

Pantheon Report

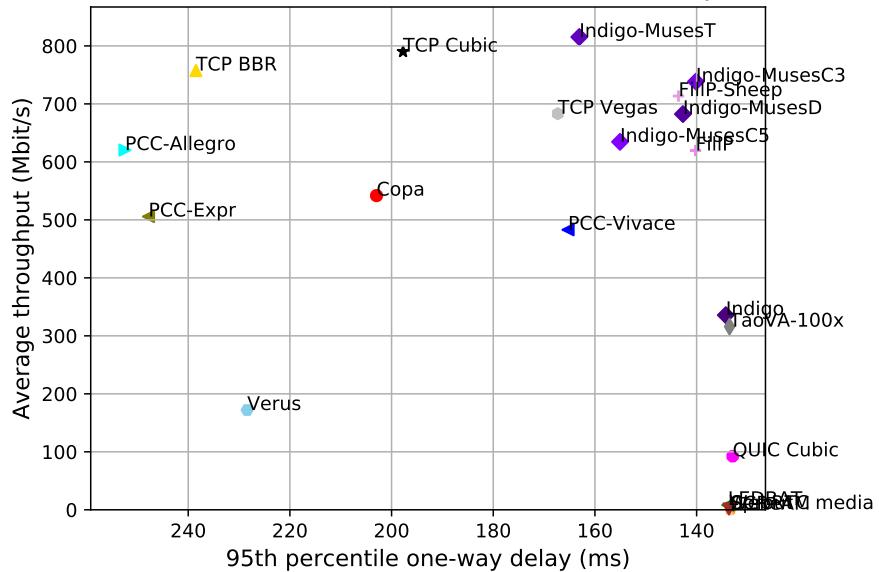
Generated at 2019-01-25 11:24:49 (UTC).
Data path: GCE Sydney on `ens4 (local)` → GCE London on `ens4 (remote)`.
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

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

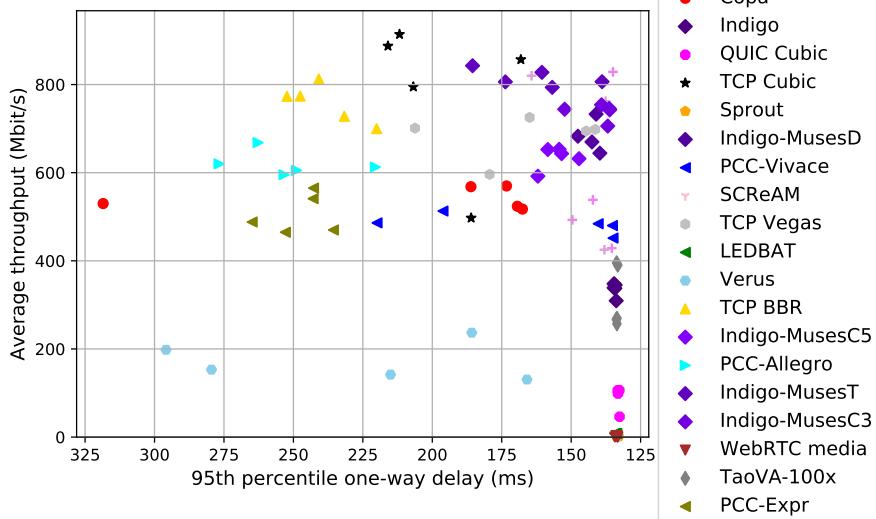
```
System info:  
Linux 4.15.0-1026-gcp  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 0b8e9a949603c3842368430acf469eec3b941f9f  
third_party/fillp @ d6da1459332fceef56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ d9c5ea33091330aca25ecd105ab2db6d34d5c40d  
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd  
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1  
M receiver/src/buffer.h  
M receiver/src/core.cpp  
M sender/src/buffer.h  
M sender/src/core.cpp  
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab  
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42  
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2  
M src/ScreamClient  
M src/ScreamServer  
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26  
M src/examples/cellsim.cc  
M src/examples/sproutbt2.cc  
M src/network/sproutconn.cc  
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494  
M src/verus.hpp  
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE Sydney to GCE London, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney to GCE London, 5 runs of 30s each per scheme
3 flows with 10s interval between flows



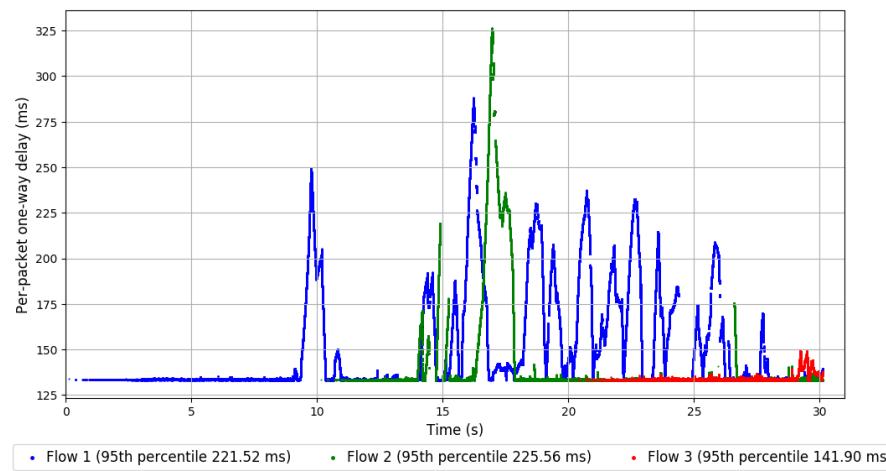
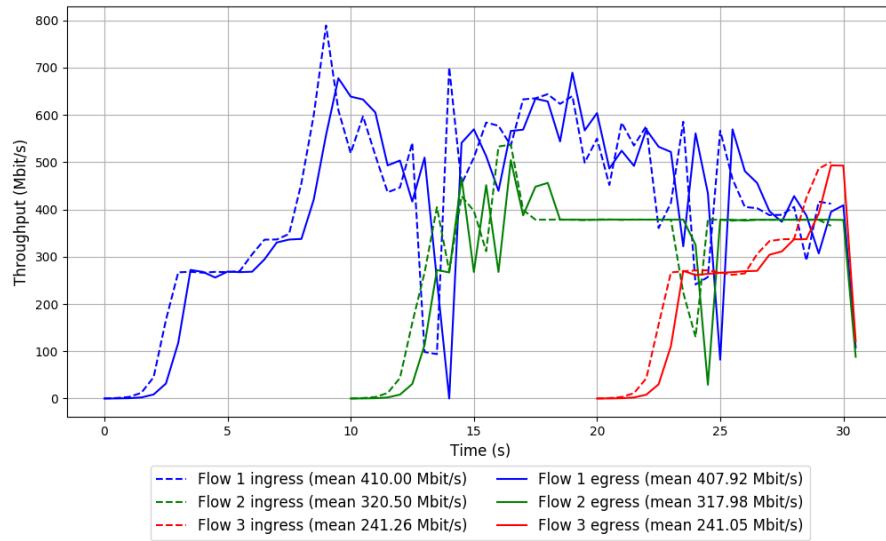
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	413.39	367.48	299.18	240.48	223.13	205.21	0.64	0.96	1.27
Copa	5	288.76	268.57	223.19	172.84	168.35	211.24	0.03	0.11	0.72
TCP Cubic	5	426.90	414.10	262.94	213.49	160.22	160.04	0.42	0.02	0.46
FillP	5	318.60	333.16	239.95	145.33	135.22	135.31	0.00	0.00	0.00
FillP-Sheep	5	420.22	323.44	235.56	148.42	137.78	136.70	0.09	0.00	0.00
Indigo	5	179.57	165.25	145.41	133.97	134.29	136.63	0.00	0.00	0.00
Indigo-MusesC3	5	435.23	364.65	272.39	142.86	136.08	135.61	0.05	0.09	0.38
Indigo-MusesC5	5	391.89	327.71	110.95	155.15	156.92	133.76	0.00	0.09	0.00
Indigo-MusesD	4	441.23	354.27	63.72	143.93	141.56	133.33	0.12	0.00	0.00
Indigo-MusesT	5	495.97	402.60	226.94	168.66	149.03	137.05	0.07	0.01	0.02
LEDBAT	5	5.28	3.49	1.69	133.90	133.78	133.64	0.00	0.00	0.00
PCC-Allegro	5	343.54	295.62	244.65	243.87	237.65	245.56	3.03	2.61	2.50
PCC-Expr	5	287.50	238.66	180.16	249.10	202.35	207.62	3.77	1.84	1.82
QUIC Cubic	5	42.98	51.12	48.24	132.81	132.66	132.86	0.00	0.00	0.00
SCReAM	5	0.14	0.16	0.16	132.69	133.15	133.06	0.00	0.00	0.00
Sprout	5	0.64	0.67	0.65	133.22	133.25	133.27	0.00	0.00	0.00
TaoVA-100x	5	198.05	85.31	183.55	133.30	133.06	133.59	0.02	0.00	0.00
TCP Vegas	5	394.08	300.83	266.49	157.98	159.38	200.96	0.02	0.08	1.65
Verus	5	85.13	99.95	65.54	202.87	187.64	192.31	1.74	0.44	1.05
PCC-Vivace	5	305.89	196.11	141.32	175.49	136.02	181.35	0.22	0.00	0.37
WebRTC media	5	0.80	0.48	0.11	133.62	133.45	133.50	0.00	0.04	0.00

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-25 05:45:09
End at: 2019-01-25 05:45:39
Local clock offset: -0.24 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-01-25 09:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.92 Mbit/s
95th percentile per-packet one-way delay: 220.039 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 407.92 Mbit/s
95th percentile per-packet one-way delay: 221.520 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 317.98 Mbit/s
95th percentile per-packet one-way delay: 225.563 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 241.05 Mbit/s
95th percentile per-packet one-way delay: 141.898 ms
Loss rate: 0.07%
```

Run 1: Report of TCP BBR — Data Link

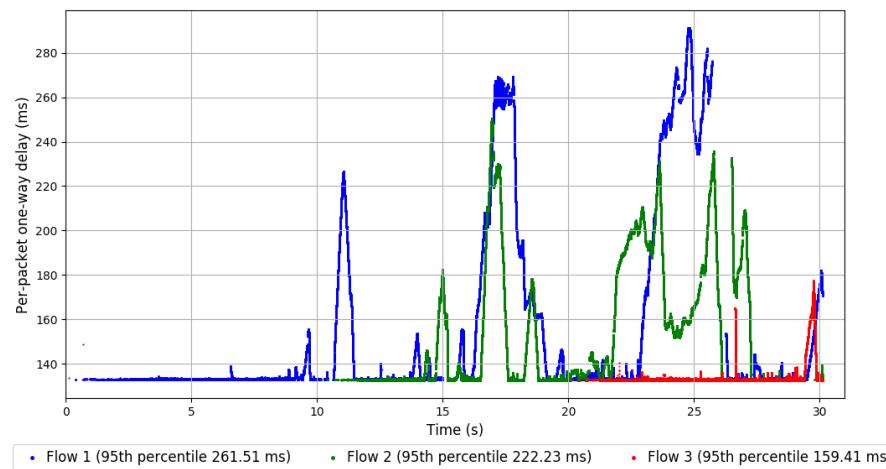
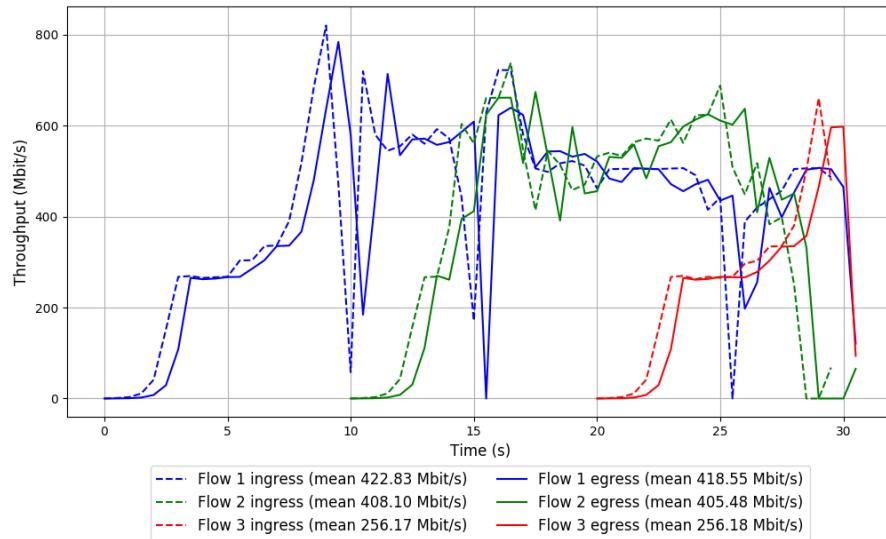


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-25 06:27:14
End at: 2019-01-25 06:27:44
Local clock offset: 0.075 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2019-01-25 09:12:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.72 Mbit/s
95th percentile per-packet one-way delay: 247.555 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 418.55 Mbit/s
95th percentile per-packet one-way delay: 261.510 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 405.48 Mbit/s
95th percentile per-packet one-way delay: 222.234 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 256.18 Mbit/s
95th percentile per-packet one-way delay: 159.412 ms
Loss rate: 0.00%
```

Run 2: Report of TCP BBR — Data Link

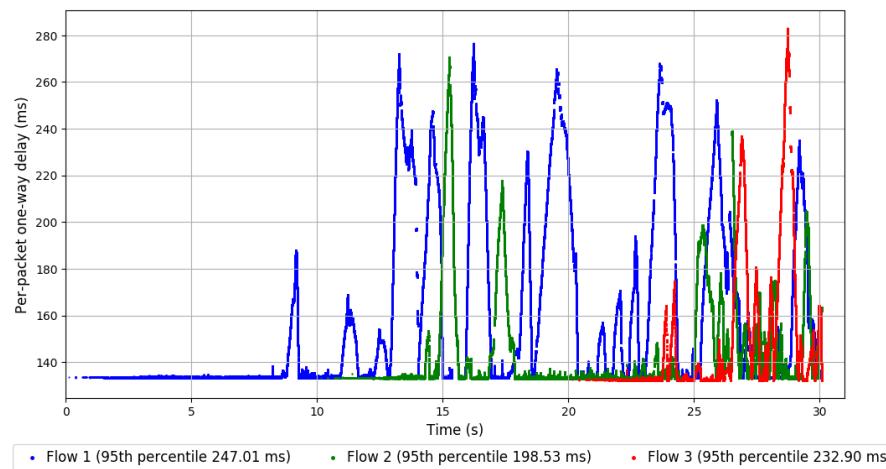
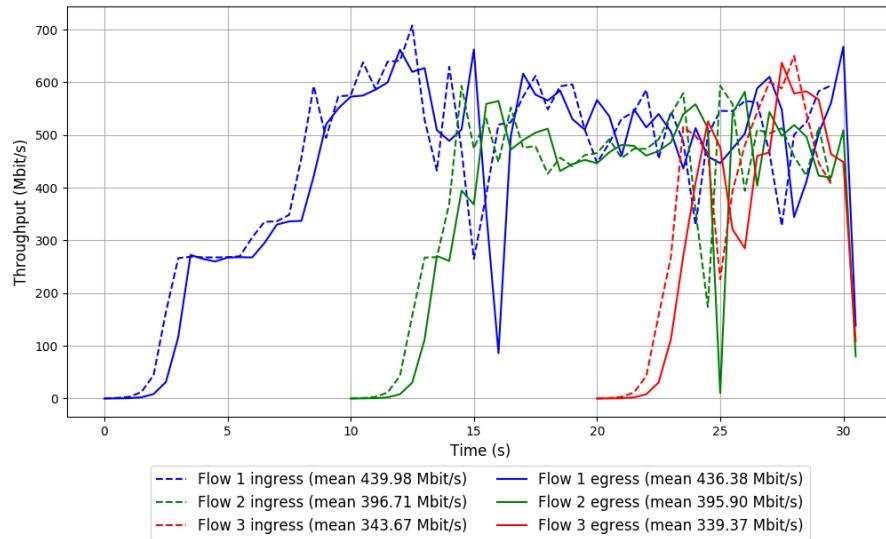


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-25 07:09:42
End at: 2019-01-25 07:10:12
Local clock offset: -0.315 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-01-25 09:13:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 812.72 Mbit/s
95th percentile per-packet one-way delay: 240.856 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 436.38 Mbit/s
95th percentile per-packet one-way delay: 247.009 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 395.90 Mbit/s
95th percentile per-packet one-way delay: 198.528 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 339.37 Mbit/s
95th percentile per-packet one-way delay: 232.896 ms
Loss rate: 1.25%
```

Run 3: Report of TCP BBR — Data Link

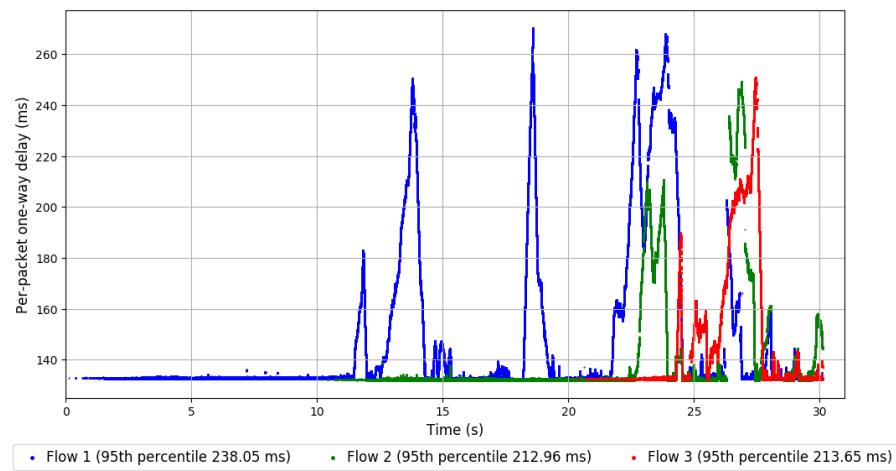
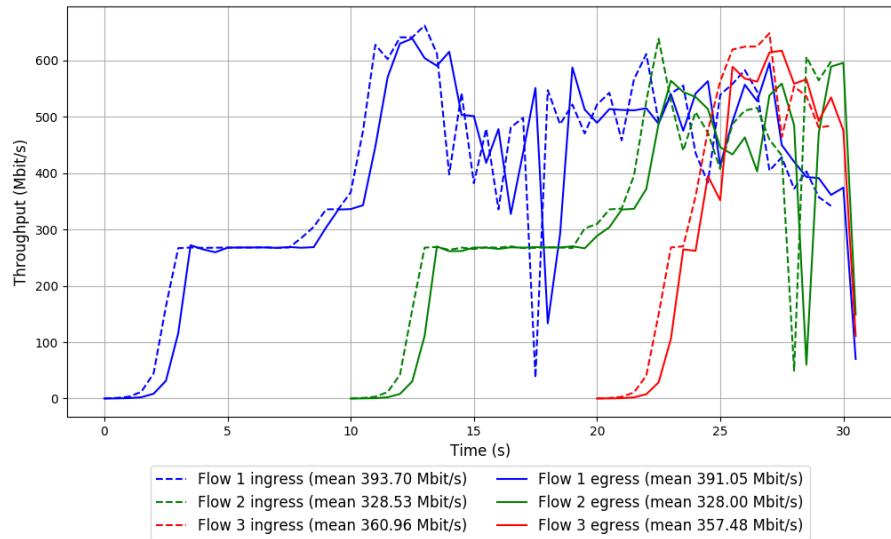


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-25 07:51:19
End at: 2019-01-25 07:51:49
Local clock offset: 0.189 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2019-01-25 09:13:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 728.00 Mbit/s
95th percentile per-packet one-way delay: 231.659 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 391.05 Mbit/s
95th percentile per-packet one-way delay: 238.052 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 328.00 Mbit/s
95th percentile per-packet one-way delay: 212.957 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 357.48 Mbit/s
95th percentile per-packet one-way delay: 213.651 ms
Loss rate: 0.96%
```

Run 4: Report of TCP BBR — Data Link

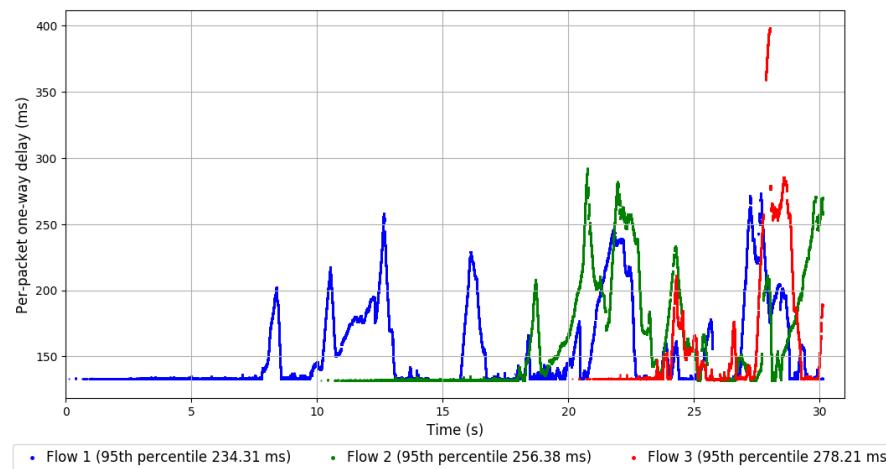
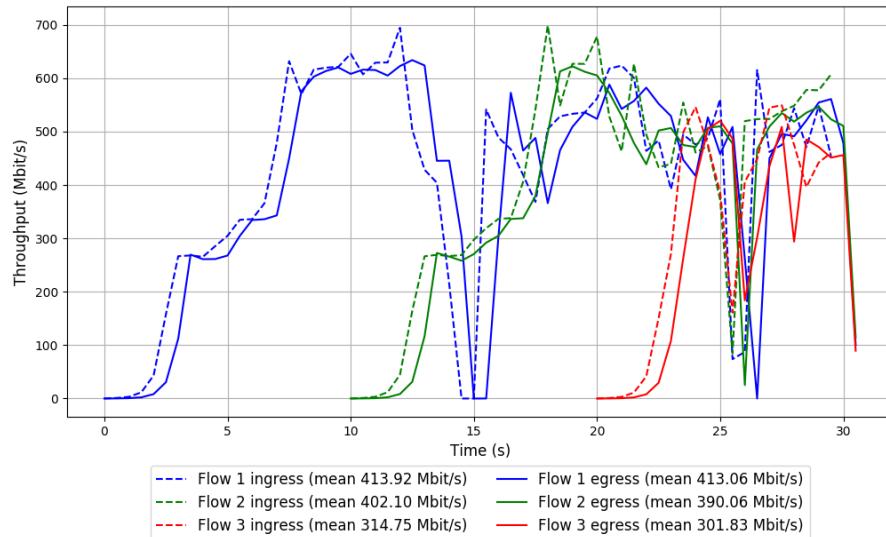


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-25 08:32:18
End at: 2019-01-25 08:32:48
Local clock offset: 0.164 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2019-01-25 09:13:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.16 Mbit/s
95th percentile per-packet one-way delay: 252.325 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 413.06 Mbit/s
95th percentile per-packet one-way delay: 234.310 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 390.06 Mbit/s
95th percentile per-packet one-way delay: 256.381 ms
Loss rate: 2.99%
-- Flow 3:
Average throughput: 301.83 Mbit/s
95th percentile per-packet one-way delay: 278.214 ms
Loss rate: 4.09%
```

Run 5: Report of TCP BBR — Data Link

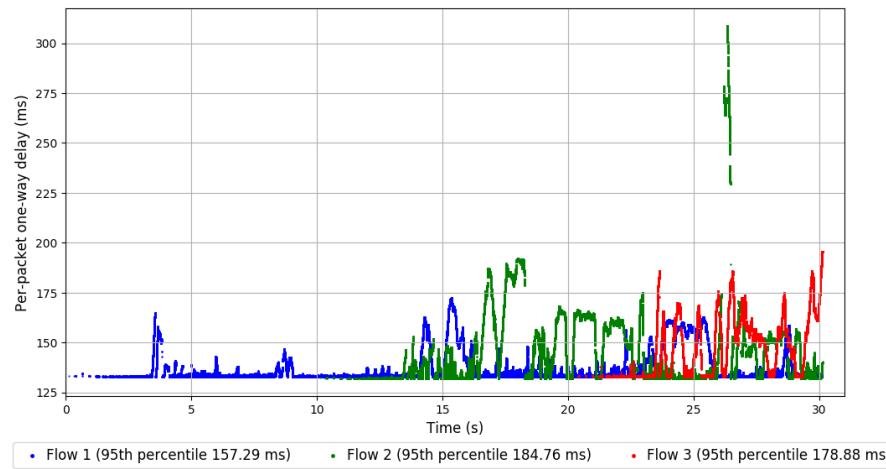
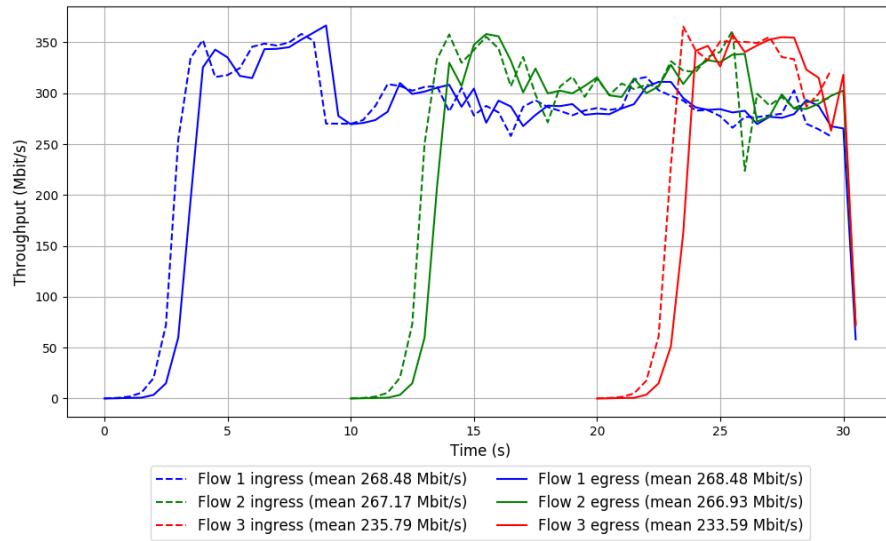


Run 1: Statistics of Copa

```
Start at: 2019-01-25 05:51:17
End at: 2019-01-25 05:51:47
Local clock offset: -0.116 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2019-01-25 09:16:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 523.77 Mbit/s
95th percentile per-packet one-way delay: 169.373 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 268.48 Mbit/s
95th percentile per-packet one-way delay: 157.295 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 266.93 Mbit/s
95th percentile per-packet one-way delay: 184.765 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 233.59 Mbit/s
95th percentile per-packet one-way delay: 178.877 ms
Loss rate: 0.91%
```

Run 1: Report of Copa — Data Link

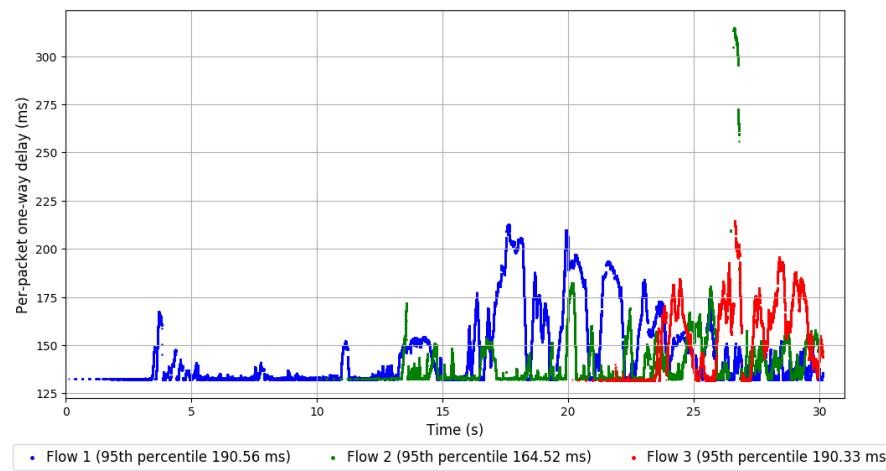
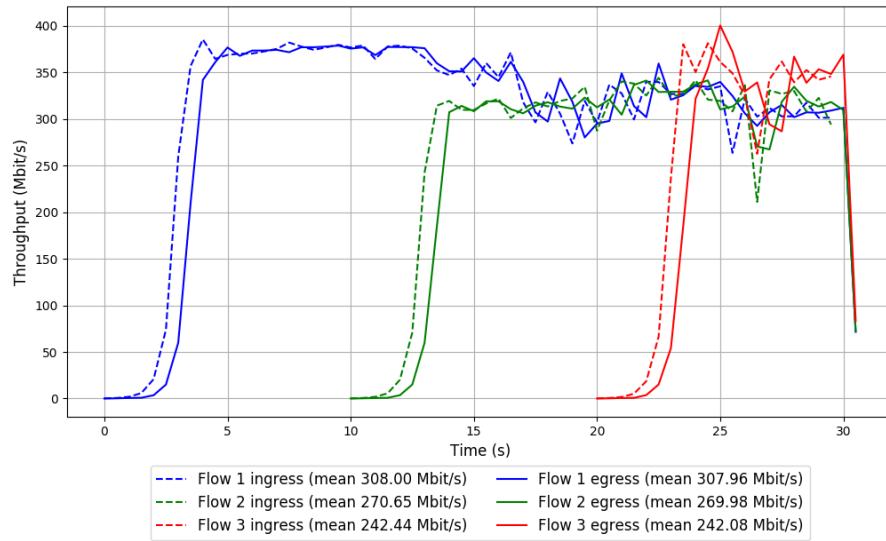


Run 2: Statistics of Copa

```
Start at: 2019-01-25 06:33:20
End at: 2019-01-25 06:33:50
Local clock offset: 0.409 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-01-25 09:17:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.18 Mbit/s
95th percentile per-packet one-way delay: 186.087 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 307.96 Mbit/s
95th percentile per-packet one-way delay: 190.557 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 269.98 Mbit/s
95th percentile per-packet one-way delay: 164.517 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 242.08 Mbit/s
95th percentile per-packet one-way delay: 190.329 ms
Loss rate: 0.13%
```

Run 2: Report of Copa — Data Link

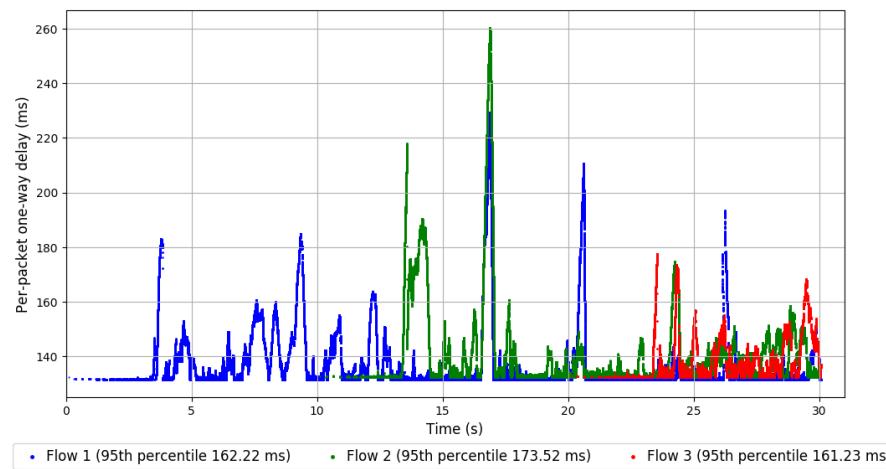
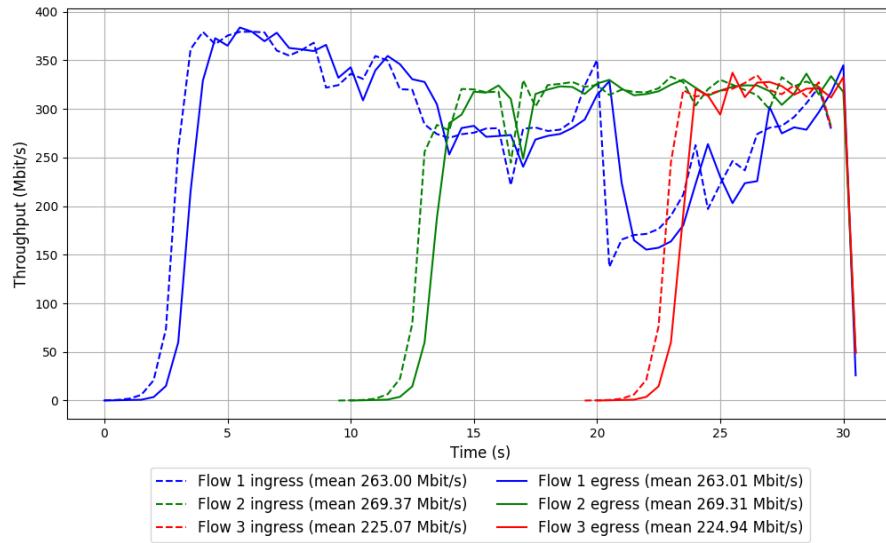


Run 3: Statistics of Copa

```
Start at: 2019-01-25 07:16:02
End at: 2019-01-25 07:16:32
Local clock offset: 0.217 ms
Remote clock offset: -0.435 ms

# Below is generated by plot.py at 2019-01-25 09:17:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.41 Mbit/s
95th percentile per-packet one-way delay: 167.550 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 263.01 Mbit/s
95th percentile per-packet one-way delay: 162.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 269.31 Mbit/s
95th percentile per-packet one-way delay: 173.524 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 224.94 Mbit/s
95th percentile per-packet one-way delay: 161.232 ms
Loss rate: 0.04%
```

Run 3: Report of Copa — Data Link

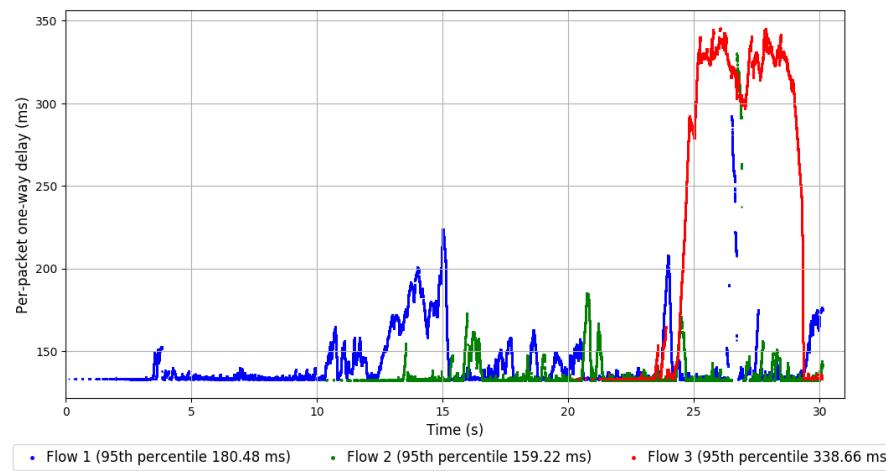
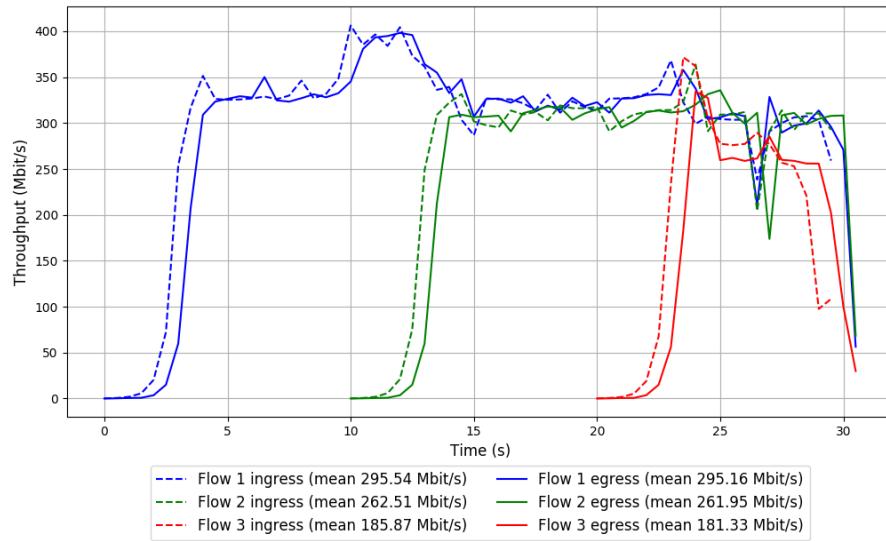


