

## Pantheon Report

Generated at 2019-01-19 08:43:54 (UTC).

Data path: Saudi Arabia on **enp2s0** (*remote*) → AWS India 2 on **ens5** (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

### System info:

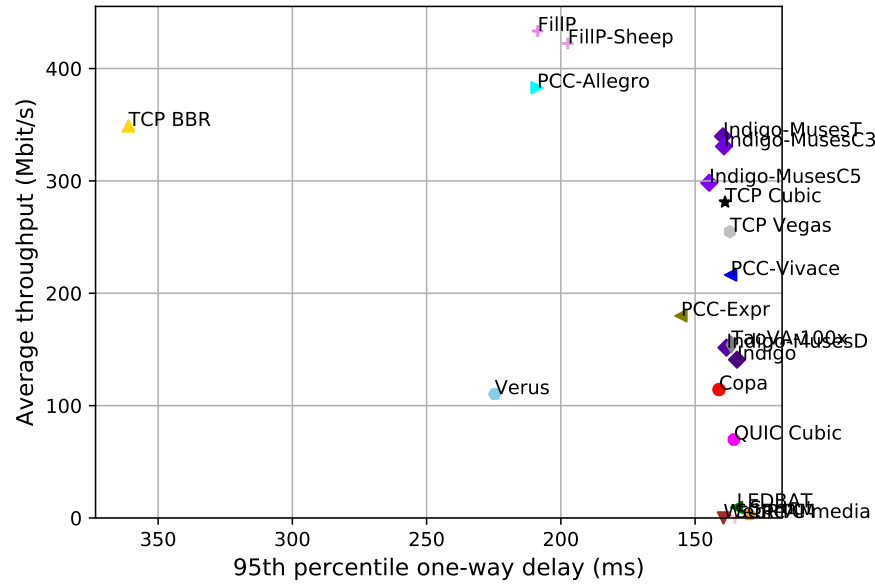
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

