 0.565 ms

Remote clock offset: 1.617 ms

Below is generated by plot.py at 2018-05-22 09:42:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 390.00 Mbit/s

95th percentile per-packet one-way delay: 35.429 ms

Loss rate: 20.60%

-- Flow 1:

Average throughput: 152.88 Mbit/s

95th percentile per-packet one-way delay: 40.896 ms

Loss rate: 18.47%

-- Flow 2:

Average throughput: 256.95 Mbit/s

95th percentile per-packet one-way delay: 32.543 ms

Loss rate: 22.55%

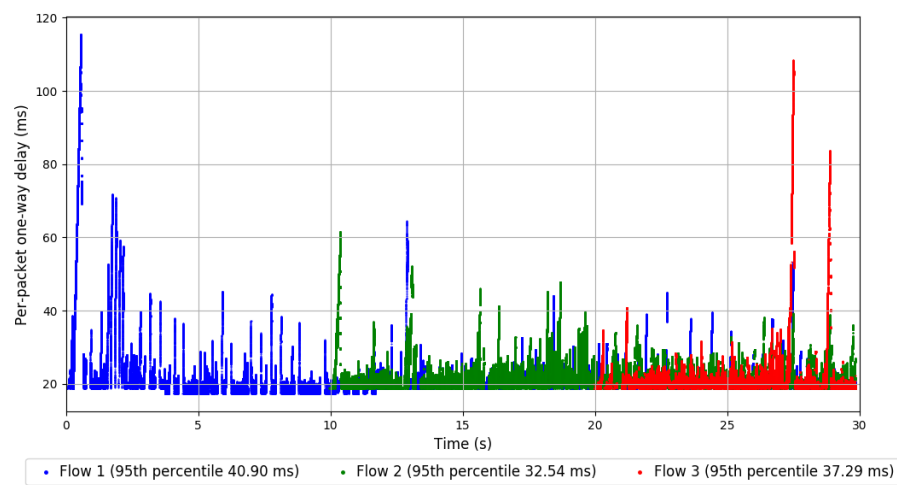
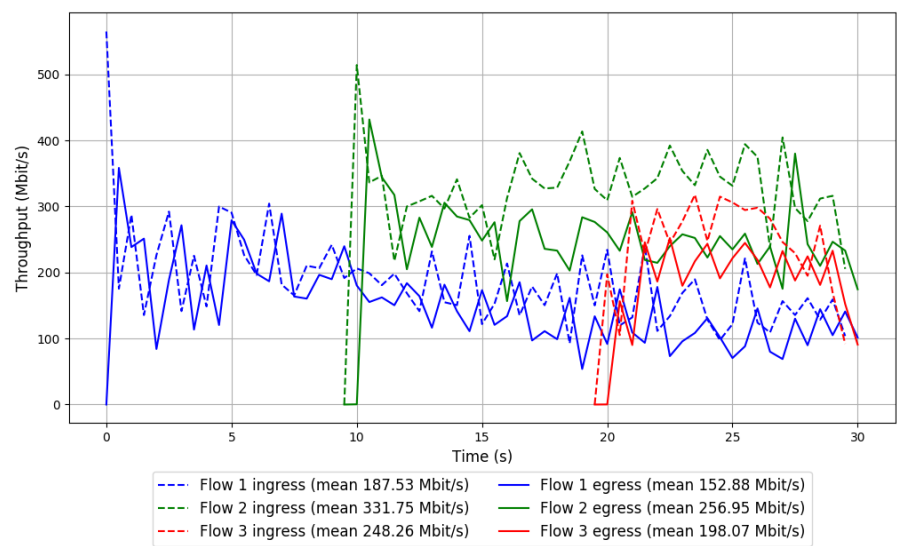
-- Flow 3:

Average throughput: 198.07 Mbit/s

95th percentile per-packet one-way delay: 37.291 ms

Loss rate: 20.20%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-05-22 03:40:42

End at: 2018-05-22 03:41:12

Local clock offset: 0.288 ms

Remote clock offset: 0.509 ms

Below is generated by plot.py at 2018-05-22 09:45:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 674.29 Mbit/s

95th percentile per-packet one-way delay: 27.303 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 421.05 Mbit/s

95th percentile per-packet one-way delay: 70.594 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 343.34 Mbit/s

95th percentile per-packet one-way delay: 20.103 ms

Loss rate: 0.33%

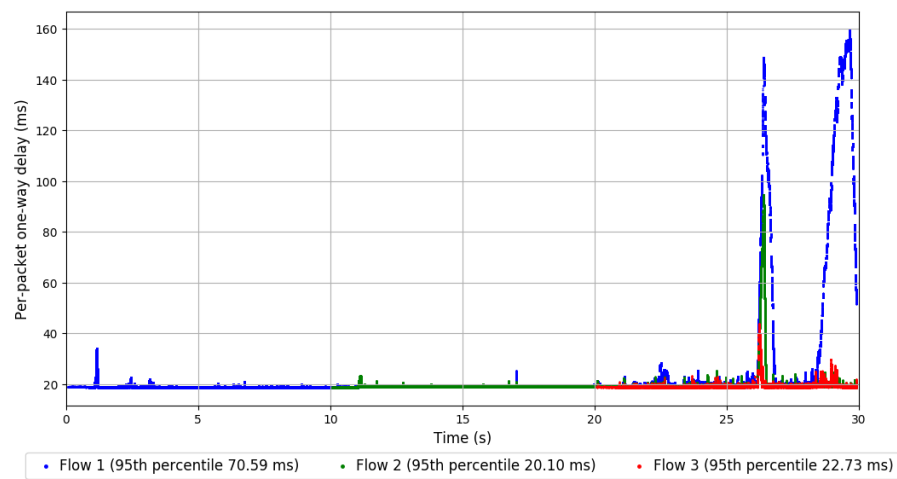
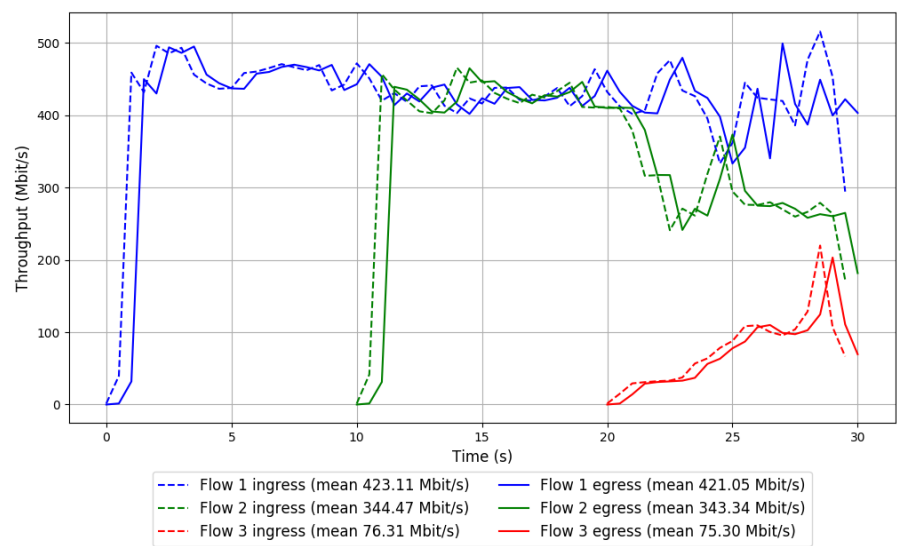
-- Flow 3:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 22.726 ms

Loss rate: 1.32%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-05-22 04:06:31

End at: 2018-05-22 04:07:01

Local clock offset: 0.304 ms

Remote clock offset: 0.67 ms

Below is generated by plot.py at 2018-05-22 09:45:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.33 Mbit/s

95th percentile per-packet one-way delay: 19.375 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 361.26 Mbit/s

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

Loss rate: 0.08%

-- Flow 2:

Average throughput: 313.57 Mbit/s

95th percentile per-packet one-way delay: 18.579 ms

Loss rate: 0.23%

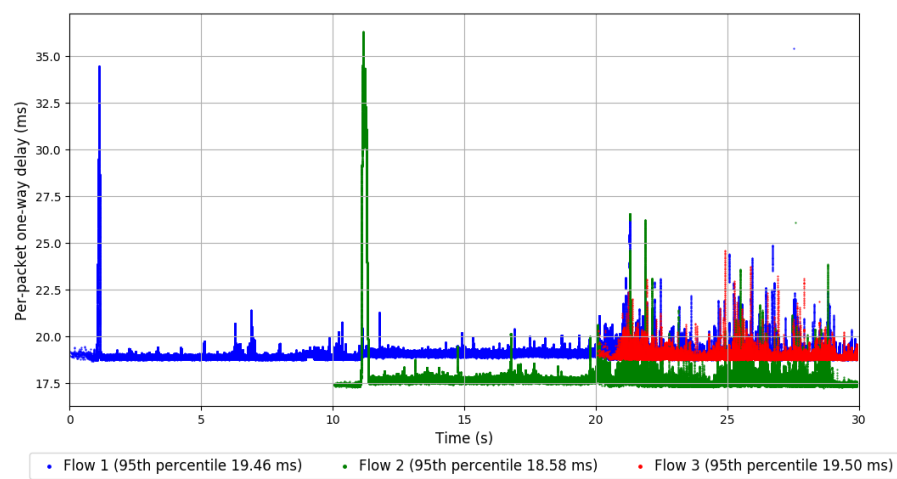
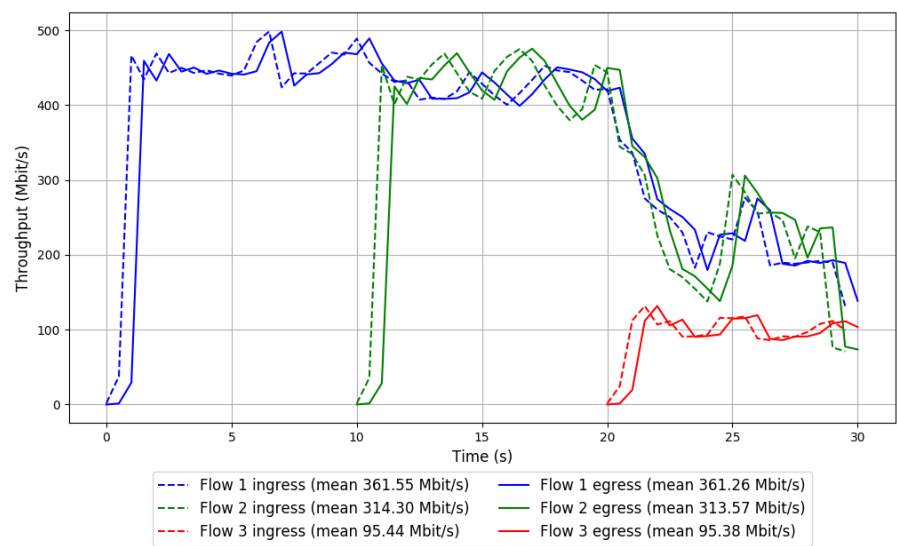
-- Flow 3:

Average throughput: 95.38 Mbit/s

95th percentile per-packet one-way delay: 19.501 ms

Loss rate: 0.07%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-05-22 04:32:04

End at: 2018-05-22 04:32:34

Local clock offset: 0.557 ms

Remote clock offset: 0.76 ms

Below is generated by plot.py at 2018-05-22 09:47:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 665.70 Mbit/s

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

Loss rate: 0.35%

-- Flow 1:

Average throughput: 404.63 Mbit/s

95th percentile per-packet one-way delay: 20.178 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 367.84 Mbit/s

95th percentile per-packet one-way delay: 21.109 ms

Loss rate: 0.38%

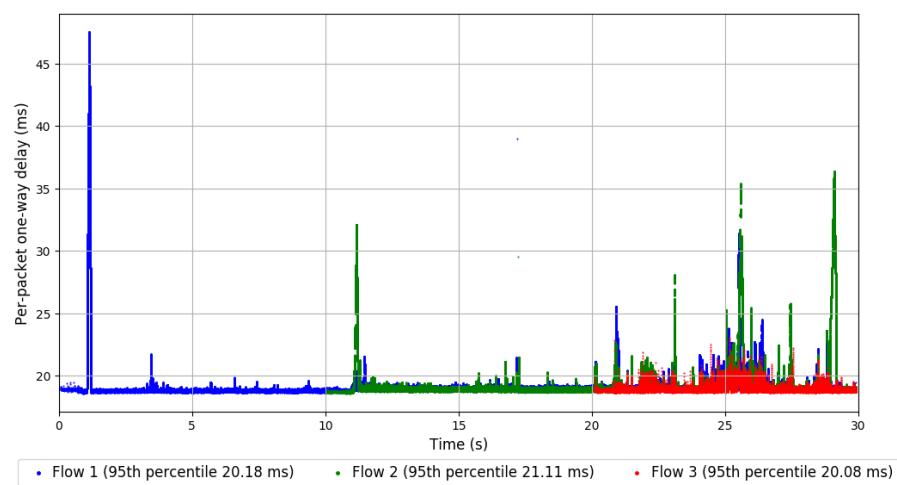
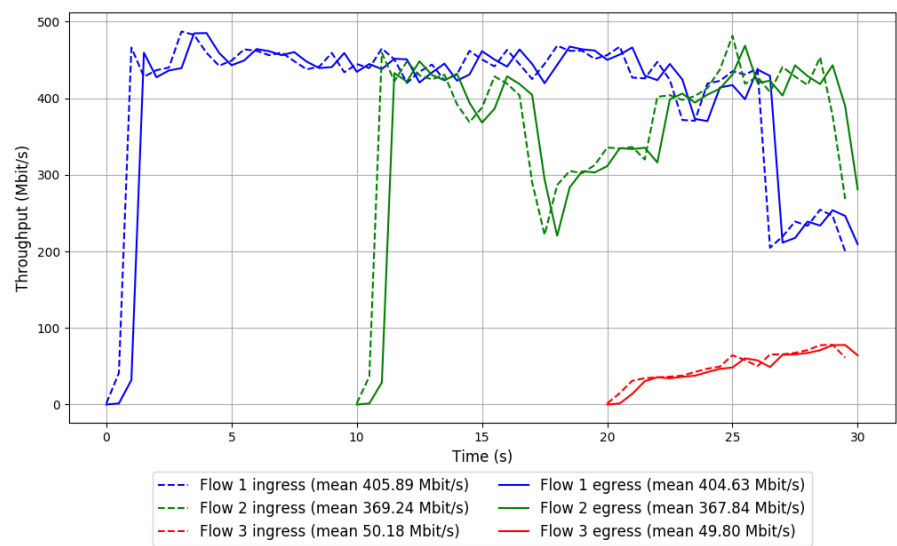
-- Flow 3:

Average throughput: 49.80 Mbit/s

95th percentile per-packet one-way delay: 20.082 ms

Loss rate: 0.77%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-05-22 04:57:41

End at: 2018-05-22 04:58:11

Local clock offset: 0.774 ms

Remote clock offset: 0.289 ms

Below is generated by plot.py at 2018-05-22 09:47:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 613.39 Mbit/s

95th percentile per-packet one-way delay: 19.519 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 382.79 Mbit/s

95th percentile per-packet one-way delay: 19.306 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 272.00 Mbit/s

95th percentile per-packet one-way delay: 20.562 ms

Loss rate: 0.09%

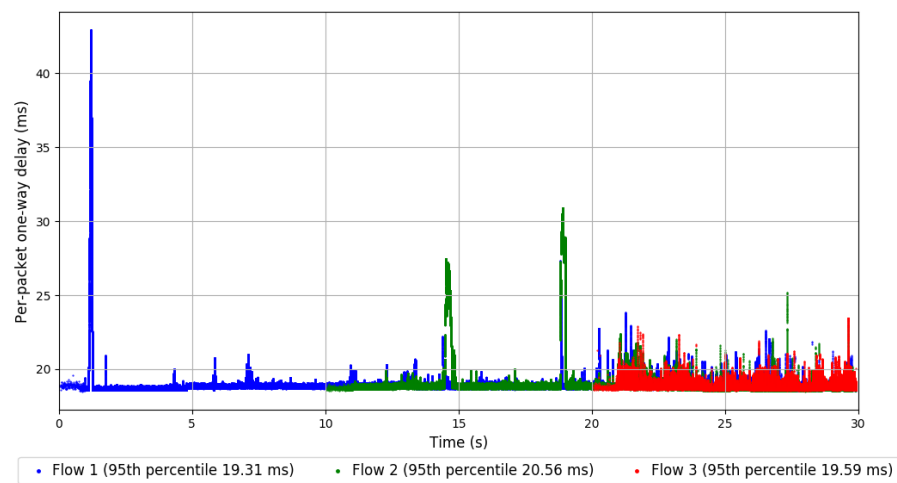
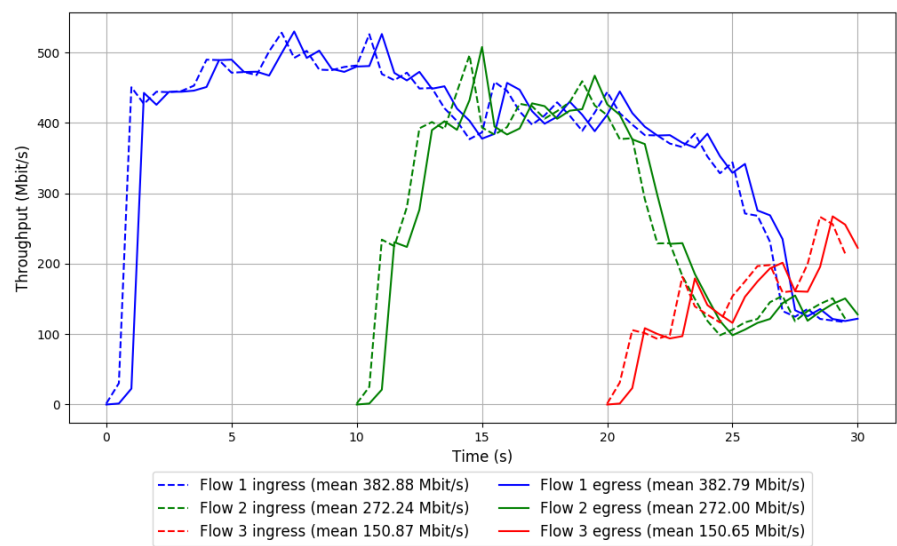
-- Flow 3:

Average throughput: 150.65 Mbit/s

95th percentile per-packet one-way delay: 19.586 ms

Loss rate: 0.14%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-05-22 05:23:12

End at: 2018-05-22 05:23:42

Local clock offset: 0.236 ms

Remote clock offset: 0.101 ms

Below is generated by plot.py at 2018-05-22 09:47:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.73 Mbit/s

95th percentile per-packet one-way delay: 20.820 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 340.13 Mbit/s

95th percentile per-packet one-way delay: 20.279 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 332.67 Mbit/s

95th percentile per-packet one-way delay: 26.937 ms

Loss rate: 0.25%

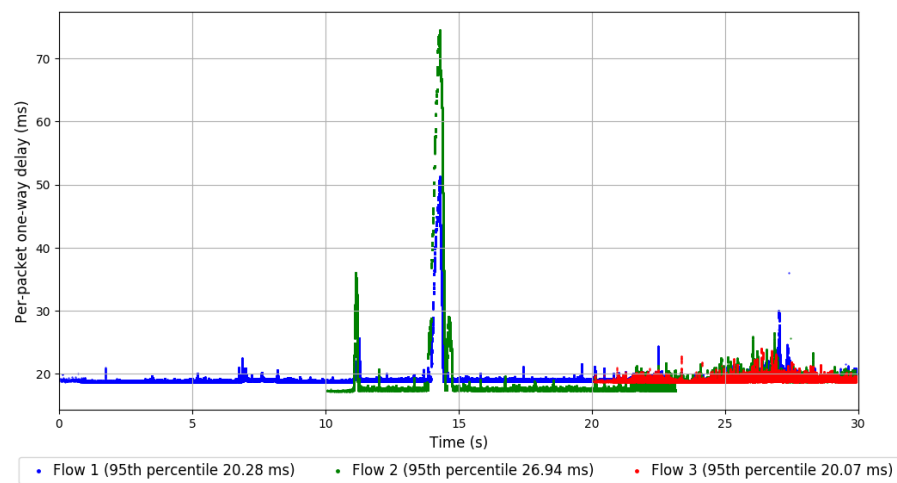
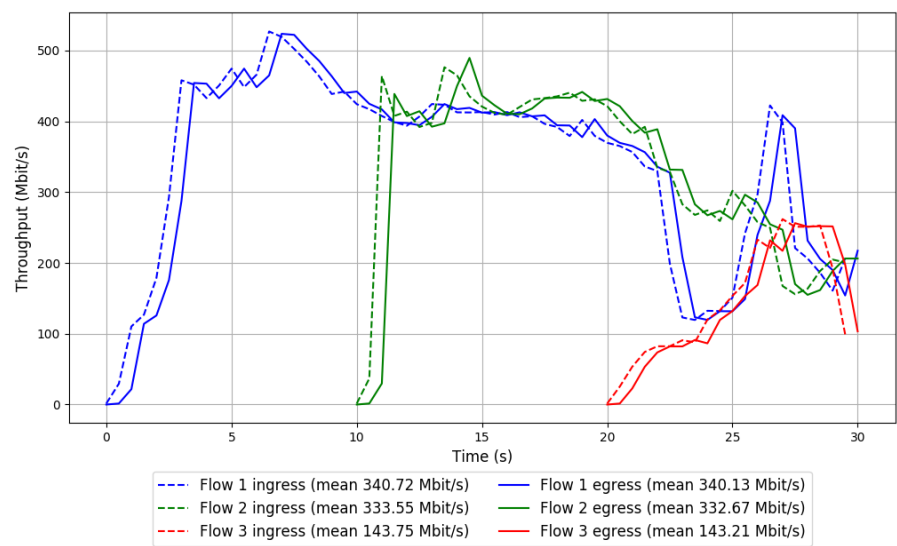
-- Flow 3:

Average throughput: 143.21 Mbit/s

95th percentile per-packet one-way delay: 20.069 ms

Loss rate: 0.38%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-05-22 05:48:44

End at: 2018-05-22 05:49:14

Local clock offset: 0.242 ms

Remote clock offset: 0.002 ms

Below is generated by plot.py at 2018-05-22 09:48:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 624.01 Mbit/s

95th percentile per-packet one-way delay: 88.816 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 386.46 Mbit/s

95th percentile per-packet one-way delay: 61.857 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 326.79 Mbit/s

95th percentile per-packet one-way delay: 101.068 ms

Loss rate: 1.94%

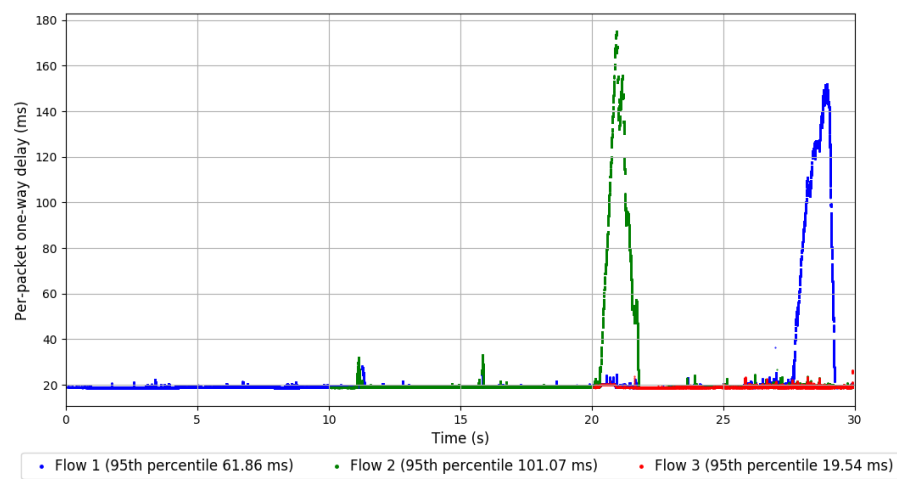
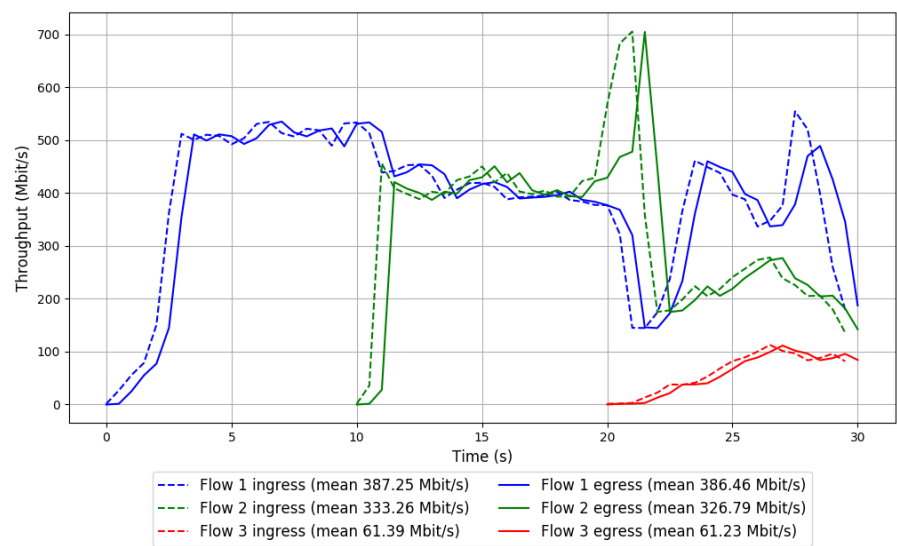
-- Flow 3:

Average throughput: 61.23 Mbit/s

95th percentile per-packet one-way delay: 19.543 ms

Loss rate: 0.25%

Run 6: Report of PCC-Vivace — Data Link

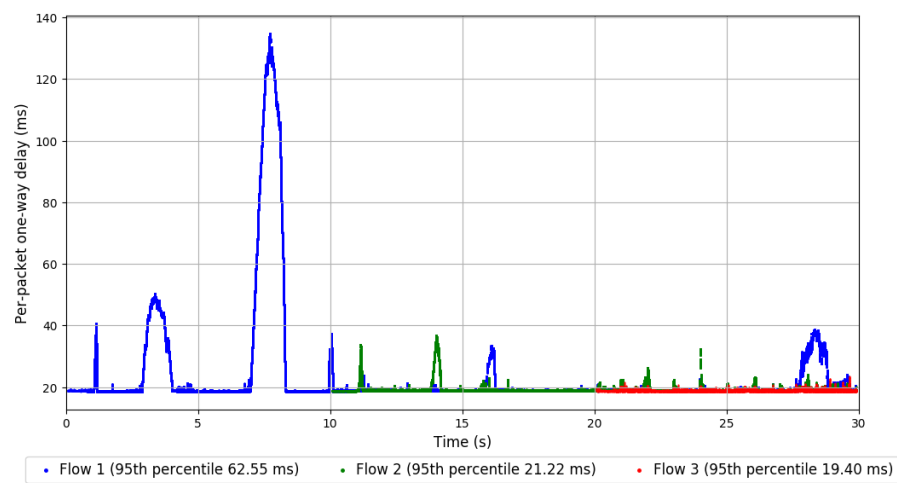
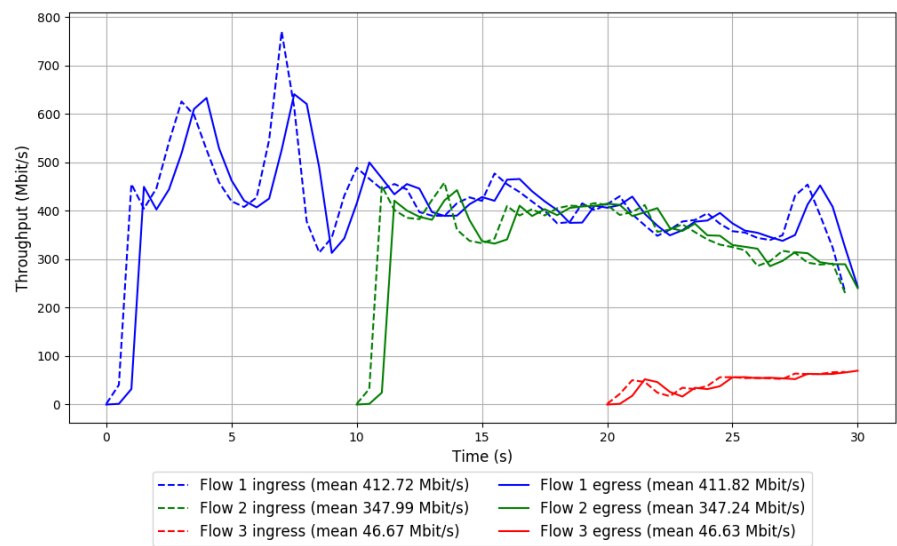


Run 7: Statistics of PCC-Vivace

Start at: 2018-05-22 06:14:16
End at: 2018-05-22 06:14:46
Local clock offset: -0.072 ms
Remote clock offset: -0.106 ms

Below is generated by plot.py at 2018-05-22 09:49:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 658.14 Mbit/s
95th percentile per-packet one-way delay: 43.886 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 411.82 Mbit/s
95th percentile per-packet one-way delay: 62.552 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 347.24 Mbit/s
95th percentile per-packet one-way delay: 21.219 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 46.63 Mbit/s
95th percentile per-packet one-way delay: 19.398 ms
Loss rate: 0.09%

Run 7: Report of PCC-Vivace — Data Link

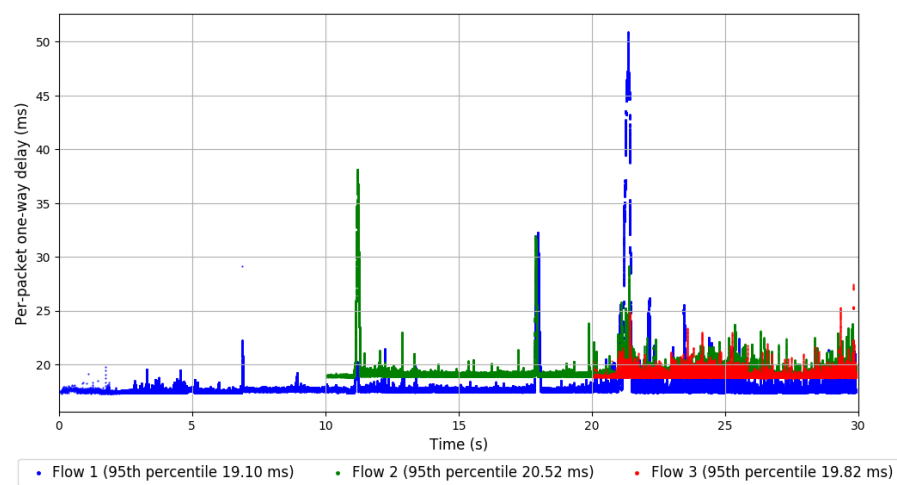
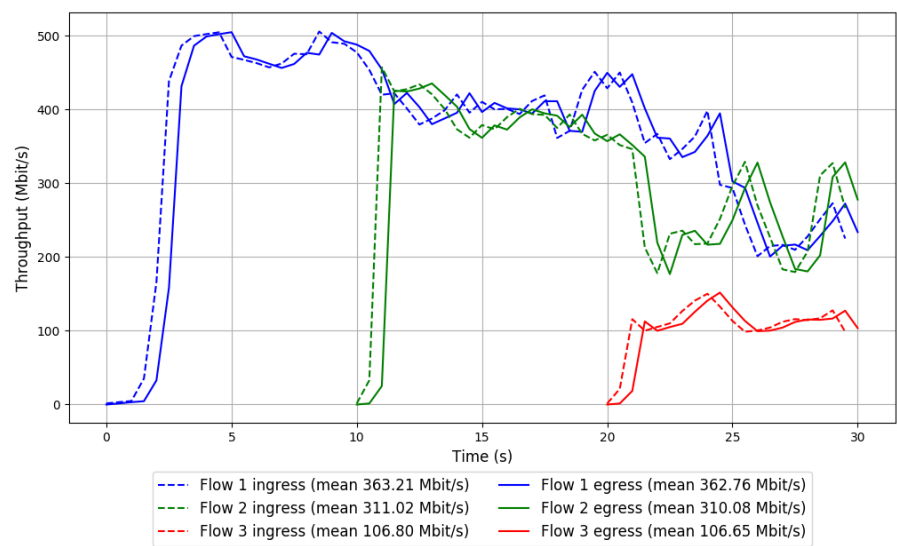


Run 8: Statistics of PCC-Vivace

Start at: 2018-05-22 06:39:42
End at: 2018-05-22 06:40:12
Local clock offset: 0.03 ms
Remote clock offset: -0.252 ms

Below is generated by plot.py at 2018-05-22 09:49:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 604.16 Mbit/s
95th percentile per-packet one-way delay: 19.935 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 362.76 Mbit/s
95th percentile per-packet one-way delay: 19.104 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 310.08 Mbit/s
95th percentile per-packet one-way delay: 20.519 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 106.65 Mbit/s
95th percentile per-packet one-way delay: 19.819 ms
Loss rate: 0.14%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-05-22 07:05:11

End at: 2018-05-22 07:05:41

Local clock offset: 0.432 ms

Remote clock offset: 0.959 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 618.46 Mbit/s

95th percentile per-packet one-way delay: 19.037 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 366.47 Mbit/s

95th percentile per-packet one-way delay: 18.337 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 322.94 Mbit/s