Run 4: Statistics of Copa

```
Start at: 2019-01-25 07:57:09
End at: 2019-01-25 07:57:39
Local clock offset: -0.379 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-01-25 09:30:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.91 Mbit/s
95th percentile per-packet one-way delay: 318.501 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 295.16 Mbit/s
95th percentile per-packet one-way delay: 180.477 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 261.95 Mbit/s
95th percentile per-packet one-way delay: 159.224 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 181.33 Mbit/s
95th percentile per-packet one-way delay: 338.656 ms
Loss rate: 2.44%
```

Run 4: Report of Copa — Data Link

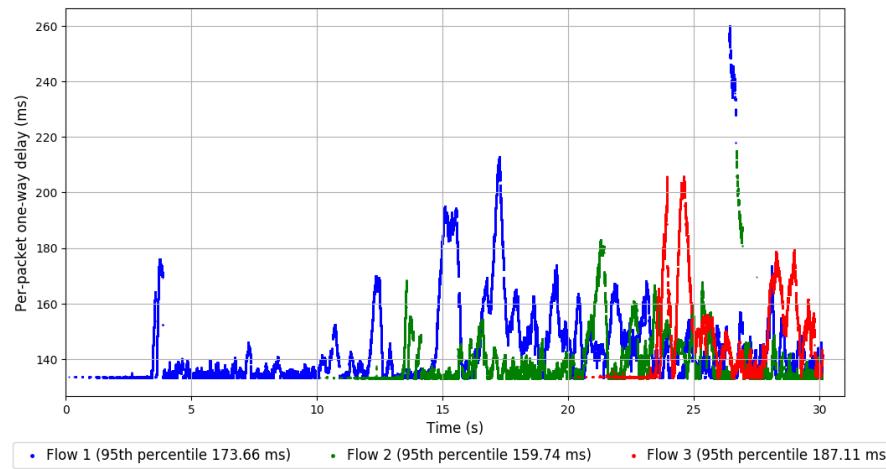
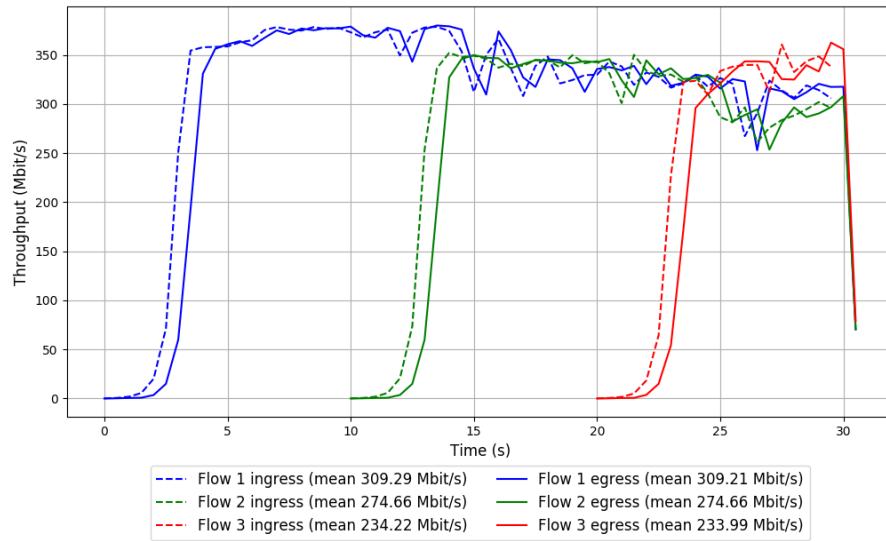


Run 5: Statistics of Copa

```
Start at: 2019-01-25 08:38:21
End at: 2019-01-25 08:38:51
Local clock offset: -0.469 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2019-01-25 09:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 569.85 Mbit/s
95th percentile per-packet one-way delay: 173.278 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 309.21 Mbit/s
95th percentile per-packet one-way delay: 173.662 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 274.66 Mbit/s
95th percentile per-packet one-way delay: 159.738 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 233.99 Mbit/s
95th percentile per-packet one-way delay: 187.108 ms
Loss rate: 0.10%
```

Run 5: Report of Copa — Data Link

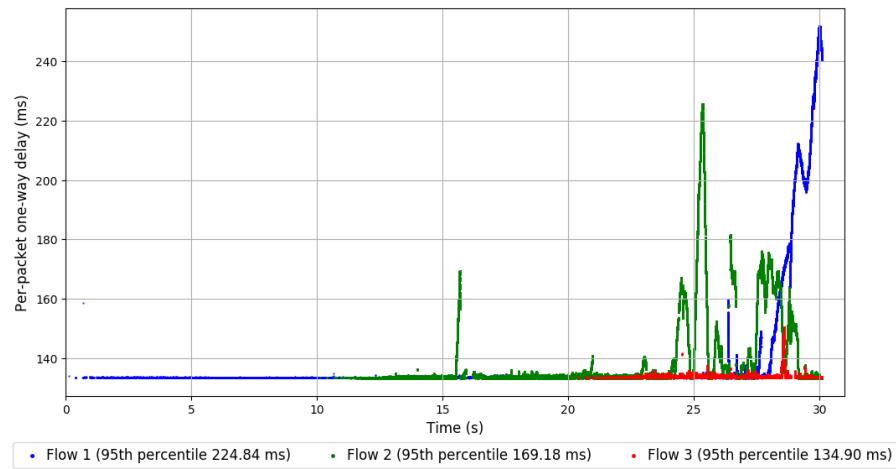
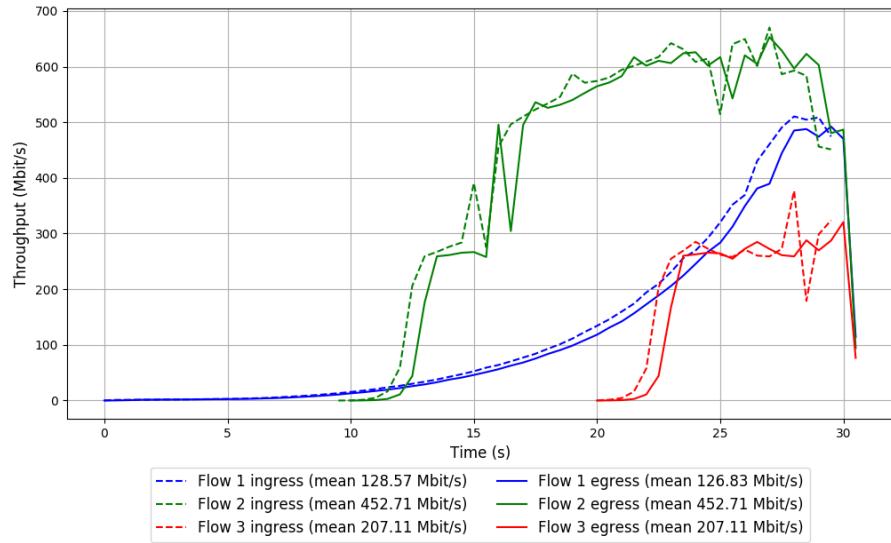


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-25 05:16:10
End at: 2019-01-25 05:16:40
Local clock offset: -0.174 ms
Remote clock offset: 0.355 ms

# Below is generated by plot.py at 2019-01-25 09:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 497.33 Mbit/s
95th percentile per-packet one-way delay: 186.013 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 126.83 Mbit/s
95th percentile per-packet one-way delay: 224.842 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 452.71 Mbit/s
95th percentile per-packet one-way delay: 169.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.11 Mbit/s
95th percentile per-packet one-way delay: 134.899 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Cubic — Data Link

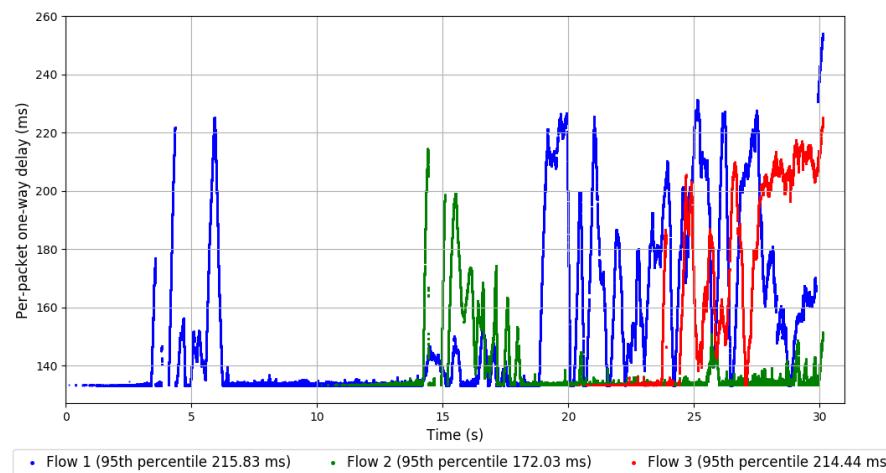
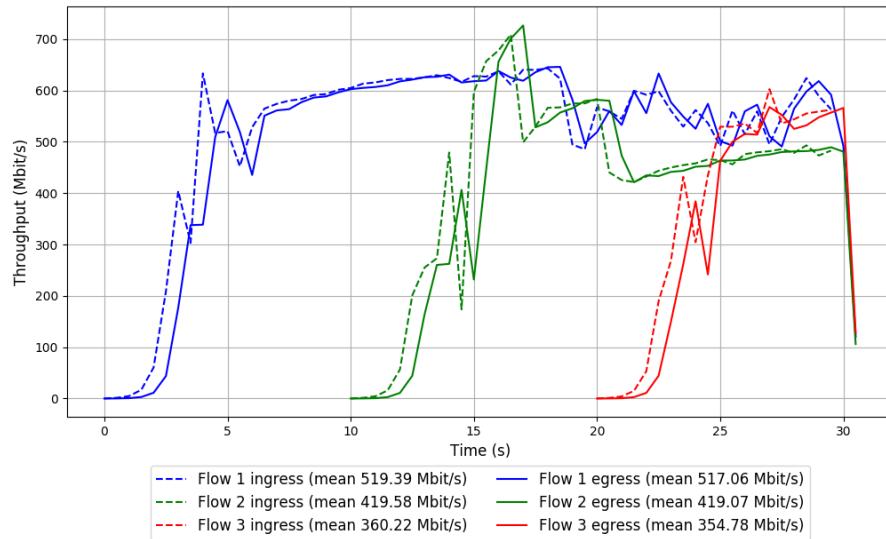


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-25 05:58:02
End at: 2019-01-25 05:58:32
Local clock offset: -0.508 ms
Remote clock offset: -0.156 ms

# Below is generated by plot.py at 2019-01-25 09:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 914.02 Mbit/s
95th percentile per-packet one-way delay: 211.795 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 517.06 Mbit/s
95th percentile per-packet one-way delay: 215.828 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 419.07 Mbit/s
95th percentile per-packet one-way delay: 172.034 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 354.78 Mbit/s
95th percentile per-packet one-way delay: 214.435 ms
Loss rate: 1.50%
```

Run 2: Report of TCP Cubic — Data Link

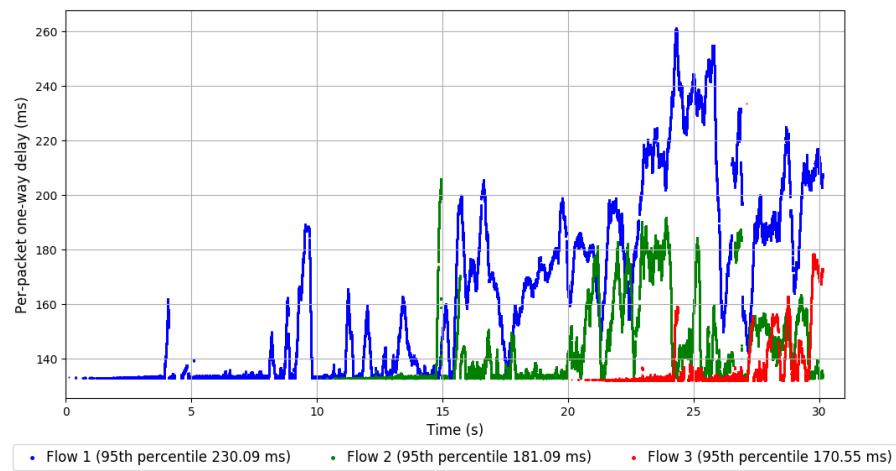
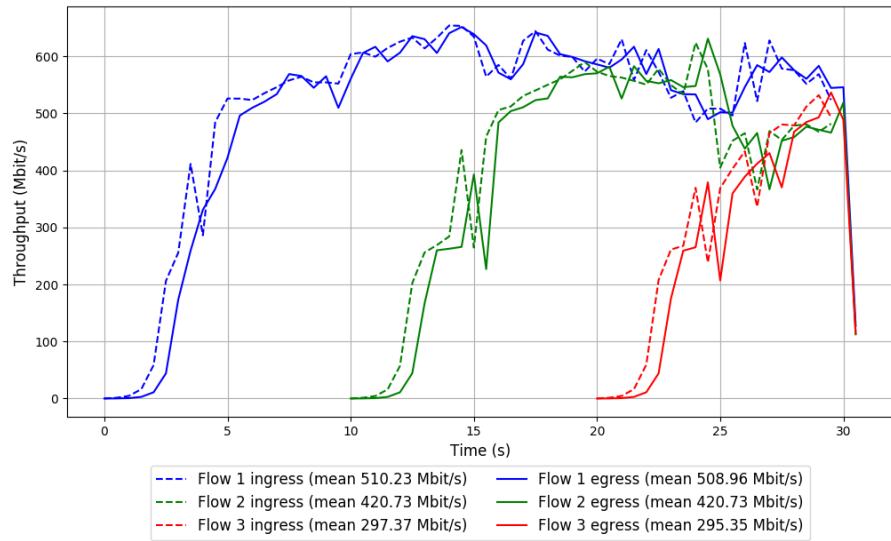


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-25 06:40:32
End at: 2019-01-25 06:41:02
Local clock offset: -0.092 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2019-01-25 09:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 887.48 Mbit/s
95th percentile per-packet one-way delay: 215.962 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 508.96 Mbit/s
95th percentile per-packet one-way delay: 230.088 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 420.73 Mbit/s
95th percentile per-packet one-way delay: 181.094 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 295.35 Mbit/s
95th percentile per-packet one-way delay: 170.552 ms
Loss rate: 0.66%
```

Run 3: Report of TCP Cubic — Data Link

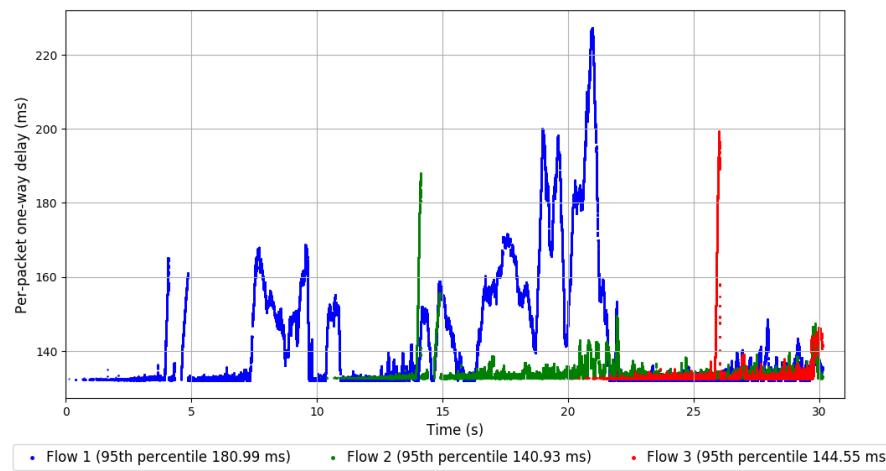
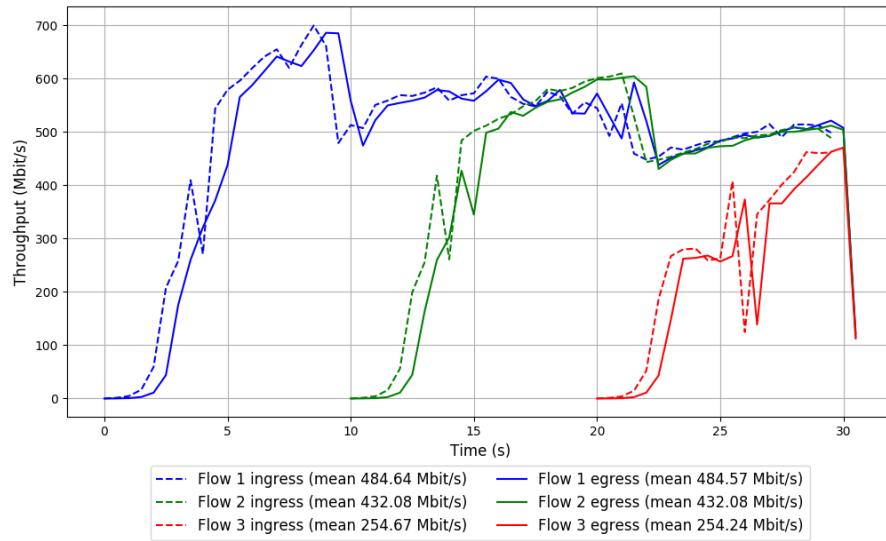


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-25 07:22:51
End at: 2019-01-25 07:23:21
Local clock offset: -0.112 ms
Remote clock offset: -0.486 ms

# Below is generated by plot.py at 2019-01-25 09:33:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 856.70 Mbit/s
95th percentile per-packet one-way delay: 168.118 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 484.57 Mbit/s
95th percentile per-packet one-way delay: 180.992 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 432.08 Mbit/s
95th percentile per-packet one-way delay: 140.925 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 254.24 Mbit/s
95th percentile per-packet one-way delay: 144.551 ms
Loss rate: 0.16%
```

Run 4: Report of TCP Cubic — Data Link

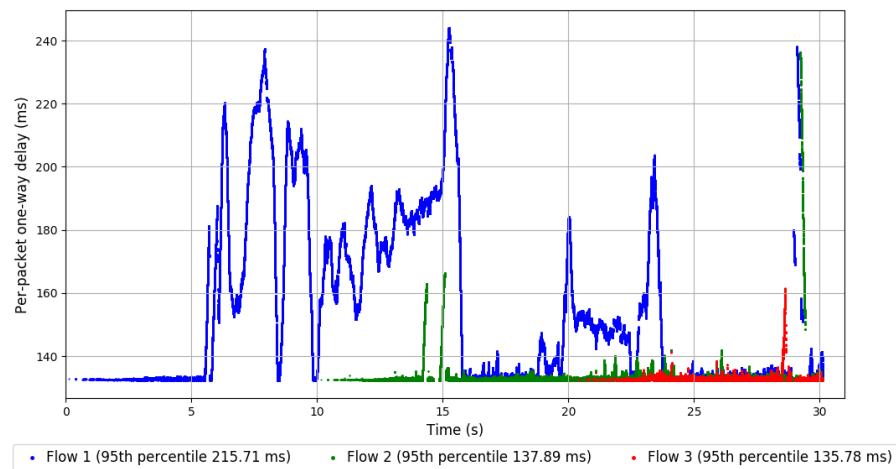
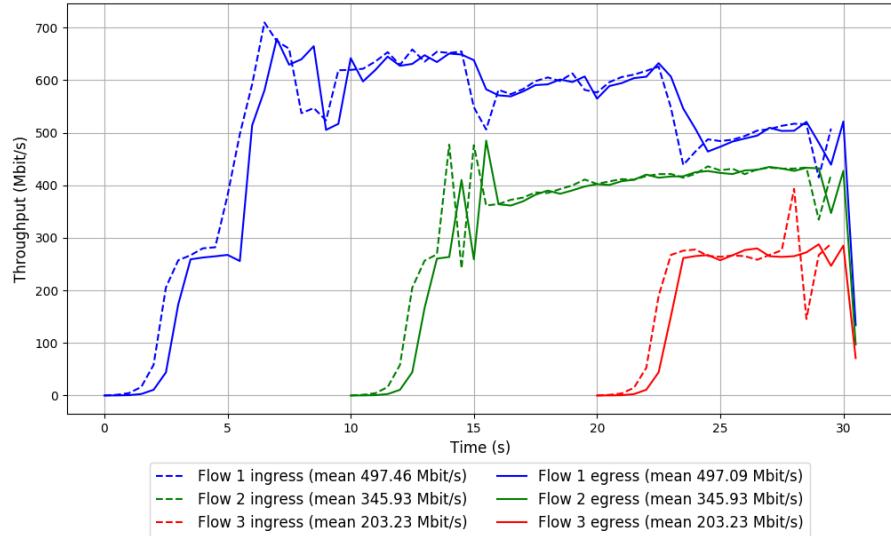


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-25 08:03:41
End at: 2019-01-25 08:04:11
Local clock offset: 0.329 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2019-01-25 09:33:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 794.93 Mbit/s
95th percentile per-packet one-way delay: 206.823 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 497.09 Mbit/s
95th percentile per-packet one-way delay: 215.708 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 345.93 Mbit/s
95th percentile per-packet one-way delay: 137.889 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.23 Mbit/s
95th percentile per-packet one-way delay: 135.784 ms
Loss rate: 0.00%
```

Run 5: Report of TCP Cubic — Data Link

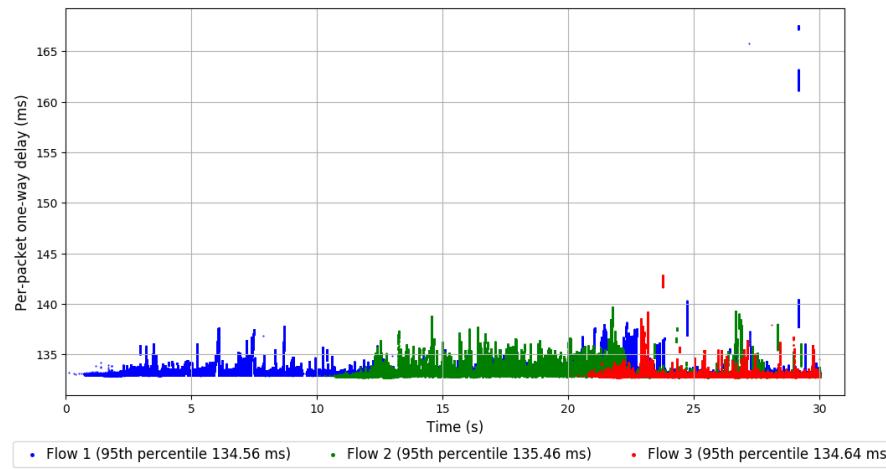
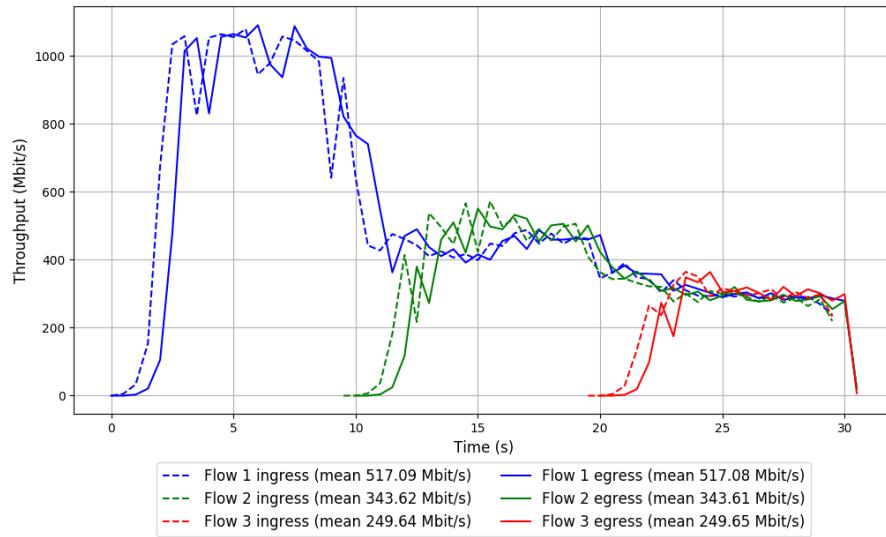


```
Run 1: Statistics of FillP
```

```
Start at: 2019-01-25 05:19:27
End at: 2019-01-25 05:19:57
Local clock offset: -0.009 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2019-01-25 09:37:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 828.77 Mbit/s
95th percentile per-packet one-way delay: 134.962 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 517.08 Mbit/s
95th percentile per-packet one-way delay: 134.561 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 343.61 Mbit/s
95th percentile per-packet one-way delay: 135.455 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 249.65 Mbit/s
95th percentile per-packet one-way delay: 134.641 ms
Loss rate: 0.00%
```

Run 1: Report of FillP — Data Link

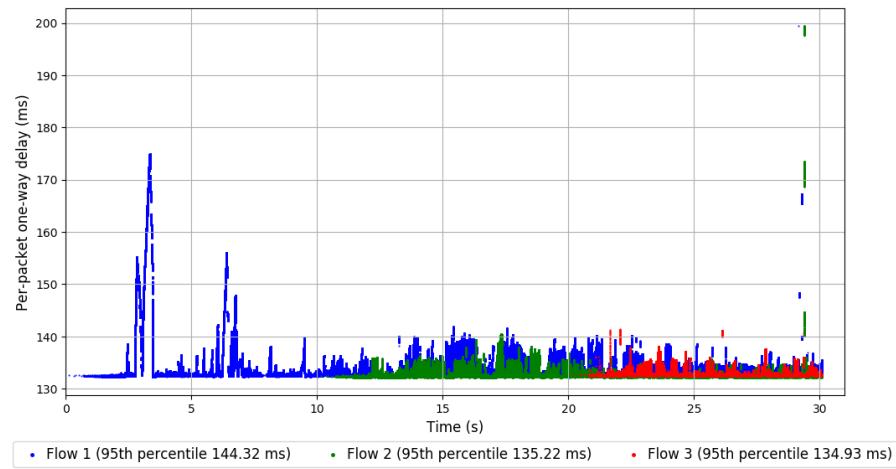
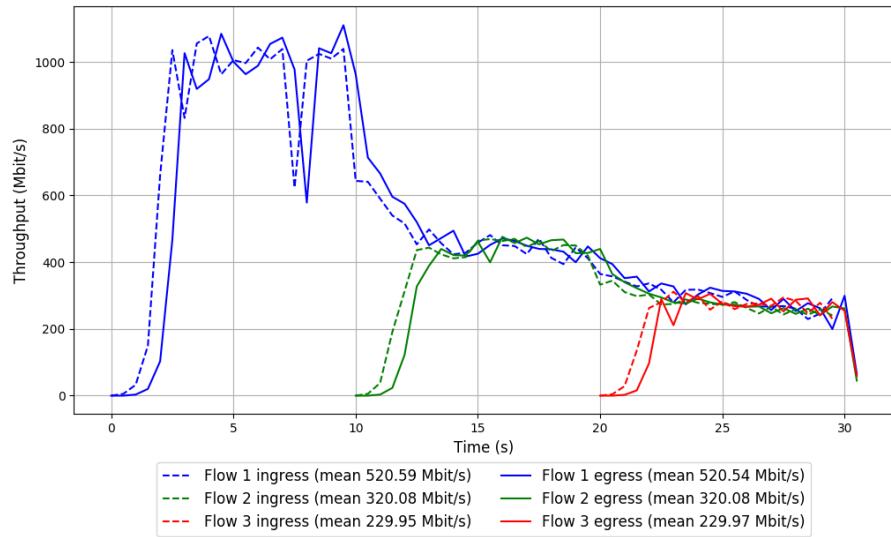


Run 2: Statistics of FillP

```
Start at: 2019-01-25 06:01:54
End at: 2019-01-25 06:02:24
Local clock offset: 0.139 ms
Remote clock offset: -0.486 ms

# Below is generated by plot.py at 2019-01-25 09:41:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 809.34 Mbit/s
95th percentile per-packet one-way delay: 138.972 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 520.54 Mbit/s
95th percentile per-packet one-way delay: 144.325 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 320.08 Mbit/s
95th percentile per-packet one-way delay: 135.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 229.97 Mbit/s
95th percentile per-packet one-way delay: 134.928 ms
Loss rate: 0.00%
```

Run 2: Report of FillP — Data Link

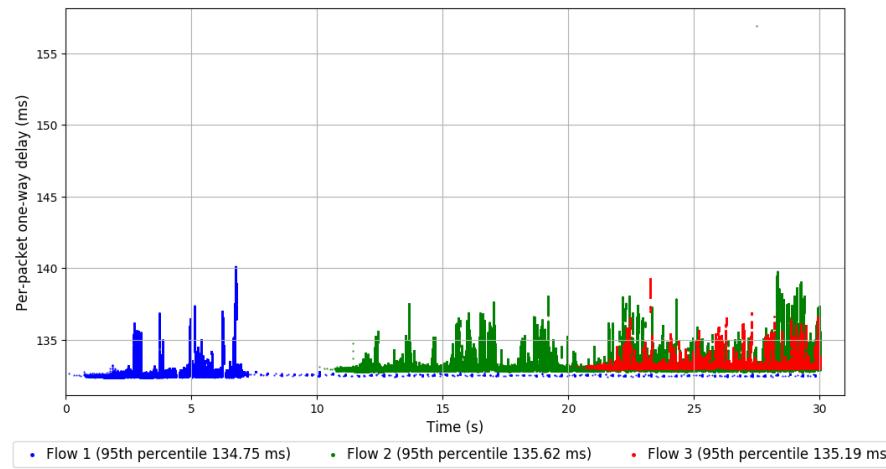
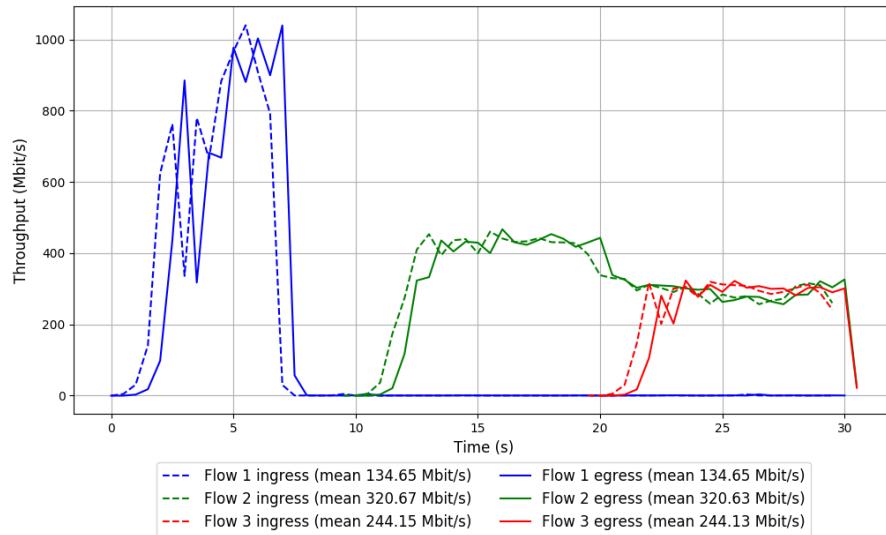


Run 3: Statistics of FillP

```
Start at: 2019-01-25 06:44:13
End at: 2019-01-25 06:44:43
Local clock offset: -0.12 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2019-01-25 09:41:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.51 Mbit/s
95th percentile per-packet one-way delay: 135.365 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 134.65 Mbit/s
95th percentile per-packet one-way delay: 134.750 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 320.63 Mbit/s
95th percentile per-packet one-way delay: 135.621 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 244.13 Mbit/s
95th percentile per-packet one-way delay: 135.187 ms
Loss rate: 0.00%
```

Run 3: Report of FillP — Data Link

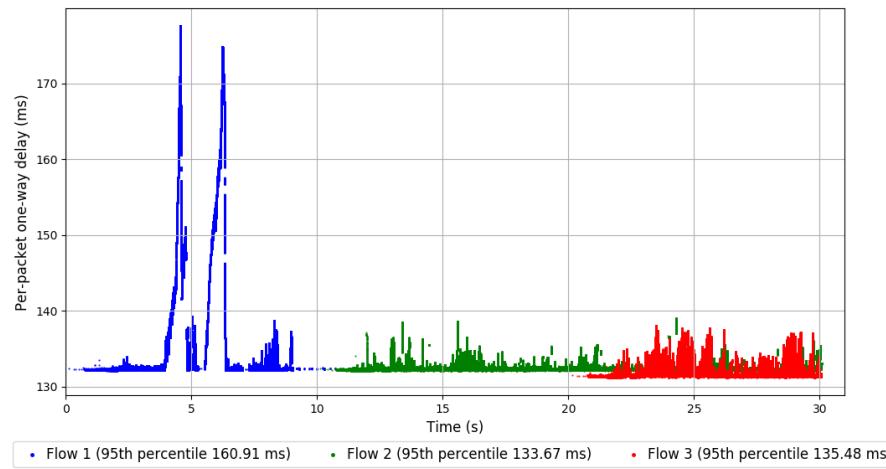
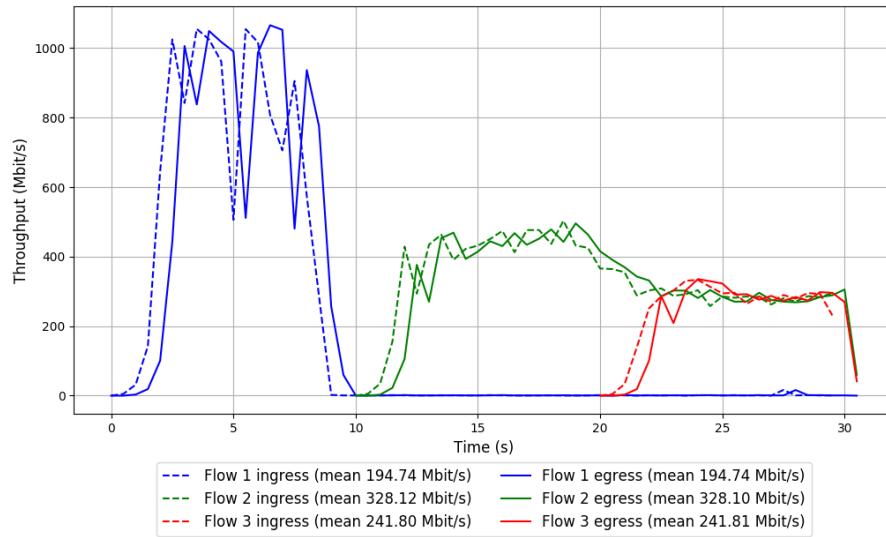


Run 4: Statistics of FillP

```
Start at: 2019-01-25 07:26:52
End at: 2019-01-25 07:27:22
Local clock offset: 0.328 ms
Remote clock offset: -0.512 ms

# Below is generated by plot.py at 2019-01-25 09:42:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.87 Mbit/s
95th percentile per-packet one-way delay: 149.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.74 Mbit/s
95th percentile per-packet one-way delay: 160.911 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 328.10 Mbit/s
95th percentile per-packet one-way delay: 133.666 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.81 Mbit/s
95th percentile per-packet one-way delay: 135.478 ms
Loss rate: 0.00%
```