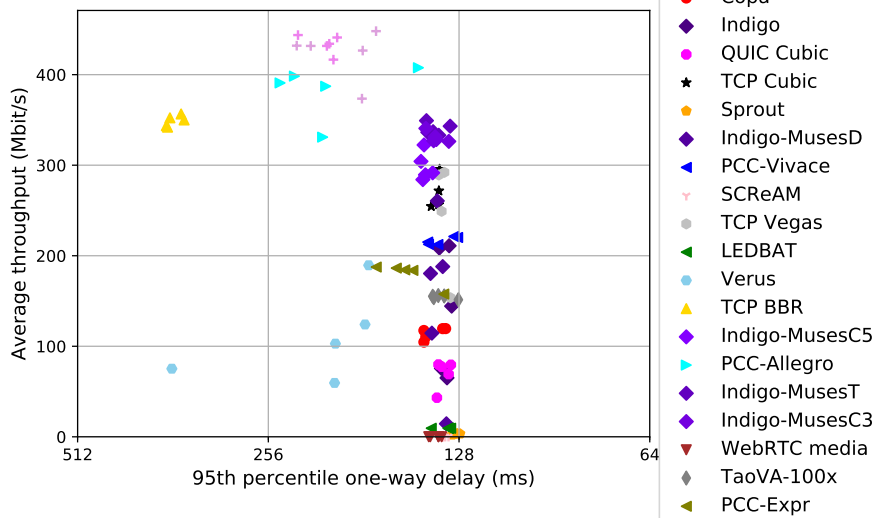
```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
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-quick @ 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 Saudi Arabia to AWS India 2, 5 runs of 30s each per scheme  
(mean of all runs by scheme)



test from Saudi Arabia to AWS India 2, 5 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	348.92	361.03	1.70
Copa	5	114.31	141.11	0.72
TCP Cubic	5	281.12	138.84	0.75
FillP	5	433.44	208.65	2.04
FillP-Sheep	5	422.38	197.44	1.36
Indigo	5	140.92	134.38	0.58
Indigo-MusesC3	5	330.74	139.25	0.81
Indigo-MusesC5	5	298.32	144.77	0.93
Indigo-MusesD	5	151.57	138.33	1.37
Indigo-MusesT	5	339.74	139.62	0.78
LEDBAT	5	9.46	134.54	1.30
PCC-Allegro	5	383.02	208.88	0.88
PCC-Expr	5	179.94	155.27	0.69
QUIC Cubic	5	69.85	135.56	0.57
SCReAM	5	0.22	135.16	0.64
Sprout	5	3.08	129.70	0.87
TaoVA-100x	5	154.38	136.51	0.70
TCP Vegas	5	254.78	137.05	0.64
Verus	5	110.25	224.64	0.96
PCC-Vivace	5	216.29	136.77	0.76
WebRTC media	5	0.05	139.45	0.00

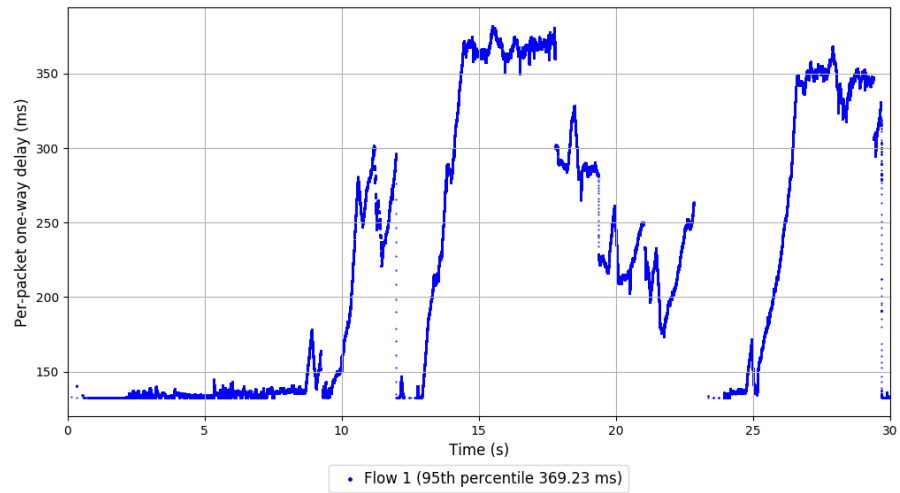
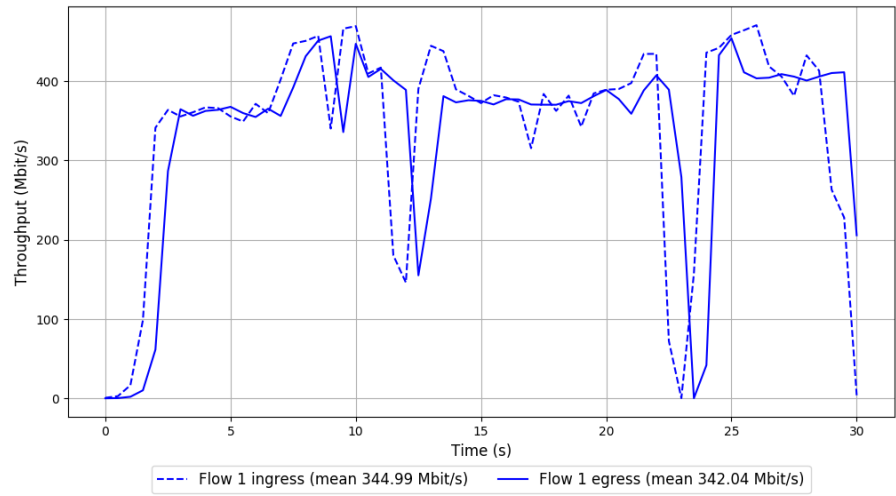


Run 1: Statistics of TCP BBR

Start at: 2019-01-19 05:51:27  
End at: 2019-01-19 05:51:57  
Local clock offset: 1.831 ms  
Remote clock offset: -34.266 ms

# Below is generated by plot.py at 2019-01-19 08:14:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 342.04 Mbit/s  
95th percentile per-packet one-way delay: 369.229 ms  
Loss rate: 1.51%  
-- Flow 1:  
Average throughput: 342.04 Mbit/s  
95th percentile per-packet one-way delay: 369.229 ms  
Loss rate: 1.51%

# Run 1: Report of TCP BBR — Data Link

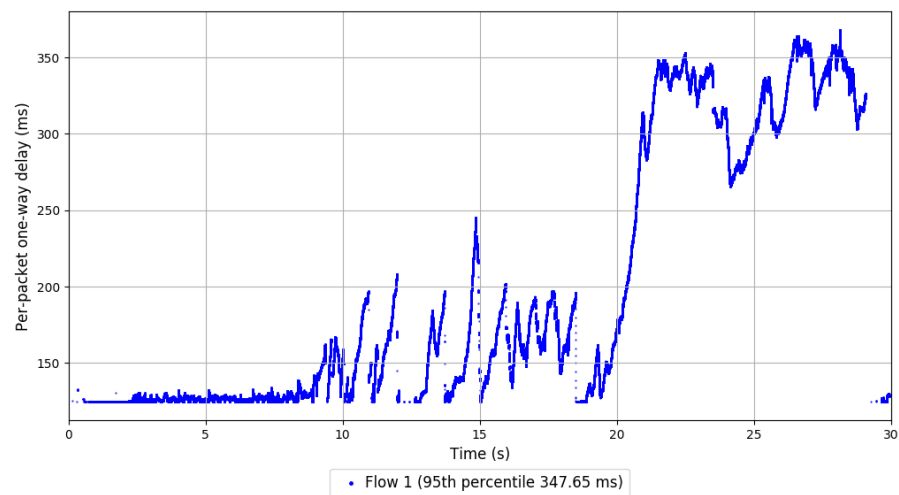
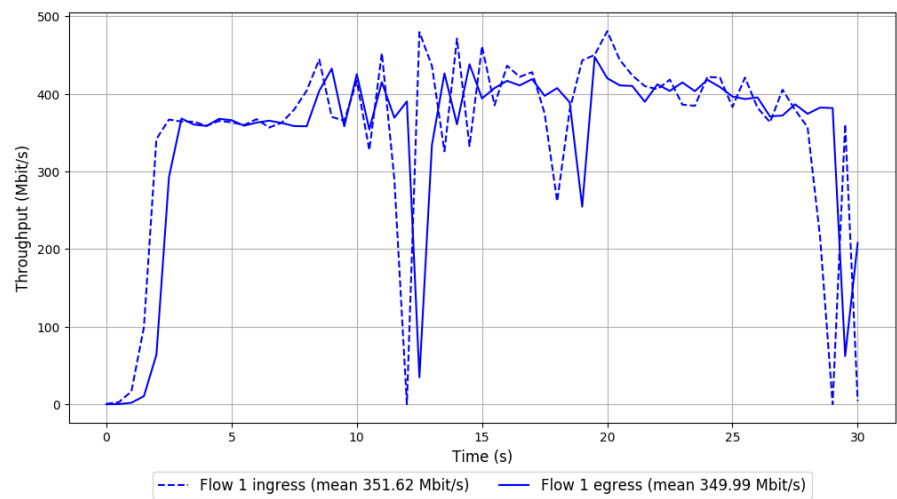


Run 2: Statistics of TCP BBR

Start at: 2019-01-19 06:19:35  
End at: 2019-01-19 06:20:05  
Local clock offset: -0.261 ms  
Remote clock offset: -30.804 ms

# Below is generated by plot.py at 2019-01-19 08:15:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 349.99 Mbit/s  
95th percentile per-packet one-way delay: 347.652 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 349.99 Mbit/s  
95th percentile per-packet one-way delay: 347.652 ms  
Loss rate: 1.12%

Run 2: Report of TCP BBR — Data Link

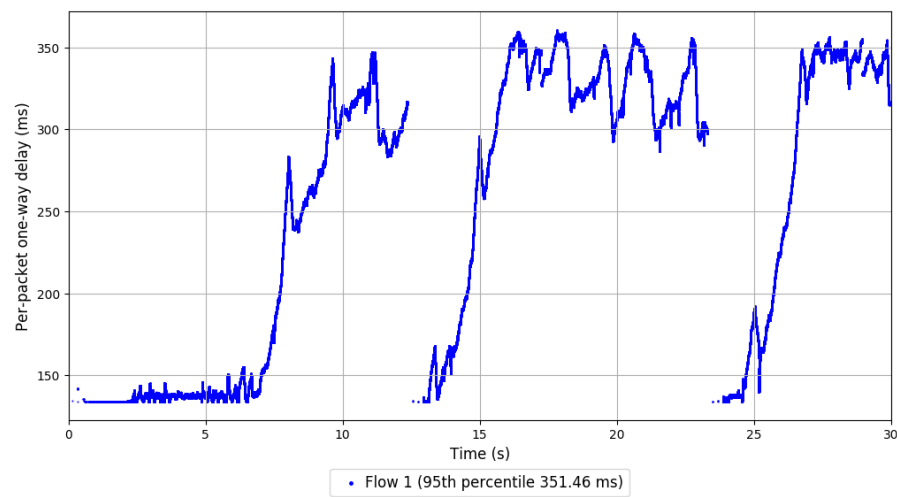
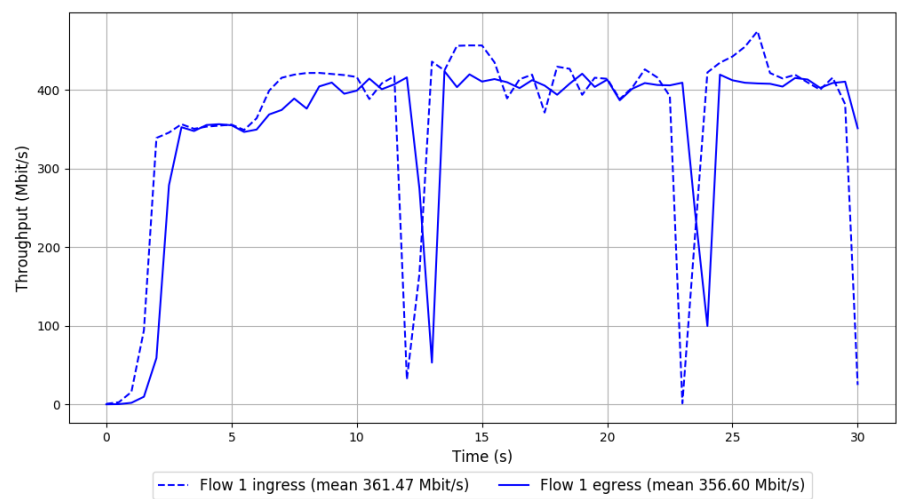


Run 3: Statistics of TCP BBR

Start at: 2019-01-19 06:53:10  
End at: 2019-01-19 06:53:40  
Local clock offset: 1.342 ms  
Remote clock offset: -37.208 ms

# Below is generated by plot.py at 2019-01-19 08:15:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 356.60 Mbit/s  
95th percentile per-packet one-way delay: 351.458 ms  
Loss rate: 2.10%  
-- Flow 1:  
Average throughput: 356.60 Mbit/s  
95th percentile per-packet one-way delay: 351.458 ms  
Loss rate: 2.10%

Run 3: Report of TCP BBR — Data Link

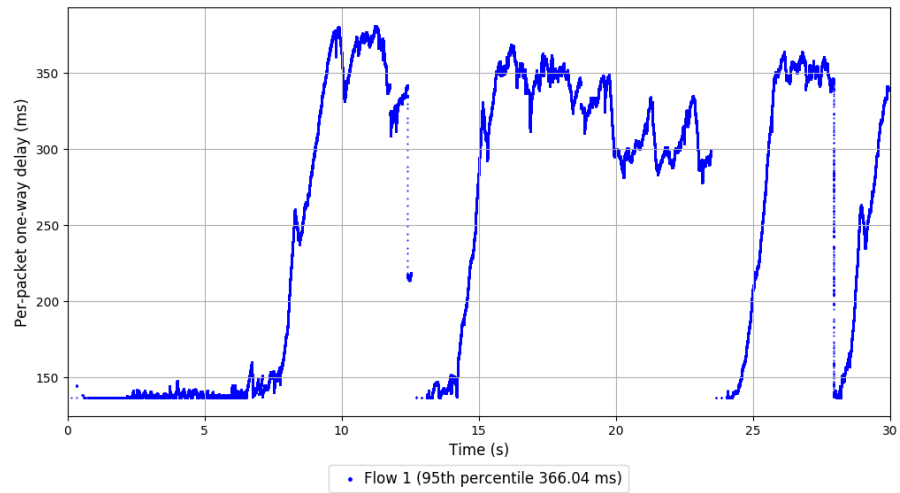
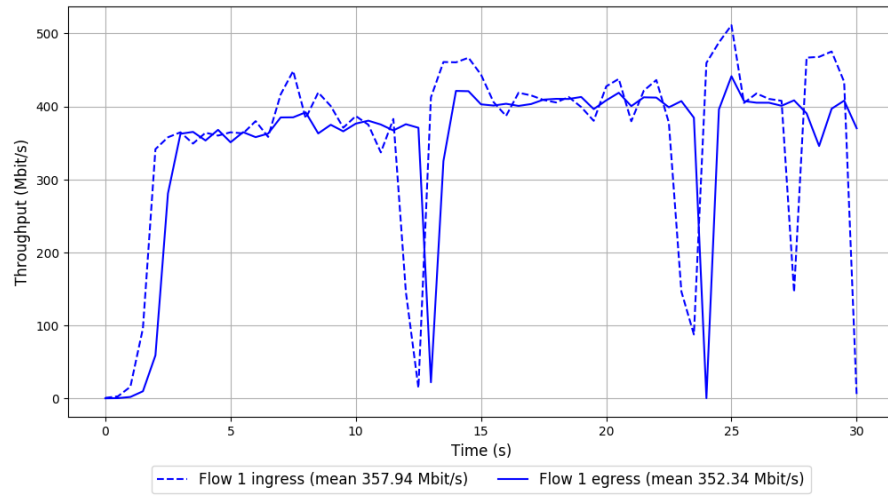


Run 4: Statistics of TCP BBR

Start at: 2019-01-19 07:32:23  
End at: 2019-01-19 07:32:53  
Local clock offset: -1.075 ms  
Remote clock offset: -40.151 ms

# Below is generated by plot.py at 2019-01-19 08:15:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 352.34 Mbit/s  
95th percentile per-packet one-way delay: 366.042 ms  
Loss rate: 2.21%  
-- Flow 1:  
Average throughput: 352.34 Mbit/s  
95th percentile per-packet one-way delay: 366.042 ms  
Loss rate: 2.21%

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



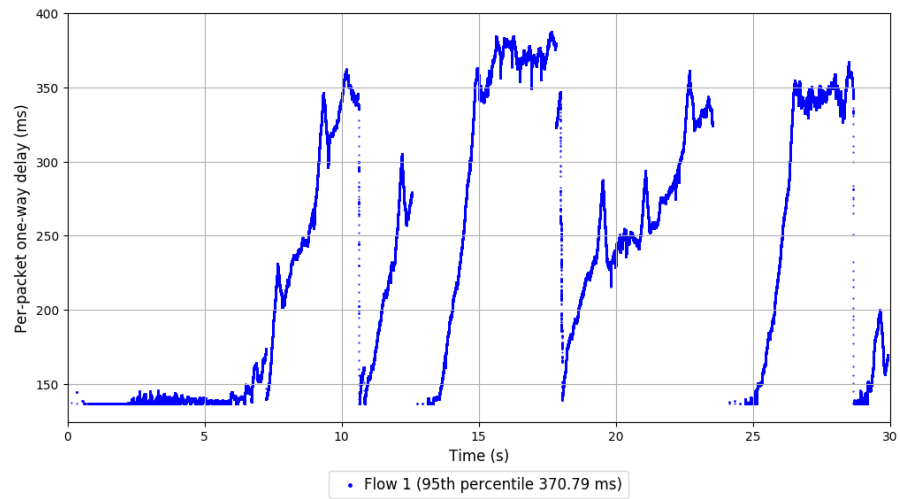
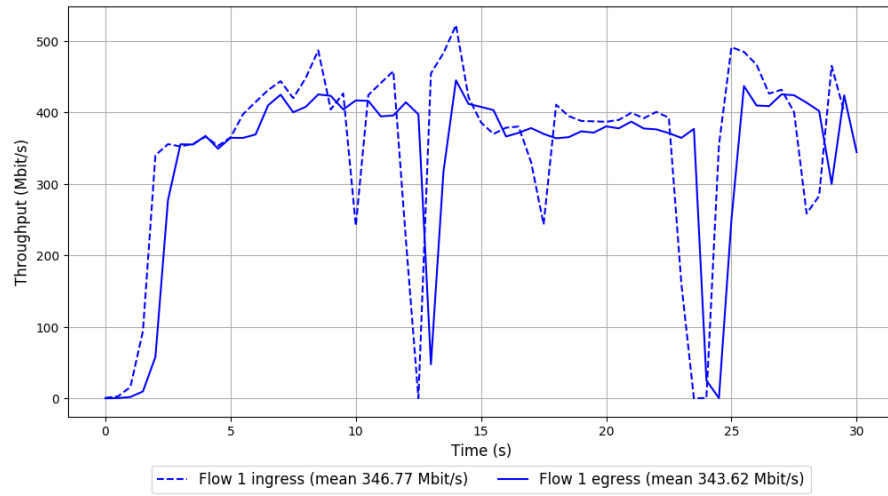


Run 5: Statistics of TCP BBR

Start at: 2019-01-19 08:06:07  
End at: 2019-01-19 08:06:37  
Local clock offset: 1.434 ms  
Remote clock offset: -38.007 ms

# Below is generated by plot.py at 2019-01-19 08:15:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 343.62 Mbit/s  
95th percentile per-packet one-way delay: 370.787 ms  
Loss rate: 1.57%  
-- Flow 1:  
Average throughput: 343.62 Mbit/s  
95th percentile per-packet one-way delay: 370.787 ms  
Loss rate: 1.57%

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

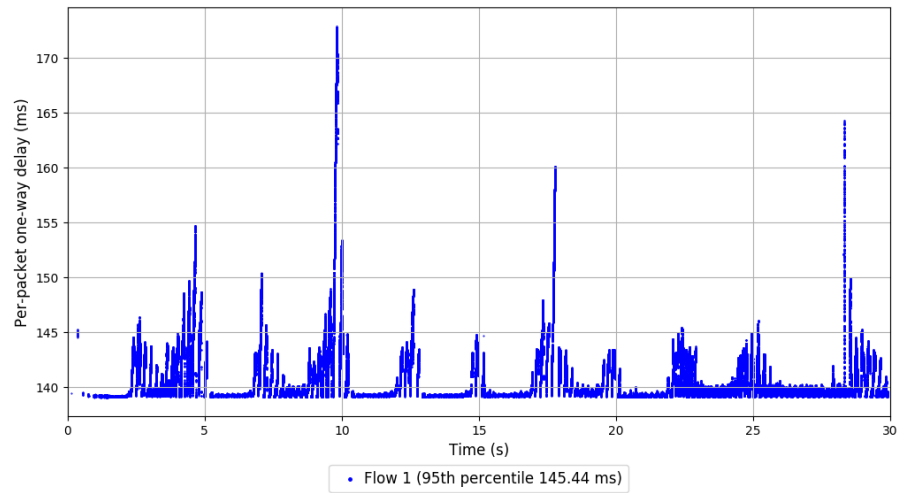
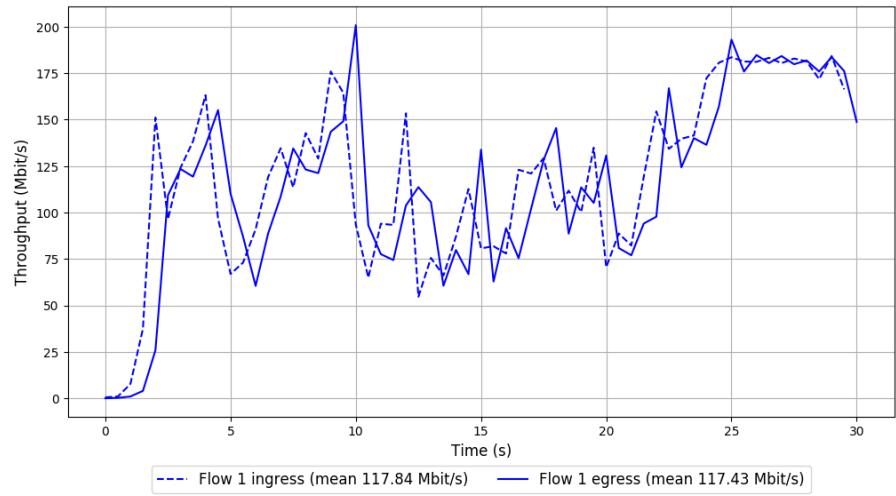


Run 1: Statistics of Copa

Start at: 2019-01-19 05:28:22  
End at: 2019-01-19 05:28:52  
Local clock offset: 0.23 ms  
Remote clock offset: -41.734 ms

# Below is generated by plot.py at 2019-01-19 08:15:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 117.43 Mbit/s  
95th percentile per-packet one-way delay: 145.444 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 117.43 Mbit/s  
95th percentile per-packet one-way delay: 145.444 ms  
Loss rate: 1.00%

## Run 1: Report of Copa — Data Link

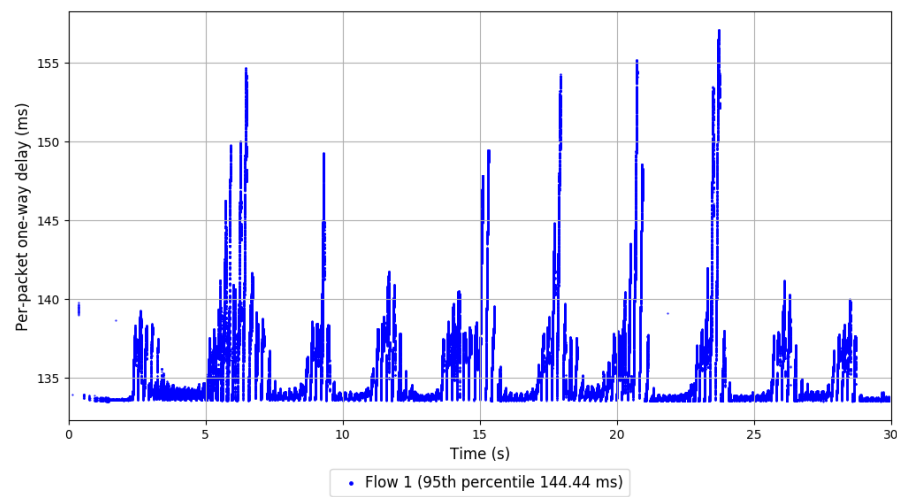
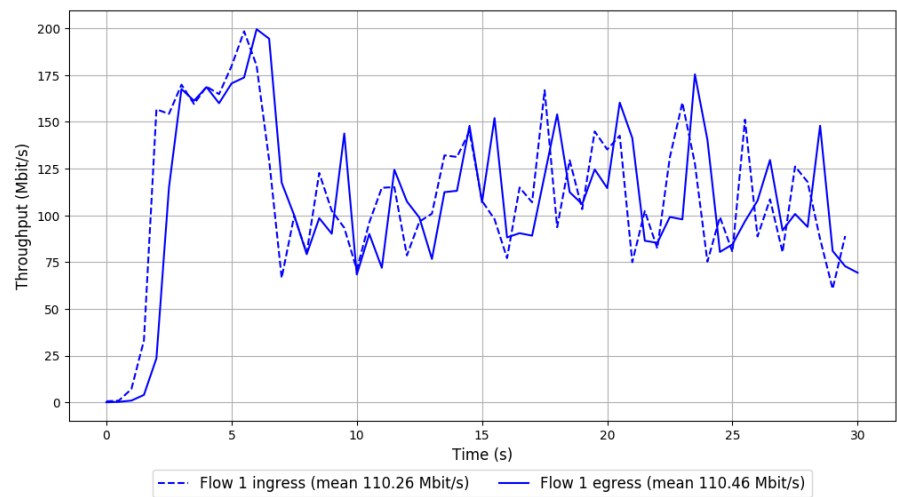


Run 2: Statistics of Copa

Start at: 2019-01-19 06:02:14  
End at: 2019-01-19 06:02:44  
Local clock offset: 0.348 ms  
Remote clock offset: -38.113 ms

# Below is generated by plot.py at 2019-01-19 08:15:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 110.46 Mbit/s  
95th percentile per-packet one-way delay: 144.435 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 110.46 Mbit/s  
95th percentile per-packet one-way delay: 144.435 ms  
Loss rate: 0.47%

Run 2: Report of Copa — Data Link

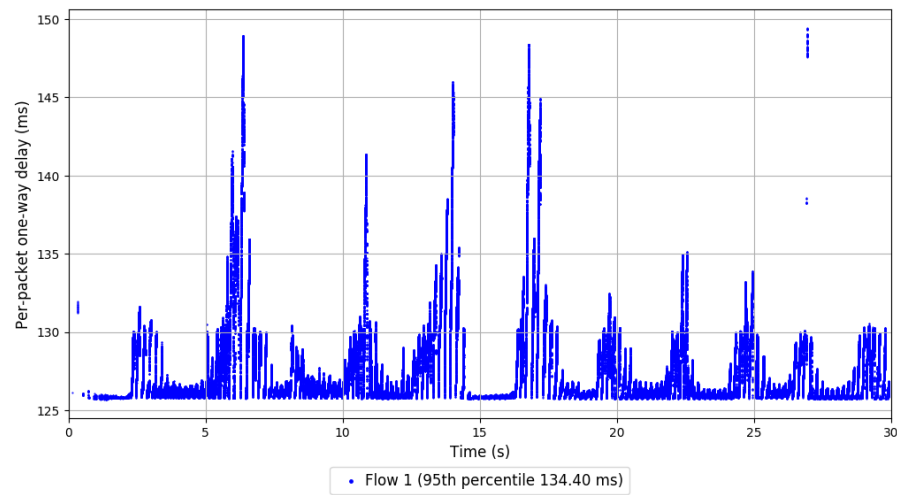
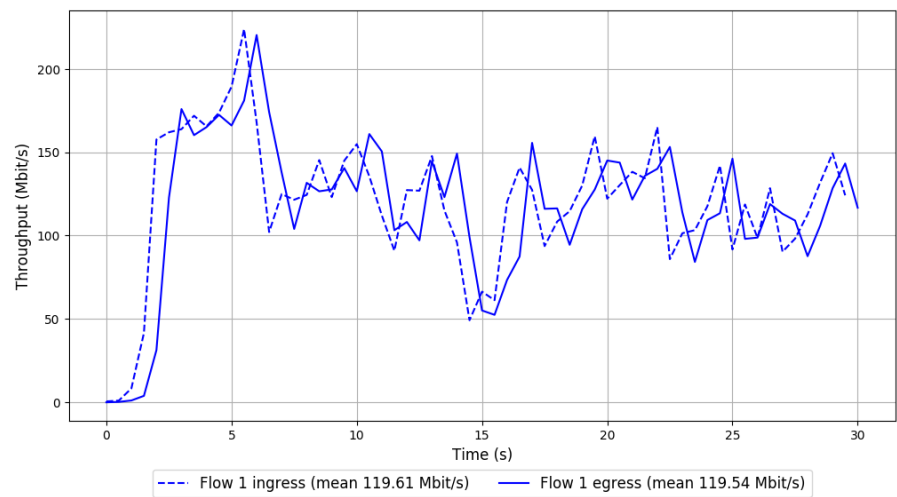


Run 3: Statistics of Copa

Start at: 2019-01-19 06:35:49  
End at: 2019-01-19 06:36:19  
Local clock offset: 0.888 ms  
Remote clock offset: -31.614 ms

# Below is generated by plot.py at 2019-01-19 08:15:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 119.54 Mbit/s  
95th percentile per-packet one-way delay: 134.396 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 119.54 Mbit/s  
95th percentile per-packet one-way delay: 134.396 ms  
Loss rate: 0.70%

Run 3: Report of Copa — Data Link



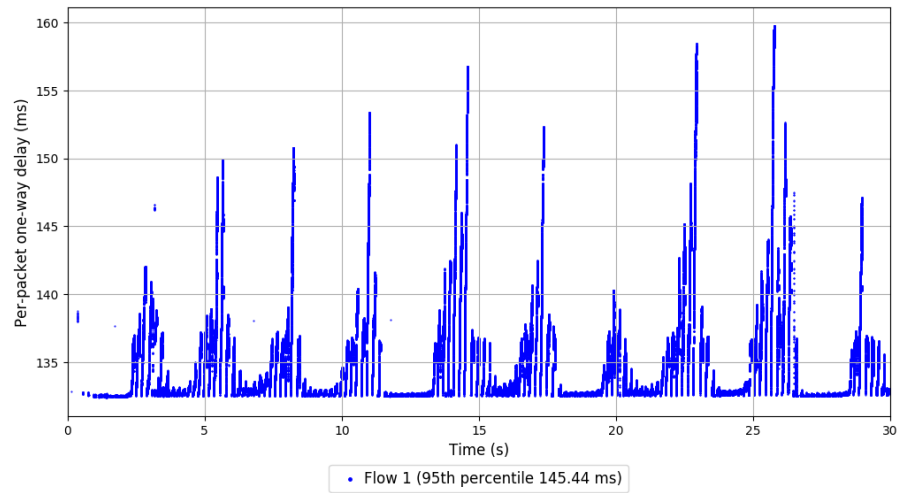
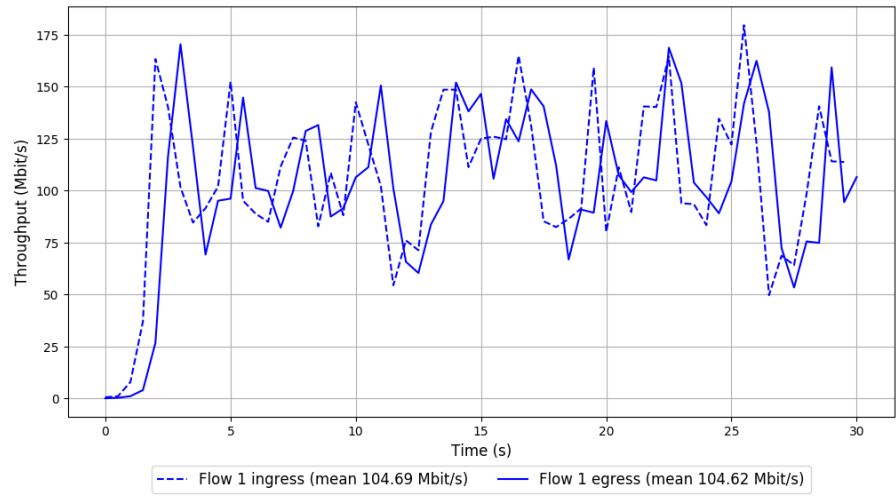


Run 4: Statistics of Copa

Start at: 2019-01-19 07:09:01  
End at: 2019-01-19 07:09:31  
Local clock offset: -1.697 ms  
Remote clock offset: -37.531 ms

# Below is generated by plot.py at 2019-01-19 08:15:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 104.62 Mbit/s  
95th percentile per-packet one-way delay: 145.444 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 104.62 Mbit/s  
95th percentile per-packet one-way delay: 145.444 ms  
Loss rate: 0.71%

#### Run 4: Report of Copa — Data Link

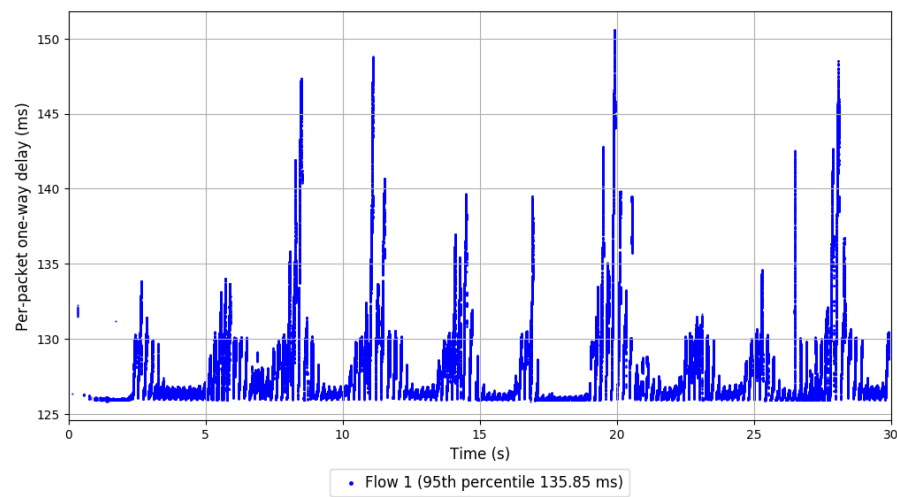
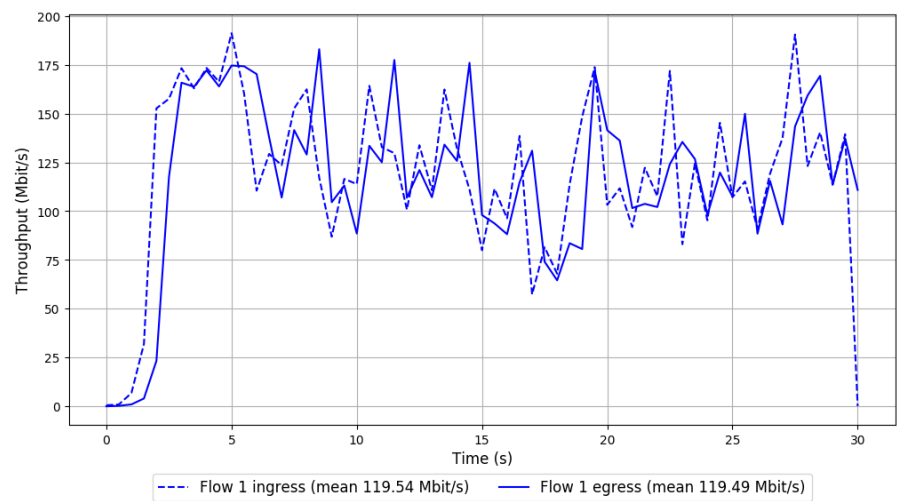


Run 5: Statistics of Copa

Start at: 2019-01-19 07:48:42  
End at: 2019-01-19 07:49:12  
Local clock offset: -1.169 ms  
Remote clock offset: -29.75 ms

# Below is generated by plot.py at 2019-01-19 08:16:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 119.49 Mbit/s  
95th percentile per-packet one-way delay: 135.850 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 119.49 Mbit/s  
95th percentile per-packet one-way delay: 135.850 ms  
Loss rate: 0.71%

Run 5: Report of Copa — Data Link

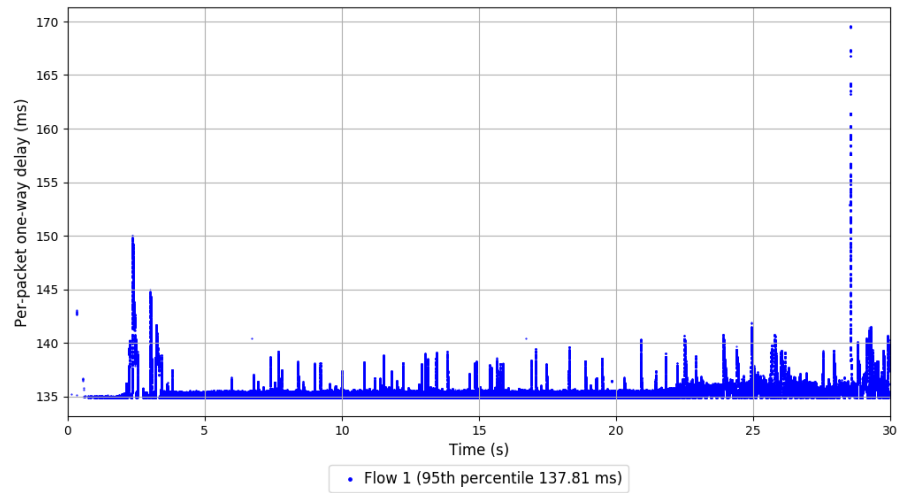
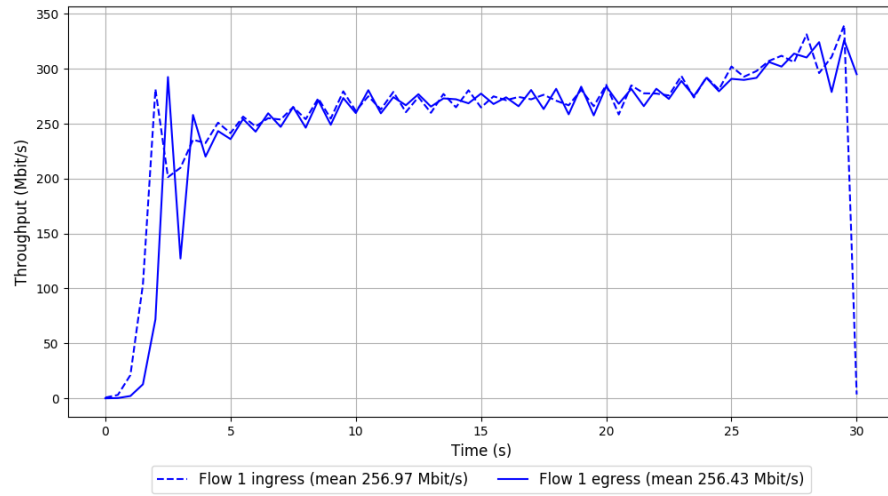


Run 1: Statistics of TCP Cubic

Start at: 2019-01-19 05:25:48  
End at: 2019-01-19 05:26:18  
Local clock offset: 1.261 ms  
Remote clock offset: -36.377 ms

# Below is generated by plot.py at 2019-01-19 08:16:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 256.43 Mbit/s  
95th percentile per-packet one-way delay: 137.812 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 256.43 Mbit/s  
95th percentile per-packet one-way delay: 137.812 ms  
Loss rate: 0.87%

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

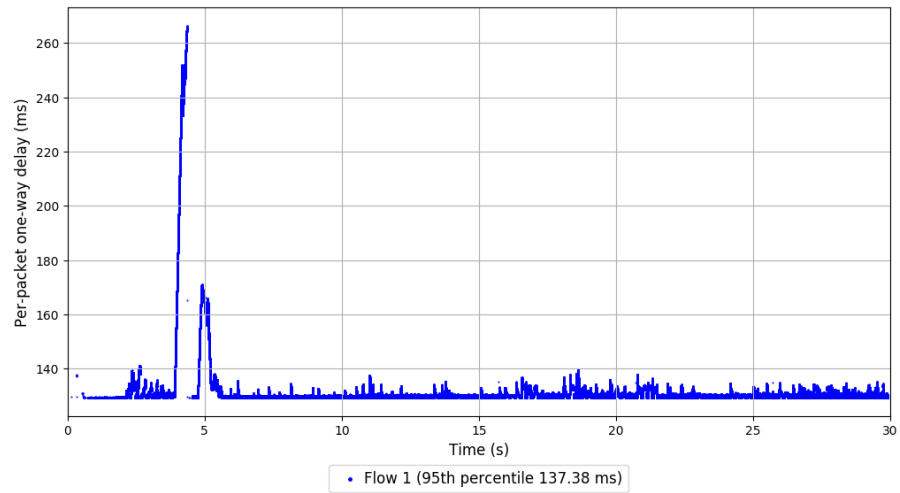
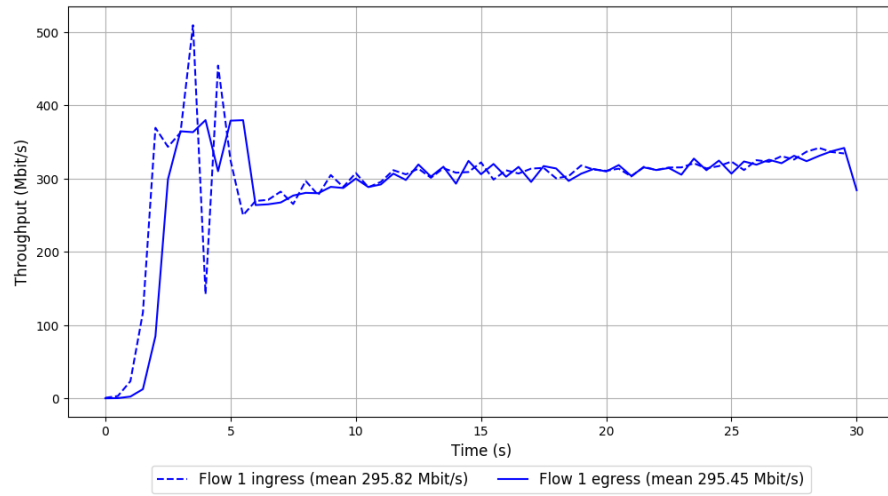


Run 2: Statistics of TCP Cubic

Start at: 2019-01-19 05:59:38  
End at: 2019-01-19 06:00:08  
Local clock offset: 0.178 ms  
Remote clock offset: -32.246 ms

# Below is generated by plot.py at 2019-01-19 08:17:51  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 295.45 Mbit/s  
95th percentile per-packet one-way delay: 137.375 ms  
Loss rate: 0.77%  
-- Flow 1:  
Average throughput: 295.45 Mbit/s  
95th percentile per-packet one-way delay: 137.375 ms  
Loss rate: 0.77%

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



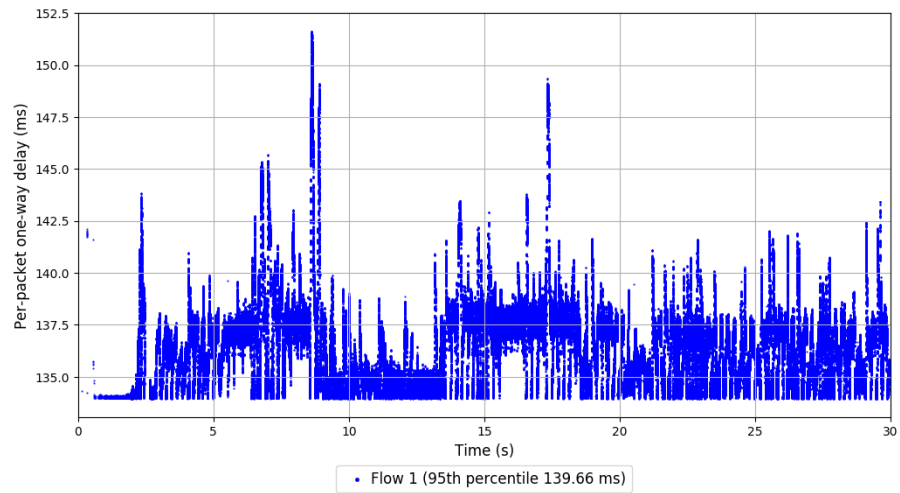
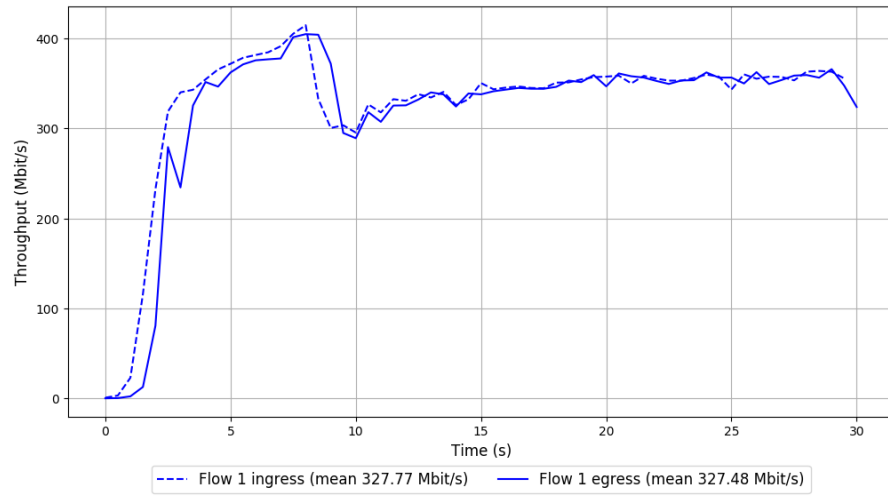


Run 3: Statistics of TCP Cubic

Start at: 2019-01-19 06:27:42  
End at: 2019-01-19 06:28:12  
Local clock offset: 0.235 ms  
Remote clock offset: -38.442 ms

# Below is generated by plot.py at 2019-01-19 08:18:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 327.48 Mbit/s  
95th percentile per-packet one-way delay: 139.663 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 327.48 Mbit/s  
95th percentile per-packet one-way delay: 139.663 ms  
Loss rate: 0.74%

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

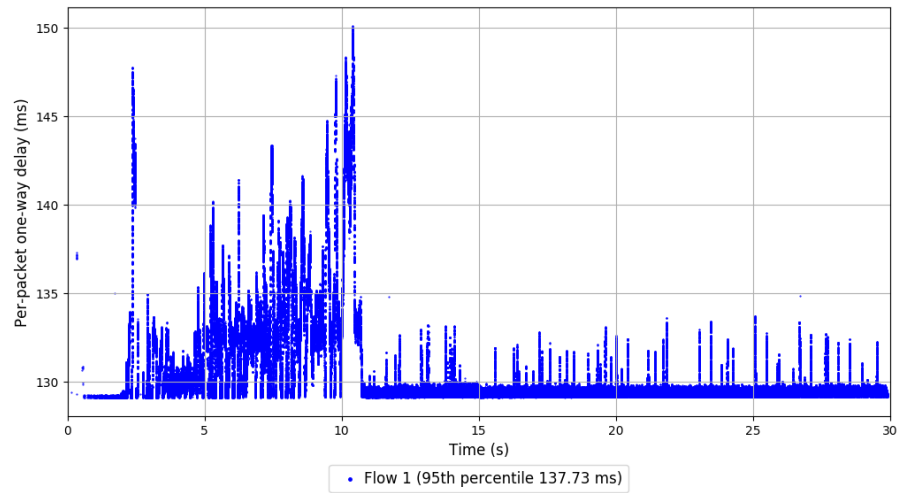
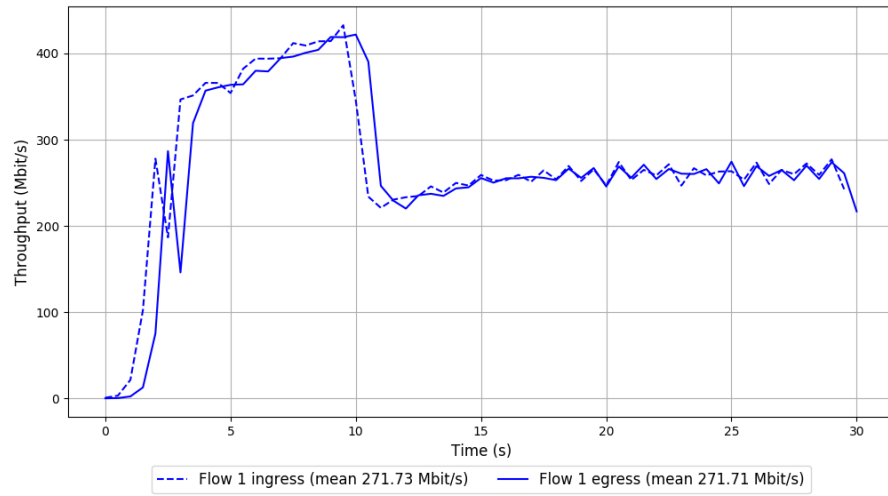


Run 4: Statistics of TCP Cubic

Start at: 2019-01-19 07:06:26  
End at: 2019-01-19 07:06:56  
Local clock offset: -0.105 ms  
Remote clock offset: -32.709 ms

# Below is generated by plot.py at 2019-01-19 08:18:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 271.71 Mbit/s  
95th percentile per-packet one-way delay: 137.734 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 271.71 Mbit/s  
95th percentile per-packet one-way delay: 137.734 ms  
Loss rate: 0.66%

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

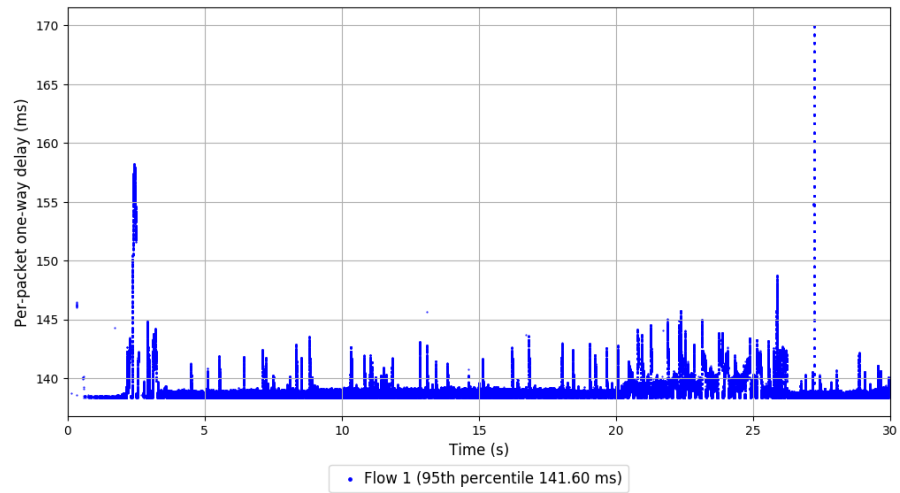
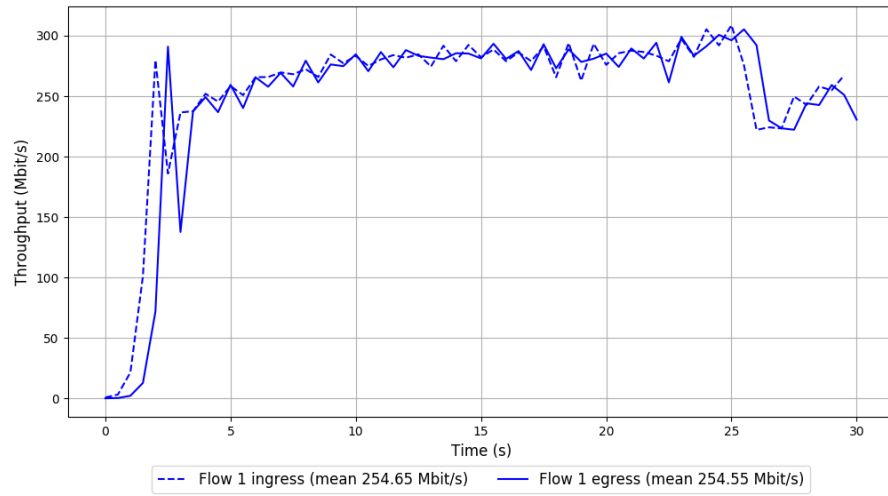


Run 5: Statistics of TCP Cubic

Start at: 2019-01-19 07:46:07  
End at: 2019-01-19 07:46:37  
Local clock offset: -1.186 ms  
Remote clock offset: -41.911 ms

# Below is generated by plot.py at 2019-01-19 08:18:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 254.55 Mbit/s  
95th percentile per-packet one-way delay: 141.603 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 254.55 Mbit/s  
95th percentile per-packet one-way delay: 141.603 ms  
Loss rate: 0.69%

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

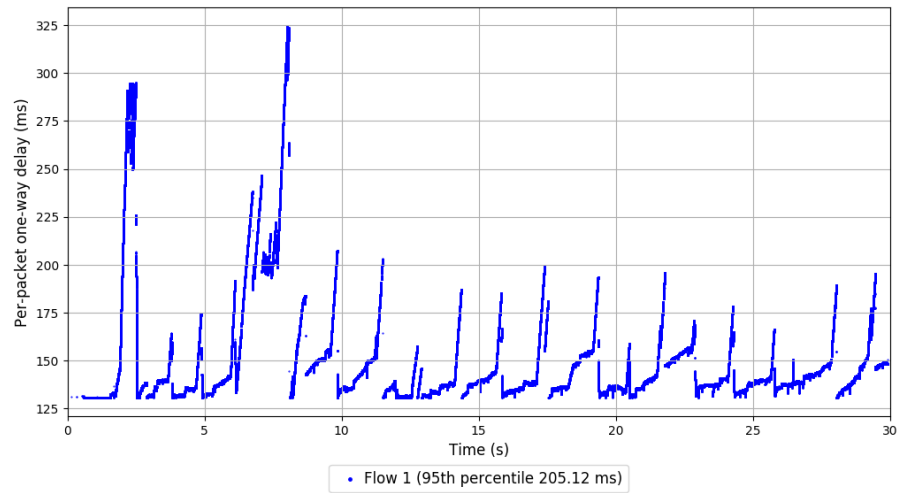
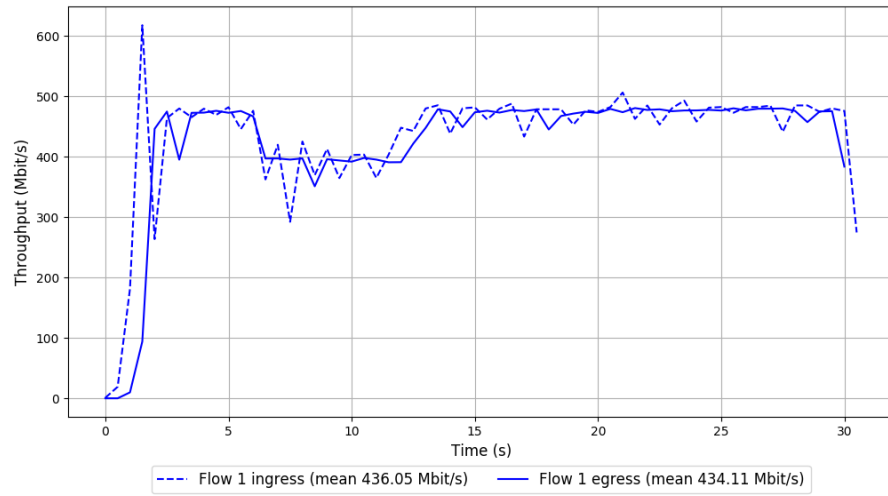


Run 1: Statistics of FillP

Start at: 2019-01-19 05:49:59  
End at: 2019-01-19 05:50:29  
Local clock offset: 0.71 ms  
Remote clock offset: -33.689 ms