95th percentile per-packet one-way delay: 18.594 ms

Loss rate: 0.31%

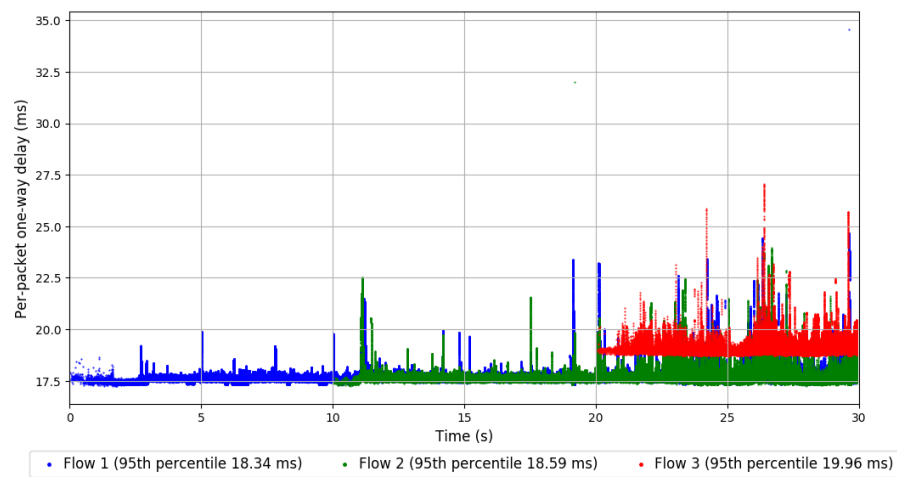
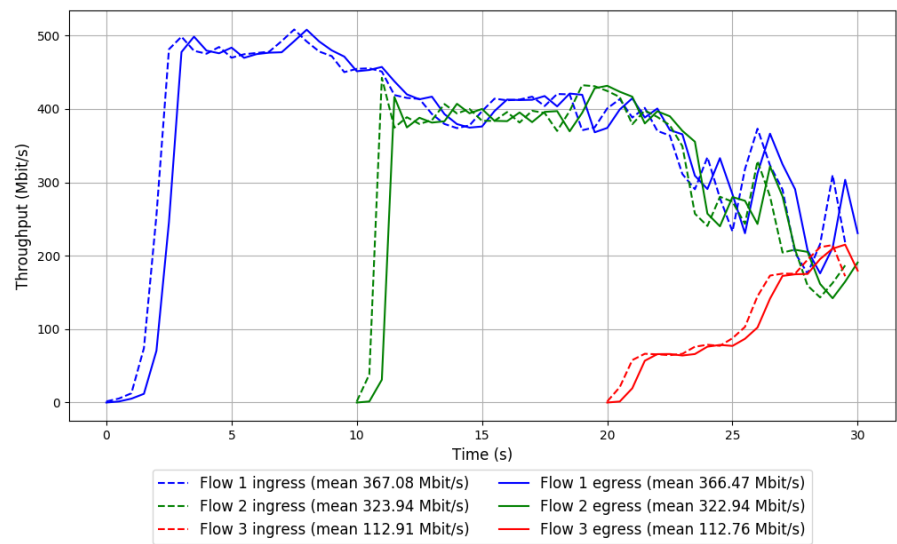
-- Flow 3:

Average throughput: 112.76 Mbit/s

95th percentile per-packet one-way delay: 19.962 ms

Loss rate: 0.14%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-05-22 07:30:43

End at: 2018-05-22 07:31:13

Local clock offset: 0.612 ms

Remote clock offset: 1.63 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.70 Mbit/s

95th percentile per-packet one-way delay: 43.942 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 347.96 Mbit/s

95th percentile per-packet one-way delay: 19.483 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 323.43 Mbit/s

95th percentile per-packet one-way delay: 103.811 ms

Loss rate: 0.03%

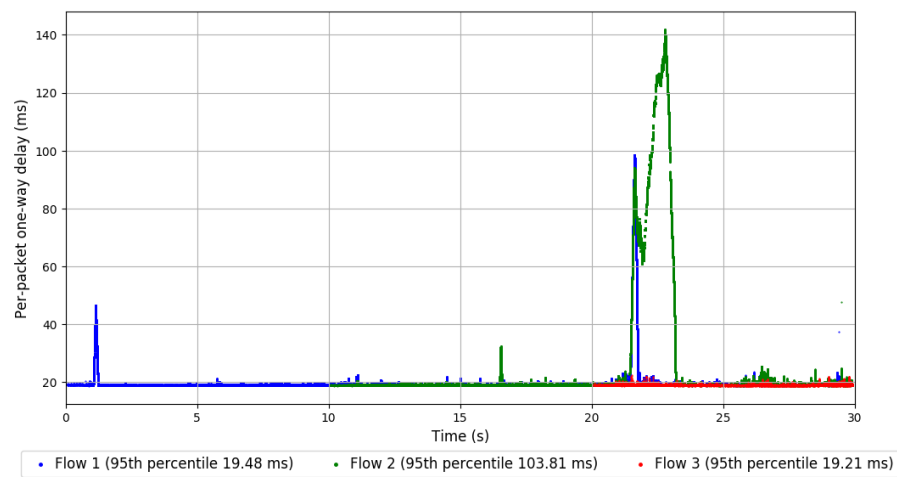
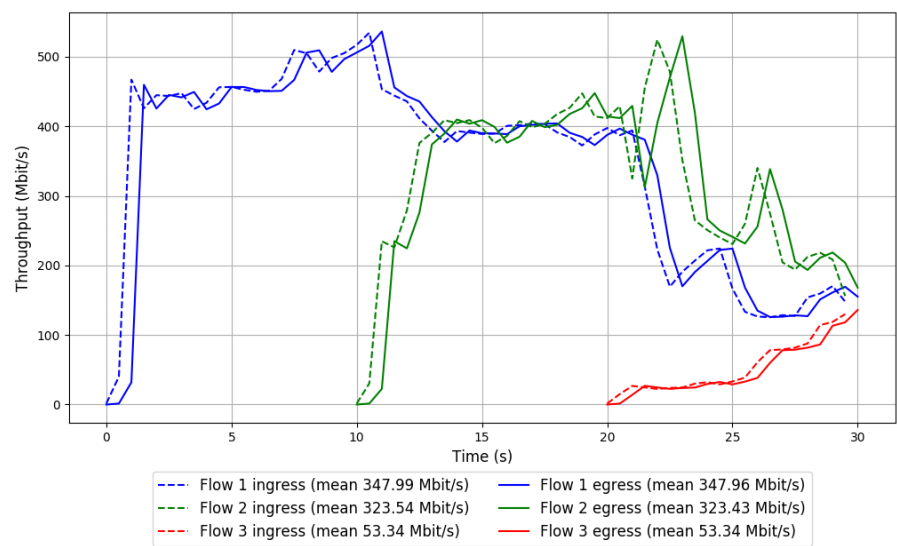
-- Flow 3:

Average throughput: 53.34 Mbit/s

95th percentile per-packet one-way delay: 19.211 ms

Loss rate: 0.01%

Run 10: Report of PCC-Vivace — Data Link

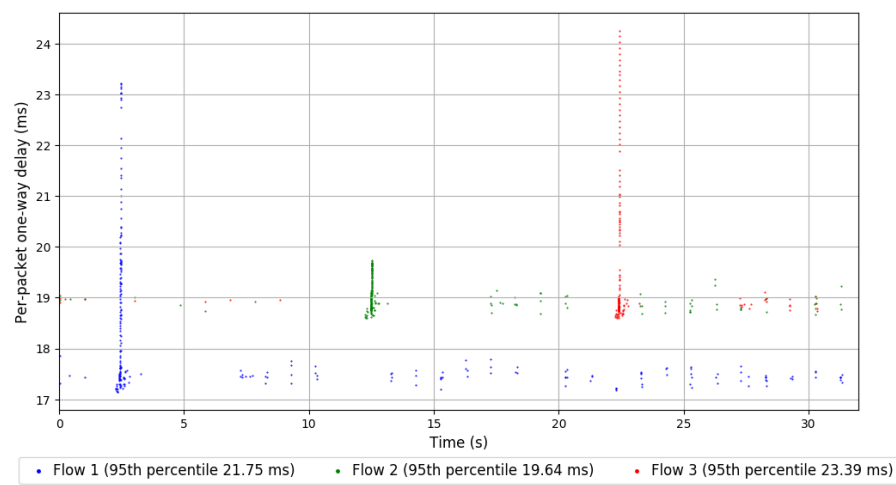
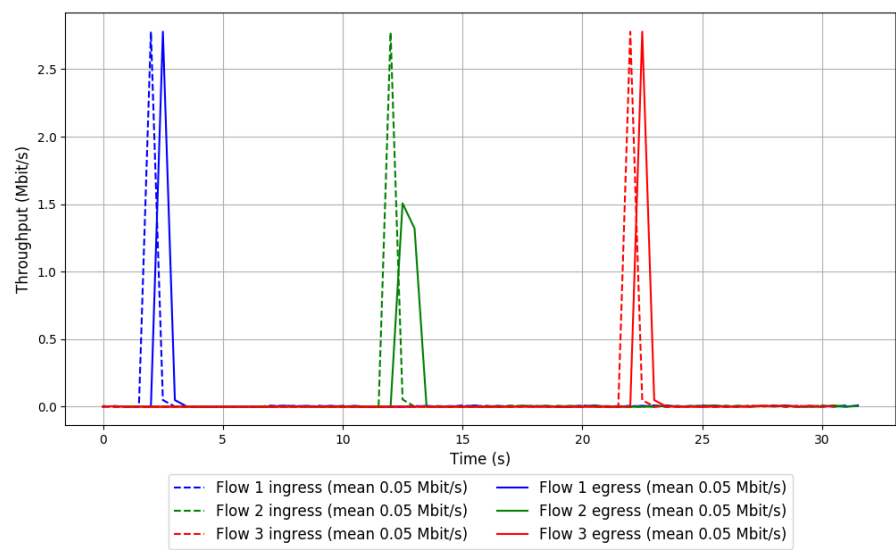


```
Run 1: Statistics of WebRTC media

Start at: 2018-05-22 03:39:24
End at: 2018-05-22 03:39:54
Local clock offset: 0.222 ms
Remote clock offset: 0.385 ms

# Below is generated by plot.py at 2018-05-22 09:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 22.014 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 21.754 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.639 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 23.393 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-05-22 04:05:13

End at: 2018-05-22 04:05:43

Local clock offset: 0.321 ms

Remote clock offset: 0.62 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 23.245 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 19.955 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 26.072 ms

Loss rate: 0.00%

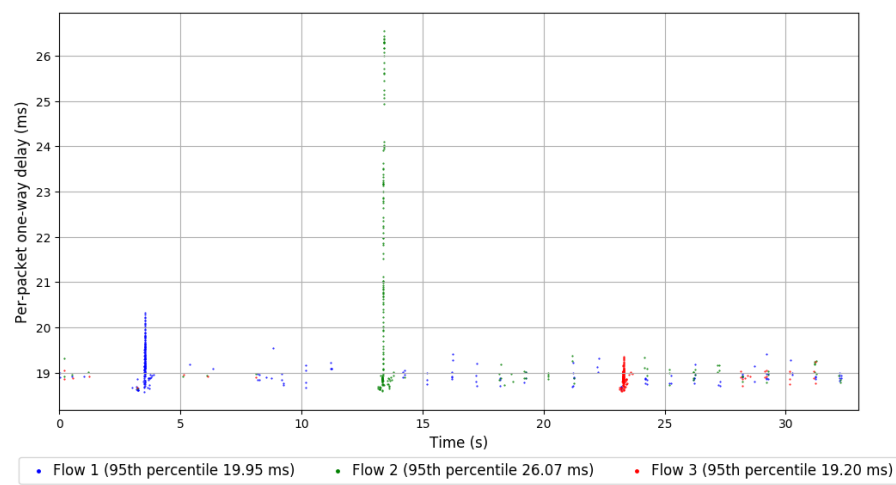
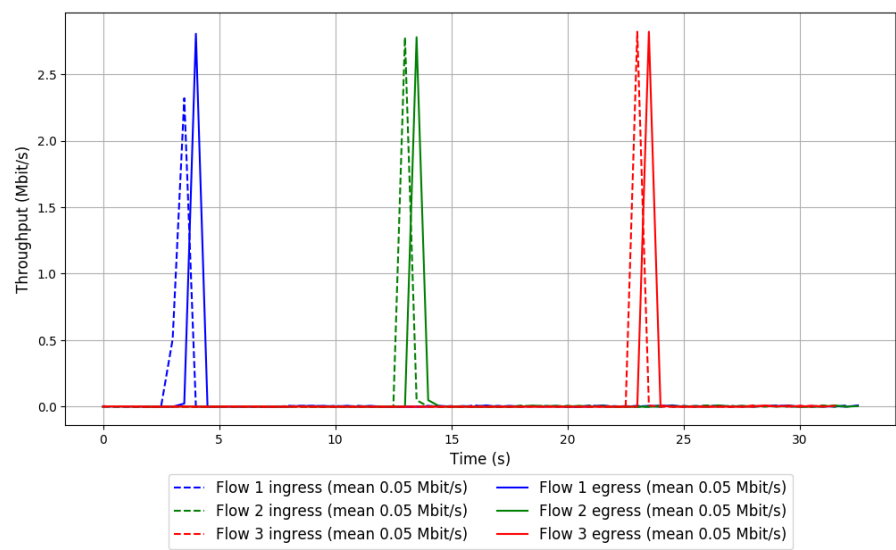
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 19.204 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-05-22 04:30:46

End at: 2018-05-22 04:31:16

Local clock offset: 0.538 ms

Remote clock offset: 0.745 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 22.422 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 20.254 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 24.505 ms

Loss rate: 0.00%

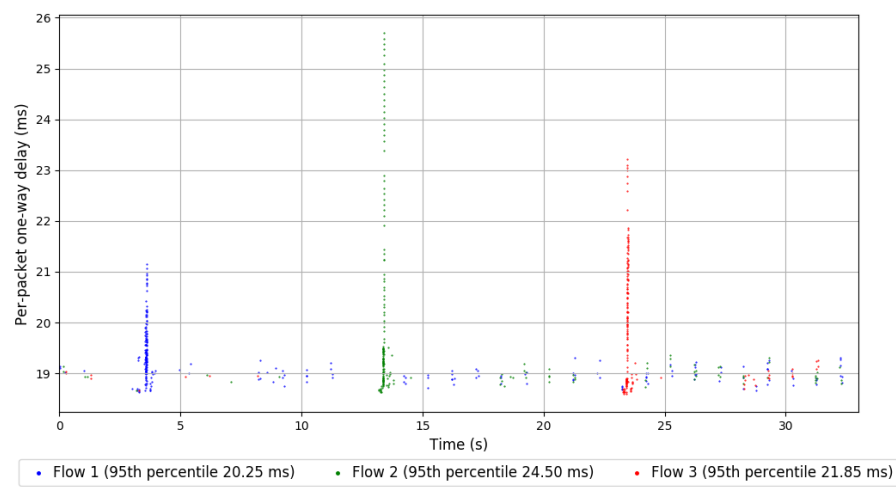
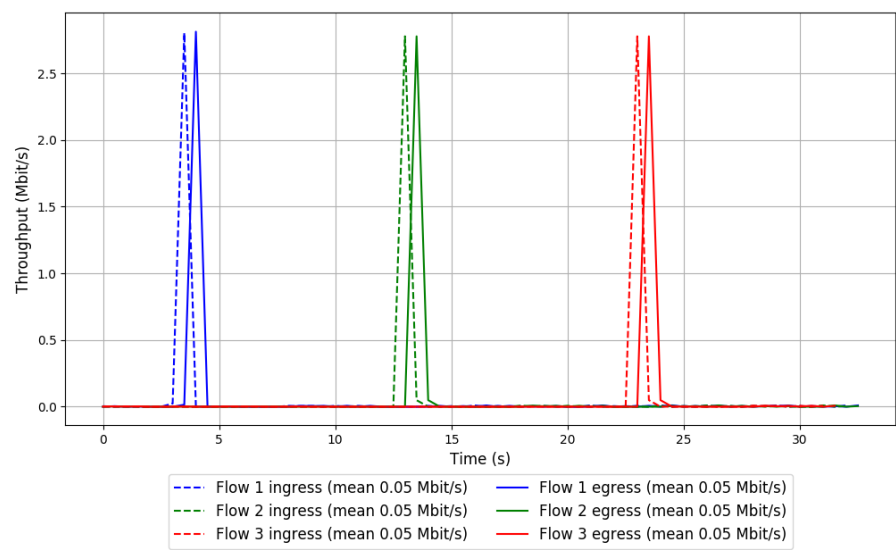
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 21.851 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-05-22 04:56:23