Run 4: Report of FillP — Data Link

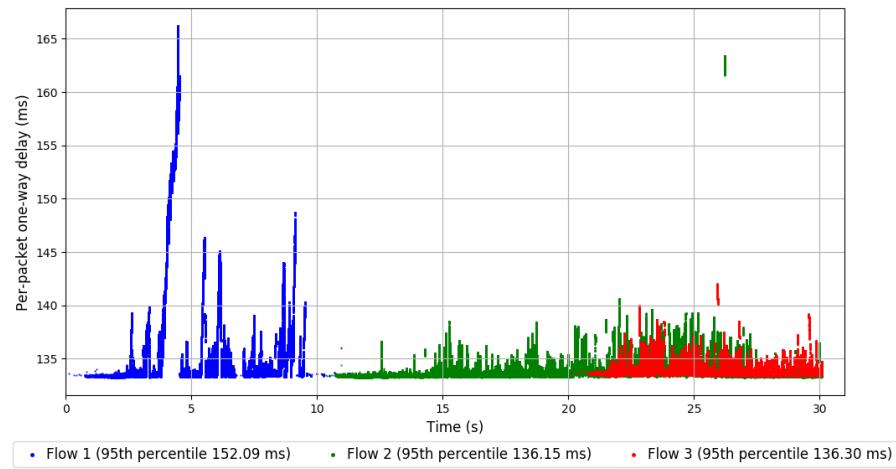
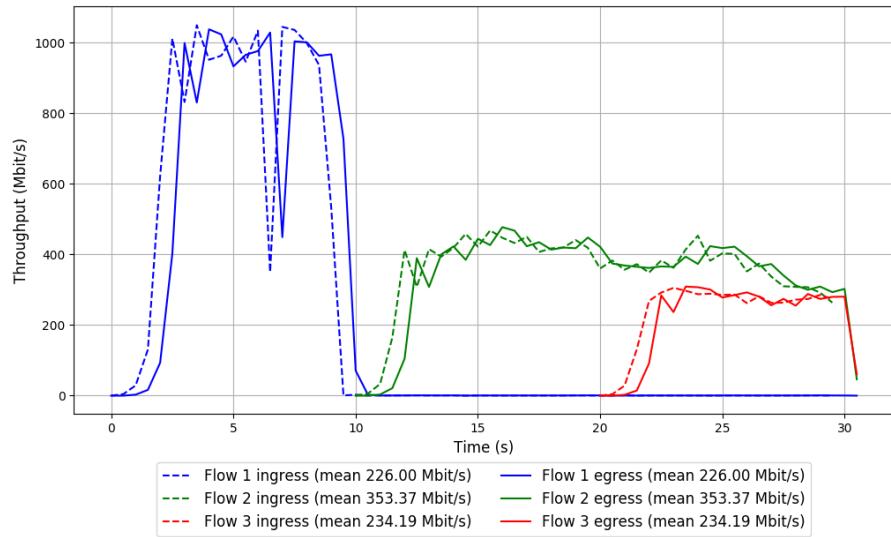


Run 5: Statistics of FillP

```
Start at: 2019-01-25 08:07:43
End at: 2019-01-25 08:08:13
Local clock offset: -0.408 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2019-01-25 09:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.44 Mbit/s
95th percentile per-packet one-way delay: 142.178 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 226.00 Mbit/s
95th percentile per-packet one-way delay: 152.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 353.37 Mbit/s
95th percentile per-packet one-way delay: 136.149 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.19 Mbit/s
95th percentile per-packet one-way delay: 136.303 ms
Loss rate: 0.00%
```

Run 5: Report of FillP — Data Link

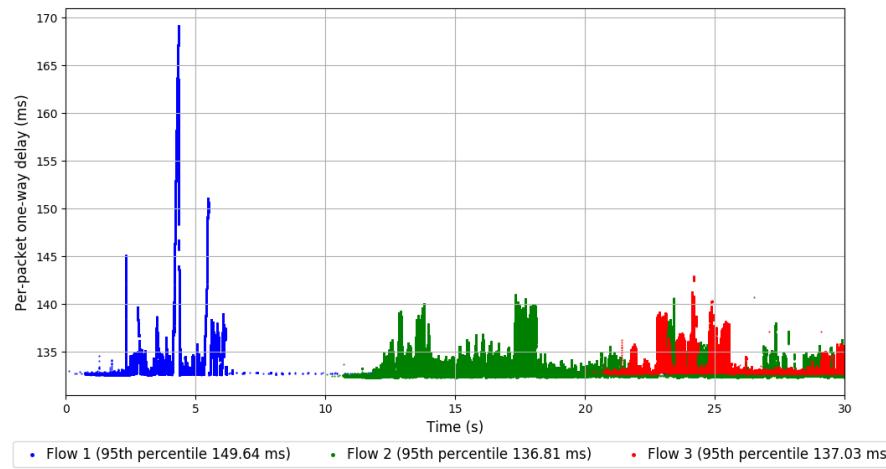
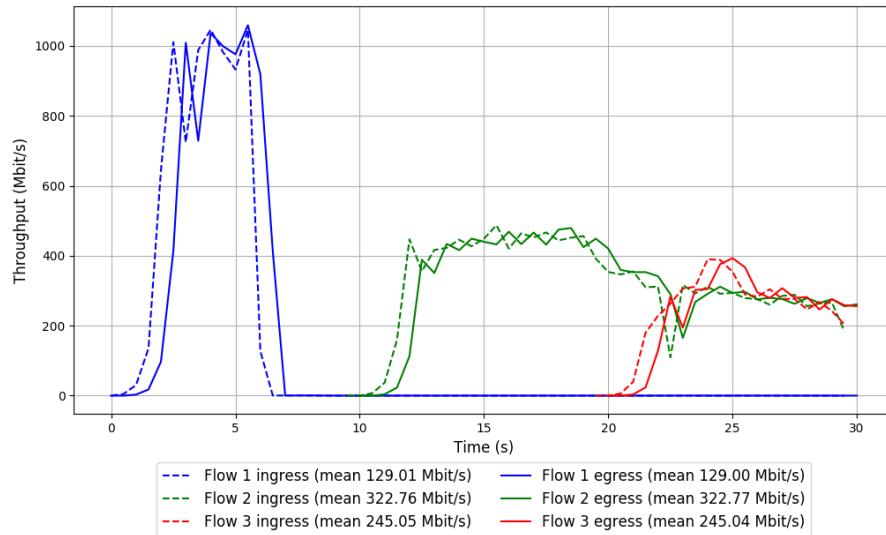


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-01-25 05:36:20
End at: 2019-01-25 05:36:50
Local clock offset: 0.204 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-01-25 09:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.15 Mbit/s
95th percentile per-packet one-way delay: 138.033 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 129.00 Mbit/s
95th percentile per-packet one-way delay: 149.636 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 322.77 Mbit/s
95th percentile per-packet one-way delay: 136.813 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 245.04 Mbit/s
95th percentile per-packet one-way delay: 137.028 ms
Loss rate: 0.01%
```

Run 1: Report of FillP-Sheep — Data Link

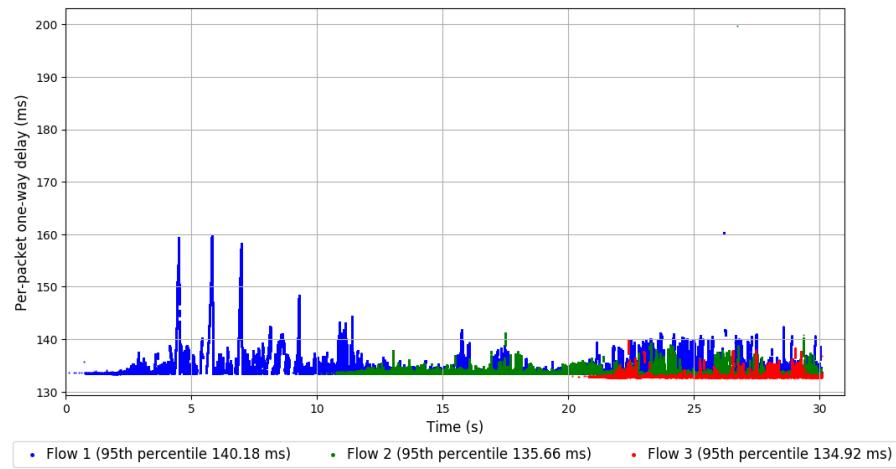
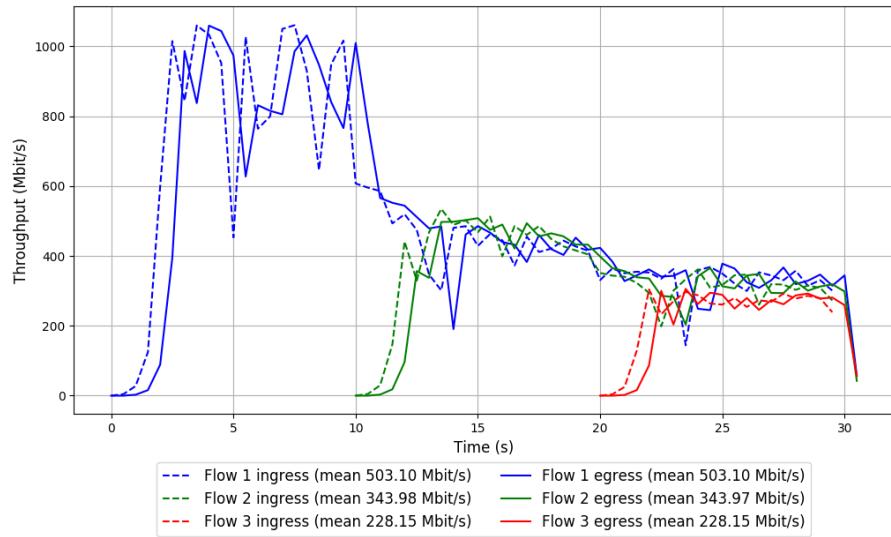


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-25 06:18:27
End at: 2019-01-25 06:18:57
Local clock offset: -0.519 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-01-25 09:51:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.38 Mbit/s
95th percentile per-packet one-way delay: 138.876 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 503.10 Mbit/s
95th percentile per-packet one-way delay: 140.182 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 343.97 Mbit/s
95th percentile per-packet one-way delay: 135.664 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 228.15 Mbit/s
95th percentile per-packet one-way delay: 134.917 ms
Loss rate: 0.00%
```

Run 2: Report of FillP-Sheep — Data Link

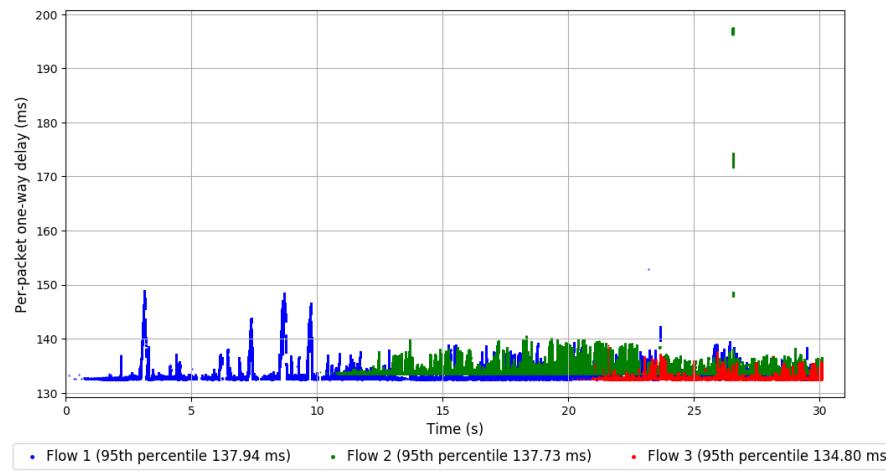
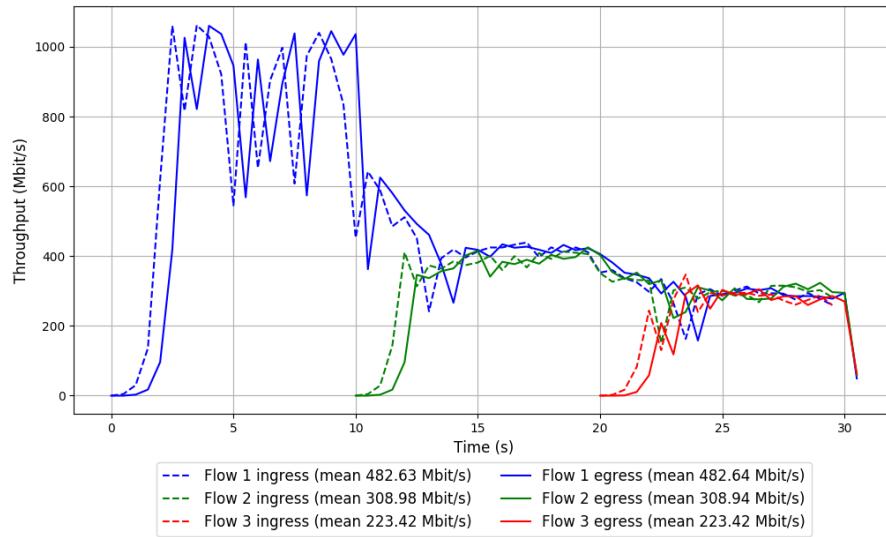


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-25 07:00:53
End at: 2019-01-25 07:01:23
Local clock offset: -0.527 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-01-25 09:51:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 762.37 Mbit/s
95th percentile per-packet one-way delay: 137.593 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 482.64 Mbit/s
95th percentile per-packet one-way delay: 137.937 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 308.94 Mbit/s
95th percentile per-packet one-way delay: 137.728 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 223.42 Mbit/s
95th percentile per-packet one-way delay: 134.797 ms
Loss rate: 0.00%
```

Run 3: Report of FillP-Sheep — Data Link

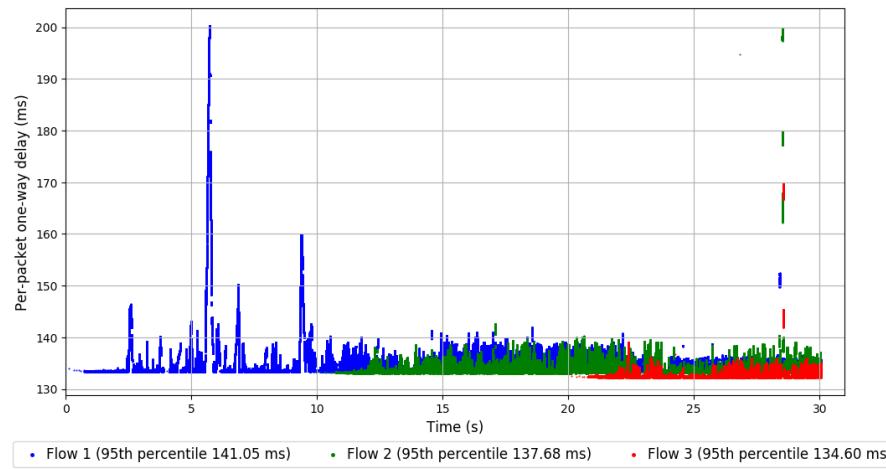
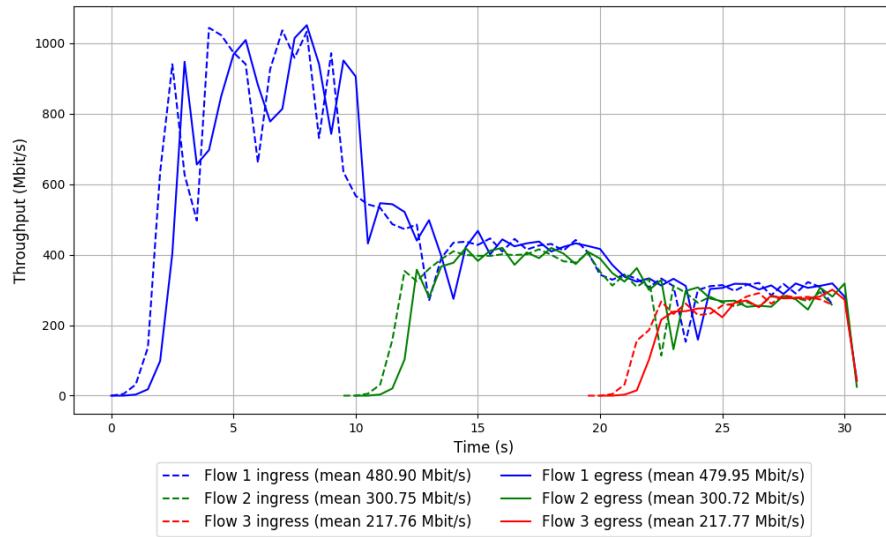


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-25 07:43:02
End at: 2019-01-25 07:43:32
Local clock offset: -0.321 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-01-25 09:56:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 752.52 Mbit/s
95th percentile per-packet one-way delay: 139.044 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 479.95 Mbit/s
95th percentile per-packet one-way delay: 141.051 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 300.72 Mbit/s
95th percentile per-packet one-way delay: 137.683 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 217.77 Mbit/s
95th percentile per-packet one-way delay: 134.597 ms
Loss rate: 0.00%
```

Run 4: Report of FillP-Sheep — Data Link

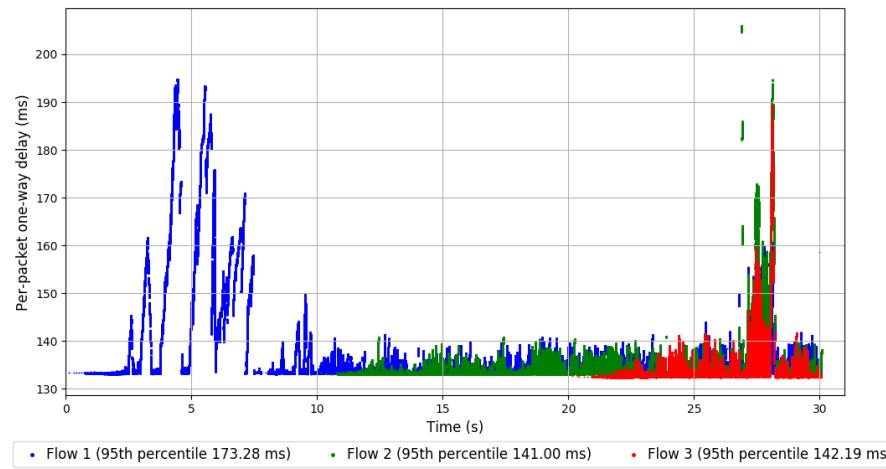
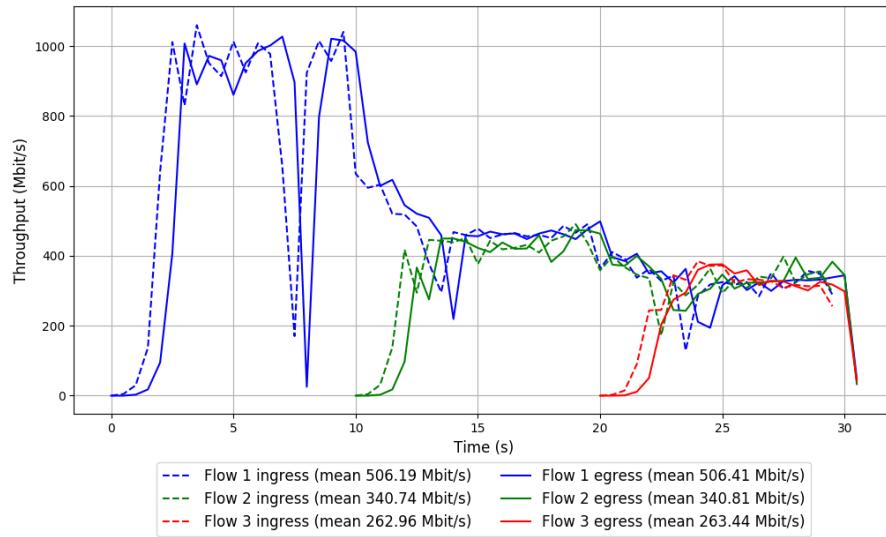


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-25 08:23:59
End at: 2019-01-25 08:24:29
Local clock offset: -0.102 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-01-25 09:59:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 820.02 Mbit/s
95th percentile per-packet one-way delay: 164.257 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 506.41 Mbit/s
95th percentile per-packet one-way delay: 173.277 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 340.81 Mbit/s
95th percentile per-packet one-way delay: 140.995 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.44 Mbit/s
95th percentile per-packet one-way delay: 142.186 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

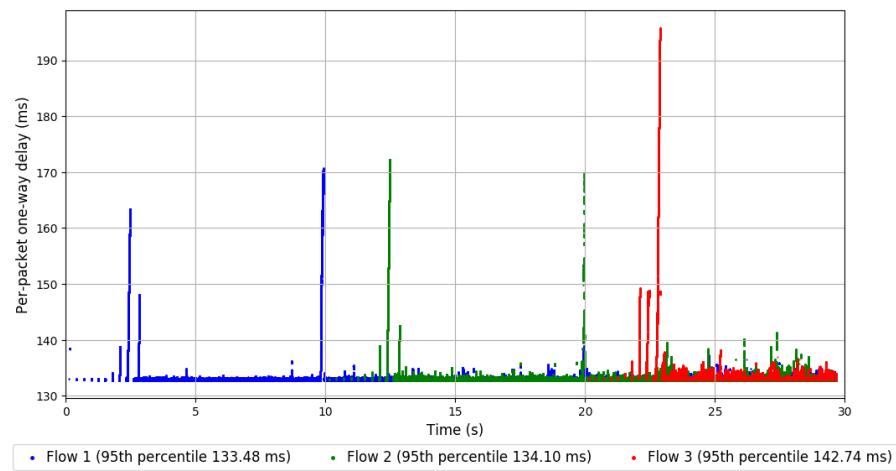
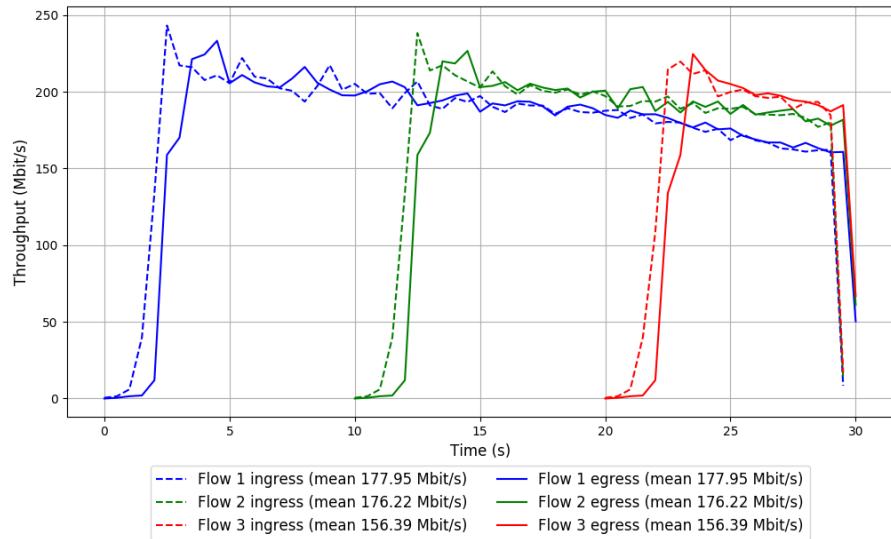


Run 1: Statistics of Indigo

```
Start at: 2019-01-25 05:38:14
End at: 2019-01-25 05:38:44
Local clock offset: 0.004 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2019-01-25 09:59:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.97 Mbit/s
95th percentile per-packet one-way delay: 134.151 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.95 Mbit/s
95th percentile per-packet one-way delay: 133.477 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 176.22 Mbit/s
95th percentile per-packet one-way delay: 134.101 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.39 Mbit/s
95th percentile per-packet one-way delay: 142.736 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

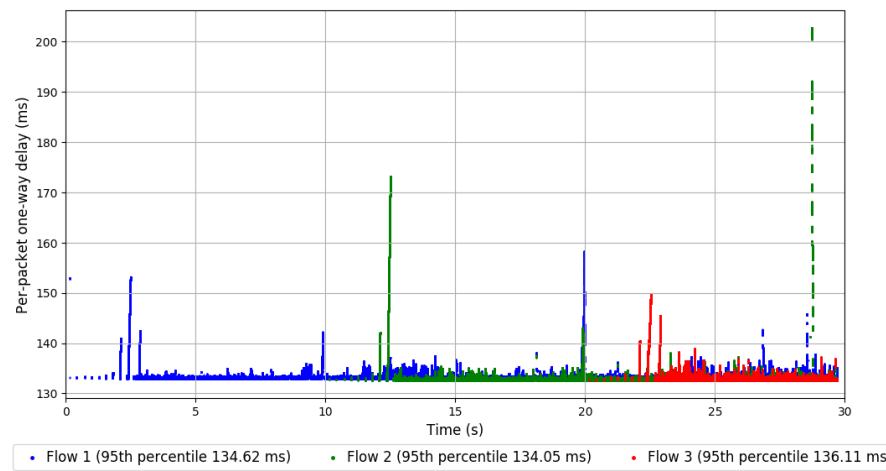
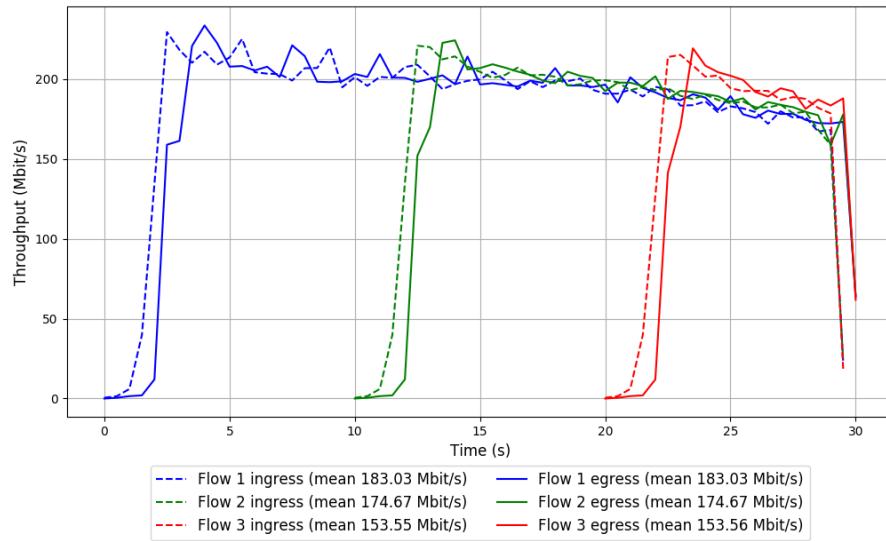


Run 2: Statistics of Indigo

```
Start at: 2019-01-25 06:20:38
End at: 2019-01-25 06:21:08
Local clock offset: 0.054 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-01-25 09:59:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 348.03 Mbit/s
95th percentile per-packet one-way delay: 134.547 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.03 Mbit/s
95th percentile per-packet one-way delay: 134.615 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.67 Mbit/s
95th percentile per-packet one-way delay: 134.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.56 Mbit/s
95th percentile per-packet one-way delay: 136.108 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

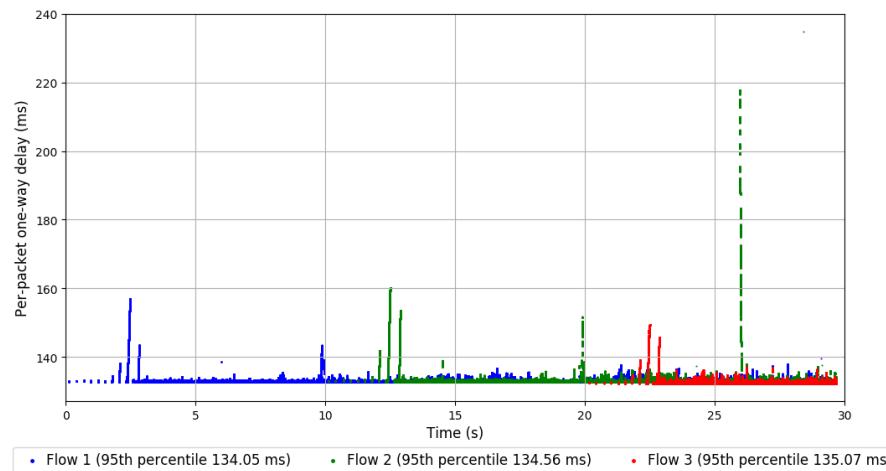
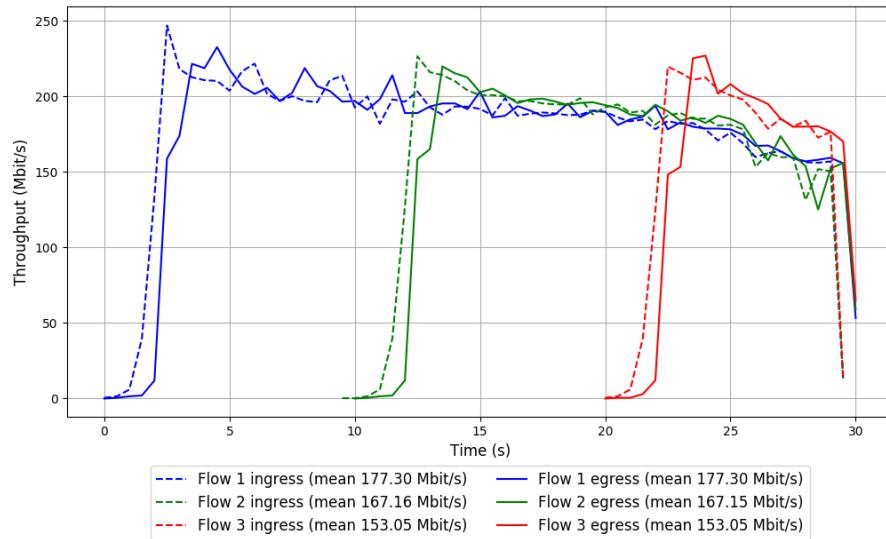


Run 3: Statistics of Indigo

```
Start at: 2019-01-25 07:02:51
End at: 2019-01-25 07:03:21
Local clock offset: 0.05 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2019-01-25 09:59:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.20 Mbit/s
95th percentile per-packet one-way delay: 134.282 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.30 Mbit/s
95th percentile per-packet one-way delay: 134.051 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.15 Mbit/s
95th percentile per-packet one-way delay: 134.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.05 Mbit/s
95th percentile per-packet one-way delay: 135.069 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

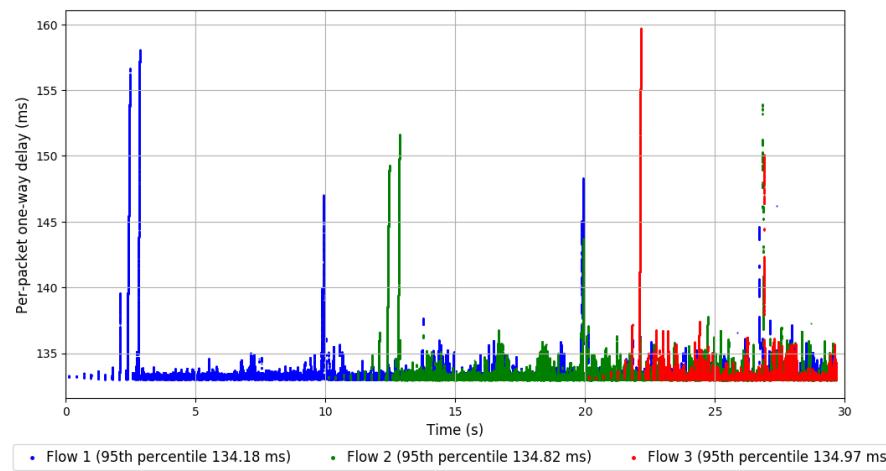
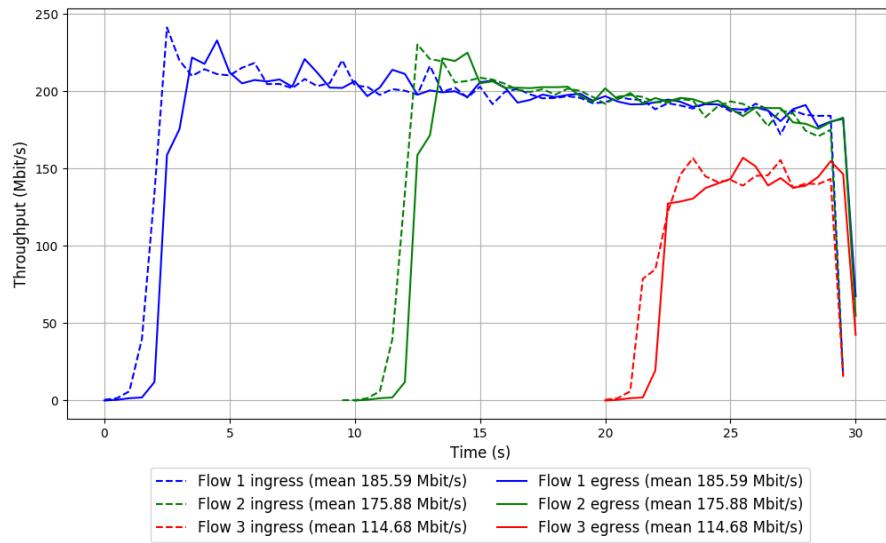


Run 4: Statistics of Indigo

```
Start at: 2019-01-25 07:45:00
End at: 2019-01-25 07:45:30
Local clock offset: -0.293 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2019-01-25 09:59:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.02 Mbit/s
95th percentile per-packet one-way delay: 134.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.59 Mbit/s
95th percentile per-packet one-way delay: 134.179 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 134.820 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 114.68 Mbit/s
95th percentile per-packet one-way delay: 134.965 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

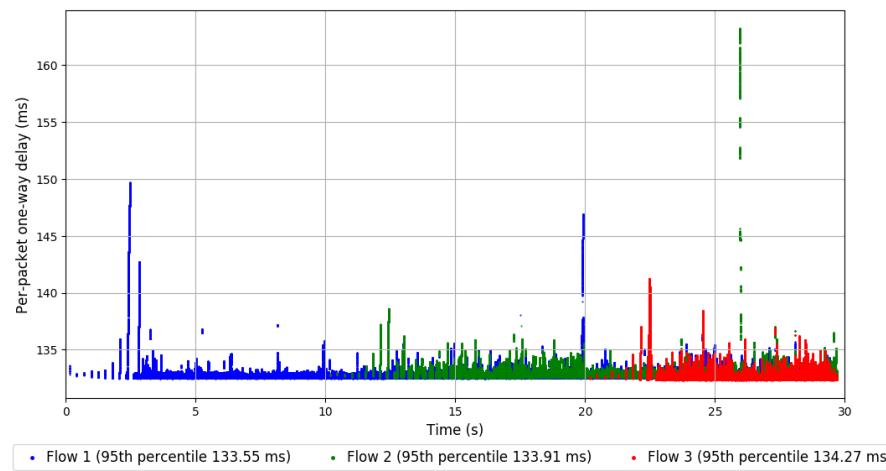
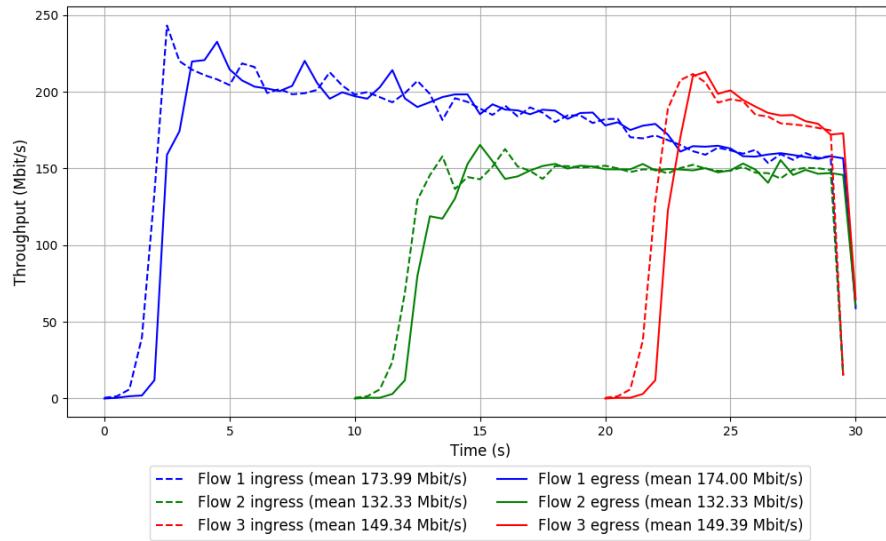