# Below is generated by plot.py at 2019-01-19 08:20:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 434.11 Mbit/s  
95th percentile per-packet one-way delay: 205.120 ms  
Loss rate: 3.73%  
-- Flow 1:  
Average throughput: 434.11 Mbit/s  
95th percentile per-packet one-way delay: 205.120 ms  
Loss rate: 3.73%

## Run 1: Report of FillP — Data Link



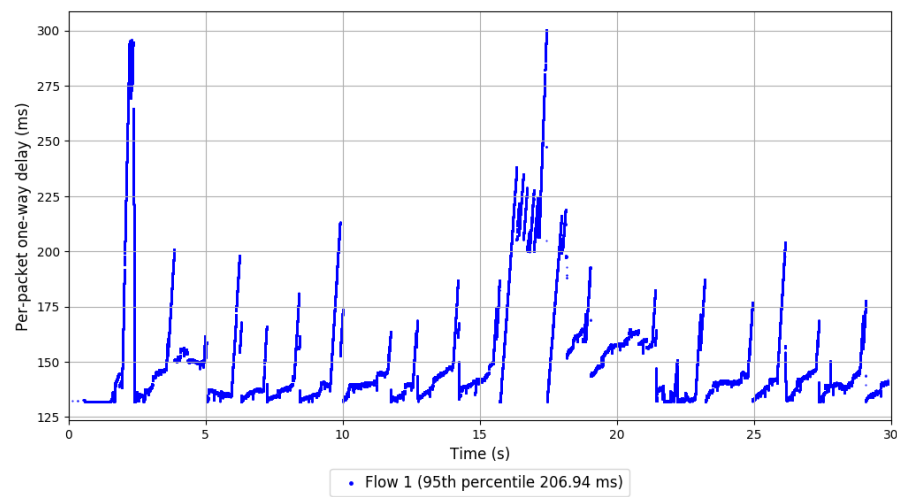
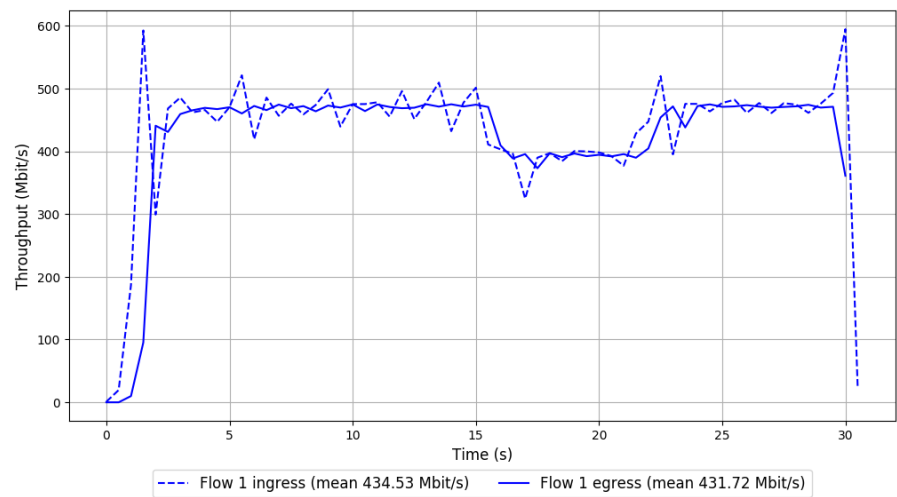


Run 2: Statistics of FillP

Start at: 2019-01-19 06:18:08  
End at: 2019-01-19 06:18:38  
Local clock offset: 0.469 ms  
Remote clock offset: -36.02 ms

# Below is generated by plot.py at 2019-01-19 08:21:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 431.72 Mbit/s  
95th percentile per-packet one-way delay: 206.940 ms  
Loss rate: 3.40%  
-- Flow 1:  
Average throughput: 431.72 Mbit/s  
95th percentile per-packet one-way delay: 206.940 ms  
Loss rate: 3.40%

Run 2: Report of FillP — Data Link

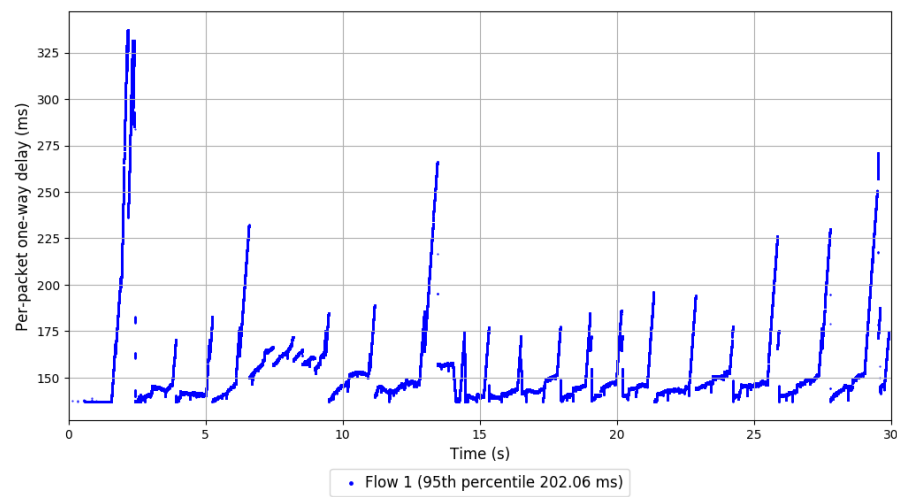
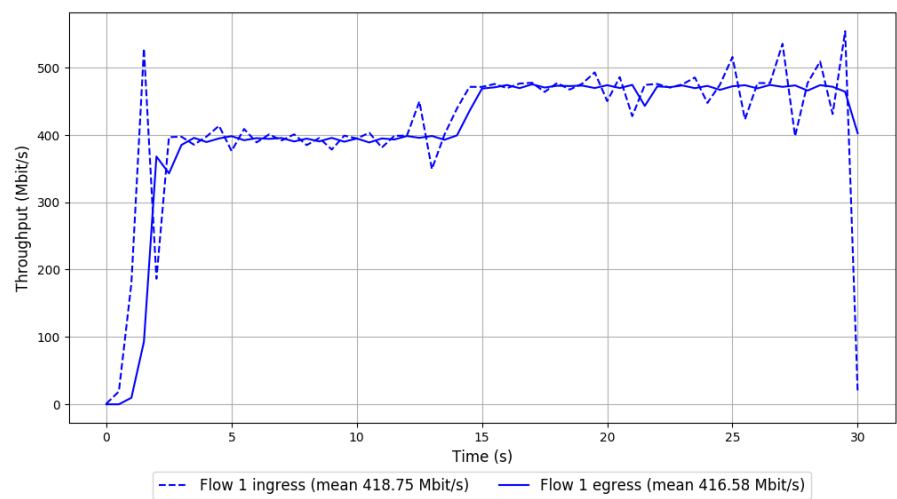


Run 3: Statistics of FillP

Start at: 2019-01-19 06:51:44  
End at: 2019-01-19 06:52:14  
Local clock offset: 1.0 ms  
Remote clock offset: -41.017 ms

# Below is generated by plot.py at 2019-01-19 08:21:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 416.58 Mbit/s  
95th percentile per-packet one-way delay: 202.055 ms  
Loss rate: 1.29%  
-- Flow 1:  
Average throughput: 416.58 Mbit/s  
95th percentile per-packet one-way delay: 202.055 ms  
Loss rate: 1.29%

Run 3: Report of FillP — Data Link

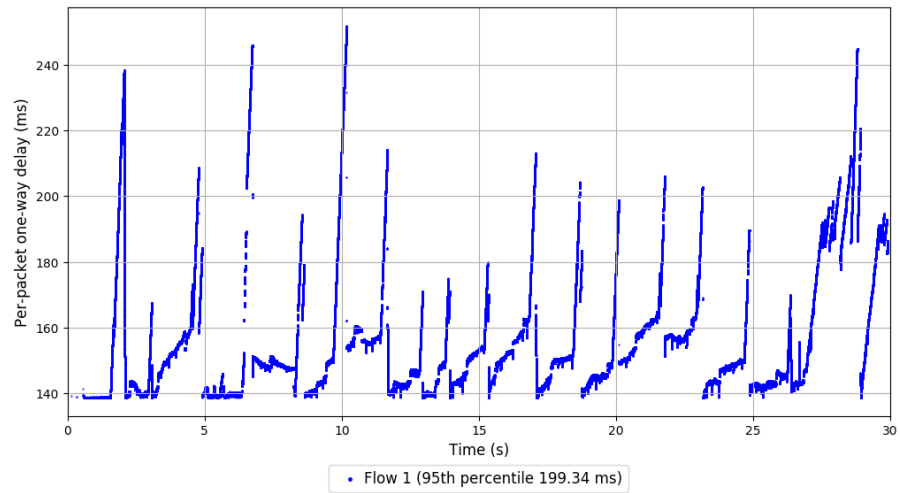
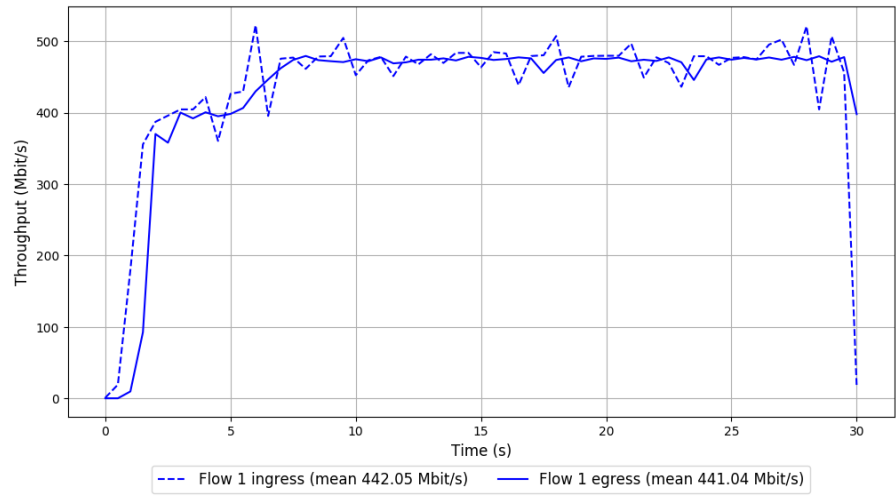


Run 4: Statistics of FillP

Start at: 2019-01-19 07:30:56  
End at: 2019-01-19 07:31:26  
Local clock offset: -1.644 ms  
Remote clock offset: -43.062 ms

# Below is generated by plot.py at 2019-01-19 08:22:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 441.04 Mbit/s  
95th percentile per-packet one-way delay: 199.337 ms  
Loss rate: 1.01%  
-- Flow 1:  
Average throughput: 441.04 Mbit/s  
95th percentile per-packet one-way delay: 199.337 ms  
Loss rate: 1.01%

#### Run 4: Report of FillP — Data Link

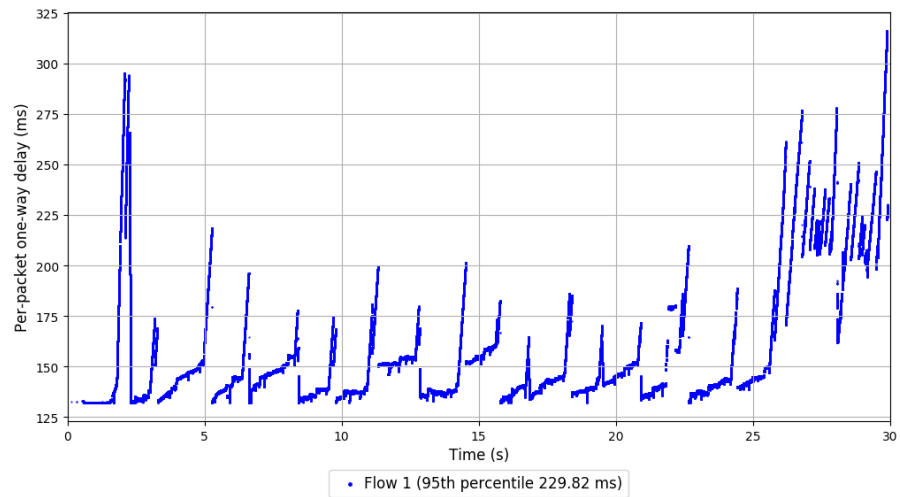
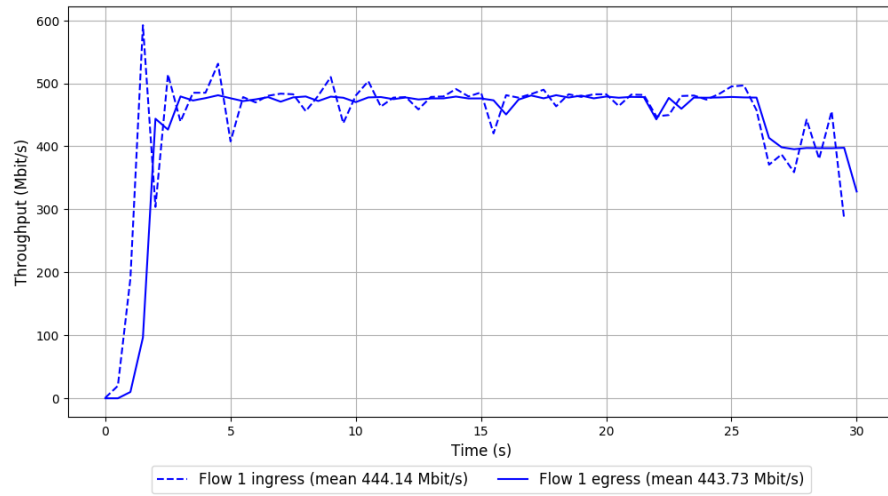


Run 5: Statistics of FillP

Start at: 2019-01-19 08:04:40  
End at: 2019-01-19 08:05:10  
Local clock offset: 0.089 ms  
Remote clock offset: -35.021 ms

# Below is generated by plot.py at 2019-01-19 08:23:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 443.73 Mbit/s  
95th percentile per-packet one-way delay: 229.820 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 443.73 Mbit/s  
95th percentile per-packet one-way delay: 229.820 ms  
Loss rate: 0.76%

### Run 5: Report of FillP — Data Link



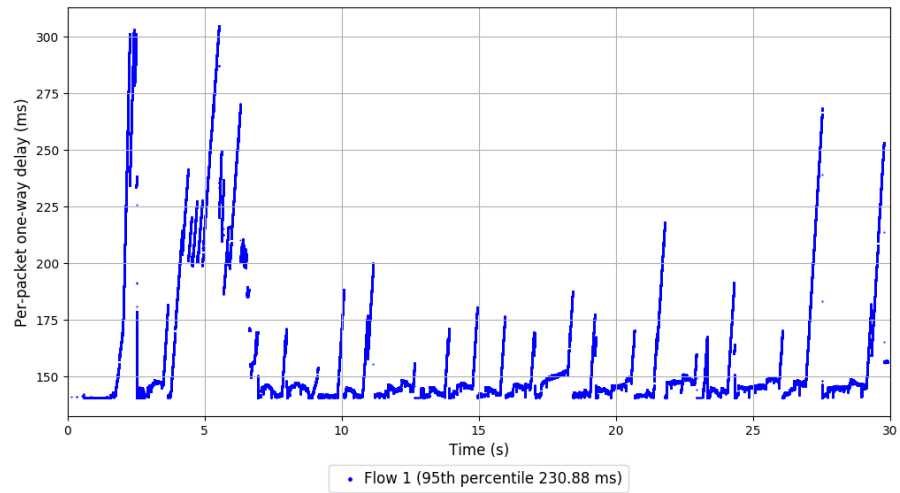
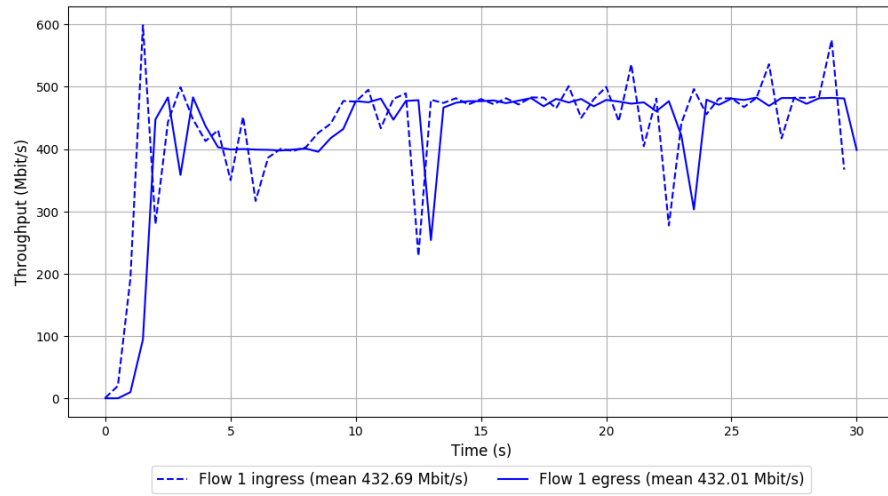


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-19 05:33:38  
End at: 2019-01-19 05:34:08  
Local clock offset: 3.219 ms  
Remote clock offset: -41.686 ms

# Below is generated by plot.py at 2019-01-19 08:23:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 432.01 Mbit/s  
95th percentile per-packet one-way delay: 230.885 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 432.01 Mbit/s  
95th percentile per-packet one-way delay: 230.885 ms  
Loss rate: 0.81%

# Run 1: Report of FillP-Sheep — Data Link

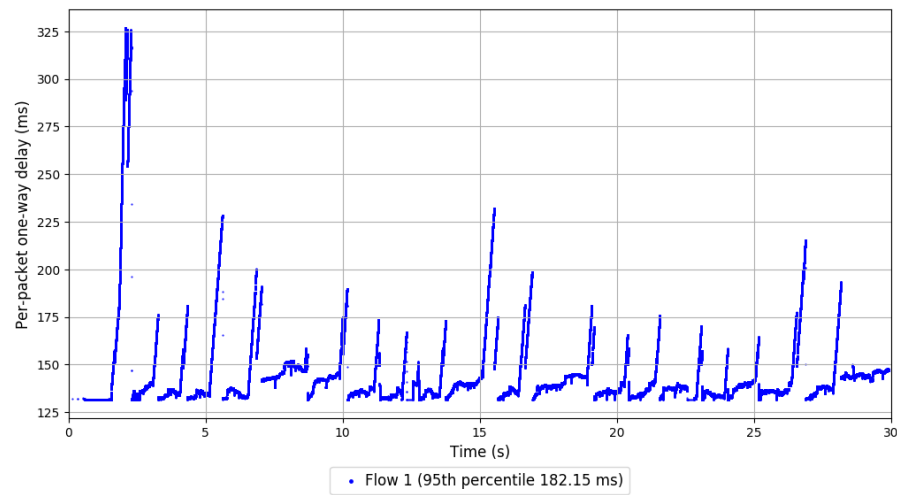
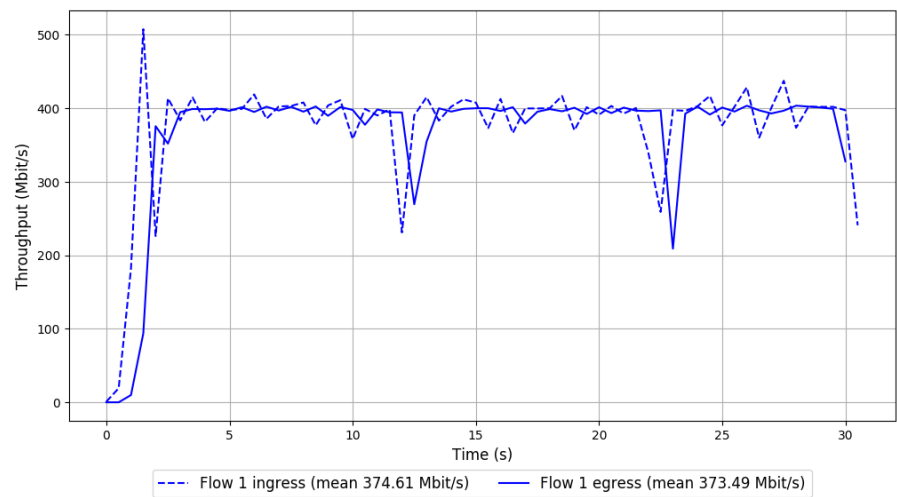


Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 06:07:20  
End at: 2019-01-19 06:07:50  
Local clock offset: 0.474 ms  
Remote clock offset: -36.561 ms

# Below is generated by plot.py at 2019-01-19 08:23:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 373.49 Mbit/s  
95th percentile per-packet one-way delay: 182.145 ms  
Loss rate: 3.62%  
-- Flow 1:  
Average throughput: 373.49 Mbit/s  
95th percentile per-packet one-way delay: 182.145 ms  
Loss rate: 3.62%

Run 2: Report of FillP-Sheep — Data Link

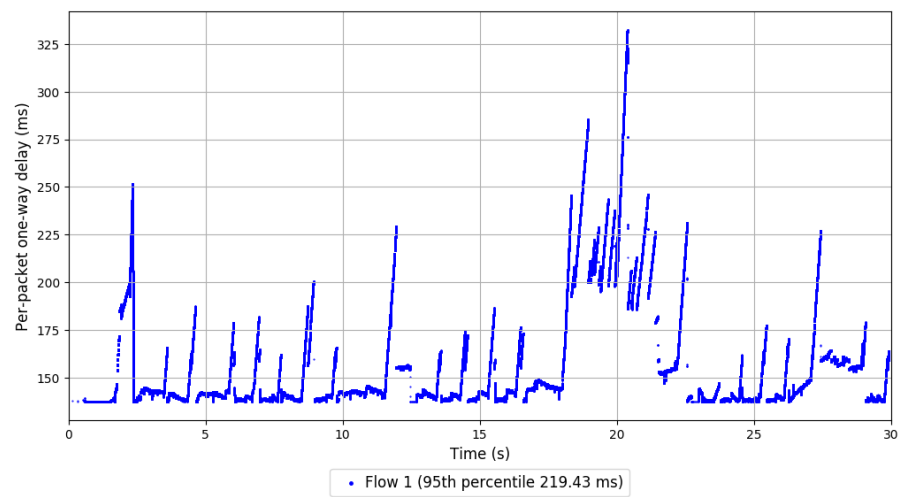
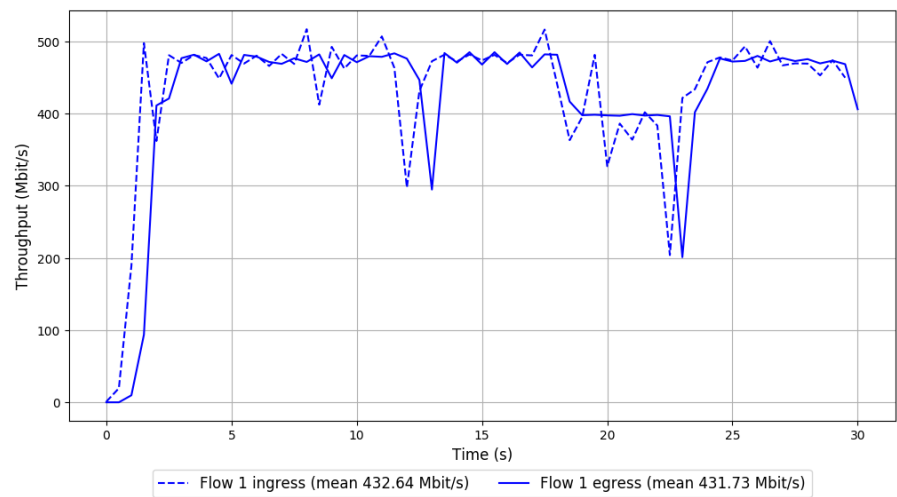


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-19 06:41:03  
End at: 2019-01-19 06:41:33  
Local clock offset: 0.788 ms  
Remote clock offset: -43.709 ms

# Below is generated by plot.py at 2019-01-19 08:23:56  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 431.73 Mbit/s  
95th percentile per-packet one-way delay: 219.431 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 431.73 Mbit/s  
95th percentile per-packet one-way delay: 219.431 ms  
Loss rate: 0.73%

Run 3: Report of FillP-Sheep — Data Link

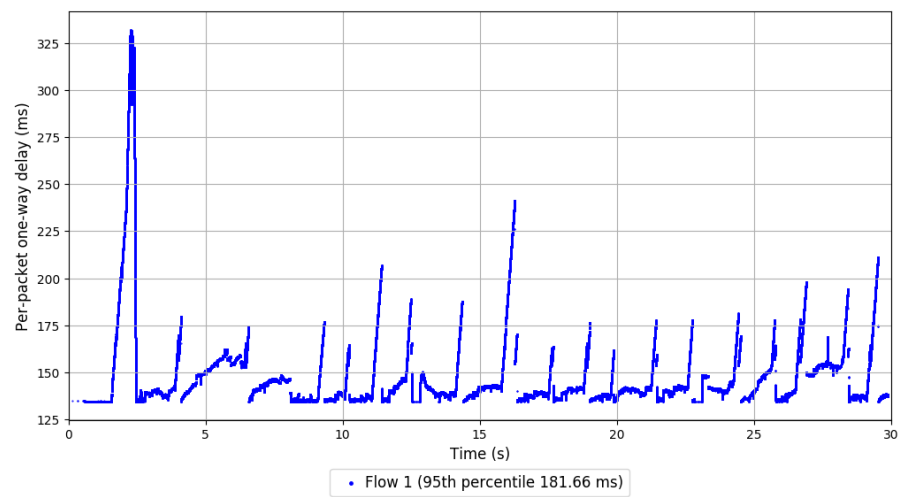
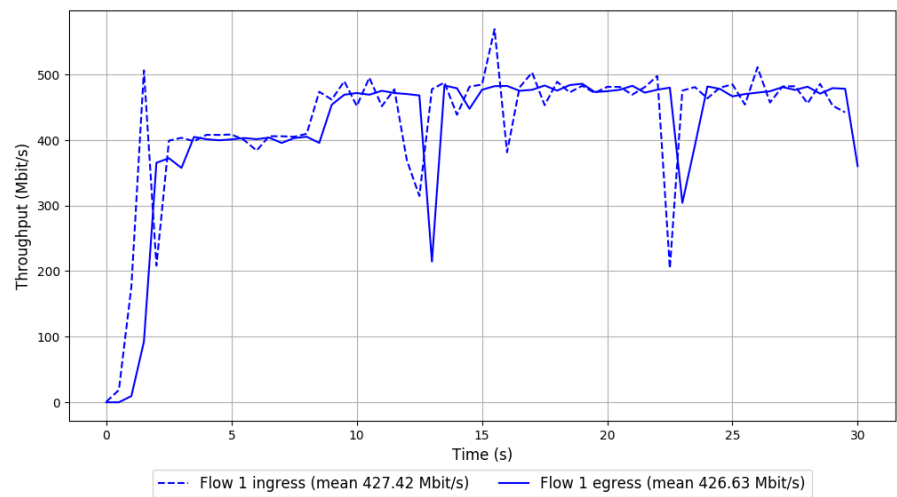


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-19 07:14:13  
End at: 2019-01-19 07:14:43  
Local clock offset: -1.464 ms  
Remote clock offset: -38.807 ms

# Below is generated by plot.py at 2019-01-19 08:26:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 426.63 Mbit/s  
95th percentile per-packet one-way delay: 181.657 ms  
Loss rate: 0.85%  
-- Flow 1:  
Average throughput: 426.63 Mbit/s  
95th percentile per-packet one-way delay: 181.657 ms  
Loss rate: 0.85%

Run 4: Report of FillP-Sheep — Data Link



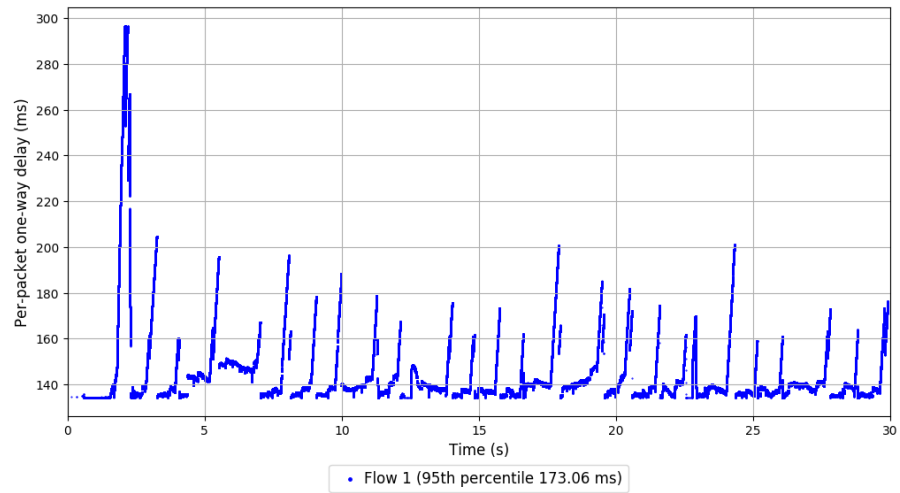
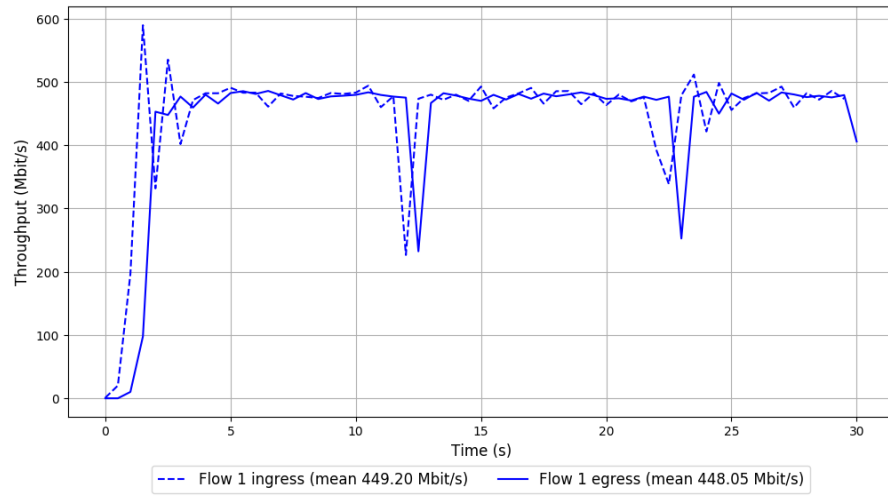


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-19 07:53:55  
End at: 2019-01-19 07:54:25  
Local clock offset: 0.277 ms  
Remote clock offset: -38.216 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 448.05 Mbit/s  
95th percentile per-packet one-way delay: 173.057 ms  
Loss rate: 0.77%  
-- Flow 1:  
Average throughput: 448.05 Mbit/s  
95th percentile per-packet one-way delay: 173.057 ms  
Loss rate: 0.77%

## Run 5: Report of FillP-Sheep — Data Link

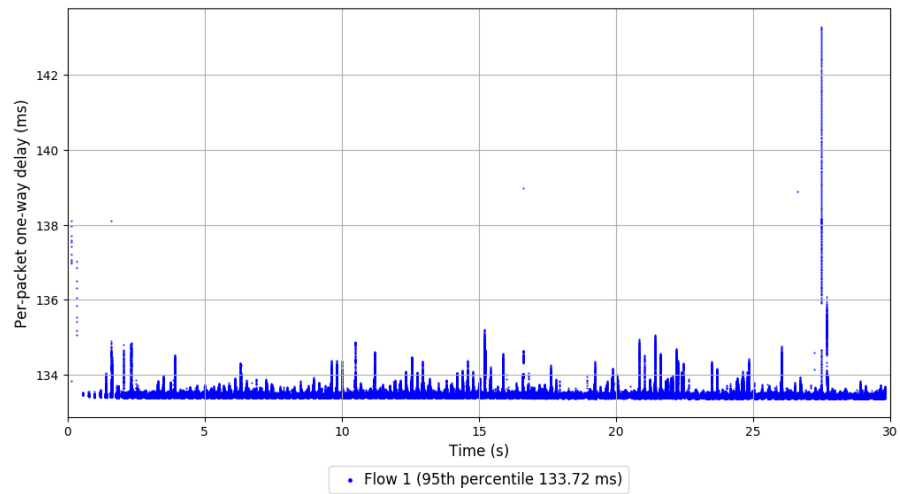
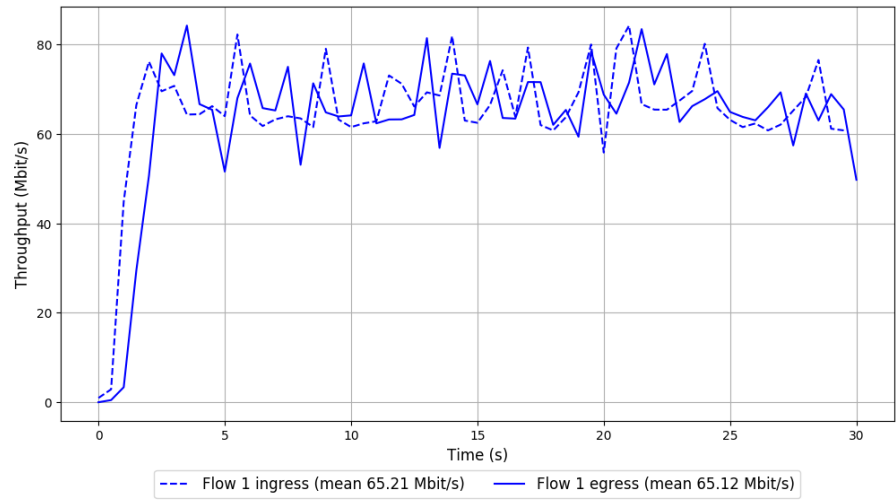


Run 1: Statistics of Indigo

Start at: 2019-01-19 05:21:58  
End at: 2019-01-19 05:22:28  
Local clock offset: -1.344 ms  
Remote clock offset: -38.793 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 65.12 Mbit/s  
95th percentile per-packet one-way delay: 133.722 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 65.12 Mbit/s  
95th percentile per-packet one-way delay: 133.722 ms  
Loss rate: 0.79%

### Run 1: Report of Indigo — Data Link

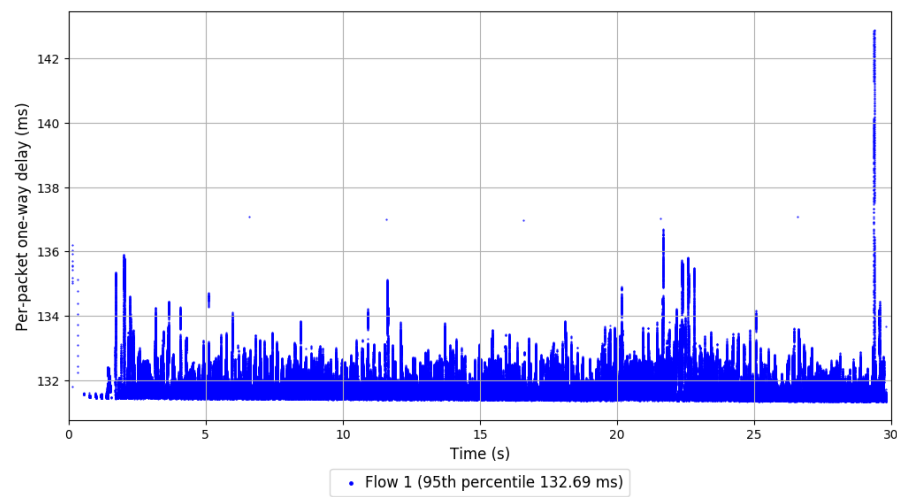
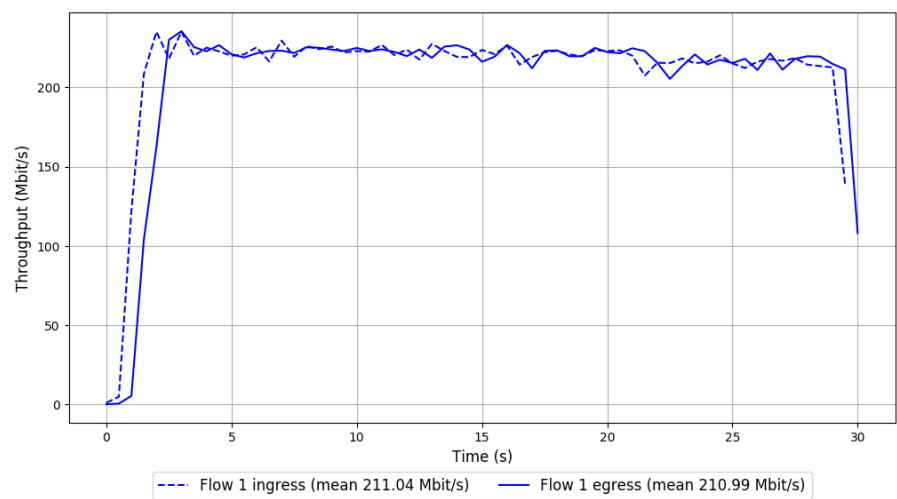


Run 2: Statistics of Indigo

Start at: 2019-01-19 05:55:40  
End at: 2019-01-19 05:56:10  
Local clock offset: -0.167 ms  
Remote clock offset: -35.304 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 210.99 Mbit/s  
95th percentile per-packet one-way delay: 132.695 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 210.99 Mbit/s  
95th percentile per-packet one-way delay: 132.695 ms  
Loss rate: 0.66%

Run 2: Report of Indigo — Data Link

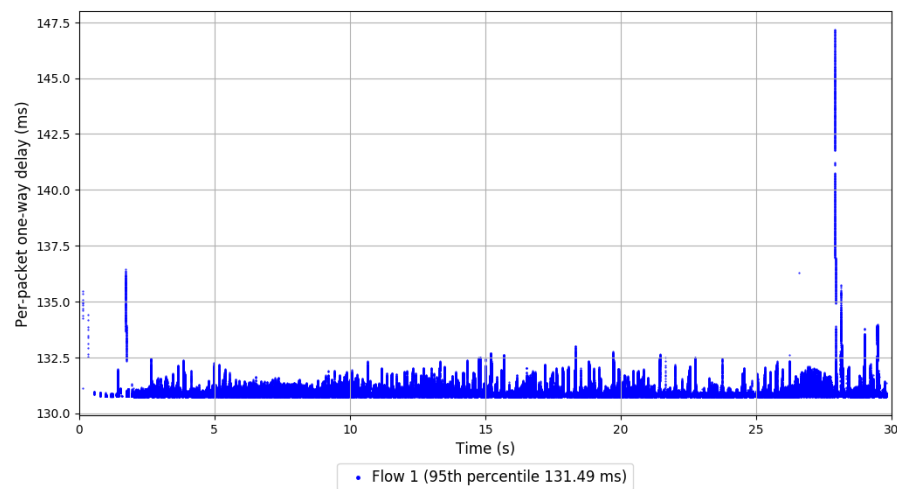
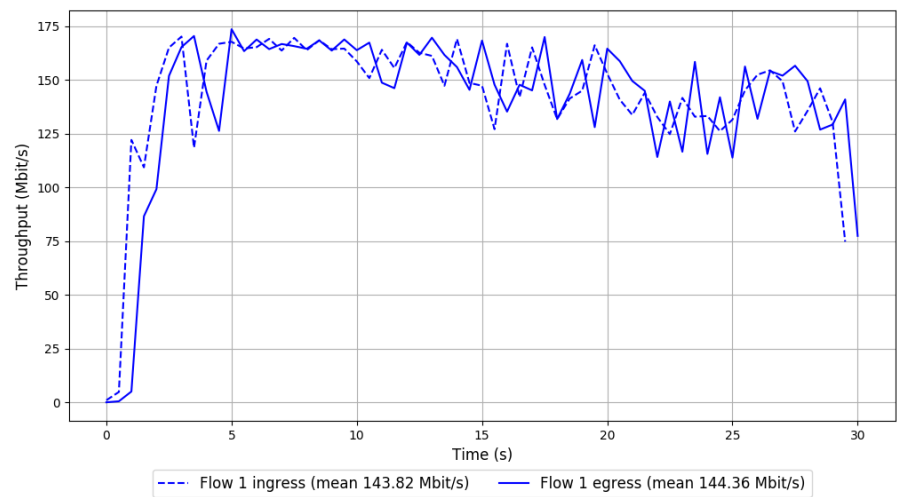


Run 3: Statistics of Indigo

Start at: 2019-01-19 06:23:47  
End at: 2019-01-19 06:24:17  
Local clock offset: 0.251 ms  
Remote clock offset: -36.641 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 144.36 Mbit/s  
95th percentile per-packet one-way delay: 131.490 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 144.36 Mbit/s  
95th percentile per-packet one-way delay: 131.490 ms  
Loss rate: 0.28%

Run 3: Report of Indigo — Data Link



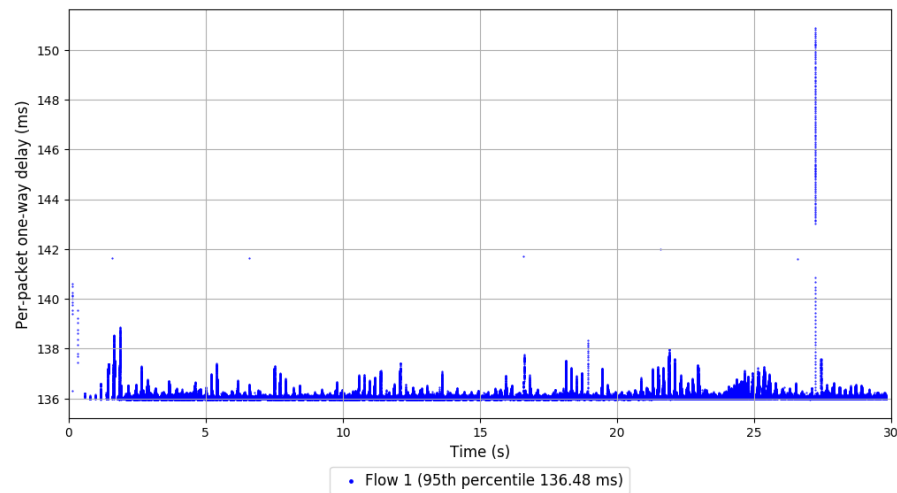
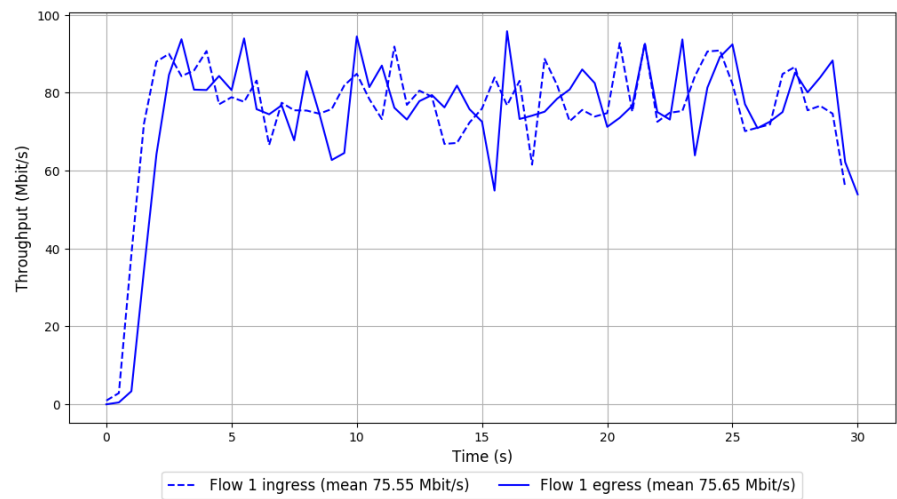


Run 4: Statistics of Indigo

Start at: 2019-01-19 06:57:25  
End at: 2019-01-19 06:57:55  
Local clock offset: 1.185 ms  
Remote clock offset: -40.571 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 75.65 Mbit/s  
95th percentile per-packet one-way delay: 136.479 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 75.65 Mbit/s  
95th percentile per-packet one-way delay: 136.479 ms  
Loss rate: 0.51%

Run 4: Report of Indigo — Data Link

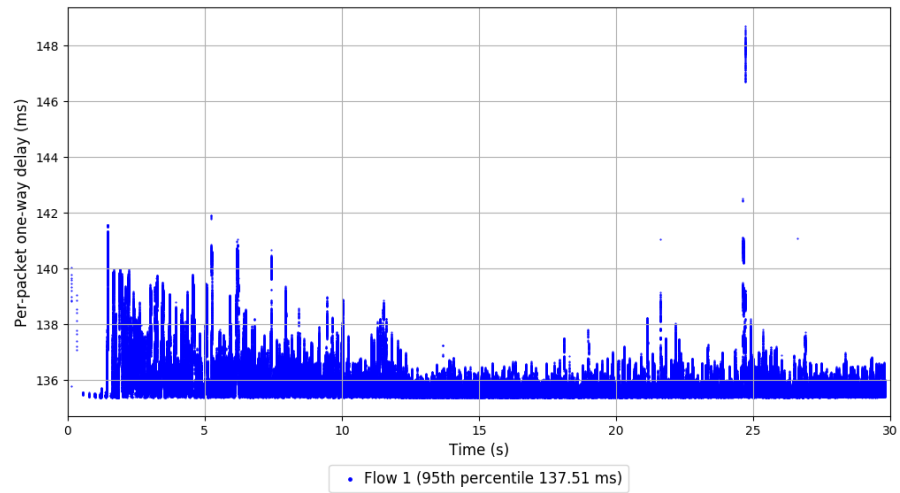
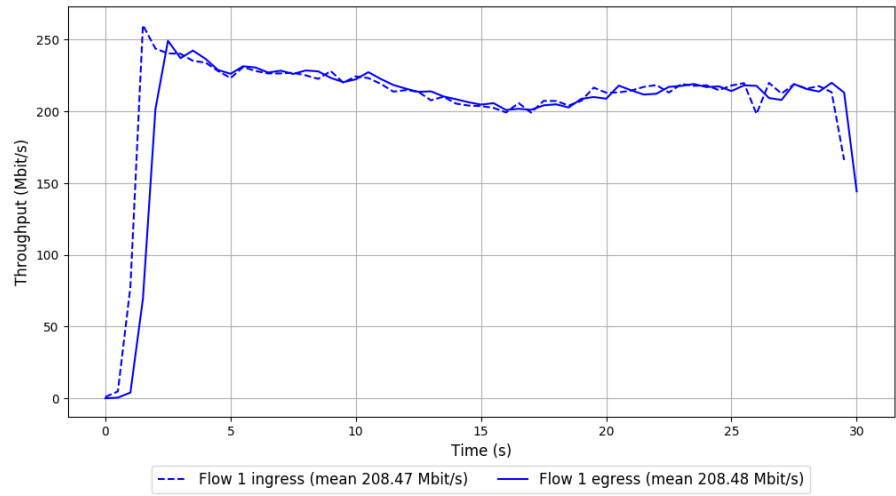


Run 5: Statistics of Indigo

Start at: 2019-01-19 07:36:38  
End at: 2019-01-19 07:37:08  
Local clock offset: -0.045 ms  
Remote clock offset: -37.929 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 208.48 Mbit/s  
95th percentile per-packet one-way delay: 137.507 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 208.48 Mbit/s  
95th percentile per-packet one-way delay: 137.507 ms  
Loss rate: 0.65%

### Run 5: Report of Indigo — Data Link

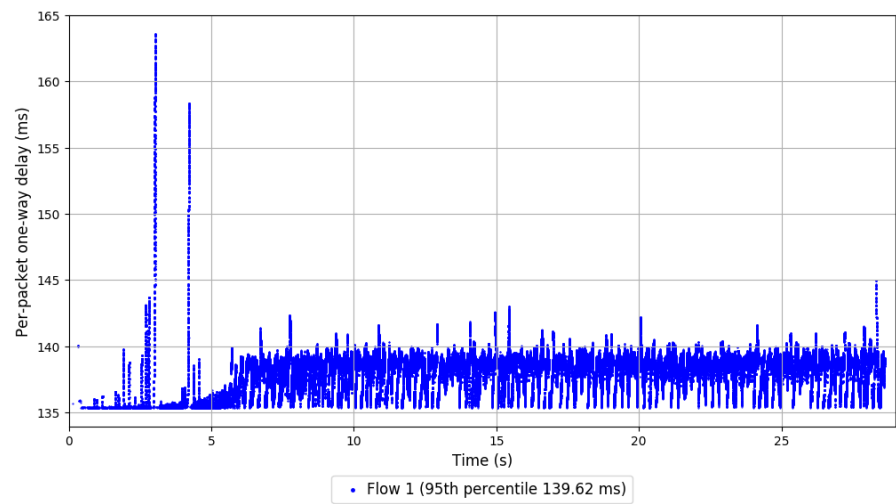
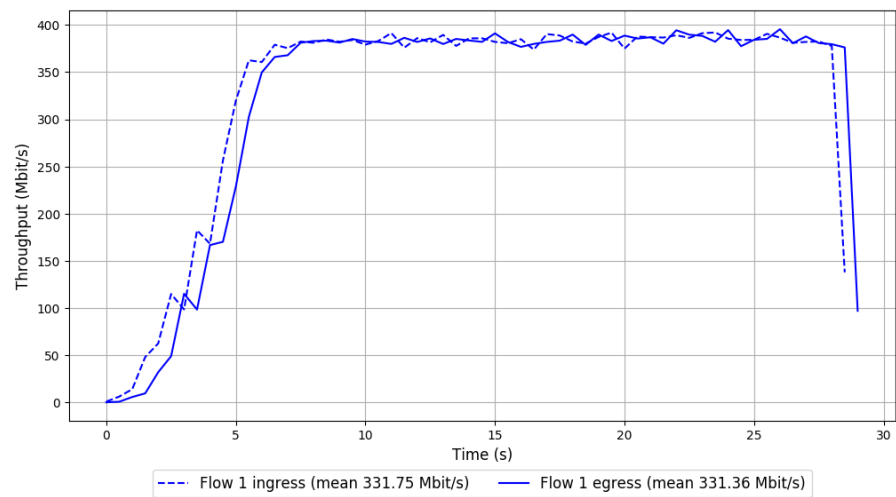


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-19 05:37:51  
End at: 2019-01-19 05:38:21  
Local clock offset: 3.29 ms  
Remote clock offset: -36.276 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 331.36 Mbit/s  
95th percentile per-packet one-way delay: 139.616 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 331.36 Mbit/s  
95th percentile per-packet one-way delay: 139.616 ms  
Loss rate: 0.80%

Run 1: Report of Indigo-MusesC3 — Data Link

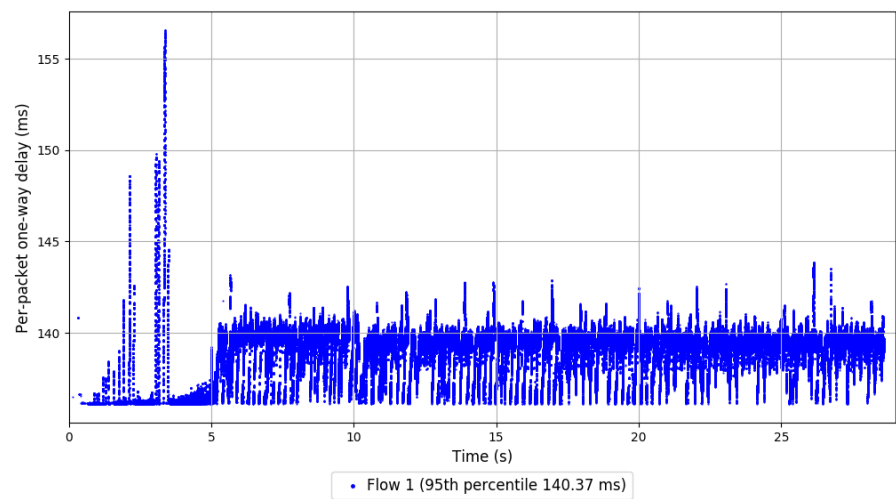
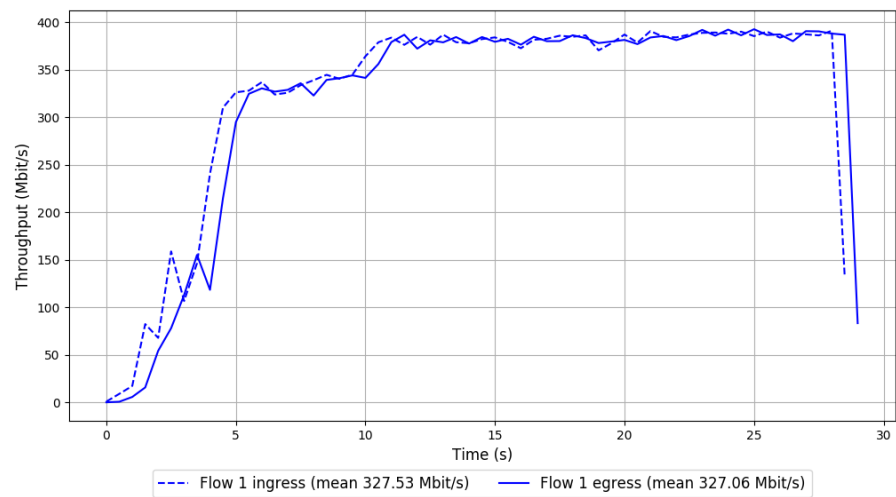


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-19 06:11:32  
End at: 2019-01-19 06:12:02  
Local clock offset: 0.234 ms  
Remote clock offset: -40.053 ms

# Below is generated by plot.py at 2019-01-19 08:27:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 327.06 Mbit/s  
95th percentile per-packet one-way delay: 140.372 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 327.06 Mbit/s  
95th percentile per-packet one-way delay: 140.372 ms  
Loss rate: 0.84%

Run 2: Report of Indigo-MusesC3 — Data Link



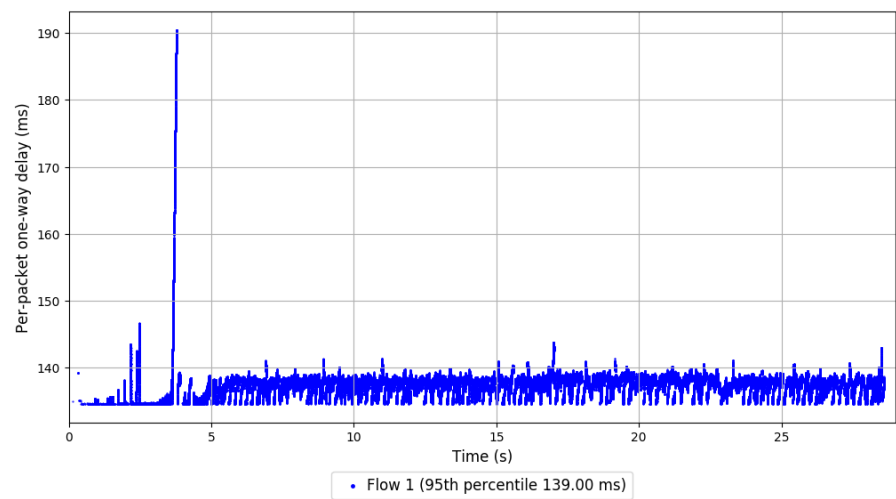
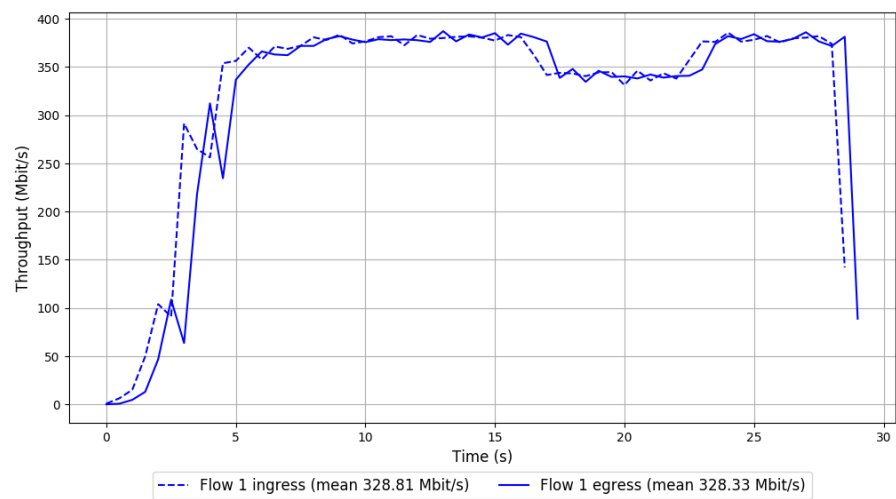


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-19 06:45:17  
End at: 2019-01-19 06:45:47  
Local clock offset: 0.011 ms  
Remote clock offset: -40.027 ms

# Below is generated by plot.py at 2019-01-19 08:27:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 328.33 Mbit/s  
95th percentile per-packet one-way delay: 139.003 ms  
Loss rate: 0.83%  
-- Flow 1:  
Average throughput: 328.33 Mbit/s  
95th percentile per-packet one-way delay: 139.003 ms  
Loss rate: 0.83%

Run 3: Report of Indigo-MusesC3 — Data Link

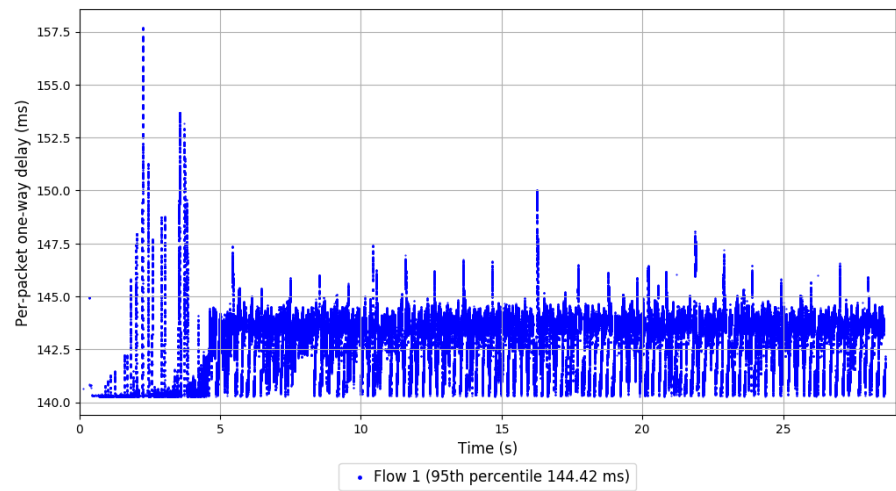
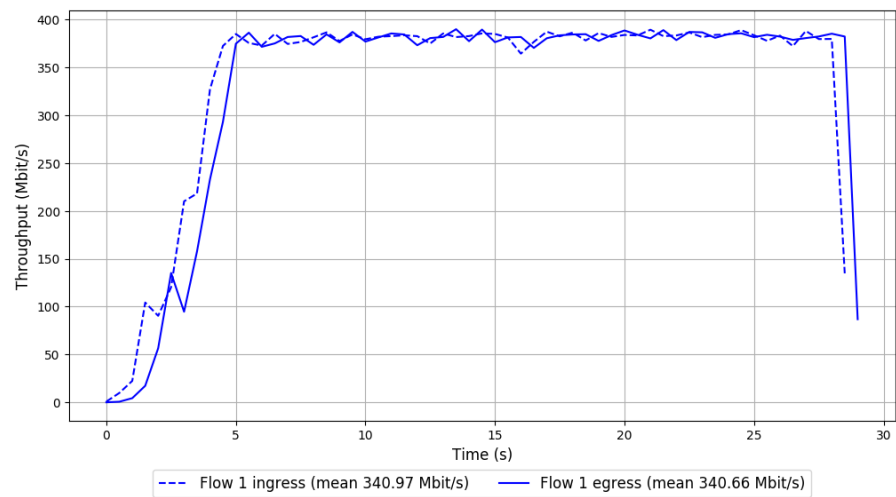


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-19 07:18:21  
End at: 2019-01-19 07:18:51  
Local clock offset: -0.16 ms  
Remote clock offset: -43.006 ms

