# Pantheon Report

Data path: AWS Brazil 1 on ens5 (local) →Brazil on p4p1 (remote).

Each test lasted for 30 seconds running 3 flows with 10-second interval be-

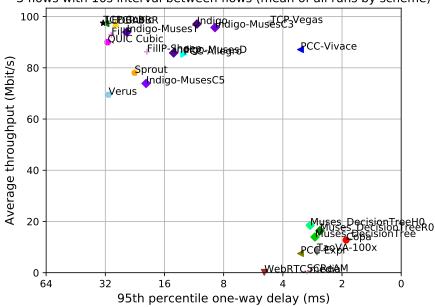
Repeated the test of 24 congestion control schemes 5 times.

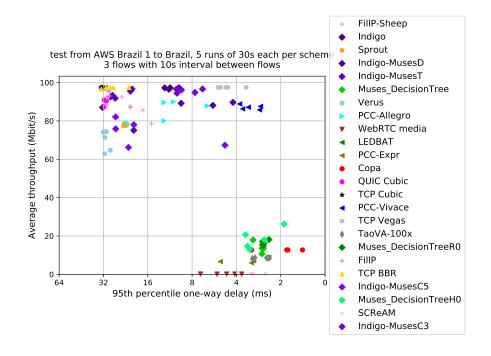
Generated at 2019-12-11 09:01:03 (UTC).

tween two flows. NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs. System info: Linux 4.15.0-1054-aws net.core.default\_qdisc = fq net.core.rmem\_default = 16777216  $net.core.rmem_max = 536870912$ net.core.wmem\_default = 16777216  $net.core.wmem_max = 536870912$ net.ipv4.tcp\_rmem = 4096 16777216 536870912 net.ipv4.tcp\_wmem = 4096 16777216 536870912 Git summary: branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec third\_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519 third\_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9 third\_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4 third\_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d third\_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf third\_party/muses @ 5ce721187ad823da20955337730c746486ca4966 third\_party/muses\_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200 third\_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd third\_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1 M receiver/src/buffer.h M receiver/src/core.cpp M sender/src/buffer.h M sender/src/core.cpp third\_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab third\_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42 third\_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2 M src/ScreamClient M src/ScreamServer third\_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26 M src/examples/cellsim.cc M src/examples/sproutbt2.cc M src/network/sproutconn.cc third\_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494 M src/verus.hpp

M tools/plot.py
third\_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS Brazil 1 to Brazil, 5 runs of 30s each per scheme 3 flows with 10s interval between flows (mean of all runs by scheme)





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		mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
$_{\mathrm{scheme}}$	# runs	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	64.64	34.69	28.71	28.18	27.56	29.46	0.70	0.40	3.50
Copa	5	11.71	0.05	4.74	1.86	2.20	2.75	67.52	87.63	83.91
TCP Cubic	5	64.43	35.55	28.22	32.71	32.46	32.20	0.04	0.04	0.03
FillP	5	50.85	46.89	32.67	28.47	29.45	29.34	9.20	16.62	38.20
FillP-Sheep	5	53.65	29.04	40.10	17.55	20.62	22.28	0.87	1.30	2.28
Indigo	5	48.29	39.11	70.13	10.12	10.75	10.90	0.00	0.00	0.00
Indigo-MusesC3	5	58.69	42.46	32.28	8.24	9.42	8.86	0.00	0.00	0.00
Indigo-MusesC5	5	41.01	34.86	34.79	18.69	19.97	21.05	0.02	0.09	0.09
Indigo-MusesD	5	51.50	38.51	31.86	13.42	14.38	15.20	0.08	0.57	1.21
Indigo-MusesT	5	58.41	42.73	26.70	22.93	25.41	27.89	0.09	0.30	0.61
LEDBAT	5	61.73	38.05	30.73	31.52	31.91	32.19	0.04	0.06	0.08
$Muses\_DecisionTree$	5	6.70	7.95	6.06	2.20	1.92	2.62	0.00	0.00	0.00
$Muses\_DecisionTreeH0$	5	7.03	11.62	11.62	2.96	2.06	2.12	0.00	0.00	0.00
$Muses\_DecisionTreeR0$	5	8.36	8.00	8.44	1.77	1.79	1.86	0.00	0.00	0.00
PCC-Allegro	5	58.49	32.77	15.05	6.92	19.84	19.78	0.03	0.06	0.35
PCC-Expr	5	0.53	7.25	8.07	1.50	4.51	2.43	85.71	25.84	24.26
QUIC Cubic	5	56.91	35.99	27.95	30.37	31.11	31.14	0.15	0.18	0.23
$\operatorname{SCReAM}$	5	0.22	0.22	0.22	2.72	2.41	2.41	0.00	0.00	0.00
$\operatorname{Sprout}$	5	42.56	37.65	31.57	20.84	23.10	24.70	0.00	0.00	0.00
TaoVA-100x	5	0.00	9.36	6.90	2.10	2.40	2.12	95.92	84.35	89.37
TCP Vegas	5	47.10	46.49	58.35	3.64	4.01	4.49	0.00	0.00	0.00
Verus	5	37.02	34.62	28.50	28.68	30.74	32.78	9.40	9.29	16.54
PCC-Vivace	5	56.30	34.19	24.47	2.74	3.58	3.83	0.00	0.00	0.00
WebRTC media	5	0.06	0.06	0.06	4.71	4.93	4.23	0.00	0.01	0.00

## Run 1: Statistics of TCP BBR

Start at: 2019-12-11 06:41:06 End at: 2019-12-11 06:41:36 Local clock offset: -6.453 ms Remote clock offset: -0.391 ms

# Below is generated by plot.py at 2019-12-11 08:49:38

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.48 Mbit/s

95th percentile per-packet one-way delay: 27.394 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 71.76 Mbit/s

95th percentile per-packet one-way delay: 27.161 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 23.06 Mbit/s

95th percentile per-packet one-way delay: 25.913 ms

Loss rate: 0.11%

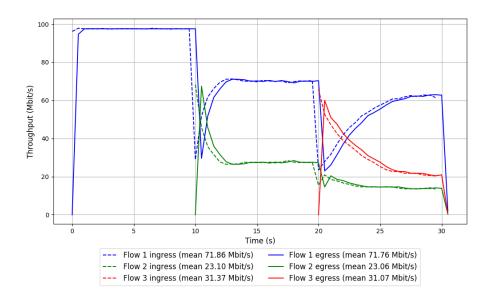
-- Flow 3:

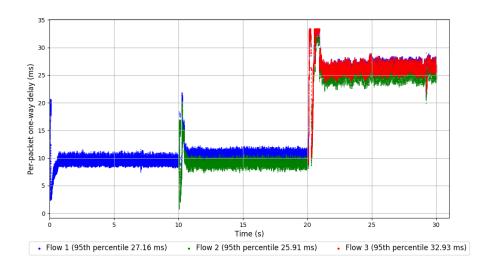
Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 32.934 ms

Loss rate: 0.79%

Run 1: Report of TCP BBR — Data Link





## Run 2: Statistics of TCP BBR

Start at: 2019-12-11 07:08:21 End at: 2019-12-11 07:08:51 Local clock offset: -6.295 ms Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 96.65 Mbit/s

95th percentile per-packet one-way delay: 33.069 ms

Loss rate: 5.52%

-- Flow 1:

Average throughput: 63.81 Mbit/s

95th percentile per-packet one-way delay: 33.144 ms

Loss rate: 3.42%

-- Flow 2:

Average throughput: 22.69 Mbit/s

95th percentile per-packet one-way delay: 31.434 ms

Loss rate: 1.61%

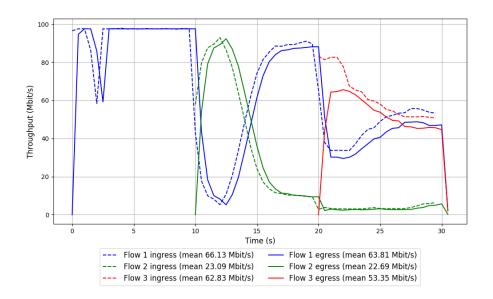
-- Flow 3:

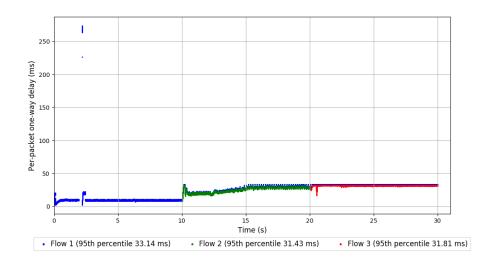
Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 31.808 ms

Loss rate: 15.07%

Run 2: Report of TCP BBR — Data Link





## Run 3: Statistics of TCP BBR

Start at: 2019-12-11 07:35:36 End at: 2019-12-11 07:36:06 Local clock offset: -5.655 ms Remote clock offset: 0.14 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 21.515 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.53 Mbit/s

95th percentile per-packet one-way delay: 21.395 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.82 Mbit/s

95th percentile per-packet one-way delay: 21.860 ms

Loss rate: 0.00%

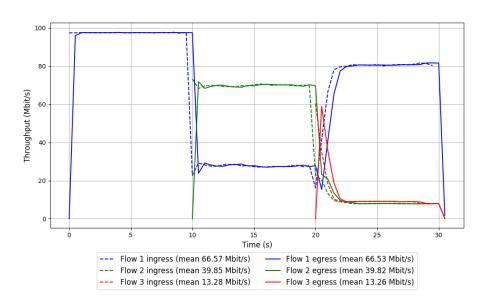
-- Flow 3:

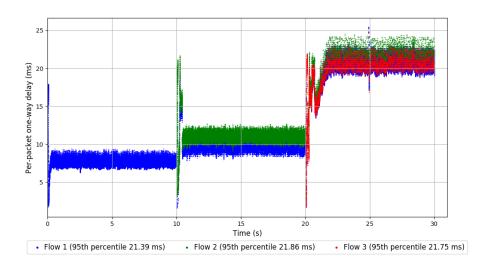
Average throughput: 13.26 Mbit/s

95th percentile per-packet one-way delay: 21.753 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link





## Run 4: Statistics of TCP BBR

Start at: 2019-12-11 08:02:51 End at: 2019-12-11 08:03:21 Local clock offset: -5.557 ms Remote clock offset: 0.19 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 30.736 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 49.46 Mbit/s

95th percentile per-packet one-way delay: 30.252 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 54.96 Mbit/s

95th percentile per-packet one-way delay: 30.915 ms

Loss rate: 0.25%

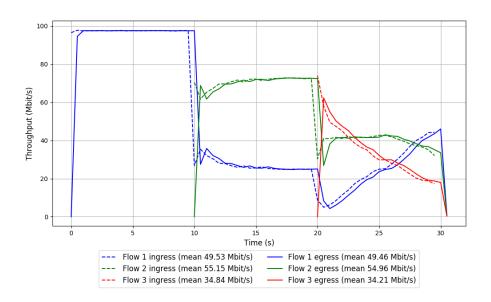
-- Flow 3:

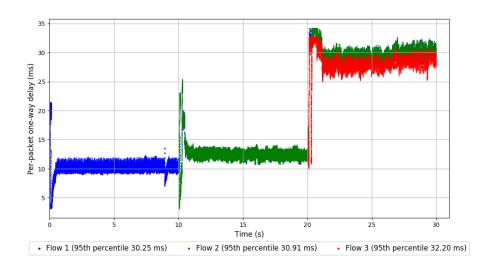
Average throughput: 34.21 Mbit/s

95th percentile per-packet one-way delay: 32.200 ms

Loss rate: 1.63%

Run 4: Report of TCP BBR — Data Link





## Run 5: Statistics of TCP BBR

Start at: 2019-12-11 08:30:07 End at: 2019-12-11 08:30:37 Local clock offset: -7.171 ms Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 28.781 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.63 Mbit/s

95th percentile per-packet one-way delay: 28.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.94 Mbit/s

95th percentile per-packet one-way delay: 27.666 ms

Loss rate: 0.01%

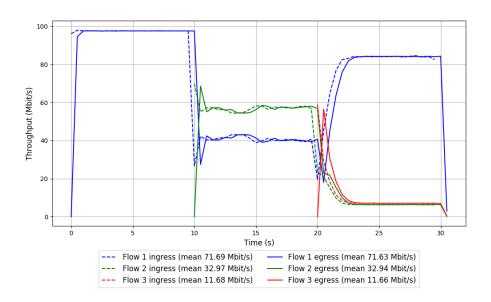
-- Flow 3:

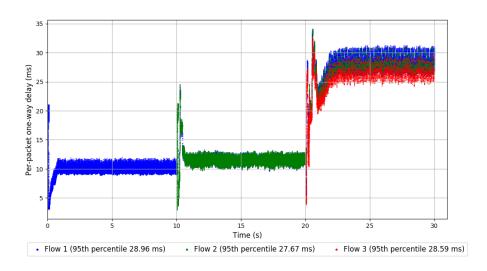
Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 28.585 ms

Loss rate: 0.01%

Run 5: Report of TCP BBR — Data Link





## Run 1: Statistics of Copa

Start at: 2019-12-11 06:36:38 End at: 2019-12-11 06:37:08 Local clock offset: -7.102 ms Remote clock offset: -0.387 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 1.678 ms

Loss rate: 68.01%

-- Flow 1:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 1.678  ${\tt ms}$ 

Loss rate: 67.95%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1.684 ms

Loss rate: 91.31%

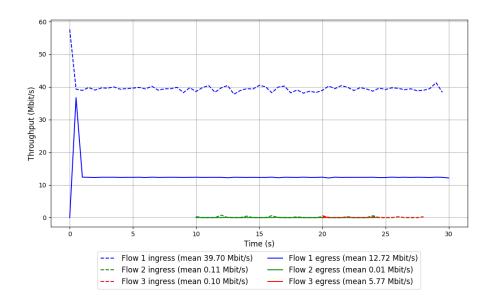
-- Flow 3:

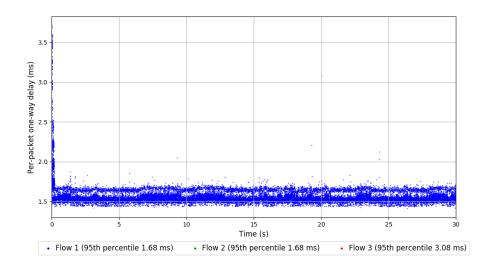
Average throughput: 5.77 Mbit/s

95th percentile per-packet one-way delay: 3.078 ms

Loss rate: 92.19%

Run 1: Report of Copa — Data Link





## Run 2: Statistics of Copa

Start at: 2019-12-11 07:03:53 End at: 2019-12-11 07:04:23 Local clock offset: -6.294 ms Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 1.019 ms

Loss rate: 67.97%

-- Flow 1:

Average throughput: 12.62 Mbit/s

95th percentile per-packet one-way delay: 1.019  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 67.79%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 0.921 ms

Loss rate: 80.13%

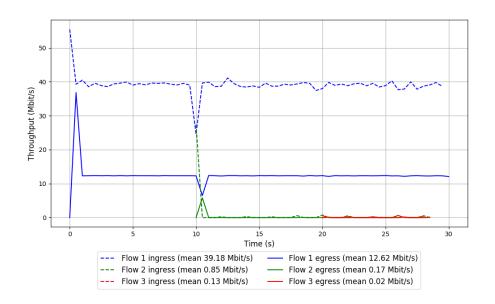
-- Flow 3:

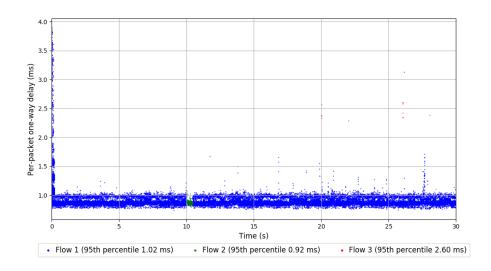
Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 2.604 ms

Loss rate: 87.12%

Run 2: Report of Copa — Data Link





## Run 3: Statistics of Copa

Start at: 2019-12-11 07:31:08 End at: 2019-12-11 07:31:38 Local clock offset: -5.725 ms Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 1.723 ms

Loss rate: 69.15%

-- Flow 1:

Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 1.728 ms

Loss rate: 67.98%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 3.334 ms

Loss rate: 93.32%

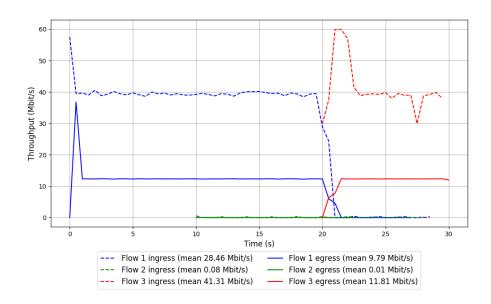
-- Flow 3:

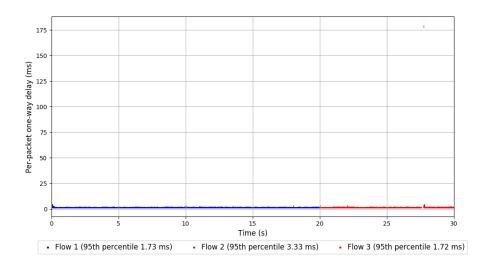
Average throughput: 11.81 Mbit/s

95th percentile per-packet one-way delay: 1.716 ms

Loss rate: 71.40%

Run 3: Report of Copa — Data Link





## Run 4: Statistics of Copa

Start at: 2019-12-11 07:58:24 End at: 2019-12-11 07:58:54 Local clock offset: -5.598 ms Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 1.725 ms

Loss rate: 67.96%

-- Flow 1:

Average throughput: 12.71 Mbit/s

95th percentile per-packet one-way delay: 1.724 ms

Loss rate: 67.91%

-- Flow 2:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 3.294 ms

Loss rate: 81.50%

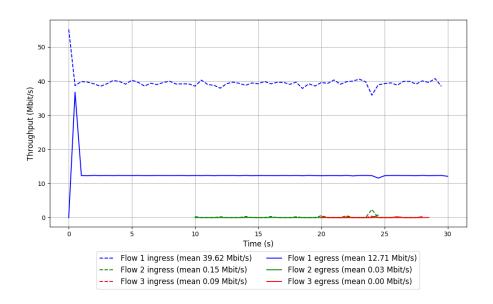
-- Flow 3:

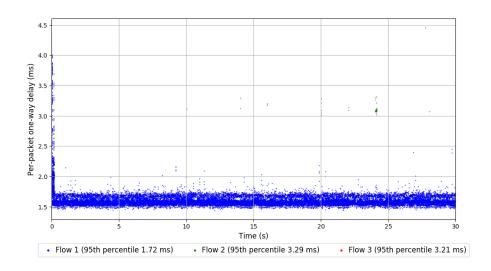
Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 3.214 ms

Loss rate: 94.95%

Run 4: Report of Copa — Data Link





## Run 5: Statistics of Copa

Start at: 2019-12-11 08:25:40 End at: 2019-12-11 08:26:10 Local clock offset: -7.038 ms Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-12-11 08:49:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 3.155 ms

Loss rate: 67.57%

-- Flow 1:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay:  $3.164~\mathrm{ms}$ 

Loss rate: 65.96%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1.779 ms

Loss rate: 91.89%

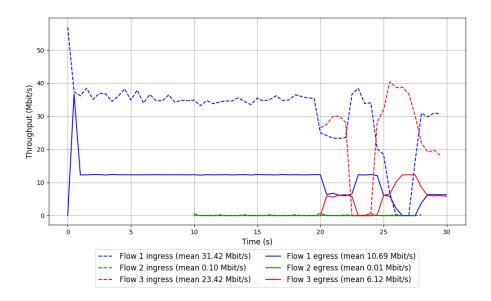
-- Flow 3:

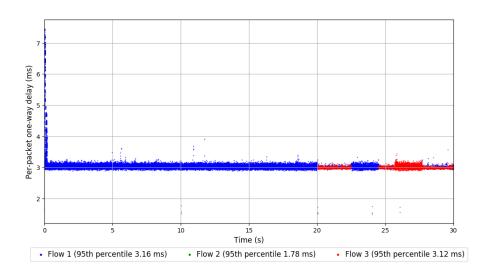
Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 3.115 ms

Loss rate: 73.88%

Run 5: Report of Copa — Data Link





## Run 1: Statistics of TCP Cubic

Start at: 2019-12-11 06:37:45 End at: 2019-12-11 06:38:15 Local clock offset: -7.166 ms Remote clock offset: -0.378 ms

# Below is generated by plot.py at 2019-12-11 08:49:54

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 33.059 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 62.13 Mbit/s

95th percentile per-packet one-way delay: 33.234 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 37.32 Mbit/s

95th percentile per-packet one-way delay: 31.837 ms

Loss rate: 0.04%

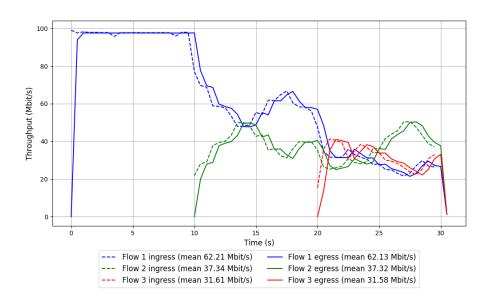
-- Flow 3:

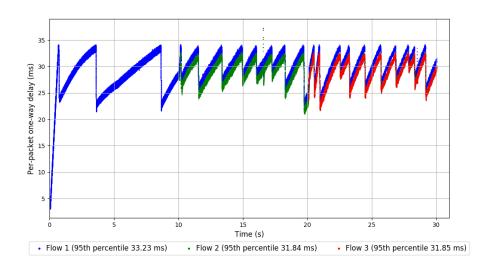
Average throughput: 31.58 Mbit/s

95th percentile per-packet one-way delay: 31.847 ms

Loss rate: 0.03%

Run 1: Report of TCP Cubic — Data Link





## Run 2: Statistics of TCP Cubic

Start at: 2019-12-11 07:05:00 End at: 2019-12-11 07:05:30 Local clock offset: -6.32 ms Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2019-12-11 08:50:06

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 32.639 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 62.44 Mbit/s

95th percentile per-packet one-way delay: 32.642 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 37.72 Mbit/s

95th percentile per-packet one-way delay: 32.678 ms

Loss rate: 0.04%

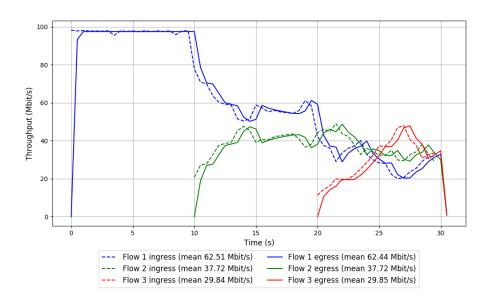
-- Flow 3:

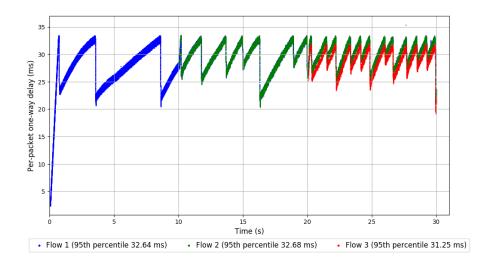
Average throughput: 29.85 Mbit/s

95th percentile per-packet one-way delay: 31.253 ms

Loss rate: 0.02%

Run 2: Report of TCP Cubic — Data Link





## Run 3: Statistics of TCP Cubic

Start at: 2019-12-11 07:32:15 End at: 2019-12-11 07:32:45 Local clock offset: -5.731 ms Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2019-12-11 08:50:06

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 33.334 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 65.68 Mbit/s

95th percentile per-packet one-way delay: 33.335 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 33.50 Mbit/s

95th percentile per-packet one-way delay: 33.379 ms

Loss rate: 0.04%

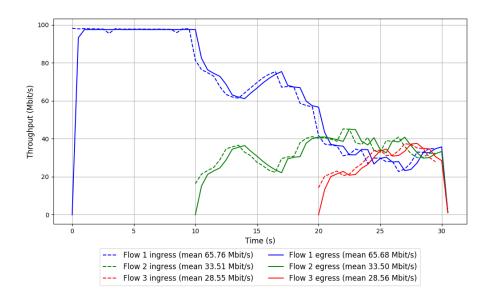
-- Flow 3:

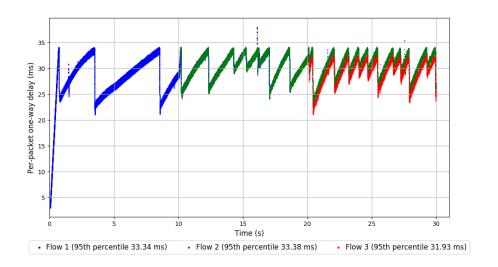
Average throughput: 28.56 Mbit/s

95th percentile per-packet one-way delay: 31.929 ms

Loss rate: 0.03%

Run 3: Report of TCP Cubic — Data Link





## Run 4: Statistics of TCP Cubic

Start at: 2019-12-11 07:59:30 End at: 2019-12-11 08:00:00 Local clock offset: -5.576 ms Remote clock offset: 0.14 ms

# Below is generated by plot.py at 2019-12-11 08:50:43

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 32.633 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 67.70 Mbit/s

95th percentile per-packet one-way delay: 31.803 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 31.91 Mbit/s

95th percentile per-packet one-way delay: 33.348 ms

Loss rate: 0.03%

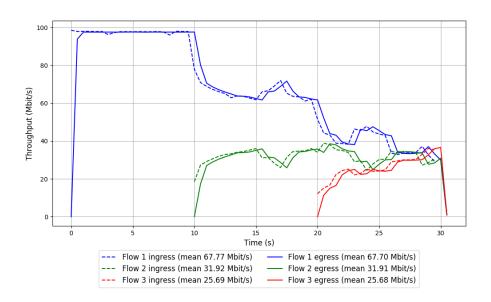
-- Flow 3:

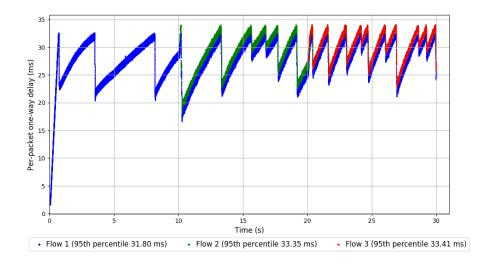
Average throughput: 25.68 Mbit/s

95th percentile per-packet one-way delay: 33.406 ms

Loss rate: 0.03%

Run 4: Report of TCP Cubic — Data Link





## Run 5: Statistics of TCP Cubic

Start at: 2019-12-11 08:26:46 End at: 2019-12-11 08:27:16 Local clock offset: -6.381 ms Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-12-11 08:50:44

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 32.347 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 64.21 Mbit/s

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

Loss rate: 0.04%

-- Flow 2:

Average throughput: 37.29 Mbit/s

95th percentile per-packet one-way delay: 31.068 ms

Loss rate: 0.03%

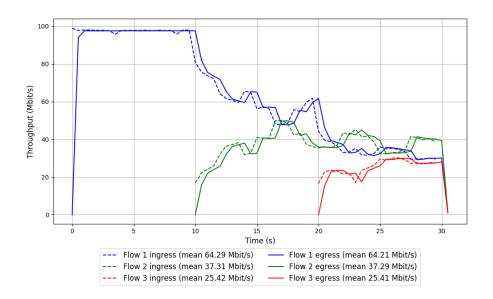
-- Flow 3:

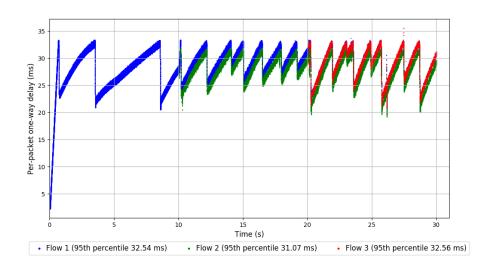
Average throughput: 25.41 Mbit/s

95th percentile per-packet one-way delay: 32.565 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link





## Run 1: Statistics of FillP

Start at: 2019-12-11 06:52:30 End at: 2019-12-11 06:53:00 Local clock offset: -6.306 ms Remote clock offset: -0.334 ms

# Below is generated by plot.py at 2019-12-11 08:51:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 93.00 Mbit/s

95th percentile per-packet one-way delay: 29.155 ms

Loss rate: 19.12%

-- Flow 1:

Average throughput: 43.38 Mbit/s

95th percentile per-packet one-way delay: 27.560 ms

Loss rate: 9.06%

-- Flow 2:

Average throughput: 56.77 Mbit/s

95th percentile per-packet one-way delay: 30.080 ms

Loss rate: 17.56%

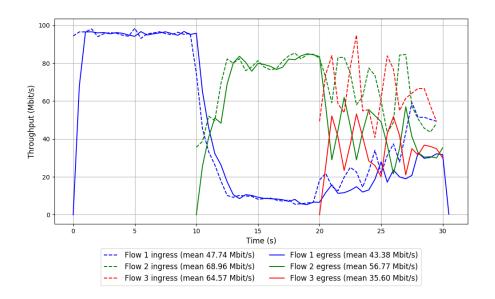
-- Flow 3:

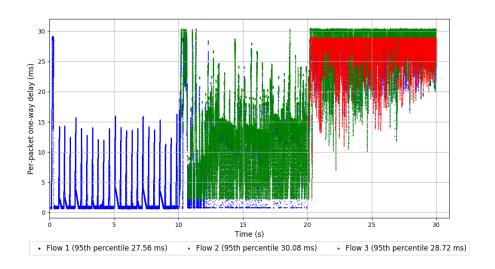
Average throughput: 35.60 Mbit/s

95th percentile per-packet one-way delay: 28.724 ms

Loss rate: 44.83%

Run 1: Report of FillP — Data Link





### Run 2: Statistics of FillP

Start at: 2019-12-11 07:19:46 End at: 2019-12-11 07:20:16 Local clock offset: -6.094 ms Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2019-12-11 08:51:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 88.30 Mbit/s

95th percentile per-packet one-way delay: 30.699 ms

Loss rate: 9.71%

-- Flow 1:

Average throughput: 69.88 Mbit/s

95th percentile per-packet one-way delay: 30.812 ms

Loss rate: 7.97%

-- Flow 2:

Average throughput: 19.48 Mbit/s

95th percentile per-packet one-way delay: 29.032 ms

Loss rate: 11.68%

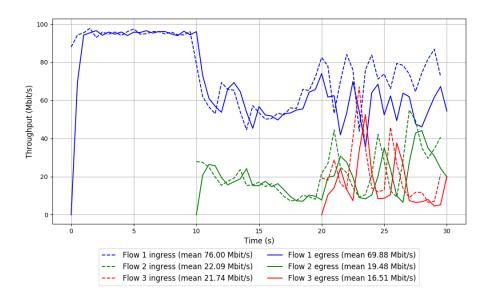
-- Flow 3:

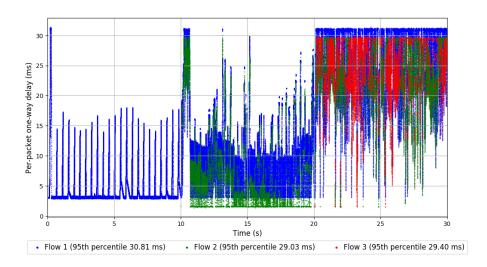
Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 29.399 ms

Loss rate: 23.94%

Run 2: Report of FillP — Data Link





### Run 3: Statistics of FillP

Start at: 2019-12-11 07:47:01 End at: 2019-12-11 07:47:31 Local clock offset: -5.654 ms Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2019-12-11 08:51:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.23 Mbit/s

95th percentile per-packet one-way delay: 30.454 ms

Loss rate: 15.87%

-- Flow 1:

Average throughput: 45.66 Mbit/s

95th percentile per-packet one-way delay: 26.226 ms

Loss rate: 3.30%

-- Flow 2:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 29.353 ms

Loss rate: 18.43%

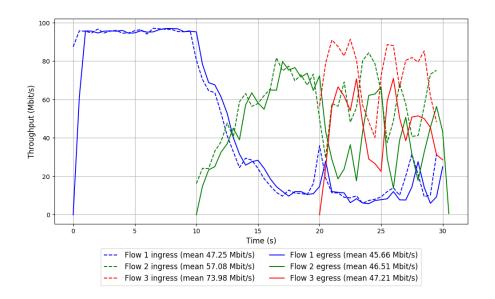
-- Flow 3:

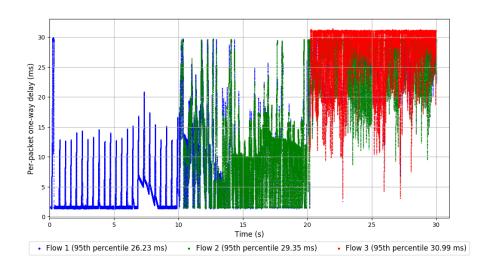
Average throughput: 47.21 Mbit/s

95th percentile per-packet one-way delay: 30.992 ms

Loss rate: 36.16%

Run 3: Report of FillP — Data Link





### Run 4: Statistics of FillP

Start at: 2019-12-11 08:14:16 End at: 2019-12-11 08:14:46 Local clock offset: -5.616 ms Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2019-12-11 08:51:21

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.52 Mbit/s

95th percentile per-packet one-way delay: 29.646 ms

Loss rate: 19.16%

-- Flow 1:

Average throughput: 44.18 Mbit/s

95th percentile per-packet one-way delay: 28.044 ms

Loss rate: 14.10%

-- Flow 2:

Average throughput: 62.43 Mbit/s

95th percentile per-packet one-way delay: 30.087 ms

Loss rate: 15.91%

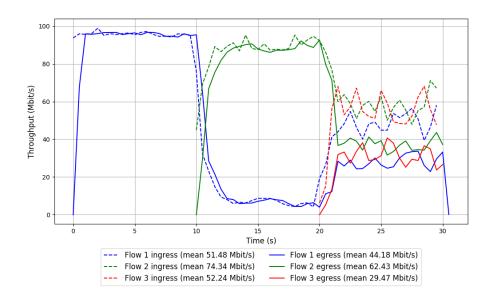
-- Flow 3:

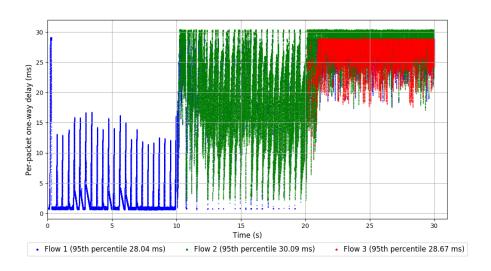
Average throughput: 29.47 Mbit/s

95th percentile per-packet one-way delay: 28.669 ms

Loss rate: 43.50%

Run 4: Report of FillP — Data Link





### Run 5: Statistics of FillP

Start at: 2019-12-11 08:41:31 End at: 2019-12-11 08:42:01 Local clock offset: -6.063 ms Remote clock offset: 0.187 ms

# Below is generated by plot.py at 2019-12-11 08:51:36

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.40 Mbit/s

95th percentile per-packet one-way delay: 29.001 ms

Loss rate: 19.53%

-- Flow 1:

Average throughput: 51.14 Mbit/s

95th percentile per-packet one-way delay: 29.706 ms

Loss rate: 11.59%

-- Flow 2:

Average throughput: 49.27 Mbit/s

95th percentile per-packet one-way delay: 28.696 ms

Loss rate: 19.51%

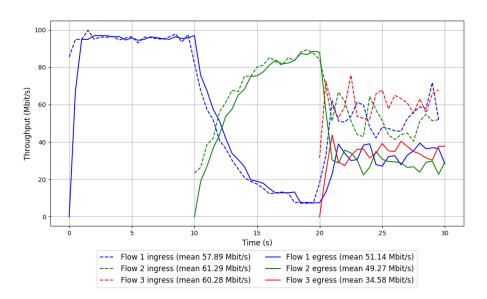
-- Flow 3:

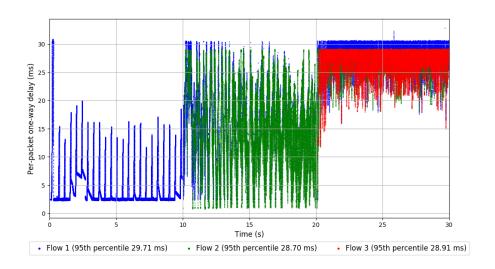
Average throughput: 34.58 Mbit/s

95th percentile per-packet one-way delay: 28.915 ms

Loss rate: 42.56%

Run 5: Report of FillP — Data Link





### Run 1: Statistics of FillP-Sheep

Start at: 2019-12-11 06:34:24 End at: 2019-12-11 06:34:54 Local clock offset: -7.082 ms Remote clock offset: -0.369 ms

# Below is generated by plot.py at 2019-12-11 08:51:36

# Datalink statistics
-- Total of 3 flows:

Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 17.268 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 45.75 Mbit/s

95th percentile per-packet one-way delay: 14.221 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 48.76 Mbit/s

95th percentile per-packet one-way delay: 18.478 ms

Loss rate: 0.45%

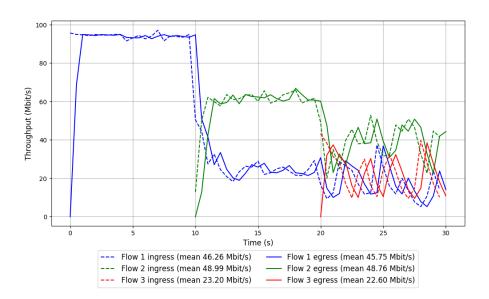
-- Flow 3:

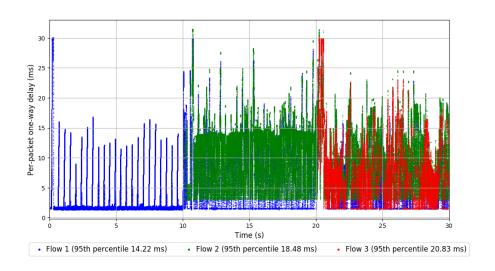
Average throughput: 22.60 Mbit/s

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

Loss rate: 2.57%

Run 1: Report of FillP-Sheep — Data Link





### Run 2: Statistics of FillP-Sheep

Start at: 2019-12-11 07:01:38 End at: 2019-12-11 07:02:08 Local clock offset: -6.34 ms Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2019-12-11 08:52:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.52 Mbit/s

95th percentile per-packet one-way delay: 21.083 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 58.38 Mbit/s

95th percentile per-packet one-way delay: 17.940 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 20.463 ms

Loss rate: 1.34%

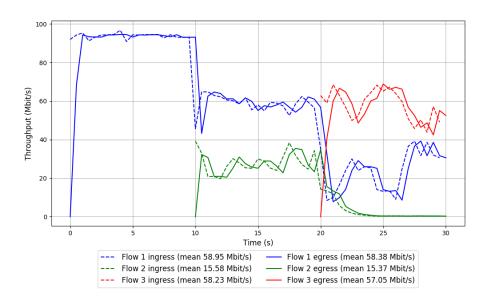
-- Flow 3:

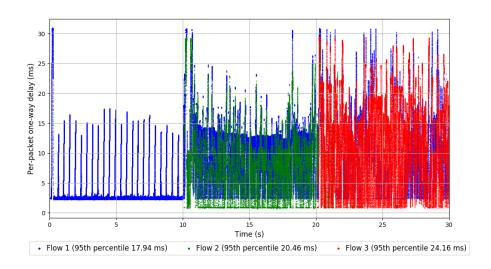
Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 24.162 ms

Loss rate: 1.94%

Run 2: Report of FillP-Sheep — Data Link





### Run 3: Statistics of FillP-Sheep

Start at: 2019-12-11 07:28:54 End at: 2019-12-11 07:29:24 Local clock offset: -5.803 ms Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2019-12-11 08:52:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 78.58 Mbit/s

95th percentile per-packet one-way delay: 15.120 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 14.044 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 29.19 Mbit/s

95th percentile per-packet one-way delay: 16.838 ms

Loss rate: 0.35%

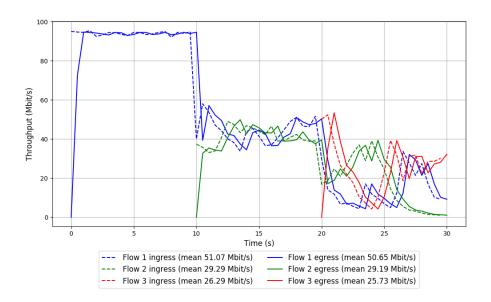
-- Flow 3:

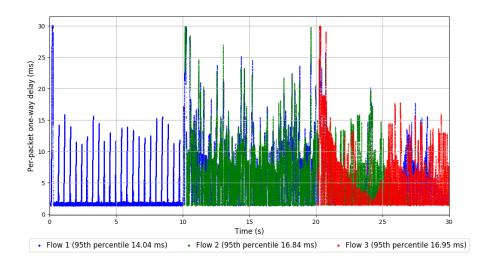
Average throughput: 25.73 Mbit/s

95th percentile per-packet one-way delay: 16.947 ms

Loss rate: 2.19%

Run 3: Report of FillP-Sheep — Data Link





# Run 4: Statistics of FillP-Sheep

Start at: 2019-12-11 07:56:09 End at: 2019-12-11 07:56:39 Local clock offset: -5.598 ms Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2019-12-11 08:52:15

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.06 Mbit/s

95th percentile per-packet one-way delay: 20.862 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 57.32 Mbit/s

95th percentile per-packet one-way delay: 18.085 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 17.27 Mbit/s

95th percentile per-packet one-way delay: 22.838 ms

Loss rate: 2.77%

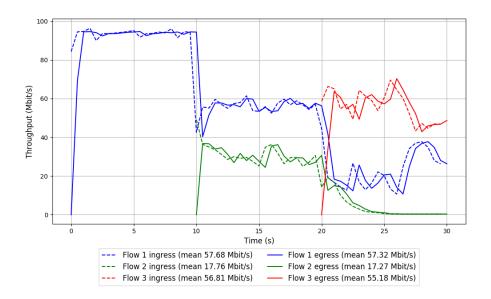
-- Flow 3:

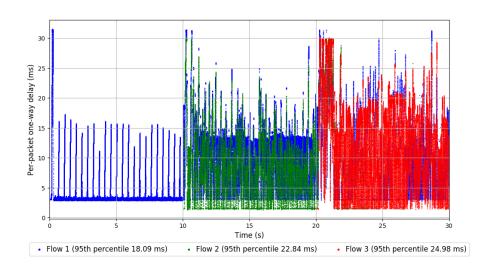
Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 24.978 ms

Loss rate: 2.83%

Run 4: Report of FillP-Sheep — Data Link





# Run 5: Statistics of FillP-Sheep

Start at: 2019-12-11 08:23:24 End at: 2019-12-11 08:23:54 Local clock offset: -6.935 ms Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2019-12-11 08:52:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 23.949 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 23.479 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 34.61 Mbit/s

95th percentile per-packet one-way delay: 24.472 ms

Loss rate: 1.57%

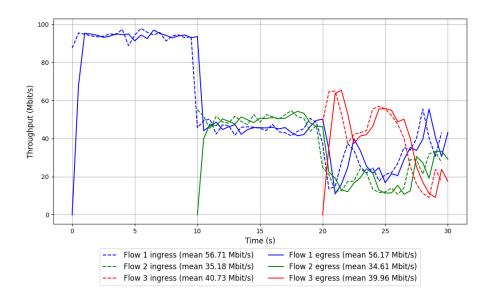
-- Flow 3:

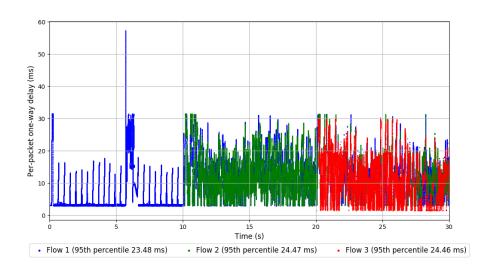
Average throughput: 39.96 Mbit/s

95th percentile per-packet one-way delay: 24.462 ms

Loss rate: 1.85%

Run 5: Report of FillP-Sheep — Data Link





# Run 1: Statistics of Indigo

Start at: 2019-12-11 06:43:23 End at: 2019-12-11 06:43:53 Local clock offset: -6.362 ms Remote clock offset: -0.332 ms

# Below is generated by plot.py at 2019-12-11 08:52:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.24 Mbit/s

95th percentile per-packet one-way delay: 12.271 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.15 Mbit/s

95th percentile per-packet one-way delay: 11.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 10.901 ms

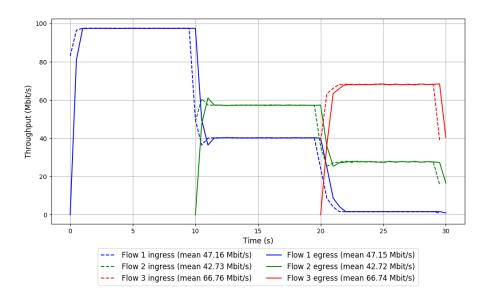
Loss rate: 0.00%

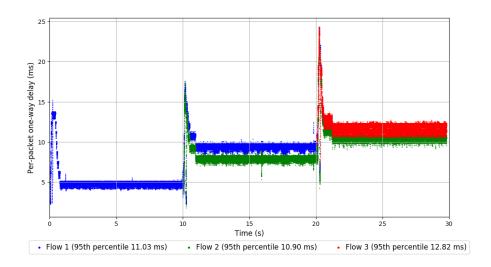
-- Flow 3:

Average throughput: 66.74 Mbit/s

95th percentile per-packet one-way delay: 12.822 ms

Run 1: Report of Indigo — Data Link





# Run 2: Statistics of Indigo

Start at: 2019-12-11 07:10:38 End at: 2019-12-11 07:11:08 Local clock offset: -6.751 ms Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-12-11 08:52:34

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.28 Mbit/s

95th percentile per-packet one-way delay: 11.276 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.08 Mbit/s

95th percentile per-packet one-way delay: 9.966 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 11.829 ms

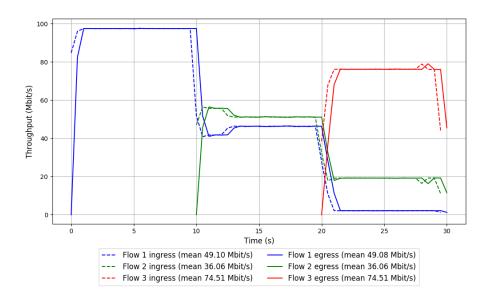
Loss rate: 0.00%

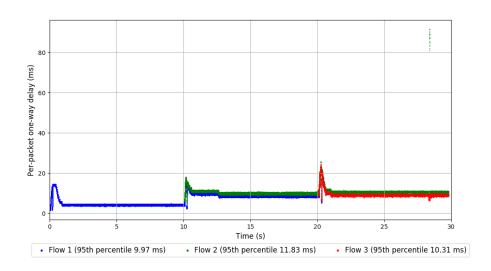
-- Flow 3:

Average throughput: 74.51 Mbit/s

95th percentile per-packet one-way delay: 10.311 ms

Run 2: Report of Indigo — Data Link





# Run 3: Statistics of Indigo

Start at: 2019-12-11 07:37:53 End at: 2019-12-11 07:38:23 Local clock offset: -4.932 ms Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2019-12-11 08:52:34

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.24 Mbit/s

95th percentile per-packet one-way delay: 9.850 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.33 Mbit/s

95th percentile per-packet one-way delay: 9.794  ${\tt ms}$ 

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.57 Mbit/s

95th percentile per-packet one-way delay: 9.231 ms

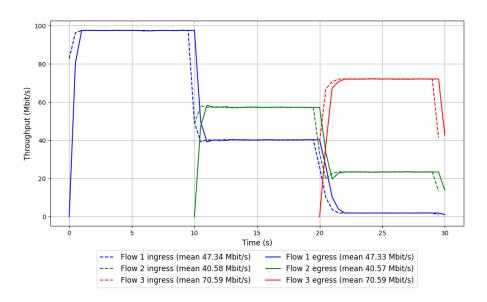
Loss rate: 0.00%

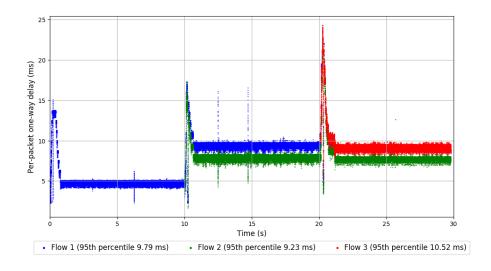
-- Flow 3:

Average throughput: 70.59 Mbit/s

95th percentile per-packet one-way delay: 10.523 ms

Run 3: Report of Indigo — Data Link





# Run 4: Statistics of Indigo

Start at: 2019-12-11 08:05:08 End at: 2019-12-11 08:05:38 Local clock offset: -4.83 ms Remote clock offset: 0.175 ms