Run 5: Statistics of Indigo

```
Start at: 2019-01-25 08:26:00
End at: 2019-01-25 08:26:30
Local clock offset: 0.235 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2019-01-25 10:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.46 Mbit/s
95th percentile per-packet one-way delay: 133.782 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 174.00 Mbit/s
95th percentile per-packet one-way delay: 133.549 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 132.33 Mbit/s
95th percentile per-packet one-way delay: 133.912 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 149.39 Mbit/s
95th percentile per-packet one-way delay: 134.269 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo — Data Link

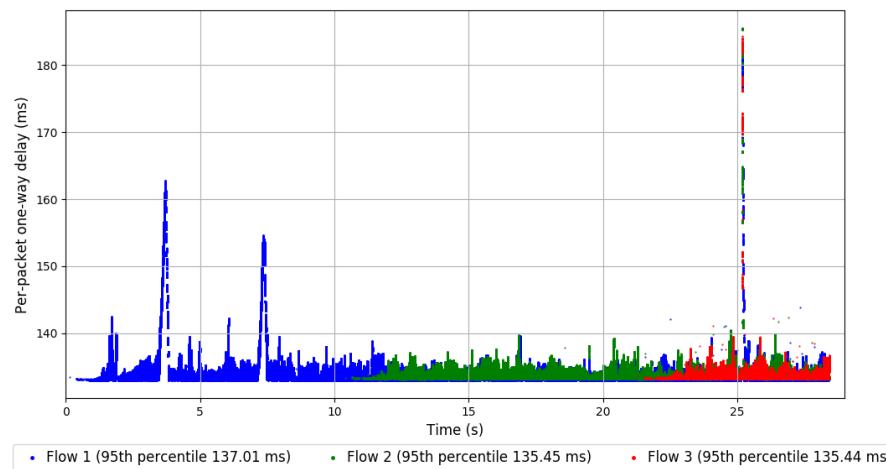
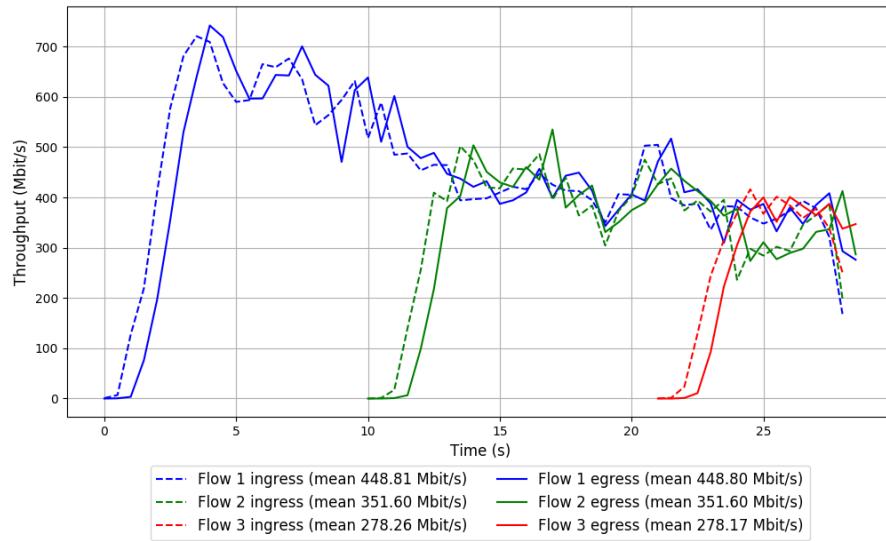


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 05:53:51
End at: 2019-01-25 05:54:21
Local clock offset: -0.338 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2019-01-25 10:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 742.61 Mbit/s
95th percentile per-packet one-way delay: 136.127 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 448.80 Mbit/s
95th percentile per-packet one-way delay: 137.015 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 351.60 Mbit/s
95th percentile per-packet one-way delay: 135.450 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 278.17 Mbit/s
95th percentile per-packet one-way delay: 135.438 ms
Loss rate: 0.03%
```

Run 1: Report of Indigo-MusesC3 — Data Link

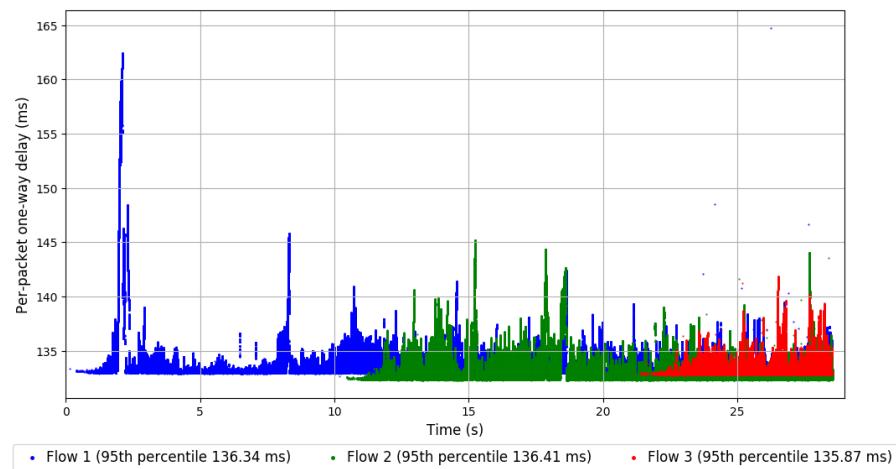
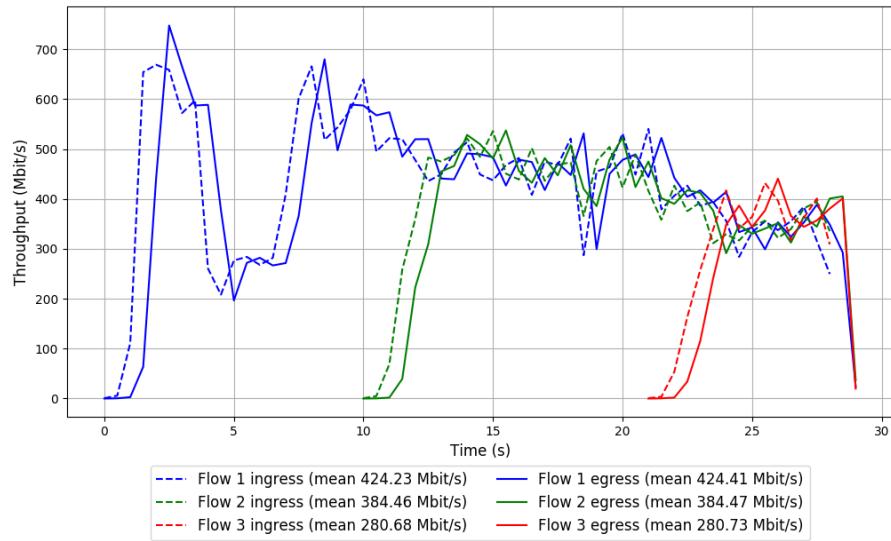


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 06:36:06
End at: 2019-01-25 06:36:36
Local clock offset: -0.089 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-01-25 10:09:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 745.64 Mbit/s
95th percentile per-packet one-way delay: 136.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 424.41 Mbit/s
95th percentile per-packet one-way delay: 136.342 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 384.47 Mbit/s
95th percentile per-packet one-way delay: 136.408 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 280.73 Mbit/s
95th percentile per-packet one-way delay: 135.867 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

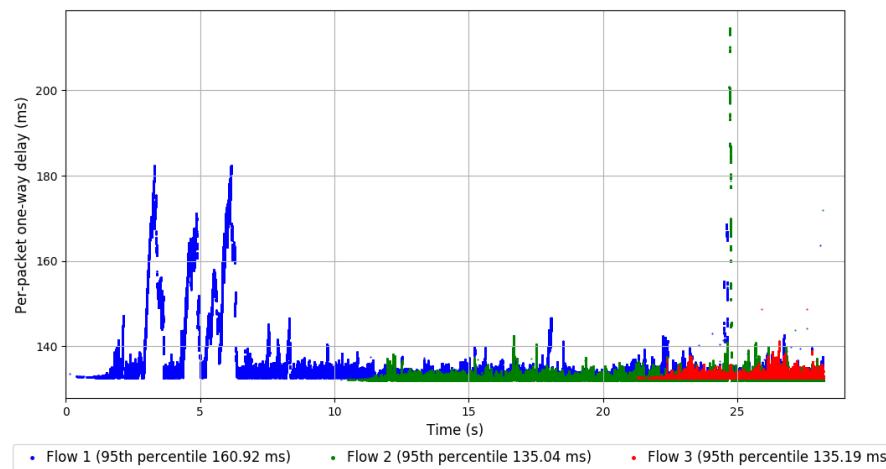
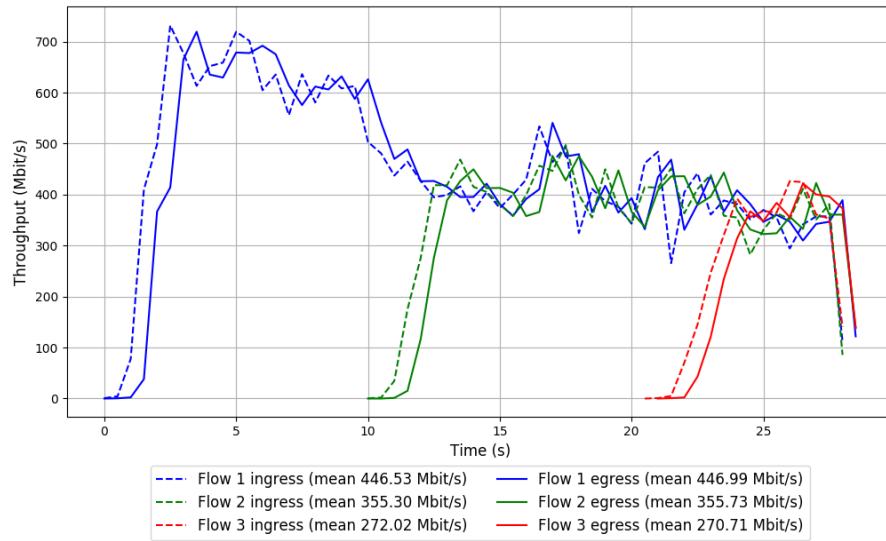


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 07:18:39
End at: 2019-01-25 07:19:09
Local clock offset: 0.245 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2019-01-25 10:09:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 744.00 Mbit/s
95th percentile per-packet one-way delay: 152.342 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 446.99 Mbit/s
95th percentile per-packet one-way delay: 160.917 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 355.73 Mbit/s
95th percentile per-packet one-way delay: 135.043 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 270.71 Mbit/s
95th percentile per-packet one-way delay: 135.190 ms
Loss rate: 1.86%
```

Run 3: Report of Indigo-MusesC3 — Data Link

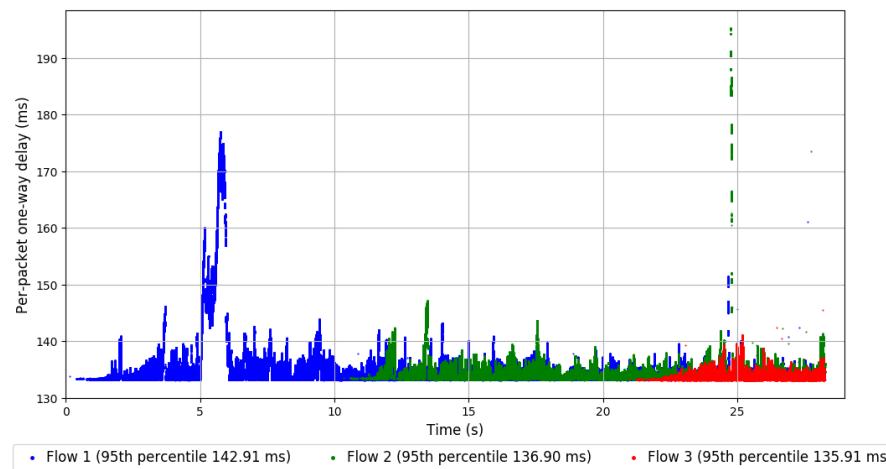
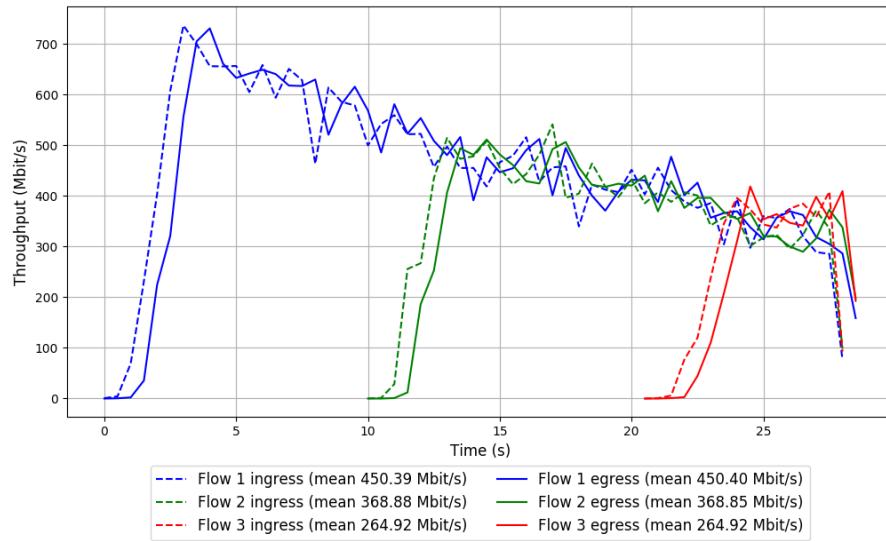


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 07:59:28
End at: 2019-01-25 07:59:58
Local clock offset: -0.122 ms
Remote clock offset: 0.299 ms

# Below is generated by plot.py at 2019-01-25 10:10:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 754.03 Mbit/s
95th percentile per-packet one-way delay: 139.063 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 450.40 Mbit/s
95th percentile per-packet one-way delay: 142.908 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 368.85 Mbit/s
95th percentile per-packet one-way delay: 136.896 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 264.92 Mbit/s
95th percentile per-packet one-way delay: 135.915 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

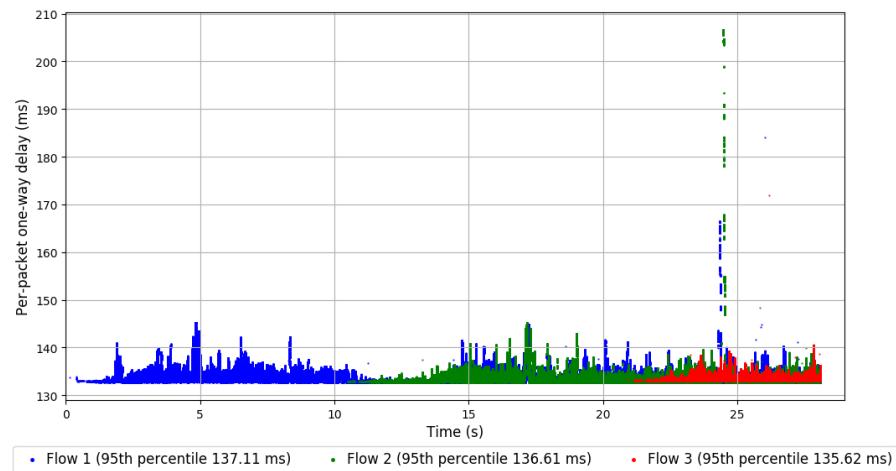
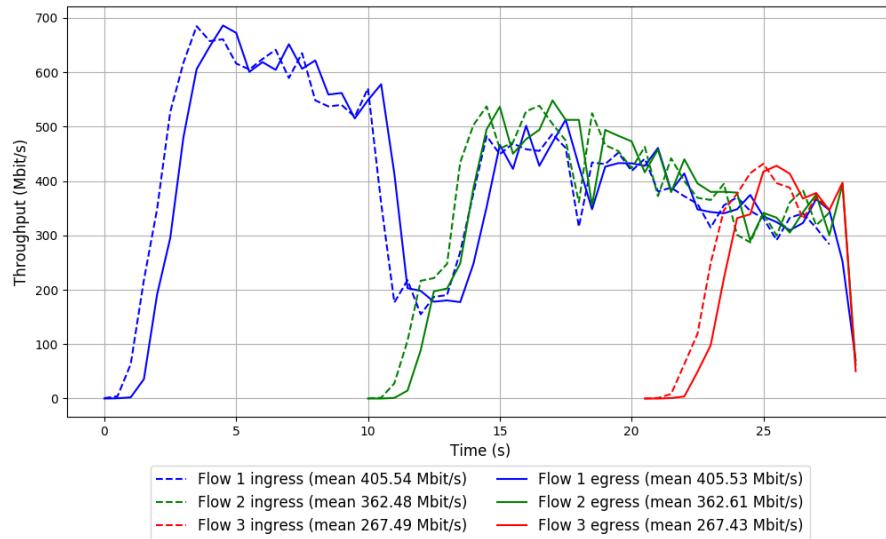


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-25 08:40:51
End at: 2019-01-25 08:41:21
Local clock offset: 0.143 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2019-01-25 10:10:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 705.77 Mbit/s
95th percentile per-packet one-way delay: 136.829 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 405.53 Mbit/s
95th percentile per-packet one-way delay: 137.108 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 362.61 Mbit/s
95th percentile per-packet one-way delay: 136.614 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 267.43 Mbit/s
95th percentile per-packet one-way delay: 135.623 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC3 — Data Link

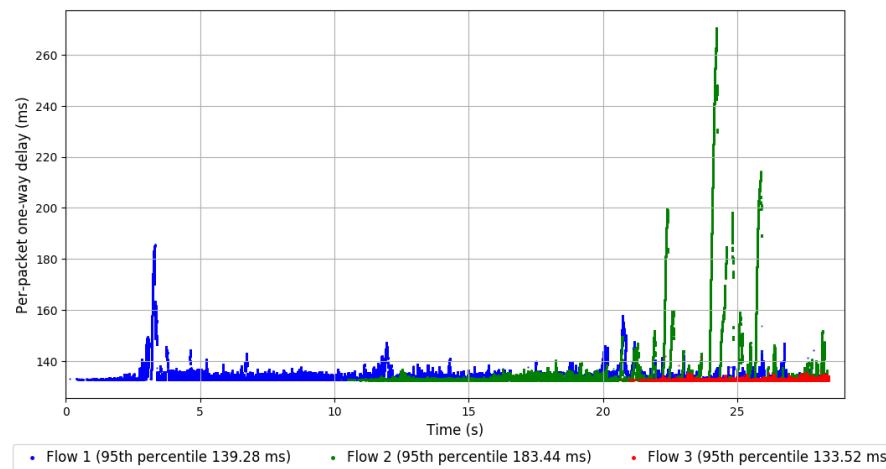
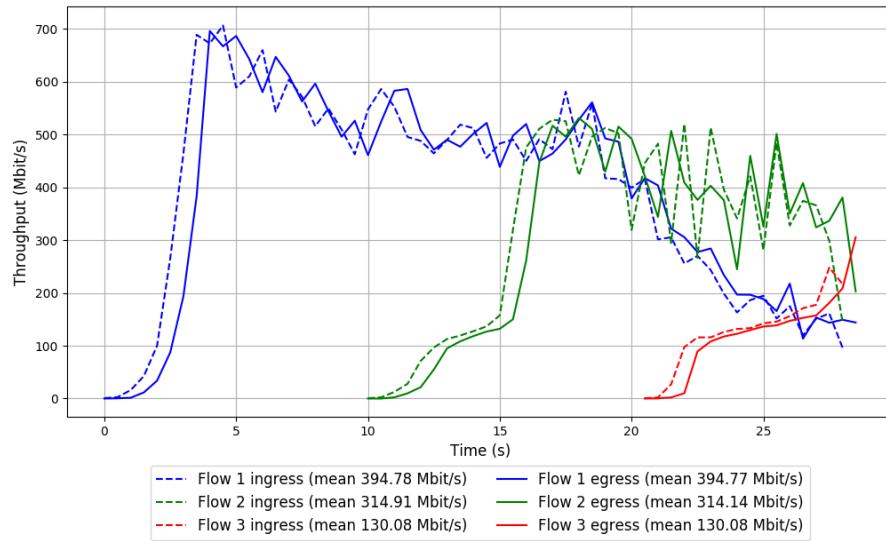


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 05:24:40
End at: 2019-01-25 05:25:10
Local clock offset: 0.198 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-01-25 10:10:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 631.77 Mbit/s
95th percentile per-packet one-way delay: 147.167 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 394.77 Mbit/s
95th percentile per-packet one-way delay: 139.284 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 314.14 Mbit/s
95th percentile per-packet one-way delay: 183.441 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 130.08 Mbit/s
95th percentile per-packet one-way delay: 133.524 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC5 — Data Link

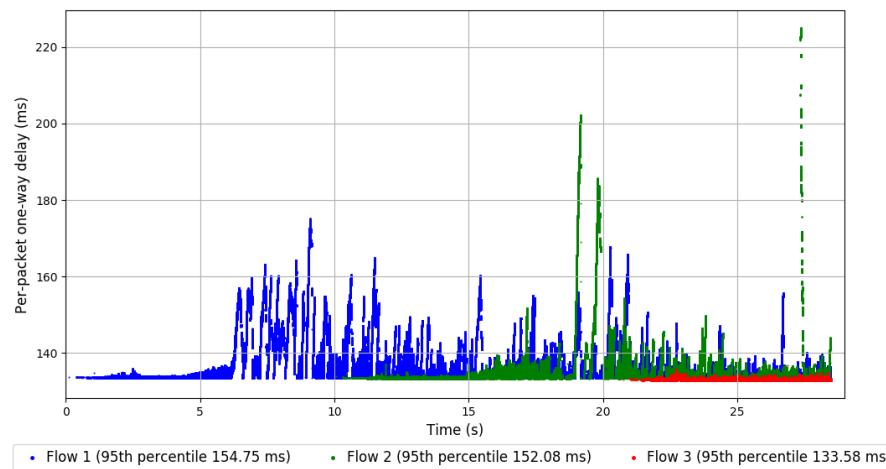
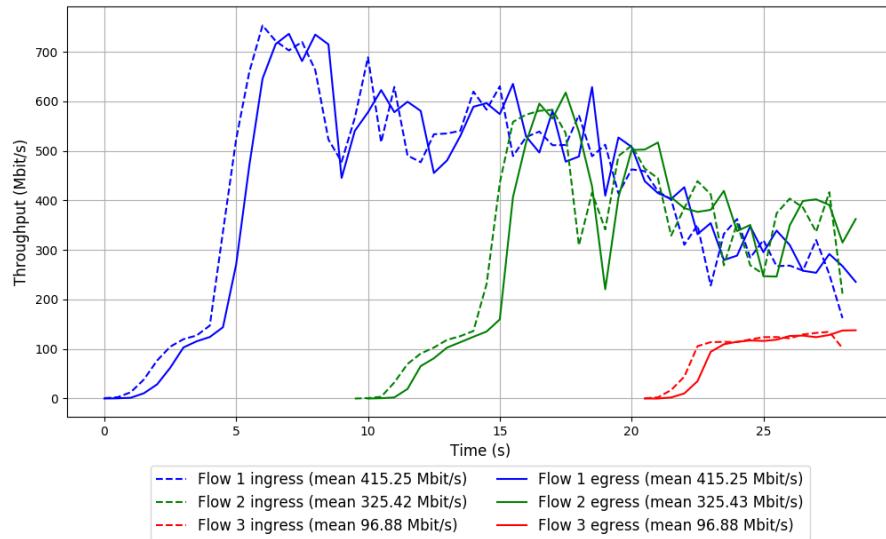


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 06:07:01
End at: 2019-01-25 06:07:31
Local clock offset: -0.518 ms
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2019-01-25 10:12:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 653.03 Mbit/s
95th percentile per-packet one-way delay: 154.331 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 415.25 Mbit/s
95th percentile per-packet one-way delay: 154.749 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 325.43 Mbit/s
95th percentile per-packet one-way delay: 152.080 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.88 Mbit/s
95th percentile per-packet one-way delay: 133.576 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

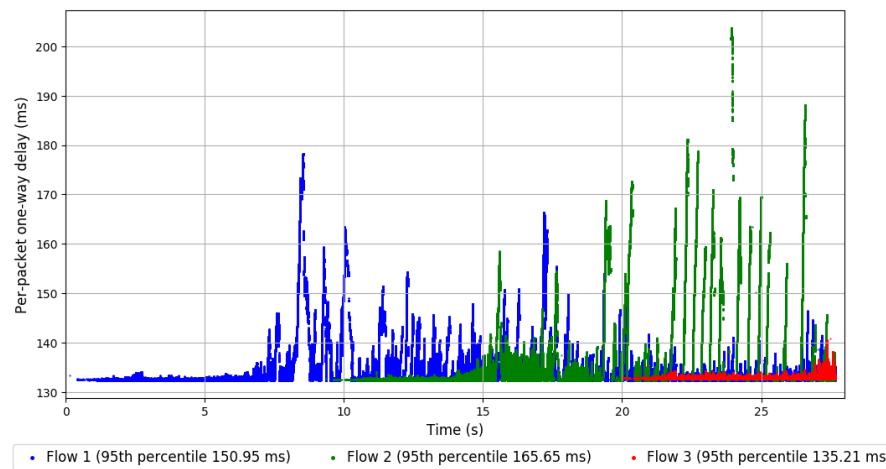
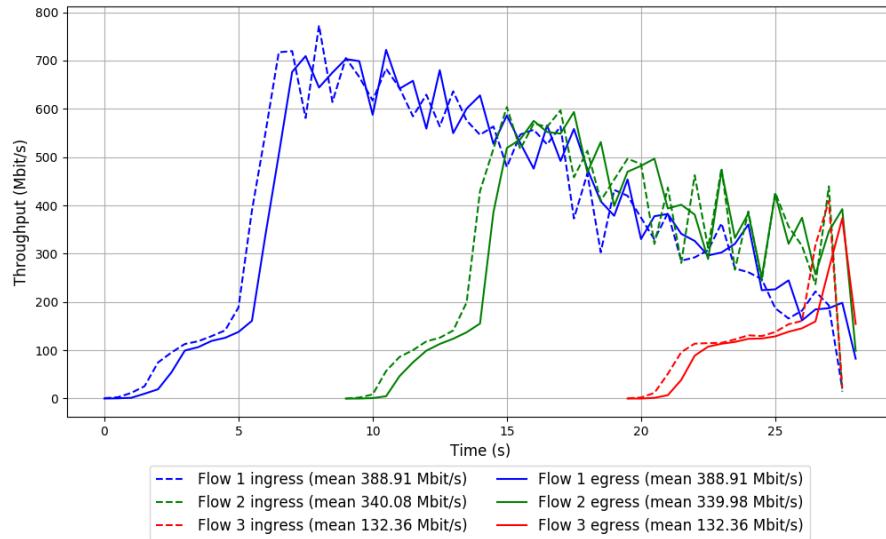


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 06:49:07
End at: 2019-01-25 06:49:37
Local clock offset: 0.274 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-01-25 10:15:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 652.59 Mbit/s
95th percentile per-packet one-way delay: 158.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 388.91 Mbit/s
95th percentile per-packet one-way delay: 150.954 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 339.98 Mbit/s
95th percentile per-packet one-way delay: 165.653 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.36 Mbit/s
95th percentile per-packet one-way delay: 135.212 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

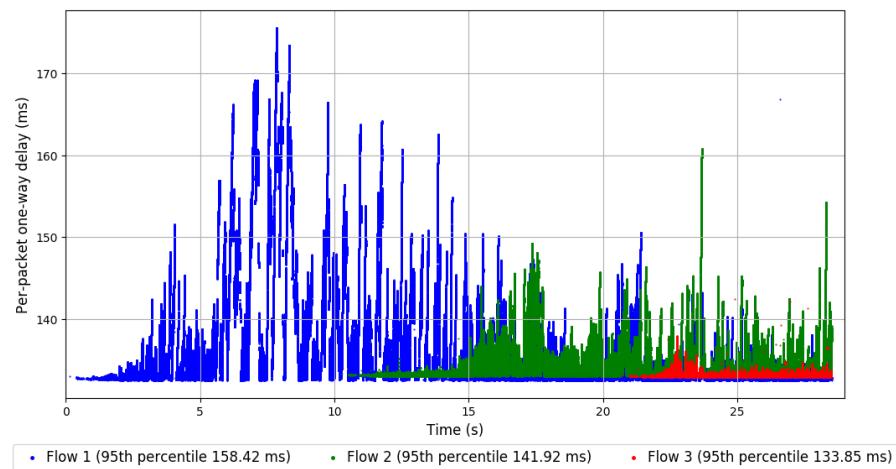
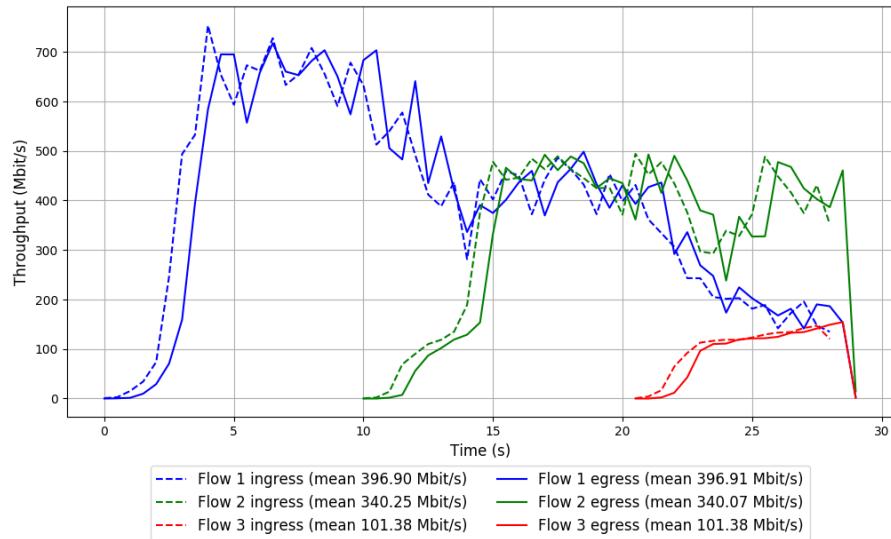


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 07:31:49
End at: 2019-01-25 07:32:19
Local clock offset: -0.104 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2019-01-25 10:18:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 643.18 Mbit/s
95th percentile per-packet one-way delay: 153.443 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 396.91 Mbit/s
95th percentile per-packet one-way delay: 158.424 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 340.07 Mbit/s
95th percentile per-packet one-way delay: 141.920 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 101.38 Mbit/s
95th percentile per-packet one-way delay: 133.851 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

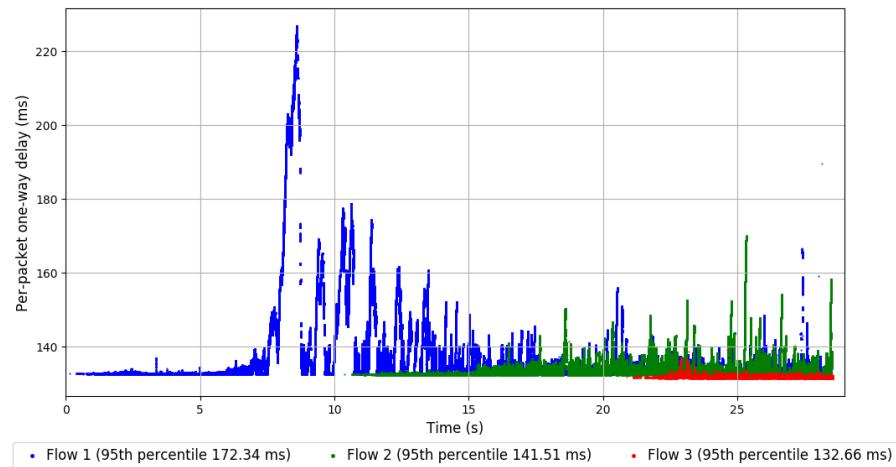
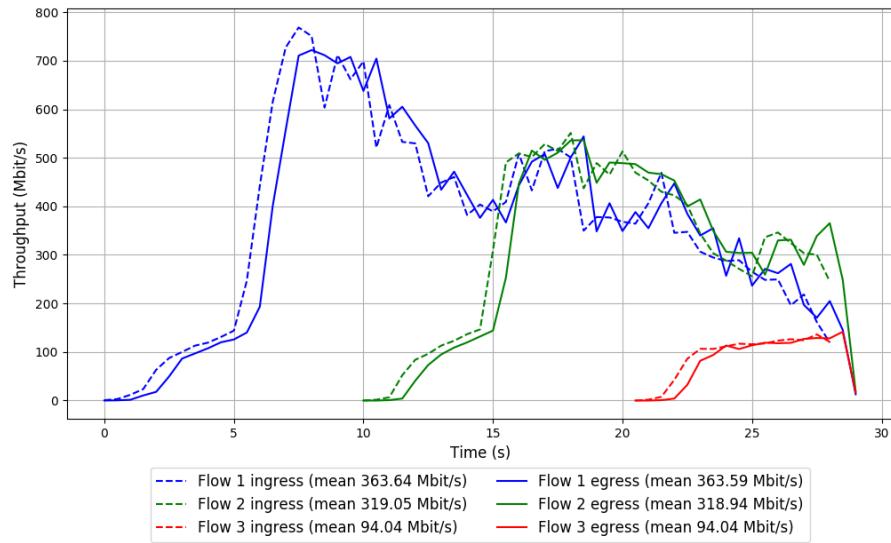


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-25 08:12:47
End at: 2019-01-25 08:13:17
Local clock offset: 0.255 ms
Remote clock offset: -0.243 ms

# Below is generated by plot.py at 2019-01-25 10:20:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 592.06 Mbit/s
95th percentile per-packet one-way delay: 161.985 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 363.59 Mbit/s
95th percentile per-packet one-way delay: 172.341 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 318.94 Mbit/s
95th percentile per-packet one-way delay: 141.514 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.04 Mbit/s
95th percentile per-packet one-way delay: 132.660 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

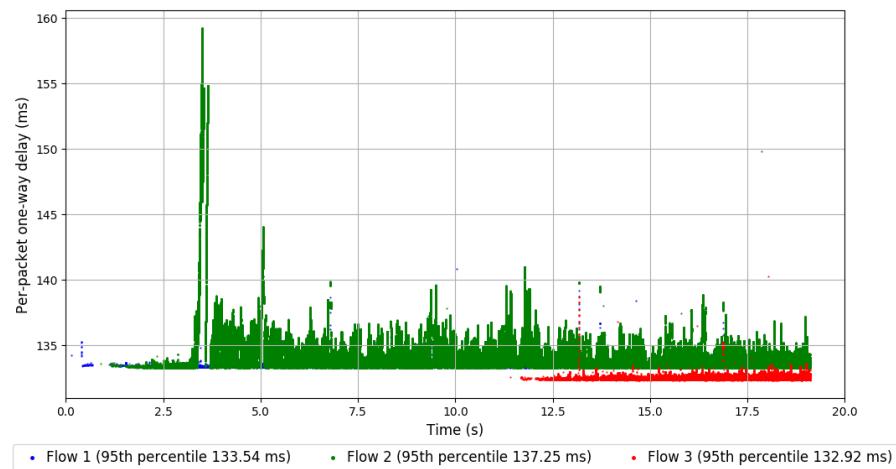
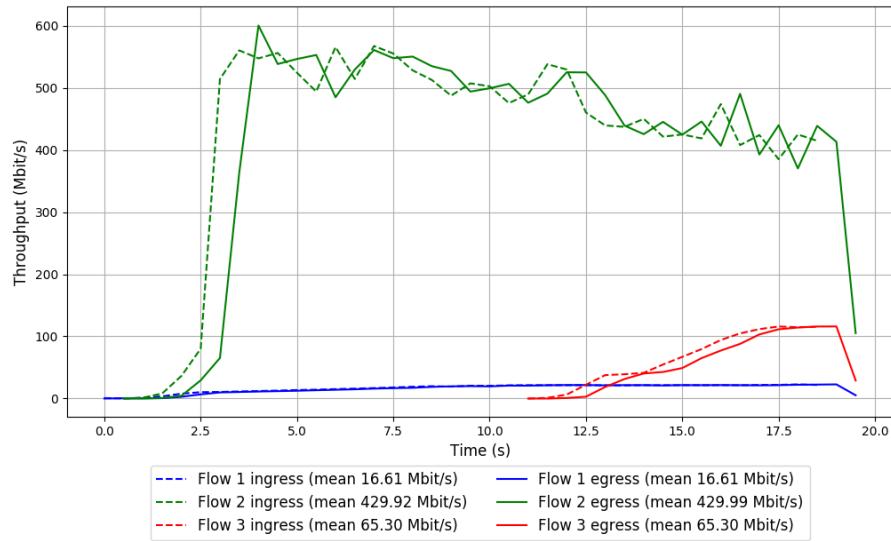
Start at: 2019-01-25 05:14:32

End at: 2019-01-25 05:15:02

Local clock offset: -0.52 ms

Remote clock offset: -0.02 ms

Run 1: Report of Indigo-MusesD — Data Link

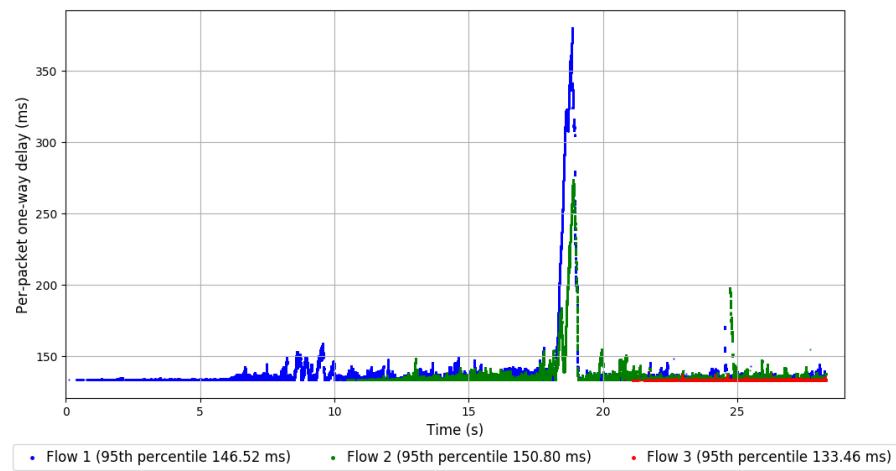
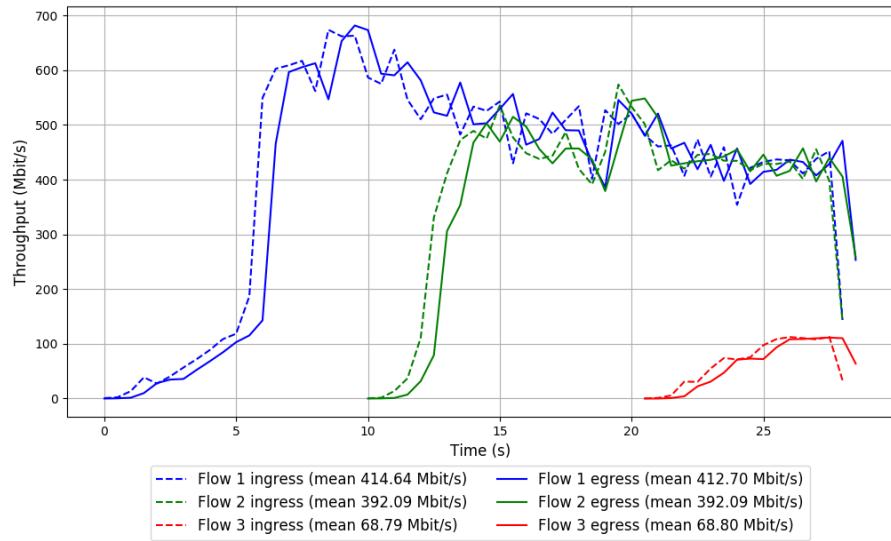


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 05:55:56
End at: 2019-01-25 05:56:26
Local clock offset: -0.26 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-01-25 10:22:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 682.74 Mbit/s
95th percentile per-packet one-way delay: 147.565 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 412.70 Mbit/s
95th percentile per-packet one-way delay: 146.520 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 392.09 Mbit/s
95th percentile per-packet one-way delay: 150.803 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 68.80 Mbit/s
95th percentile per-packet one-way delay: 133.459 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

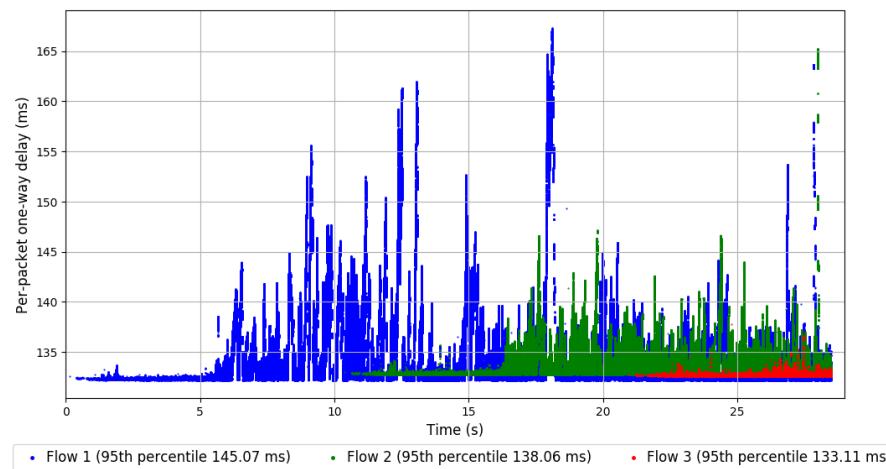
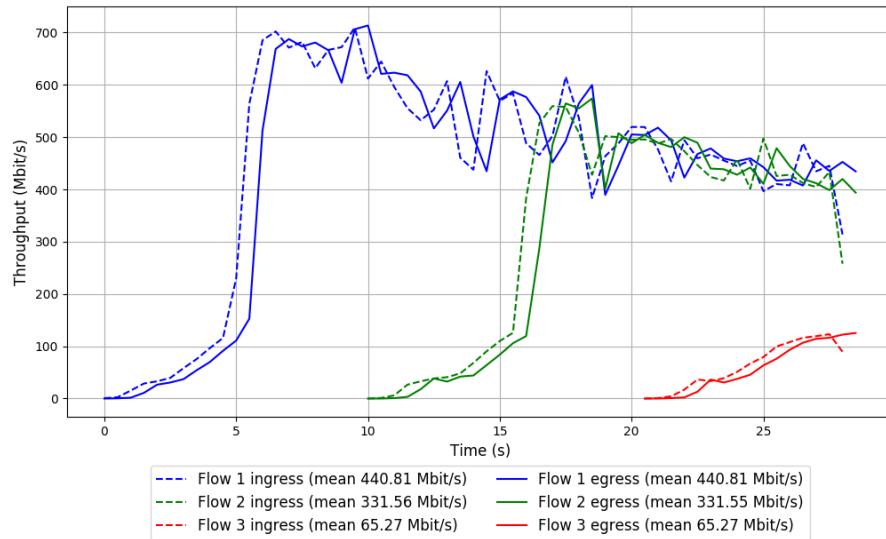


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 06:38:21
End at: 2019-01-25 06:38:51
Local clock offset: 0.046 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-01-25 10:22:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 669.82 Mbit/s
95th percentile per-packet one-way delay: 142.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 440.81 Mbit/s
95th percentile per-packet one-way delay: 145.075 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 331.55 Mbit/s
95th percentile per-packet one-way delay: 138.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.27 Mbit/s
95th percentile per-packet one-way delay: 133.114 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

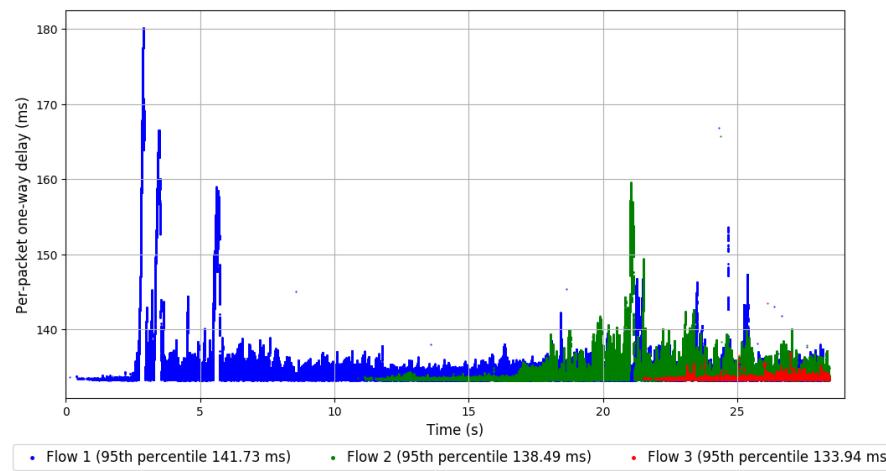
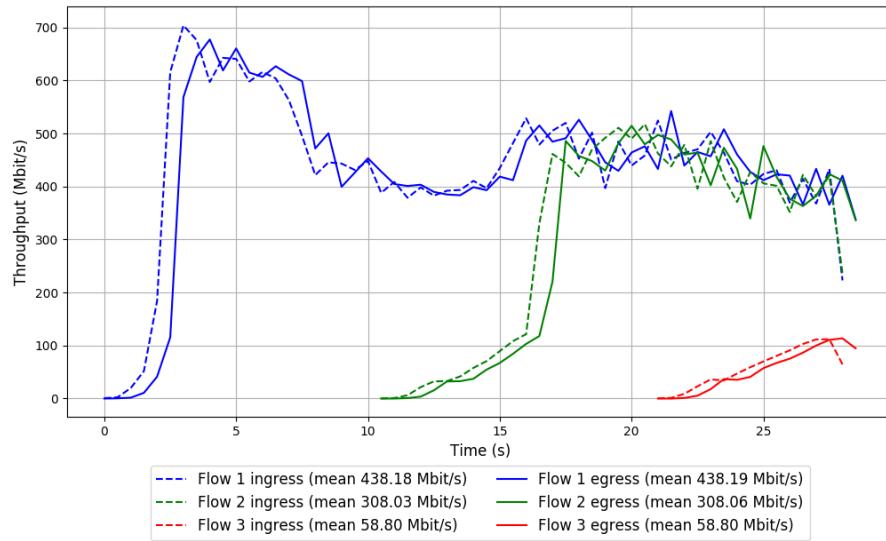


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 07:20:42
End at: 2019-01-25 07:21:12
Local clock offset: -0.486 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-01-25 10:22:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 644.25 Mbit/s
95th percentile per-packet one-way delay: 139.668 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 438.19 Mbit/s
95th percentile per-packet one-way delay: 141.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 308.06 Mbit/s
95th percentile per-packet one-way delay: 138.486 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 133.940 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

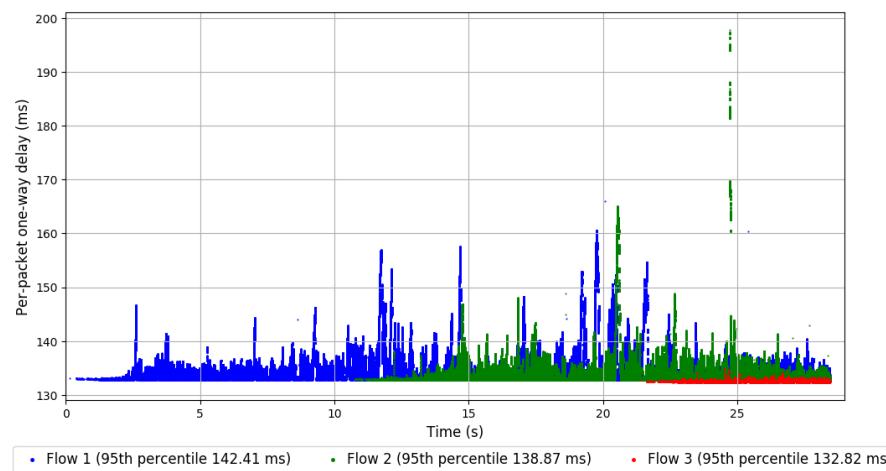
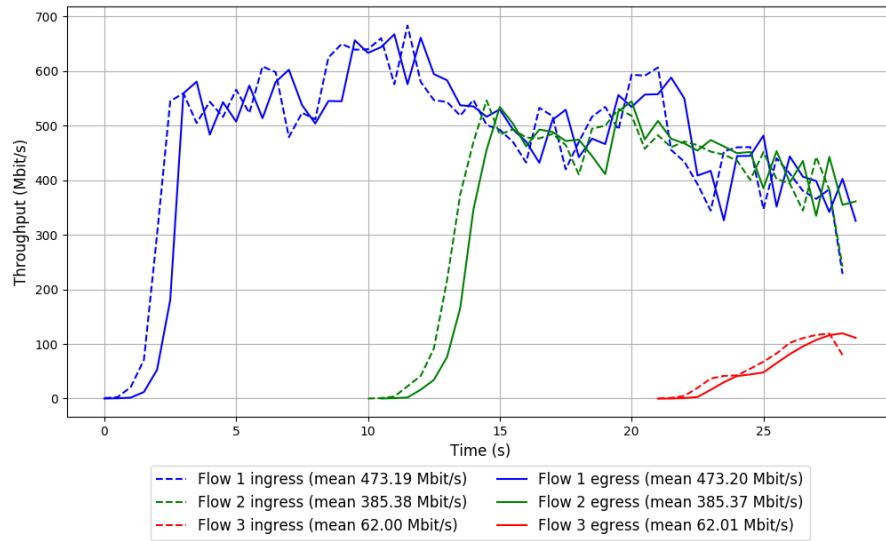


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-25 08:01:35
End at: 2019-01-25 08:02:05
Local clock offset: 0.005 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-01-25 10:26:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 732.83 Mbit/s
95th percentile per-packet one-way delay: 141.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 473.20 Mbit/s
95th percentile per-packet one-way delay: 142.413 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 385.37 Mbit/s
95th percentile per-packet one-way delay: 138.874 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.01 Mbit/s
95th percentile per-packet one-way delay: 132.821 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

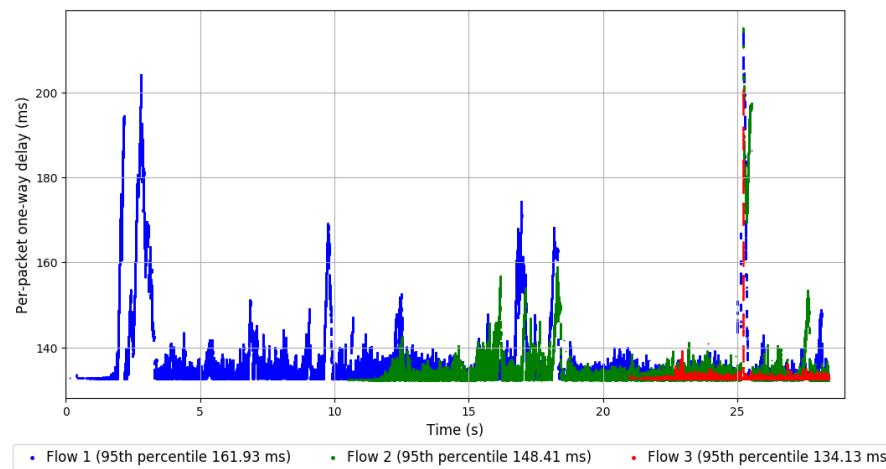
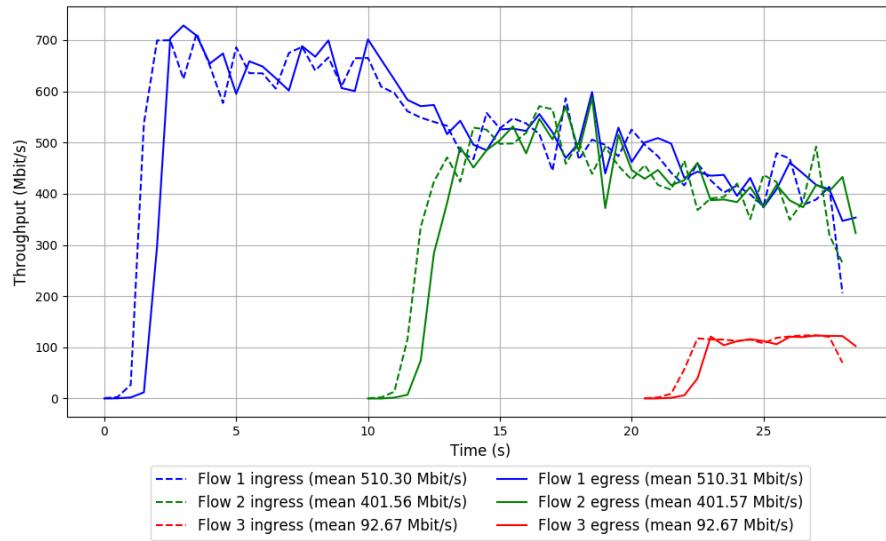


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 05:32:14
End at: 2019-01-25 05:32:44
Local clock offset: -0.443 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-01-25 10:29:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 793.69 Mbit/s
95th percentile per-packet one-way delay: 156.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 510.31 Mbit/s
95th percentile per-packet one-way delay: 161.929 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 401.57 Mbit/s
95th percentile per-packet one-way delay: 148.415 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 92.67 Mbit/s
95th percentile per-packet one-way delay: 134.131 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesT — Data Link

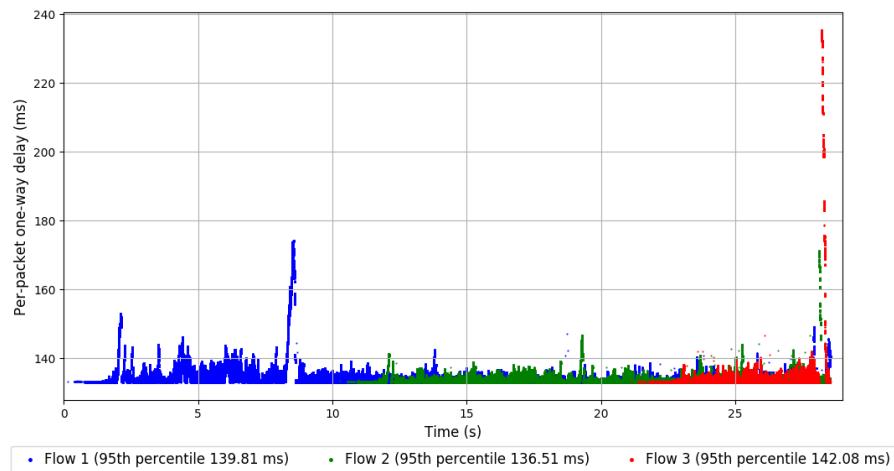
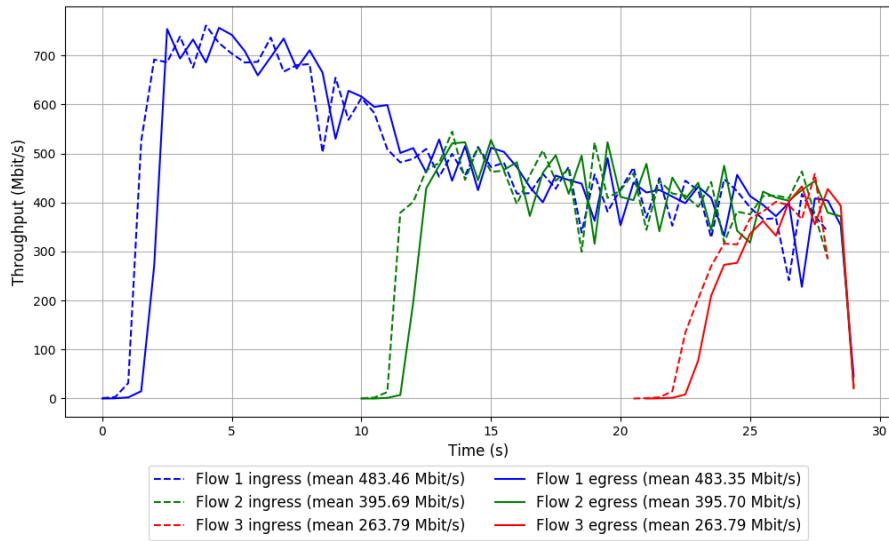


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 06:14:14
End at: 2019-01-25 06:14:44
Local clock offset: -0.093 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2019-01-25 10:30:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 806.45 Mbit/s
95th percentile per-packet one-way delay: 138.867 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 483.35 Mbit/s
95th percentile per-packet one-way delay: 139.814 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 395.70 Mbit/s
95th percentile per-packet one-way delay: 136.508 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.79 Mbit/s
95th percentile per-packet one-way delay: 142.081 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesT — Data Link

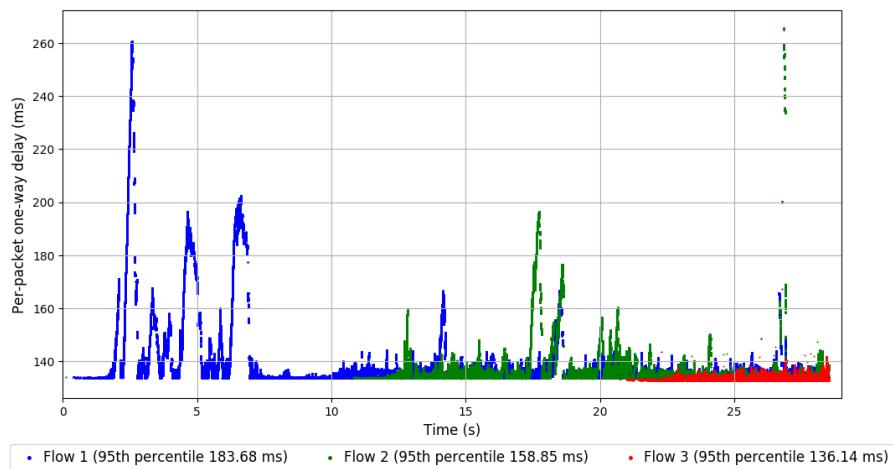
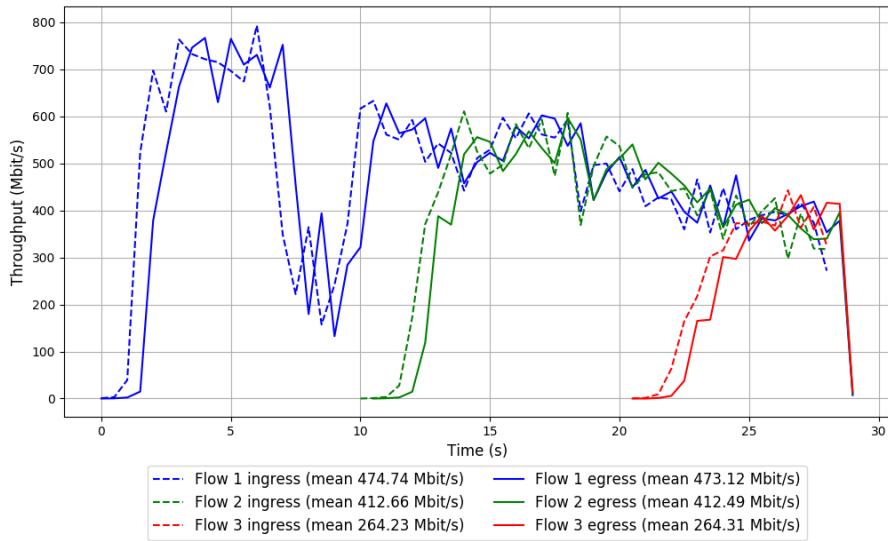


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 06:56:13
End at: 2019-01-25 06:56:43
Local clock offset: -0.518 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2019-01-25 10:33:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 806.08 Mbit/s
95th percentile per-packet one-way delay: 173.690 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 473.12 Mbit/s
95th percentile per-packet one-way delay: 183.680 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 412.49 Mbit/s
95th percentile per-packet one-way delay: 158.852 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 264.31 Mbit/s
95th percentile per-packet one-way delay: 136.140 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesT — Data Link

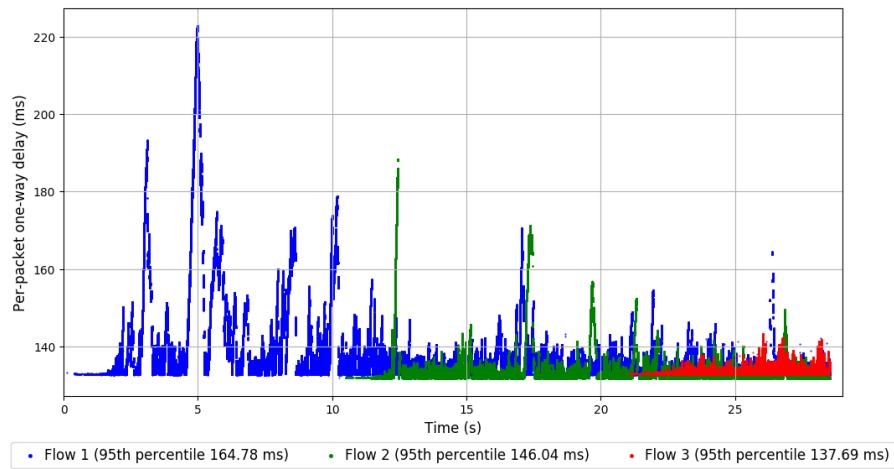
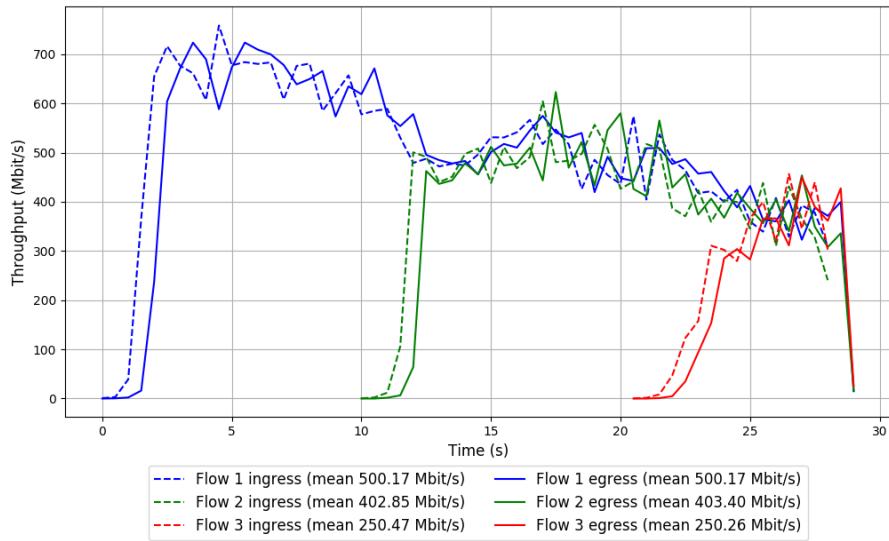


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 07:38:39
End at: 2019-01-25 07:39:09
Local clock offset: 0.11 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2019-01-25 10:35:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 827.69 Mbit/s
95th percentile per-packet one-way delay: 160.527 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 500.17 Mbit/s
95th percentile per-packet one-way delay: 164.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 403.40 Mbit/s
95th percentile per-packet one-way delay: 146.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 250.26 Mbit/s
95th percentile per-packet one-way delay: 137.687 ms
Loss rate: 0.08%
```