# Below is generated by plot.py at 2019-01-19 08:27:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 340.66 Mbit/s  
95th percentile per-packet one-way delay: 144.416 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 340.66 Mbit/s  
95th percentile per-packet one-way delay: 144.416 ms  
Loss rate: 0.78%

Run 4: Report of Indigo-MusesC3 — Data Link

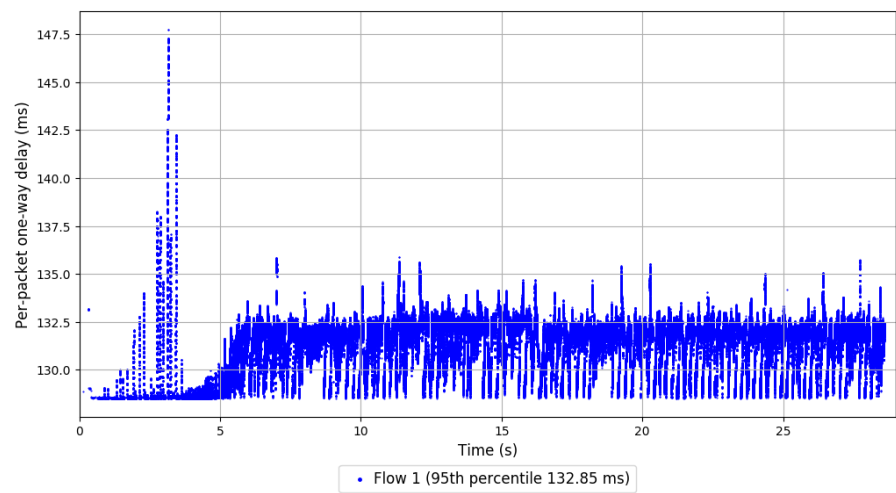
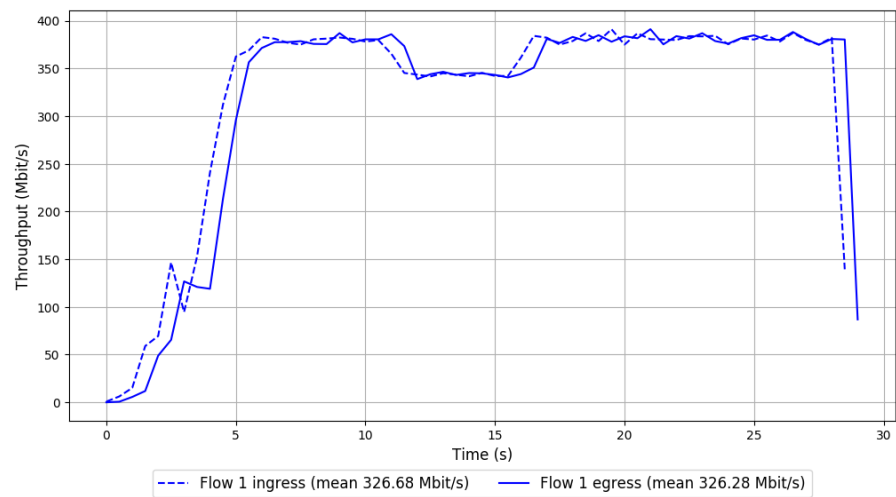


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-19 07:58:09  
End at: 2019-01-19 07:58:39  
Local clock offset: 0.882 ms  
Remote clock offset: -30.379 ms

# Below is generated by plot.py at 2019-01-19 08:28:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 326.28 Mbit/s  
95th percentile per-packet one-way delay: 132.848 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 326.28 Mbit/s  
95th percentile per-packet one-way delay: 132.848 ms  
Loss rate: 0.81%

Run 5: Report of Indigo-MusesC3 — Data Link

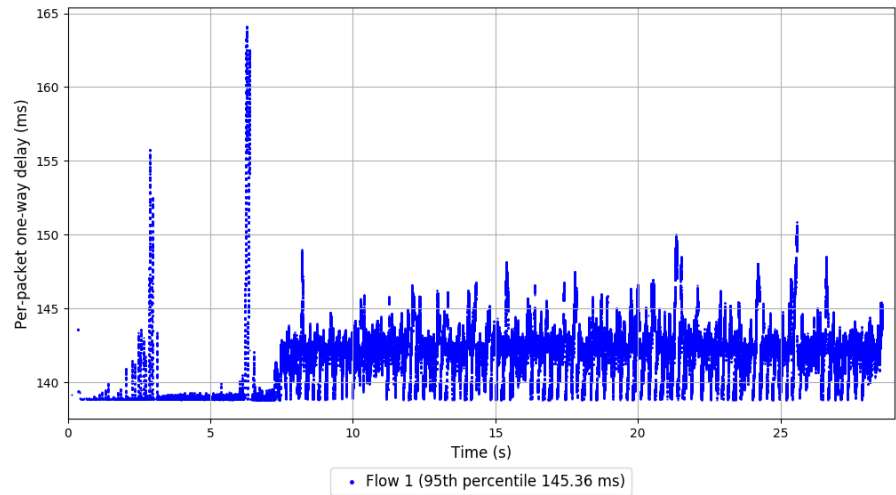
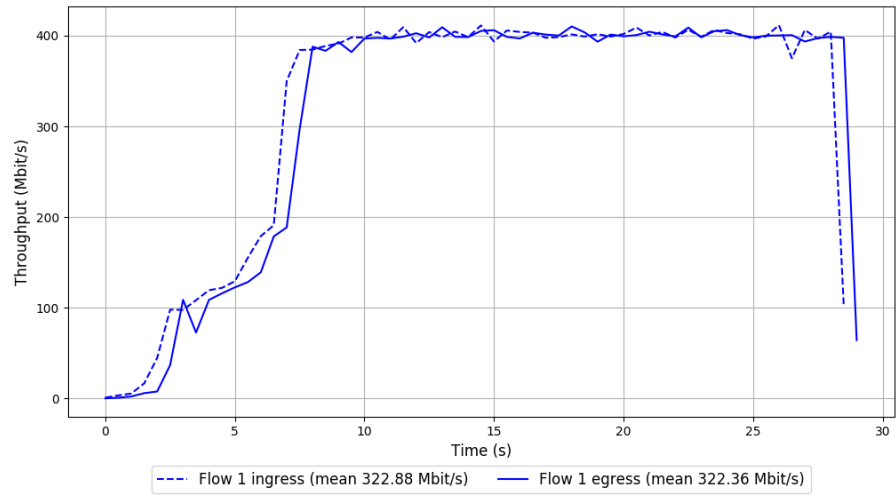


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-19 05:19:10  
End at: 2019-01-19 05:19:40  
Local clock offset: -0.489 ms  
Remote clock offset: -41.799 ms

# Below is generated by plot.py at 2019-01-19 08:29:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 322.36 Mbit/s  
95th percentile per-packet one-way delay: 145.363 ms  
Loss rate: 0.85%  
-- Flow 1:  
Average throughput: 322.36 Mbit/s  
95th percentile per-packet one-way delay: 145.363 ms  
Loss rate: 0.85%

# Run 1: Report of Indigo-MusesC5 — Data Link



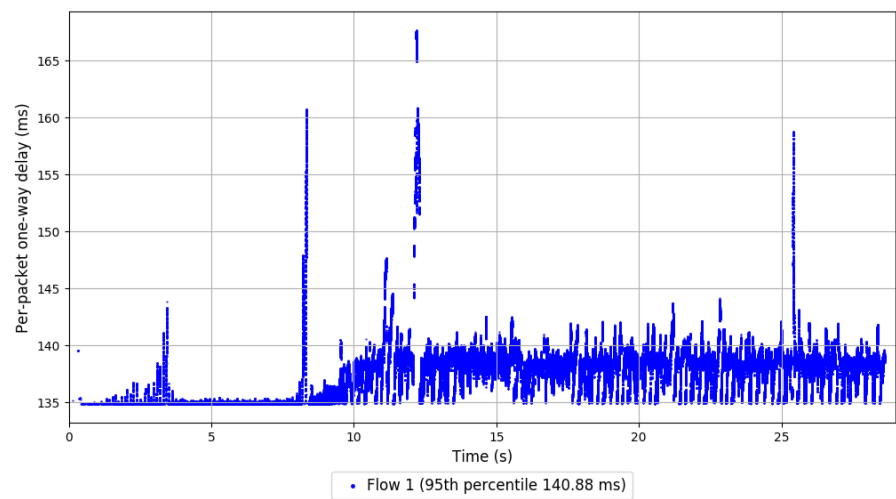
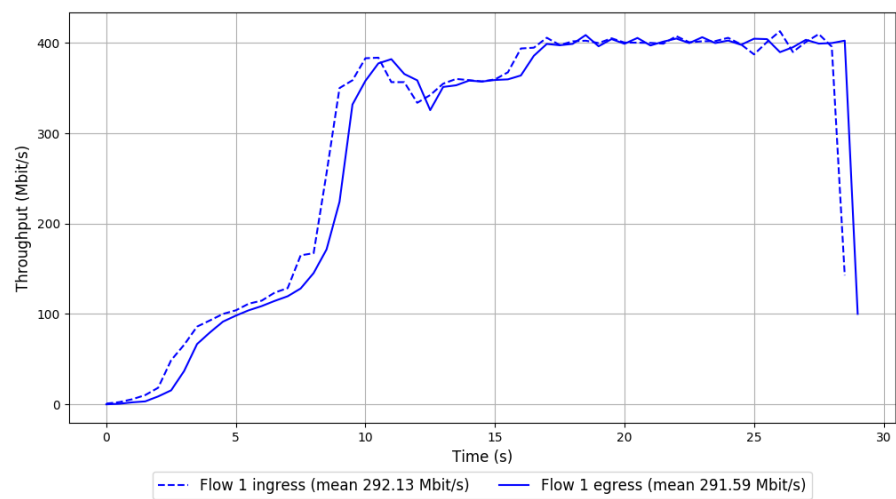


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-19 05:52:54  
End at: 2019-01-19 05:53:24  
Local clock offset: 0.901 ms  
Remote clock offset: -37.447 ms

# Below is generated by plot.py at 2019-01-19 08:29:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 291.59 Mbit/s  
95th percentile per-packet one-way delay: 140.876 ms  
Loss rate: 0.94%  
-- Flow 1:  
Average throughput: 291.59 Mbit/s  
95th percentile per-packet one-way delay: 140.876 ms  
Loss rate: 0.94%

Run 2: Report of Indigo-MusesC5 — Data Link

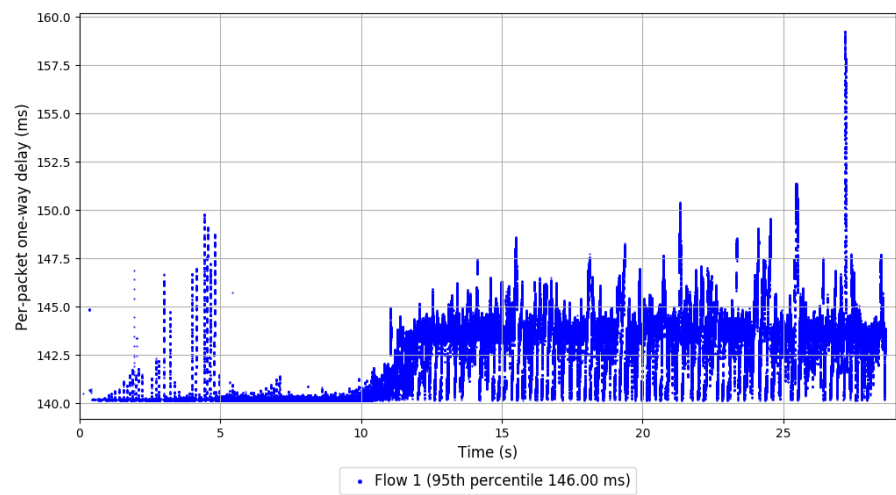
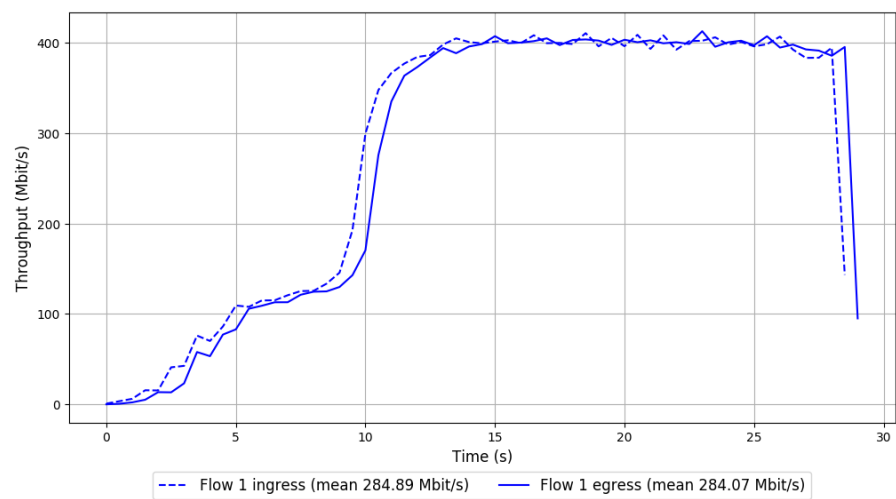


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-19 06:21:03  
End at: 2019-01-19 06:21:33  
Local clock offset: 1.543 ms  
Remote clock offset: -44.736 ms

# Below is generated by plot.py at 2019-01-19 08:30:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 284.07 Mbit/s  
95th percentile per-packet one-way delay: 145.995 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 284.07 Mbit/s  
95th percentile per-packet one-way delay: 145.995 ms  
Loss rate: 0.96%

Run 3: Report of Indigo-MusesC5 — Data Link

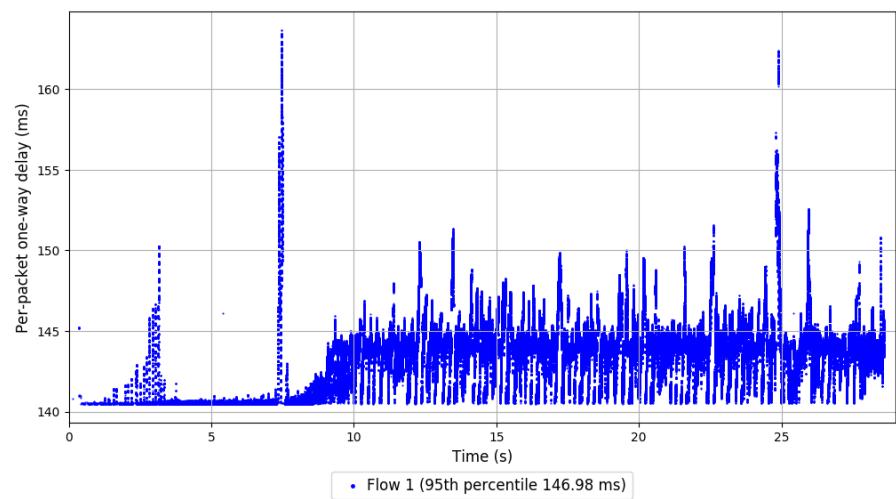
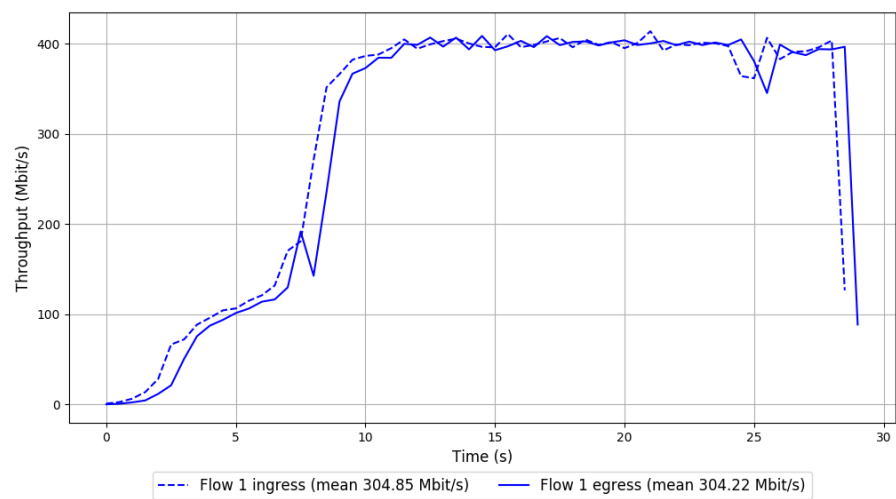


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-19 06:54:38  
End at: 2019-01-19 06:55:08  
Local clock offset: 0.022 ms  
Remote clock offset: -46.436 ms

# Below is generated by plot.py at 2019-01-19 08:30:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 304.22 Mbit/s  
95th percentile per-packet one-way delay: 146.980 ms  
Loss rate: 0.90%  
-- Flow 1:  
Average throughput: 304.22 Mbit/s  
95th percentile per-packet one-way delay: 146.980 ms  
Loss rate: 0.90%

Run 4: Report of Indigo-MusesC5 — Data Link

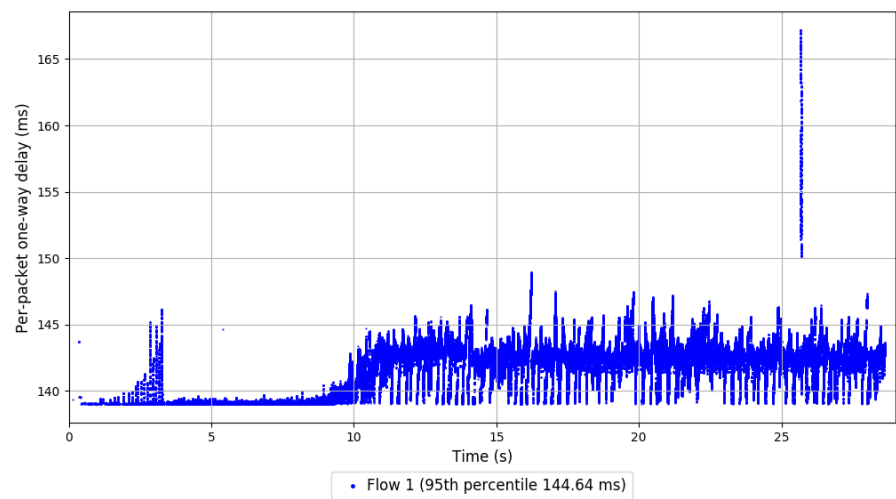
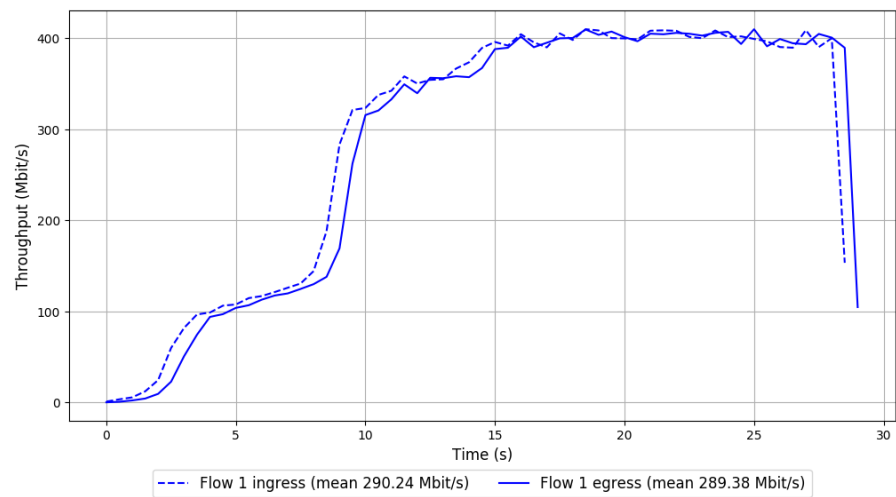


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-19 07:33:51  
End at: 2019-01-19 07:34:21  
Local clock offset: 0.269 ms  
Remote clock offset: -41.377 ms

# Below is generated by plot.py at 2019-01-19 08:30:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 289.38 Mbit/s  
95th percentile per-packet one-way delay: 144.640 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 289.38 Mbit/s  
95th percentile per-packet one-way delay: 144.640 ms  
Loss rate: 0.99%

Run 5: Report of Indigo-MusesC5 — Data Link



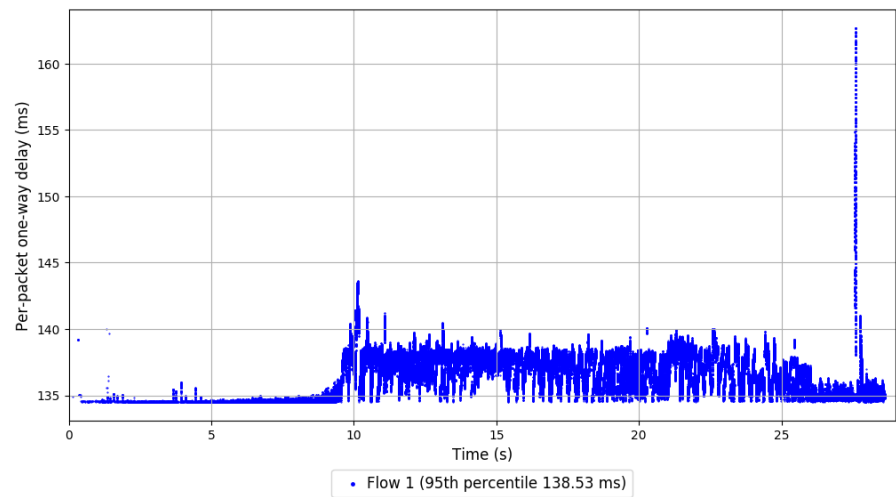
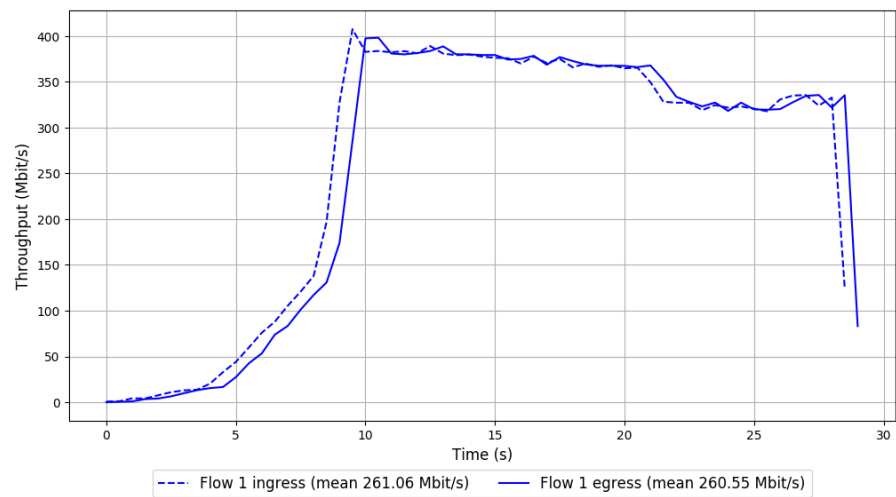


Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-19 05:31:05  
End at: 2019-01-19 05:31:35  
Local clock offset: 0.486 ms  
Remote clock offset: -38.282 ms

# Below is generated by plot.py at 2019-01-19 08:30:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 260.55 Mbit/s  
95th percentile per-packet one-way delay: 138.531 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 260.55 Mbit/s  
95th percentile per-packet one-way delay: 138.531 ms  
Loss rate: 0.87%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-19 06:04:57

End at: 2019-01-19 06:05:27

Local clock offset: 1.529 ms

Remote clock offset: -37.625 ms

# Below is generated by plot.py at 2019-01-19 08:30:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 14.41 Mbit/s

95th percentile per-packet one-way delay: 134.013 ms

Loss rate: 1.13%

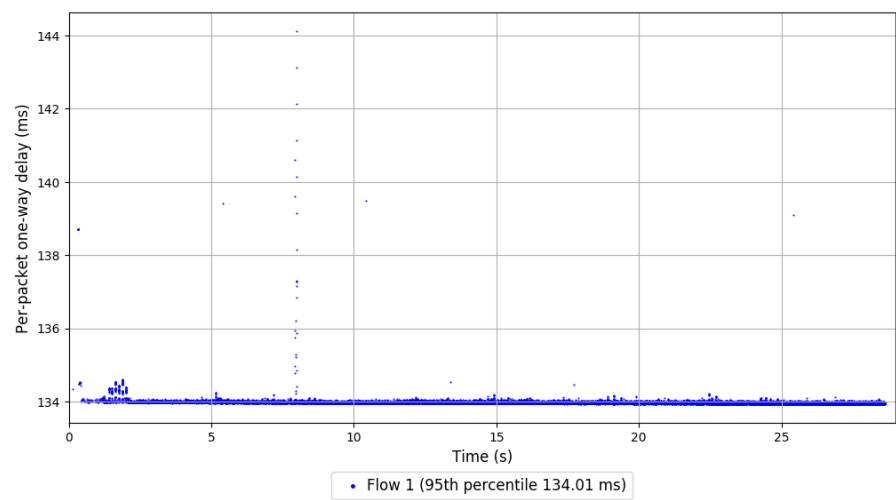
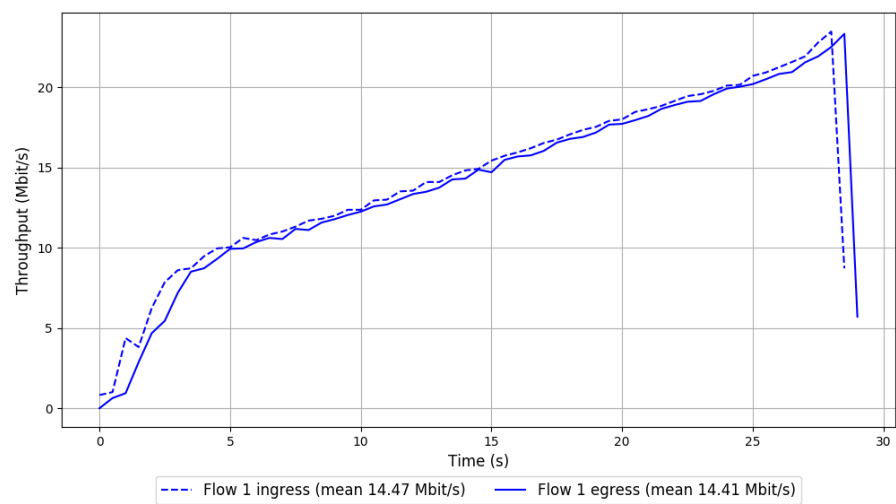
-- Flow 1:

Average throughput: 14.41 Mbit/s

95th percentile per-packet one-way delay: 134.013 ms

Loss rate: 1.13%

Run 2: Report of Indigo-MusesD — Data Link

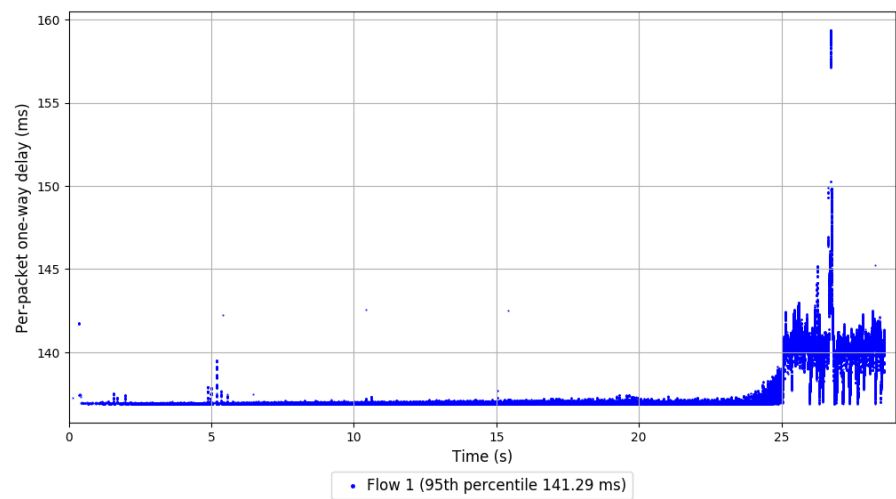
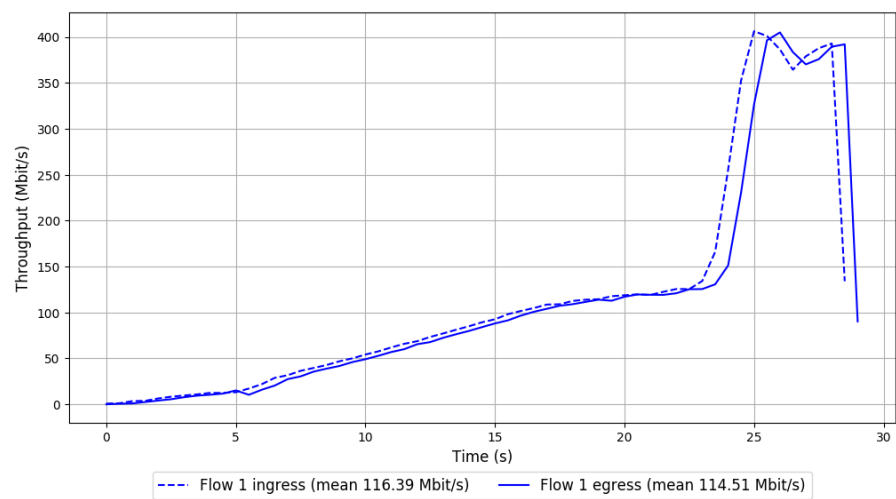


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 06:38:37  
End at: 2019-01-19 06:39:07  
Local clock offset: 1.914 ms  
Remote clock offset: -40.239 ms

# Below is generated by plot.py at 2019-01-19 08:30:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 114.51 Mbit/s  
95th percentile per-packet one-way delay: 141.287 ms  
Loss rate: 2.30%  
-- Flow 1:  
Average throughput: 114.51 Mbit/s  
95th percentile per-packet one-way delay: 141.287 ms  
Loss rate: 2.30%

Run 3: Report of Indigo-MusesD — Data Link

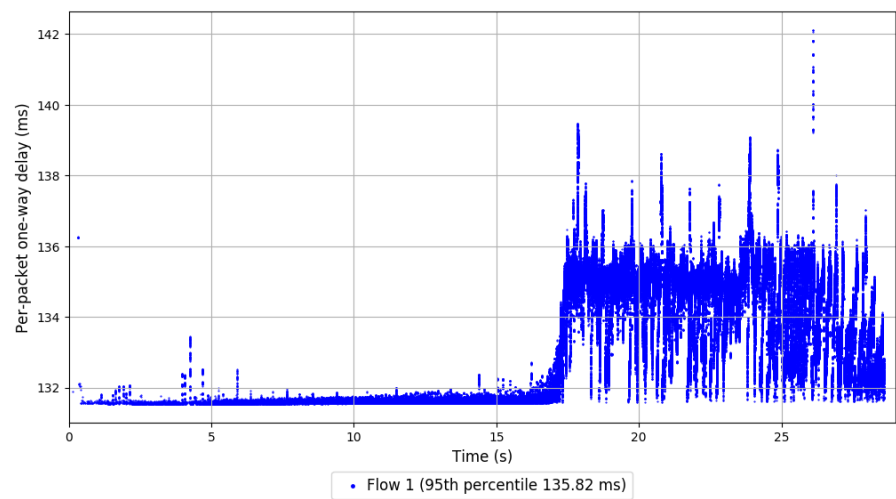
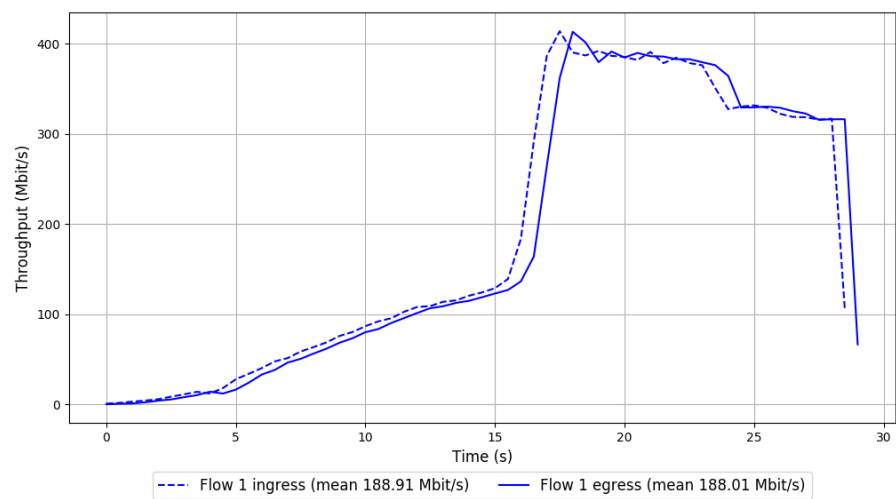


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-19 07:11:44  
End at: 2019-01-19 07:12:14  
Local clock offset: 0.151 ms  
Remote clock offset: -34.322 ms

# Below is generated by plot.py at 2019-01-19 08:30:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 188.01 Mbit/s  
95th percentile per-packet one-way delay: 135.822 ms  
Loss rate: 1.16%  
-- Flow 1:  
Average throughput: 188.01 Mbit/s  
95th percentile per-packet one-way delay: 135.822 ms  
Loss rate: 1.16%

Run 4: Report of Indigo-MusesD — Data Link



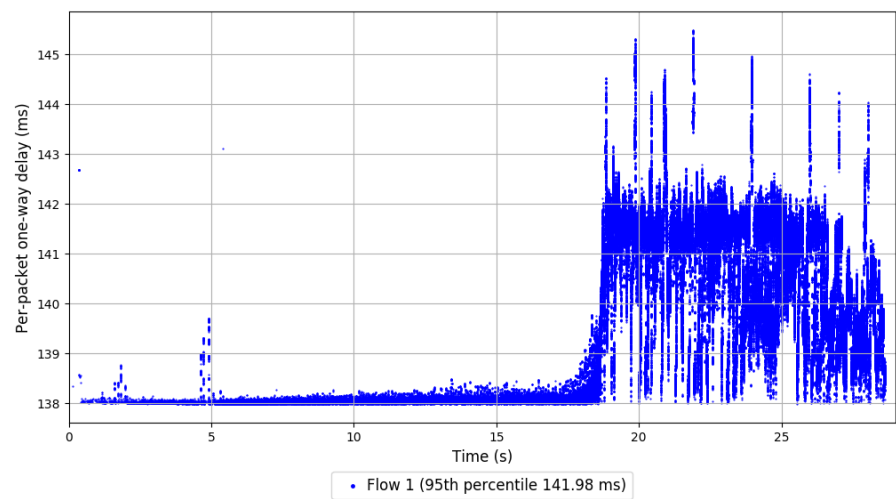
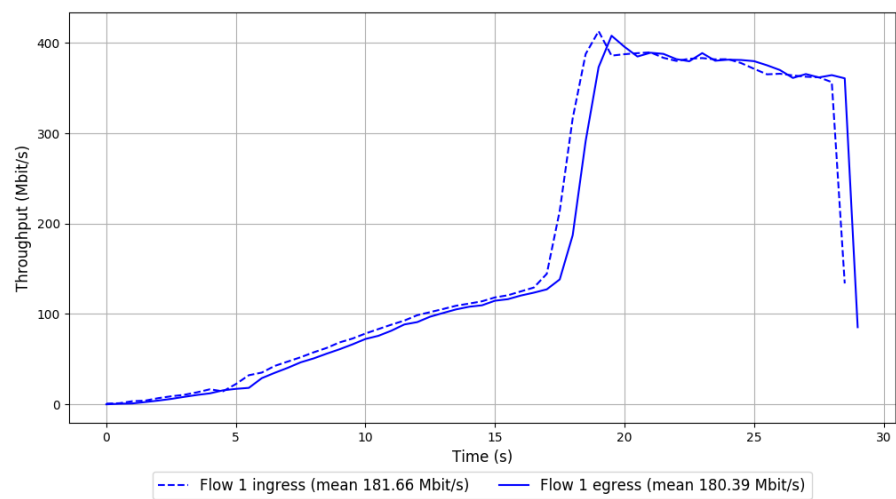


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-19 07:51:26  
End at: 2019-01-19 07:51:56  
Local clock offset: 3.383 ms  
Remote clock offset: -37.363 ms

# Below is generated by plot.py at 2019-01-19 08:30:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 180.39 Mbit/s  
95th percentile per-packet one-way delay: 141.981 ms  
Loss rate: 1.38%  
-- Flow 1:  
Average throughput: 180.39 Mbit/s  
95th percentile per-packet one-way delay: 141.981 ms  
Loss rate: 1.38%

Run 5: Report of Indigo-MusesD — Data Link

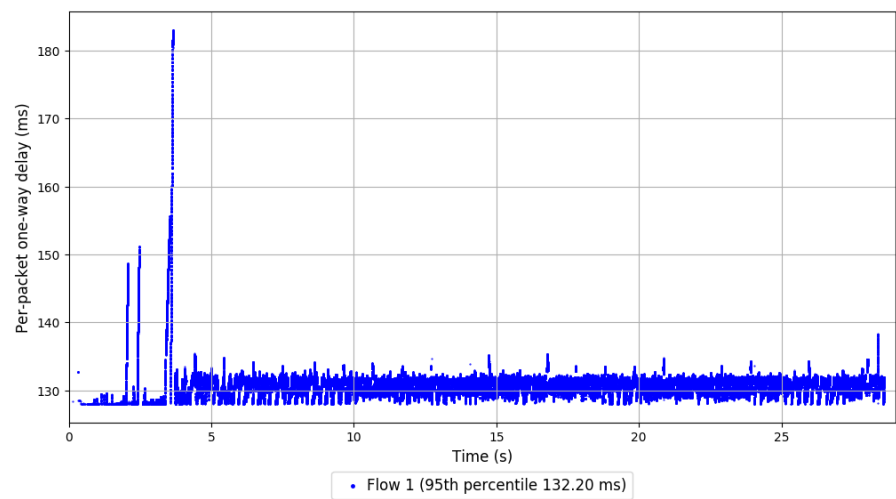
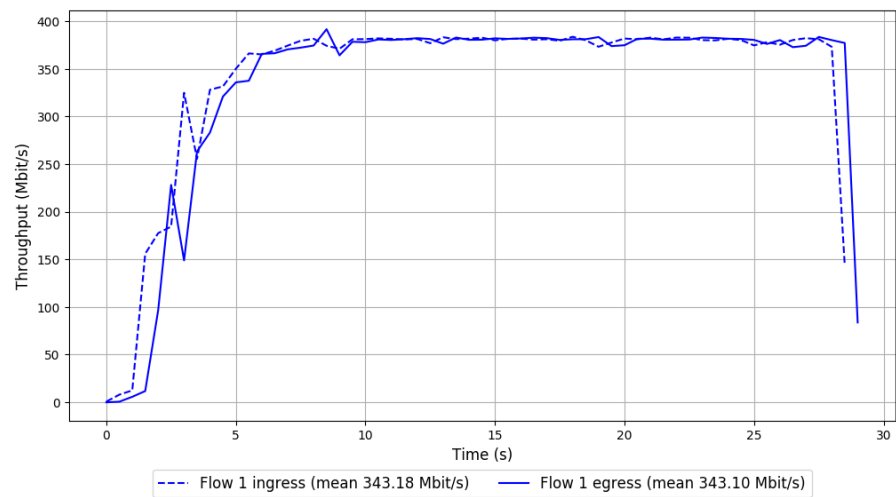


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-19 05:23:13  
End at: 2019-01-19 05:23:43  
Local clock offset: 0.201 ms  
Remote clock offset: -30.574 ms

# Below is generated by plot.py at 2019-01-19 08:32:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 343.10 Mbit/s  
95th percentile per-packet one-way delay: 132.196 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 343.10 Mbit/s  
95th percentile per-packet one-way delay: 132.196 ms  
Loss rate: 0.80%

Run 1: Report of Indigo-MusesT — Data Link

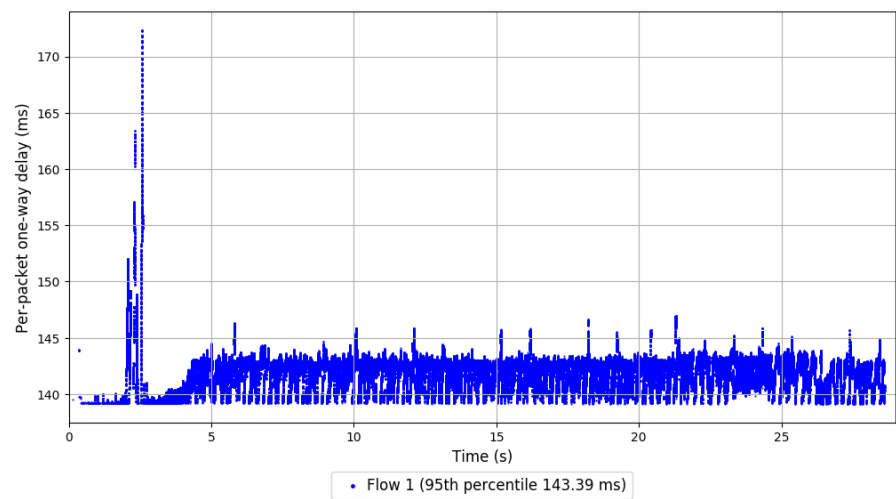
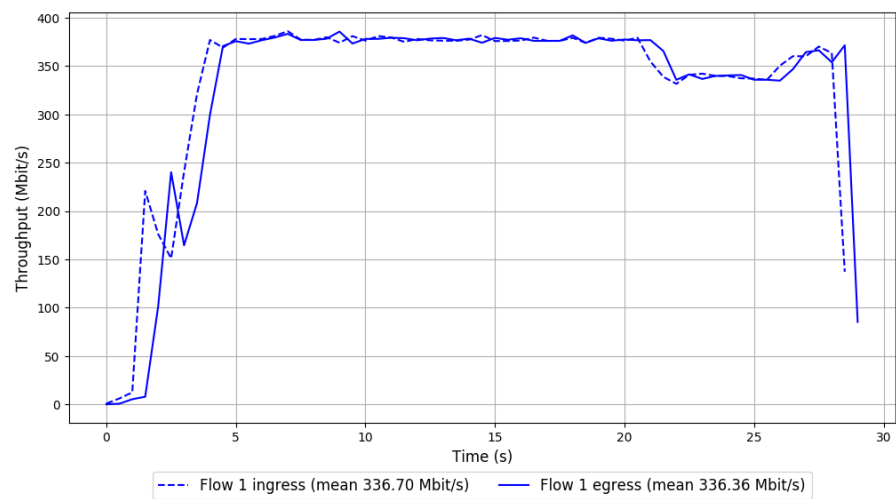


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-19 05:57:03  
End at: 2019-01-19 05:57:33  
Local clock offset: 1.337 ms  
Remote clock offset: -40.343 ms

# Below is generated by plot.py at 2019-01-19 08:33:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 336.36 Mbit/s  
95th percentile per-packet one-way delay: 143.390 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 336.36 Mbit/s  
95th percentile per-packet one-way delay: 143.390 ms  
Loss rate: 0.80%

Run 2: Report of Indigo-MusesT — Data Link

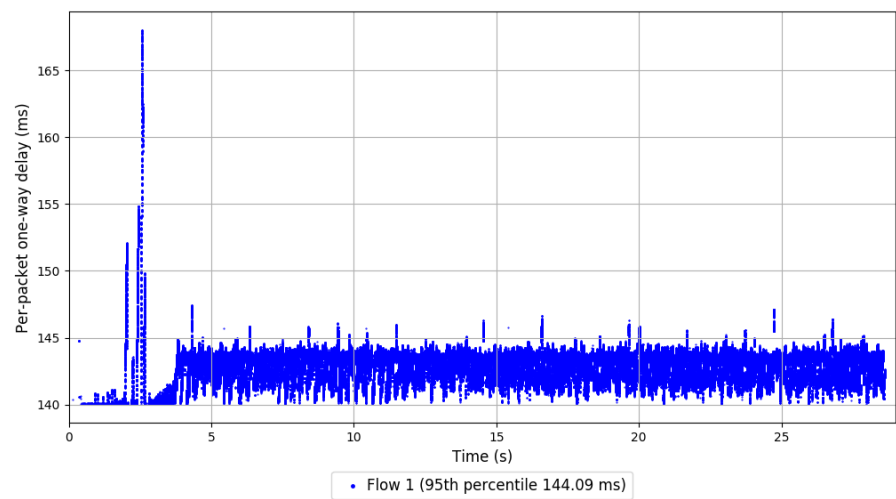
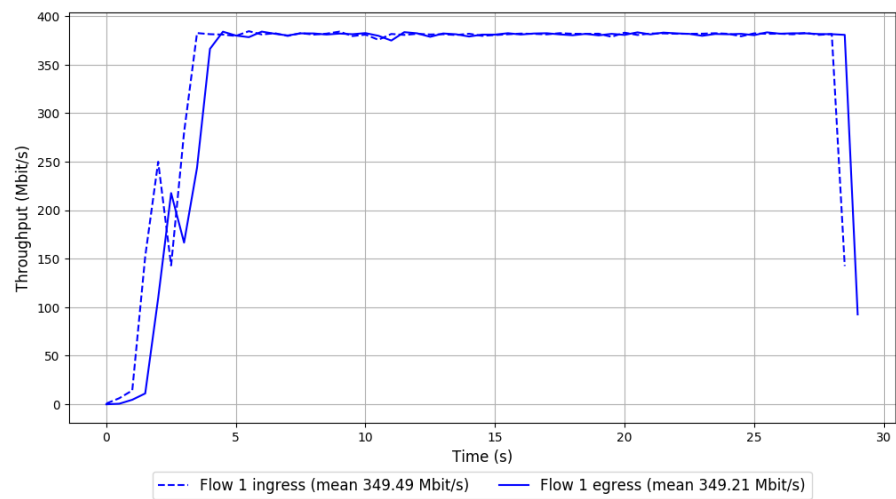


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-19 06:25:06  
End at: 2019-01-19 06:25:36  
Local clock offset: 1.084 ms  
Remote clock offset: -43.658 ms

# Below is generated by plot.py at 2019-01-19 08:33:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 349.21 Mbit/s  
95th percentile per-packet one-way delay: 144.095 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 349.21 Mbit/s  
95th percentile per-packet one-way delay: 144.095 ms  
Loss rate: 0.79%

Run 3: Report of Indigo-MusesT — Data Link



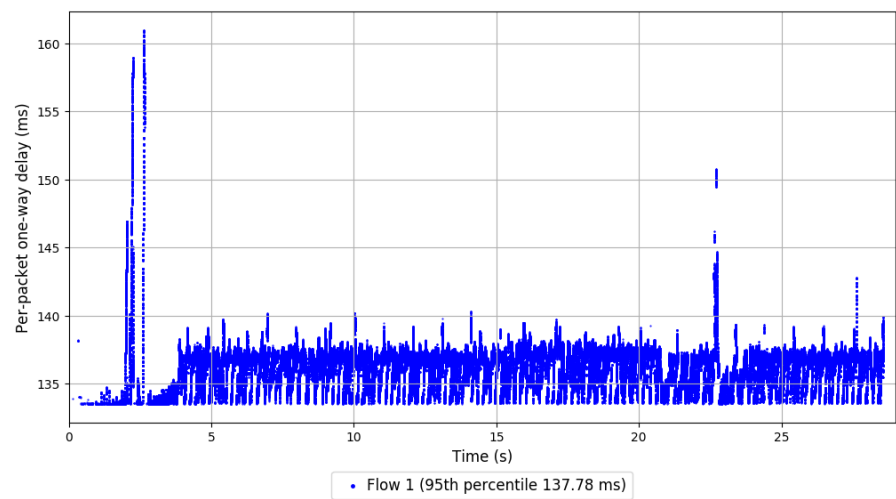
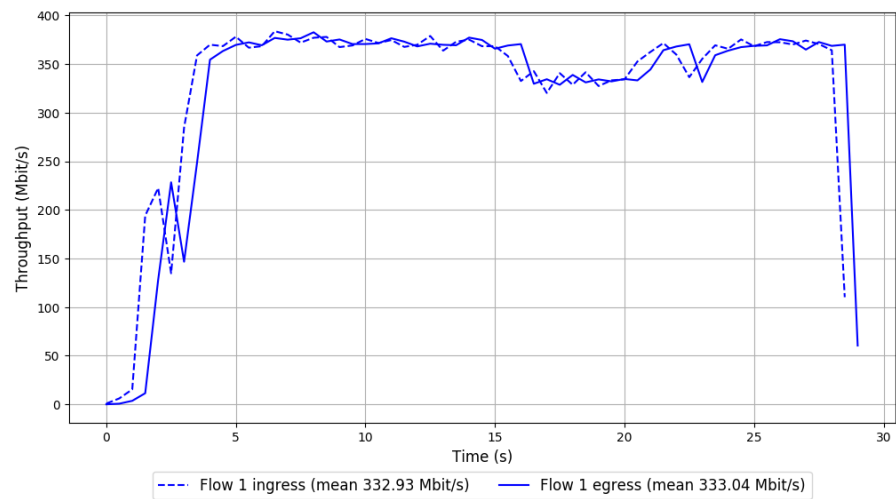


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-19 06:58:40  
End at: 2019-01-19 06:59:10  
Local clock offset: -0.358 ms  
Remote clock offset: -39.599 ms

# Below is generated by plot.py at 2019-01-19 08:33:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 333.04 Mbit/s  
95th percentile per-packet one-way delay: 137.784 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 333.04 Mbit/s  
95th percentile per-packet one-way delay: 137.784 ms  
Loss rate: 0.79%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-19 07:38:01

End at: 2019-01-19 07:38:31

Local clock offset: 0.851 ms

Remote clock offset: -38.144 ms

# Below is generated by plot.py at 2019-01-19 08:33:42

# Datalink statistics

-- Total of 1 flow:

Average throughput: 336.99 Mbit/s

95th percentile per-packet one-way delay: 140.654 ms

Loss rate: 0.70%

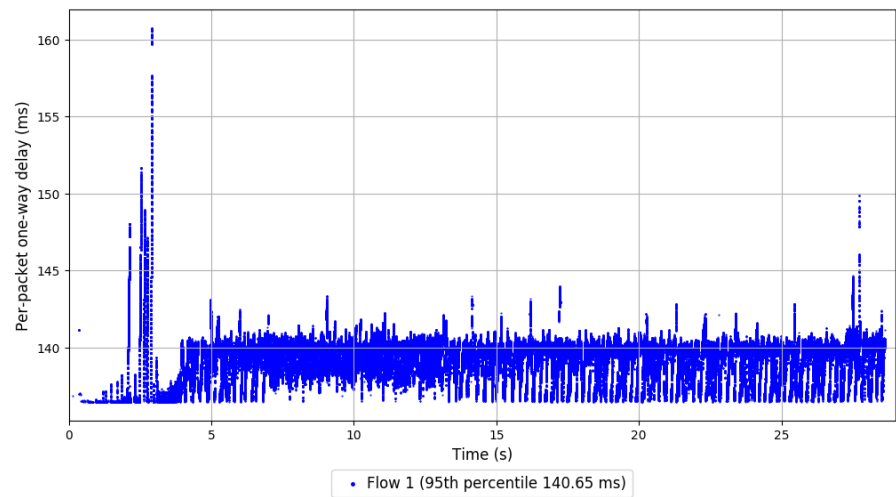
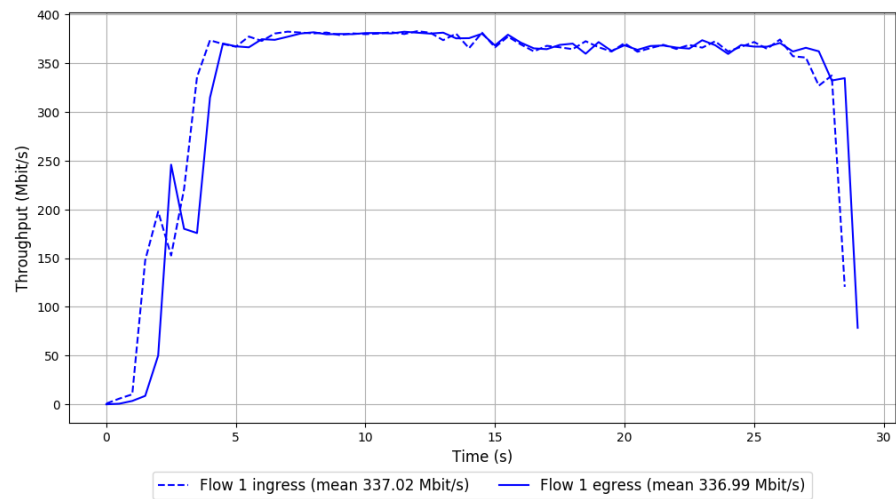
-- Flow 1:

Average throughput: 336.99 Mbit/s

95th percentile per-packet one-way delay: 140.654 ms

Loss rate: 0.70%

Run 5: Report of Indigo-MusesT — Data Link

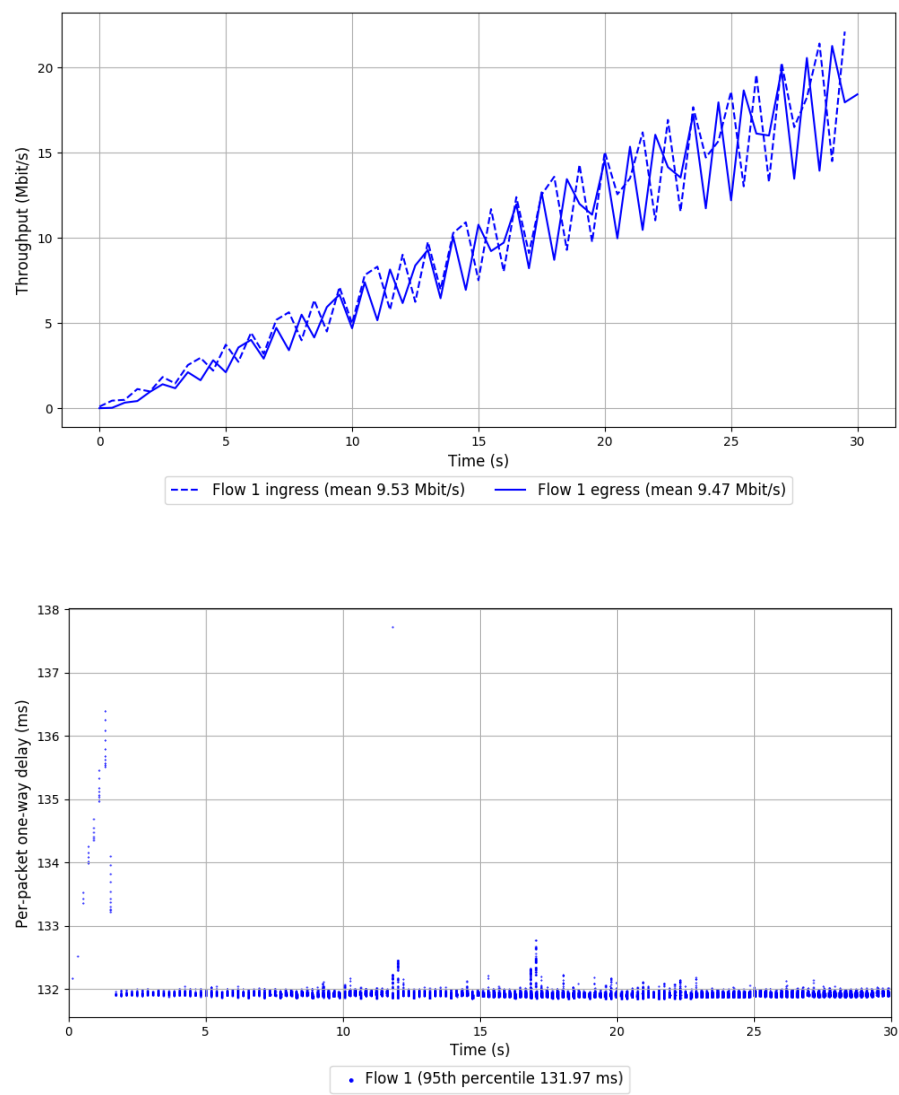


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-19 05:27:10
End at: 2019-01-19 05:27:40
Local clock offset: 0.113 ms
Remote clock offset: -34.501 ms

# Below is generated by plot.py at 2019-01-19 08:33:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 131.971 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 131.971 ms
Loss rate: 1.30%
```