End at: 2018-05-22 04:56:53

Local clock offset: 0.814 ms

Remote clock offset: 0.316 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 22.193 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 24.052 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 19.562 ms

Loss rate: 0.00%

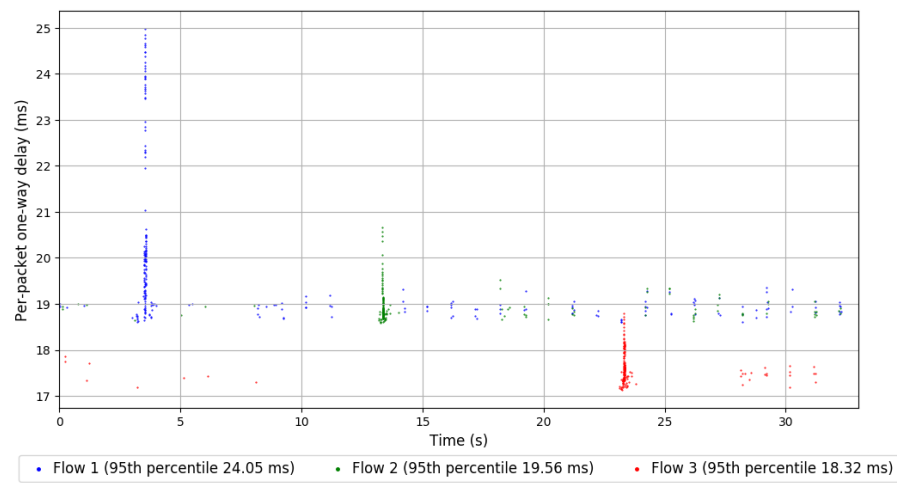
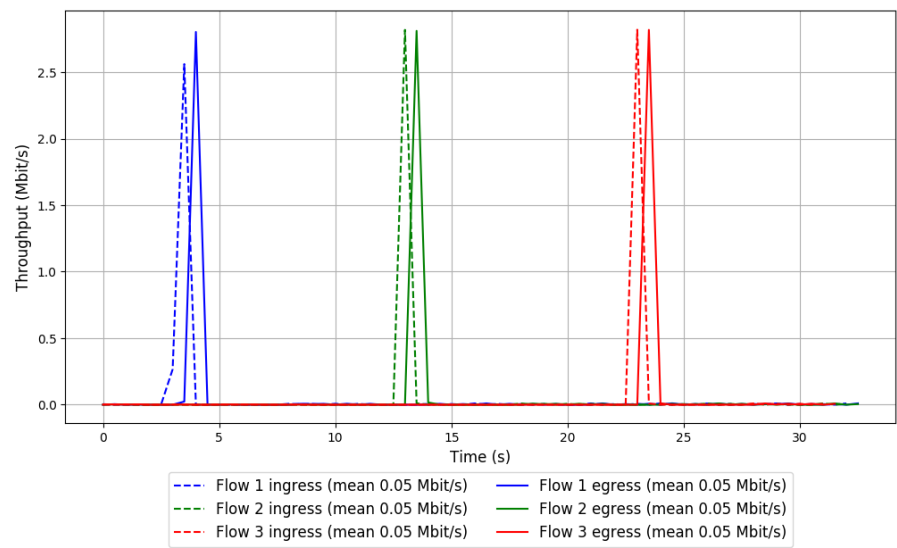
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 18.323 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-05-22 05:21:54

End at: 2018-05-22 05:22:24

Local clock offset: 0.241 ms

Remote clock offset: 0.129 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 22.391 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 20.936 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 24.122 ms

Loss rate: 0.00%

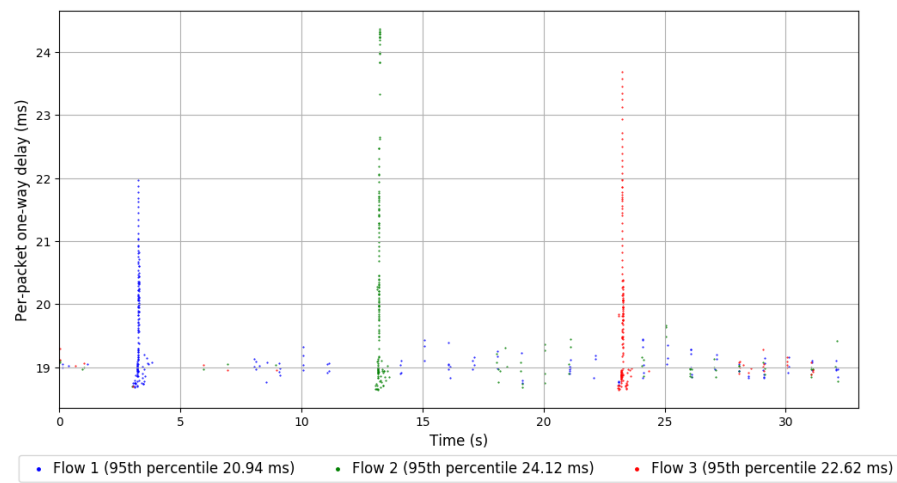
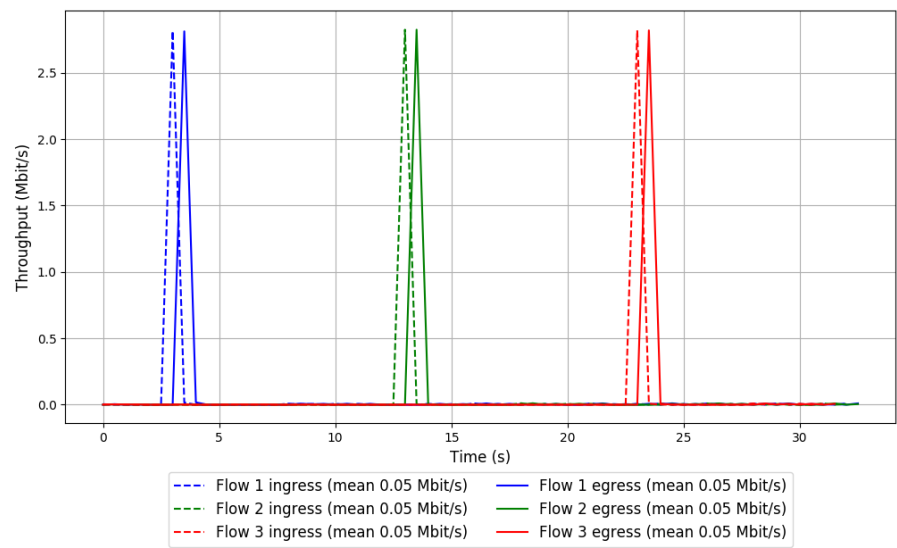
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 22.618 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-05-22 05:47:26

End at: 2018-05-22 05:47:56

Local clock offset: 0.269 ms

Remote clock offset: 0.014 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 20.119 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 20.663 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 19.673 ms

Loss rate: 0.00%

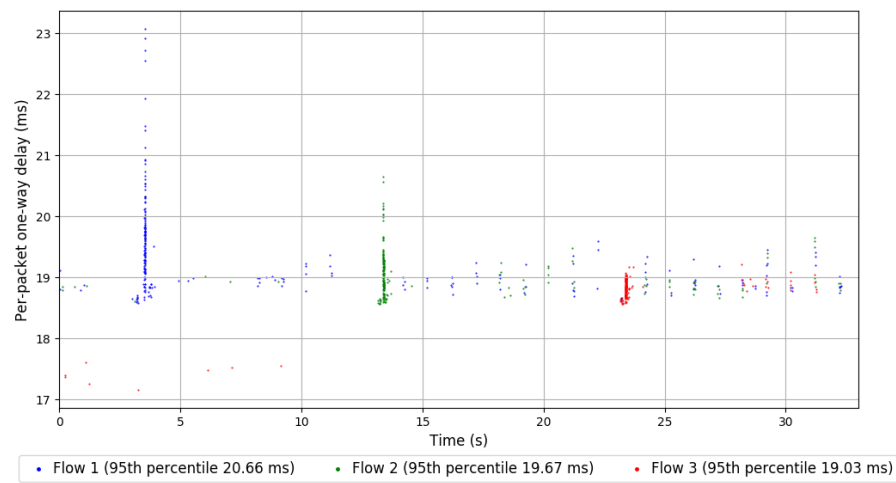
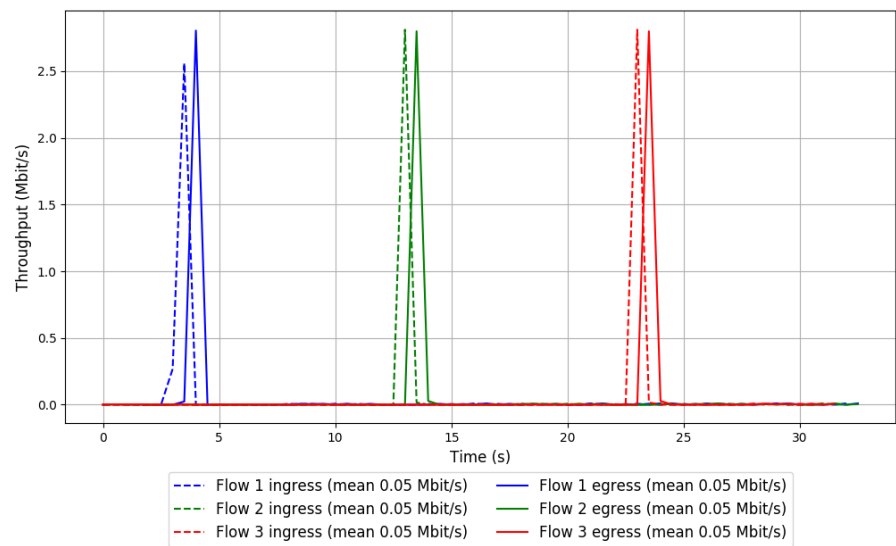
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 19.032 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

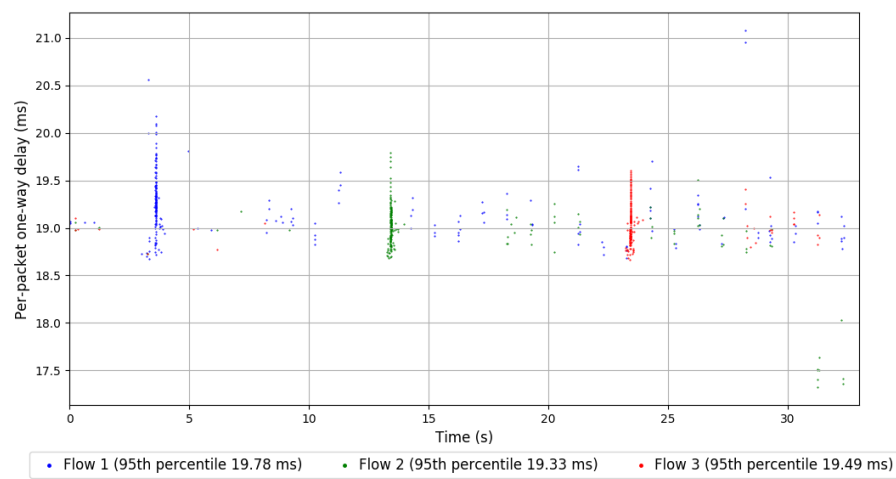
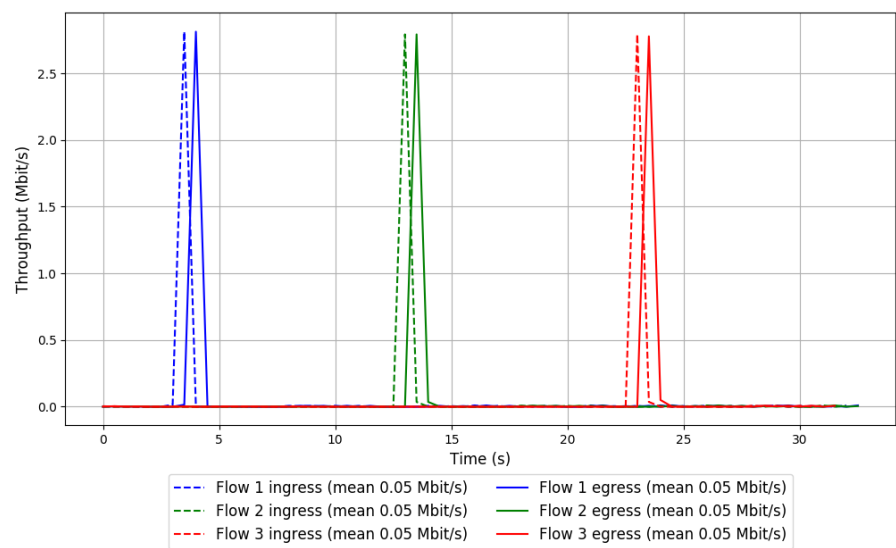


Run 7: Statistics of WebRTC media

Start at: 2018-05-22 06:12:58
End at: 2018-05-22 06:13:28
Local clock offset: -0.139 ms