# Below is generated by plot.py at 2019-12-11 08:52:47

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.23 Mbit/s

95th percentile per-packet one-way delay: 9.798 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.74 Mbit/s

95th percentile per-packet one-way delay: 9.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.14 Mbit/s

95th percentile per-packet one-way delay: 9.547 ms

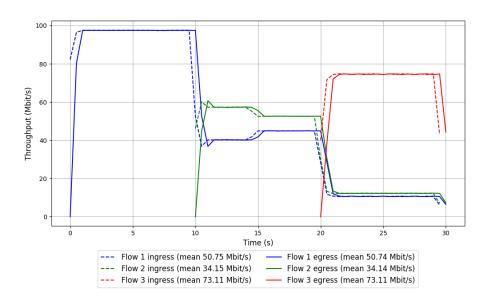
Loss rate: 0.00%

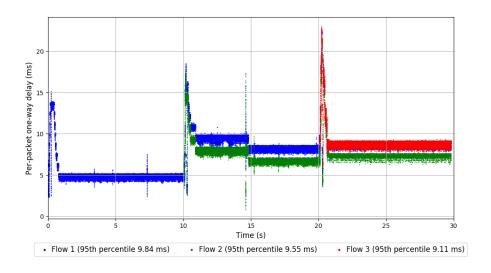
-- Flow 3:

Average throughput: 73.11 Mbit/s

95th percentile per-packet one-way delay: 9.113 ms

Run 4: Report of Indigo — Data Link





# Run 5: Statistics of Indigo

Start at: 2019-12-11 08:32:24 End at: 2019-12-11 08:32:54 Local clock offset: -7.29 ms Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2019-12-11 08:53:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 96.46 Mbit/s

95th percentile per-packet one-way delay: 11.499 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.17 Mbit/s

95th percentile per-packet one-way delay: 9.990  ${\tt ms}$ 

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.06 Mbit/s

95th percentile per-packet one-way delay: 12.238 ms

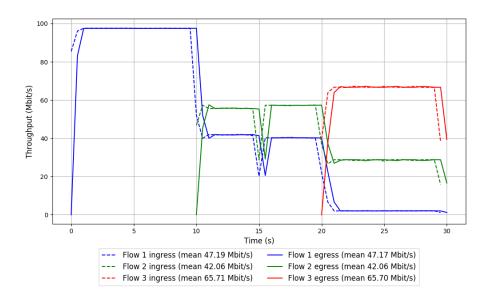
Loss rate: 0.00%

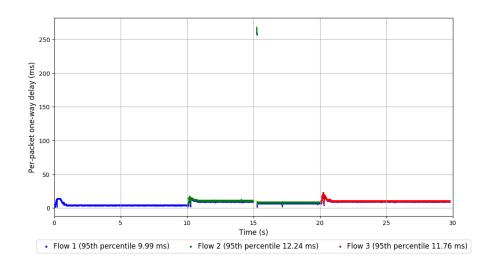
-- Flow 3:

Average throughput: 65.70 Mbit/s

95th percentile per-packet one-way delay: 11.755 ms

Run 5: Report of Indigo — Data Link



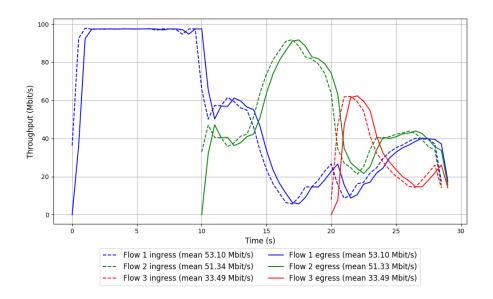


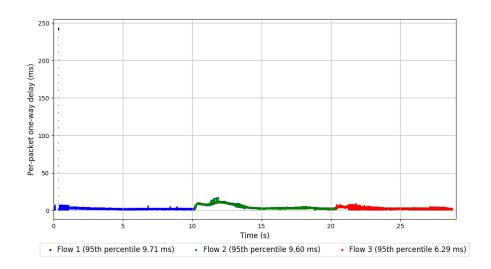
### Run 1: Statistics of Indigo-MusesC3

Start at: 2019-12-11 06:33:14 End at: 2019-12-11 06:33:44 Local clock offset: -6.359 ms Remote clock offset: -0.358 ms # Below is generated by plot.py at 2019-12-11 08:53:12 # Datalink statistics -- Total of 3 flows: Average throughput: 96.17 Mbit/s 95th percentile per-packet one-way delay: 9.458 ms Loss rate: 0.00% -- Flow 1: Average throughput: 53.10 Mbit/s 95th percentile per-packet one-way delay: 9.711 ms Loss rate: 0.00% -- Flow 2: Average throughput: 51.33 Mbit/s 95th percentile per-packet one-way delay: 9.602 ms Loss rate: 0.00% -- Flow 3: Average throughput: 33.49 Mbit/s

95th percentile per-packet one-way delay: 6.291 ms

Run 1: Report of Indigo-MusesC3 — Data Link





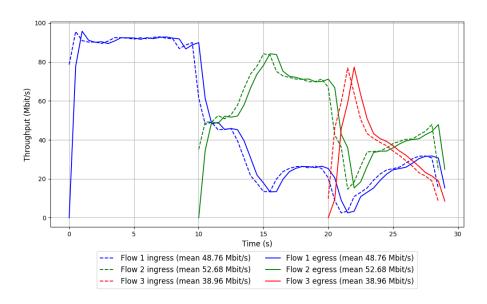
### Run 2: Statistics of Indigo-MusesC3

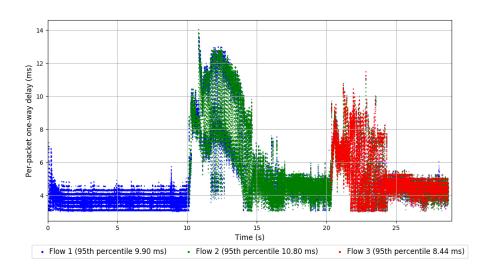
Start at: 2019-12-11 07:00:29

Loss rate: 0.00%

End at: 2019-12-11 07:00:59 Local clock offset: -6.986 ms Remote clock offset: -0.098 ms # Below is generated by plot.py at 2019-12-11 08:53:21 # Datalink statistics -- Total of 3 flows: Average throughput: 94.44 Mbit/s 95th percentile per-packet one-way delay: 10.132 ms Loss rate: 0.00% -- Flow 1: Average throughput: 48.76 Mbit/s 95th percentile per-packet one-way delay: 9.900 ms Loss rate: 0.00% -- Flow 2: Average throughput: 52.68 Mbit/s 95th percentile per-packet one-way delay: 10.801 ms Loss rate: 0.00% -- Flow 3: Average throughput: 38.96 Mbit/s 95th percentile per-packet one-way delay: 8.435 ms

Run 2: Report of Indigo-MusesC3 — Data Link



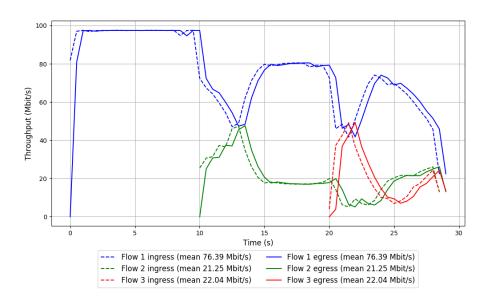


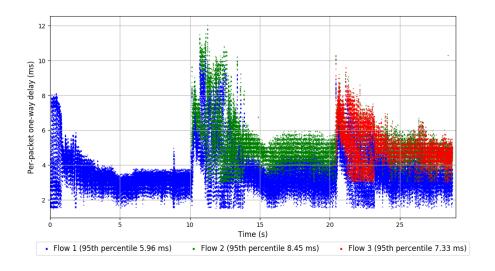
### Run 3: Statistics of Indigo-MusesC3

Loss rate: 0.00%

Start at: 2019-12-11 07:27:45 End at: 2019-12-11 07:28:15 Local clock offset: -5.838 ms Remote clock offset: 0.073 ms # Below is generated by plot.py at 2019-12-11 08:53:24 # Datalink statistics -- Total of 3 flows: Average throughput: 96.63 Mbit/s 95th percentile per-packet one-way delay: 6.790 ms Loss rate: 0.00% -- Flow 1: Average throughput: 76.39 Mbit/s 95th percentile per-packet one-way delay: 5.956 ms Loss rate: 0.00% -- Flow 2: Average throughput: 21.25 Mbit/s 95th percentile per-packet one-way delay: 8.447 ms Loss rate: 0.00% -- Flow 3: Average throughput: 22.04 Mbit/s 95th percentile per-packet one-way delay: 7.335 ms

Run 3: Report of Indigo-MusesC3 — Data Link





### Run 4: Statistics of Indigo-MusesC3

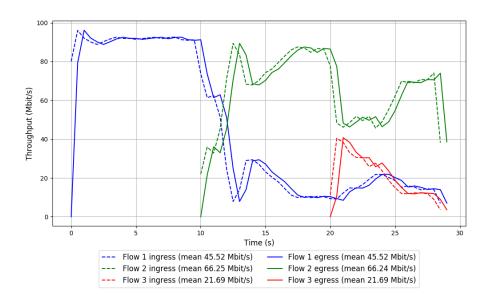
Start at: 2019-12-11 07:55:00

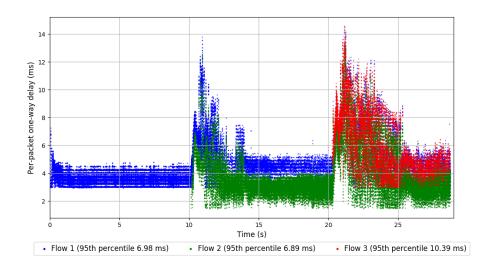
End at: 2019-12-11 07:55:30 Local clock offset: -5.604 ms Remote clock offset: 0.1 ms # Below is generated by plot.py at 2019-12-11 08:53:35 # Datalink statistics -- Total of 3 flows: Average throughput: 94.79 Mbit/s 95th percentile per-packet one-way delay: 7.657 ms Loss rate: 0.00% -- Flow 1: Average throughput: 45.52 Mbit/s 95th percentile per-packet one-way delay:  $6.982~\mathrm{ms}$ Loss rate: 0.00% -- Flow 2: Average throughput: 66.24 Mbit/s 95th percentile per-packet one-way delay: 6.895 ms Loss rate: 0.00%

-- Flow 3: Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 10.392 ms

Run 4: Report of Indigo-MusesC3 — Data Link





# Run 5: Statistics of Indigo-MusesC3

Start at: 2019-12-11 08:22:15 End at: 2019-12-11 08:22:45 Local clock offset: -6.194 ms Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-12-11 08:53:44

# Datalink statistics
-- Total of 3 flows:

Average throughput: 96.56 Mbit/s

95th percentile per-packet one-way delay: 10.225 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.66 Mbit/s

95th percentile per-packet one-way delay: 8.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.78 Mbit/s

95th percentile per-packet one-way delay: 11.375 ms

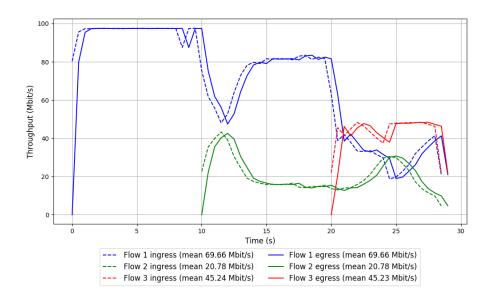
Loss rate: 0.00%

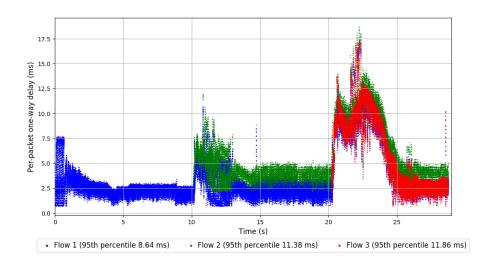
-- Flow 3:

Average throughput: 45.23 Mbit/s

95th percentile per-packet one-way delay: 11.863 ms

Run 5: Report of Indigo-MusesC3 — Data Link





# Run 1: Statistics of Indigo-MusesC5

Start at: 2019-12-11 06:45:43

End at: 2019-12-11 06:46:13 Local clock offset: -7.025 ms Remote clock offset: -0.365 ms # Below is generated by plot.py at 2019-12-11 08:53:44 # Datalink statistics -- Total of 3 flows: Average throughput: 67.32 Mbit/s 95th percentile per-packet one-way delay: 4.787 ms Loss rate: 0.00% -- Flow 1: Average throughput: 31.62 Mbit/s 95th percentile per-packet one-way delay: 5.286 ms Loss rate: 0.00% -- Flow 2: Average throughput: 38.69 Mbit/s 95th percentile per-packet one-way delay: 4.166 ms

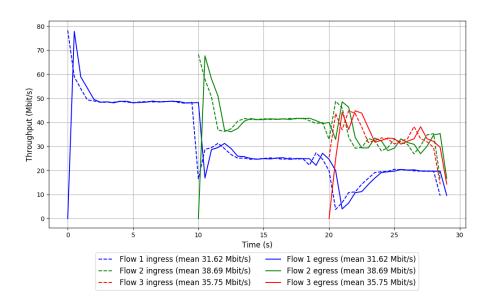
Loss rate: 0.00%

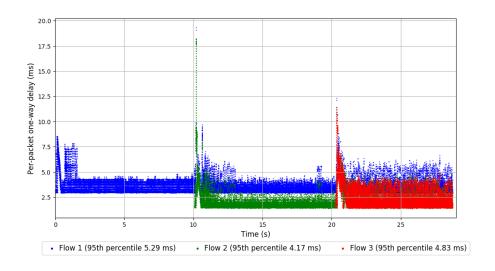
-- Flow 3:

Average throughput: 35.75 Mbit/s

95th percentile per-packet one-way delay: 4.831 ms

Run 1: Report of Indigo-MusesC5 — Data Link





# Run 2: Statistics of Indigo-MusesC5

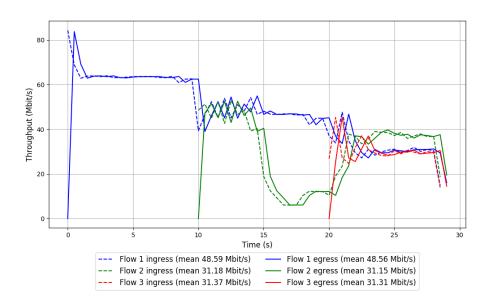
Start at: 2019-12-11 07:12:58

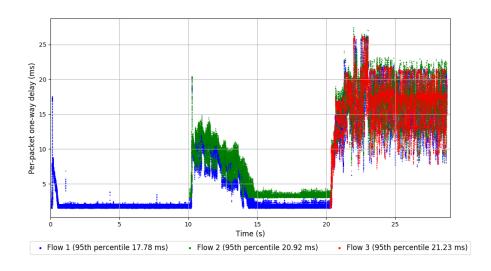
End at: 2019-12-11 07:13:28 Local clock offset: -6.523 ms Remote clock offset: -0.052 ms # Below is generated by plot.py at 2019-12-11 08:53:46 # Datalink statistics -- Total of 3 flows: Average throughput: 78.01 Mbit/s 95th percentile per-packet one-way delay: 19.901 ms Loss rate: 0.00% -- Flow 1: Average throughput: 48.56 Mbit/s 95th percentile per-packet one-way delay: 17.781 ms Loss rate: 0.00% -- Flow 2: Average throughput: 31.15 Mbit/s 95th percentile per-packet one-way delay: 20.922 ms Loss rate: 0.00% -- Flow 3:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 21.234 ms

Run 2: Report of Indigo-MusesC5 — Data Link





# Run 3: Statistics of Indigo-MusesC5

Start at: 2019-12-11 07:40:13
End at: 2019-12-11 07:40:43
Local clock offset: -5.696 ms
Remote clock offset: 0.106 ms
# Below is generated by plot.

# Below is generated by plot.py at 2019-12-11 08:54:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 82.08 Mbit/s

95th percentile per-packet one-way delay: 26.474 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 47.59 Mbit/s

95th percentile per-packet one-way delay: 25.206 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 36.76 Mbit/s

95th percentile per-packet one-way delay: 26.175 ms

Loss rate: 0.44%

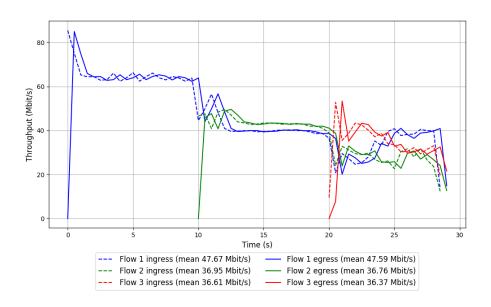
-- Flow 3:

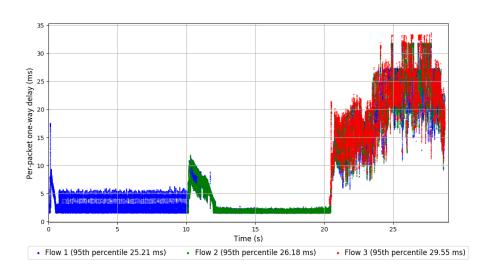
Average throughput: 36.37 Mbit/s

95th percentile per-packet one-way delay: 29.555 ms

Loss rate: 0.46%

Run 3: Report of Indigo-MusesC5 — Data Link





# Run 4: Statistics of Indigo-MusesC5

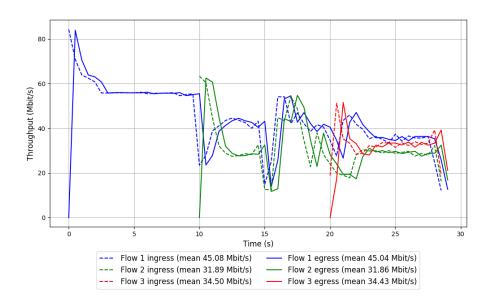
Start at: 2019-12-11 08:07:28

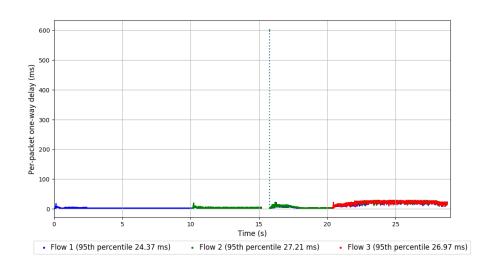
Loss rate: 0.00%

End at: 2019-12-11 08:07:58 Local clock offset: -5.498 ms Remote clock offset: 0.161 ms # Below is generated by plot.py at 2019-12-11 08:54:06 # Datalink statistics -- Total of 3 flows: Average throughput: 75.87 Mbit/s 95th percentile per-packet one-way delay: 26.427 ms Loss rate: 0.00% -- Flow 1: Average throughput: 45.04 Mbit/s 95th percentile per-packet one-way delay: 24.370 ms Loss rate: 0.00% -- Flow 2: Average throughput: 31.86 Mbit/s 95th percentile per-packet one-way delay: 27.213 ms Loss rate: 0.00% -- Flow 3: Average throughput: 34.43 Mbit/s

95th percentile per-packet one-way delay: 26.970 ms

Run 4: Report of Indigo-MusesC5 — Data Link





# Run 5: Statistics of Indigo-MusesC5

Start at: 2019-12-11 08:34:44 End at: 2019-12-11 08:35:14 Local clock offset: -7.283 ms Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2019-12-11 08:54:11

# Datalink statistics
-- Total of 3 flows:

Average throughput: 66.18 Mbit/s

95th percentile per-packet one-way delay: 21.644 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.25 Mbit/s

95th percentile per-packet one-way delay: 20.793 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.83 Mbit/s

95th percentile per-packet one-way delay: 21.365 ms

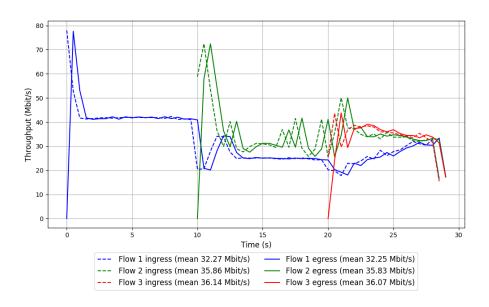
Loss rate: 0.00%

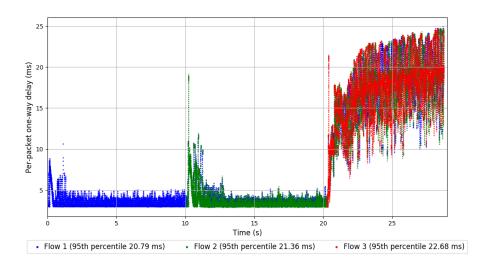
-- Flow 3:

Average throughput: 36.07 Mbit/s

95th percentile per-packet one-way delay: 22.677 ms

Run 5: Report of Indigo-MusesC5 — Data Link





# Run 1: Statistics of Indigo-MusesD

Start at: 2019-12-11 06:55:54 End at: 2019-12-11 06:56:24 Local clock offset: -6.292 ms Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2019-12-11 08:54:28

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.17 Mbit/s

95th percentile per-packet one-way delay: 9.500 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 4.897 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.93 Mbit/s

95th percentile per-packet one-way delay: 10.628 ms

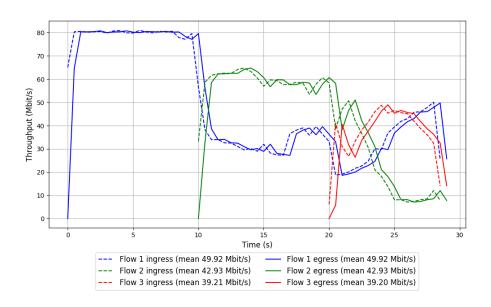
Loss rate: 0.00%

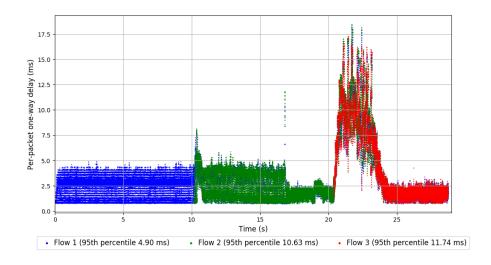
-- Flow 3:

Average throughput: 39.20 Mbit/s

95th percentile per-packet one-way delay: 11.742 ms

Run 1: Report of Indigo-MusesD — Data Link





# Run 2: Statistics of Indigo-MusesD

Start at: 2019-12-11 07:23:10 End at: 2019-12-11 07:23:40 Local clock offset: -5.958 ms Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-12-11 08:54:28

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.01 Mbit/s

95th percentile per-packet one-way delay: 32.447 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 66.98 Mbit/s

95th percentile per-packet one-way delay: 32.405 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 25.19 Mbit/s

95th percentile per-packet one-way delay: 32.694 ms

Loss rate: 2.83%

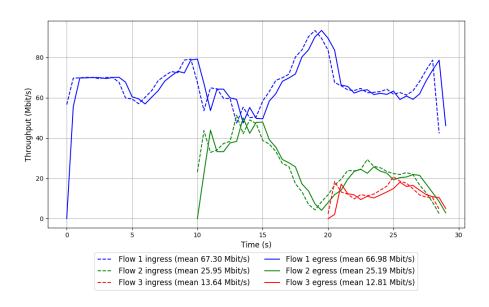
-- Flow 3:

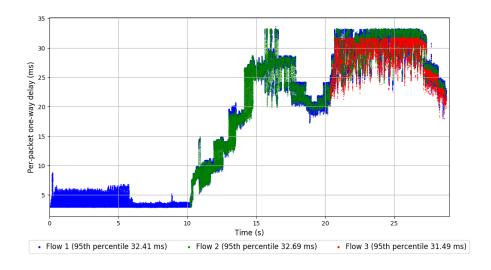
Average throughput: 12.81 Mbit/s

95th percentile per-packet one-way delay: 31.494 ms

Loss rate: 6.06%

Run 2: Report of Indigo-MusesD — Data Link





# Run 3: Statistics of Indigo-MusesD

Start at: 2019-12-11 07:50:26 End at: 2019-12-11 07:50:56 Local clock offset: -4.935 ms Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-12-11 08:54:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.65 Mbit/s

95th percentile per-packet one-way delay: 4.216 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.67 Mbit/s