Run 1: Report of LEDBAT — Data Link

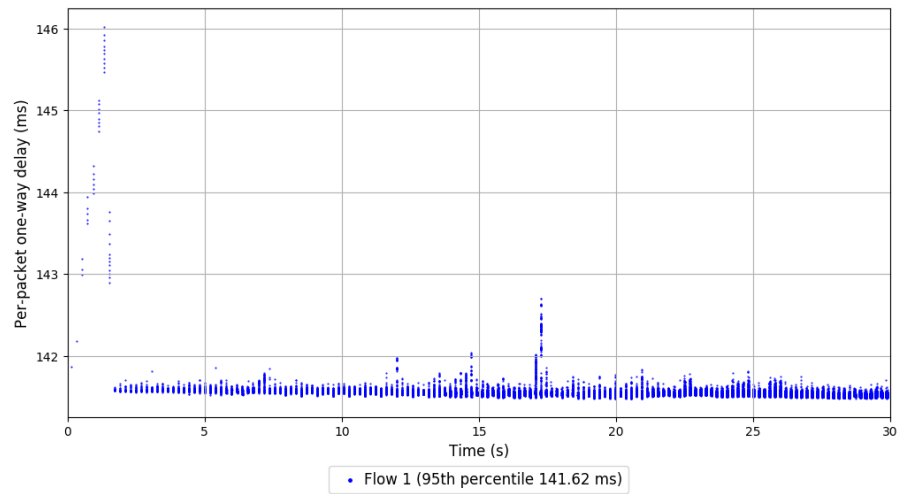
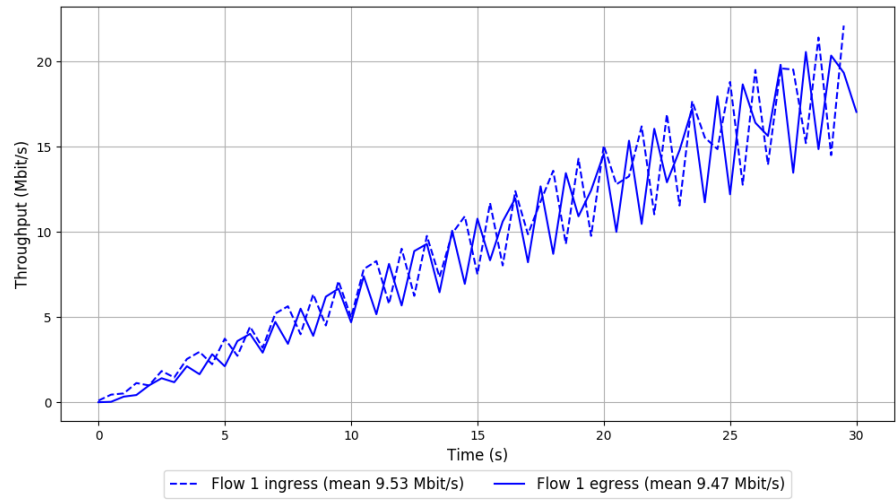