Run 4: Report of Indigo-MusesT — Data Link

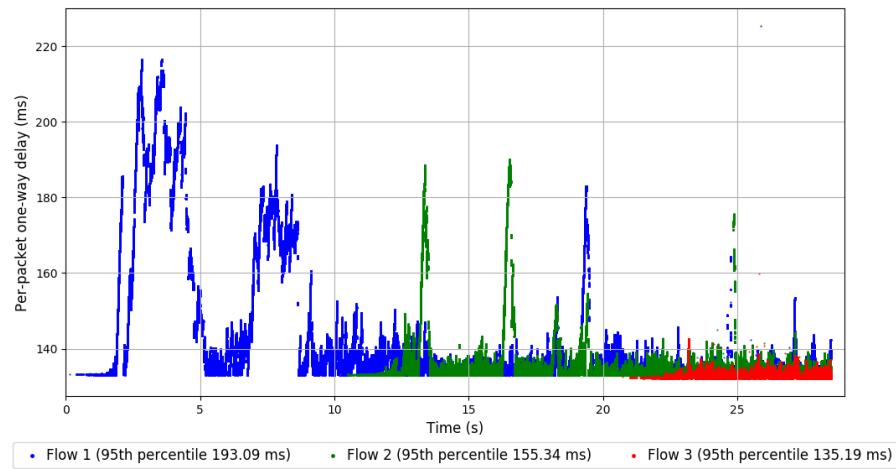
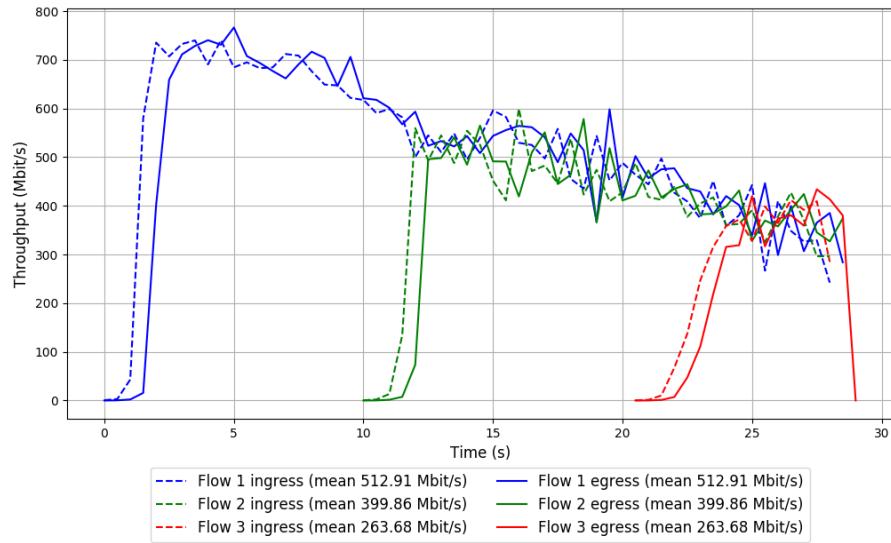


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-25 08:19:53
End at: 2019-01-25 08:20:23
Local clock offset: -0.106 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2019-01-25 10:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 842.76 Mbit/s
95th percentile per-packet one-way delay: 185.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 512.91 Mbit/s
95th percentile per-packet one-way delay: 193.088 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 399.86 Mbit/s
95th percentile per-packet one-way delay: 155.339 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 263.68 Mbit/s
95th percentile per-packet one-way delay: 135.195 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesT — Data Link

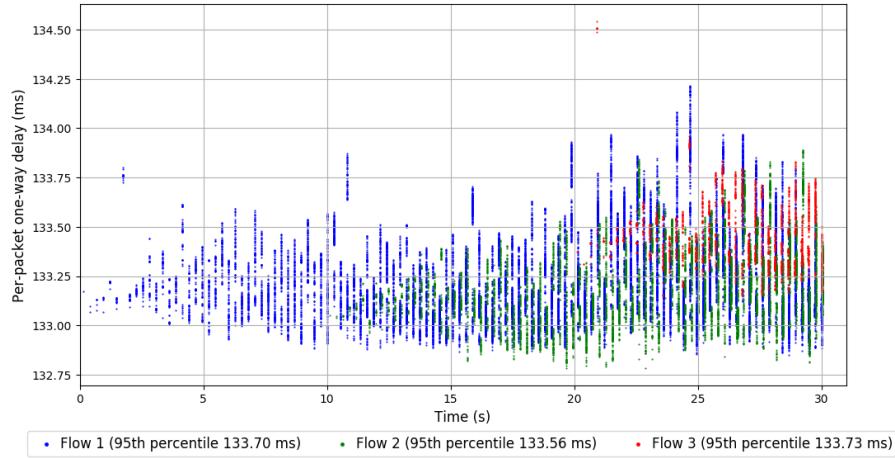
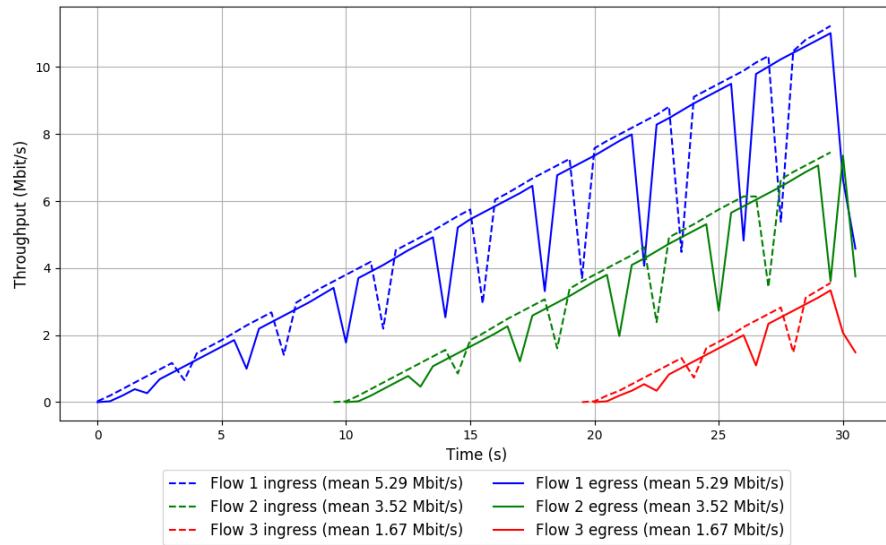


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-25 05:30:53
End at: 2019-01-25 05:31:23
Local clock offset: -0.208 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2019-01-25 10:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 133.679 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 133.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.52 Mbit/s
95th percentile per-packet one-way delay: 133.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 133.728 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

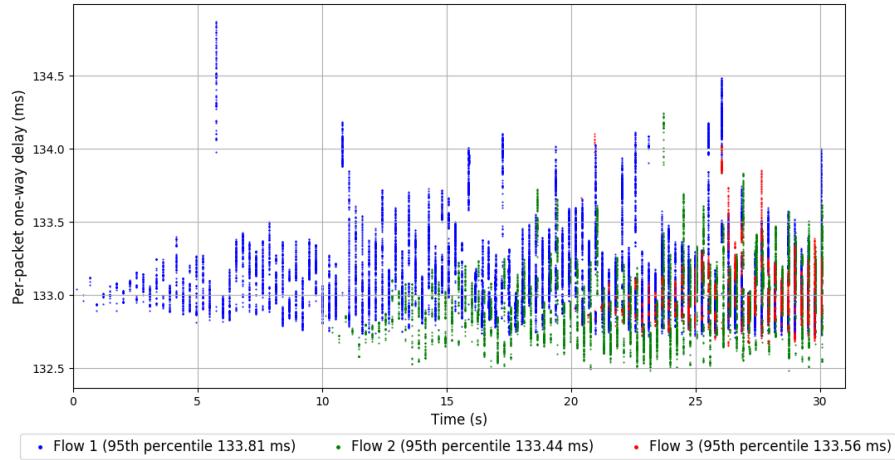
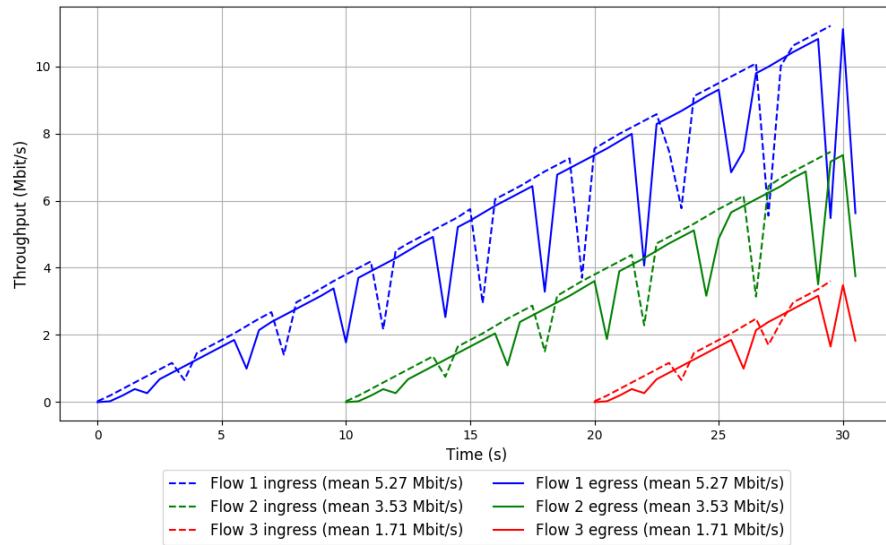


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-25 06:12:54
End at: 2019-01-25 06:13:24
Local clock offset: -0.106 ms
Remote clock offset: -0.427 ms

# Below is generated by plot.py at 2019-01-25 10:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 133.684 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 133.813 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 133.435 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.565 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