95th percentile per-packet one-way delay: 4.518 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.43 Mbit/s

95th percentile per-packet one-way delay: 3.691 ms

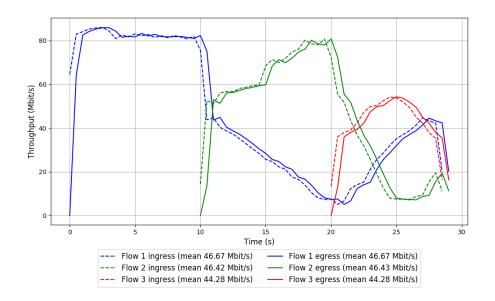
Loss rate: 0.00%

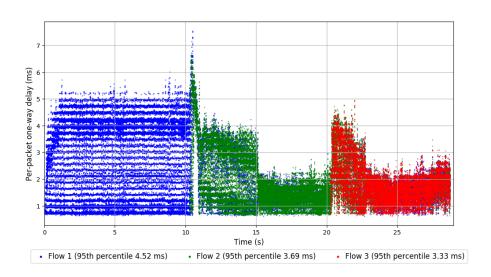
-- Flow 3:

Average throughput: 44.28 Mbit/s

95th percentile per-packet one-way delay: 3.331 ms

Run 3: Report of Indigo-MusesD — Data Link





# Run 4: Statistics of Indigo-MusesD

Start at: 2019-12-11 08:17:40 End at: 2019-12-11 08:18:10 Local clock offset: -6.676 ms Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2019-12-11 08:54:47

# Datalink statistics -- Total of 3 flows:

Average throughput: 88.08 Mbit/s

95th percentile per-packet one-way delay: 5.775 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.66 Mbit/s

95th percentile per-packet one-way delay: 5.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.53 Mbit/s

95th percentile per-packet one-way delay: 5.847 ms

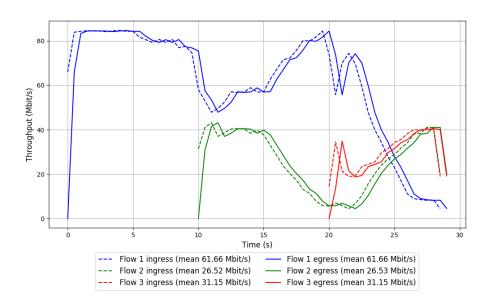
Loss rate: 0.00%

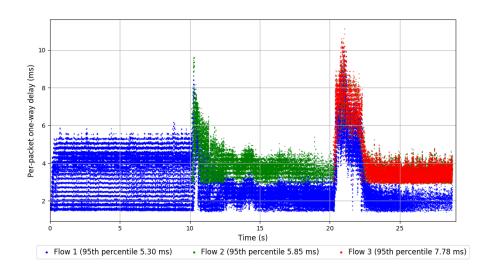
-- Flow 3:

Average throughput: 31.15 Mbit/s

95th percentile per-packet one-way delay: 7.776 ms

Run 4: Report of Indigo-MusesD — Data Link





# Run 5: Statistics of Indigo-MusesD

Start at: 2019-12-11 08:44:56 End at: 2019-12-11 08:45:26 Local clock offset: -6.317 ms Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2019-12-11 08:54:47

# Datalink statistics
-- Total of 3 flows:

Average throughput: 75.10 Mbit/s

95th percentile per-packet one-way delay: 19.924 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.27 Mbit/s

95th percentile per-packet one-way delay: 19.951 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.48 Mbit/s

95th percentile per-packet one-way delay: 19.031 ms

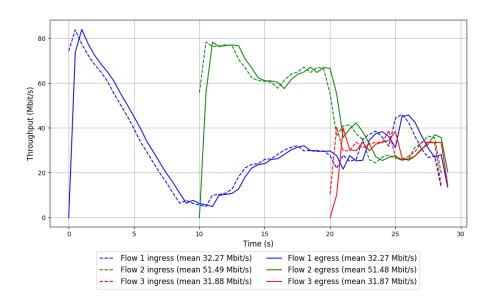
Loss rate: 0.00%

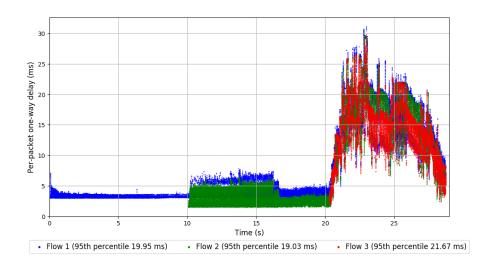
-- Flow 3:

Average throughput: 31.87 Mbit/s

95th percentile per-packet one-way delay: 21.672 ms

Run 5: Report of Indigo-MusesD — Data Link





# Run 1: Statistics of Indigo-MusesT

Start at: 2019-12-11 06:50:15 End at: 2019-12-11 06:50:45 Local clock offset: -6.311 ms Remote clock offset: -0.236 ms

# Below is generated by plot.py at 2019-12-11 08:55:10

# Datalink statistics
-- Total of 3 flows:

Average throughput: 91.81 Mbit/s

95th percentile per-packet one-way delay: 26.618 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 62.05 Mbit/s

95th percentile per-packet one-way delay: 23.669 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 32.96 Mbit/s

95th percentile per-packet one-way delay: 28.104 ms

Loss rate: 0.26%

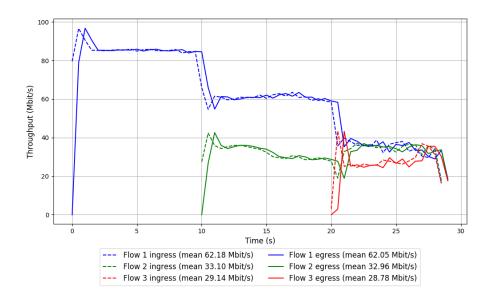
-- Flow 3:

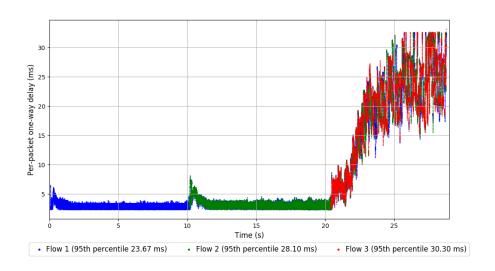
Average throughput: 28.78 Mbit/s

95th percentile per-packet one-way delay: 30.304 ms

Loss rate: 0.94%

Run 1: Report of Indigo-MusesT — Data Link





# Run 2: Statistics of Indigo-MusesT

Start at: 2019-12-11 07:17:31 End at: 2019-12-11 07:18:01 Local clock offset: -6.209 ms Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-12-11 08:55:17

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.49 Mbit/s

95th percentile per-packet one-way delay: 20.988 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.69 Mbit/s

95th percentile per-packet one-way delay: 19.445 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.49 Mbit/s

95th percentile per-packet one-way delay: 22.248 ms

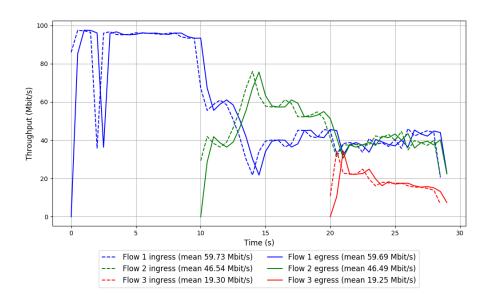
Loss rate: 0.00%

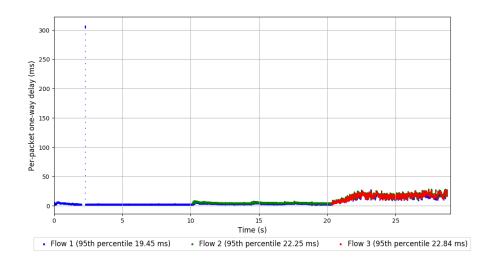
-- Flow 3:

Average throughput: 19.25 Mbit/s

95th percentile per-packet one-way delay: 22.840 ms

Run 2: Report of Indigo-MusesT — Data Link





# Run 3: Statistics of Indigo-MusesT

Start at: 2019-12-11 07:44:46 End at: 2019-12-11 07:45:16 Local clock offset: -5.635 ms Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-12-11 08:55:19

# Datalink statistics
-- Total of 3 flows:

Average throughput: 96.62 Mbit/s

95th percentile per-packet one-way delay: 20.471 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.20 Mbit/s

95th percentile per-packet one-way delay: 18.634 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.80 Mbit/s

95th percentile per-packet one-way delay: 21.213 ms

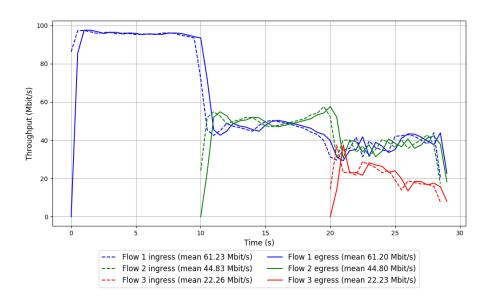
Loss rate: 0.00%

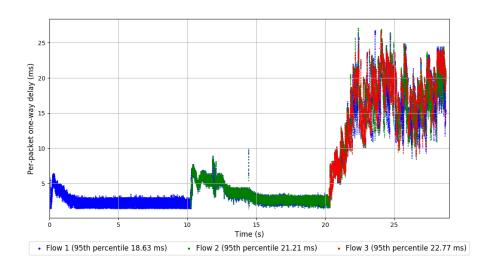
-- Flow 3:

Average throughput: 22.23 Mbit/s

95th percentile per-packet one-way delay: 22.773 ms

Run 3: Report of Indigo-MusesT — Data Link





# Run 4: Statistics of Indigo-MusesT

Start at: 2019-12-11 08:12:01 End at: 2019-12-11 08:12:31 Local clock offset: -6.06 ms Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-12-11 08:55:37

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.51 Mbit/s

95th percentile per-packet one-way delay: 28.655 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 52.93 Mbit/s

95th percentile per-packet one-way delay: 27.111 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 45.57 Mbit/s

95th percentile per-packet one-way delay: 27.971 ms

Loss rate: 0.84%

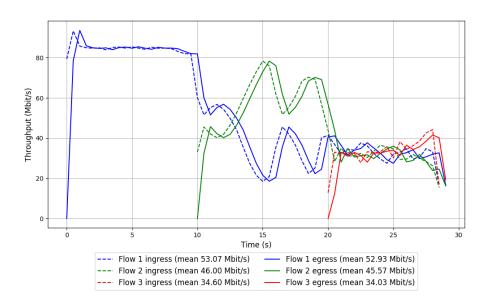
-- Flow 3:

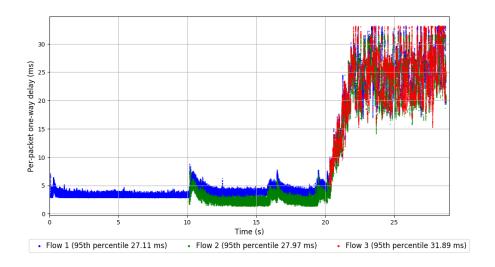
Average throughput: 34.03 Mbit/s

95th percentile per-packet one-way delay: 31.887 ms

Loss rate: 1.48%

Run 4: Report of Indigo-MusesT — Data Link





# Run 5: Statistics of Indigo-MusesT

Start at: 2019-12-11 08:39:17 End at: 2019-12-11 08:39:47 Local clock offset: -7.184 ms Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2019-12-11 08:55:38

# Datalink statistics
-- Total of 3 flows:

Average throughput: 93.30 Mbit/s

95th percentile per-packet one-way delay: 27.722 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 56.19 Mbit/s

95th percentile per-packet one-way delay: 25.802 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 43.85 Mbit/s

95th percentile per-packet one-way delay: 27.491 ms

Loss rate: 0.38%

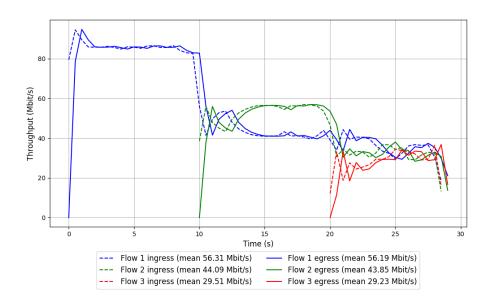
-- Flow 3:

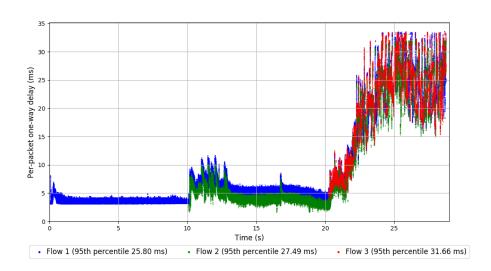
Average throughput: 29.23 Mbit/s

95th percentile per-packet one-way delay: 31.663 ms

Loss rate: 0.64%

Run 5: Report of Indigo-MusesT — Data Link





#### Run 1: Statistics of LEDBAT

Start at: 2019-12-11 06:49:05 End at: 2019-12-11 06:49:35 Local clock offset: -6.31 ms Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2019-12-11 08:55:55

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.15 Mbit/s

95th percentile per-packet one-way delay: 32.358 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 61.73 Mbit/s

95th percentile per-packet one-way delay: 32.194 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 37.89 Mbit/s

95th percentile per-packet one-way delay: 32.411 ms

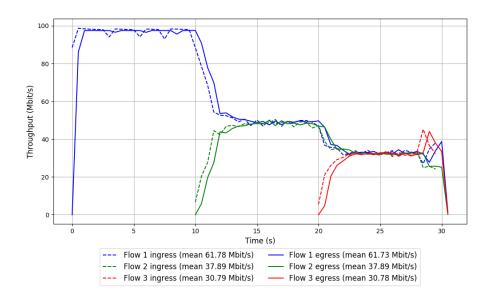
Loss rate: 0.06%

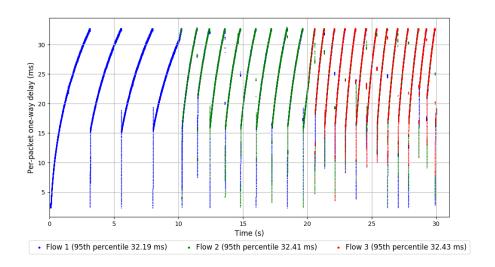
-- Flow 3:

Average throughput: 30.78 Mbit/s

95th percentile per-packet one-way delay: 32.433 ms

Run 1: Report of LEDBAT — Data Link





# Run 2: Statistics of LEDBAT

Start at: 2019-12-11 07:16:20 End at: 2019-12-11 07:16:50 Local clock offset: -6.28 ms Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-12-11 08:56:00

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.21 Mbit/s

95th percentile per-packet one-way delay: 32.368 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 62.80 Mbit/s

95th percentile per-packet one-way delay: 32.762 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 34.32 Mbit/s

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

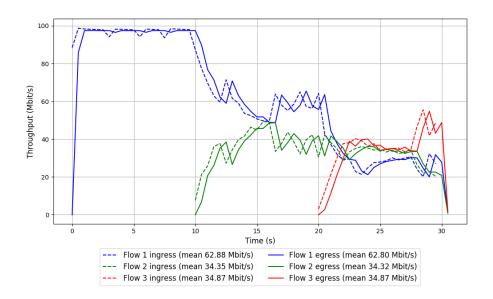
Loss rate: 0.08%

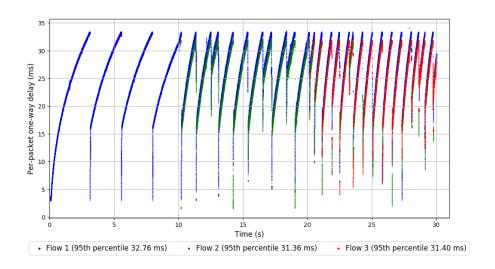
-- Flow 3:

Average throughput: 34.87 Mbit/s

95th percentile per-packet one-way delay: 31.399 ms

Run 2: Report of LEDBAT — Data Link





### Run 3: Statistics of LEDBAT

Start at: 2019-12-11 07:43:35 End at: 2019-12-11 07:44:05 Local clock offset: -5.641 ms Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2019-12-11 08:56:08

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 31.611 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 62.60 Mbit/s

95th percentile per-packet one-way delay: 31.409 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 42.08 Mbit/s

95th percentile per-packet one-way delay: 31.573 ms

Loss rate: 0.05%

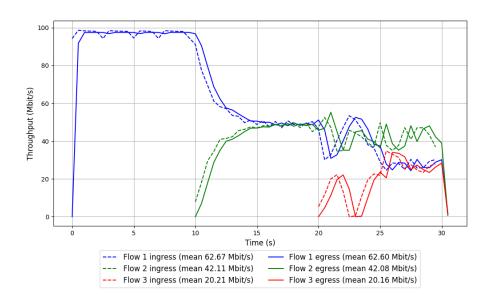
-- Flow 3:

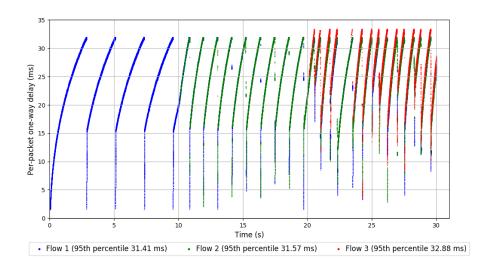
Average throughput: 20.16 Mbit/s

95th percentile per-packet one-way delay: 32.875 ms

Loss rate: 0.16%

Run 3: Report of LEDBAT — Data Link





## Run 4: Statistics of LEDBAT

Start at: 2019-12-11 08:10:50 End at: 2019-12-11 08:11:20 Local clock offset: -5.216 ms Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2019-12-11 08:56:36

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.30 Mbit/s

95th percentile per-packet one-way delay: 31.101 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 61.37 Mbit/s

95th percentile per-packet one-way delay: 30.560 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 36.75 Mbit/s

95th percentile per-packet one-way delay: 32.025 ms

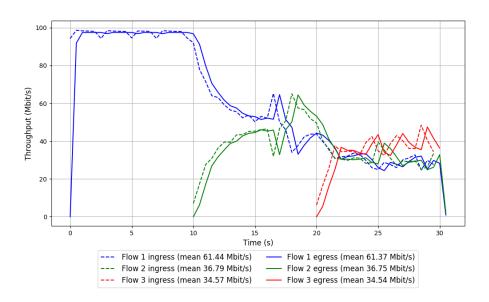
Loss rate: 0.07%

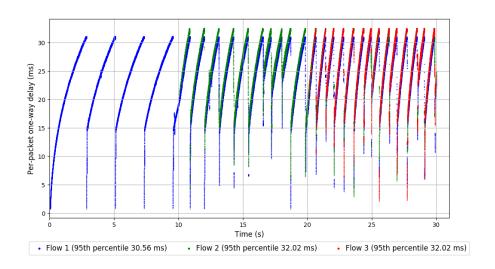
-- Flow 3:

Average throughput: 34.54 Mbit/s

95th percentile per-packet one-way delay: 32.025 ms

Run 4: Report of LEDBAT — Data Link





## Run 5: Statistics of LEDBAT

Start at: 2019-12-11 08:38:06 End at: 2019-12-11 08:38:36 Local clock offset: -6.719 ms Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2019-12-11 08:56:41

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.30 Mbit/s

95th percentile per-packet one-way delay: 31.406 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 60.13 Mbit/s

95th percentile per-packet one-way delay: 30.659 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 39.20 Mbit/s

95th percentile per-packet one-way delay: 32.157 ms

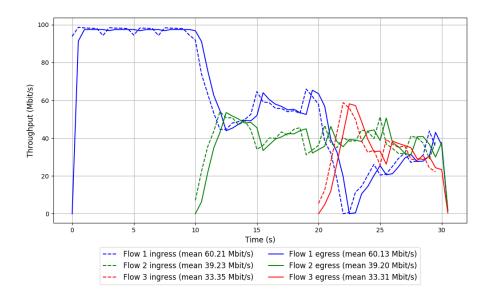
Loss rate: 0.05%

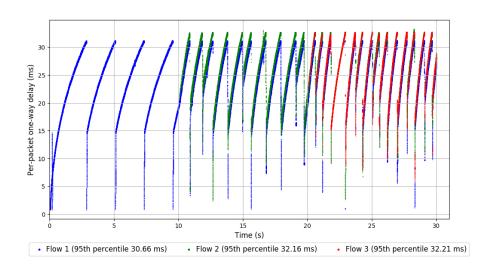
-- Flow 3:

Average throughput: 33.31 Mbit/s

95th percentile per-packet one-way delay: 32.208 ms

Run 5: Report of LEDBAT — Data Link





## Run 1: Statistics of Muses\\_DecisionTree

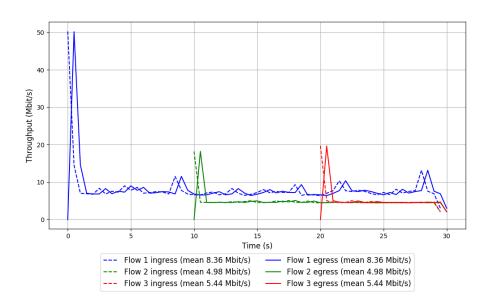
Average throughput: 5.44 Mbit/s

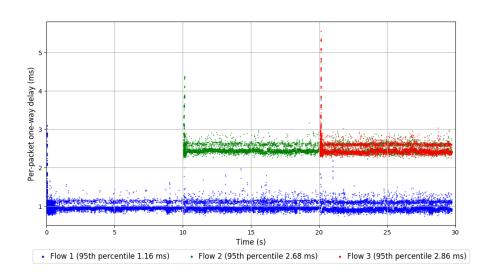
Loss rate: 0.00%

Start at: 2019-12-11 06:57:03 End at: 2019-12-11 06:57:33 Local clock offset: -6.302 ms Remote clock offset: -0.206 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 13.44 Mbit/s 95th percentile per-packet one-way delay: 2.629 ms Loss rate: 0.00% -- Flow 1: Average throughput: 8.36 Mbit/s 95th percentile per-packet one-way delay: 1.160 ms Loss rate: 0.00% -- Flow 2: Average throughput: 4.98 Mbit/s 95th percentile per-packet one-way delay: 2.681 ms Loss rate: 0.00% -- Flow 3:

95th percentile per-packet one-way delay: 2.864 ms

Run 1: Report of Muses\_DecisionTree — Data Link



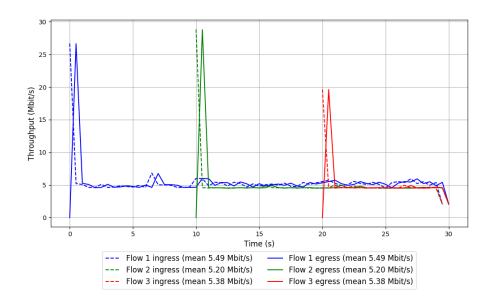


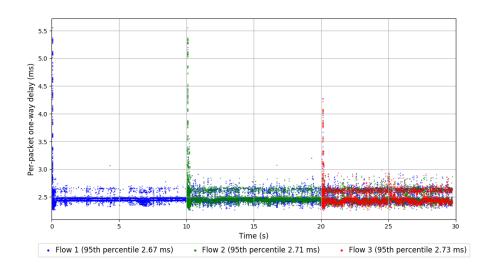
## Run 2: Statistics of Muses\\_DecisionTree

Loss rate: 0.00%

Start at: 2019-12-11 07:24:19 End at: 2019-12-11 07:24:49 Local clock offset: -5.235 ms Remote clock offset: 0.037 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 10.69 Mbit/s 95th percentile per-packet one-way delay: 2.683 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.49 Mbit/s 95th percentile per-packet one-way delay: 2.667 ms Loss rate: 0.00% -- Flow 2: Average throughput: 5.20 Mbit/s 95th percentile per-packet one-way delay: 2.707 ms Loss rate: 0.00% -- Flow 3: Average throughput: 5.38 Mbit/s 95th percentile per-packet one-way delay: 2.728 ms