Run 2: Statistics of LEDBAT

Start at: 2019-01-19 06:01:02  
End at: 2019-01-19 06:01:32  
Local clock offset: 2.5 ms  
Remote clock offset: -42.336 ms

# Below is generated by plot.py at 2019-01-19 08:33:42  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 9.47 Mbit/s  
95th percentile per-packet one-way delay: 141.622 ms  
Loss rate: 1.30%  
-- Flow 1:  
Average throughput: 9.47 Mbit/s  
95th percentile per-packet one-way delay: 141.622 ms  
Loss rate: 1.30%

## Run 2: Report of LEDBAT — Data Link



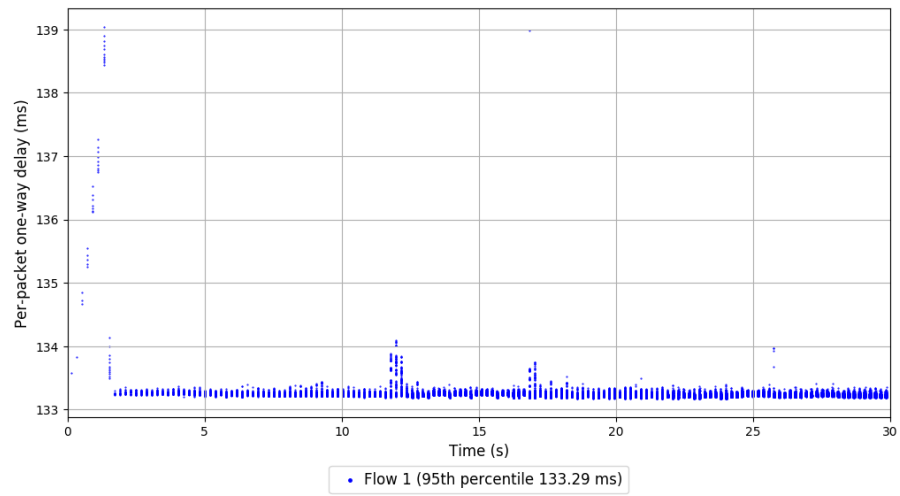
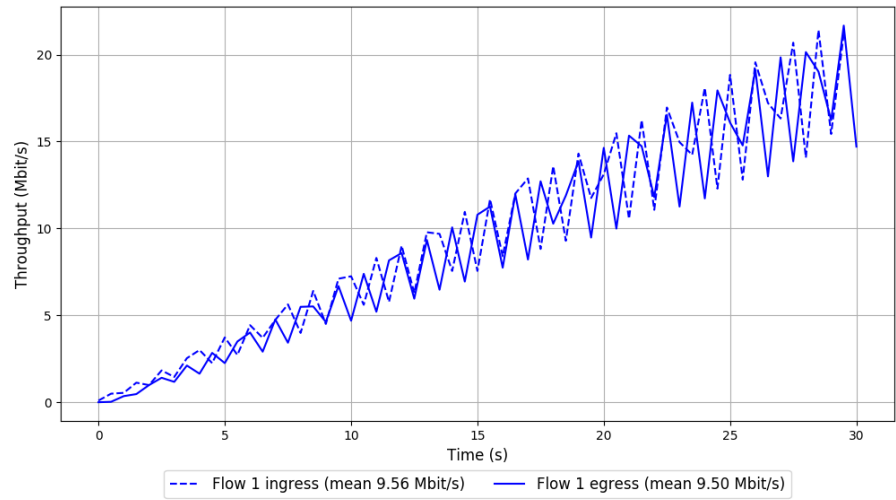


Run 3: Statistics of LEDBAT

Start at: 2019-01-19 06:34:32  
End at: 2019-01-19 06:35:02  
Local clock offset: 0.839 ms  
Remote clock offset: -37.569 ms

# Below is generated by plot.py at 2019-01-19 08:33:42  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 9.50 Mbit/s  
95th percentile per-packet one-way delay: 133.295 ms  
Loss rate: 1.30%  
-- Flow 1:  
Average throughput: 9.50 Mbit/s  
95th percentile per-packet one-way delay: 133.295 ms  
Loss rate: 1.30%

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

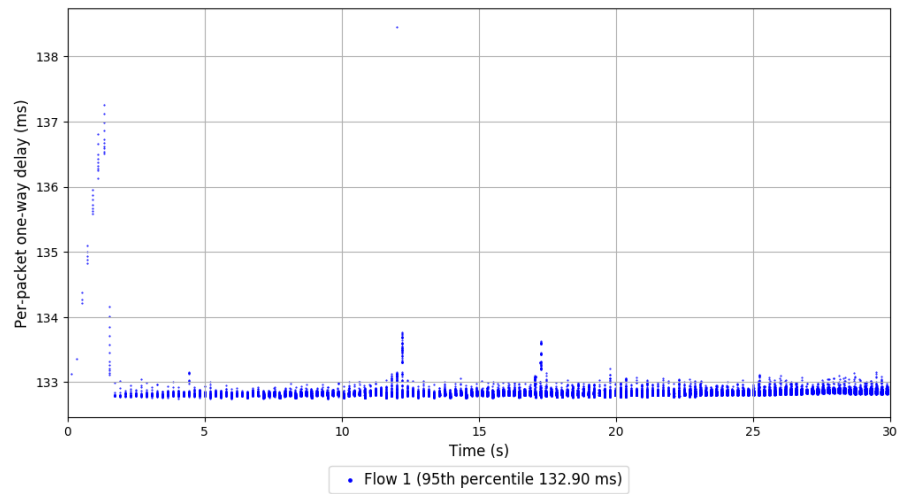
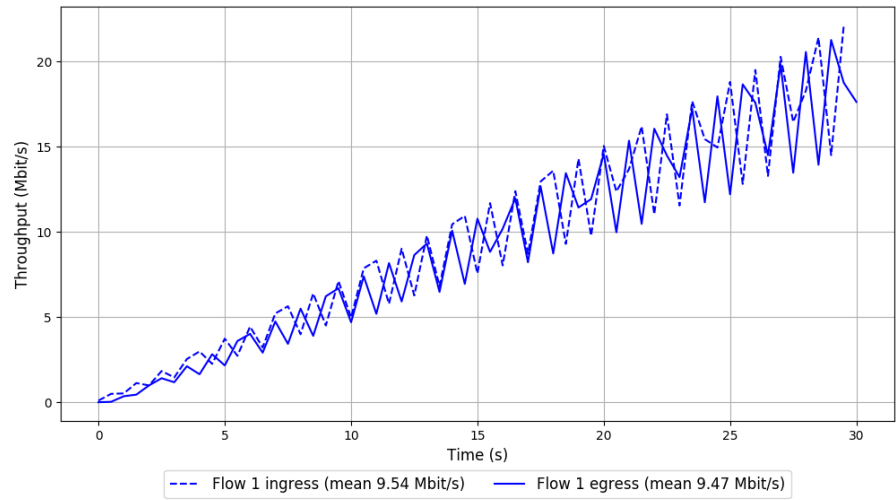


Run 4: Statistics of LEDBAT

Start at: 2019-01-19 07:07:48  
End at: 2019-01-19 07:08:18  
Local clock offset: -1.058 ms  
Remote clock offset: -37.163 ms

# Below is generated by plot.py at 2019-01-19 08:33:42  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 9.47 Mbit/s  
95th percentile per-packet one-way delay: 132.903 ms  
Loss rate: 1.30%  
-- Flow 1:  
Average throughput: 9.47 Mbit/s  
95th percentile per-packet one-way delay: 132.903 ms  
Loss rate: 1.30%

#### Run 4: Report of LEDBAT — Data Link

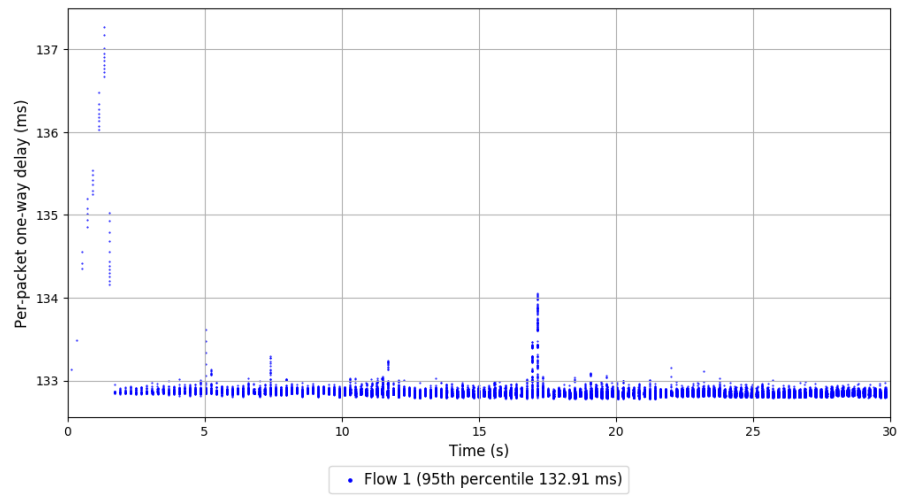
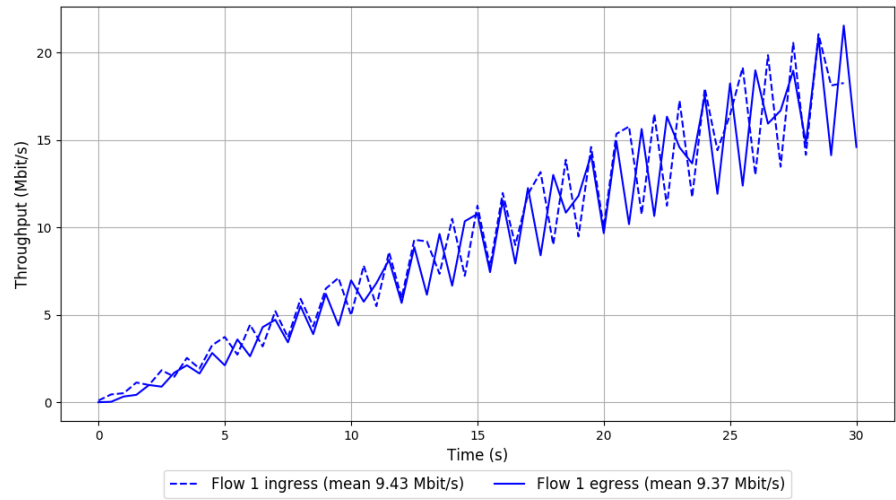


Run 5: Statistics of LEDBAT

Start at: 2019-01-19 07:47:30  
End at: 2019-01-19 07:48:00  
Local clock offset: 0.049 ms  
Remote clock offset: -36.71 ms

# Below is generated by plot.py at 2019-01-19 08:33:42  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 9.37 Mbit/s  
95th percentile per-packet one-way delay: 132.907 ms  
Loss rate: 1.31%  
-- Flow 1:  
Average throughput: 9.37 Mbit/s  
95th percentile per-packet one-way delay: 132.907 ms  
Loss rate: 1.31%

## Run 5: Report of LEDBAT — Data Link

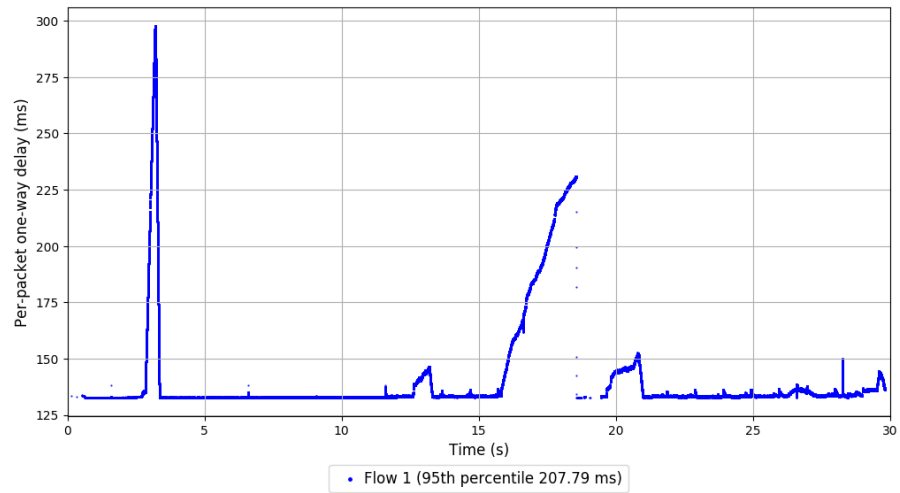
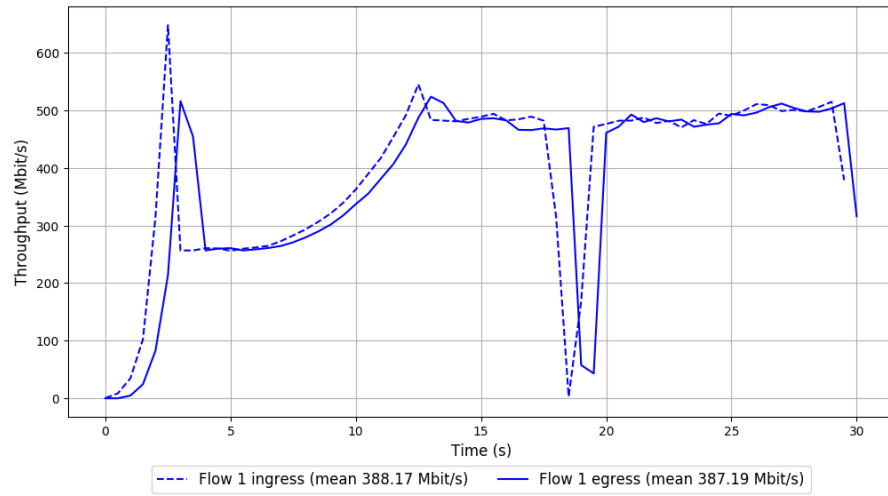


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-19 05:20:35
End at: 2019-01-19 05:21:05
Local clock offset: 0.707 ms
Remote clock offset: -36.081 ms

# Below is generated by plot.py at 2019-01-19 08:34:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 387.19 Mbit/s
95th percentile per-packet one-way delay: 207.791 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 387.19 Mbit/s
95th percentile per-packet one-way delay: 207.791 ms
Loss rate: 0.91%
```

## Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

Start at: 2019-01-19 05:54:17

End at: 2019-01-19 05:54:47

Local clock offset: 2.984 ms

Remote clock offset: -35.764 ms

# Below is generated by plot.py at 2019-01-19 08:34:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 398.40 Mbit/s

95th percentile per-packet one-way delay: 232.835 ms

Loss rate: 0.86%

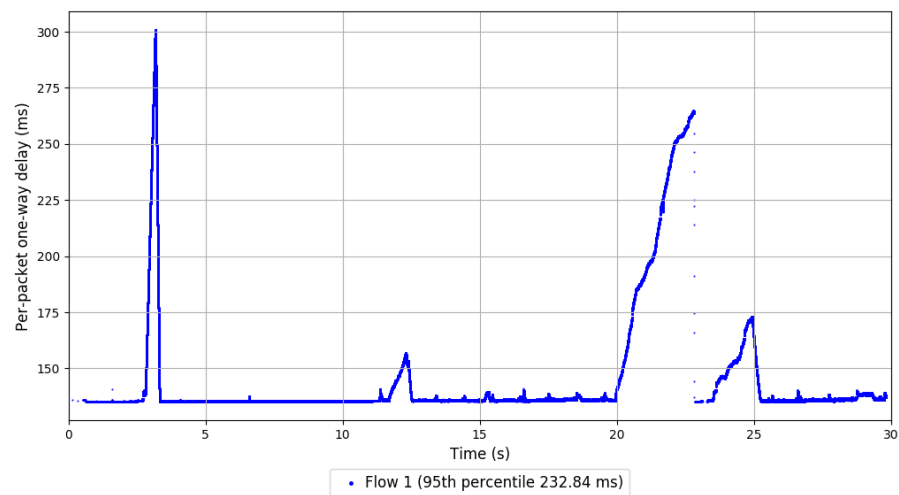
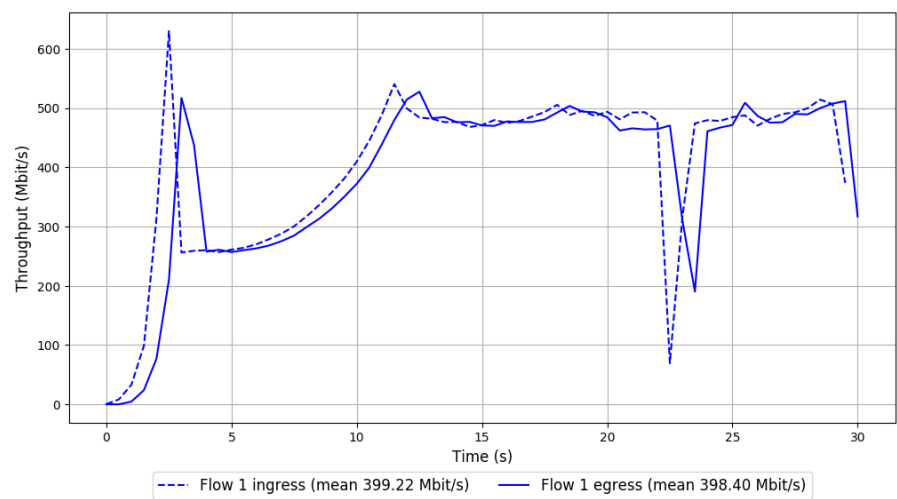
-- Flow 1:

Average throughput: 398.40 Mbit/s

95th percentile per-packet one-way delay: 232.835 ms

Loss rate: 0.86%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-01-19 06:22:26

End at: 2019-01-19 06:22:56

Local clock offset: 1.105 ms

Remote clock offset: -36.113 ms

# Below is generated by plot.py at 2019-01-19 08:34:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 330.98 Mbit/s

95th percentile per-packet one-way delay: 210.122 ms

Loss rate: 0.93%

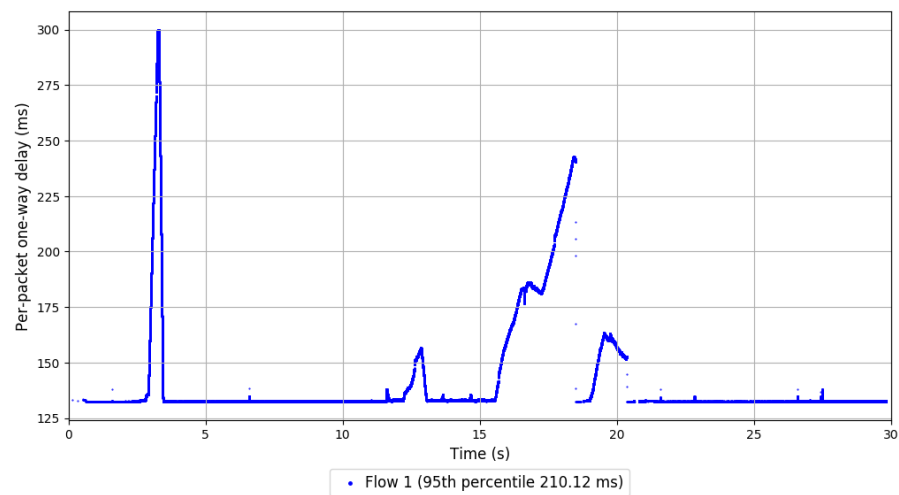
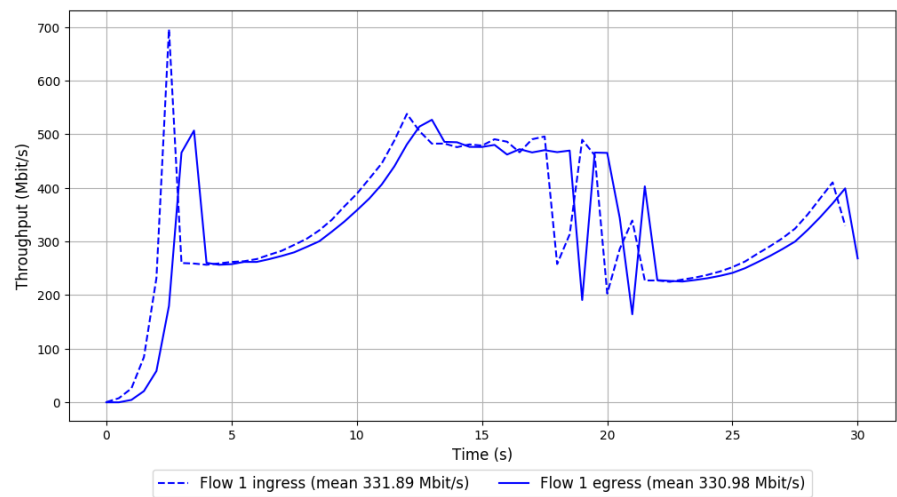
-- Flow 1:

Average throughput: 330.98 Mbit/s

95th percentile per-packet one-way delay: 210.122 ms

Loss rate: 0.93%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-01-19 06:56:02

End at: 2019-01-19 06:56:32

Local clock offset: 0.772 ms

Remote clock offset: -42.996 ms

# Below is generated by plot.py at 2019-01-19 08:37:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 390.88 Mbit/s

95th percentile per-packet one-way delay: 245.291 ms

Loss rate: 0.89%

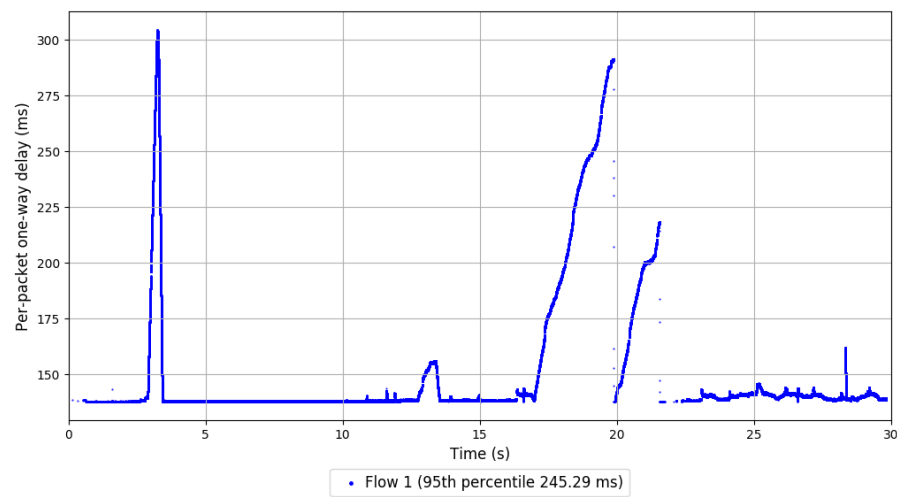
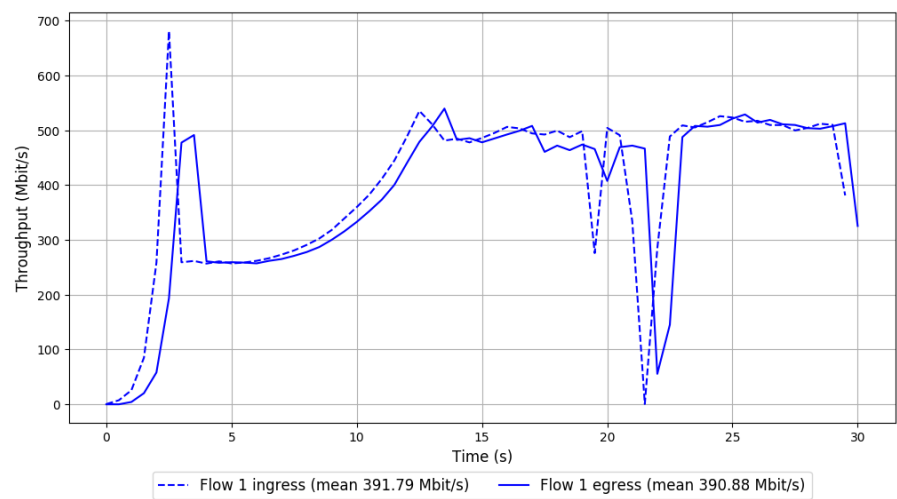
-- Flow 1:

Average throughput: 390.88 Mbit/s

95th percentile per-packet one-way delay: 245.291 ms

Loss rate: 0.89%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-01-19 07:35:14

End at: 2019-01-19 07:35:44

Local clock offset: 1.629 ms

Remote clock offset: -42.619 ms

# Below is generated by plot.py at 2019-01-19 08:37:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 407.64 Mbit/s

95th percentile per-packet one-way delay: 148.356 ms

Loss rate: 0.81%

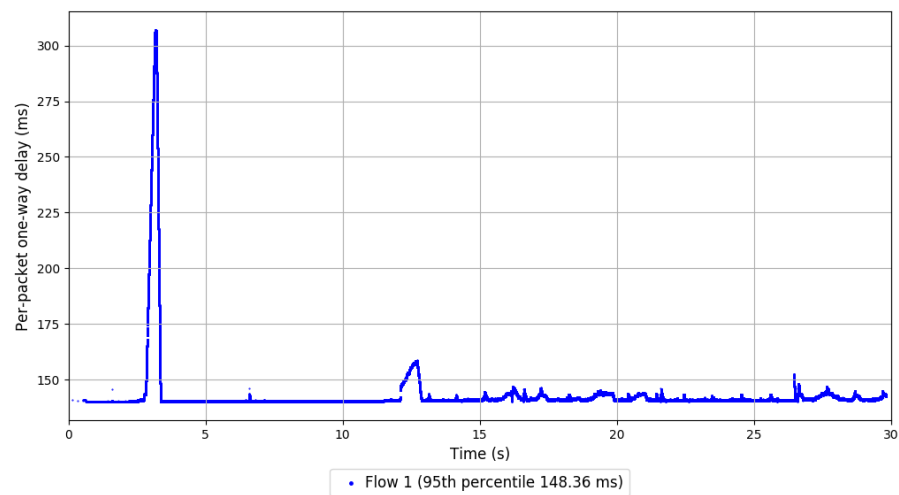
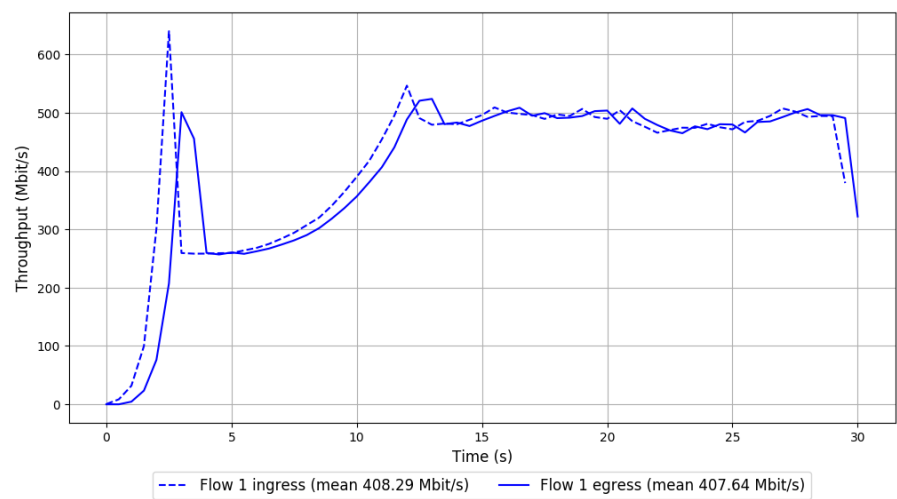
-- Flow 1:

Average throughput: 407.64 Mbit/s

95th percentile per-packet one-way delay: 148.356 ms

Loss rate: 0.81%

Run 5: Report of PCC-Allegro — Data Link



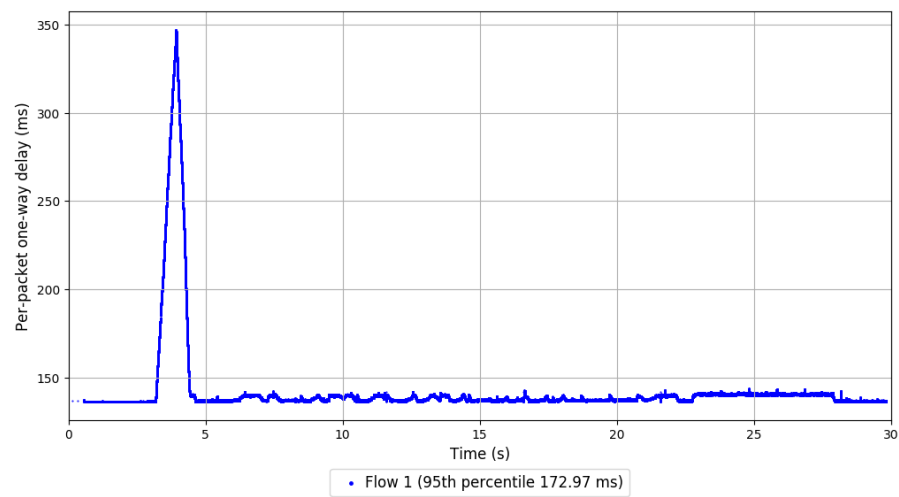
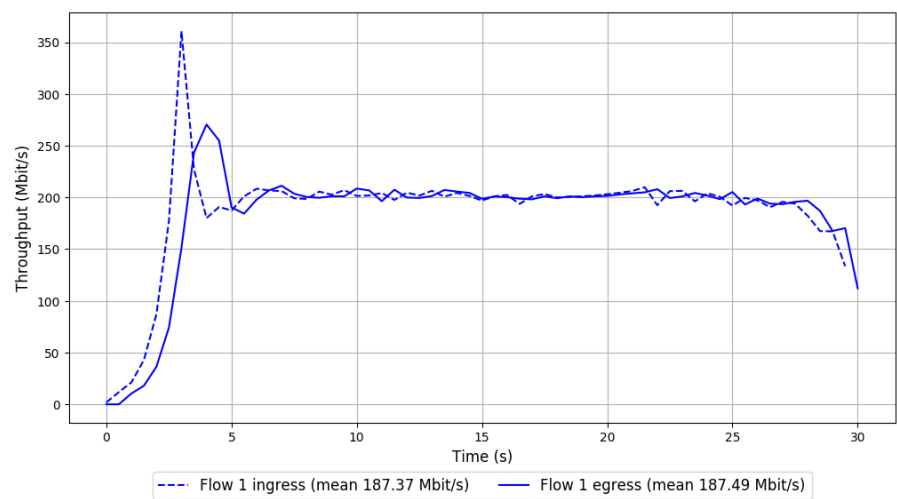


Run 1: Statistics of PCC-Expr

Start at: 2019-01-19 05:47:23  
End at: 2019-01-19 05:47:53  
Local clock offset: 1.366 ms  
Remote clock offset: -37.889 ms

# Below is generated by plot.py at 2019-01-19 08:37:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 187.49 Mbit/s  
95th percentile per-packet one-way delay: 172.971 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 187.49 Mbit/s  
95th percentile per-packet one-way delay: 172.971 ms  
Loss rate: 0.59%

Run 1: Report of PCC-Expr — Data Link

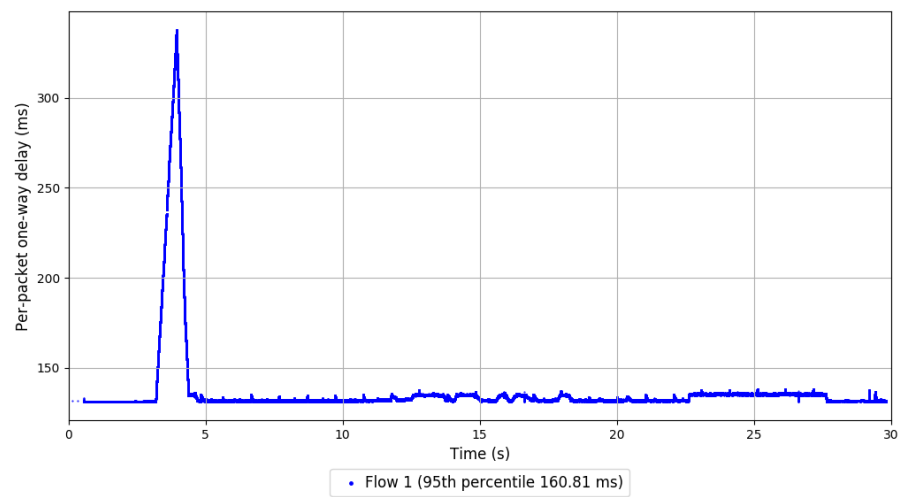
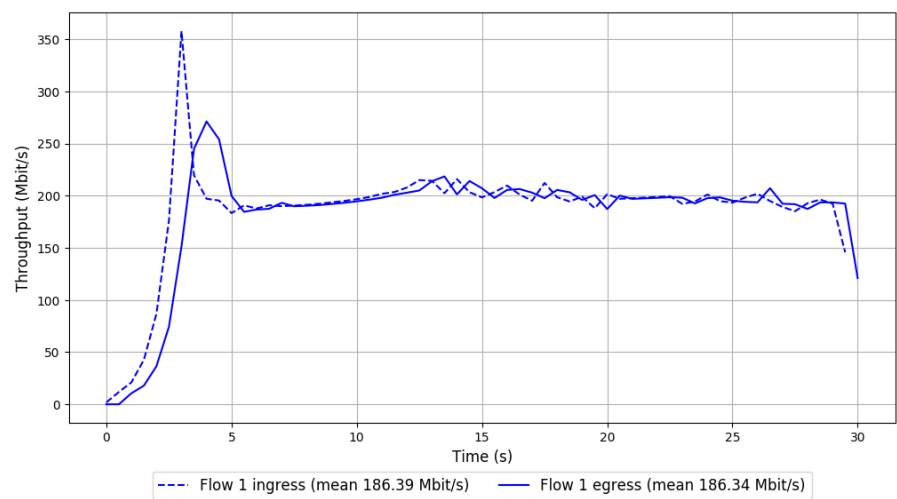


Run 2: Statistics of PCC-Expr

Start at: 2019-01-19 06:15:33  
End at: 2019-01-19 06:16:03  
Local clock offset: -0.251 ms  
Remote clock offset: -37.224 ms

# Below is generated by plot.py at 2019-01-19 08:37:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 186.34 Mbit/s  
95th percentile per-packet one-way delay: 160.811 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 186.34 Mbit/s  
95th percentile per-packet one-way delay: 160.811 ms  
Loss rate: 0.68%

Run 2: Report of PCC-Expr — Data Link

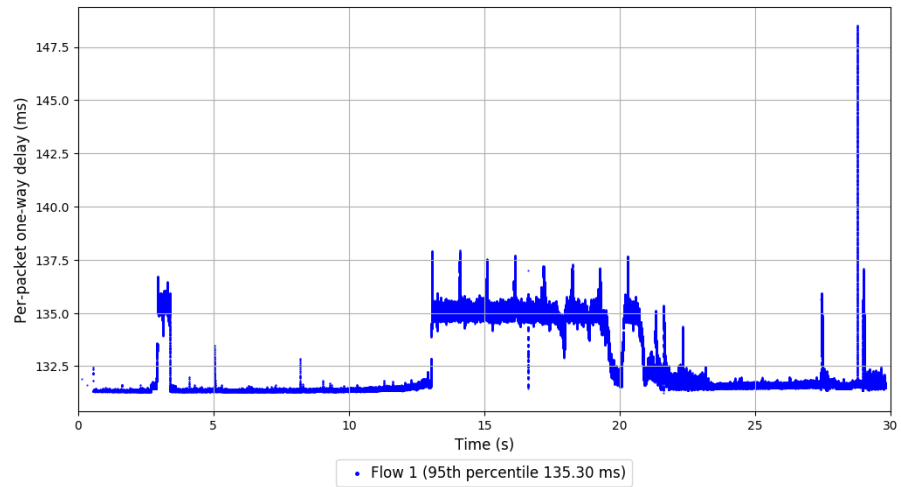
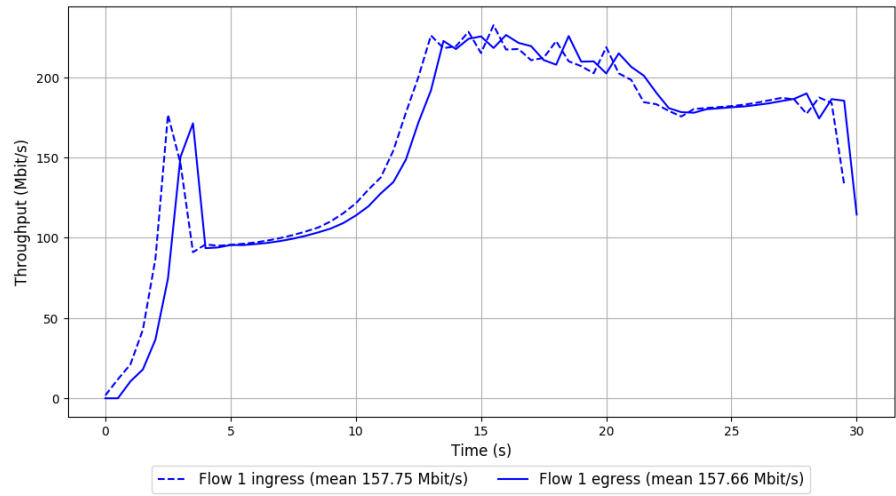


Run 3: Statistics of PCC-Expr

Start at: 2019-01-19 06:49:10  
End at: 2019-01-19 06:49:40  
Local clock offset: 0.85 ms  
Remote clock offset: -37.001 ms

# Below is generated by plot.py at 2019-01-19 08:37:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 157.66 Mbit/s  
95th percentile per-packet one-way delay: 135.302 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 157.66 Mbit/s  
95th percentile per-packet one-way delay: 135.302 ms  
Loss rate: 0.71%

### Run 3: Report of PCC-Expr — Data Link

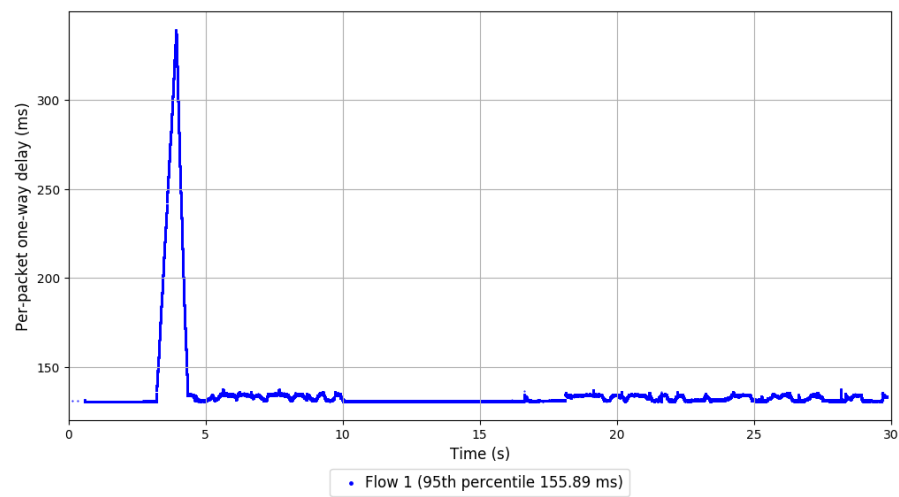
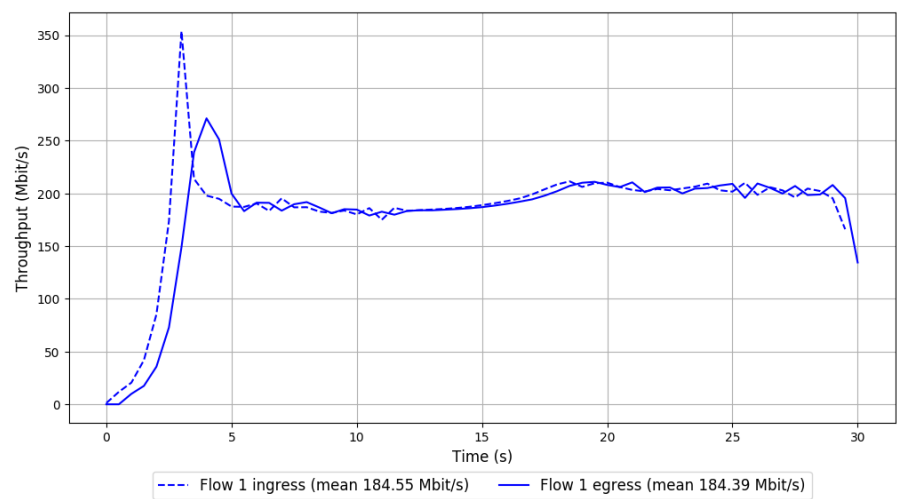


Run 4: Statistics of PCC-Expr

Start at: 2019-01-19 07:28:21  
End at: 2019-01-19 07:28:51  
Local clock offset: -2.242 ms  
Remote clock offset: -35.791 ms

# Below is generated by plot.py at 2019-01-19 08:38:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 184.39 Mbit/s  
95th percentile per-packet one-way delay: 155.894 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 184.39 Mbit/s  
95th percentile per-packet one-way delay: 155.894 ms  
Loss rate: 0.75%

Run 4: Report of PCC-Expr — Data Link



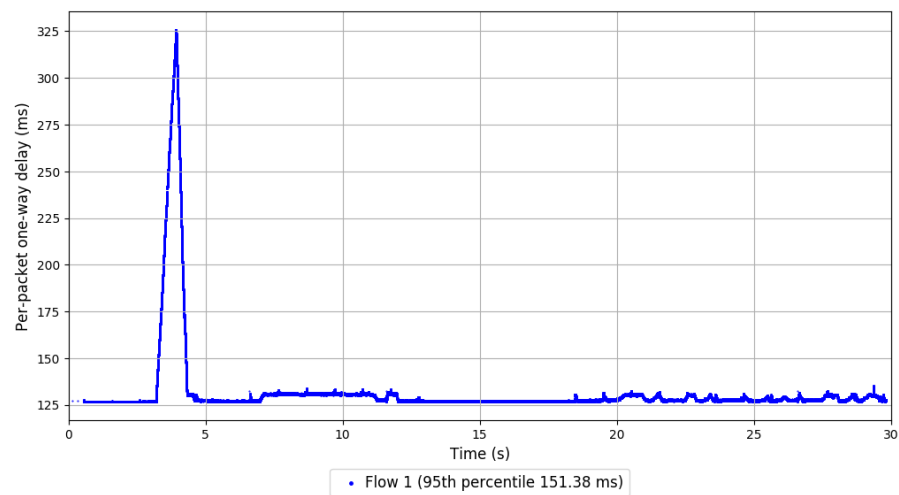
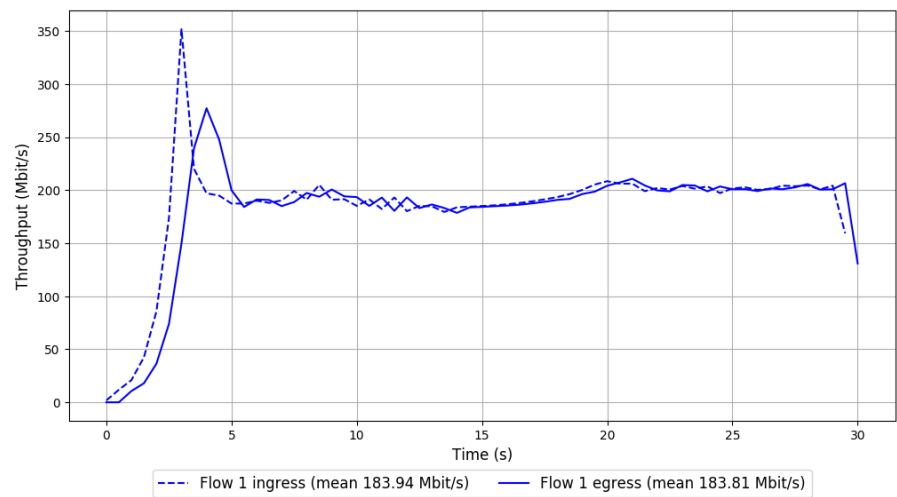


Run 5: Statistics of PCC-Expr

Start at: 2019-01-19 08:02:04  
End at: 2019-01-19 08:02:34  
Local clock offset: 0.216 ms  
Remote clock offset: -29.284 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 183.81 Mbit/s  
95th percentile per-packet one-way delay: 151.381 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 183.81 Mbit/s  
95th percentile per-packet one-way delay: 151.381 ms  
Loss rate: 0.74%

Run 5: Report of PCC-Expr — Data Link

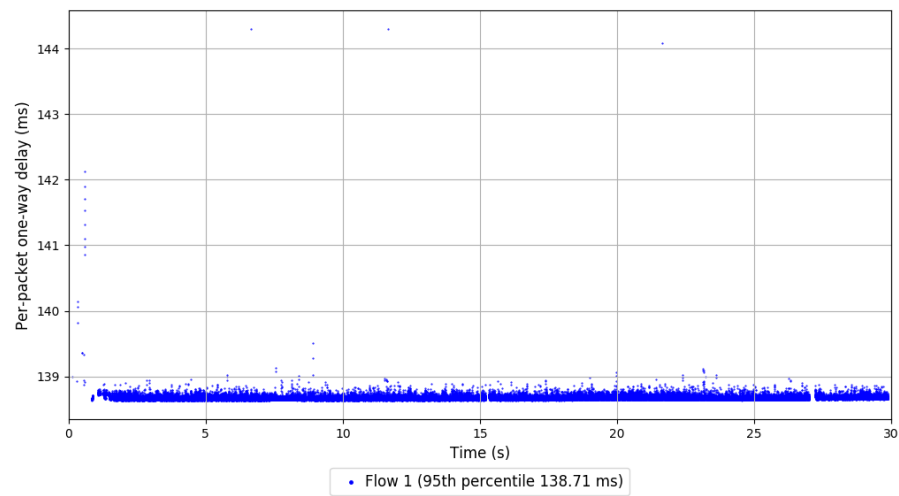
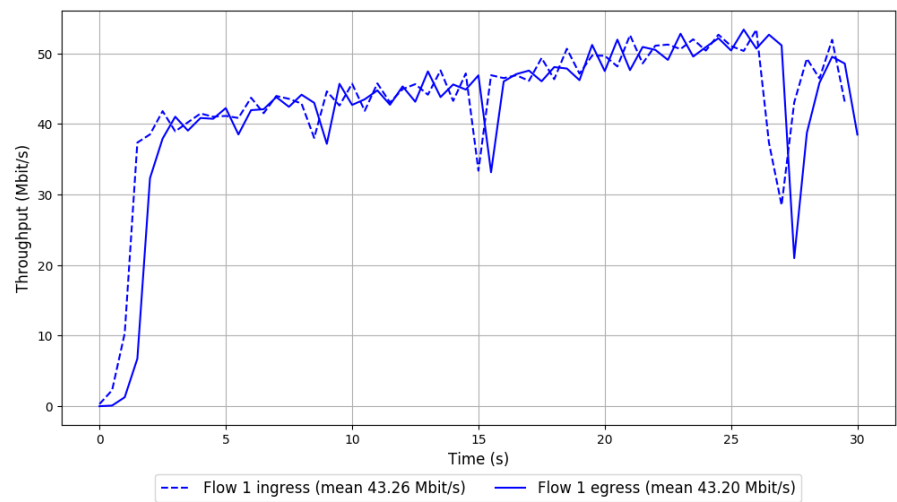


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 05:46:10  
End at: 2019-01-19 05:46:40  
Local clock offset: 1.1 ms  
Remote clock offset: -40.338 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 43.20 Mbit/s  
95th percentile per-packet one-way delay: 138.714 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 43.20 Mbit/s  
95th percentile per-packet one-way delay: 138.714 ms  
Loss rate: 0.78%

Run 1: Report of QUIC Cubic — Data Link

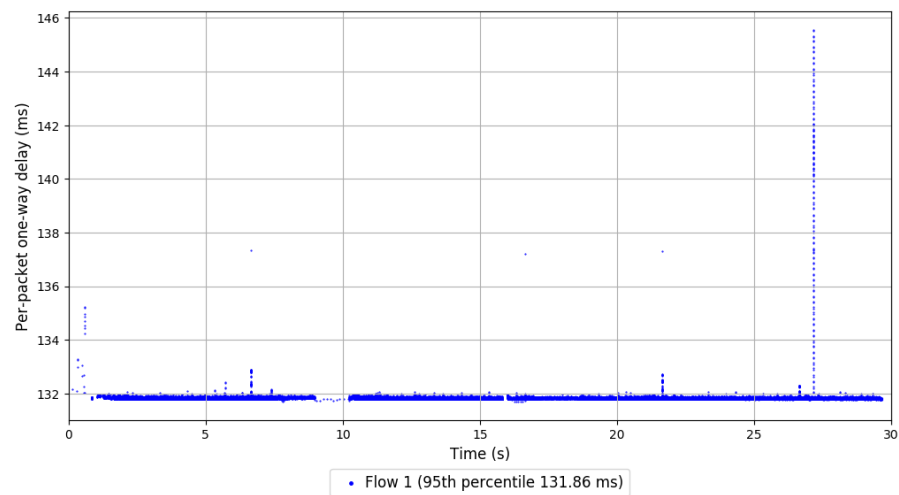
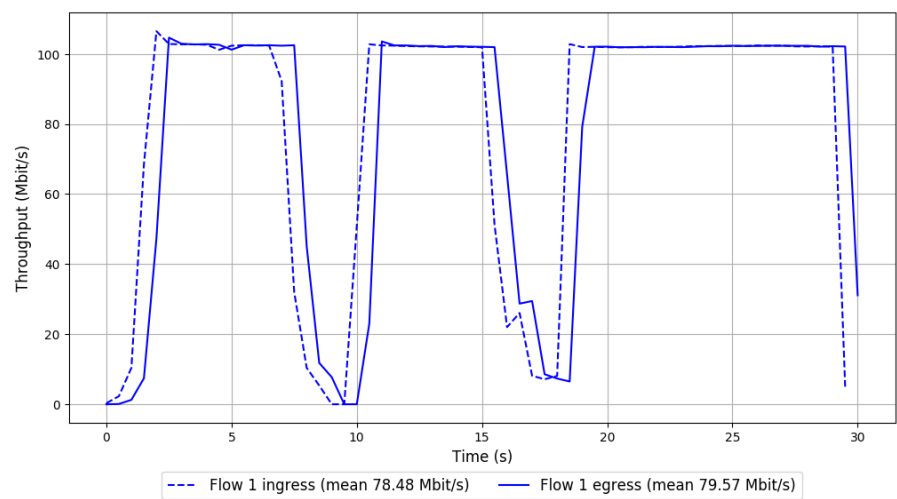


Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 06:14:18  
End at: 2019-01-19 06:14:48  
Local clock offset: 1.458 ms  
Remote clock offset: -36.215 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 79.57 Mbit/s  
95th percentile per-packet one-way delay: 131.857 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 79.57 Mbit/s  
95th percentile per-packet one-way delay: 131.857 ms  
Loss rate: 0.02%

Run 2: Report of QUIC Cubic — Data Link

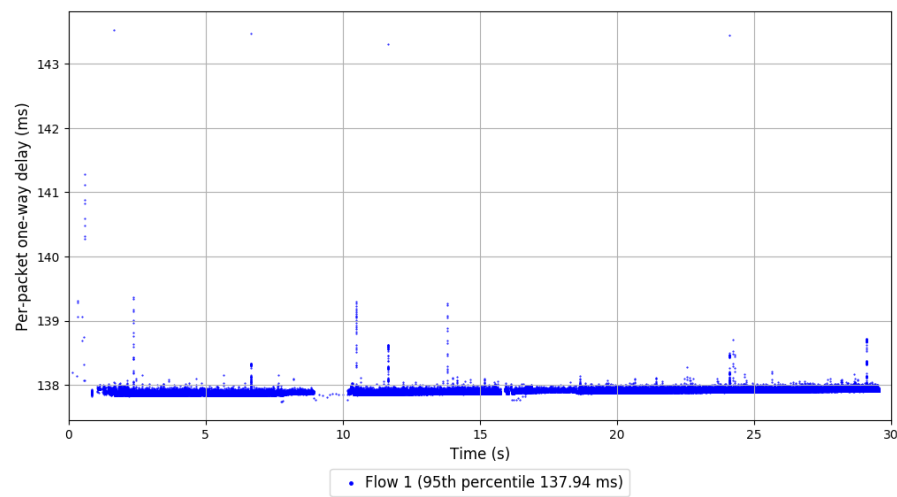
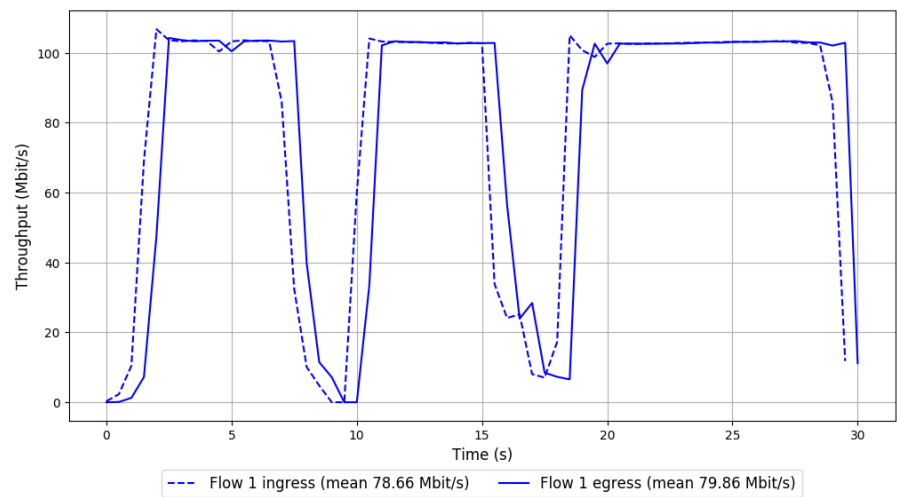


Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 06:47:56  
End at: 2019-01-19 06:48:26  
Local clock offset: 2.072 ms  
Remote clock offset: -42.513 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 79.86 Mbit/s  
95th percentile per-packet one-way delay: 137.940 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 79.86 Mbit/s  
95th percentile per-packet one-way delay: 137.940 ms  
Loss rate: 0.25%

Run 3: Report of QUIC Cubic — Data Link



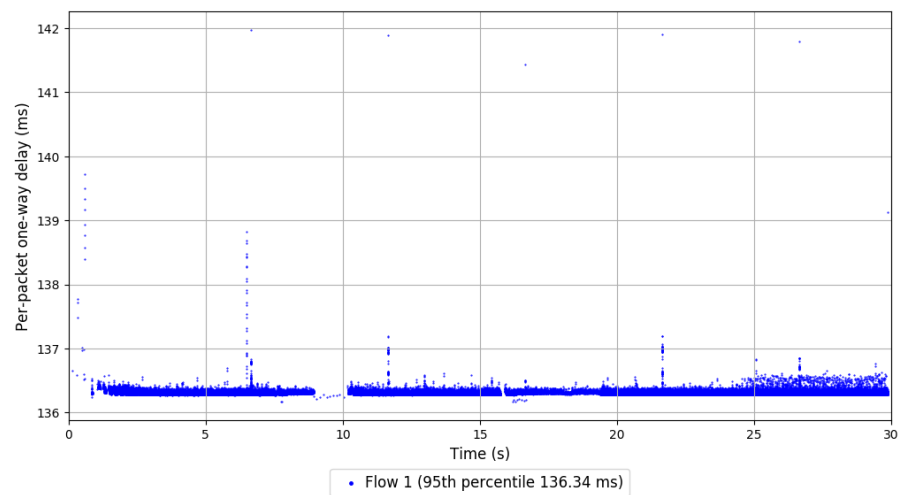
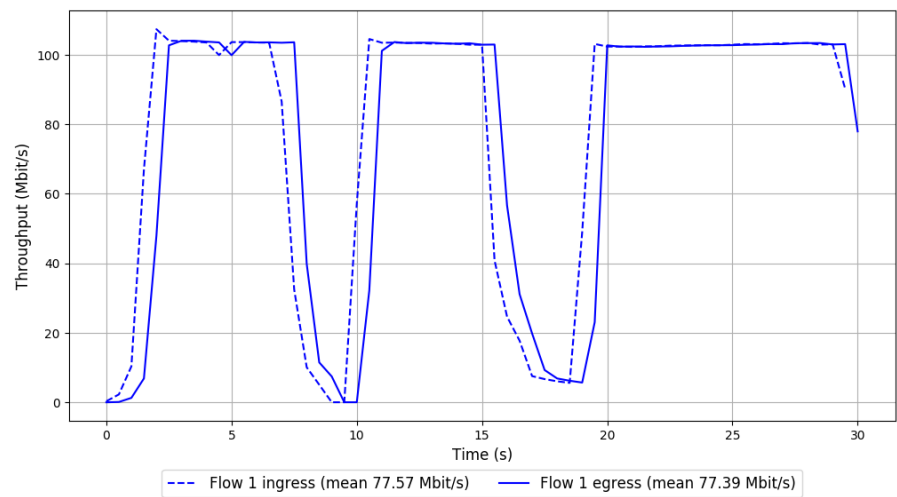


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-19 07:27:06  
End at: 2019-01-19 07:27:36  
Local clock offset: 0.974 ms  
Remote clock offset: -37.947 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 77.39 Mbit/s  
95th percentile per-packet one-way delay: 136.340 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 77.39 Mbit/s  
95th percentile per-packet one-way delay: 136.340 ms  
Loss rate: 0.87%

Run 4: Report of QUIC Cubic — Data Link

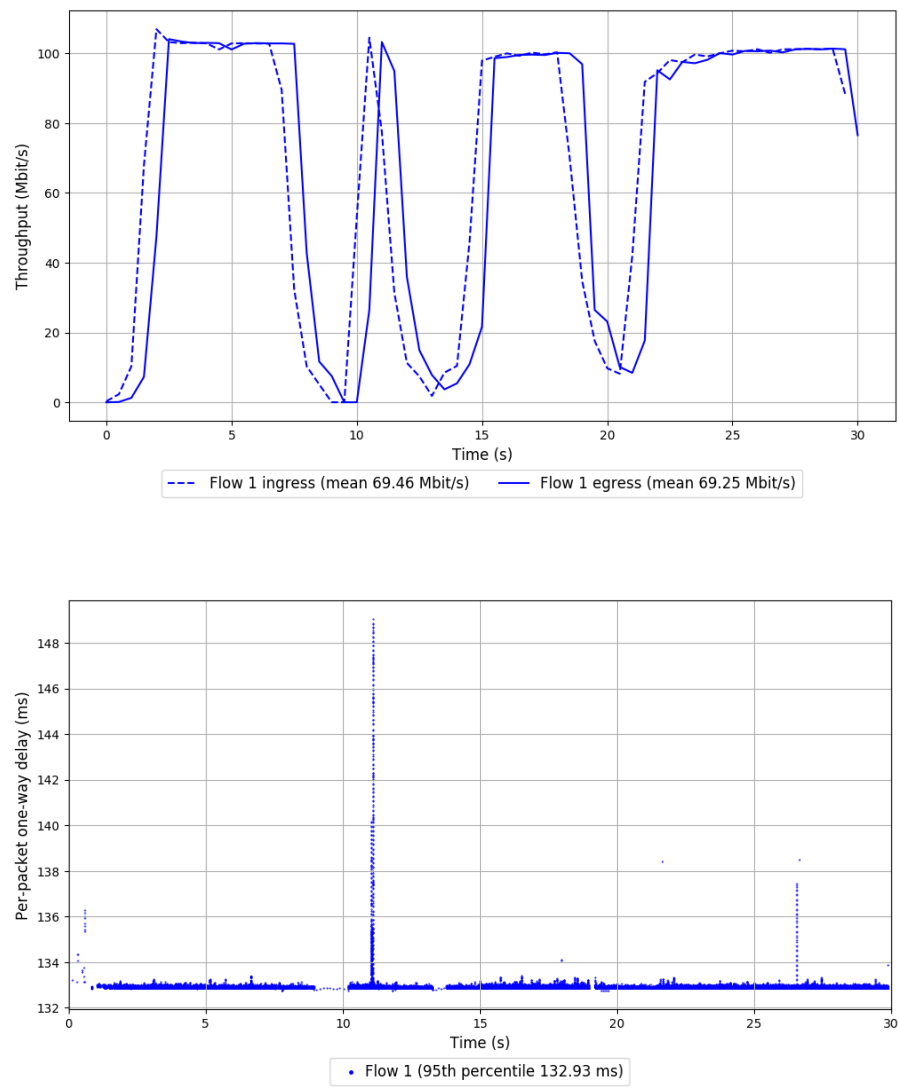


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-19 08:00:50  
End at: 2019-01-19 08:01:20  
Local clock offset: 0.889 ms  
Remote clock offset: -36.237 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 69.25 Mbit/s  
95th percentile per-packet one-way delay: 132.933 ms  
Loss rate: 0.94%  
-- Flow 1:  
Average throughput: 69.25 Mbit/s  
95th percentile per-packet one-way delay: 132.933 ms  
Loss rate: 0.94%

Run 5: Report of QUIC Cubic — Data Link

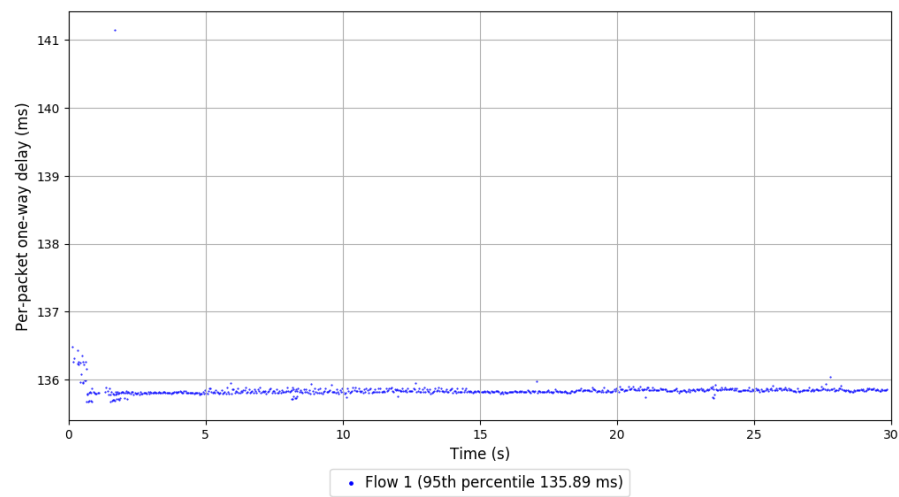
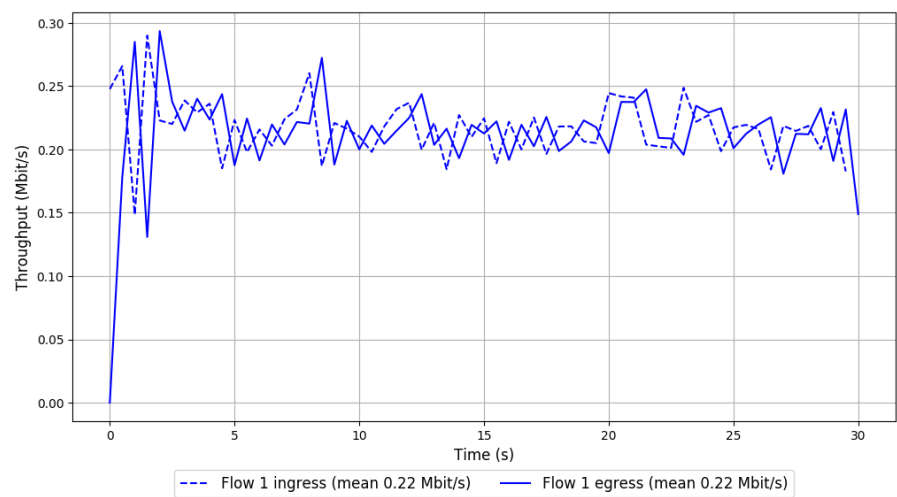