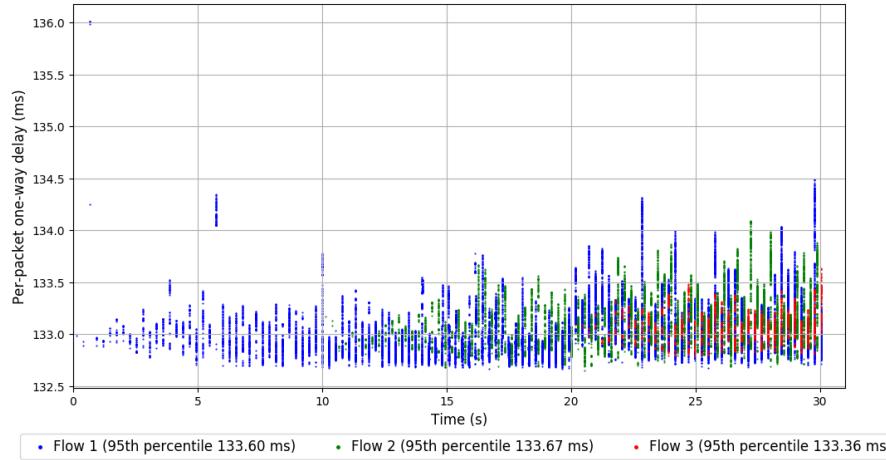
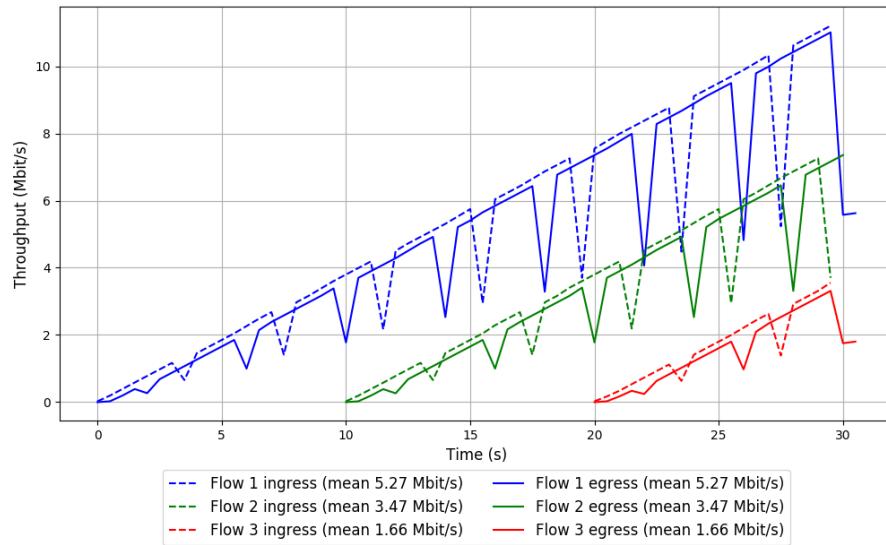


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-25 06:54:53
End at: 2019-01-25 06:55:23
Local clock offset: 0.038 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-01-25 10:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 133.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 133.597 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.667 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 133.364 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

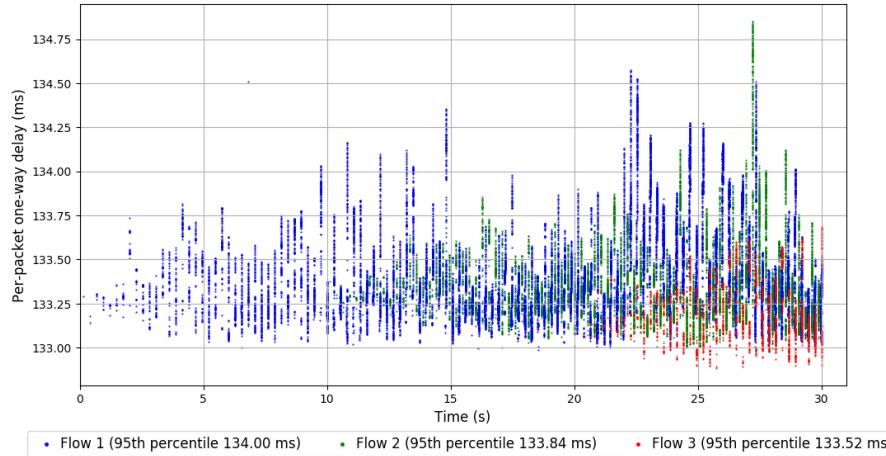
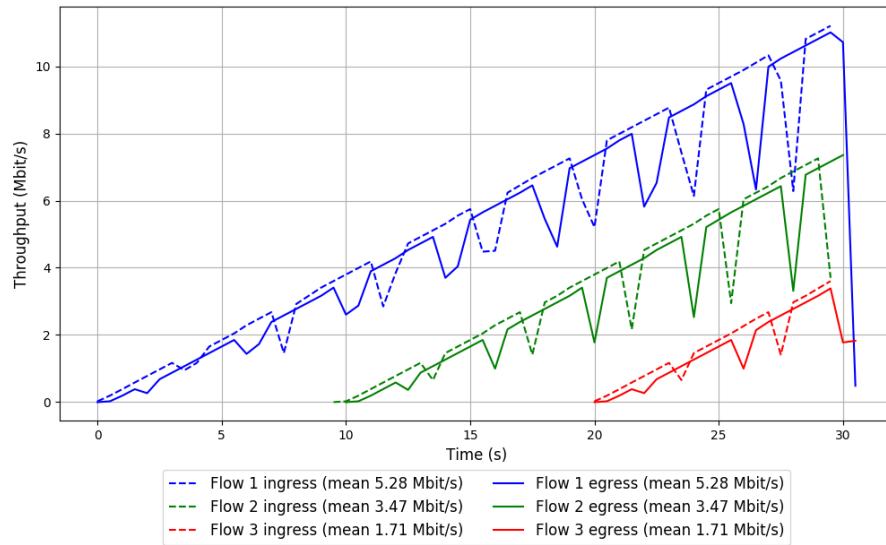


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-25 07:37:19
End at: 2019-01-25 07:37:49
Local clock offset: -0.12 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2019-01-25 10:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 133.931 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 133.997 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 133.842 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 133.524 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

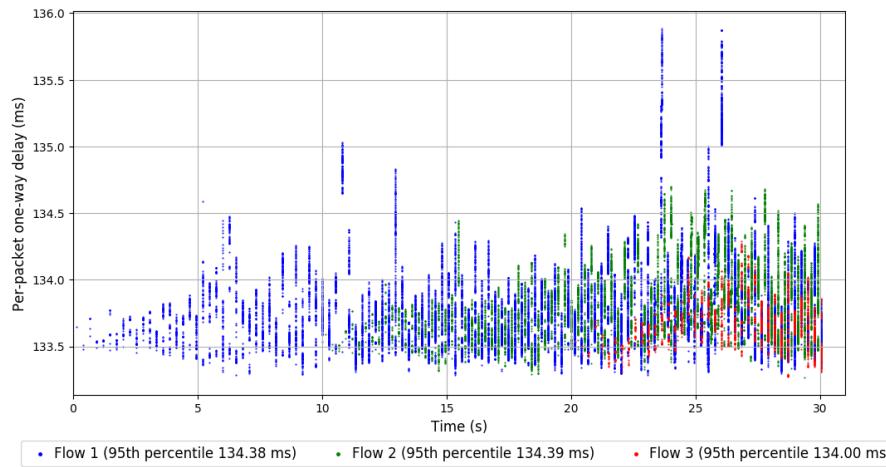
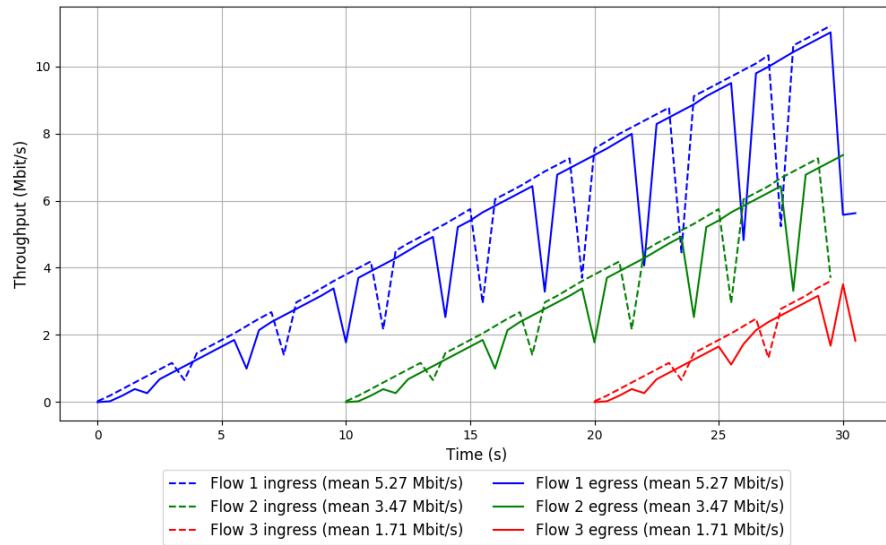


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-25 08:18:33
End at: 2019-01-25 08:19:03
Local clock offset: -0.477 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-01-25 10:36:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 134.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 134.375 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 134.390 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 134.004 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

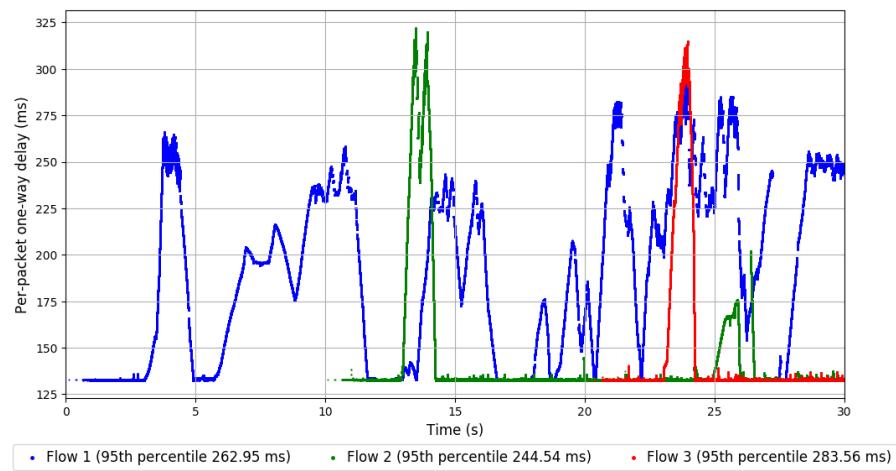
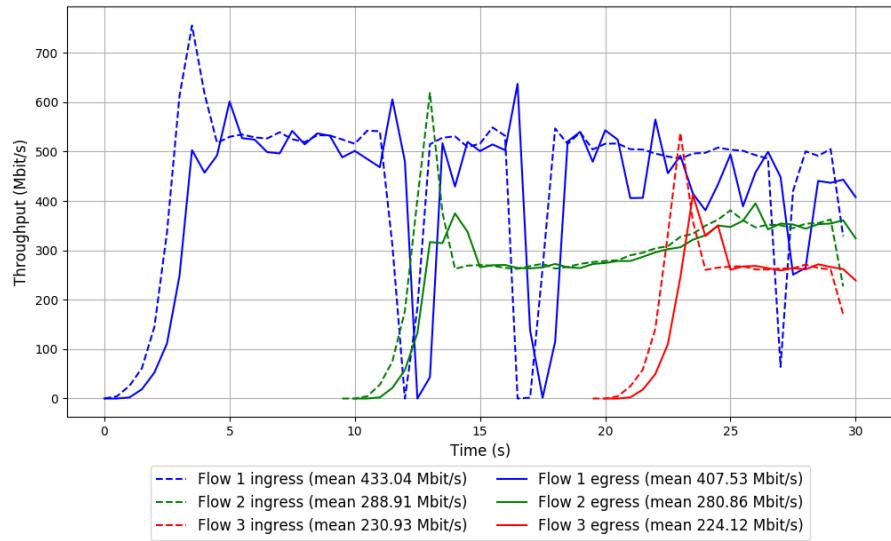


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-25 05:42:44
End at: 2019-01-25 05:43:14
Local clock offset: 0.109 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-01-25 10:48:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 668.25 Mbit/s
95th percentile per-packet one-way delay: 262.696 ms
Loss rate: 4.72%
-- Flow 1:
Average throughput: 407.53 Mbit/s
95th percentile per-packet one-way delay: 262.955 ms
Loss rate: 5.88%
-- Flow 2:
Average throughput: 280.86 Mbit/s
95th percentile per-packet one-way delay: 244.543 ms
Loss rate: 2.79%
-- Flow 3:
Average throughput: 224.12 Mbit/s
95th percentile per-packet one-way delay: 283.565 ms
Loss rate: 2.95%
```

Run 1: Report of PCC-Allegro — Data Link

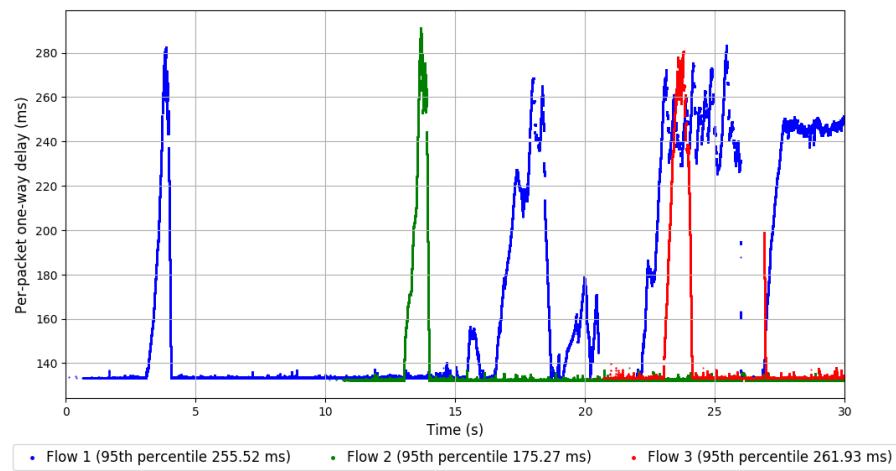
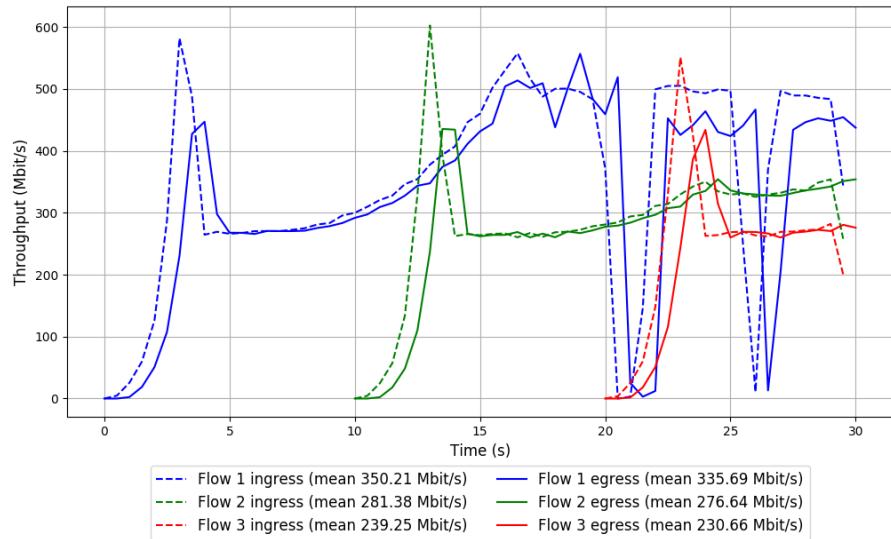


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-25 06:25:02
End at: 2019-01-25 06:25:32
Local clock offset: -0.385 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-01-25 10:48:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 595.36 Mbit/s
95th percentile per-packet one-way delay: 253.360 ms
Loss rate: 3.34%
-- Flow 1:
Average throughput: 335.69 Mbit/s
95th percentile per-packet one-way delay: 255.521 ms
Loss rate: 4.14%
-- Flow 2:
Average throughput: 276.64 Mbit/s
95th percentile per-packet one-way delay: 175.267 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 230.66 Mbit/s
95th percentile per-packet one-way delay: 261.927 ms
Loss rate: 3.67%
```

Run 2: Report of PCC-Allegro — Data Link

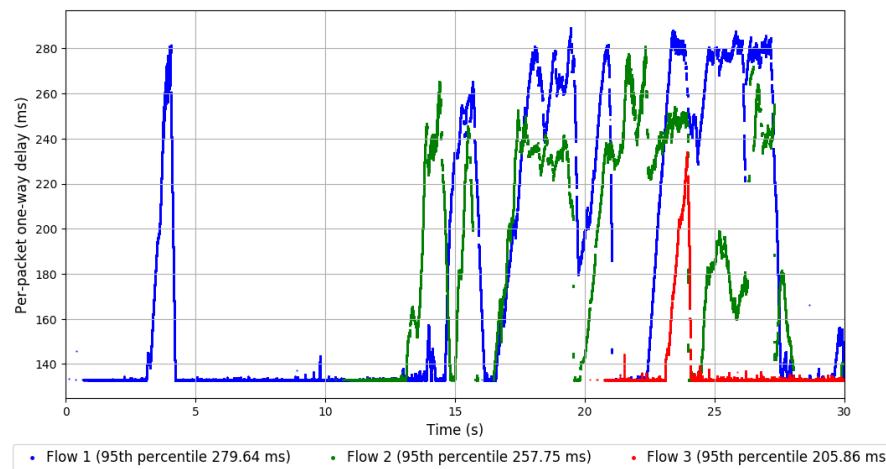
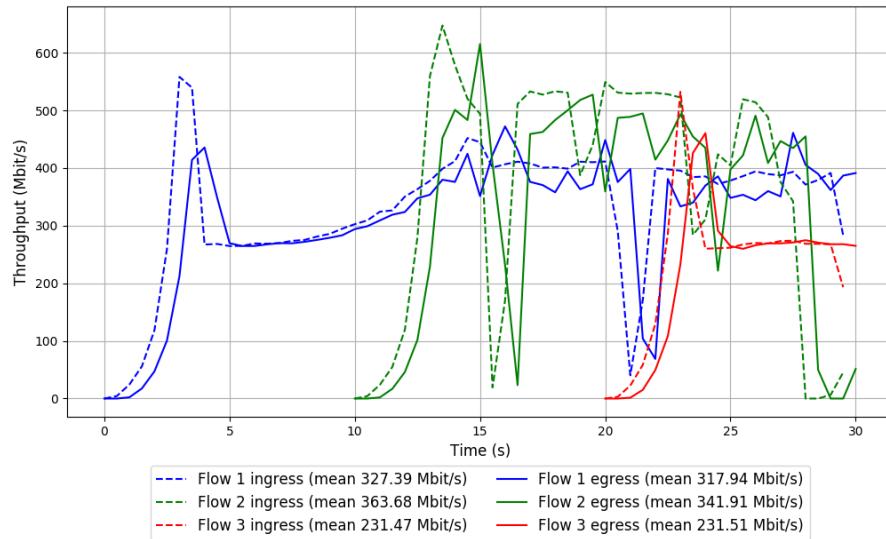


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-25 07:07:20
End at: 2019-01-25 07:07:50
Local clock offset: 0.06 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-01-25 10:50:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 620.01 Mbit/s
95th percentile per-packet one-way delay: 276.777 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 317.94 Mbit/s
95th percentile per-packet one-way delay: 279.641 ms
Loss rate: 2.89%
-- Flow 2:
Average throughput: 341.91 Mbit/s
95th percentile per-packet one-way delay: 257.753 ms
Loss rate: 5.95%
-- Flow 3:
Average throughput: 231.51 Mbit/s
95th percentile per-packet one-way delay: 205.860 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Allegro — Data Link

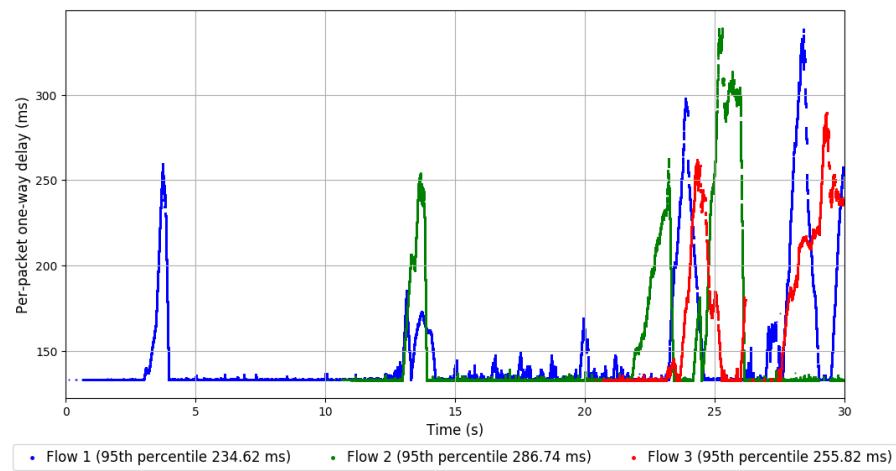
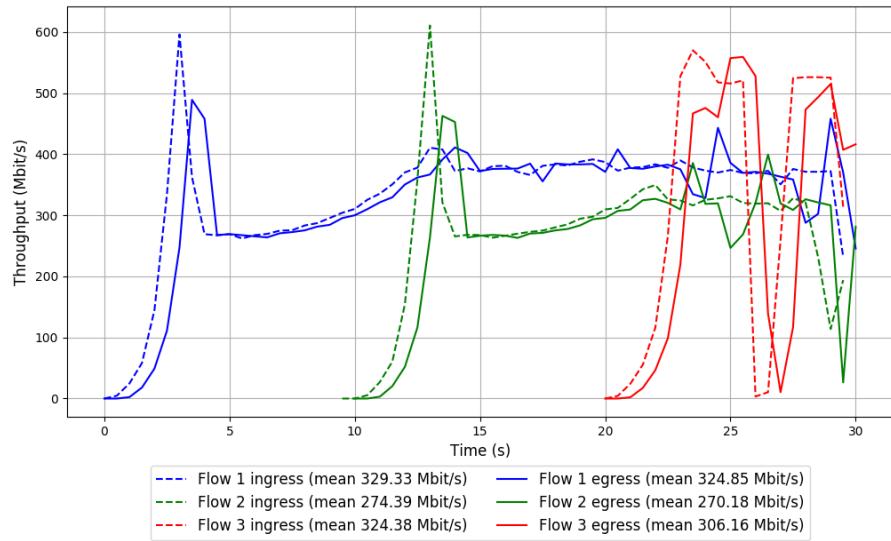


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-25 07:49:04
End at: 2019-01-25 07:49:34
Local clock offset: -0.122 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2019-01-25 10:52:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.38 Mbit/s
95th percentile per-packet one-way delay: 248.865 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 324.85 Mbit/s
95th percentile per-packet one-way delay: 234.622 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 270.18 Mbit/s
95th percentile per-packet one-way delay: 286.739 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 306.16 Mbit/s
95th percentile per-packet one-way delay: 255.821 ms
Loss rate: 5.59%
```

Run 4: Report of PCC-Allegro — Data Link

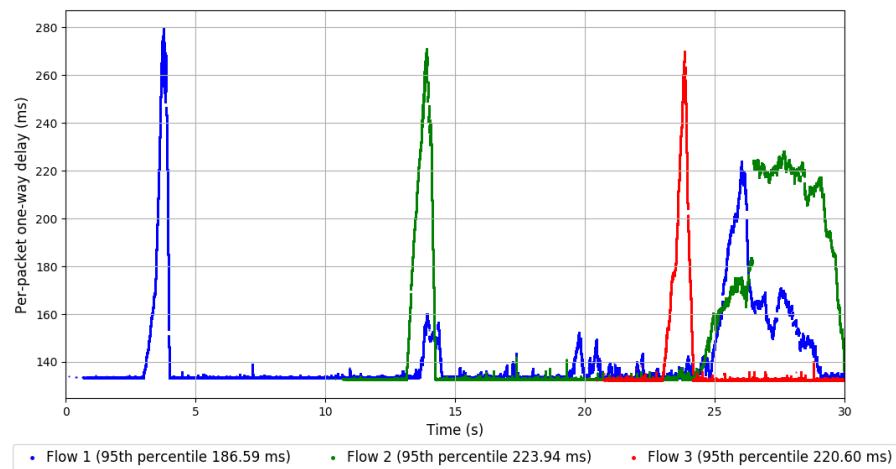
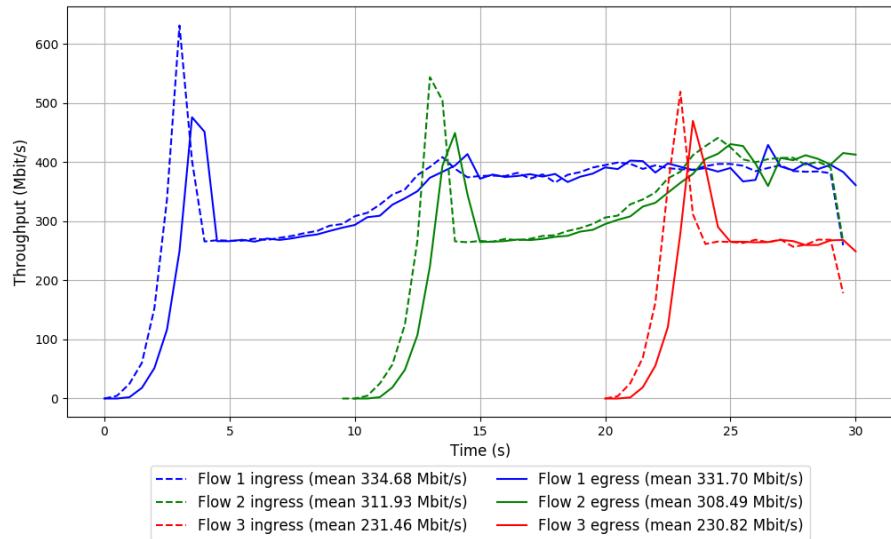


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-25 08:30:00
End at: 2019-01-25 08:30:30
Local clock offset: -0.224 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-01-25 10:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 612.73 Mbit/s
95th percentile per-packet one-way delay: 220.484 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 331.70 Mbit/s
95th percentile per-packet one-way delay: 186.590 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 308.49 Mbit/s
95th percentile per-packet one-way delay: 223.942 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 230.82 Mbit/s
95th percentile per-packet one-way delay: 220.605 ms
Loss rate: 0.28%
```

Run 5: Report of PCC-Allegro — Data Link

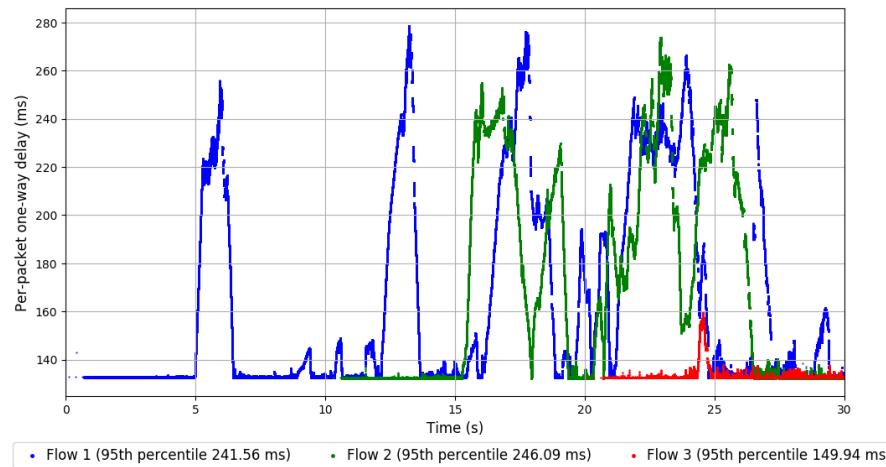
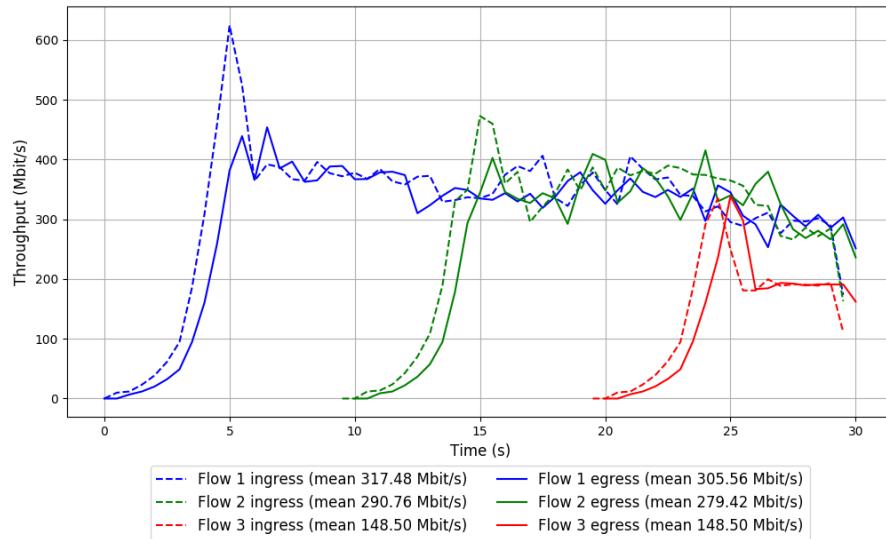


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-01-25 05:26:58
End at: 2019-01-25 05:27:28
Local clock offset: 0.236 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2019-01-25 10:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 541.01 Mbit/s
95th percentile per-packet one-way delay: 242.916 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 305.56 Mbit/s
95th percentile per-packet one-way delay: 241.565 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 279.42 Mbit/s
95th percentile per-packet one-way delay: 246.090 ms
Loss rate: 3.90%
-- Flow 3:
Average throughput: 148.50 Mbit/s
95th percentile per-packet one-way delay: 149.941 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link

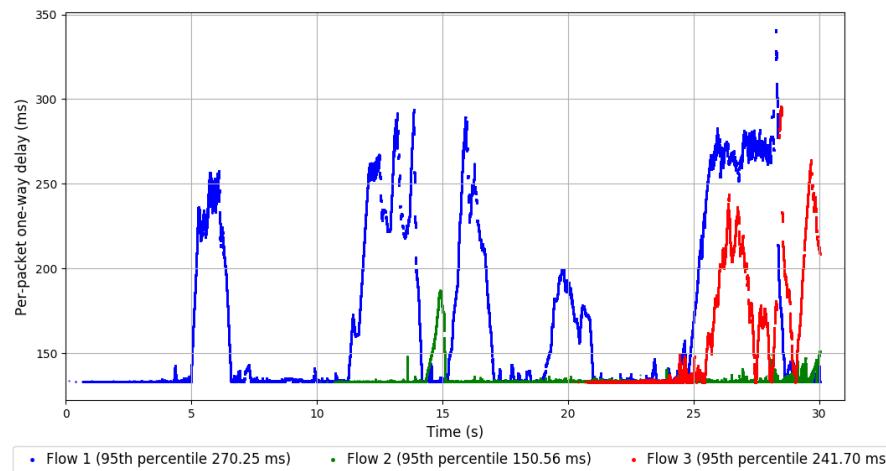
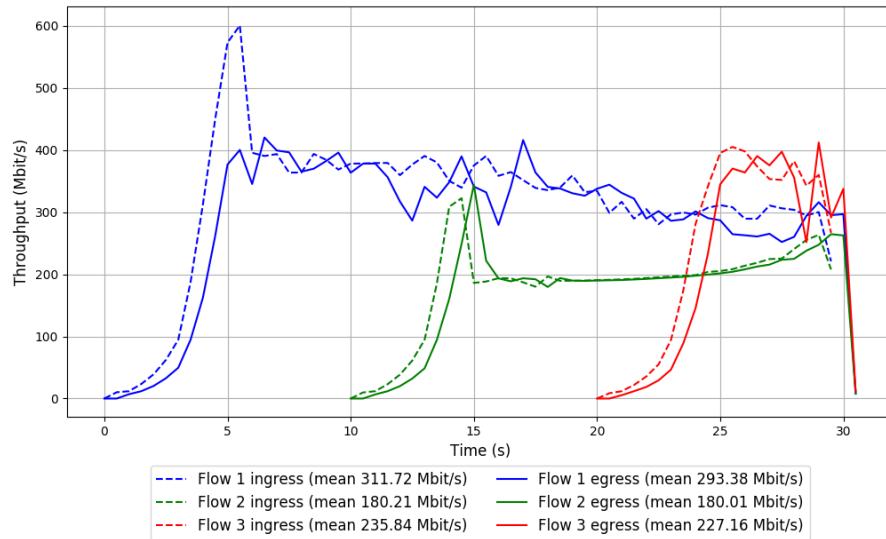


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-25 06:09:06
End at: 2019-01-25 06:09:36
Local clock offset: -0.164 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2019-01-25 10:54:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.05 Mbit/s
95th percentile per-packet one-way delay: 264.856 ms
Loss rate: 4.19%
-- Flow 1:
Average throughput: 293.38 Mbit/s
95th percentile per-packet one-way delay: 270.247 ms
Loss rate: 5.89%
-- Flow 2:
Average throughput: 180.01 Mbit/s
95th percentile per-packet one-way delay: 150.557 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 227.16 Mbit/s
95th percentile per-packet one-way delay: 241.702 ms
Loss rate: 3.68%
```

Run 2: Report of PCC-Expr — Data Link

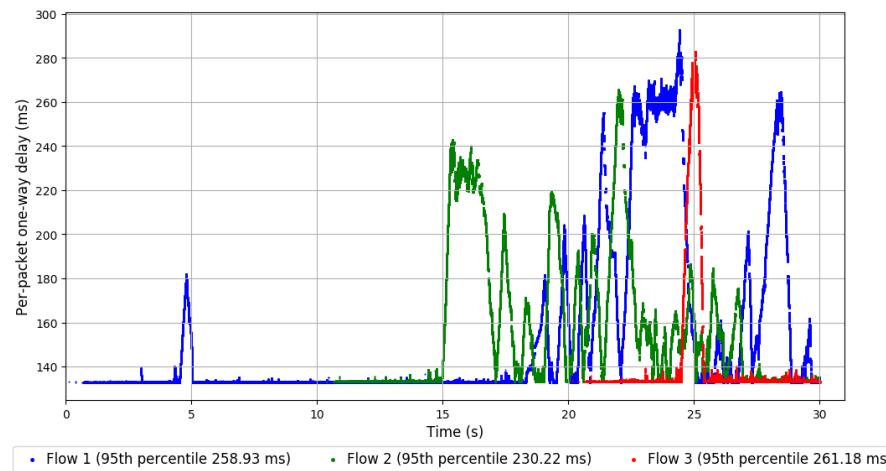
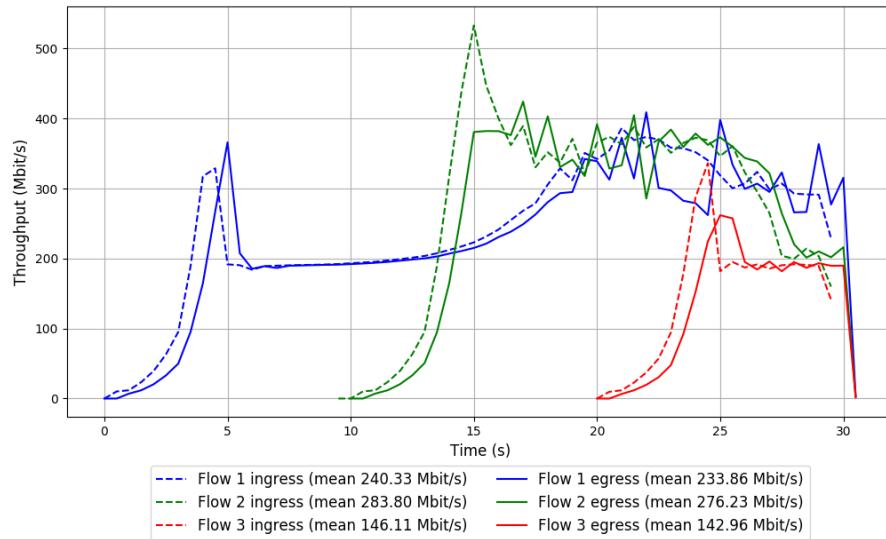


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-25 06:51:09
End at: 2019-01-25 06:51:40
Local clock offset: -0.518 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-01-25 10:55:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.79 Mbit/s
95th percentile per-packet one-way delay: 252.927 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 233.86 Mbit/s
95th percentile per-packet one-way delay: 258.932 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 276.23 Mbit/s
95th percentile per-packet one-way delay: 230.219 ms
Loss rate: 2.67%
-- Flow 3:
Average throughput: 142.96 Mbit/s
95th percentile per-packet one-way delay: 261.180 ms
Loss rate: 2.16%
```