Remote clock offset: -0.089 ms

Below is generated by plot.py at 2018-05-22 09:50:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 19.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.330 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.492 ms
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link

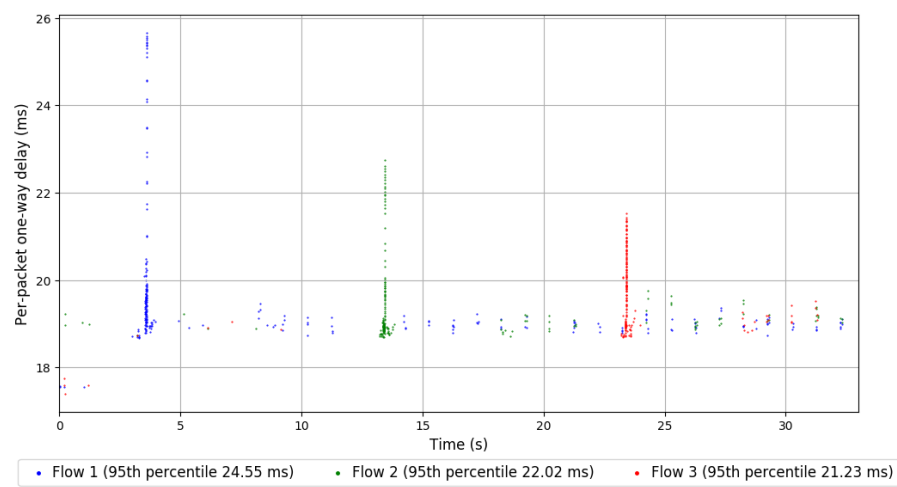
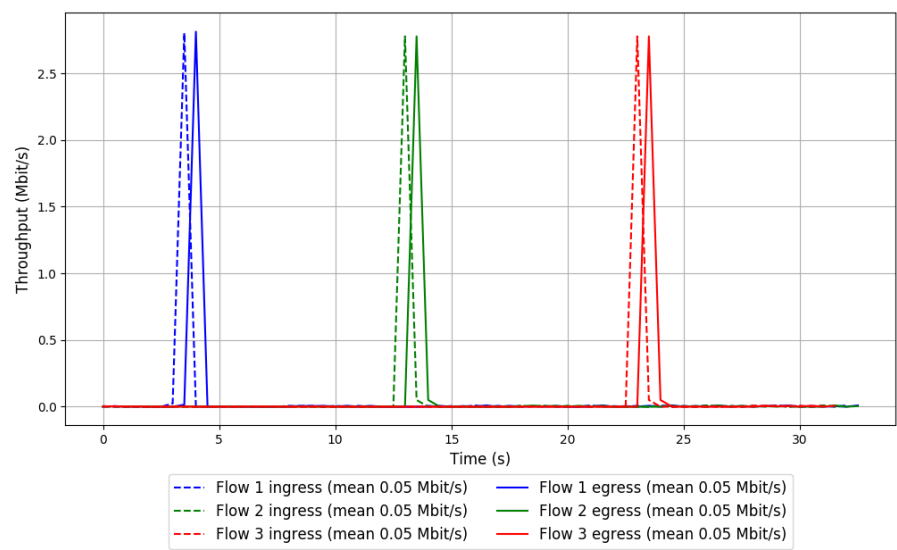


Run 8: Statistics of WebRTC media

Start at: 2018-05-22 06:38:24
End at: 2018-05-22 06:38:54
Local clock offset: 0.09 ms
Remote clock offset: -0.213 ms

Below is generated by plot.py at 2018-05-22 09:50:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 22.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 24.552 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 22.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 21.233 ms
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-05-22 07:03:52

End at: 2018-05-22 07:04:22

Local clock offset: 0.488 ms

Remote clock offset: 0.952 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 20.903 ms

Loss rate: 0.00%

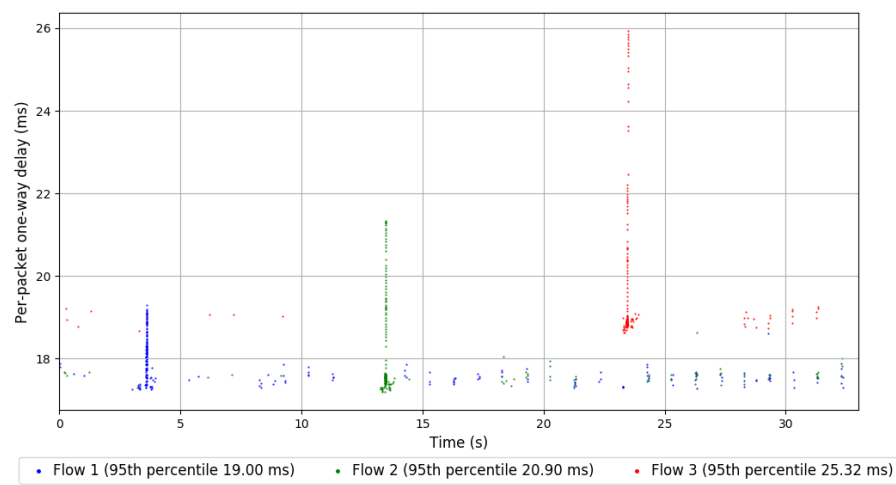
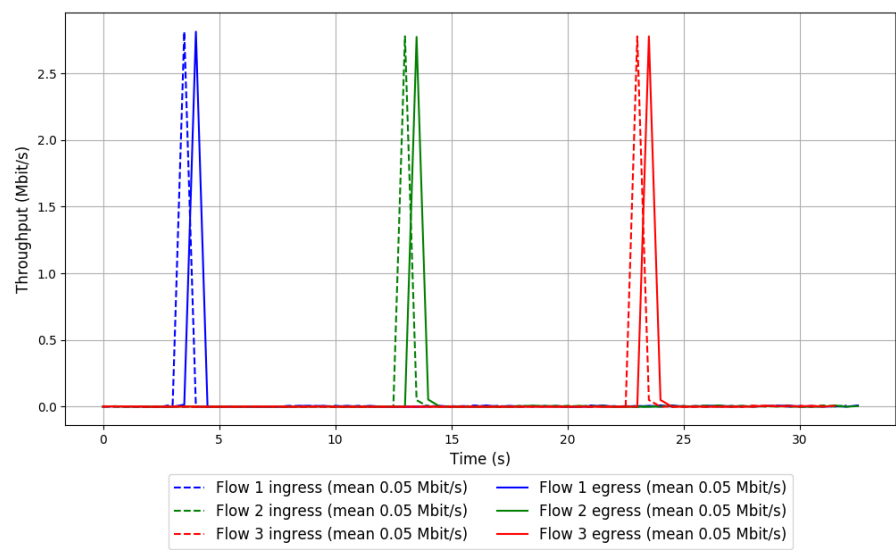
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 25.322 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-05-22 07:29:25

End at: 2018-05-22 07:29:55

Local clock offset: 0.738 ms

Remote clock offset: 1.612 ms

Below is generated by plot.py at 2018-05-22 09:50:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 21.548 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 22.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 17.800 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 21.456 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