```
Run 1: Statistics of SCReAM

Start at: 2019-01-19 05:48:49
End at: 2019-01-19 05:49:19
Local clock offset: 0.428 ms
Remote clock offset: -37.841 ms

# Below is generated by plot.py at 2019-01-19 08:38:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.890 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.890 ms
Loss rate: 0.64%
```

Run 1: Report of SReAM — Data Link

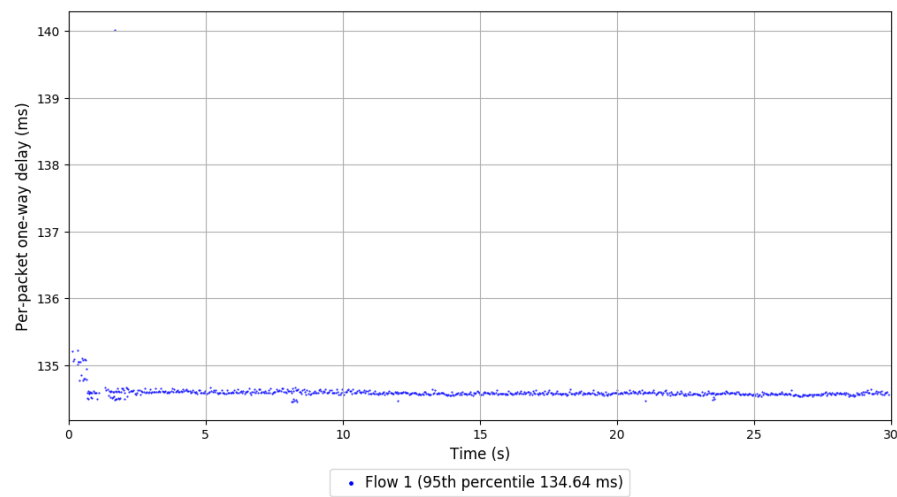
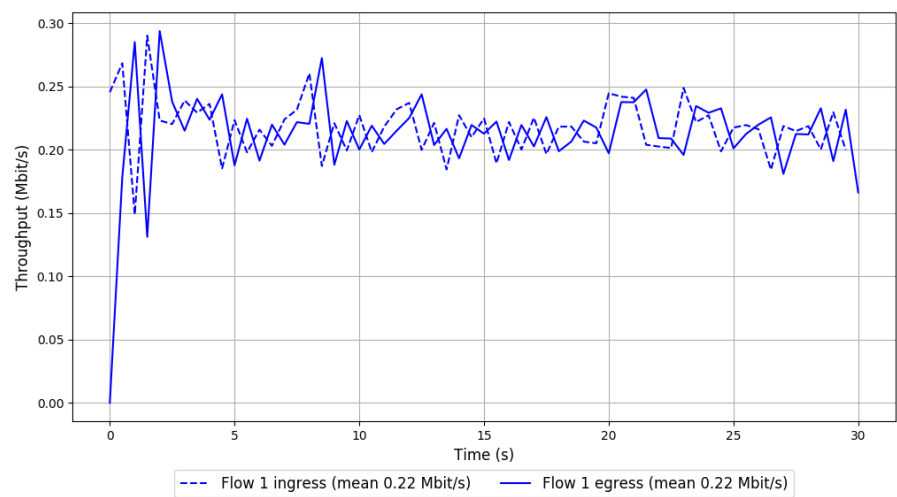


Run 2: Statistics of SCReAM

Start at: 2019-01-19 06:16:58  
End at: 2019-01-19 06:17:28  
Local clock offset: 2.183 ms  
Remote clock offset: -36.862 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 134.643 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 134.643 ms  
Loss rate: 0.64%

Run 2: Report of SReAM — Data Link



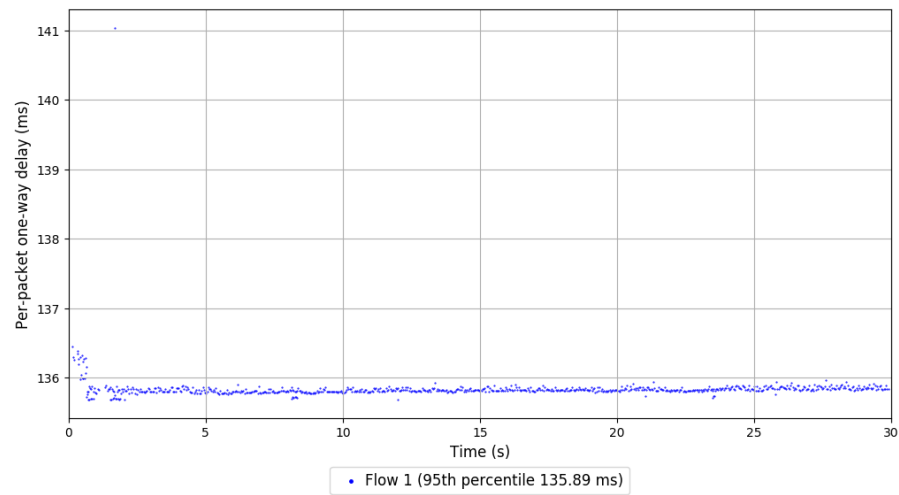
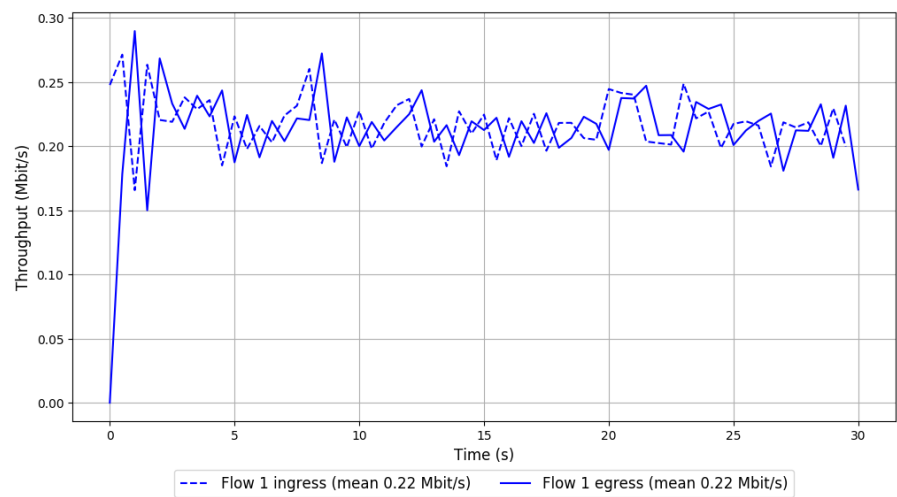


Run 3: Statistics of SCReAM

Start at: 2019-01-19 06:50:34  
End at: 2019-01-19 06:51:04  
Local clock offset: 1.093 ms  
Remote clock offset: -39.433 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.891 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 135.891 ms  
Loss rate: 0.64%

Run 3: Report of SReAM — Data Link

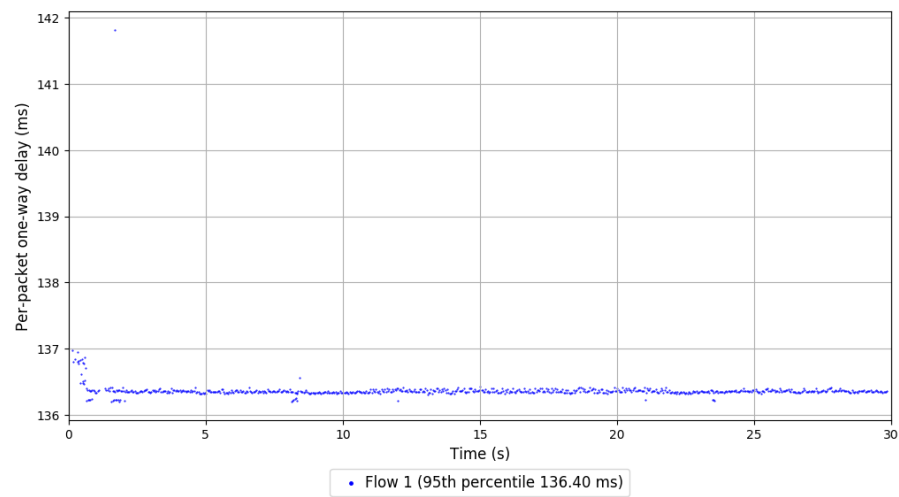
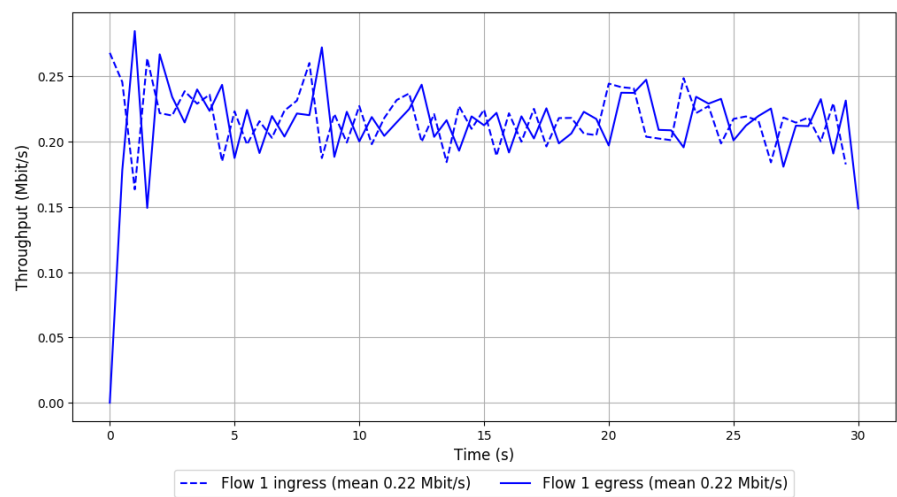


Run 4: Statistics of SCReAM

Start at: 2019-01-19 07:29:46  
End at: 2019-01-19 07:30:16  
Local clock offset: 0.151 ms  
Remote clock offset: -40.205 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.404 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 136.404 ms  
Loss rate: 0.64%

Run 4: Report of SReAM — Data Link

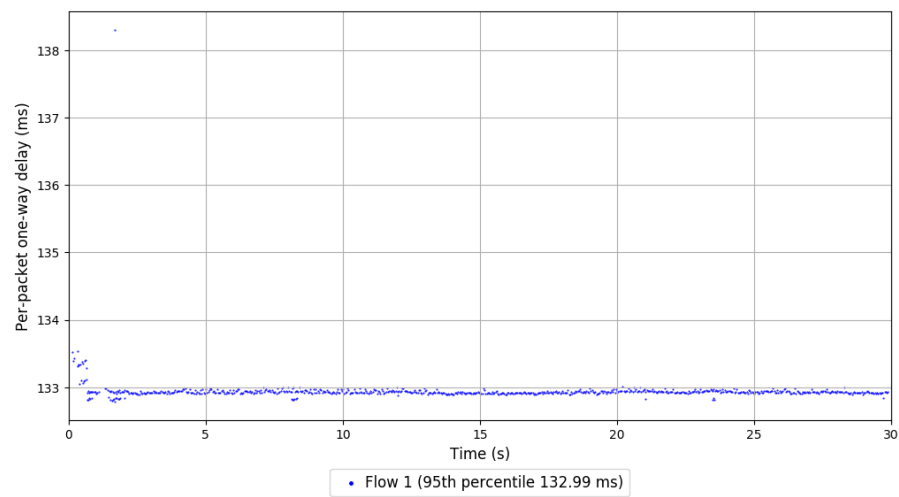
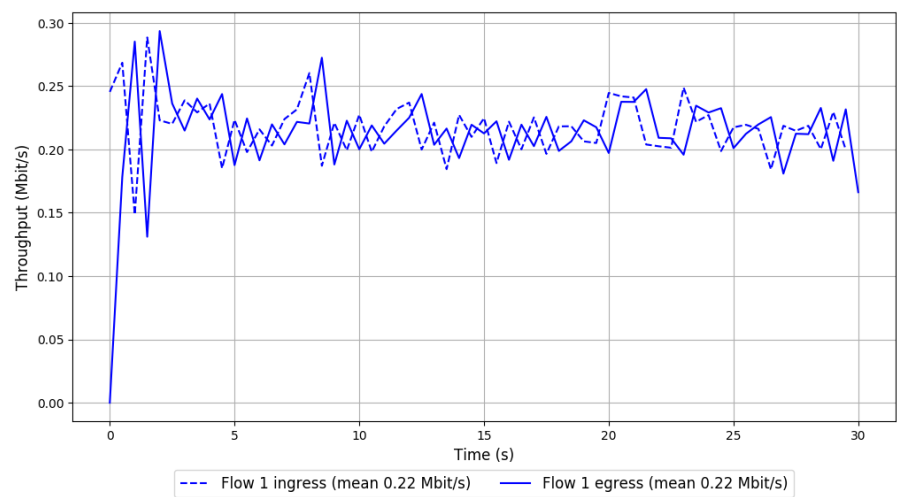


Run 5: Statistics of SCReAM

Start at: 2019-01-19 08:03:30  
End at: 2019-01-19 08:04:00  
Local clock offset: 0.13 ms  
Remote clock offset: -35.372 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 132.985 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 132.985 ms  
Loss rate: 0.64%

Run 5: Report of SReAM — Data Link

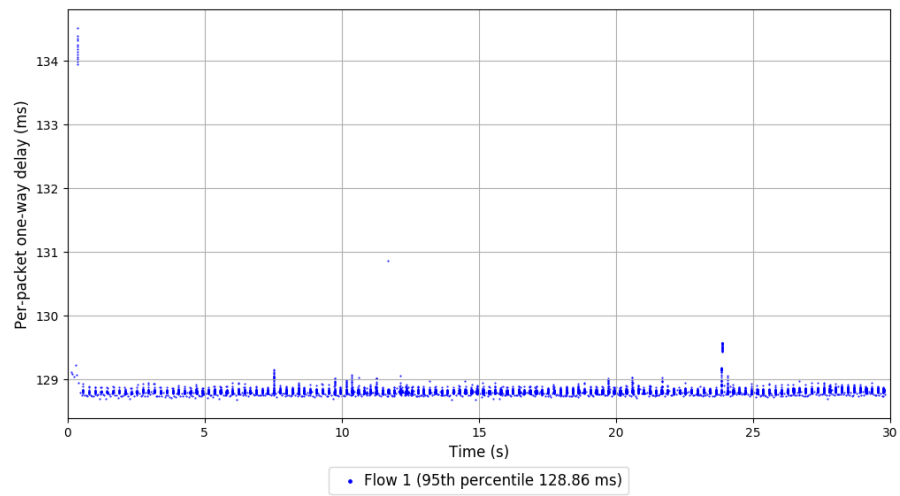
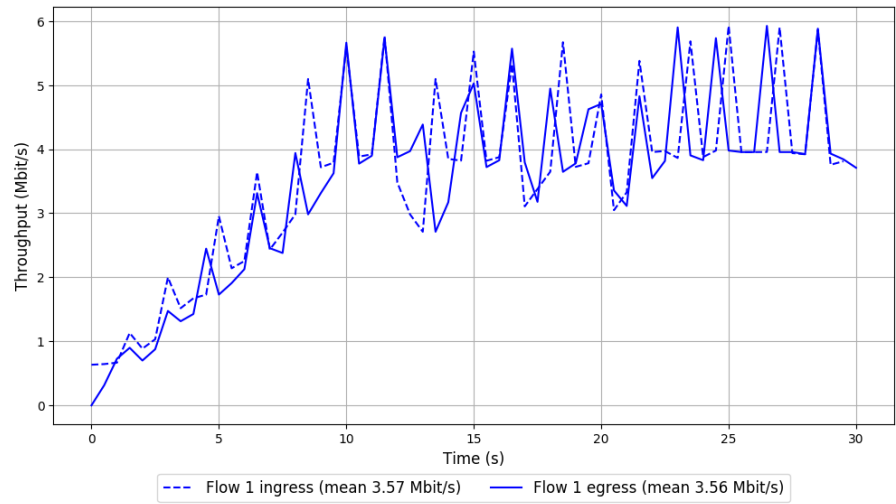


Run 1: Statistics of Sprout

Start at: 2019-01-19 05:32:27  
End at: 2019-01-19 05:32:57  
Local clock offset: 1.868 ms  
Remote clock offset: -29.669 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.56 Mbit/s  
95th percentile per-packet one-way delay: 128.862 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 3.56 Mbit/s  
95th percentile per-packet one-way delay: 128.862 ms  
Loss rate: 0.91%

# Run 1: Report of Sprout — Data Link



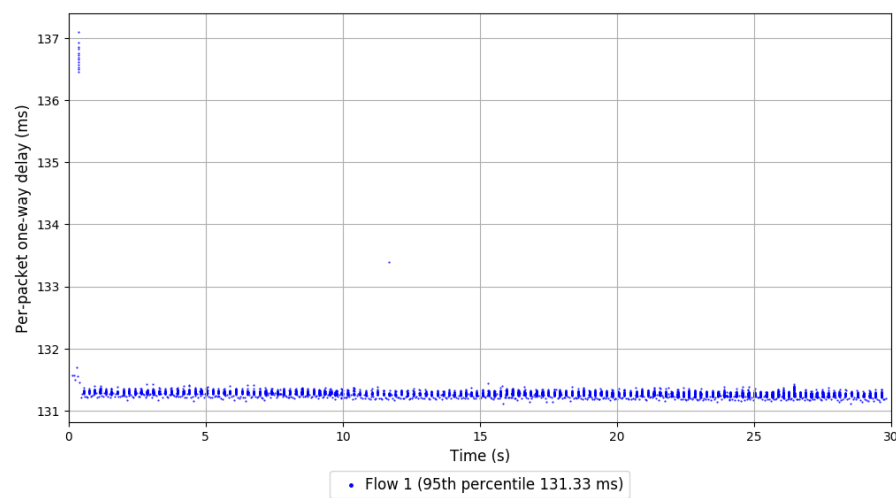
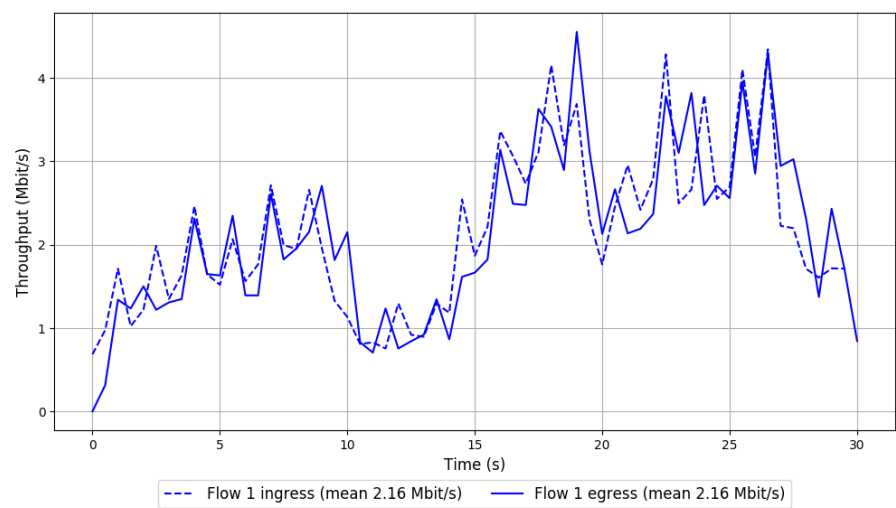


Run 2: Statistics of Sprout

Start at: 2019-01-19 06:06:09  
End at: 2019-01-19 06:06:39  
Local clock offset: 0.98 ms  
Remote clock offset: -35.547 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.16 Mbit/s  
95th percentile per-packet one-way delay: 131.329 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 2.16 Mbit/s  
95th percentile per-packet one-way delay: 131.329 ms  
Loss rate: 0.68%

Run 2: Report of Sprout — Data Link

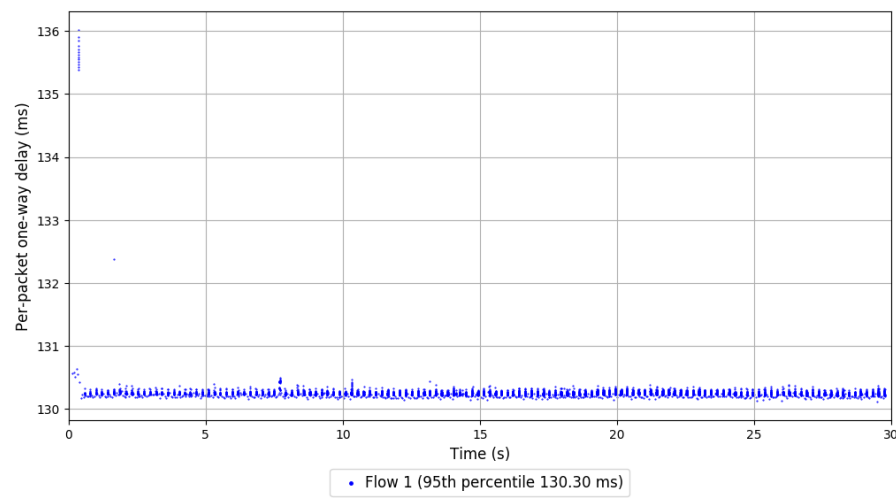
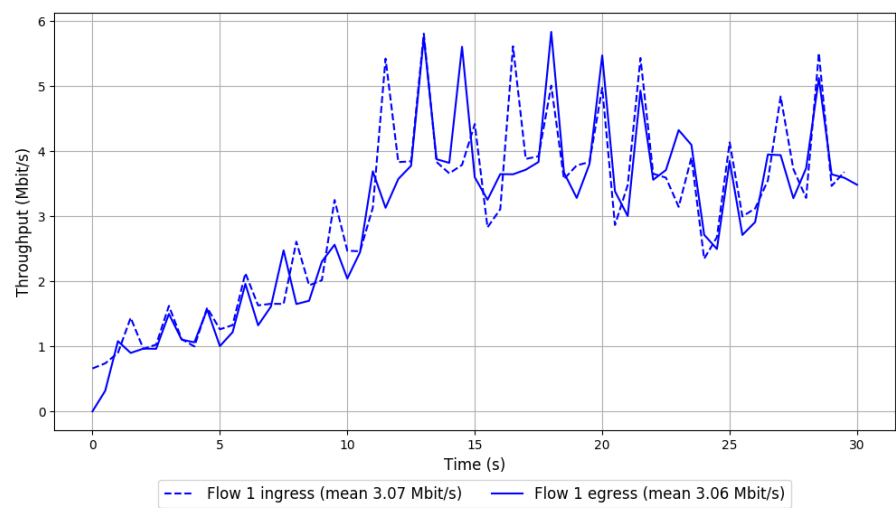


Run 3: Statistics of Sprout

Start at: 2019-01-19 06:39:53  
End at: 2019-01-19 06:40:23  
Local clock offset: 1.554 ms  
Remote clock offset: -33.937 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.06 Mbit/s  
95th percentile per-packet one-way delay: 130.300 ms  
Loss rate: 1.06%  
-- Flow 1:  
Average throughput: 3.06 Mbit/s  
95th percentile per-packet one-way delay: 130.300 ms  
Loss rate: 1.06%

Run 3: Report of Sprout — Data Link

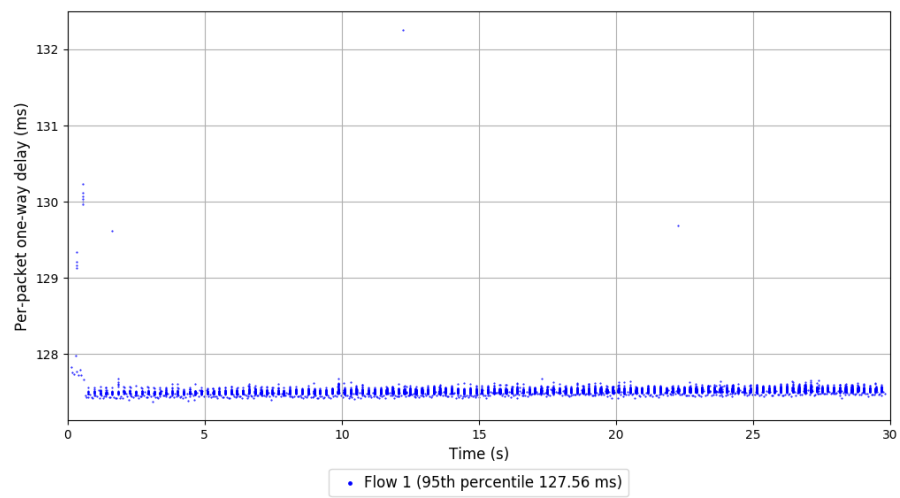
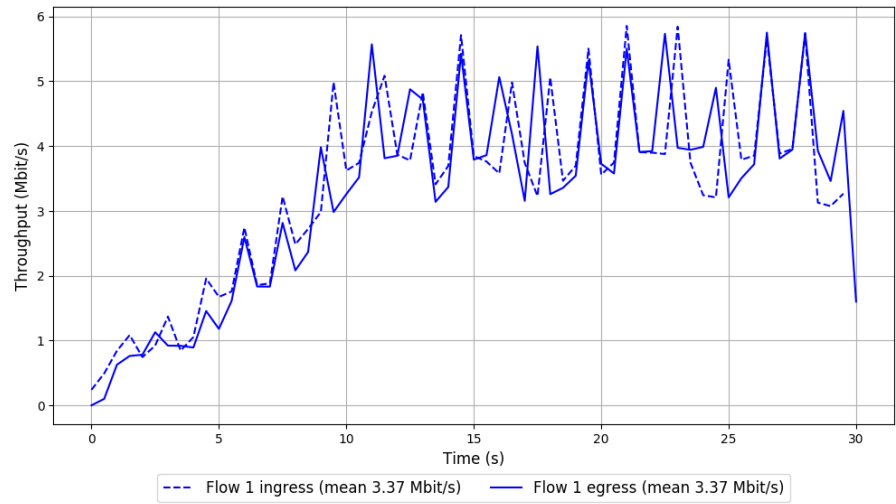


Run 4: Statistics of Sprout

Start at: 2019-01-19 07:13:03  
End at: 2019-01-19 07:13:33  
Local clock offset: 0.215 ms  
Remote clock offset: -30.134 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.37 Mbit/s  
95th percentile per-packet one-way delay: 127.555 ms  
Loss rate: 0.83%  
-- Flow 1:  
Average throughput: 3.37 Mbit/s  
95th percentile per-packet one-way delay: 127.555 ms  
Loss rate: 0.83%

#### Run 4: Report of Sprout — Data Link

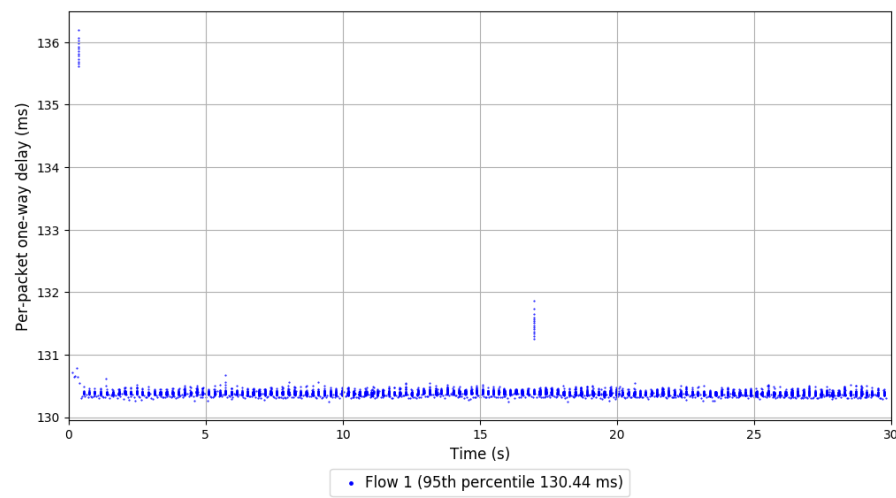
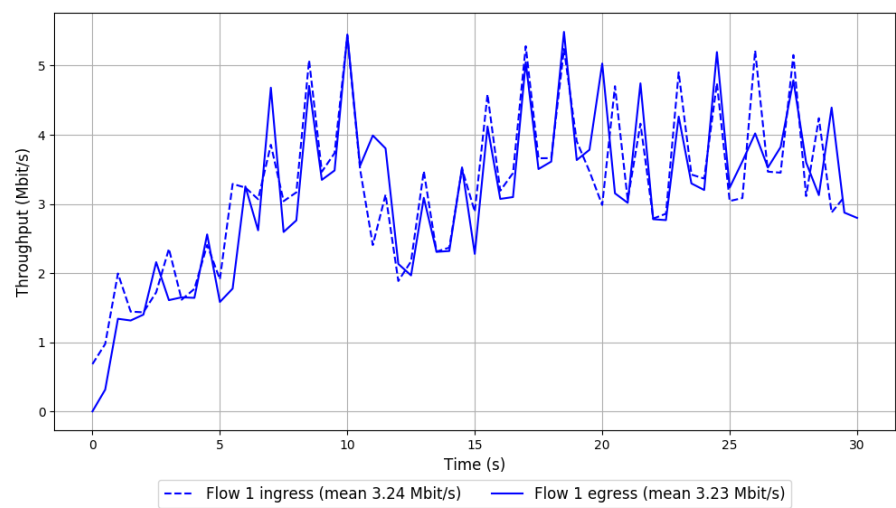


Run 5: Statistics of Sprout

Start at: 2019-01-19 07:52:45  
End at: 2019-01-19 07:53:15  
Local clock offset: -1.048 ms  
Remote clock offset: -35.565 ms

# Below is generated by plot.py at 2019-01-19 08:38:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.23 Mbit/s  
95th percentile per-packet one-way delay: 130.439 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 3.23 Mbit/s  
95th percentile per-packet one-way delay: 130.439 ms  
Loss rate: 0.88%

Run 5: Report of Sprout — Data Link



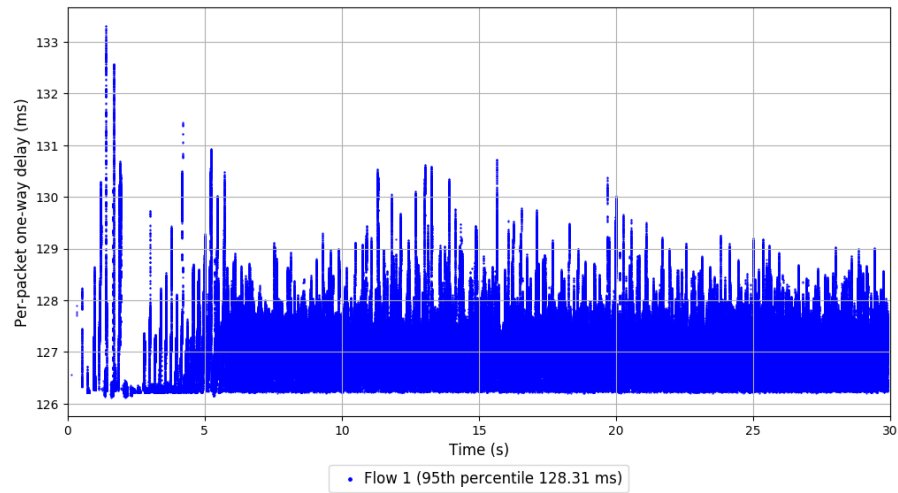
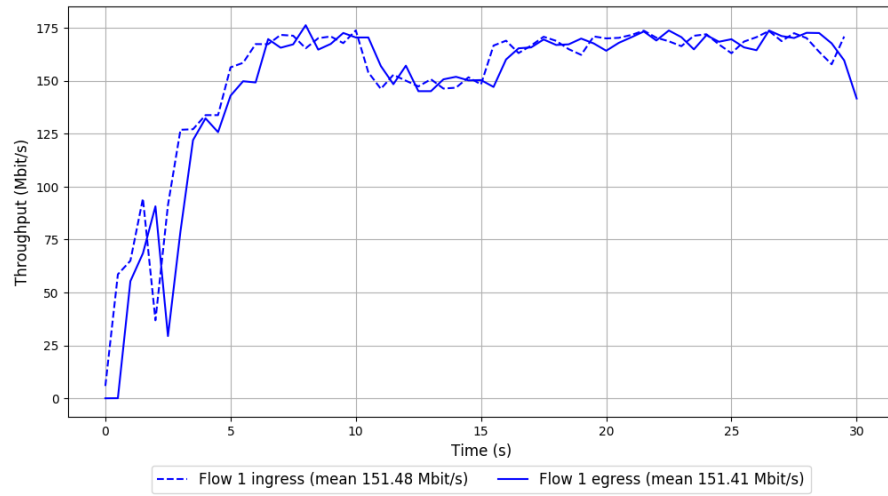


Run 1: Statistics of TaoVA-100x

Start at: 2019-01-19 05:29:42  
End at: 2019-01-19 05:30:12  
Local clock offset: 0.233 ms  
Remote clock offset: -28.794 ms

# Below is generated by plot.py at 2019-01-19 08:40:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 151.41 Mbit/s  
95th percentile per-packet one-way delay: 128.309 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 151.41 Mbit/s  
95th percentile per-packet one-way delay: 128.309 ms  
Loss rate: 0.70%

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

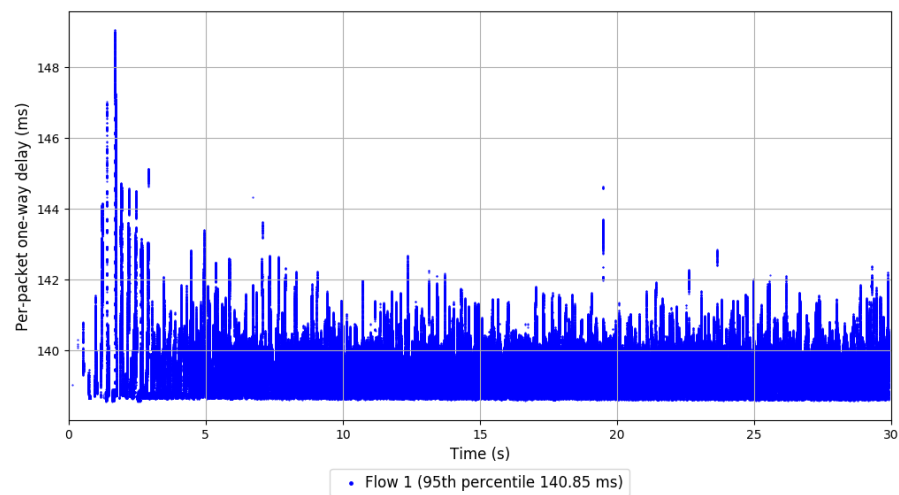
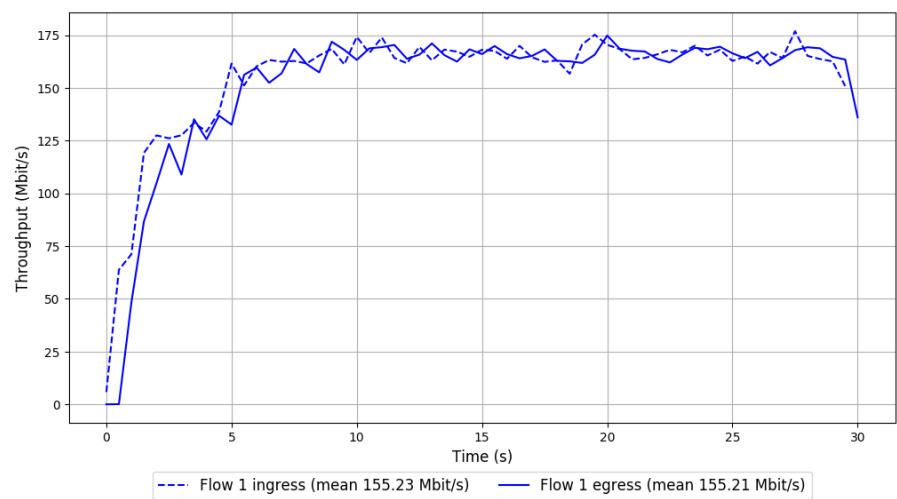


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-19 06:03:33  
End at: 2019-01-19 06:04:03  
Local clock offset: -0.345 ms  
Remote clock offset: -42.512 ms

# Below is generated by plot.py at 2019-01-19 08:40:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 155.21 Mbit/s  
95th percentile per-packet one-way delay: 140.848 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 155.21 Mbit/s  
95th percentile per-packet one-way delay: 140.848 ms  
Loss rate: 0.65%

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

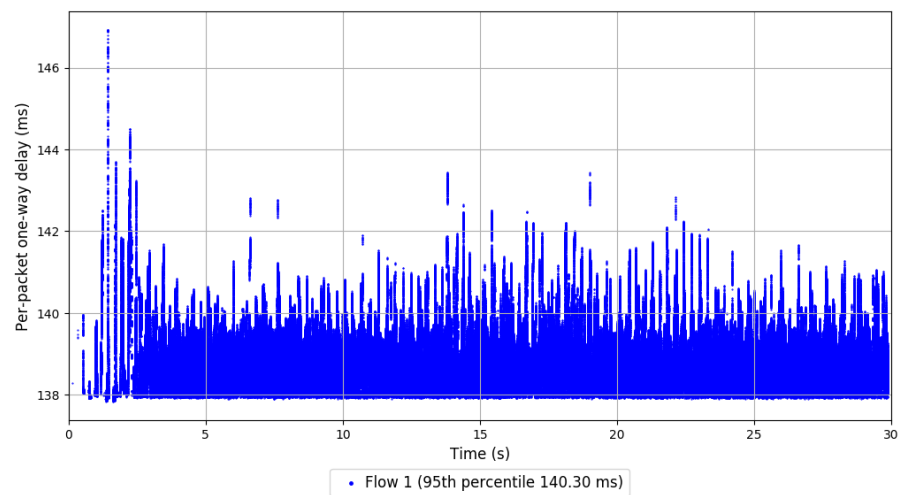
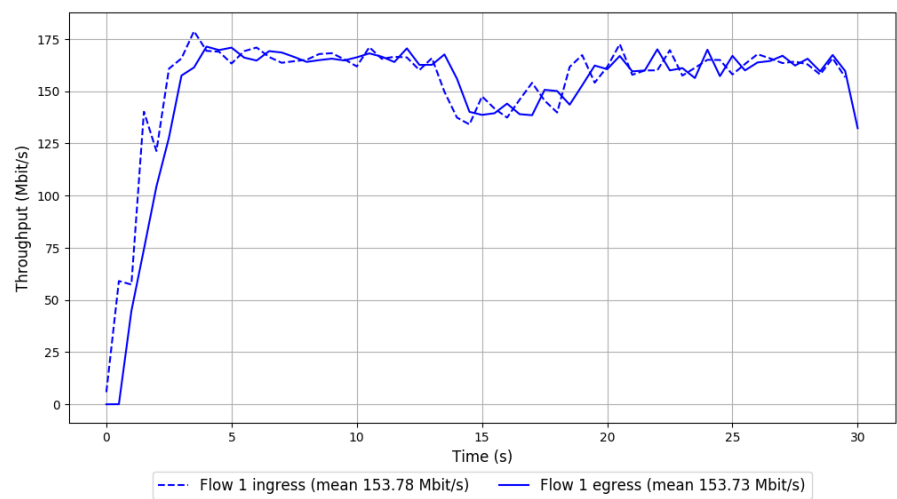


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-19 06:37:12  
End at: 2019-01-19 06:37:42  
Local clock offset: -0.002 ms  
Remote clock offset: -43.262 ms

# Below is generated by plot.py at 2019-01-19 08:40:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 153.73 Mbit/s  
95th percentile per-packet one-way delay: 140.298 ms  
Loss rate: 0.77%  
-- Flow 1:  
Average throughput: 153.73 Mbit/s  
95th percentile per-packet one-way delay: 140.298 ms  
Loss rate: 0.77%

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

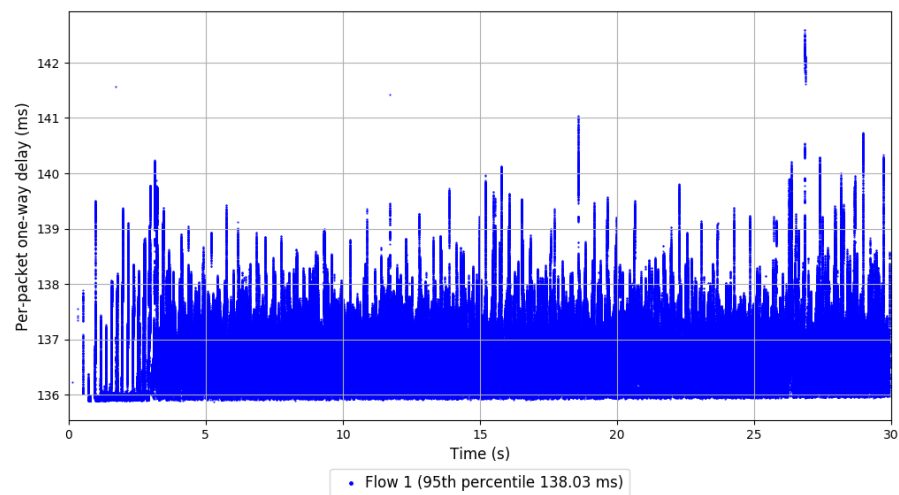
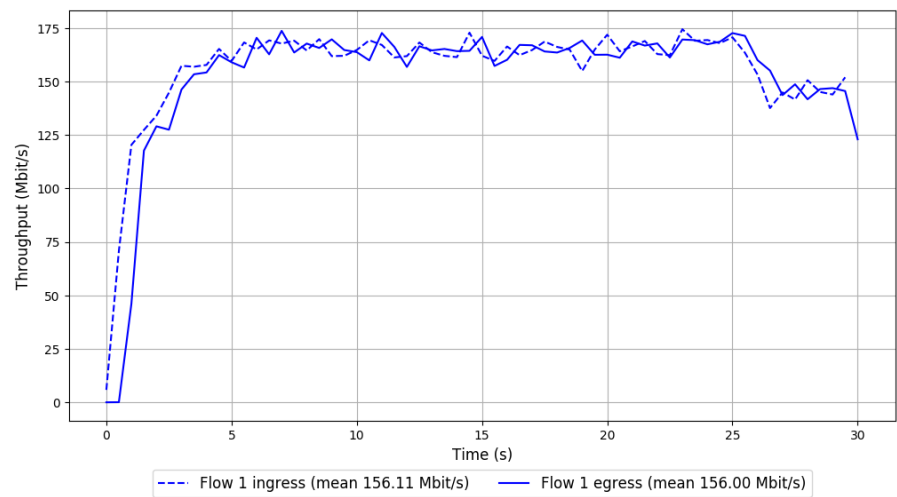


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-19 07:10:20  
End at: 2019-01-19 07:10:50  
Local clock offset: -2.075 ms  
Remote clock offset: -41.21 ms

# Below is generated by plot.py at 2019-01-19 08:40:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 156.00 Mbit/s  
95th percentile per-packet one-way delay: 138.027 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 156.00 Mbit/s  
95th percentile per-packet one-way delay: 138.027 ms  
Loss rate: 0.69%

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



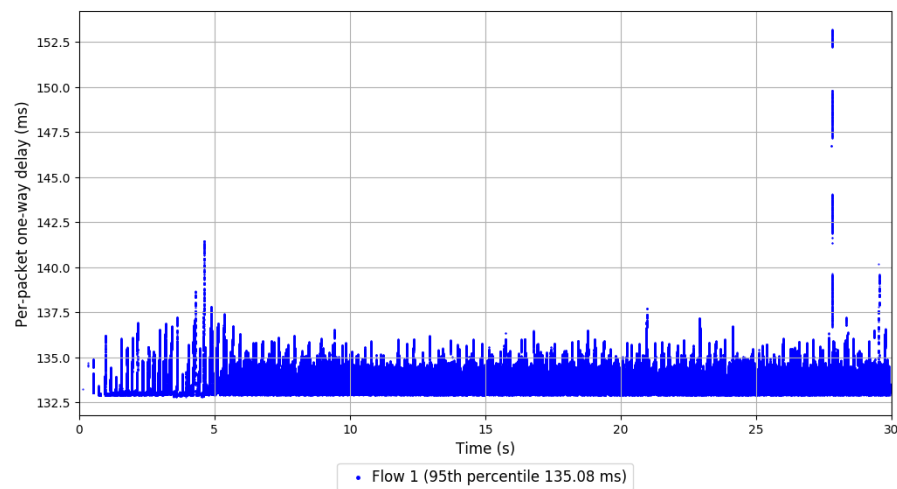
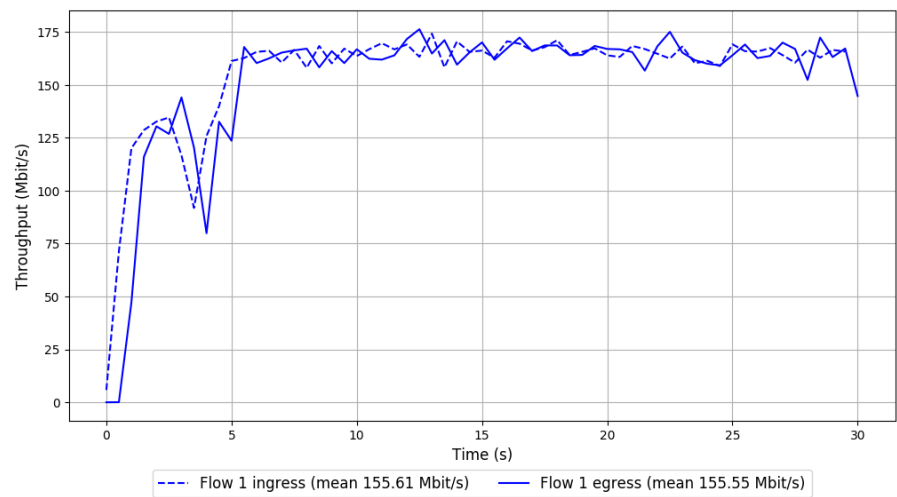


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-19 07:50:02  
End at: 2019-01-19 07:50:32  
Local clock offset: -0.463 ms  
Remote clock offset: -36.135 ms

# Below is generated by plot.py at 2019-01-19 08:41:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 155.55 Mbit/s  
95th percentile per-packet one-way delay: 135.081 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 155.55 Mbit/s  
95th percentile per-packet one-way delay: 135.081 ms  
Loss rate: 0.69%

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

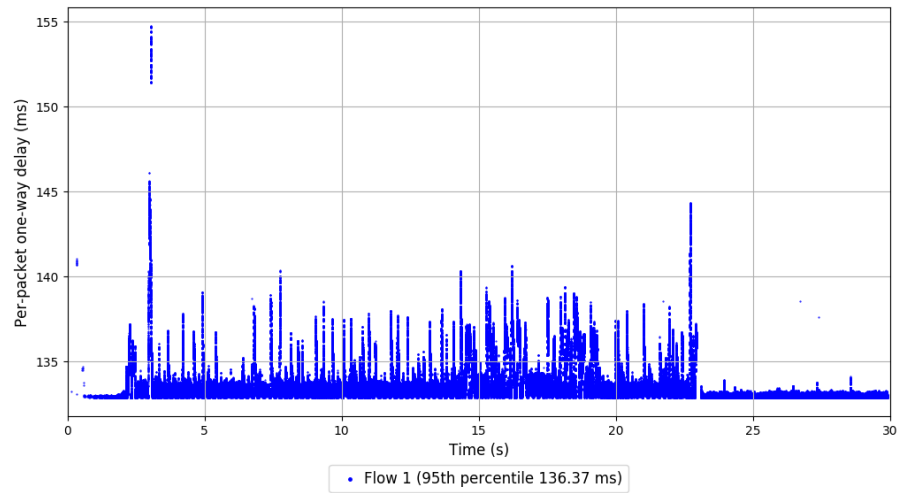
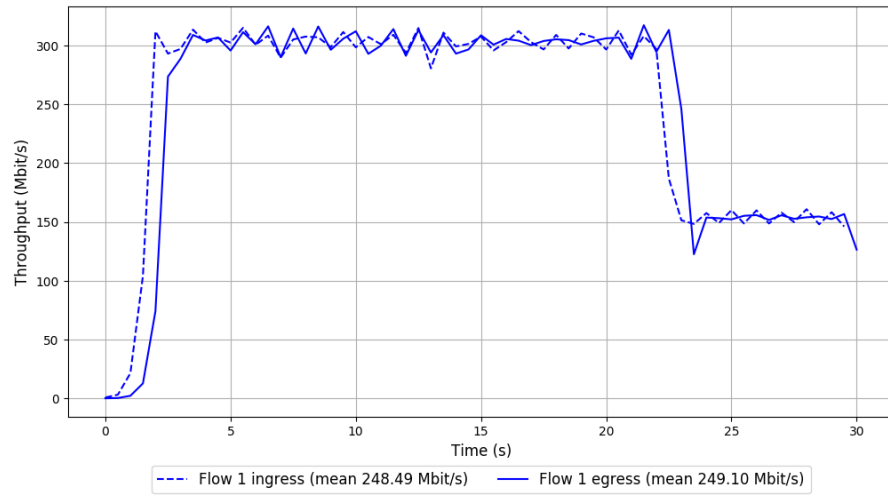


Run 1: Statistics of TCP Vegas

Start at: 2019-01-19 05:35:05  
End at: 2019-01-19 05:35:35  
Local clock offset: 1.304 ms  
Remote clock offset: -34.505 ms

# Below is generated by plot.py at 2019-01-19 08:41:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 249.10 Mbit/s  
95th percentile per-packet one-way delay: 136.372 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 249.10 Mbit/s  
95th percentile per-packet one-way delay: 136.372 ms  
Loss rate: 0.41%

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

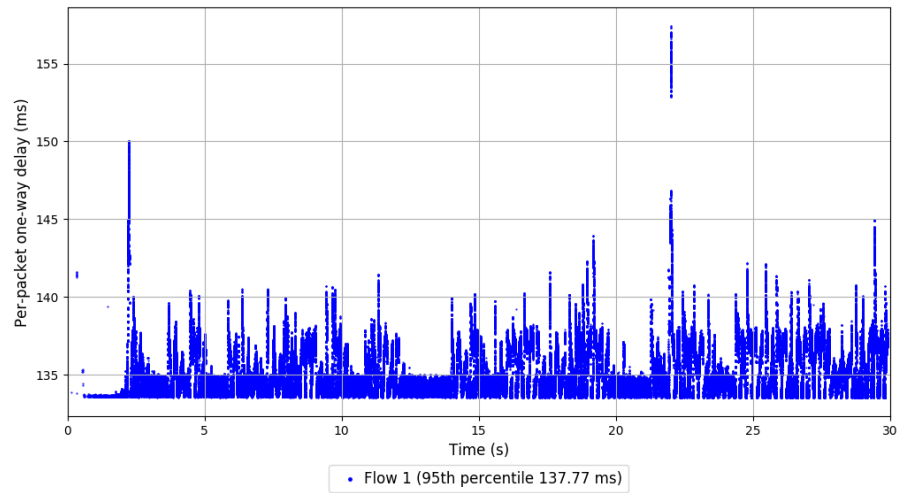
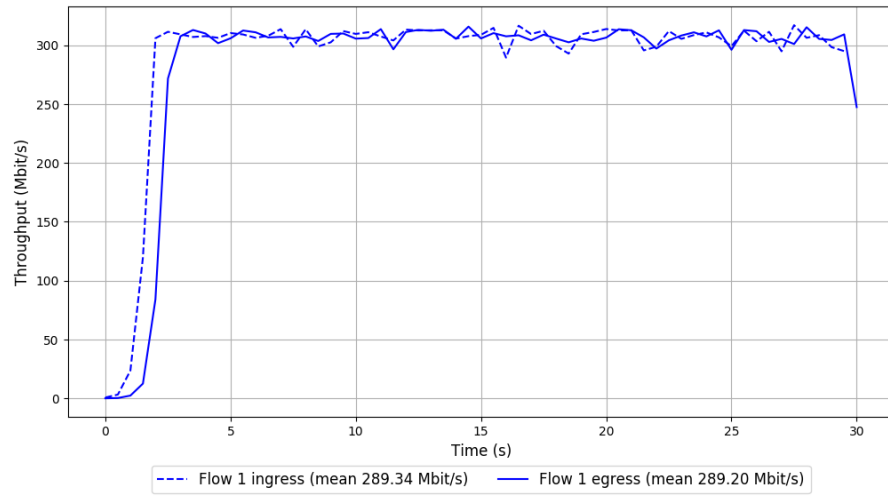


Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 06:08:45  
End at: 2019-01-19 06:09:15  
Local clock offset: -0.14 ms  
Remote clock offset: -37.677 ms

# Below is generated by plot.py at 2019-01-19 08:41:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 289.20 Mbit/s  
95th percentile per-packet one-way delay: 137.766 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 289.20 Mbit/s  
95th percentile per-packet one-way delay: 137.766 ms  
Loss rate: 0.70%

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

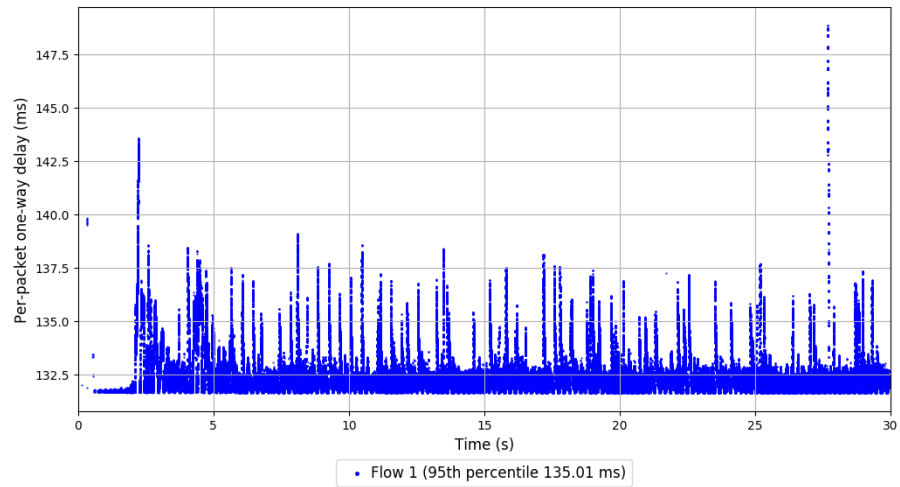
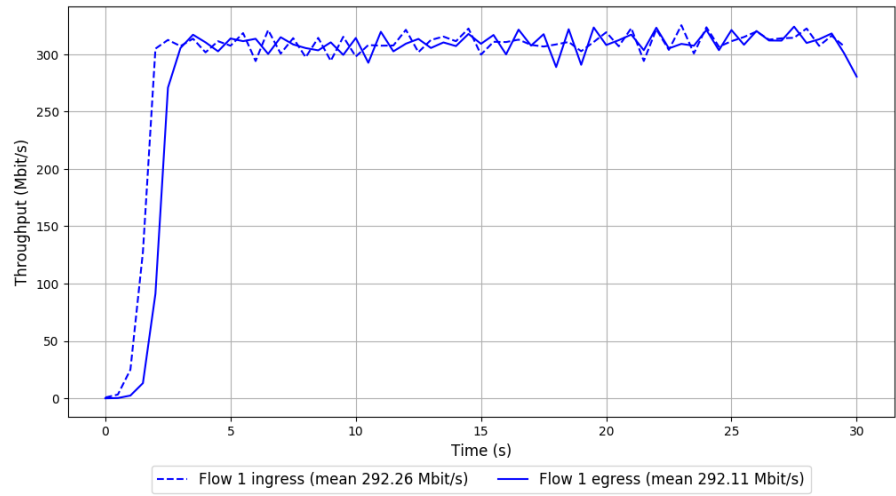


Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 06:42:30  
End at: 2019-01-19 06:43:00  
Local clock offset: 1.657 ms  
Remote clock offset: -36.892 ms

# Below is generated by plot.py at 2019-01-19 08:41:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 292.11 Mbit/s  
95th percentile per-packet one-way delay: 135.013 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 292.11 Mbit/s  