Run 2: Report of Muses\_DecisionTree — Data Link



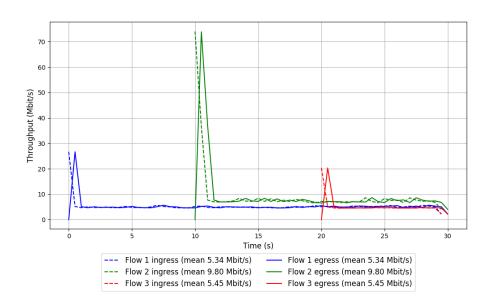


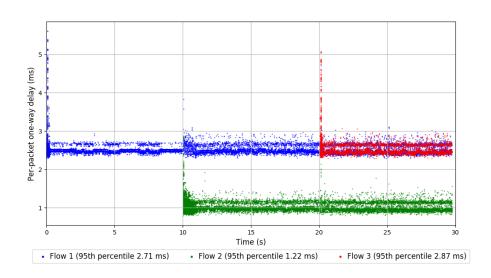
## Run 3: Statistics of Muses\\_DecisionTree

Loss rate: 0.00%

Start at: 2019-12-11 07:51:35 End at: 2019-12-11 07:52:05 Local clock offset: -4.936 ms Remote clock offset: 0.145 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 13.61 Mbit/s 95th percentile per-packet one-way delay: 2.681 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.34 Mbit/s 95th percentile per-packet one-way delay: 2.714 ms Loss rate: 0.00% -- Flow 2: Average throughput: 9.80 Mbit/s 95th percentile per-packet one-way delay: 1.217 ms Loss rate: 0.00% -- Flow 3: Average throughput: 5.45 Mbit/s 95th percentile per-packet one-way delay: 2.866 ms

Run 3: Report of Muses\_DecisionTree — Data Link





## Run 4: Statistics of Muses\\_DecisionTree

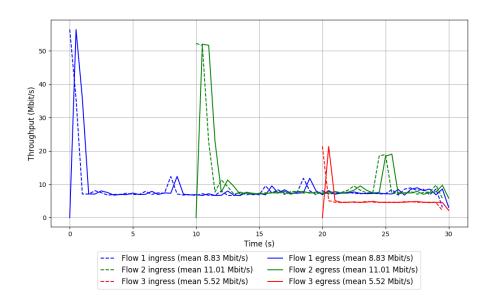
Start at: 2019-12-11 08:18:49

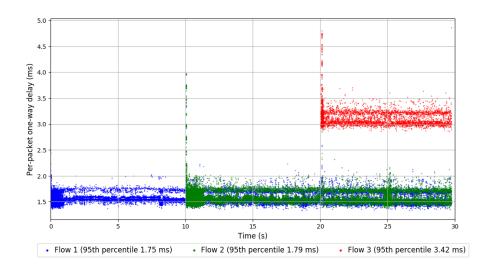
Loss rate: 0.00%

End at: 2019-12-11 08:19:19 Local clock offset: -6.706 ms Remote clock offset: 0.051 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 17.93 Mbit/s 95th percentile per-packet one-way delay: 3.084 ms Loss rate: 0.00% -- Flow 1: Average throughput: 8.83 Mbit/s 95th percentile per-packet one-way delay: 1.748 ms Loss rate: 0.00% -- Flow 2: Average throughput: 11.01 Mbit/s 95th percentile per-packet one-way delay: 1.789 ms Loss rate: 0.00% -- Flow 3: Average throughput: 5.52 Mbit/s

95th percentile per-packet one-way delay:  $3.417~\mathrm{ms}$ 

Run 4: Report of Muses\_DecisionTree — Data Link



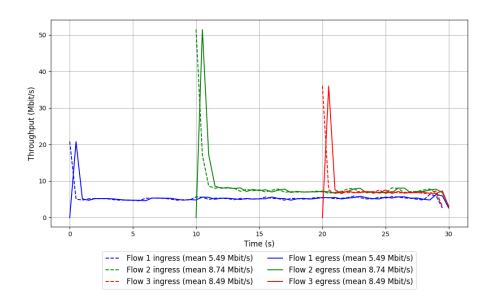


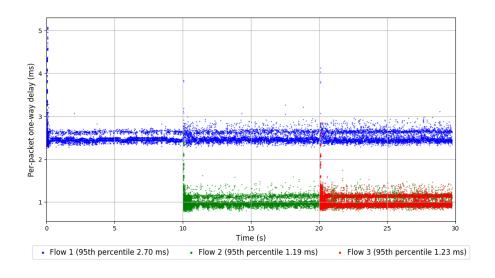
## Run 5: Statistics of Muses\\_DecisionTree

Loss rate: 0.00%

Start at: 2019-12-11 08:46:05 End at: 2019-12-11 08:46:35 Local clock offset: -5.493 ms Remote clock offset: 0.111 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 14.05 Mbit/s 95th percentile per-packet one-way delay: 2.649 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.49 Mbit/s 95th percentile per-packet one-way delay: 2.701 ms Loss rate: 0.00% -- Flow 2: Average throughput: 8.74 Mbit/s 95th percentile per-packet one-way delay: 1.190 ms Loss rate: 0.00% -- Flow 3: Average throughput: 8.49 Mbit/s 95th percentile per-packet one-way delay: 1.234 ms

Run 5: Report of Muses\_DecisionTree — Data Link



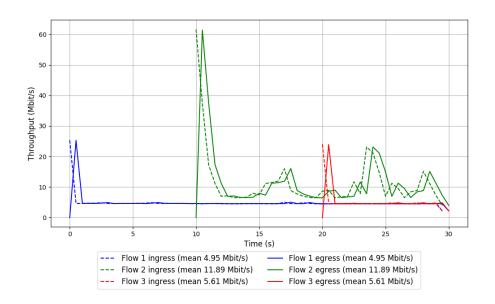


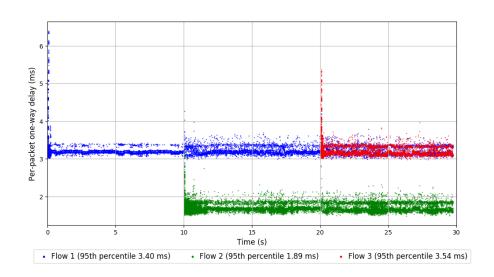
## Run 1: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-12-11 06:54:48 End at: 2019-12-11 06:55:18 Local clock offset: -6.993 ms Remote clock offset: -0.191 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 14.66 Mbit/s 95th percentile per-packet one-way delay: 3.365 ms Loss rate: 0.00% -- Flow 1: Average throughput: 4.95 Mbit/s 95th percentile per-packet one-way delay: 3.401 ms Loss rate: 0.00% -- Flow 2: Average throughput: 11.89 Mbit/s 95th percentile per-packet one-way delay: 1.891 ms Loss rate: 0.00% -- Flow 3: Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 3.544 ms

Run 1: Report of Muses\_DecisionTreeH0 — Data Link



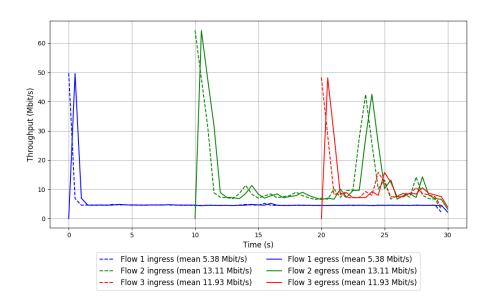


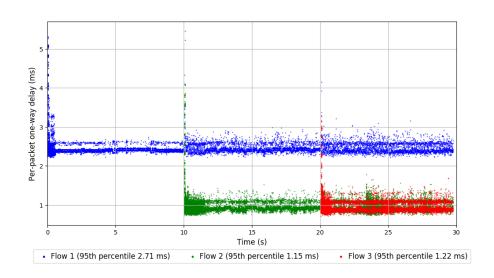
## Run 2: Statistics of Muses\\_DecisionTreeHO

Loss rate: 0.00%

Start at: 2019-12-11 07:22:04 End at: 2019-12-11 07:22:34 Local clock offset: -5.307 ms Remote clock offset: -0.018 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 17.96 Mbit/s 95th percentile per-packet one-way delay: 2.581 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.38 Mbit/s 95th percentile per-packet one-way delay: 2.711 ms Loss rate: 0.00% -- Flow 2: Average throughput: 13.11 Mbit/s 95th percentile per-packet one-way delay: 1.153 ms Loss rate: 0.00% -- Flow 3: Average throughput: 11.93 Mbit/s 95th percentile per-packet one-way delay: 1.215 ms

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

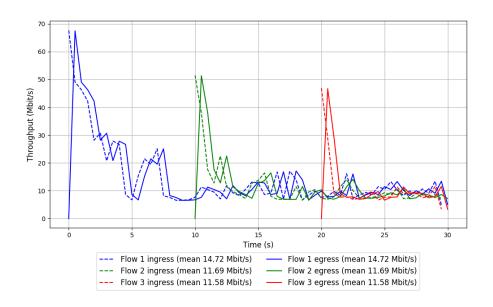


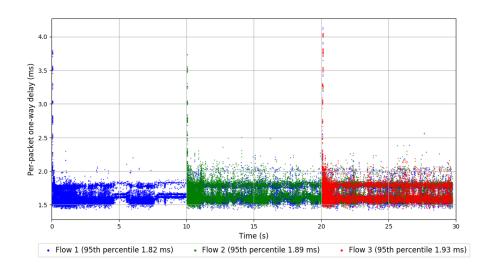


## Run 3: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-12-11 07:49:19 End at: 2019-12-11 07:49:49 Local clock offset: -5.634 ms Remote clock offset: 0.117 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 26.24 Mbit/s 95th percentile per-packet one-way delay: 1.850 ms Loss rate: 0.00% -- Flow 1: Average throughput: 14.72 Mbit/s 95th percentile per-packet one-way delay: 1.816 ms Loss rate: 0.00% -- Flow 2: Average throughput: 11.69 Mbit/s 95th percentile per-packet one-way delay: 1.894 ms Loss rate: 0.00% -- Flow 3: Average throughput: 11.58 Mbit/s 95th percentile per-packet one-way delay: 1.928 ms

Run 3: Report of Muses\_DecisionTreeH0 — Data Link

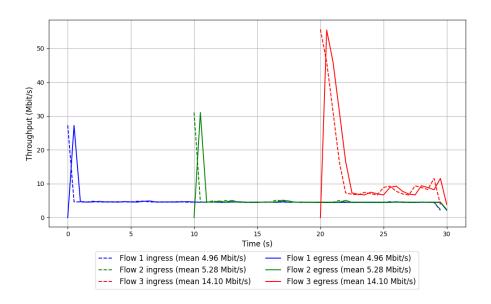


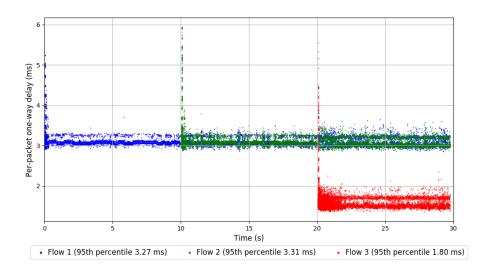


## Run 4: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-12-11 08:16:34 End at: 2019-12-11 08:17:04 Local clock offset: -6.548 ms Remote clock offset: 0.045 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 13.05 Mbit/s 95th percentile per-packet one-way delay: 3.259 ms Loss rate: 0.00% -- Flow 1: Average throughput: 4.96 Mbit/s 95th percentile per-packet one-way delay: 3.275 ms Loss rate: 0.00% -- Flow 2: Average throughput: 5.28 Mbit/s 95th percentile per-packet one-way delay: 3.305 ms Loss rate: 0.00% -- Flow 3: Average throughput: 14.10 Mbit/s 95th percentile per-packet one-way delay: 1.800 ms

Run 4: Report of Muses\_DecisionTreeH0 — Data Link



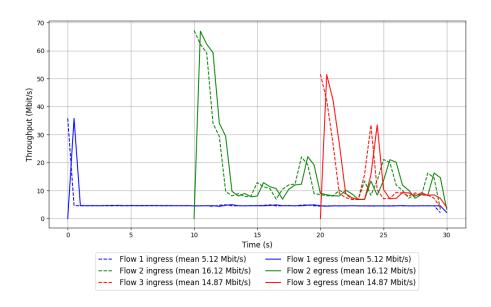


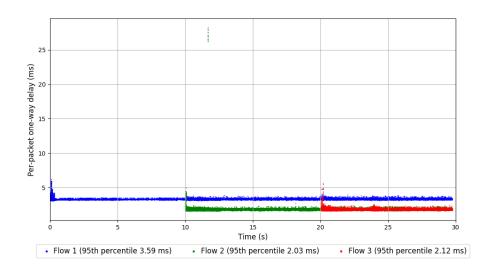
# Run 5: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-12-11 08:43:50 End at: 2019-12-11 08:44:20 Local clock offset: -6.515 ms Remote clock offset: 0.169 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 20.66 Mbit/s 95th percentile per-packet one-way delay: 3.468 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.12 Mbit/s 95th percentile per-packet one-way delay: 3.593 ms Loss rate: 0.00% -- Flow 2: Average throughput: 16.12 Mbit/s 95th percentile per-packet one-way delay: 2.032 ms Loss rate: 0.00% -- Flow 3: Average throughput: 14.87 Mbit/s

95th percentile per-packet one-way delay: 2.123 ms

Run 5: Report of Muses\_DecisionTreeH0 — Data Link



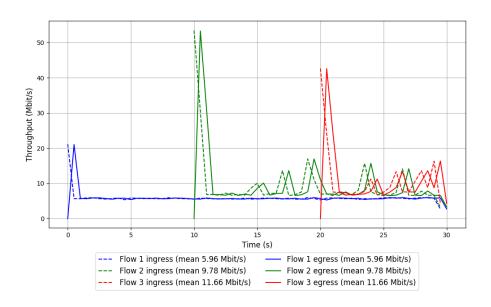


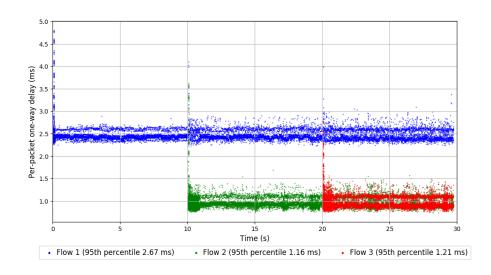
## Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 06:38:54 End at: 2019-12-11 06:39:24 Local clock offset: -6.438 ms Remote clock offset: -0.384 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 16.24 Mbit/s 95th percentile per-packet one-way delay: 2.607 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.96 Mbit/s 95th percentile per-packet one-way delay: 2.665 ms Loss rate: 0.00% -- Flow 2: Average throughput: 9.78 Mbit/s 95th percentile per-packet one-way delay: 1.161 ms Loss rate: 0.00% -- Flow 3: Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 1.205 ms

Run 1: Report of Muses\_DecisionTreeR0 — Data Link



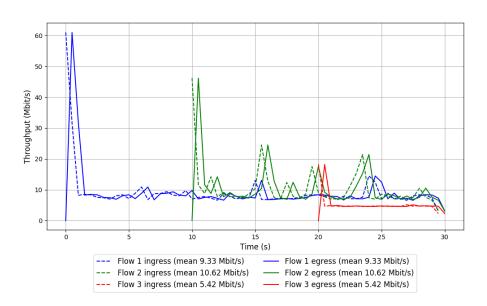


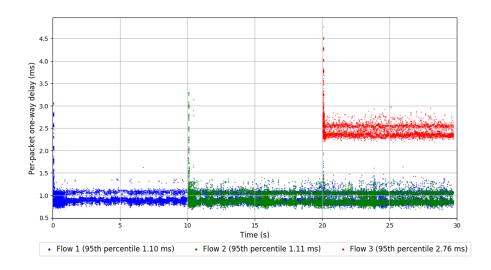
# Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 07:06:09 End at: 2019-12-11 07:06:39 Local clock offset: -6.28 ms Remote clock offset: -0.122 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 18.14 Mbit/s 95th percentile per-packet one-way delay: 2.406 ms Loss rate: 0.00% -- Flow 1: Average throughput: 9.33 Mbit/s 95th percentile per-packet one-way delay: 1.103 ms Loss rate: 0.00% -- Flow 2: Average throughput: 10.62 Mbit/s 95th percentile per-packet one-way delay: 1.110 ms Loss rate: 0.00% -- Flow 3: Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 2.758 ms

Run 2: Report of Muses\_DecisionTreeR0 — Data Link



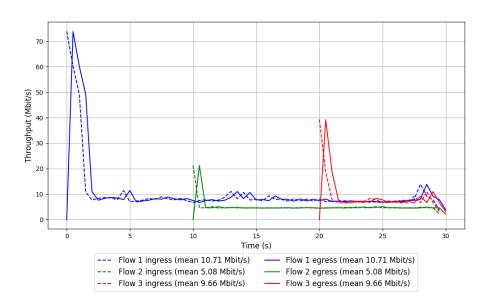


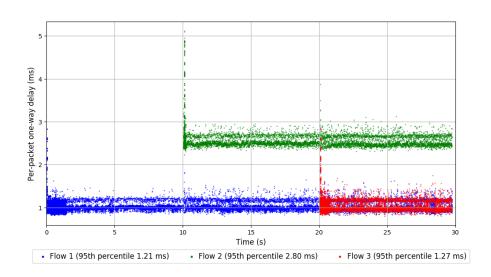
## Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 07:33:24 End at: 2019-12-11 07:33:54 Local clock offset: -4.997 ms Remote clock offset: 0.15 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 17.22 Mbit/s 95th percentile per-packet one-way delay: 2.651 ms Loss rate: 0.00% -- Flow 1: Average throughput: 10.71 Mbit/s 95th percentile per-packet one-way delay: 1.209 ms Loss rate: 0.00% -- Flow 2: Average throughput: 5.08 Mbit/s 95th percentile per-packet one-way delay: 2.796 ms Loss rate: 0.00% -- Flow 3: Average throughput: 9.66 Mbit/s

95th percentile per-packet one-way delay: 1.267 ms

Run 3: Report of Muses\_DecisionTreeR0 — Data Link



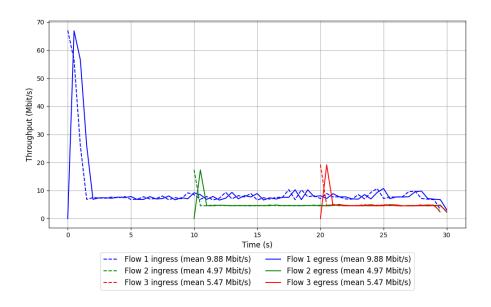


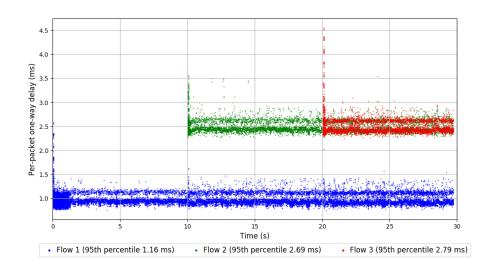
## Run 4: Statistics of Muses\\_DecisionTreeR0

Loss rate: 0.00%

Start at: 2019-12-11 08:00:40 End at: 2019-12-11 08:01:10 Local clock offset: -4.869 ms Remote clock offset: 0.122 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 14.96 Mbit/s 95th percentile per-packet one-way delay: 2.631 ms Loss rate: 0.00% -- Flow 1: Average throughput: 9.88 Mbit/s 95th percentile per-packet one-way delay: 1.156 ms Loss rate: 0.00% -- Flow 2: Average throughput: 4.97 Mbit/s 95th percentile per-packet one-way delay: 2.692 ms Loss rate: 0.00% -- Flow 3: Average throughput: 5.47 Mbit/s 95th percentile per-packet one-way delay: 2.795 ms

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

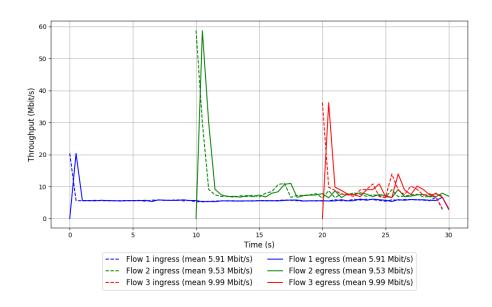


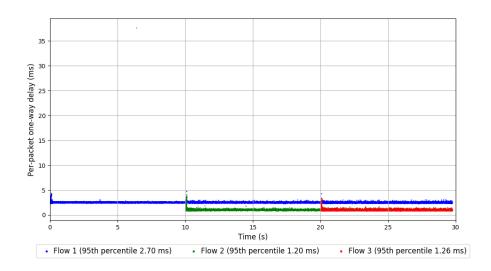


# Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 08:27:55 End at: 2019-12-11 08:28:25 Local clock offset: -6.412 ms Remote clock offset: 0.14 ms # Below is generated by plot.py at 2019-12-11 08:56:41 # Datalink statistics -- Total of 3 flows: Average throughput: 15.48 Mbit/s 95th percentile per-packet one-way delay: 2.651 ms Loss rate: 0.00% -- Flow 1: Average throughput: 5.91 Mbit/s 95th percentile per-packet one-way delay: 2.700 ms Loss rate: 0.00% -- Flow 2: Average throughput: 9.53 Mbit/s 95th percentile per-packet one-way delay: 1.203 ms Loss rate: 0.00% -- Flow 3: Average throughput: 9.99 Mbit/s 95th percentile per-packet one-way delay: 1.262 ms

Run 5: Report of Muses\_DecisionTreeR0 — Data Link





## Run 1: Statistics of PCC-Allegro

Start at: 2019-12-11 06:46:51 End at: 2019-12-11 06:47:21 Local clock offset: -7.016 ms Remote clock offset: -0.3 ms

# Below is generated by plot.py at 2019-12-11 08:57:28

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.60 Mbit/s

95th percentile per-packet one-way delay: 12.408 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 63.87 Mbit/s

95th percentile per-packet one-way delay: 6.368 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 36.29 Mbit/s

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

Loss rate: 0.20%

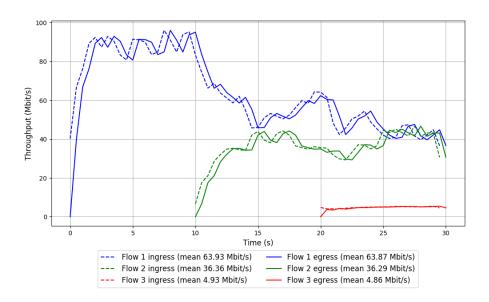
-- Flow 3:

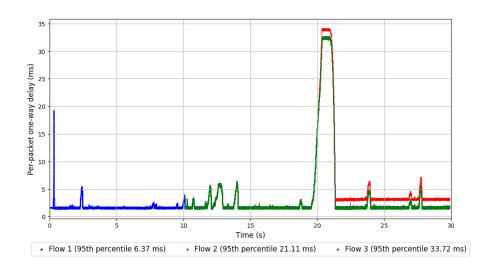
Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 33.720 ms

Loss rate: 1.44%

Run 1: Report of PCC-Allegro — Data Link





# Run 2: Statistics of PCC-Allegro

Average throughput: 14.86 Mbit/s

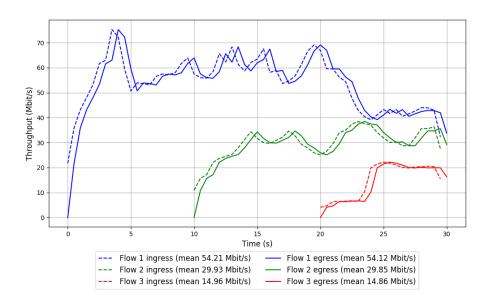
Loss rate: 0.33%

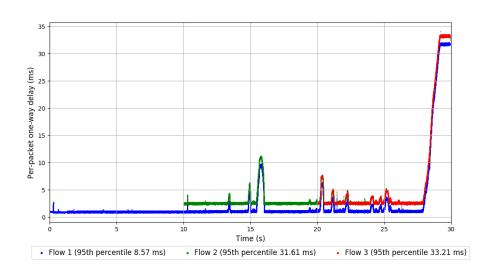
Start at: 2019-12-11 07:14:07

End at: 2019-12-11 07:14:37 Local clock offset: -5.807 ms Remote clock offset: -0.079 ms # Below is generated by plot.py at 2019-12-11 08:57:28 # Datalink statistics -- Total of 3 flows: Average throughput: 78.90 Mbit/s 95th percentile per-packet one-way delay: 22.089 ms Loss rate: 0.09% -- Flow 1: Average throughput: 54.12 Mbit/s 95th percentile per-packet one-way delay: 8.570 ms Loss rate: 0.06% -- Flow 2: Average throughput: 29.85 Mbit/s 95th percentile per-packet one-way delay: 31.615 ms Loss rate: 0.11% -- Flow 3:

95th percentile per-packet one-way delay: 33.208 ms

Run 2: Report of PCC-Allegro — Data Link





## Run 3: Statistics of PCC-Allegro

Start at: 2019-12-11 07:41:21
End at: 2019-12-11 07:41:51
Local clock offset: -4.939 ms
Remote clock offset: 0.104 ms
# Below is generated by plot.py at 2019-12-11 08:57:35
# Datalink statistics

-- Total of 3 flows:
Average throughput: 87.82 Mbit/s

95th percentile per-packet one-way delay: 6.307 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 3.997 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.08 Mbit/s

95th percentile per-packet one-way delay: 9.337 ms

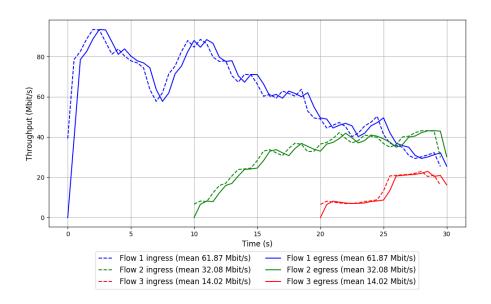
Loss rate: 0.00%

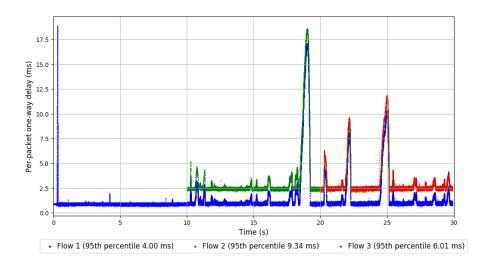
-- Flow 3:

Average throughput: 14.02 Mbit/s

95th percentile per-packet one-way delay: 6.009 ms

Run 3: Report of PCC-Allegro — Data Link





## Run 4: Statistics of PCC-Allegro

Start at: 2019-12-11 08:08:37 End at: 2019-12-11 08:09:07 Local clock offset: -5.508 ms Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2019-12-11 08:57:35

# Datalink statistics
-- Total of 3 flows:

Average throughput: 80.01 Mbit/s

95th percentile per-packet one-way delay: 12.410 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.47 Mbit/s

95th percentile per-packet one-way delay: 8.759 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.06 Mbit/s

95th percentile per-packet one-way delay: 15.720 ms

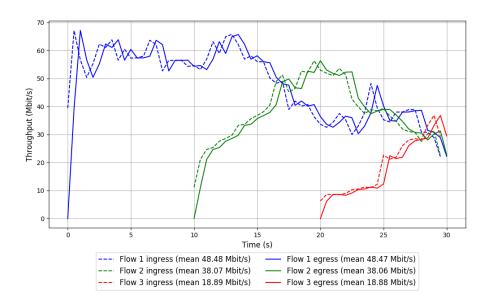
Loss rate: 0.00%

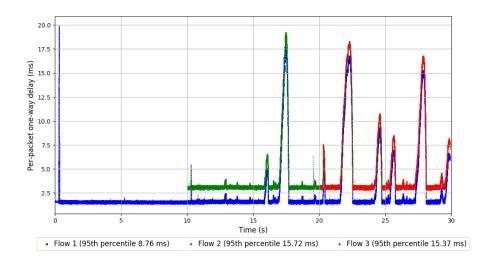
-- Flow 3:

Average throughput: 18.88 Mbit/s

95th percentile per-packet one-way delay: 15.374 ms

Run 4: Report of PCC-Allegro — Data Link





## Run 5: Statistics of PCC-Allegro

Start at: 2019-12-11 08:35:52 End at: 2019-12-11 08:36:22 Local clock offset: -7.365 ms Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2019-12-11 08:57:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 10.695 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.13 Mbit/s

95th percentile per-packet one-way delay: 6.922 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.56 Mbit/s

95th percentile per-packet one-way delay: 21.428 ms

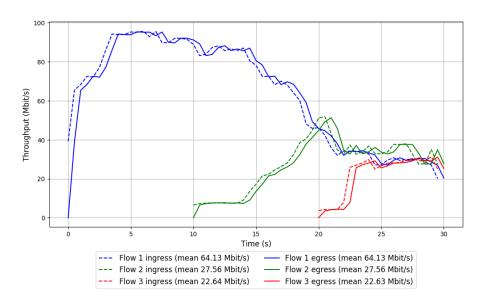
Loss rate: 0.00%

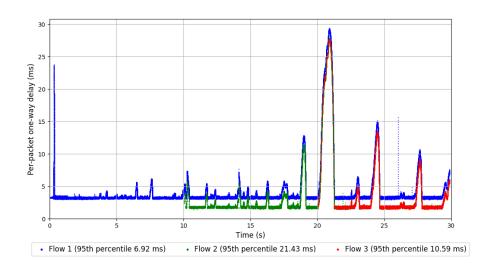
-- Flow 3:

Average throughput: 22.63 Mbit/s

95th percentile per-packet one-way delay: 10.587 ms

Run 5: Report of PCC-Allegro — Data Link





### Run 1: Statistics of PCC-Expr

Start at: 2019-12-11 06:47:59 End at: 2019-12-11 06:48:29 Local clock offset: -6.322 ms Remote clock offset: -0.307 ms

# Below is generated by plot.py at 2019-12-11 08:57:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 5.147 ms

Loss rate: 22.30%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 2.422 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 5.41 Mbit/s

95th percentile per-packet one-way delay: 13.034 ms

Loss rate: 22.68%

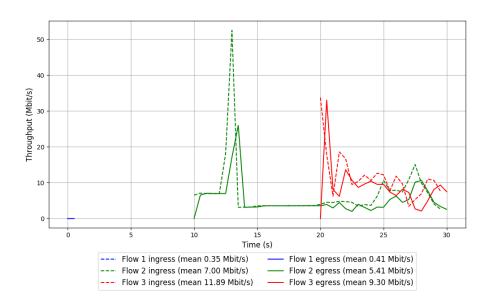
-- Flow 3:

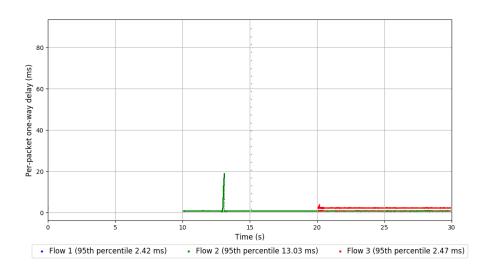
Average throughput: 9.30 Mbit/s

95th percentile per-packet one-way delay: 2.468 ms

Loss rate: 21.83%

Run 1: Report of PCC-Expr — Data Link





### Run 2: Statistics of PCC-Expr

Start at: 2019-12-11 07:15:14 End at: 2019-12-11 07:15:44 Local clock offset: -5.65 ms Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2019-12-11 08:57:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.86 Mbit/s

95th percentile per-packet one-way delay: 2.409 ms

Loss rate: 19.50%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 0.814 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 10.09 Mbit/s

95th percentile per-packet one-way delay: 2.418 ms

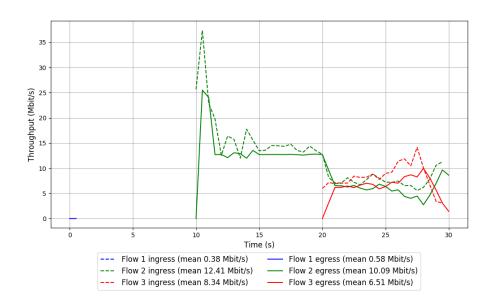
Loss rate: 18.66%

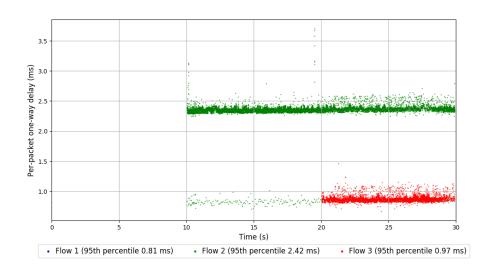
-- Flow 3:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 0.971 ms

Run 2: Report of PCC-Expr — Data Link





### Run 3: Statistics of PCC-Expr

Start at: 2019-12-11 07:42:30 End at: 2019-12-11 07:43:00 Local clock offset: -5.634 ms Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2019-12-11 08:57:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 3.161 ms

Loss rate: 27.52%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 1.754 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 1.734 ms

Loss rate: 22.09%

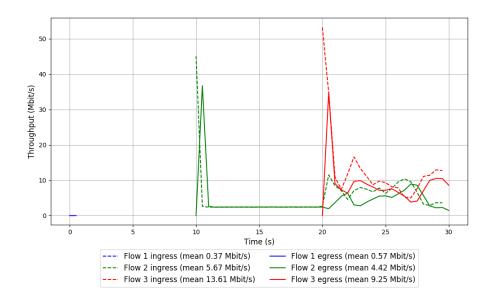
-- Flow 3:

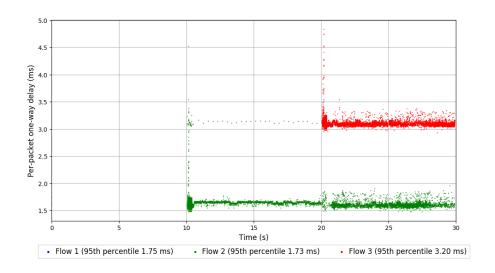
Average throughput: 9.25 Mbit/s

95th percentile per-packet one-way delay: 3.197 ms

Loss rate: 32.07%

Run 3: Report of PCC-Expr — Data Link





### Run 4: Statistics of PCC-Expr

Start at: 2019-12-11 08:09:45 End at: 2019-12-11 08:10:15 Local clock offset: -5.701 ms Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2019-12-11 08:57:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 3.054 ms

Loss rate: 29.31%

-- Flow 1:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 1.528 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 7.53 Mbit/s

95th percentile per-packet one-way delay: 2.582 ms

Loss rate: 29.13%

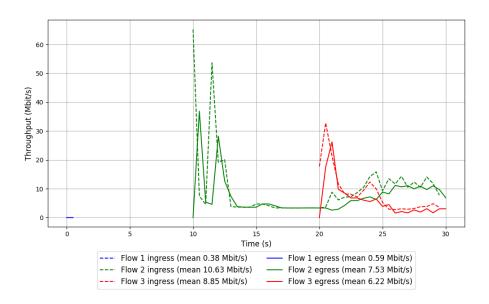
-- Flow 3:

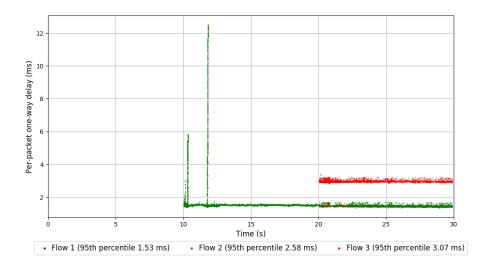
Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 3.073 ms

Loss rate: 29.72%

Run 4: Report of PCC-Expr — Data Link





### Run 5: Statistics of PCC-Expr

Start at: 2019-12-11 08:37:00 End at: 2019-12-11 08:37:30 Local clock offset: -6.623 ms Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2019-12-11 08:57:39

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.86 Mbit/s

95th percentile per-packet one-way delay: 2.498 ms

Loss rate: 30.83%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 1.005 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 8.82 Mbit/s

95th percentile per-packet one-way delay: 2.776 ms

Loss rate: 36.63%

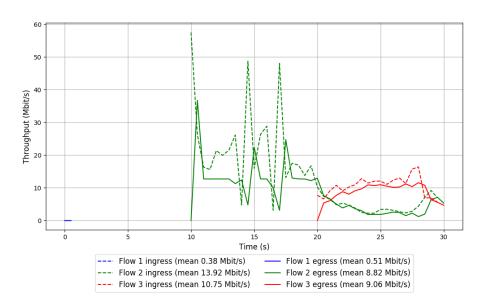
-- Flow 3:

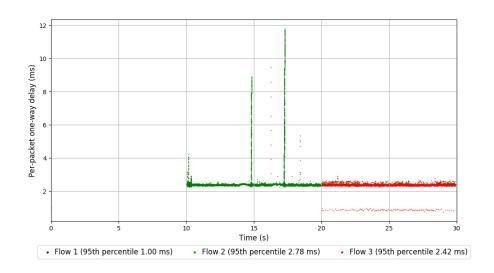
Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay:  $2.424~\mathrm{ms}$ 

Loss rate: 15.69%

Run 5: Report of PCC-Expr — Data Link





### Run 1: Statistics of QUIC Cubic

Start at: 2019-12-11 06:53:39 End at: 2019-12-11 06:54:09 Local clock offset: -6.359 ms Remote clock offset: -0.275 ms

# Below is generated by plot.py at 2019-12-11 08:57:58

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.79 Mbit/s

95th percentile per-packet one-way delay: 30.923 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 57.85 Mbit/s

95th percentile per-packet one-way delay: 29.664 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 36.16 Mbit/s

95th percentile per-packet one-way delay: 31.328 ms

Loss rate: 0.17%

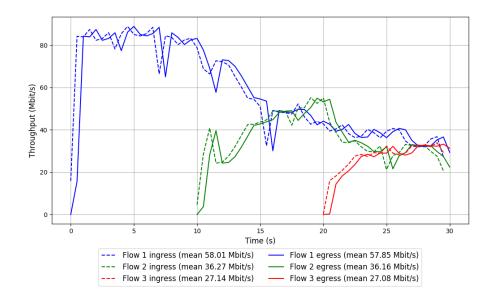
-- Flow 3:

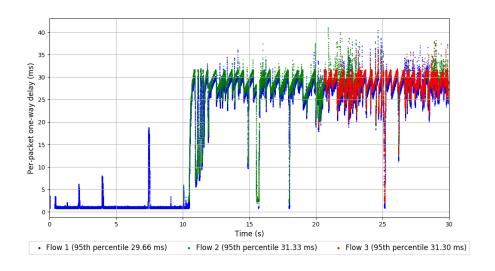
Average throughput: 27.08 Mbit/s

95th percentile per-packet one-way delay: 31.300 ms

Loss rate: 0.21%

Run 1: Report of QUIC Cubic — Data Link





### Run 2: Statistics of QUIC Cubic

Start at: 2019-12-11 07:20:54 End at: 2019-12-11 07:21:24 Local clock offset: -6.066 ms Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2019-12-11 08:58:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.36 Mbit/s

95th percentile per-packet one-way delay: 30.524 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 58.21 Mbit/s

95th percentile per-packet one-way delay: 30.427 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 34.24 Mbit/s

95th percentile per-packet one-way delay: 30.617 ms

Loss rate: 0.23%

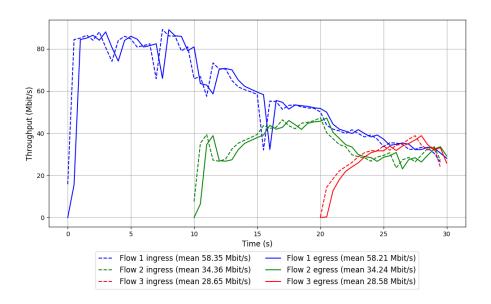
-- Flow 3:

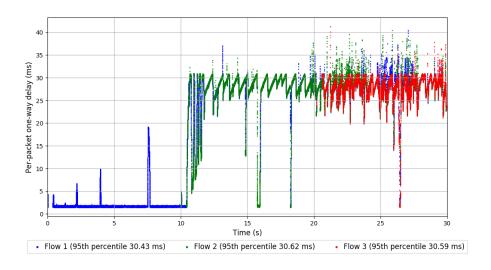
Average throughput: 28.58 Mbit/s

95th percentile per-packet one-way delay: 30.585 ms

Loss rate: 0.26%

Run 2: Report of QUIC Cubic — Data Link





### Run 3: Statistics of QUIC Cubic

Start at: 2019-12-11 07:48:10 End at: 2019-12-11 07:48:40 Local clock offset: -5.639 ms Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2019-12-11 08:58:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.89 Mbit/s

95th percentile per-packet one-way delay: 31.622 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 57.29 Mbit/s

95th percentile per-packet one-way delay: 30.359 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 38.82 Mbit/s

95th percentile per-packet one-way delay: 32.017 ms

Loss rate: 0.16%

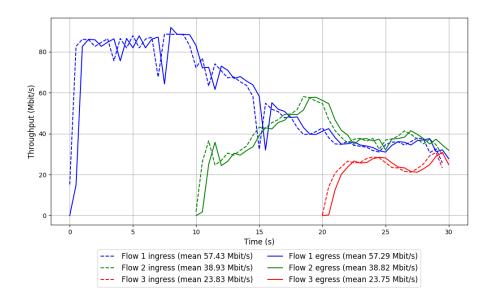
-- Flow 3:

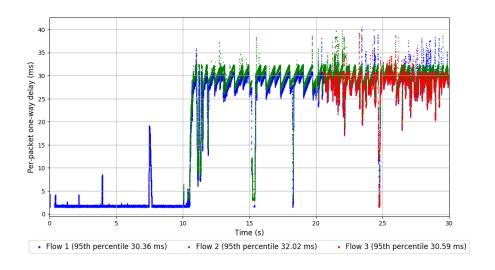
Average throughput: 23.75 Mbit/s

95th percentile per-packet one-way delay: 30.593 ms

Loss rate: 0.31%

Run 3: Report of QUIC Cubic — Data Link





### Run 4: Statistics of QUIC Cubic

Start at: 2019-12-11 08:15:25 End at: 2019-12-11 08:15:55 Local clock offset: -6.488 ms Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-12-11 08:58:37

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.48 Mbit/s

95th percentile per-packet one-way delay: 31.531 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 53.86 Mbit/s

95th percentile per-packet one-way delay: 30.260 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 34.08 Mbit/s

95th percentile per-packet one-way delay: 31.808 ms

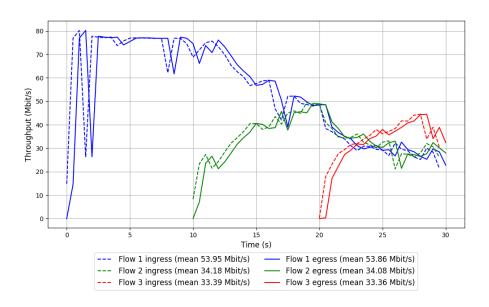
Loss rate: 0.17%

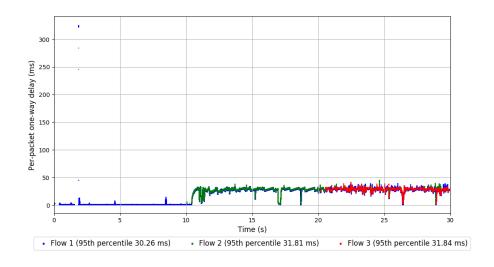
-- Flow 3:

Average throughput: 33.36 Mbit/s

95th percentile per-packet one-way delay: 31.840 ms

Run 4: Report of QUIC Cubic — Data Link





### Run 5: Statistics of QUIC Cubic

Start at: 2019-12-11 08:42:41 End at: 2019-12-11 08:43:11 Local clock offset: -5.911 ms Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.59 Mbit/s

95th percentile per-packet one-way delay: 31.103 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 31.156 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 36.67 Mbit/s

95th percentile per-packet one-way delay: 29.804 ms

Loss rate: 0.17%

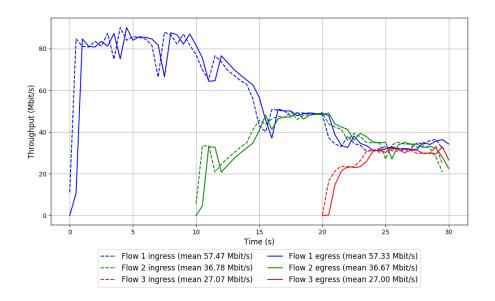
-- Flow 3:

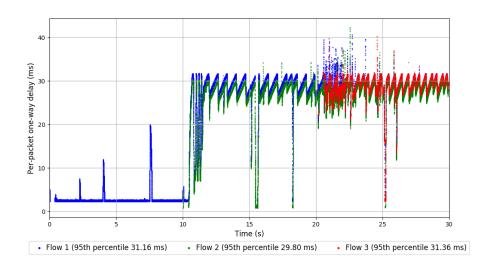
Average throughput: 27.00 Mbit/s

95th percentile per-packet one-way delay: 31.363 ms

Loss rate: 0.26%

Run 5: Report of QUIC Cubic — Data Link





### Run 1: Statistics of SCReAM

Start at: 2019-12-11 06:51:24 End at: 2019-12-11 06:51:54 Local clock offset: -6.995 ms Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 3.145 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.153 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.646 ms

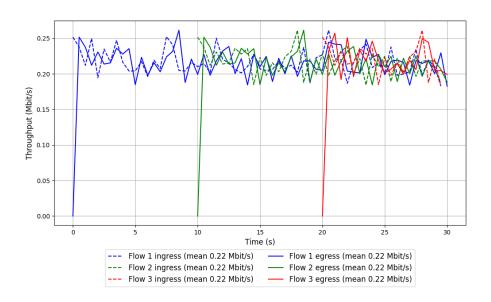
Loss rate: 0.00%

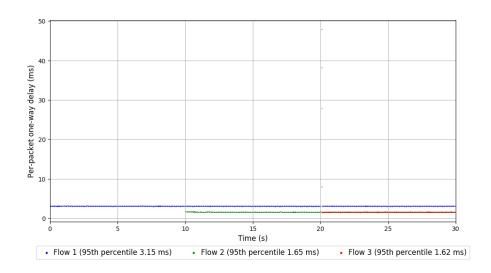
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.620 ms

Run 1: Report of SCReAM — Data Link





### Run 2: Statistics of SCReAM

Start at: 2019-12-11 07:18:40 End at: 2019-12-11 07:19:10 Local clock offset: -6.163 ms Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics -- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 3.139 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.632 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.139 ms

Loss rate: 0.00%

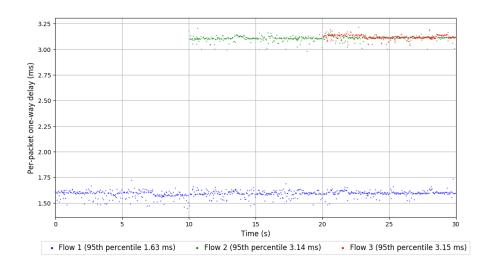
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.150 ms

Run 2: Report of SCReAM — Data Link





### Run 3: Statistics of SCReAM

Start at: 2019-12-11 07:45:55 End at: 2019-12-11 07:46:25 Local clock offset: -5.647 ms Remote clock offset: 0.162 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 3.200 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.203 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.188 ms

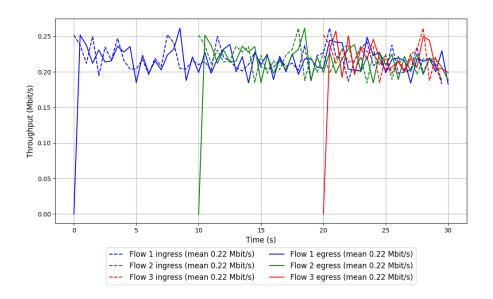
Loss rate: 0.00%

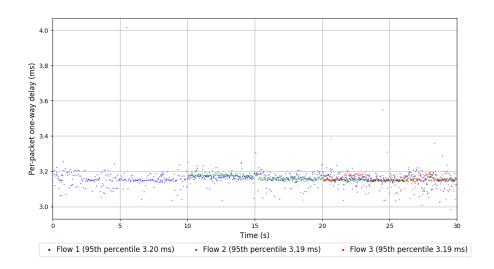
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.190 ms

Run 3: Report of SCReAM — Data Link





## Run 4: Statistics of SCReAM

Start at: 2019-12-11 08:13:10 End at: 2019-12-11 08:13:40 Local clock offset: -6.278 ms Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 3.078 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.086 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3.052 ms

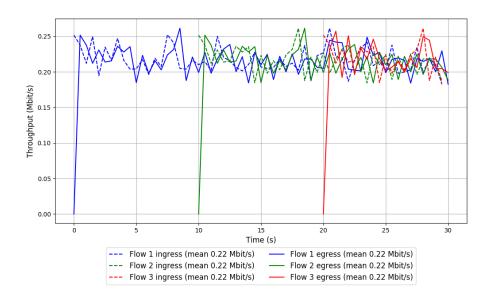
Loss rate: 0.00%

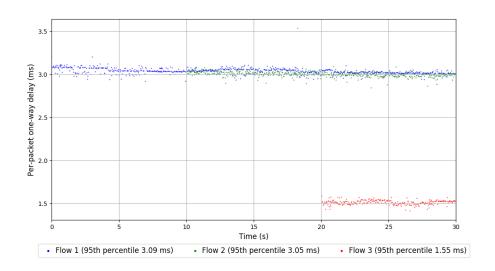
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.551 ms