Run 3: Report of PCC-Expr — Data Link

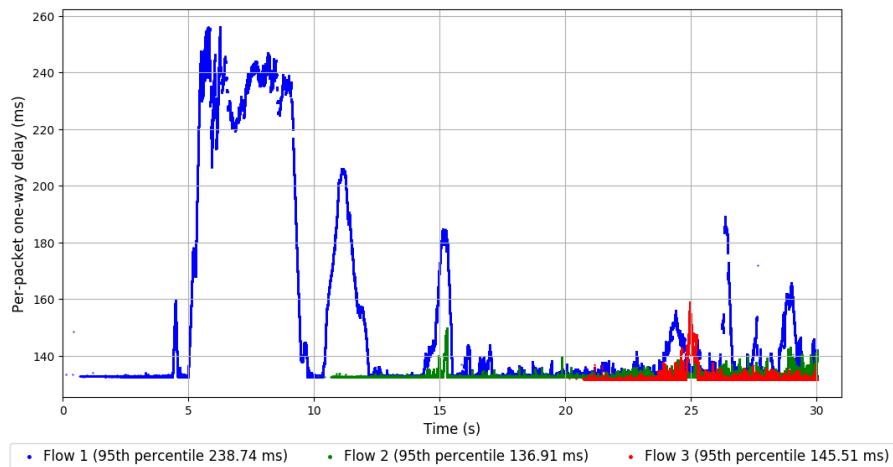
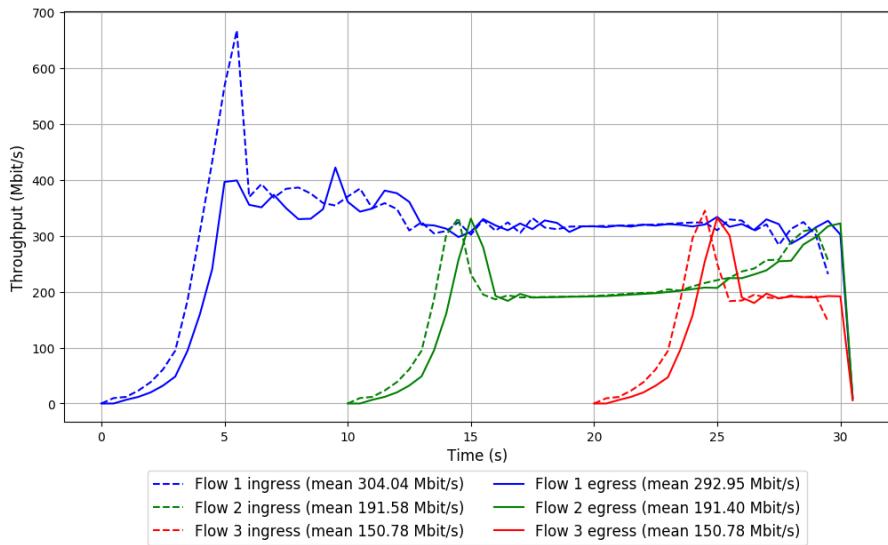


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-25 07:33:49
End at: 2019-01-25 07:34:19
Local clock offset: 0.151 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-01-25 11:02:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.95 Mbit/s
95th percentile per-packet one-way delay: 235.613 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 292.95 Mbit/s
95th percentile per-packet one-way delay: 238.741 ms
Loss rate: 3.66%
-- Flow 2:
Average throughput: 191.40 Mbit/s
95th percentile per-packet one-way delay: 136.912 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 150.78 Mbit/s
95th percentile per-packet one-way delay: 145.511 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

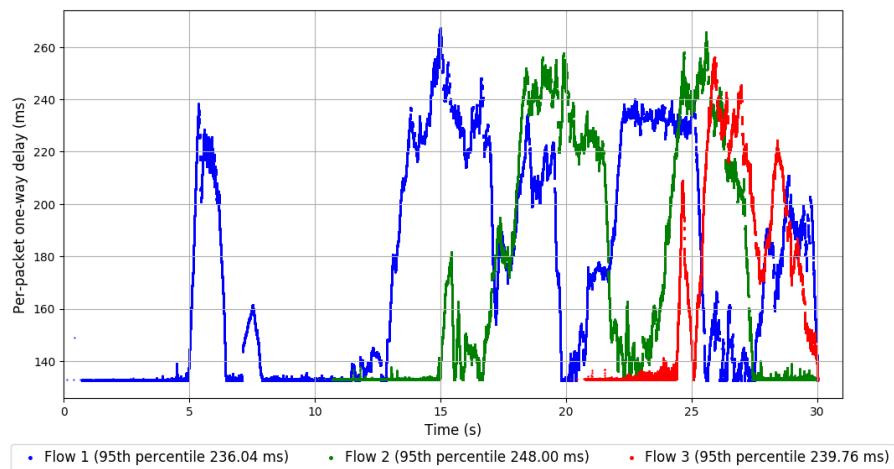
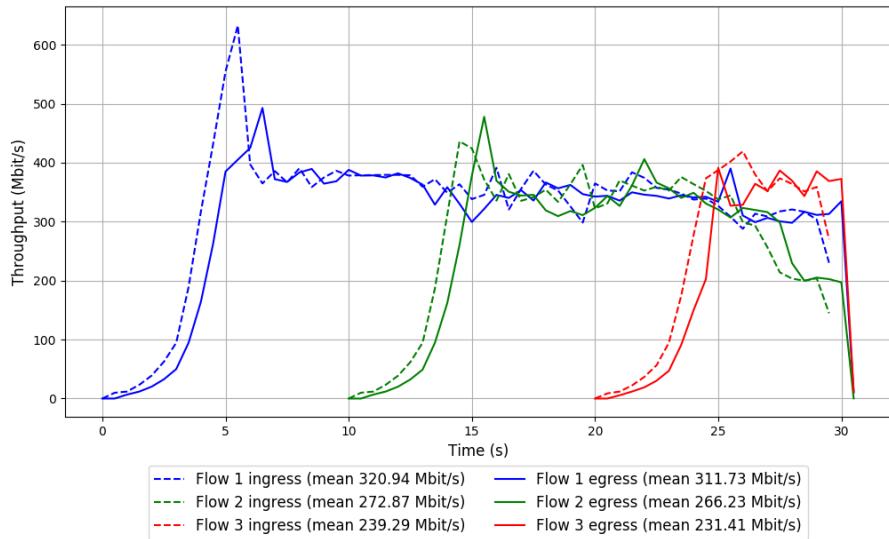


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-25 08:14:44
End at: 2019-01-25 08:15:14
Local clock offset: -0.346 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 565.03 Mbit/s
95th percentile per-packet one-way delay: 242.775 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 311.73 Mbit/s
95th percentile per-packet one-way delay: 236.036 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 266.23 Mbit/s
95th percentile per-packet one-way delay: 247.995 ms
Loss rate: 2.43%
-- Flow 3:
Average throughput: 231.41 Mbit/s
95th percentile per-packet one-way delay: 239.757 ms
Loss rate: 3.28%
```

Run 5: Report of PCC-Expr — Data Link

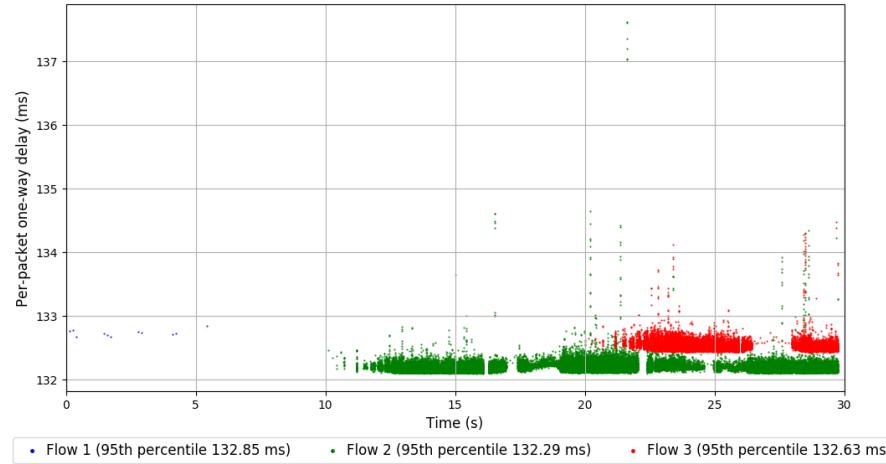
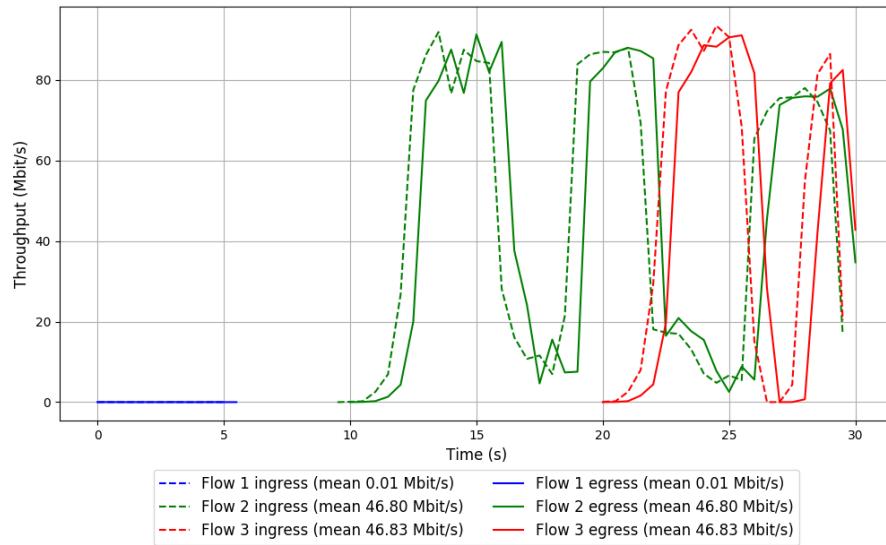


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-25 05:18:04
End at: 2019-01-25 05:18:34
Local clock offset: 0.088 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.22 Mbit/s
95th percentile per-packet one-way delay: 132.573 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 132.848 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.80 Mbit/s
95th percentile per-packet one-way delay: 132.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 46.83 Mbit/s
95th percentile per-packet one-way delay: 132.627 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

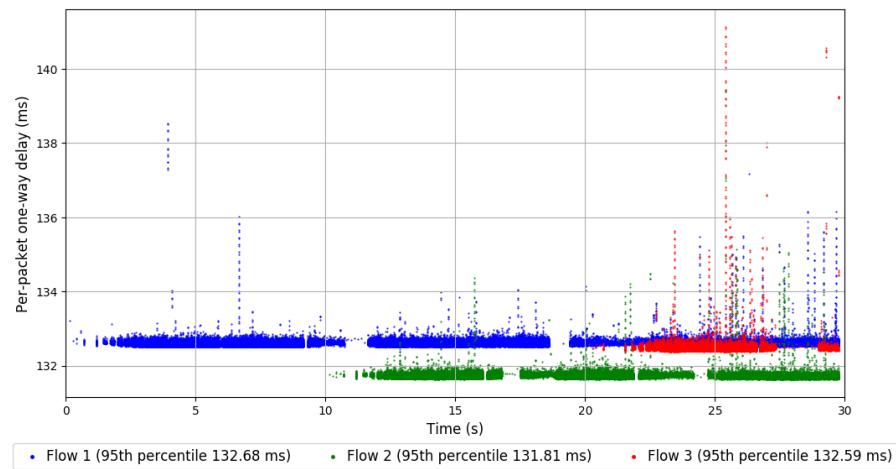
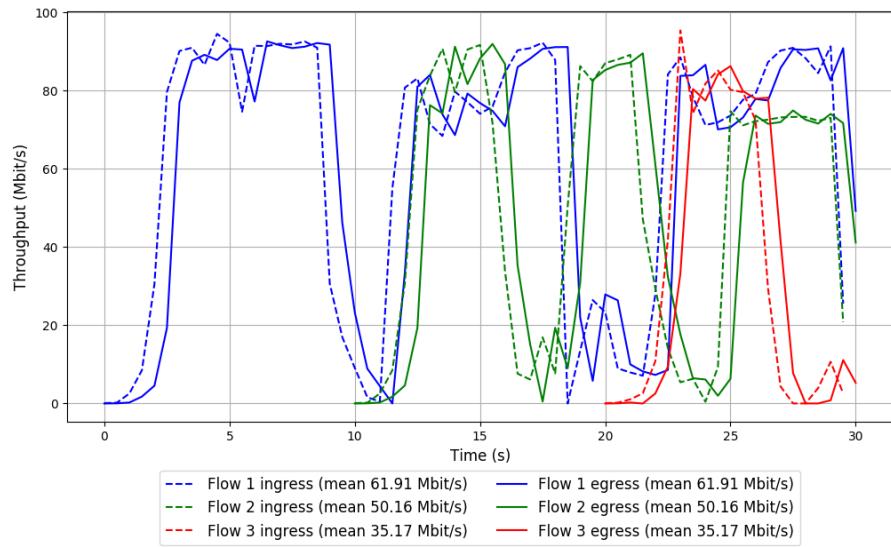


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-25 06:00:24
End at: 2019-01-25 06:00:54
Local clock offset: 0.299 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.55 Mbit/s
95th percentile per-packet one-way delay: 132.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.91 Mbit/s
95th percentile per-packet one-way delay: 132.683 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 131.810 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.17 Mbit/s
95th percentile per-packet one-way delay: 132.589 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

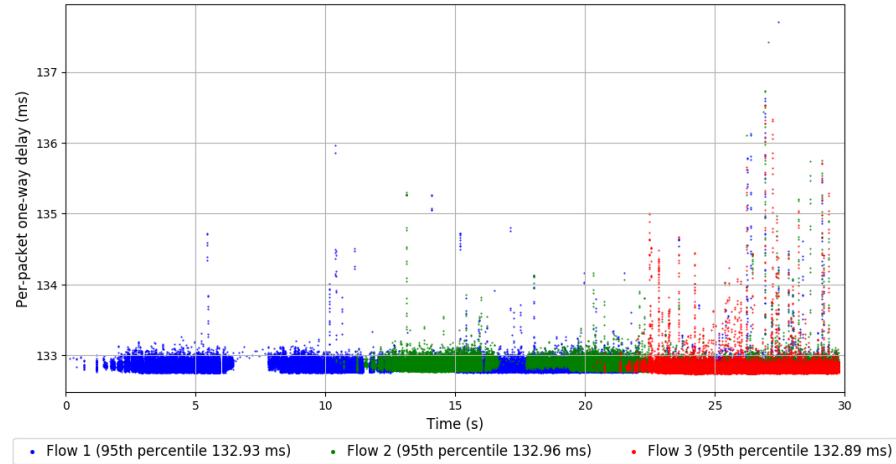
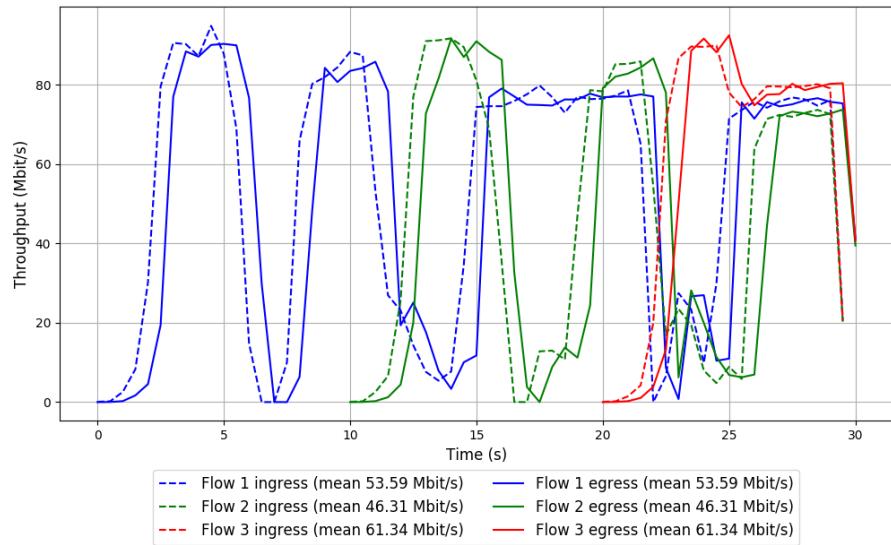


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-25 06:42:46
End at: 2019-01-25 06:43:16
Local clock offset: -0.012 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 104.16 Mbit/s
95th percentile per-packet one-way delay: 132.938 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.59 Mbit/s
95th percentile per-packet one-way delay: 132.927 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.31 Mbit/s
95th percentile per-packet one-way delay: 132.964 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 61.34 Mbit/s
95th percentile per-packet one-way delay: 132.891 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

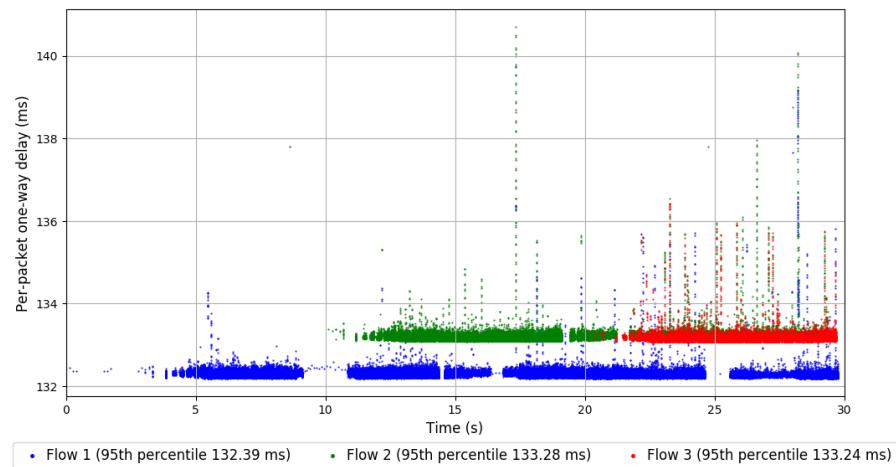
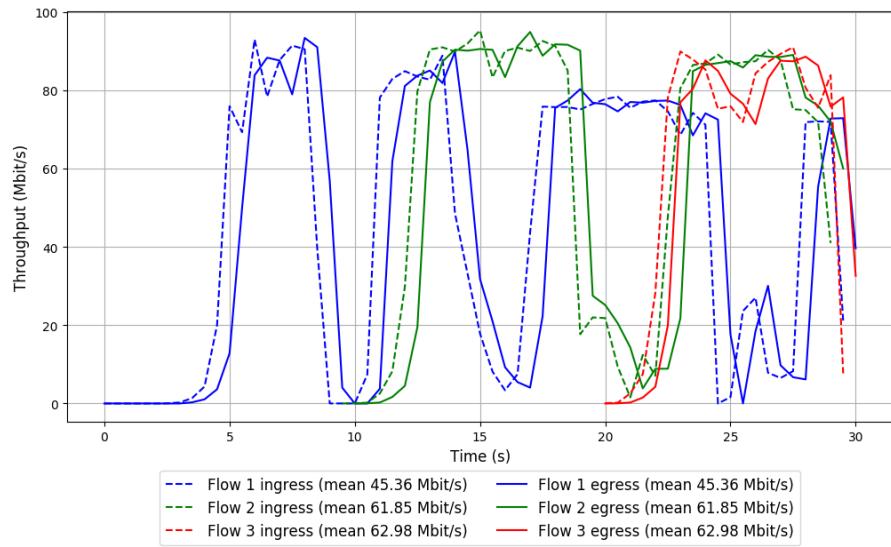


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-25 07:25:24
End at: 2019-01-25 07:25:54
Local clock offset: -0.306 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.93 Mbit/s
95th percentile per-packet one-way delay: 133.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.36 Mbit/s
95th percentile per-packet one-way delay: 132.392 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.85 Mbit/s
95th percentile per-packet one-way delay: 133.276 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.98 Mbit/s
95th percentile per-packet one-way delay: 133.241 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

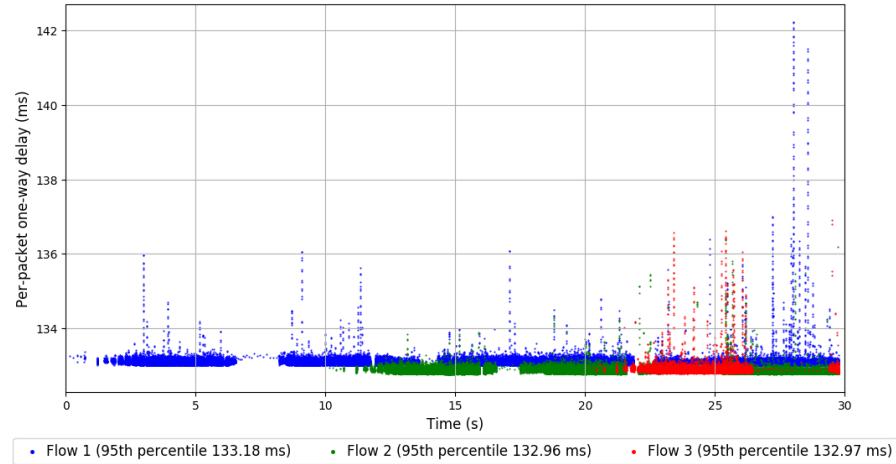
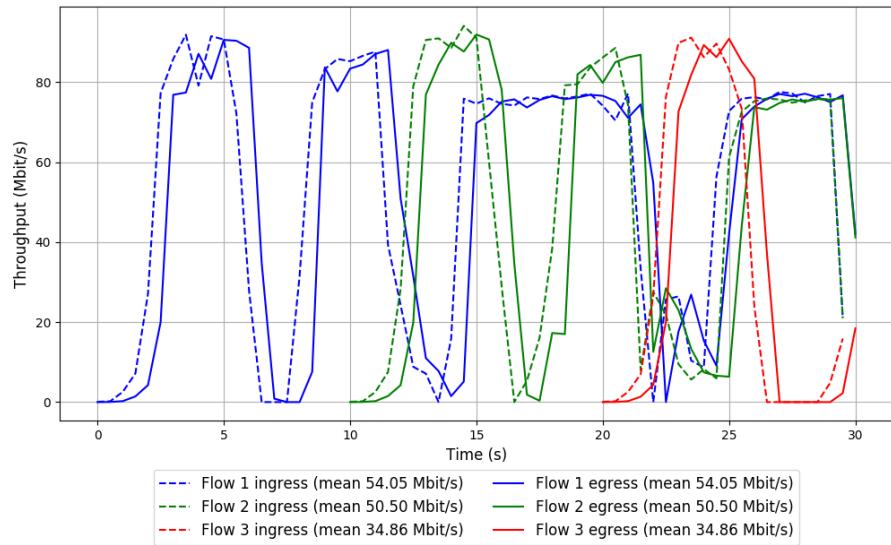


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-25 08:06:14
End at: 2019-01-25 08:06:44
Local clock offset: -0.118 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.82 Mbit/s
95th percentile per-packet one-way delay: 133.153 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.05 Mbit/s
95th percentile per-packet one-way delay: 133.178 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.50 Mbit/s
95th percentile per-packet one-way delay: 132.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 132.974 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

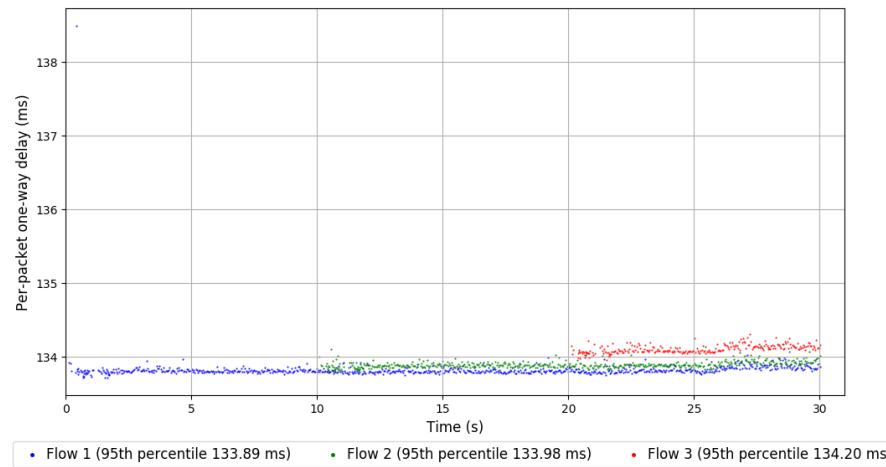
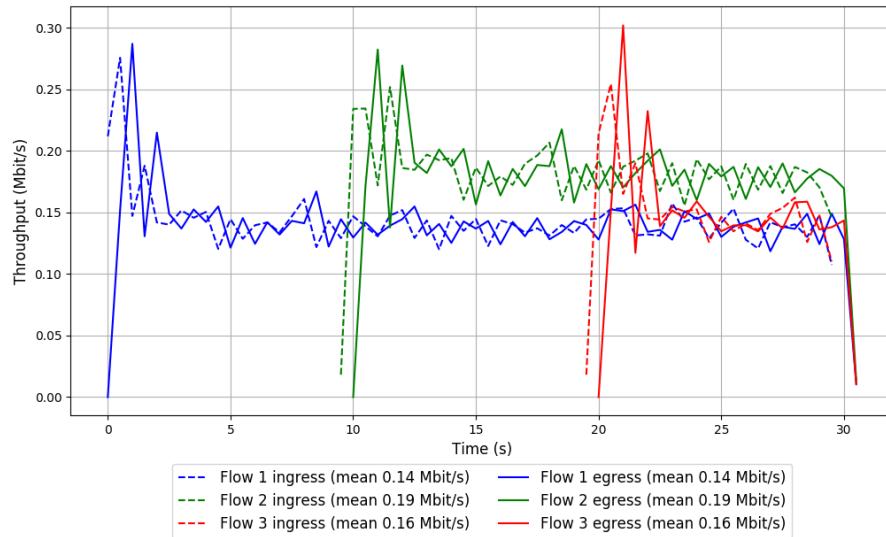


```
Run 1: Statistics of SCReAM
```

```
Start at: 2019-01-25 05:47:39
End at: 2019-01-25 05:48:09
Local clock offset: -0.528 ms
Remote clock offset: 0.264 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 134.134 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 133.890 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 133.981 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 134.198 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

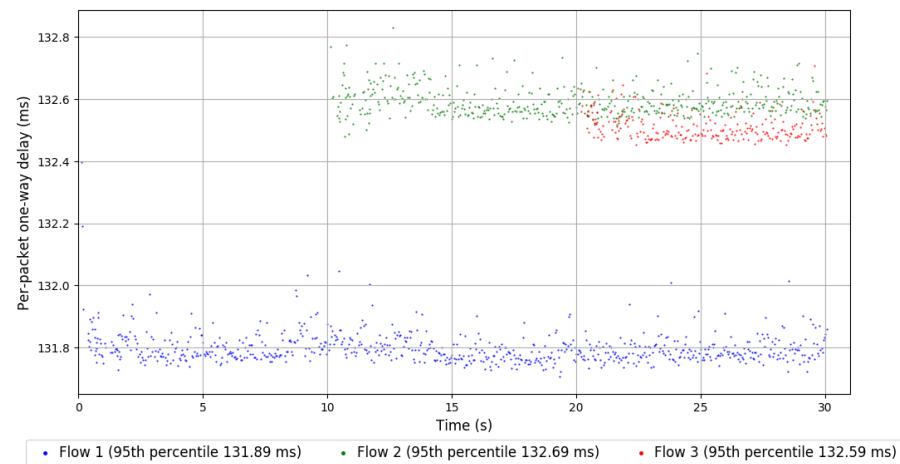
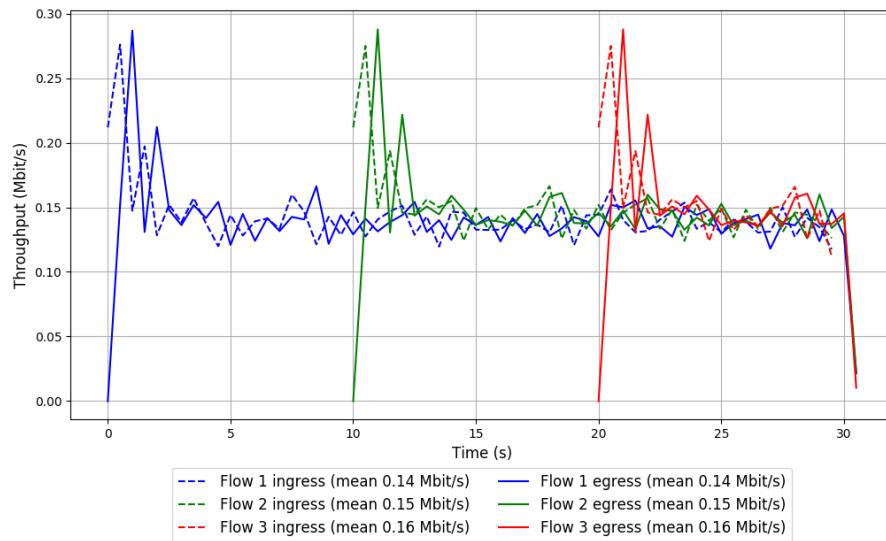


Run 2: Statistics of SCReAM

```
Start at: 2019-01-25 06:29:41
End at: 2019-01-25 06:30:11
Local clock offset: -0.086 ms
Remote clock offset: -0.405 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 132.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 131.888 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.685 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.590 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

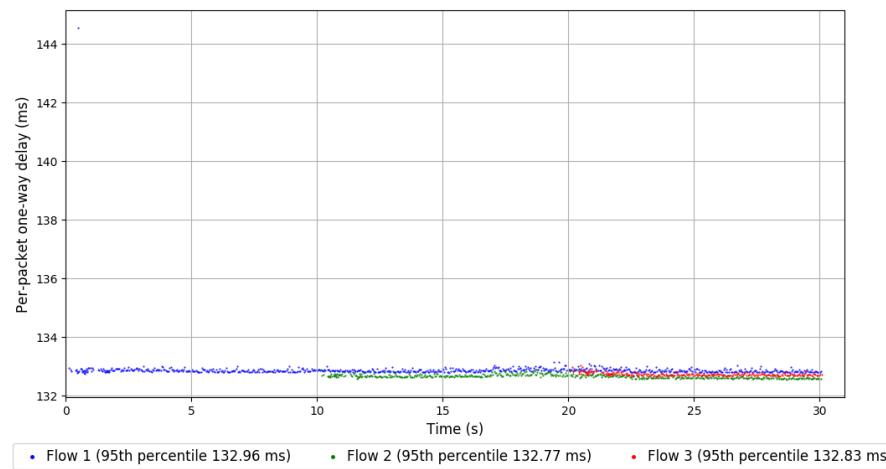
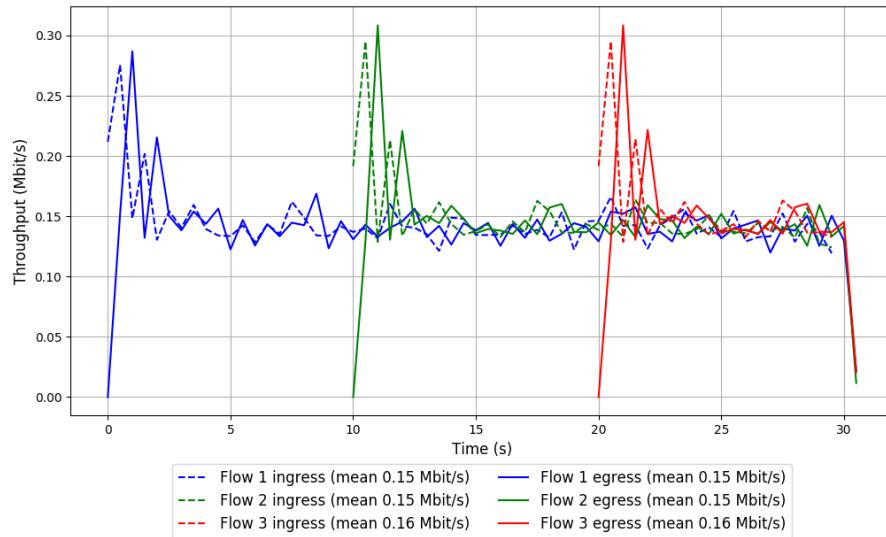


Run 3: Statistics of SCReAM

```
Start at: 2019-01-25 07:12:21
End at: 2019-01-25 07:12:51
Local clock offset: 0.294 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 132.923 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.956 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.770 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.827 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

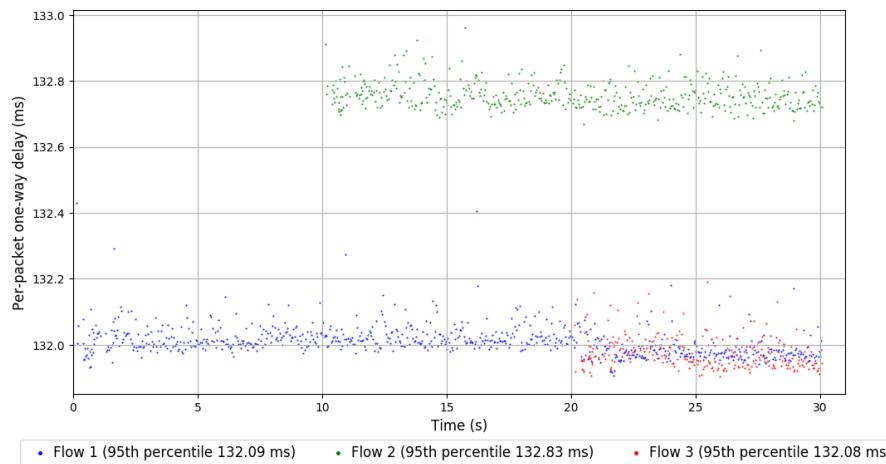
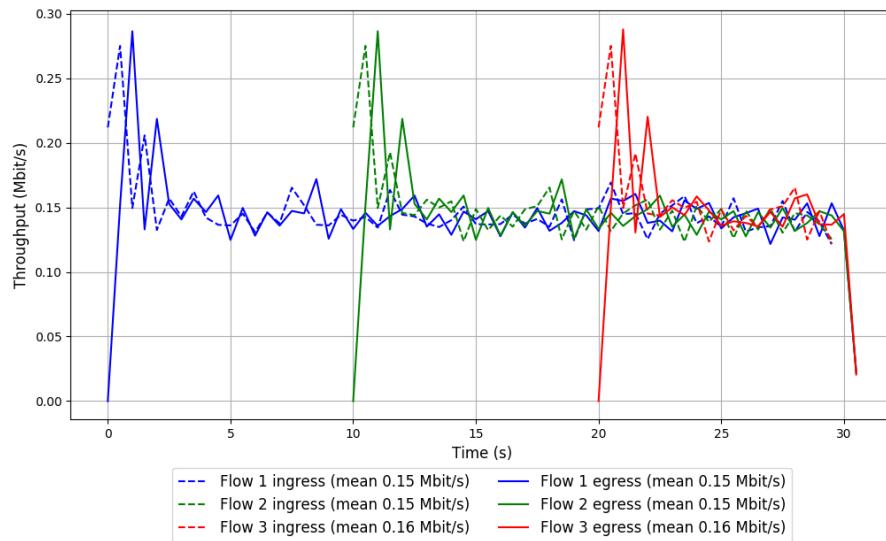


Run 4: Statistics of SCReAM

```
Start at: 2019-01-25 07:53:38
End at: 2019-01-25 07:54:08
Local clock offset: 0.131 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 132.798 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.087 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 132.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 132.076 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

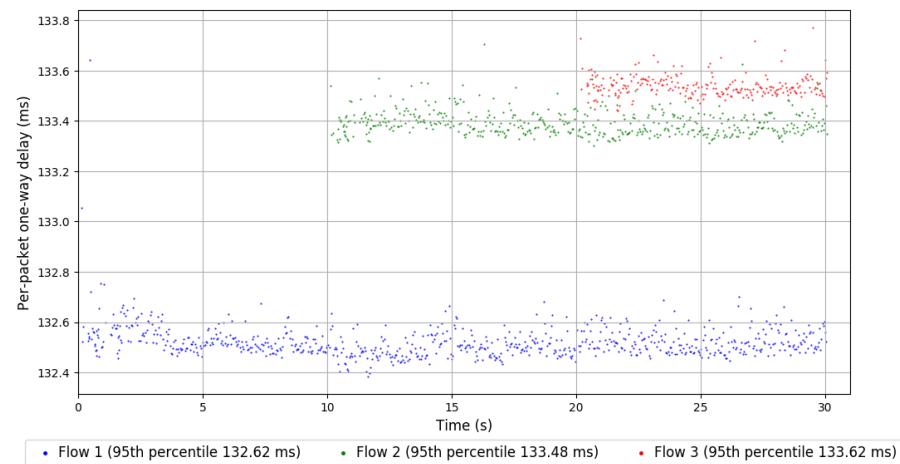
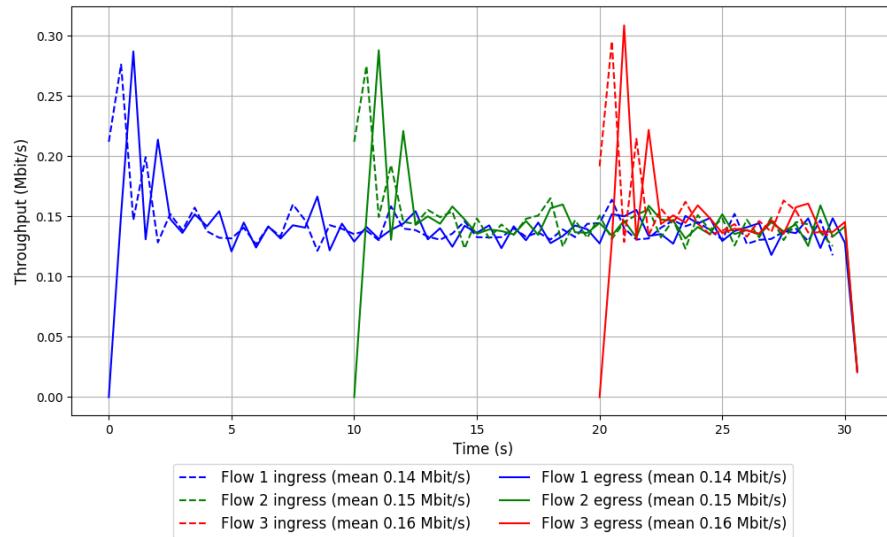


Run 5: Statistics of SCReAM