95th percentile per-packet one-way delay: 135.013 ms  
Loss rate: 0.70%

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



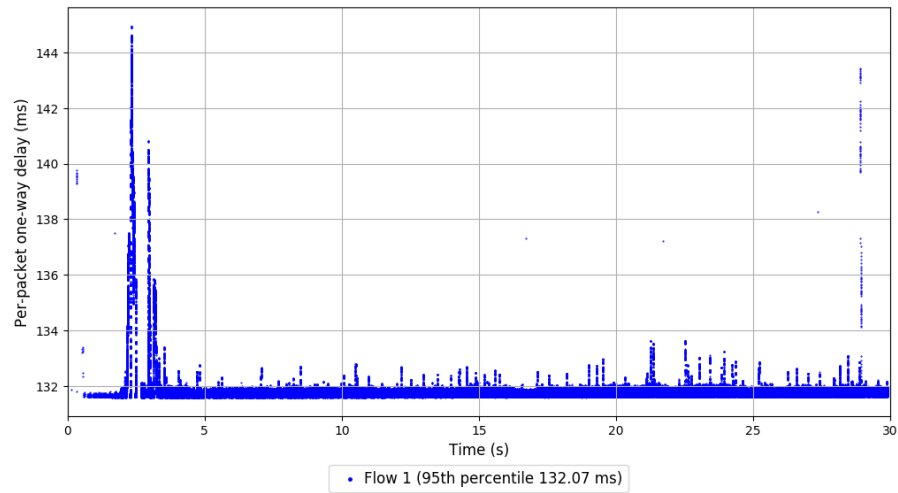
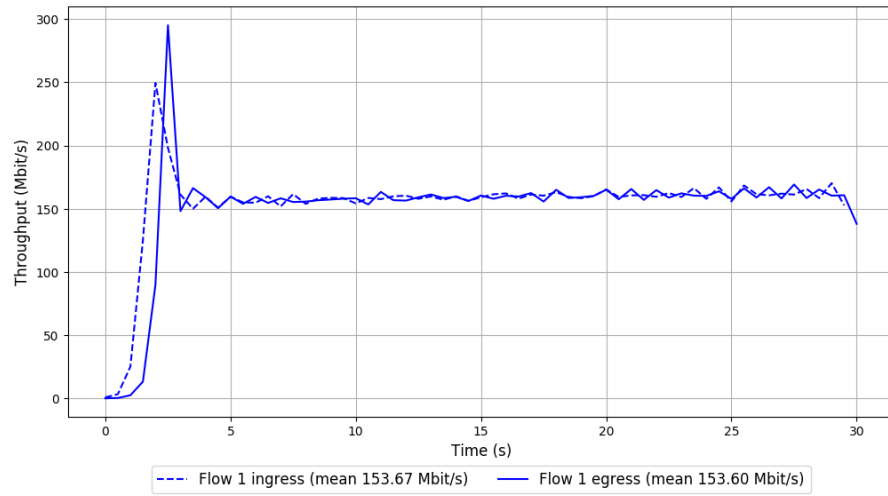


Run 4: Statistics of TCP Vegas

Start at: 2019-01-19 07:15:39  
End at: 2019-01-19 07:16:09  
Local clock offset: -1.123 ms  
Remote clock offset: -36.874 ms

# Below is generated by plot.py at 2019-01-19 08:42:08  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 153.60 Mbit/s  
95th percentile per-packet one-way delay: 132.068 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 153.60 Mbit/s  
95th percentile per-packet one-way delay: 132.068 ms  
Loss rate: 0.69%

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

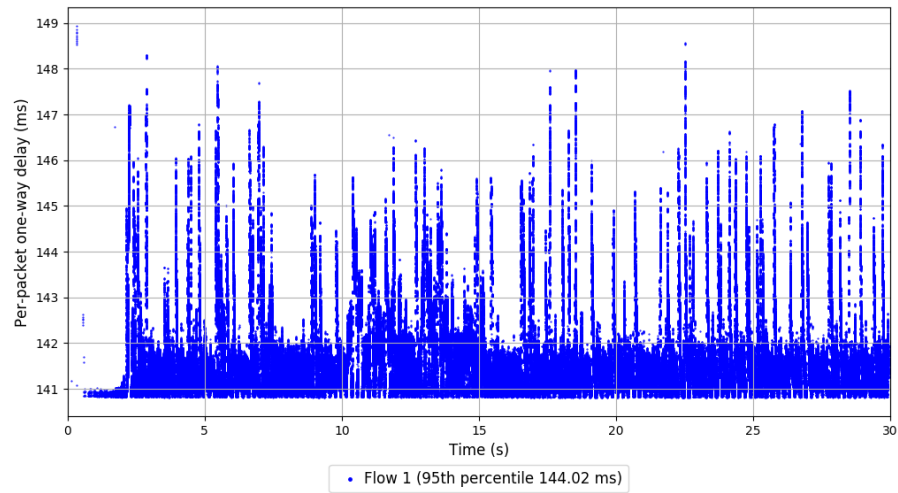
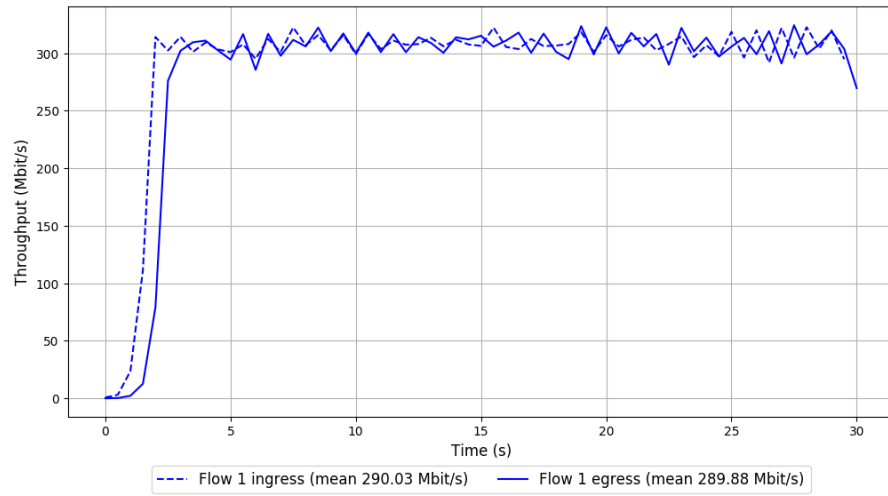


Run 5: Statistics of TCP Vegas

Start at: 2019-01-19 07:55:22  
End at: 2019-01-19 07:55:52  
Local clock offset: 0.858 ms  
Remote clock offset: -42.803 ms

# Below is generated by plot.py at 2019-01-19 08:43:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 289.88 Mbit/s  
95th percentile per-packet one-way delay: 144.018 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 289.88 Mbit/s  
95th percentile per-packet one-way delay: 144.018 ms  
Loss rate: 0.70%

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

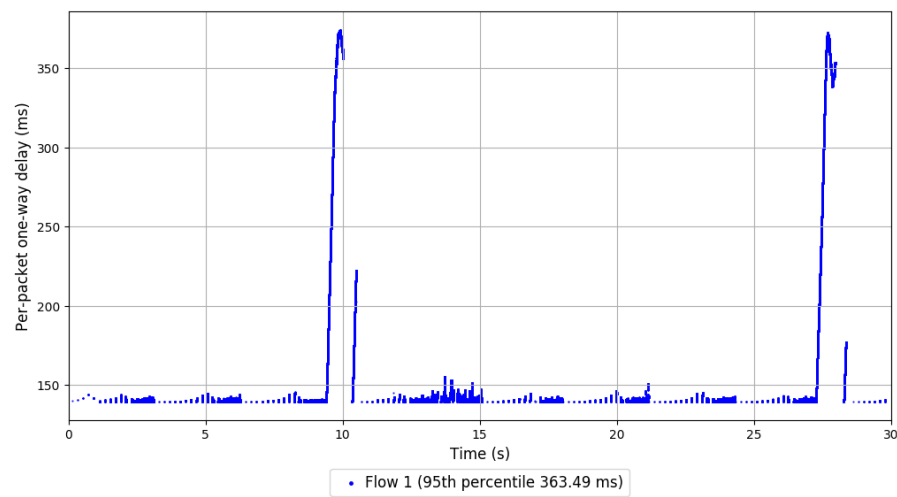
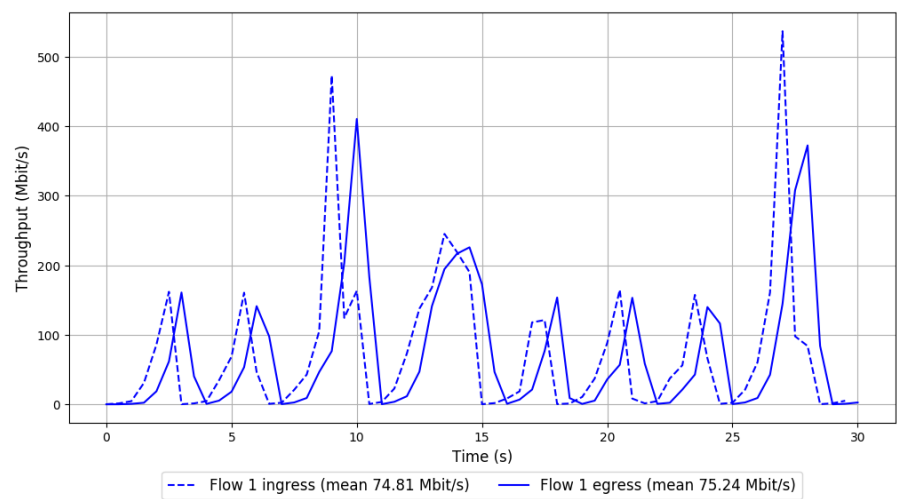


Run 1: Statistics of Verus

Start at: 2019-01-19 05:44:46  
End at: 2019-01-19 05:45:16  
Local clock offset: 1.29 ms  
Remote clock offset: -40.91 ms

# Below is generated by plot.py at 2019-01-19 08:43:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 75.24 Mbit/s  
95th percentile per-packet one-way delay: 363.488 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 75.24 Mbit/s  
95th percentile per-packet one-way delay: 363.488 ms  
Loss rate: 0.09%

Run 1: Report of Verus — Data Link

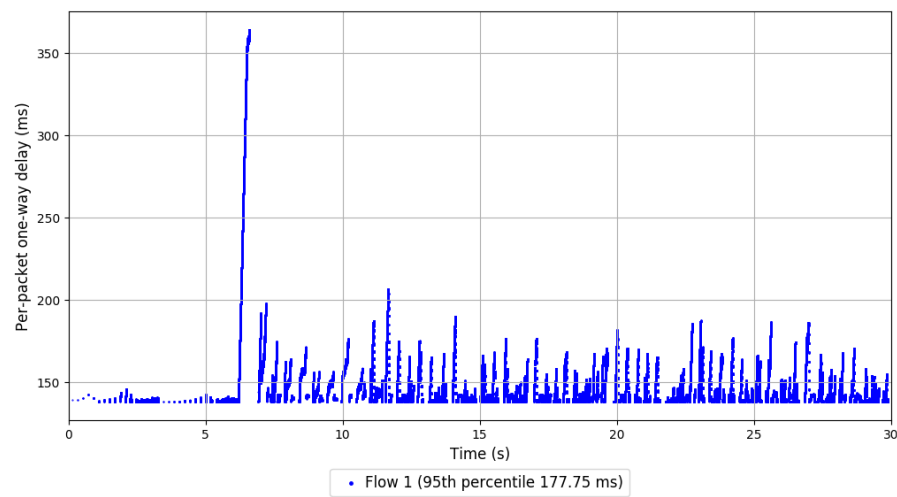
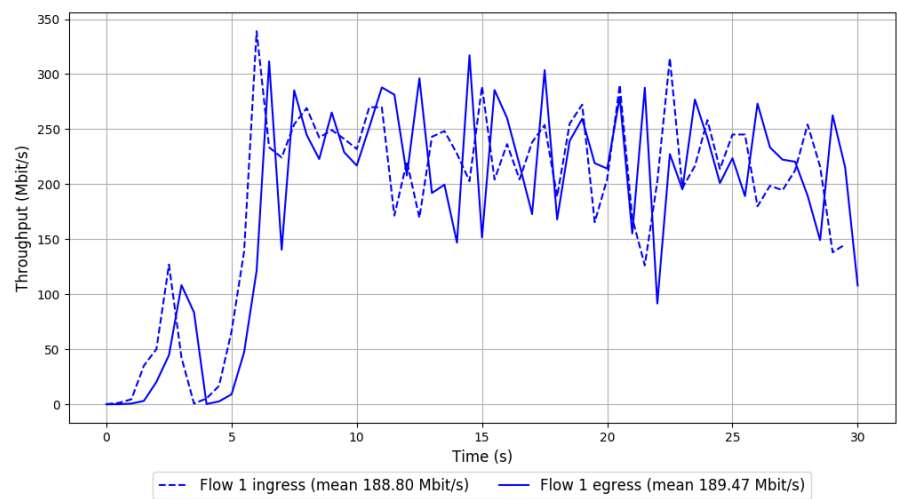


Run 2: Statistics of Verus

Start at: 2019-01-19 06:12:56  
End at: 2019-01-19 06:13:26  
Local clock offset: 0.258 ms  
Remote clock offset: -43.528 ms

# Below is generated by plot.py at 2019-01-19 08:43:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 189.47 Mbit/s  
95th percentile per-packet one-way delay: 177.749 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 189.47 Mbit/s  
95th percentile per-packet one-way delay: 177.749 ms  
Loss rate: 0.47%

Run 2: Report of Verus — Data Link



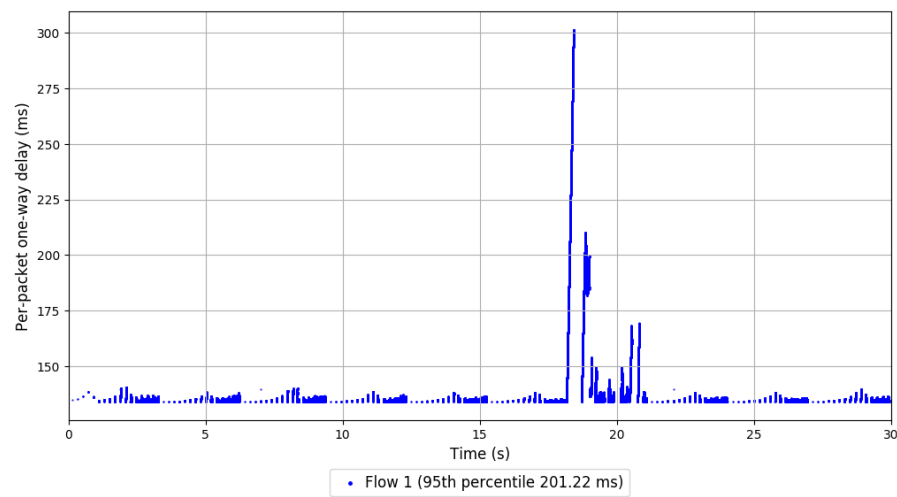
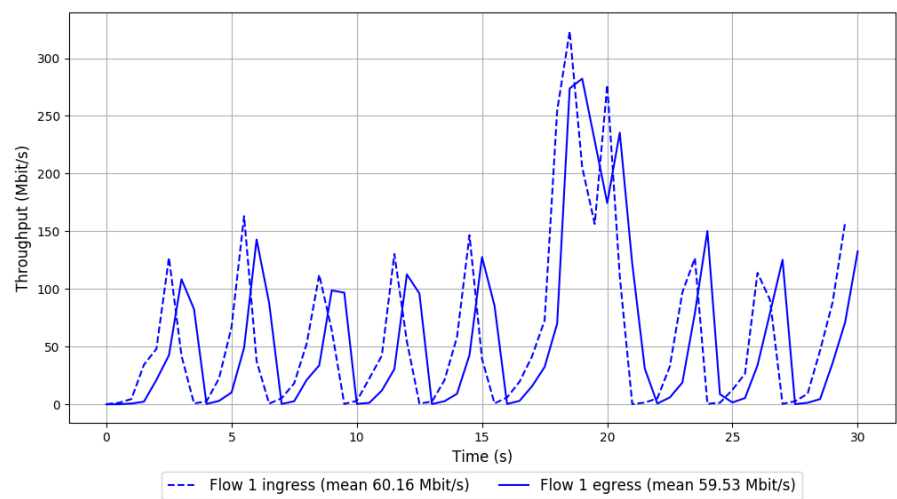


Run 3: Statistics of Verus

Start at: 2019-01-19 06:46:42  
End at: 2019-01-19 06:47:12  
Local clock offset: 0.567 ms  
Remote clock offset: -38.791 ms

# Below is generated by plot.py at 2019-01-19 08:43:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 59.53 Mbit/s  
95th percentile per-packet one-way delay: 201.217 ms  
Loss rate: 1.65%  
-- Flow 1:  
Average throughput: 59.53 Mbit/s  
95th percentile per-packet one-way delay: 201.217 ms  
Loss rate: 1.65%

Run 3: Report of Verus — Data Link

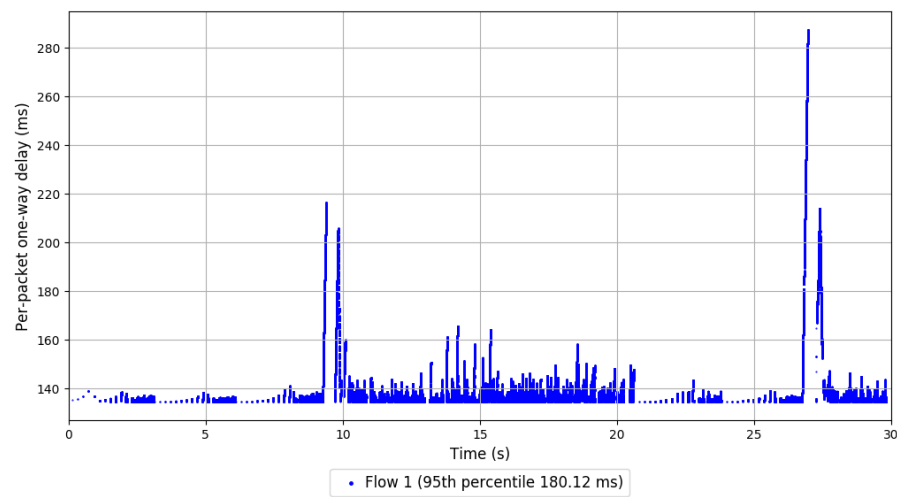
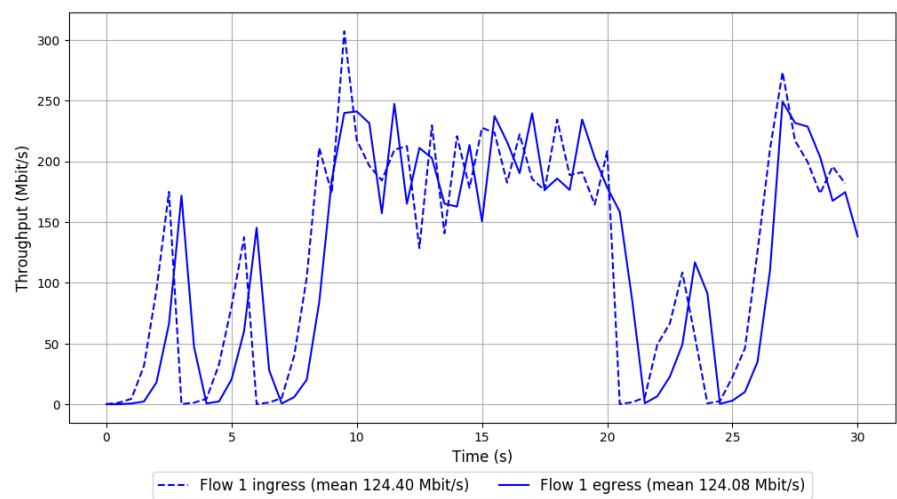


Run 4: Statistics of Verus

Start at: 2019-01-19 07:25:48  
End at: 2019-01-19 07:26:18  
Local clock offset: -0.742 ms  
Remote clock offset: -37.749 ms

# Below is generated by plot.py at 2019-01-19 08:43:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 124.08 Mbit/s  
95th percentile per-packet one-way delay: 180.121 ms  
Loss rate: 1.30%  
-- Flow 1:  
Average throughput: 124.08 Mbit/s  
95th percentile per-packet one-way delay: 180.121 ms  
Loss rate: 1.30%

Run 4: Report of Verus — Data Link

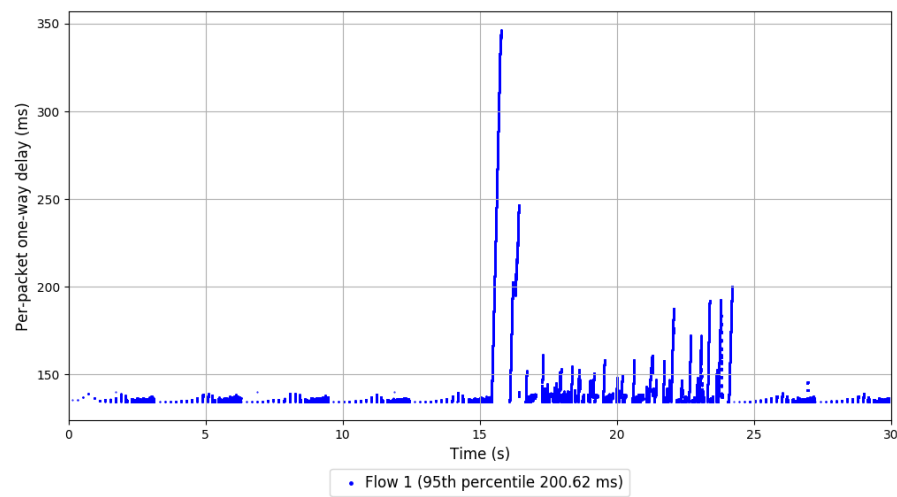
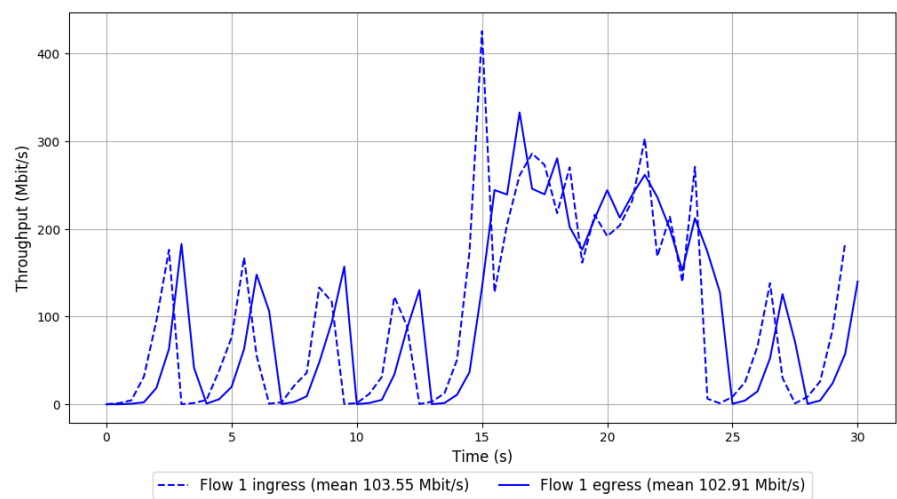


Run 5: Statistics of Verus

Start at: 2019-01-19 07:59:33  
End at: 2019-01-19 08:00:03  
Local clock offset: -0.691 ms  
Remote clock offset: -37.931 ms

# Below is generated by plot.py at 2019-01-19 08:43:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 102.91 Mbit/s  
95th percentile per-packet one-way delay: 200.615 ms  
Loss rate: 1.27%  
-- Flow 1:  
Average throughput: 102.91 Mbit/s  
95th percentile per-packet one-way delay: 200.615 ms  
Loss rate: 1.27%

Run 5: Report of Verus — Data Link

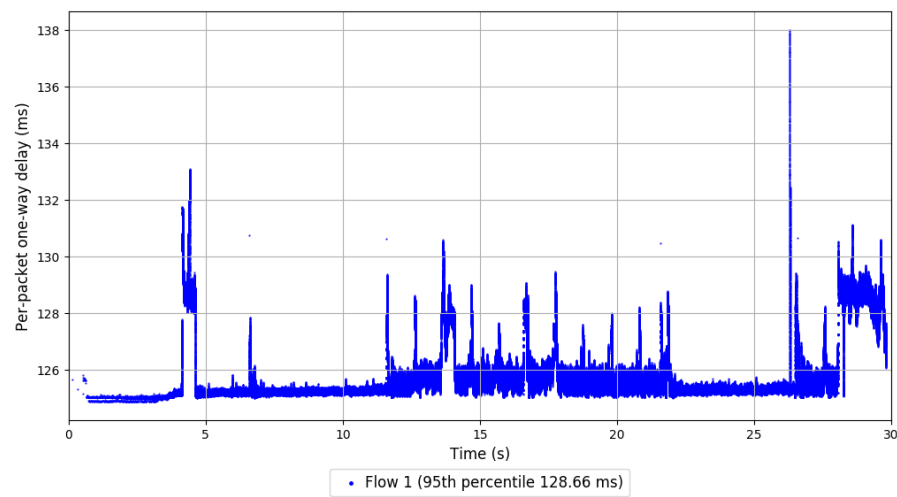
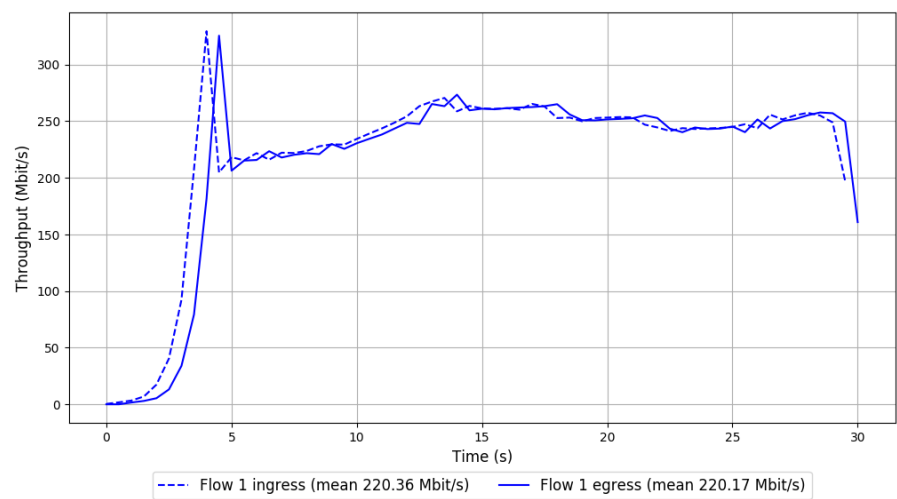


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-19 05:36:27  
End at: 2019-01-19 05:36:57  
Local clock offset: 1.222 ms  
Remote clock offset: -28.078 ms

# Below is generated by plot.py at 2019-01-19 08:43:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 220.17 Mbit/s  
95th percentile per-packet one-way delay: 128.657 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 220.17 Mbit/s  
95th percentile per-packet one-way delay: 128.657 ms  
Loss rate: 0.75%

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-01-19 06:10:08

End at: 2019-01-19 06:10:38

Local clock offset: 0.608 ms

Remote clock offset: -45.24 ms

# Below is generated by plot.py at 2019-01-19 08:43:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 215.08 Mbit/s

95th percentile per-packet one-way delay: 143.447 ms

Loss rate: 0.77%

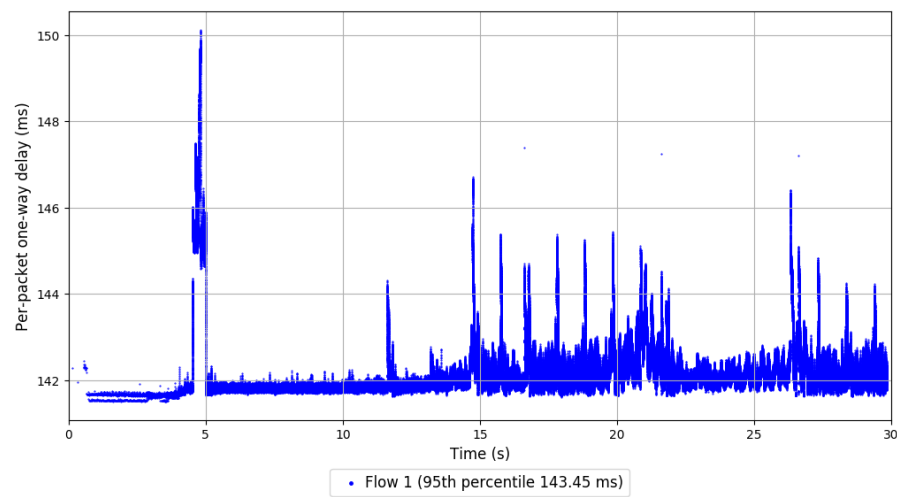
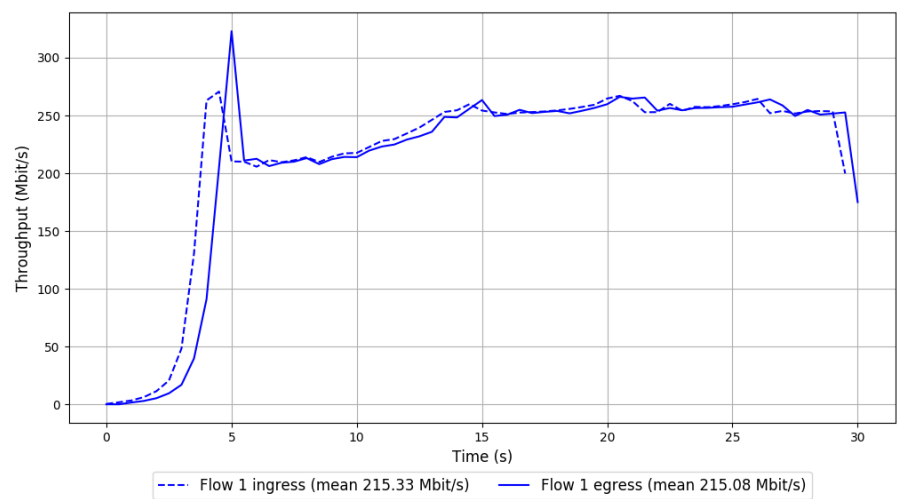
-- Flow 1:

Average throughput: 215.08 Mbit/s

95th percentile per-packet one-way delay: 143.447 ms

Loss rate: 0.77%

Run 2: Report of PCC-Vivace — Data Link

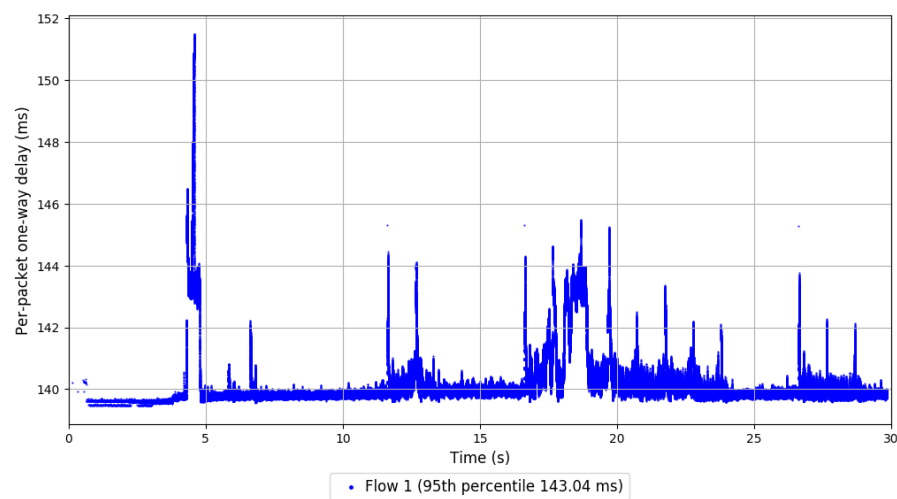
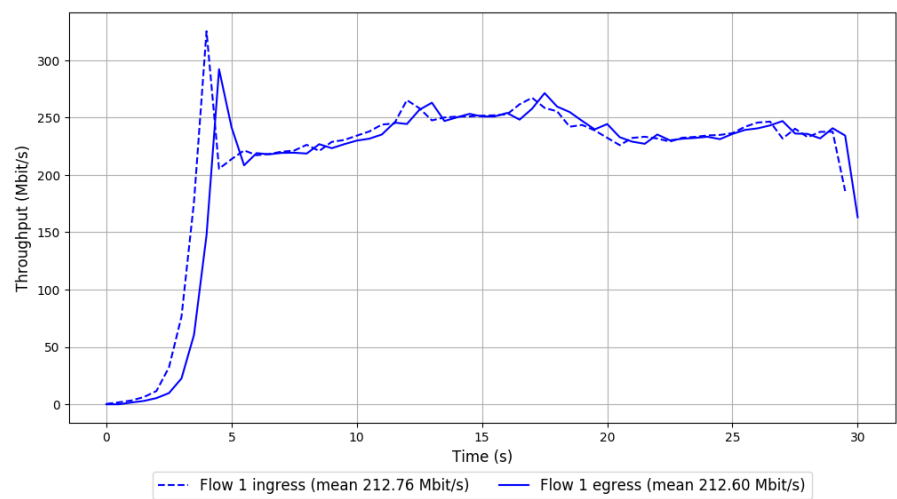


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-19 06:43:54  
End at: 2019-01-19 06:44:24  
Local clock offset: 2.195 ms  
Remote clock offset: -44.353 ms

# Below is generated by plot.py at 2019-01-19 08:43:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 212.60 Mbit/s  
95th percentile per-packet one-way delay: 143.044 ms  
Loss rate: 0.72%  
-- Flow 1:  
Average throughput: 212.60 Mbit/s  
95th percentile per-packet one-way delay: 143.044 ms  
Loss rate: 0.72%

Run 3: Report of PCC-Vivace — Data Link

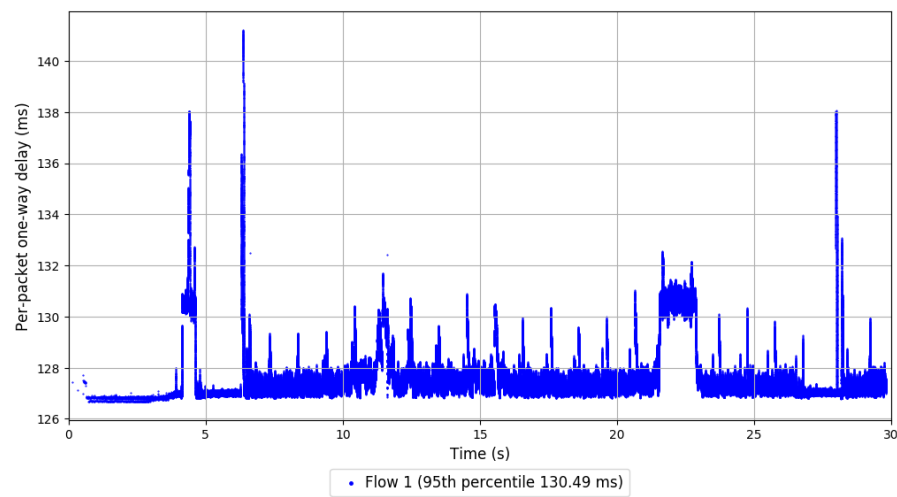
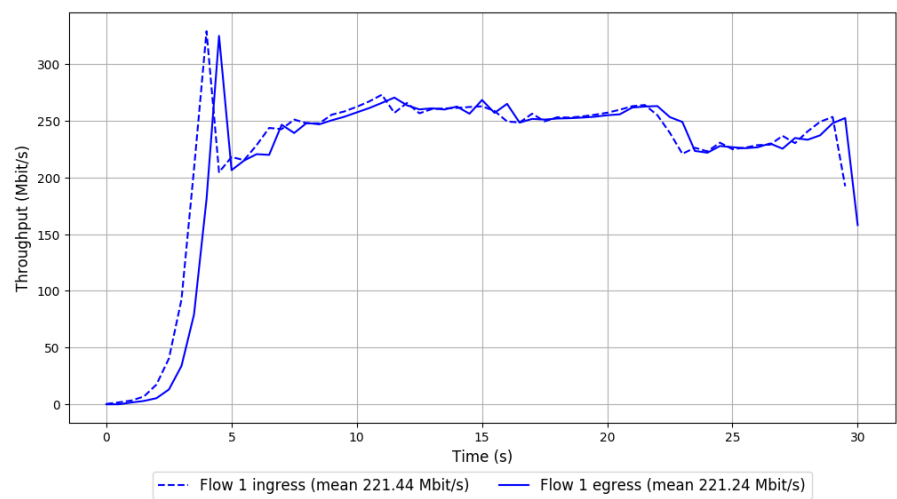


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-19 07:16:57  
End at: 2019-01-19 07:17:27  
Local clock offset: 0.138 ms  
Remote clock offset: -30.786 ms

# Below is generated by plot.py at 2019-01-19 08:43:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 221.24 Mbit/s  
95th percentile per-packet one-way delay: 130.493 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 221.24 Mbit/s  
95th percentile per-packet one-way delay: 130.493 ms  
Loss rate: 0.75%

Run 4: Report of PCC-Vivace — Data Link

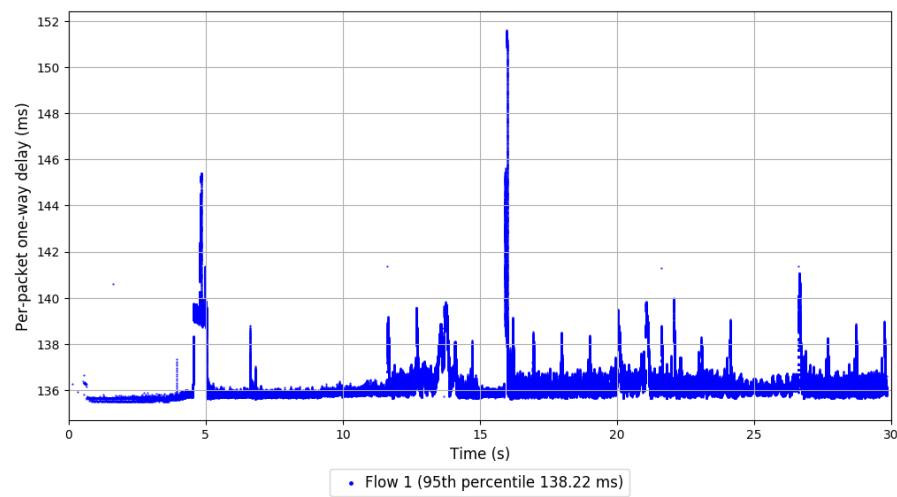
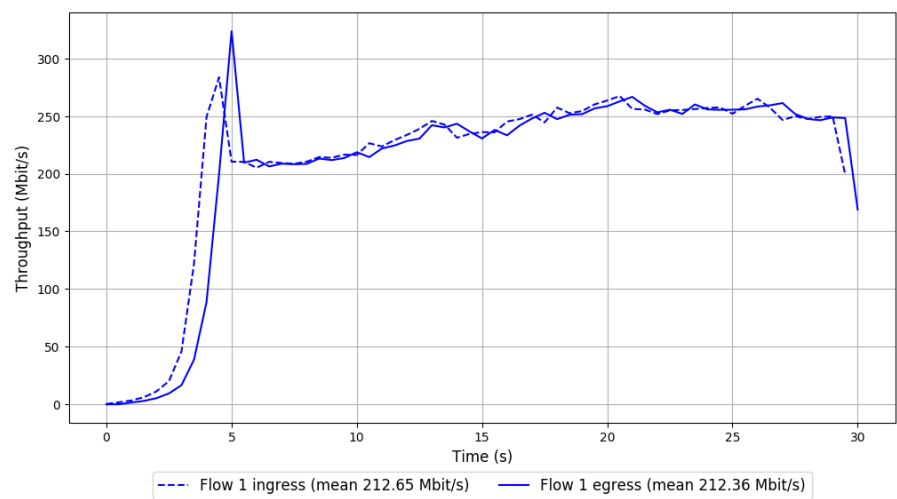


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-19 07:56:46  
End at: 2019-01-19 07:57:16  
Local clock offset: 0.853 ms  
Remote clock offset: -37.639 ms

# Below is generated by plot.py at 2019-01-19 08:43:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 212.36 Mbit/s  
95th percentile per-packet one-way delay: 138.223 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 212.36 Mbit/s  
95th percentile per-packet one-way delay: 138.223 ms  
Loss rate: 0.79%

Run 5: Report of PCC-Vivace — Data Link





Run 1: Statistics of WebRTC media

Start at: 2019-01-19 05:24:38

End at: 2019-01-19 05:25:08

Local clock offset: 2.106 ms

Remote clock offset: -36.02 ms

# Below is generated by plot.py at 2019-01-19 08:43:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 137.899 ms

Loss rate: 0.00%

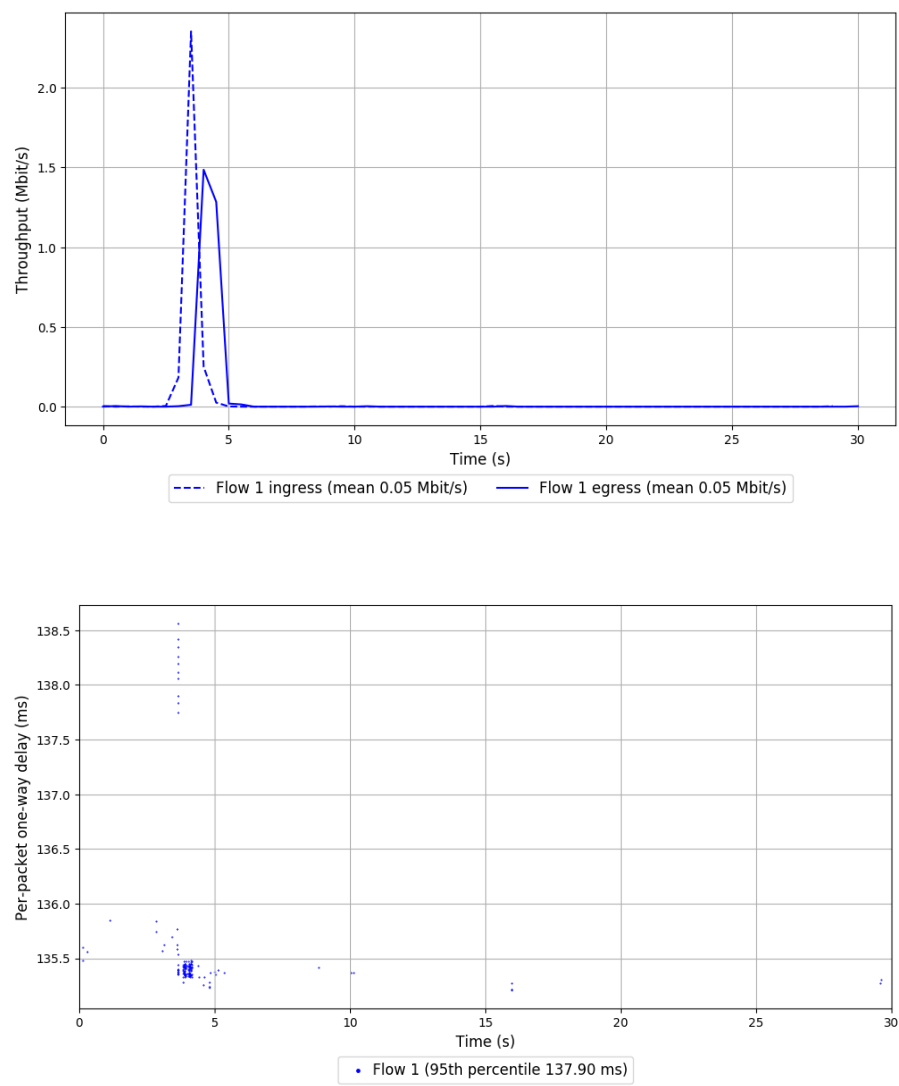
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 137.899 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

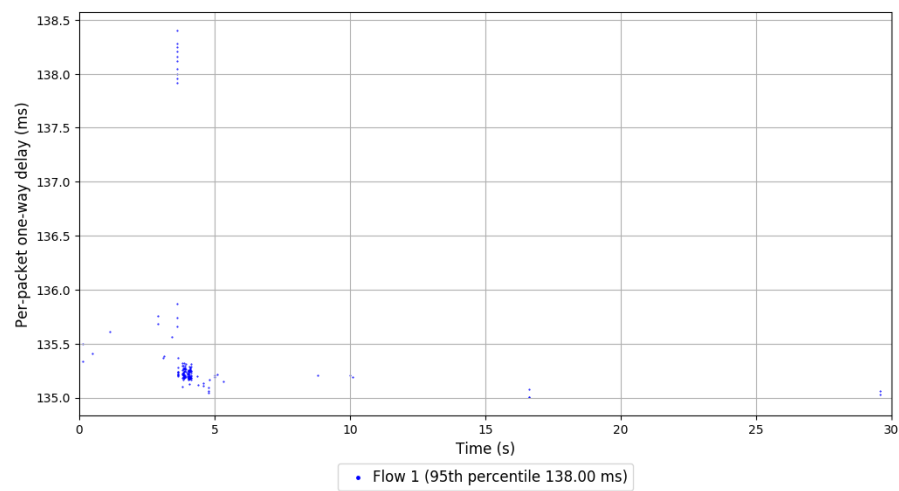
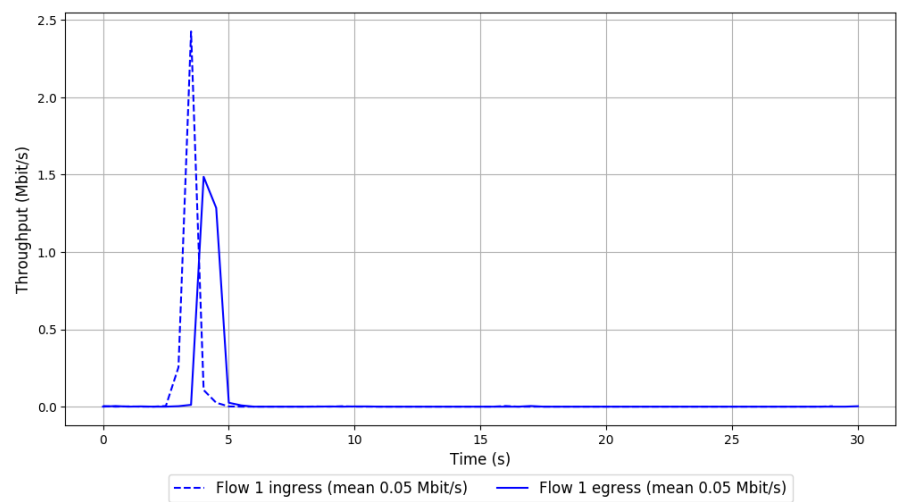


Run 2: Statistics of WebRTC media

Start at: 2019-01-19 05:58:29  
End at: 2019-01-19 05:58:59  
Local clock offset: 2.659 ms  
Remote clock offset: -36.721 ms

# Below is generated by plot.py at 2019-01-19 08:43:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 137.998 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 137.998 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

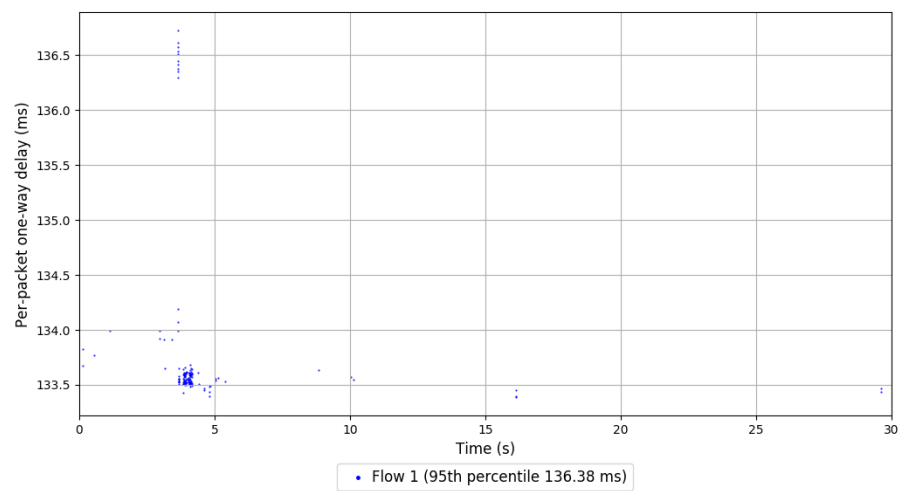
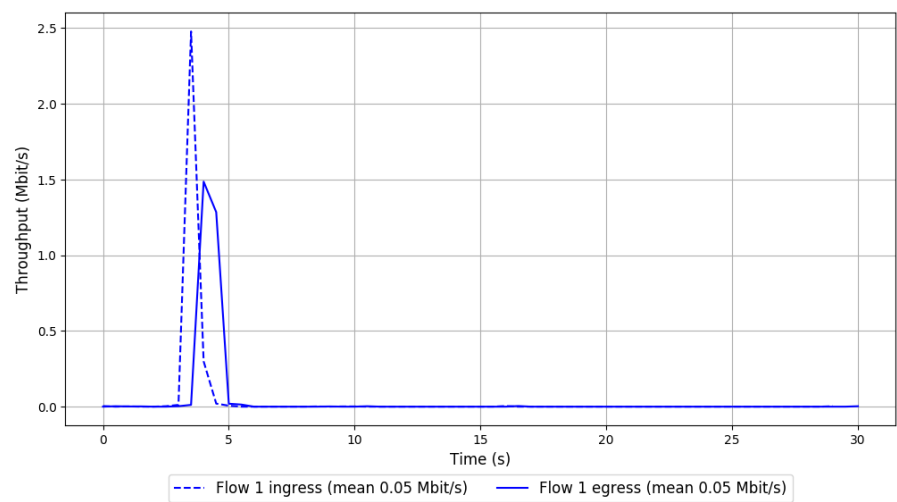


Run 3: Statistics of WebRTC media

Start at: 2019-01-19 06:26:32  
End at: 2019-01-19 06:27:02  
Local clock offset: 1.364 ms  
Remote clock offset: -36.833 ms

# Below is generated by plot.py at 2019-01-19 08:43:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 136.377 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 136.377 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

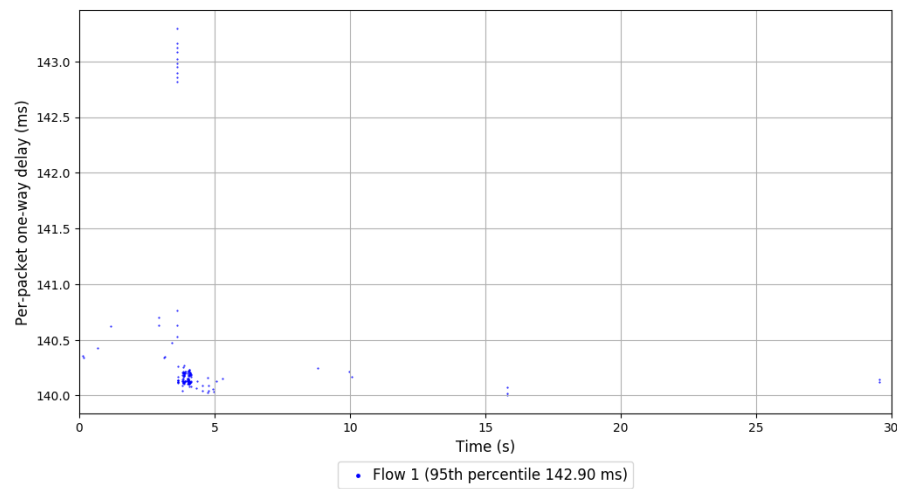
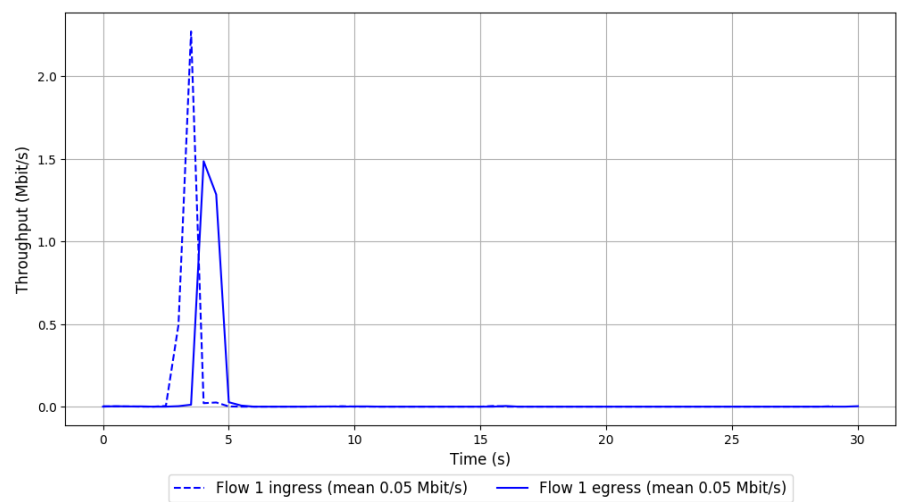


Run 4: Statistics of WebRTC media

Start at: 2019-01-19 07:05:16  
End at: 2019-01-19 07:05:46  
Local clock offset: 0.169 ms  
Remote clock offset: -43.712 ms

# Below is generated by plot.py at 2019-01-19 08:43:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 142.896 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 142.896 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-01-19 07:44:58  
End at: 2019-01-19 07:45:28  
Local clock offset: -5.925 ms  
Remote clock offset: -49.156 ms

# Below is generated by plot.py at 2019-01-19 08:43:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 142.102 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 142.102 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