Run 4: Report of SCReAM — Data Link





## Run 5: Statistics of SCReAM

Start at: 2019-12-11 08:40:26 End at: 2019-12-11 08:40:56 Local clock offset: -6.314 ms Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 2.541 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.546 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.021 ms

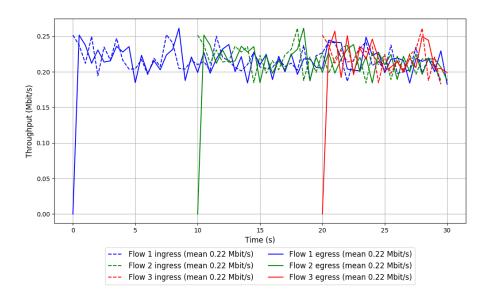
Loss rate: 0.00%

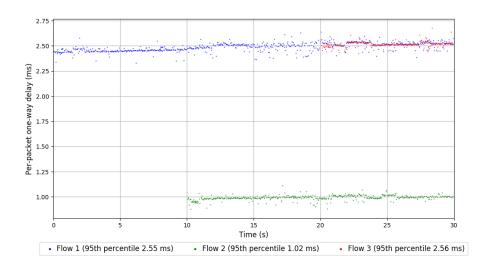
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.559 ms

Run 5: Report of SCReAM — Data Link





# Run 1: Statistics of Sprout

Start at: 2019-12-11 06:42:15 End at: 2019-12-11 06:42:45 Local clock offset: -6.379 ms Remote clock offset: -0.339 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 77.47 Mbit/s

95th percentile per-packet one-way delay: 22.629 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.68 Mbit/s

95th percentile per-packet one-way delay: 21.147 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.71 Mbit/s

95th percentile per-packet one-way delay: 21.690 ms

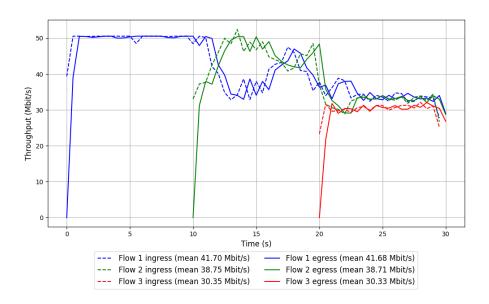
Loss rate: 0.00%

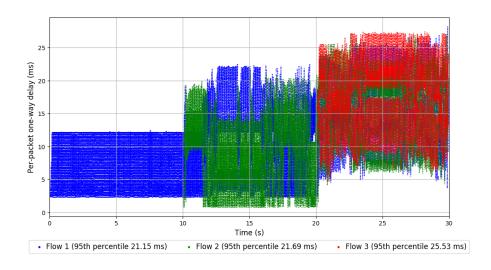
-- Flow 3:

Average throughput: 30.33 Mbit/s

95th percentile per-packet one-way delay: 25.533 ms

Run 1: Report of Sprout — Data Link





## Run 2: Statistics of Sprout

Start at: 2019-12-11 07:09:30
End at: 2019-12-11 07:10:00
Local clock offset: -6.17 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-12-11 08:58:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.11 Mbit/s

95th percentile per-packet one-way delay: 22.149 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.39 Mbit/s

95th percentile per-packet one-way delay: 20.993 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.12 Mbit/s

95th percentile per-packet one-way delay: 23.498 ms

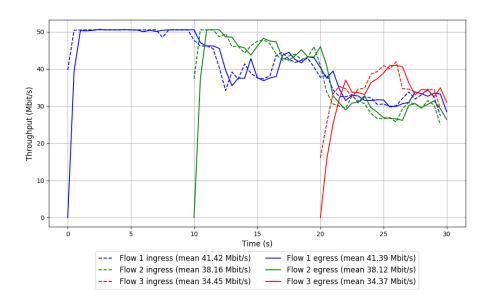
Loss rate: 0.00%

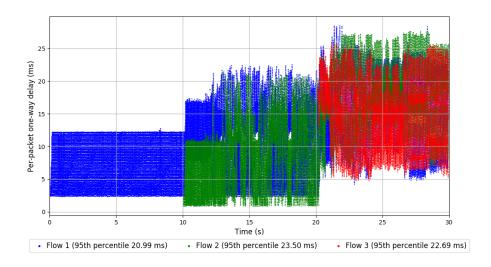
-- Flow 3:

Average throughput: 34.37 Mbit/s

95th percentile per-packet one-way delay: 22.693 ms

Run 2: Report of Sprout — Data Link





## Run 3: Statistics of Sprout

Start at: 2019-12-11 07:36:45 End at: 2019-12-11 07:37:15 Local clock offset: -5.638 ms Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2019-12-11 08:58:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 78.59 Mbit/s

95th percentile per-packet one-way delay: 23.094 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.54 Mbit/s

95th percentile per-packet one-way delay: 21.259 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.19 Mbit/s

95th percentile per-packet one-way delay: 23.863 ms

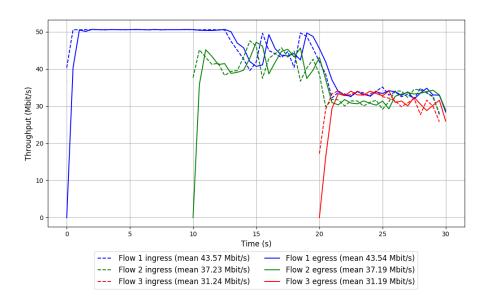
Loss rate: 0.00%

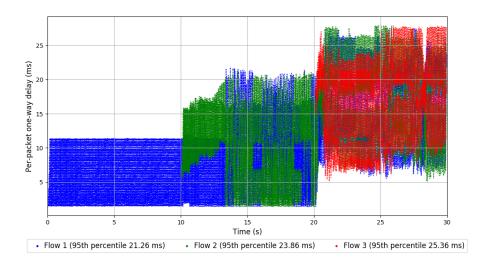
-- Flow 3:

Average throughput: 31.19 Mbit/s

95th percentile per-packet one-way delay: 25.359 ms

Run 3: Report of Sprout — Data Link





## Run 4: Statistics of Sprout

Start at: 2019-12-11 08:04:01 End at: 2019-12-11 08:04:31 Local clock offset: -5.55 ms Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2019-12-11 08:59:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 23.354 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.90 Mbit/s

95th percentile per-packet one-way delay: 20.888 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.04 Mbit/s

95th percentile per-packet one-way delay: 22.987 ms

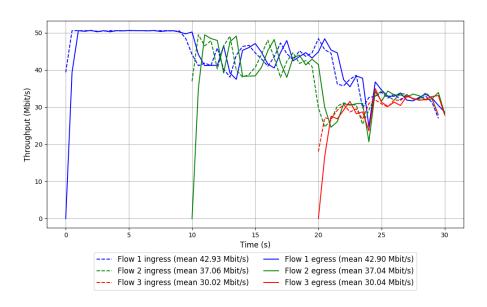
Loss rate: 0.00%

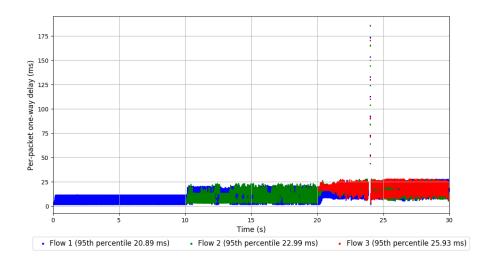
-- Flow 3:

Average throughput: 30.04 Mbit/s

95th percentile per-packet one-way delay: 25.929 ms

Run 4: Report of Sprout — Data Link





## Run 5: Statistics of Sprout

Start at: 2019-12-11 08:31:16 End at: 2019-12-11 08:31:46 Local clock offset: -7.208 ms Remote clock offset: 0.139 ms

# Below is generated by plot.py at 2019-12-11 08:59:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 78.58 Mbit/s

95th percentile per-packet one-way delay: 22.311 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.29 Mbit/s

95th percentile per-packet one-way delay: 19.902 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.17 Mbit/s

95th percentile per-packet one-way delay: 23.440 ms

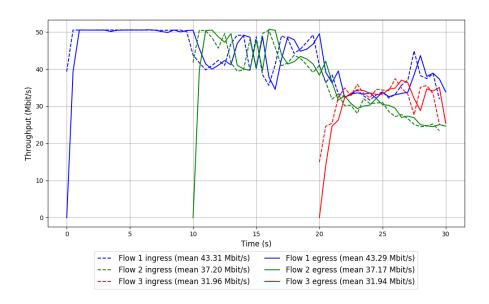
Loss rate: 0.00%

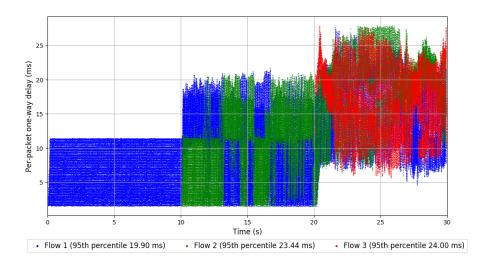
-- Flow 3:

Average throughput: 31.94 Mbit/s

95th percentile per-packet one-way delay: 24.000 ms

Run 5: Report of Sprout — Data Link





## Run 1: Statistics of TaoVA-100x

Start at: 2019-12-11 06:35:32 End at: 2019-12-11 06:36:02 Local clock offset: -6.453 ms Remote clock offset: -0.424 ms

# Below is generated by plot.py at 2019-12-11 08:59:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.61 Mbit/s

95th percentile per-packet one-way delay: 2.401 ms

Loss rate: 83.28%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 0.971 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 9.98 Mbit/s

95th percentile per-packet one-way delay: 2.408 ms

Loss rate: 83.59%

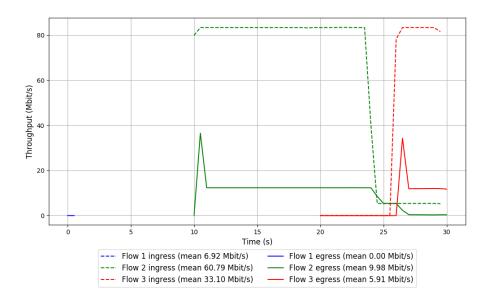
-- Flow 3:

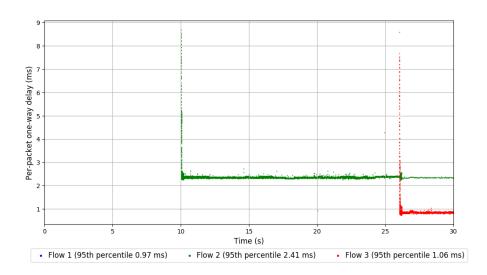
Average throughput: 5.91 Mbit/s

95th percentile per-packet one-way delay: 1.056 ms

Loss rate: 82.15%

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





## Run 2: Statistics of TaoVA-100x

Start at: 2019-12-11 07:02:47 End at: 2019-12-11 07:03:17 Local clock offset: -6.984 ms Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2019-12-11 08:59:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.26 Mbit/s

95th percentile per-packet one-way delay: 3.116 ms

Loss rate: 83.98%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 3.096 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 3.116 ms

Loss rate: 83.98%

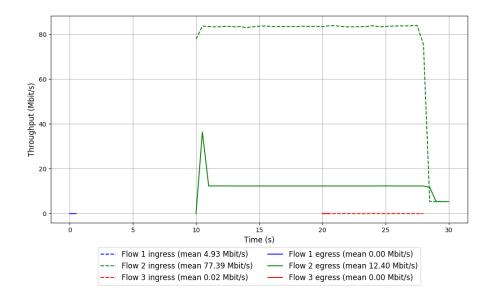
-- Flow 3:

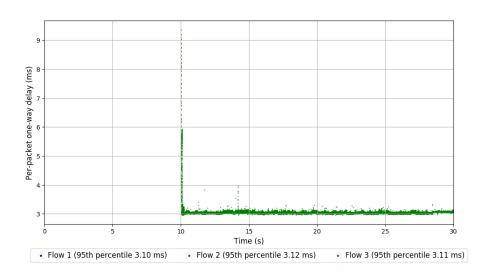
Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 3.111 ms

Loss rate: 99.16%

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





## Run 3: Statistics of TaoVA-100x

Start at: 2019-12-11 07:30:02 End at: 2019-12-11 07:30:32 Local clock offset: -5.062 ms Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2019-12-11 08:59:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.56 Mbit/s

95th percentile per-packet one-way delay: 2.496 ms

Loss rate: 84.46%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 0.972 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 2.498 ms

Loss rate: 83.66%

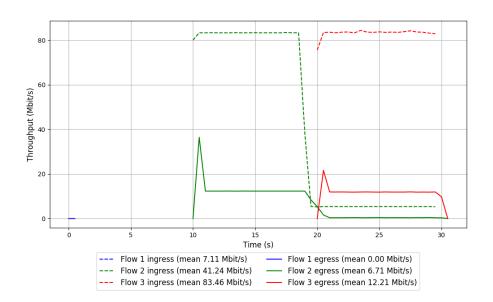
-- Flow 3:

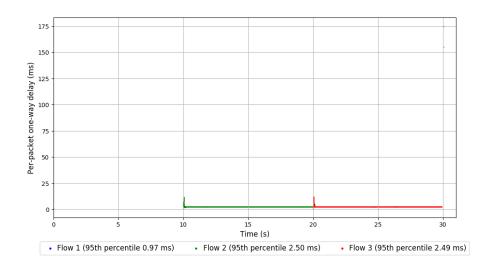
Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 2.491 ms

Loss rate: 85.24%

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





## Run 4: Statistics of TaoVA-100x

Start at: 2019-12-11 07:57:18 End at: 2019-12-11 07:57:48 Local clock offset: -4.889 ms Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2019-12-11 08:59:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.62 Mbit/s

95th percentile per-packet one-way delay: 2.427 ms

Loss rate: 84.37%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 2.295 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 2.443 ms

Loss rate: 83.71%

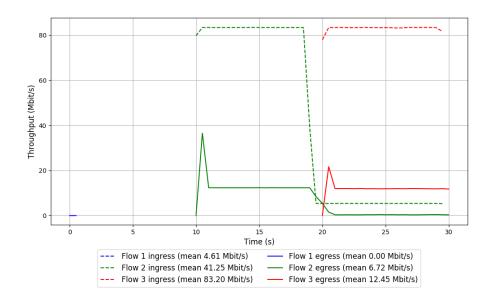
-- Flow 3:

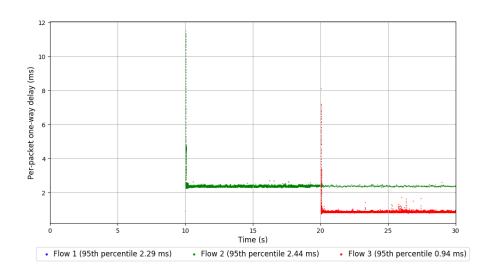
Average throughput: 12.45 Mbit/s

95th percentile per-packet one-way delay: 0.939 ms

Loss rate: 85.03%

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





## Run 5: Statistics of TaoVA-100x

Start at: 2019-12-11 08:24:33 End at: 2019-12-11 08:25:03 Local clock offset: -7.007 ms Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-12-11 08:59:05

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.62 Mbit/s

95th percentile per-packet one-way delay: 2.987 ms

Loss rate: 89.61%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 3.160 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 1.552 ms

Loss rate: 86.81%

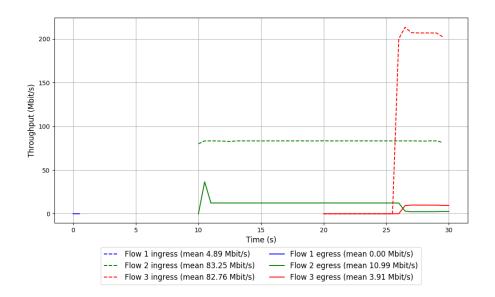
-- Flow 3:

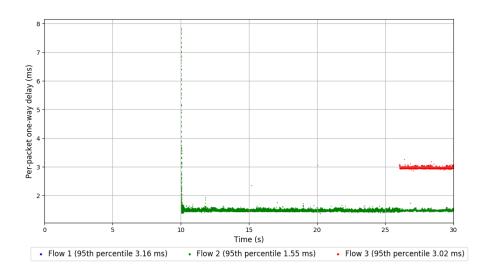
Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 3.021 ms

Loss rate: 95.28%

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





# Run 1: Statistics of TCP Vegas

Start at: 2019-12-11 06:44:33 End at: 2019-12-11 06:45:03 Local clock offset: -6.335 ms Remote clock offset: -0.341 ms

# Below is generated by plot.py at 2019-12-11 08:59:52

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 5.335 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.50 Mbit/s

95th percentile per-packet one-way delay: 4.614 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.45 Mbit/s

95th percentile per-packet one-way delay: 3.647 ms

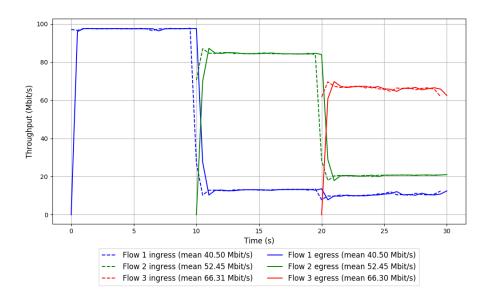
Loss rate: 0.00%

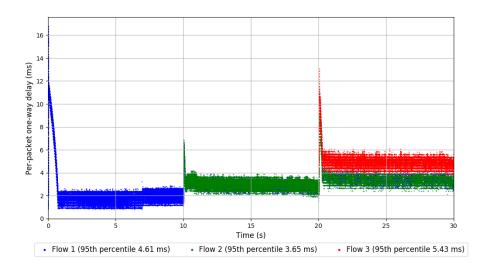
-- Flow 3:

Average throughput: 66.30 Mbit/s

95th percentile per-packet one-way delay:  $5.435~\mathrm{ms}$ 

Run 1: Report of TCP Vegas — Data Link





# Run 2: Statistics of TCP Vegas

Start at: 2019-12-11 07:11:49 End at: 2019-12-11 07:12:19 Local clock offset: -6.006 ms Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-12-11 08:59:55

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.48 Mbit/s

95th percentile per-packet one-way delay: 5.128 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 3.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.29 Mbit/s

95th percentile per-packet one-way delay: 3.576 ms

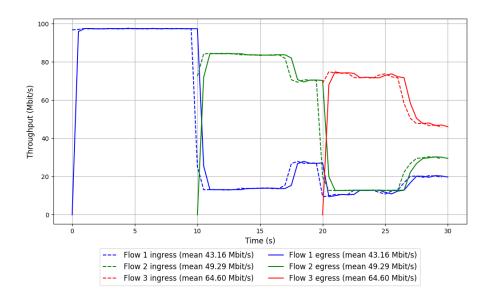
Loss rate: 0.00%

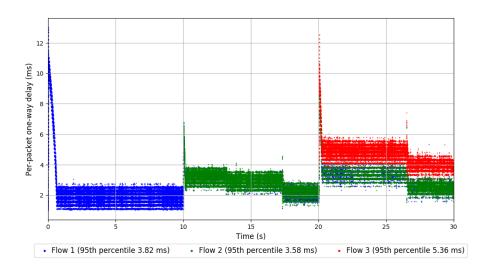
-- Flow 3:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 5.360 ms

Run 2: Report of TCP Vegas — Data Link





# Run 3: Statistics of TCP Vegas

Start at: 2019-12-11 07:39:03 End at: 2019-12-11 07:39:33 Local clock offset: -4.984 ms Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2019-12-11 08:59:57

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.48 Mbit/s

95th percentile per-packet one-way delay: 4.705 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.07 Mbit/s

95th percentile per-packet one-way delay: 2.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.65 Mbit/s

95th percentile per-packet one-way delay: 4.679 ms

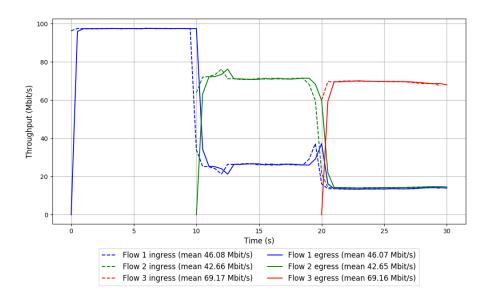
Loss rate: 0.00%

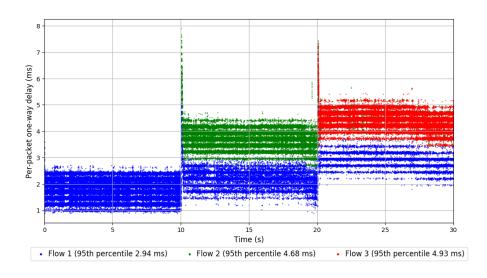
-- Flow 3:

Average throughput: 69.16 Mbit/s

95th percentile per-packet one-way delay:  $4.927~\mathrm{ms}$ 

Run 3: Report of TCP Vegas — Data Link





# Run 4: Statistics of TCP Vegas

Start at: 2019-12-11 08:06:19 End at: 2019-12-11 08:06:49 Local clock offset: -5.512 ms Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2019-12-11 09:00:07

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.48 Mbit/s

95th percentile per-packet one-way delay: 3.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.13 Mbit/s

95th percentile per-packet one-way delay: 3.530 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.22 Mbit/s

95th percentile per-packet one-way delay: 3.403 ms

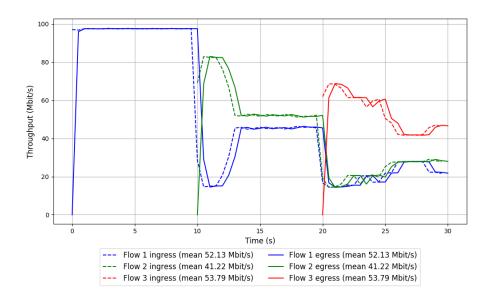
Loss rate: 0.00%

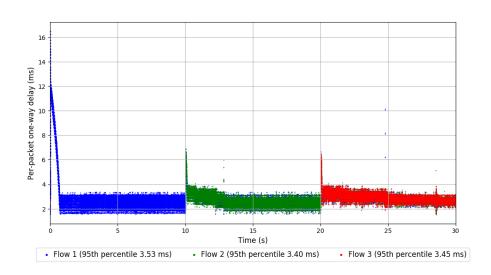
-- Flow 3:

Average throughput: 53.79 Mbit/s

95th percentile per-packet one-way delay: 3.451 ms

Run 4: Report of TCP Vegas — Data Link





# Run 5: Statistics of TCP Vegas

Start at: 2019-12-11 08:33:34 End at: 2019-12-11 08:34:04 Local clock offset: -7.318 ms Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-12-11 09:00:08

# Datalink statistics
-- Total of 3 flows:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 4.565 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 3.277 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.83 Mbit/s

95th percentile per-packet one-way delay: 4.758 ms

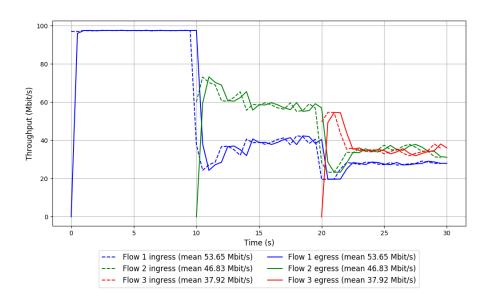
Loss rate: 0.00%

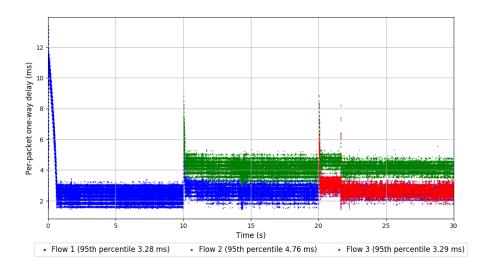
-- Flow 3:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 3.291 ms

Run 5: Report of TCP Vegas — Data Link





### Run 1: Statistics of Verus

Start at: 2019-12-11 06:32:06 End at: 2019-12-11 06:32:36 Local clock offset: -7.049 ms Remote clock offset: -0.288 ms

# Below is generated by plot.py at 2019-12-11 09:00:08

# Datalink statistics
-- Total of 3 flows:

Average throughput: 64.71 Mbit/s

95th percentile per-packet one-way delay: 28.722 ms

Loss rate: 4.82%

-- Flow 1:

Average throughput: 31.19 Mbit/s

95th percentile per-packet one-way delay: 25.745 ms

Loss rate: 3.88%

-- Flow 2:

Average throughput: 39.48 Mbit/s

95th percentile per-packet one-way delay: 27.477 ms

Loss rate: 3.48%

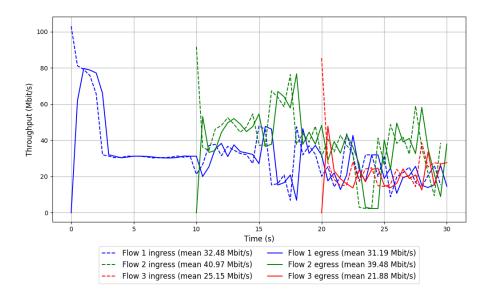
-- Flow 3:

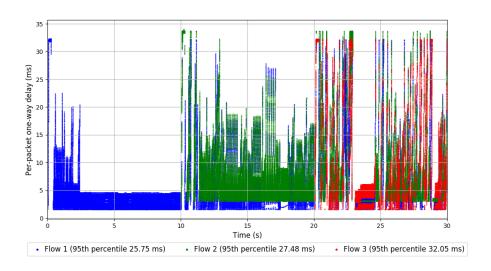
Average throughput: 21.88 Mbit/s

95th percentile per-packet one-way delay: 32.048 ms

Loss rate: 12.87%

Run 1: Report of Verus — Data Link





# Run 2: Statistics of Verus

Start at: 2019-12-11 06:59:20 End at: 2019-12-11 06:59:50 Local clock offset: -6.988 ms Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2019-12-11 09:00:08

# Datalink statistics
-- Total of 3 flows:

Average throughput: 71.39 Mbit/s

95th percentile per-packet one-way delay: 31.272 ms

Loss rate: 14.22%

-- Flow 1:

Average throughput: 31.41 Mbit/s

95th percentile per-packet one-way delay: 30.546 ms

Loss rate: 22.08%

-- Flow 2:

Average throughput: 43.17 Mbit/s

95th percentile per-packet one-way delay: 28.864 ms

Loss rate: 4.16%

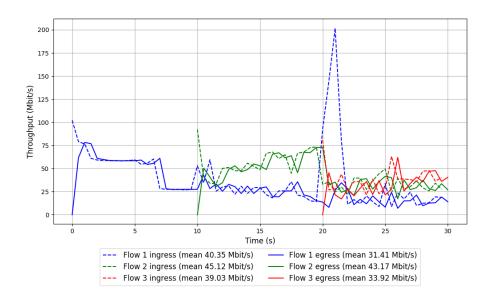
-- Flow 3:

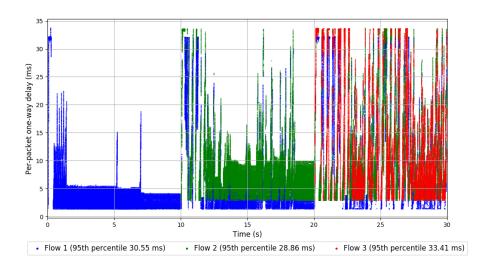
Average throughput: 33.92 Mbit/s

95th percentile per-packet one-way delay: 33.410 ms

Loss rate: 13.02%

Run 2: Report of Verus — Data Link





## Run 3: Statistics of Verus

Start at: 2019-12-11 07:26:35 End at: 2019-12-11 07:27:05 Local clock offset: -5.158 ms Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-12-11 09:00:08

# Datalink statistics
-- Total of 3 flows:

Average throughput: 74.10 Mbit/s

95th percentile per-packet one-way delay: 32.196 ms

Loss rate: 13.32%

-- Flow 1:

Average throughput: 47.46 Mbit/s

95th percentile per-packet one-way delay: 29.767 ms

Loss rate: 9.57%

-- Flow 2:

Average throughput: 26.15 Mbit/s

95th percentile per-packet one-way delay: 32.783 ms

Loss rate: 14.07%

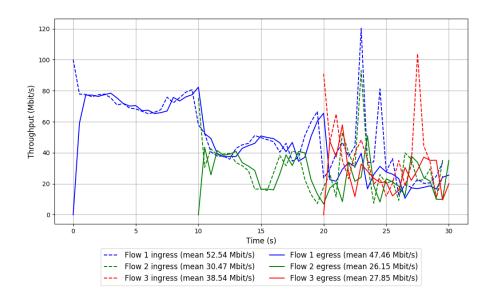
-- Flow 3:

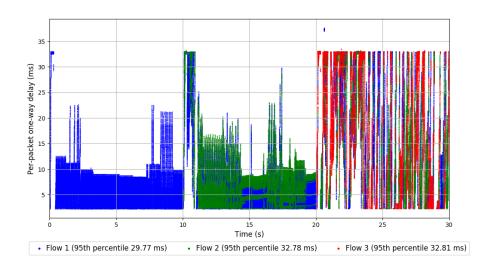
Average throughput: 27.85 Mbit/s

95th percentile per-packet one-way delay: 32.813 ms

Loss rate: 27.57%

Run 3: Report of Verus — Data Link





## Run 4: Statistics of Verus

Start at: 2019-12-11 07:53:51 End at: 2019-12-11 07:54:21 Local clock offset: -4.919 ms Remote clock offset: 0.154 ms

# Below is generated by plot.py at 2019-12-11 09:00:34

# Datalink statistics
-- Total of 3 flows:

Average throughput: 62.86 Mbit/s

95th percentile per-packet one-way delay: 31.417 ms

Loss rate: 12.35%

-- Flow 1:

Average throughput: 29.94 Mbit/s

95th percentile per-packet one-way delay: 30.553 ms

Loss rate: 7.91%

-- Flow 2:

Average throughput: 33.60 Mbit/s

95th percentile per-packet one-way delay: 32.818 ms

Loss rate: 15.60%

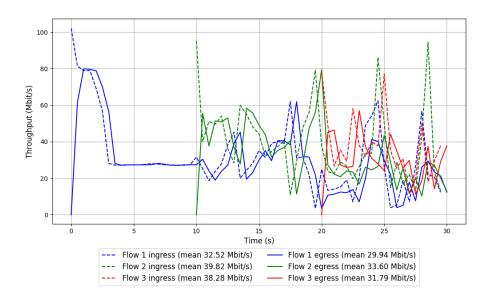
-- Flow 3:

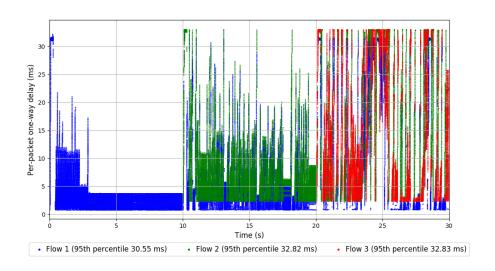
Average throughput: 31.79 Mbit/s

95th percentile per-packet one-way delay: 32.825 ms

Loss rate: 16.93%

Run 4: Report of Verus — Data Link





## Run 5: Statistics of Verus

Start at: 2019-12-11 08:21:06 End at: 2019-12-11 08:21:36 Local clock offset: -6.133 ms Remote clock offset: 0.131 ms

# Below is generated by plot.py at 2019-12-11 09:00:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 74.38 Mbit/s

95th percentile per-packet one-way delay: 30.534 ms

Loss rate: 6.24%

-- Flow 1:

Average throughput: 45.12 Mbit/s

95th percentile per-packet one-way delay: 26.797 ms

Loss rate: 3.54%

-- Flow 2:

Average throughput: 30.71 Mbit/s

95th percentile per-packet one-way delay: 31.775 ms

Loss rate: 9.16%

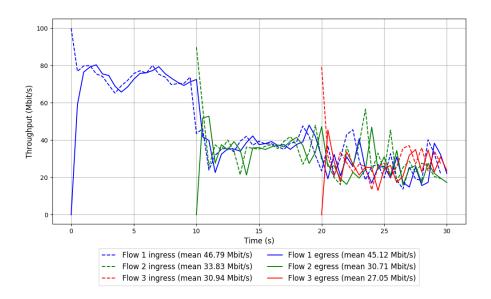
-- Flow 3:

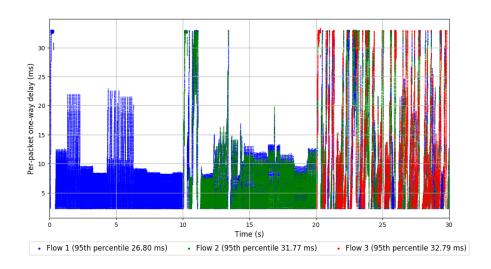
Average throughput: 27.05 Mbit/s

95th percentile per-packet one-way delay: 32.790 ms

Loss rate: 12.30%

Run 5: Report of Verus — Data Link





# Run 1: Statistics of PCC-Vivace

Start at: 2019-12-11 06:30:55 End at: 2019-12-11 06:31:25 Local clock offset: -6.38 ms Remote clock offset: -0.31 ms

# Below is generated by plot.py at 2019-12-11 09:00:57

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.61 Mbit/s

95th percentile per-packet one-way delay: 2.743 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 2.805 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.61 Mbit/s

95th percentile per-packet one-way delay: 2.010 ms

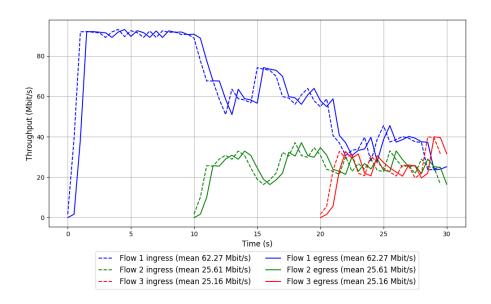
Loss rate: 0.00%

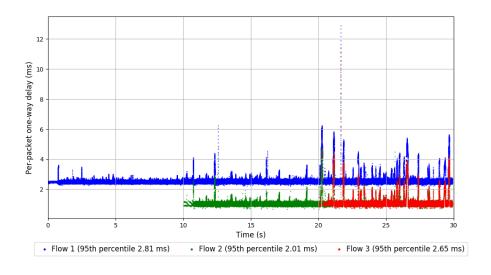
-- Flow 3:

Average throughput: 25.16 Mbit/s

95th percentile per-packet one-way delay: 2.647 ms

Run 1: Report of PCC-Vivace — Data Link





# Run 2: Statistics of PCC-Vivace

Start at: 2019-12-11 06:58:09

End at: 2019-12-11 06:58:39 Local clock offset: -6.999 ms Remote clock offset: -0.227 ms # Below is generated by plot.py at 2019-12-11 09:00:58 # Datalink statistics -- Total of 3 flows: Average throughput: 86.30 Mbit/s 95th percentile per-packet one-way delay: 3.628 ms Loss rate: 0.00% -- Flow 1: Average throughput: 49.08 Mbit/s 95th percentile per-packet one-way delay: 2.051 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.52 Mbit/s

95th percentile per-packet one-way delay: 4.529 ms

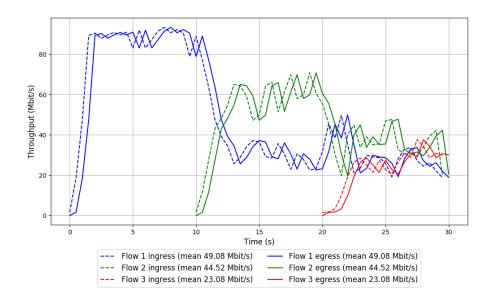
Loss rate: 0.00%

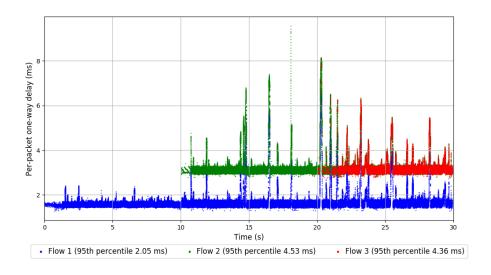
-- Flow 3:

Average throughput: 23.08 Mbit/s

95th percentile per-packet one-way delay: 4.363 ms

Run 2: Report of PCC-Vivace — Data Link





# Run 3: Statistics of PCC-Vivace

Start at: 2019-12-11 07:25:24 End at: 2019-12-11 07:25:54 Local clock offset: -5.265 ms Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2019-12-11 09:00:58

# Datalink statistics
-- Total of 3 flows:

Average throughput: 85.75 Mbit/s

95th percentile per-packet one-way delay: 2.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.55 Mbit/s

95th percentile per-packet one-way delay: 1.734 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.25 Mbit/s

95th percentile per-packet one-way delay: 3.035 ms

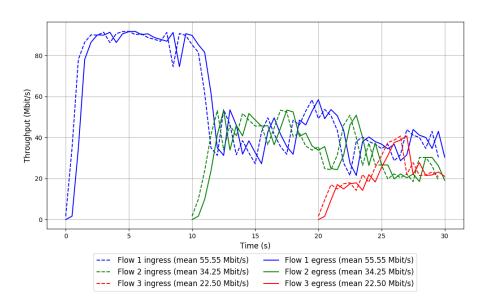
Loss rate: 0.00%

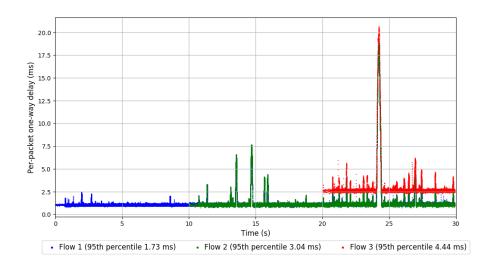
-- Flow 3:

Average throughput: 22.50 Mbit/s

95th percentile per-packet one-way delay:  $4.443~\mathrm{ms}$ 

Run 3: Report of PCC-Vivace — Data Link





# Run 4: Statistics of PCC-Vivace

Start at: 2019-12-11 07:52:41 End at: 2019-12-11 07:53:11 Local clock offset: -4.915 ms Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2019-12-11 09:01:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.10 Mbit/s

95th percentile per-packet one-way delay: 3.316 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 3.078 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.37 Mbit/s

95th percentile per-packet one-way delay: 4.565 ms

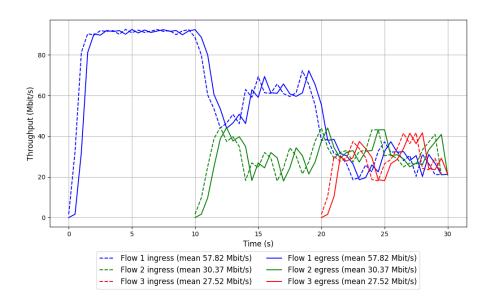
Loss rate: 0.00%

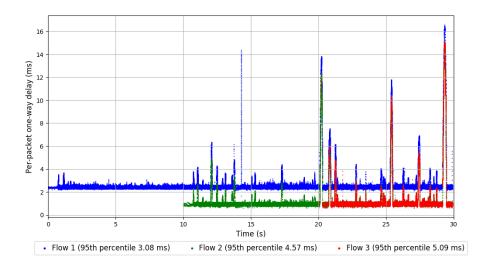
-- Flow 3:

Average throughput: 27.52 Mbit/s

95th percentile per-packet one-way delay: 5.092 ms

Run 4: Report of PCC-Vivace — Data Link





# Run 5: Statistics of PCC-Vivace

Start at: 2019-12-11 08:19:55 End at: 2019-12-11 08:20:25 Local clock offset: -6.763 ms Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2019-12-11 09:01:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 3.802 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.80 Mbit/s

95th percentile per-packet one-way delay: 4.014 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.19 Mbit/s

95th percentile per-packet one-way delay: 3.759 ms

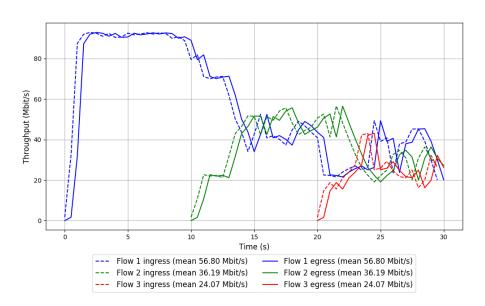
Loss rate: 0.00%

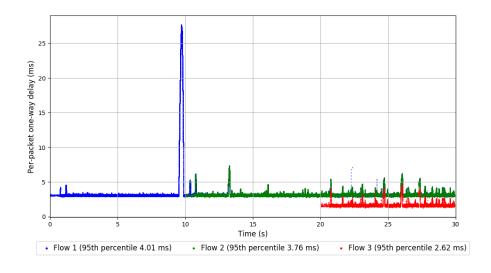
-- Flow 3:

Average throughput: 24.07 Mbit/s

95th percentile per-packet one-way delay: 2.623 ms

Run 5: Report of PCC-Vivace — Data Link





# Run 1: Statistics of WebRTC media

Start at: 2019-12-11 06:40:00 End at: 2019-12-11 06:40:30 Local clock offset: -7.089 ms Remote clock offset: -0.358 ms

# Below is generated by plot.py at 2019-12-11 09:01:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 7.007 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 3.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 8.289 ms

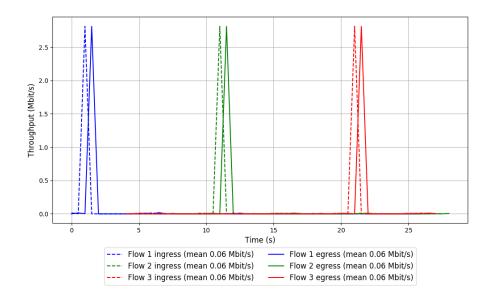
Loss rate: 0.00%

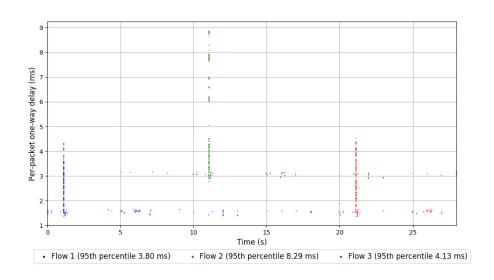
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay:  $4.134~\mathrm{ms}$ 

Run 1: Report of WebRTC media — Data Link





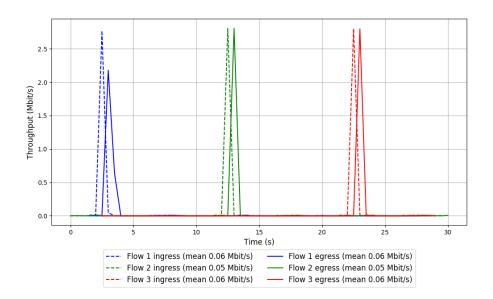
# Run 2: Statistics of WebRTC media

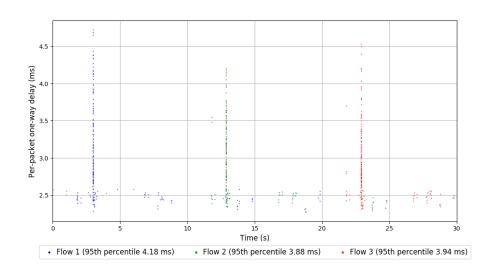
Start at: 2019-12-11 07:07:15

Loss rate: 0.00%

End at: 2019-12-11 07:07:45 Local clock offset: -6.361 ms Remote clock offset: -0.036 ms # Below is generated by plot.py at 2019-12-11 09:01:01 # Datalink statistics -- Total of 3 flows: Average throughput: 0.15 Mbit/s 95th percentile per-packet one-way delay: 4.100 ms Loss rate: 0.00% -- Flow 1: Average throughput: 0.06 Mbit/s 95th percentile per-packet one-way delay: 4.181 ms Loss rate: 0.00% -- Flow 2: Average throughput: 0.05 Mbit/s 95th percentile per-packet one-way delay: 3.877 ms Loss rate: 0.00% -- Flow 3: Average throughput: 0.06 Mbit/s 95th percentile per-packet one-way delay: 3.942 ms

Run 2: Report of WebRTC media — Data Link





# Run 3: Statistics of WebRTC media

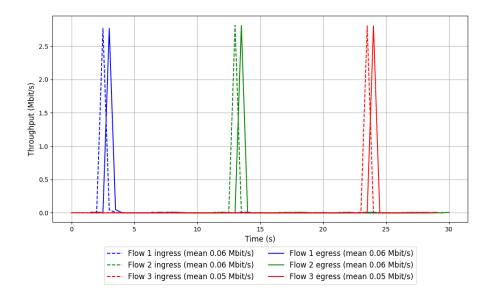
Start at: 2019-12-11 07:34:30

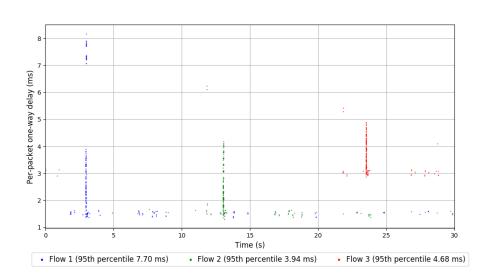
Loss rate: 0.00%

End at: 2019-12-11 07:35:00 Local clock offset: -5.682 ms Remote clock offset: 0.047 ms # Below is generated by plot.py at 2019-12-11 09:01:01 # Datalink statistics -- Total of 3 flows: Average throughput: 0.15 Mbit/s 95th percentile per-packet one-way delay: 5.415 ms Loss rate: 0.00% -- Flow 1: Average throughput: 0.06 Mbit/s 95th percentile per-packet one-way delay: 7.702 ms Loss rate: 0.00% -- Flow 2: Average throughput: 0.06 Mbit/s 95th percentile per-packet one-way delay: 3.942 ms Loss rate: 0.00% -- Flow 3: Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 4.677 ms

Run 3: Report of WebRTC media — Data Link



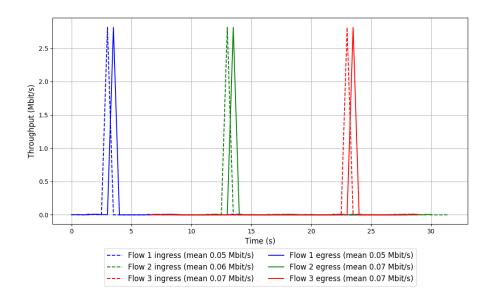


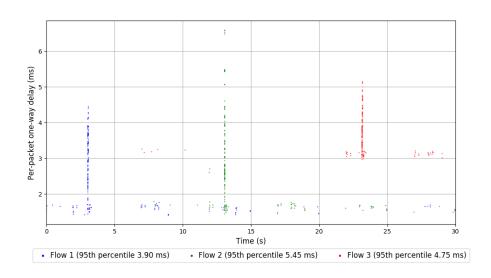
# Run 4: Statistics of WebRTC media

Start at: 2019-12-11 08:01:46 End at: 2019-12-11 08:02:16 Local clock offset: -5.568 ms Remote clock offset: 0.172 ms # Below is generated by plot.py at 2019-12-11 09:01:01 # Datalink statistics -- Total of 3 flows: Average throughput: 0.14 Mbit/s 95th percentile per-packet one-way delay: 4.661 ms Loss rate: 0.02% -- Flow 1: Average throughput: 0.05 Mbit/s 95th percentile per-packet one-way delay: 3.902 ms Loss rate: 0.00% -- Flow 2: Average throughput: 0.07 Mbit/s 95th percentile per-packet one-way delay: 5.452 ms Loss rate: 0.05% -- Flow 3: Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 4.746 ms

Run 4: Report of WebRTC media — Data Link





# Run 5: Statistics of WebRTC media

Average throughput: 0.07 Mbit/s

Loss rate: 0.00%

Start at: 2019-12-11 08:29:01 End at: 2019-12-11 08:29:31 Local clock offset: -6.535 ms Remote clock offset: -0.011 ms # Below is generated by plot.py at 2019-12-11 09:01:01 # Datalink statistics -- Total of 3 flows: Average throughput: 0.15 Mbit/s 95th percentile per-packet one-way delay: 3.683 ms Loss rate: 0.00% -- Flow 1: Average throughput: 0.06 Mbit/s 95th percentile per-packet one-way delay: 3.972 ms Loss rate: 0.00% -- Flow 2: Average throughput: 0.06 Mbit/s 95th percentile per-packet one-way delay: 3.082 ms Loss rate: 0.00% -- Flow 3:

95th percentile per-packet one-way delay: 3.638 ms

Run 5: Report of WebRTC media — Data Link