```
Start at: 2019-01-25 08:34:42
End at: 2019-01-25 08:35:12
Local clock offset: -0.35 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 133.555 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 132.620 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 133.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 133.621 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

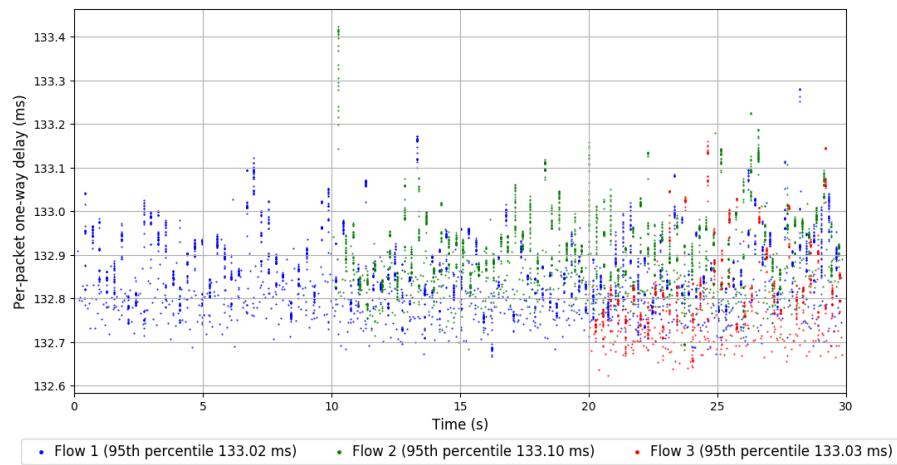
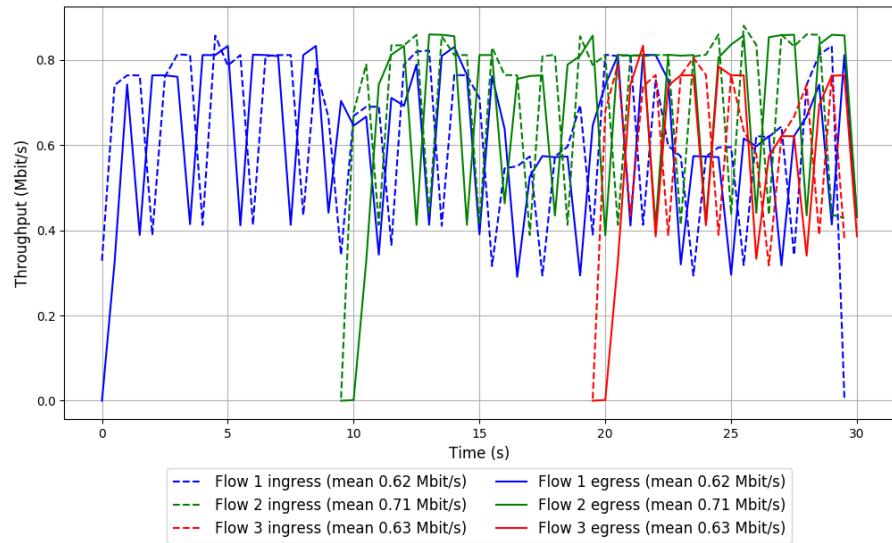


Run 1: Statistics of Sprout

```
Start at: 2019-01-25 05:29:34
End at: 2019-01-25 05:30:04
Local clock offset: -0.024 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 133.049 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 133.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 133.096 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 133.029 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

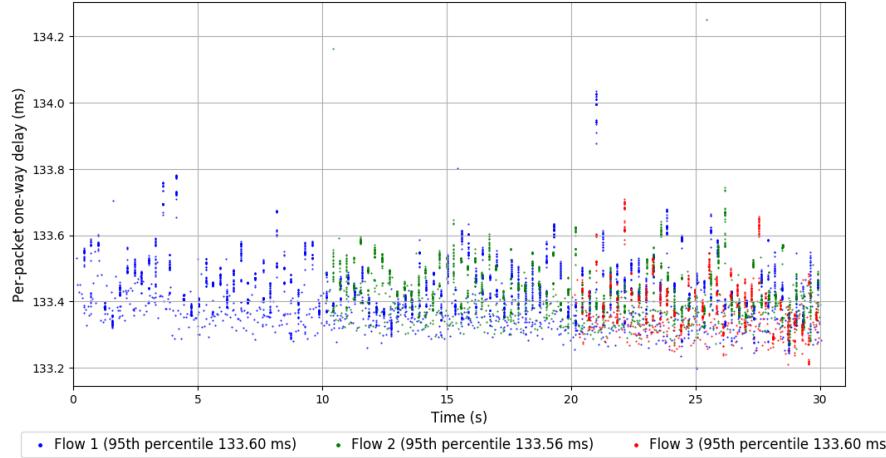
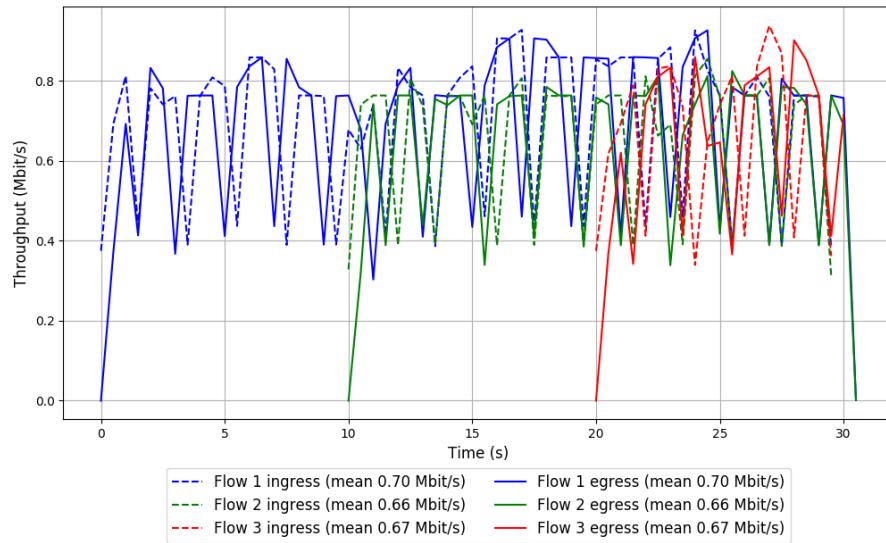


Run 2: Statistics of Sprout

```
Start at: 2019-01-25 06:11:35
End at: 2019-01-25 06:12:05
Local clock offset: 0.011 ms
Remote clock offset: 0.28 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 133.592 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 133.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 133.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 133.600 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

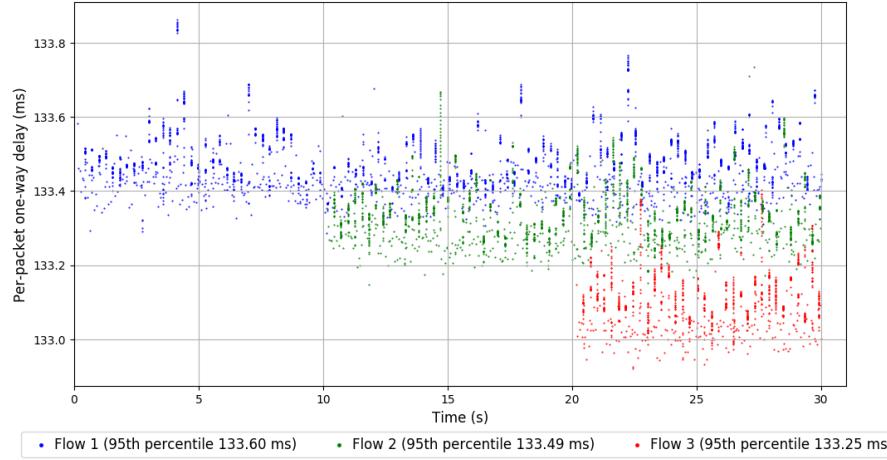
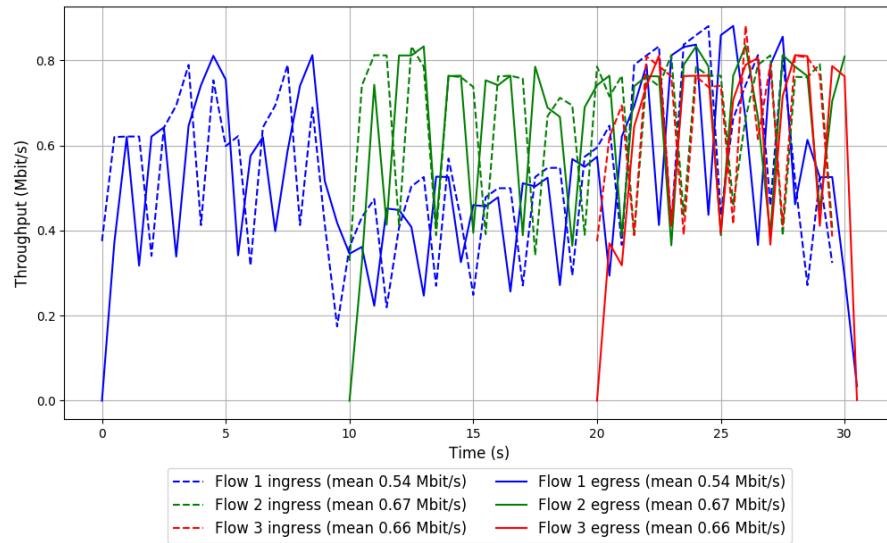


Run 3: Statistics of Sprout

```
Start at: 2019-01-25 06:53:34
End at: 2019-01-25 06:54:04
Local clock offset: -0.258 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 133.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 133.605 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 133.493 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 133.251 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

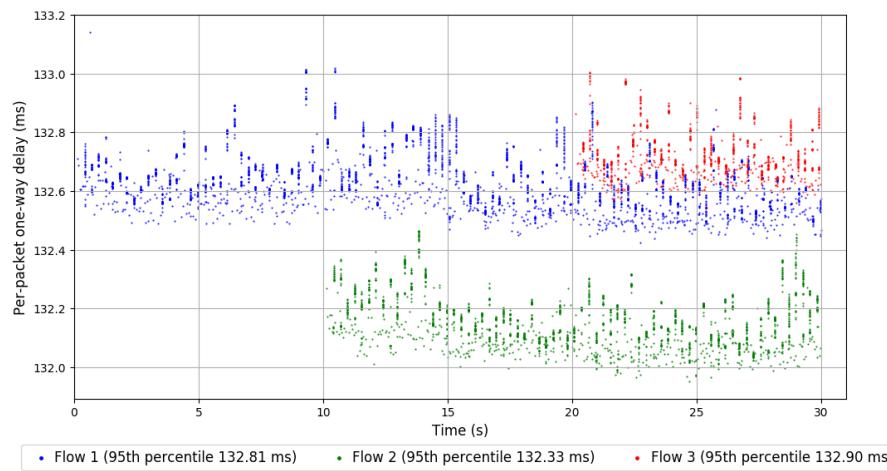
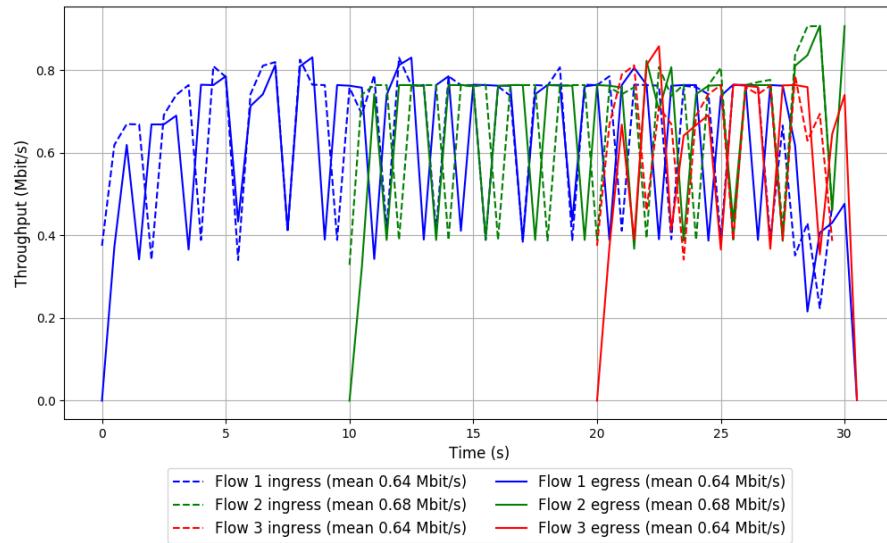


Run 4: Statistics of Sprout

```
Start at: 2019-01-25 07:36:00
End at: 2019-01-25 07:36:30
Local clock offset: 0.328 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 132.815 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 132.813 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 132.327 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 132.899 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

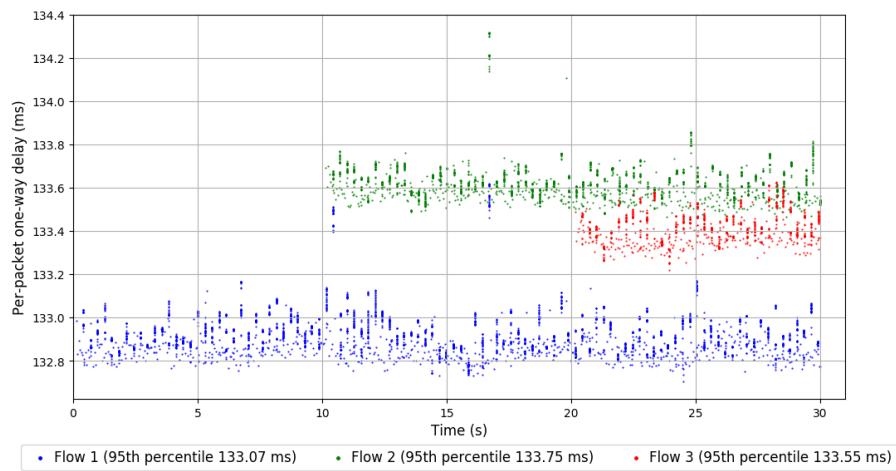
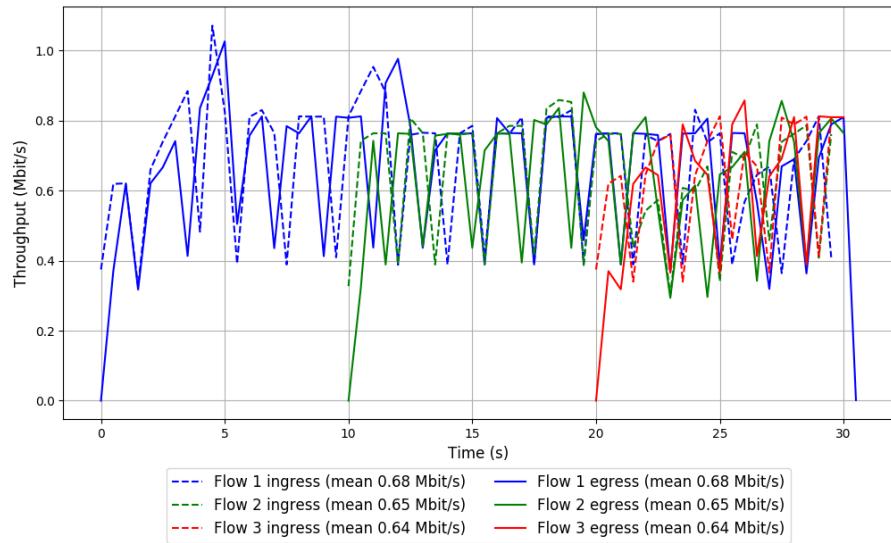


Run 5: Statistics of Sprout

```
Start at: 2019-01-25 08:17:14
End at: 2019-01-25 08:17:44
Local clock offset: -0.283 ms
Remote clock offset: 0.093 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 133.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 133.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 133.749 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 133.553 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

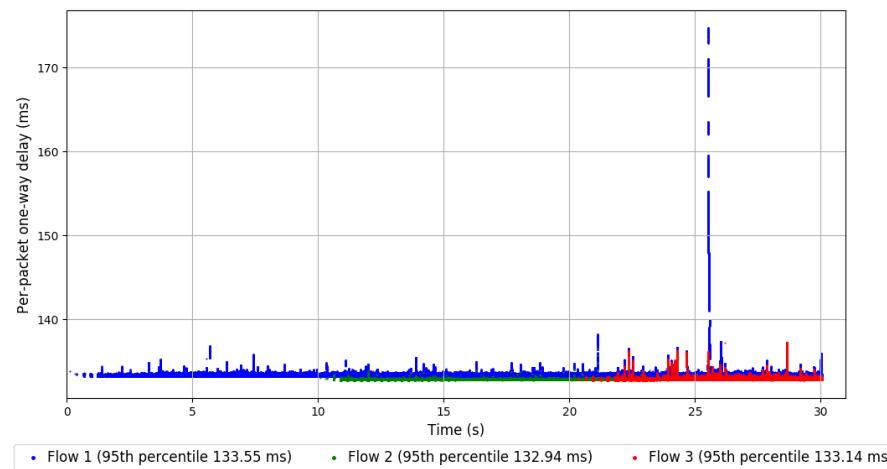
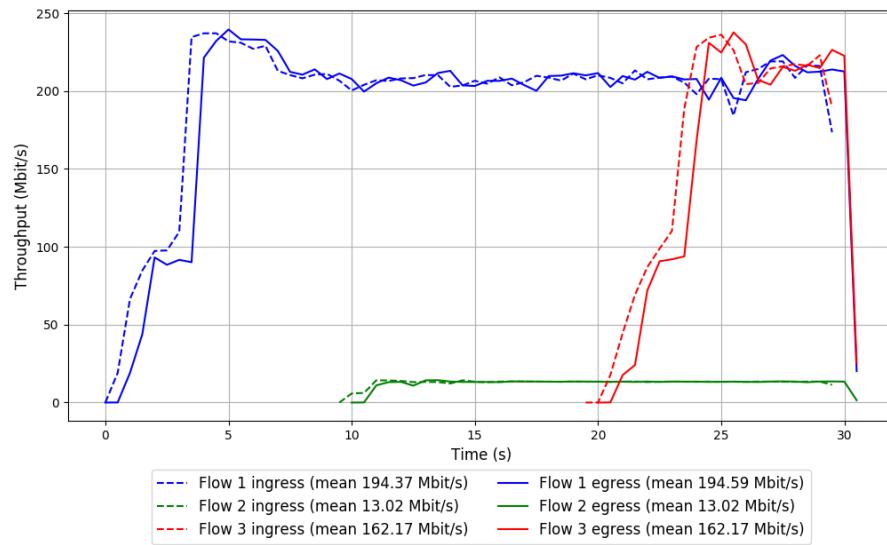


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-25 05:34:23
End at: 2019-01-25 05:34:53
Local clock offset: -0.586 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.15 Mbit/s
95th percentile per-packet one-way delay: 133.529 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.59 Mbit/s
95th percentile per-packet one-way delay: 133.552 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 132.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.17 Mbit/s
95th percentile per-packet one-way delay: 133.136 ms
Loss rate: 0.00%
```

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

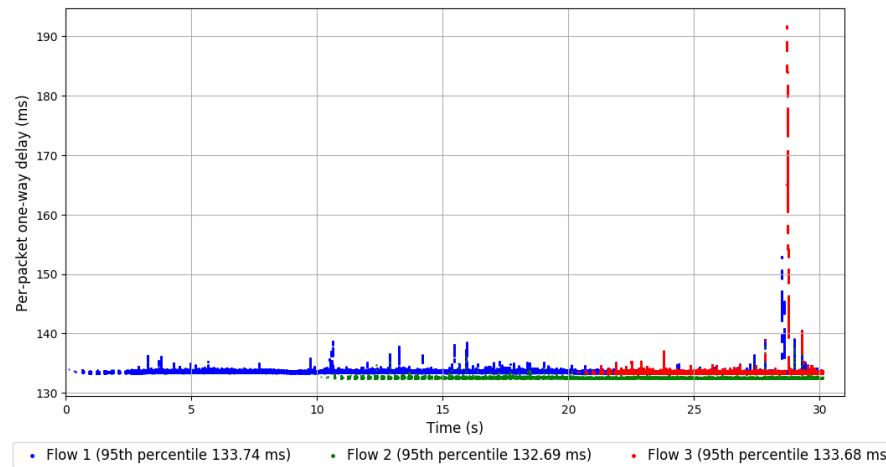
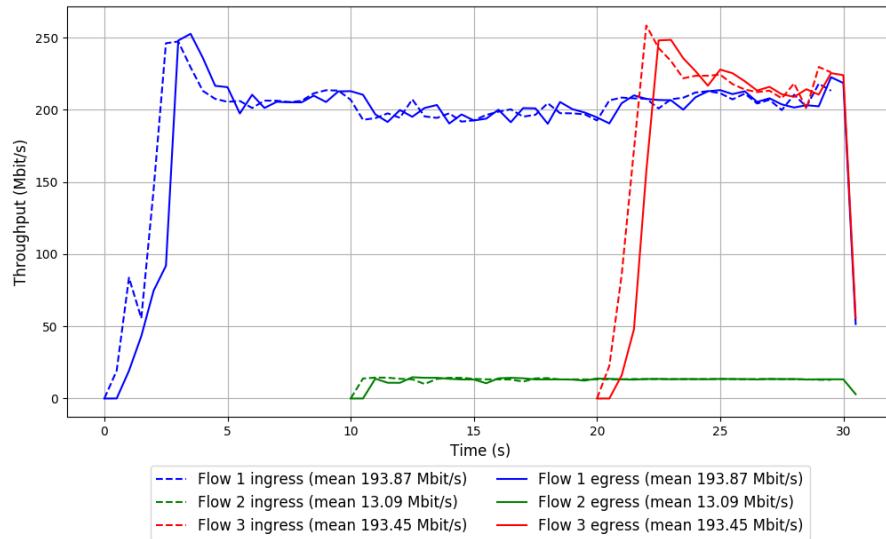


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-25 06:16:30
End at: 2019-01-25 06:17:00
Local clock offset: -0.531 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-01-25 11:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.79 Mbit/s
95th percentile per-packet one-way delay: 133.733 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.87 Mbit/s
95th percentile per-packet one-way delay: 133.744 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 132.686 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 193.45 Mbit/s
95th percentile per-packet one-way delay: 133.682 ms
Loss rate: 0.00%
```

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

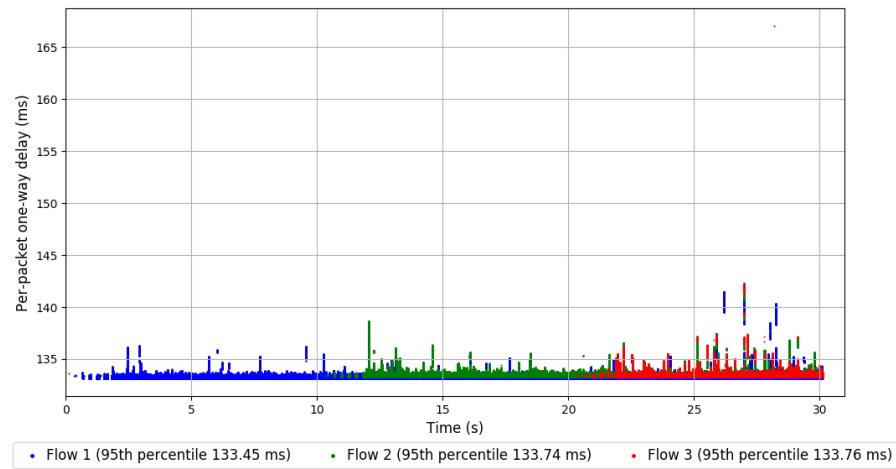
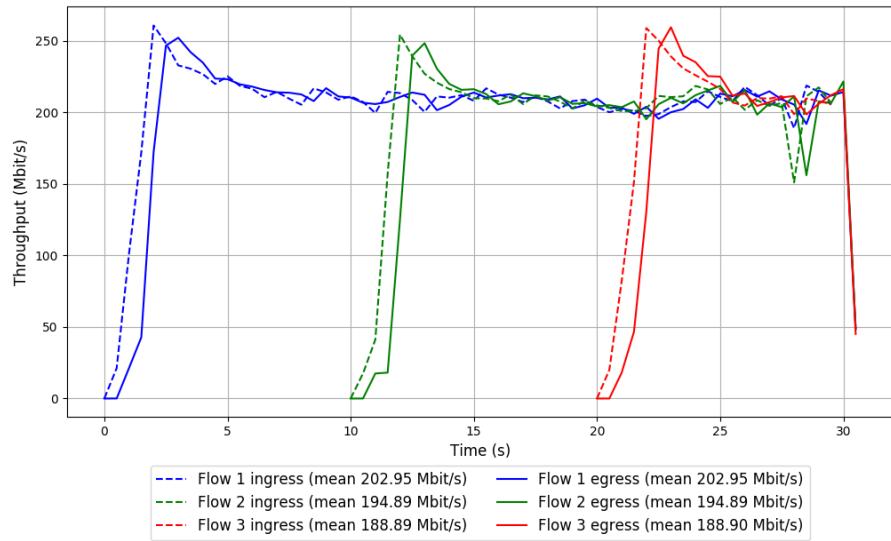


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-25 06:58:33
End at: 2019-01-25 06:59:03
Local clock offset: -0.516 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2019-01-25 11:10:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.52 Mbit/s
95th percentile per-packet one-way delay: 133.632 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.95 Mbit/s
95th percentile per-packet one-way delay: 133.447 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.89 Mbit/s
95th percentile per-packet one-way delay: 133.744 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.90 Mbit/s
95th percentile per-packet one-way delay: 133.759 ms
Loss rate: 0.00%
```

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

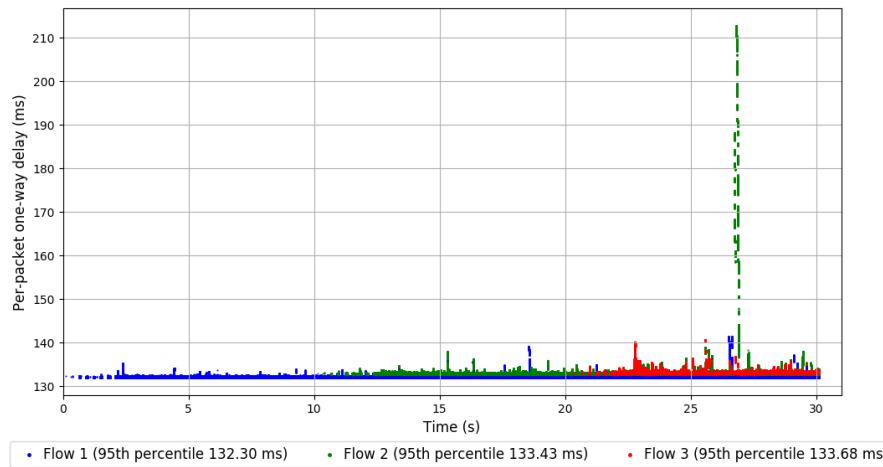
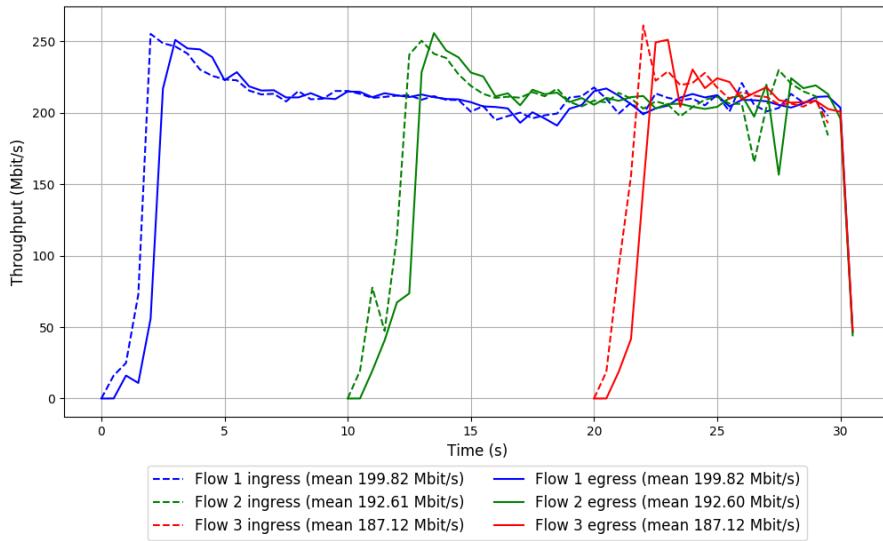


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-25 07:40:49
End at: 2019-01-25 07:41:19
Local clock offset: -0.051 ms
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2019-01-25 11:10:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.28 Mbit/s
95th percentile per-packet one-way delay: 133.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 199.82 Mbit/s
95th percentile per-packet one-way delay: 132.300 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.60 Mbit/s
95th percentile per-packet one-way delay: 133.432 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.12 Mbit/s
95th percentile per-packet one-way delay: 133.679 ms
Loss rate: 0.00%
```

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

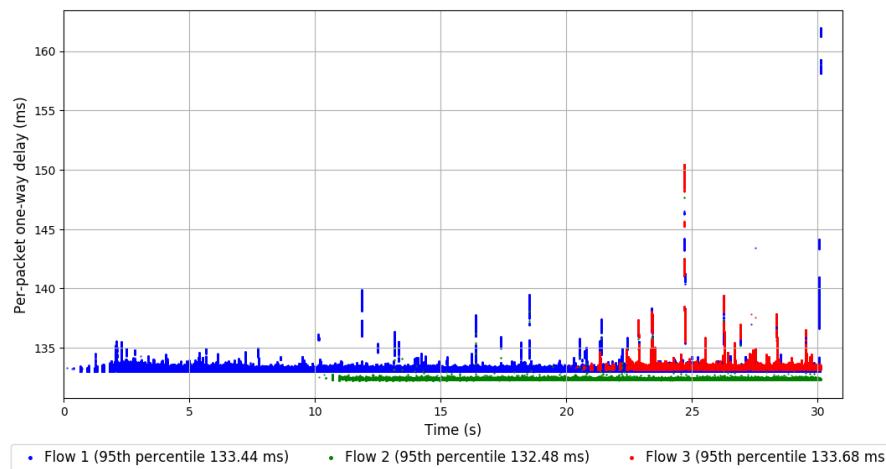
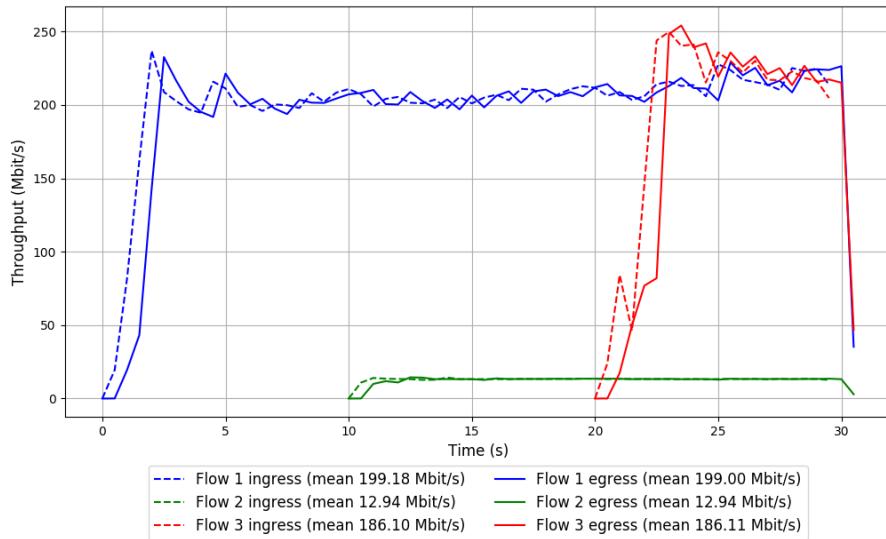


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-25 08:22:03
End at: 2019-01-25 08:22:33
Local clock offset: -0.408 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-01-25 11:10:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.41 Mbit/s
95th percentile per-packet one-way delay: 133.508 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 199.00 Mbit/s
95th percentile per-packet one-way delay: 133.445 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 132.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 186.11 Mbit/s
95th percentile per-packet one-way delay: 133.679 ms
Loss rate: 0.00%
```

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

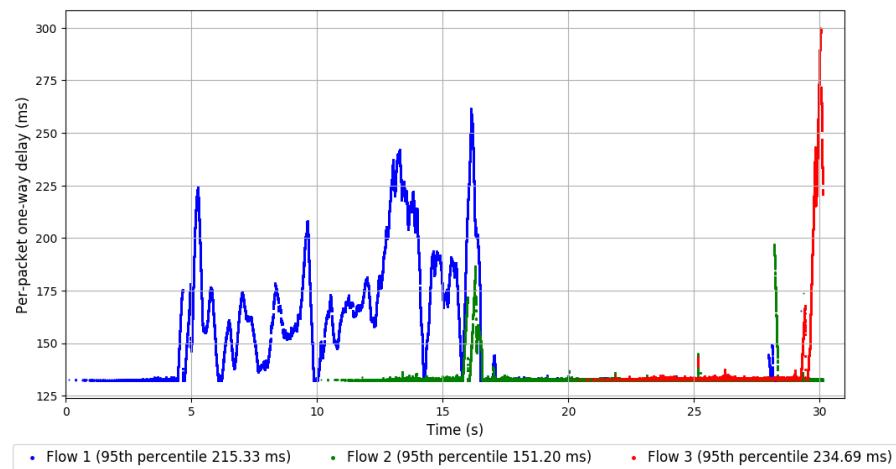
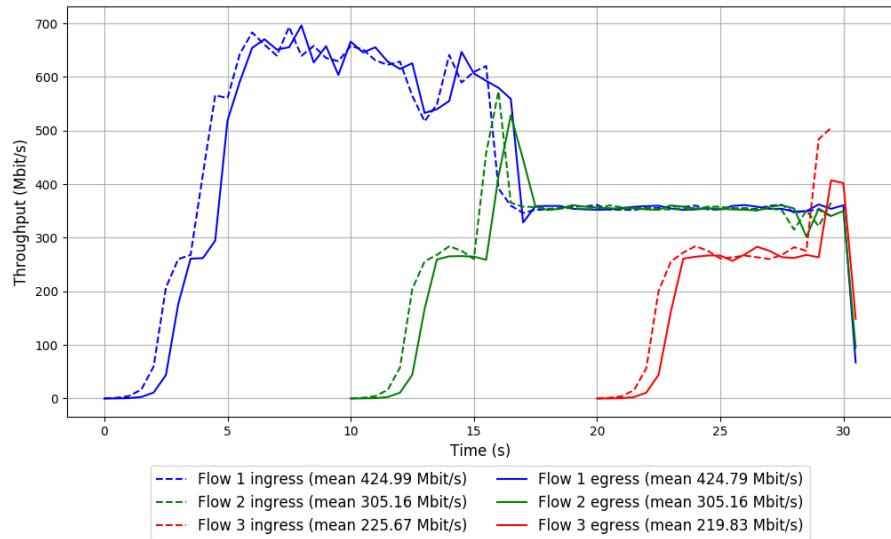


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-25 05:48:57
End at: 2019-01-25 05:49:27
Local clock offset: -0.02 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2019-01-25 11:10:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 701.09 Mbit/s
95th percentile per-packet one-way delay: 206.244 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 424.79 Mbit/s
95th percentile per-packet one-way delay: 215.331 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 305.16 Mbit/s
95th percentile per-packet one-way delay: 151.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 219.83 Mbit/s
95th percentile per-packet one-way delay: 234.695 ms
Loss rate: 2.57%
```

Run 1: Report of TCP Vegas — Data Link

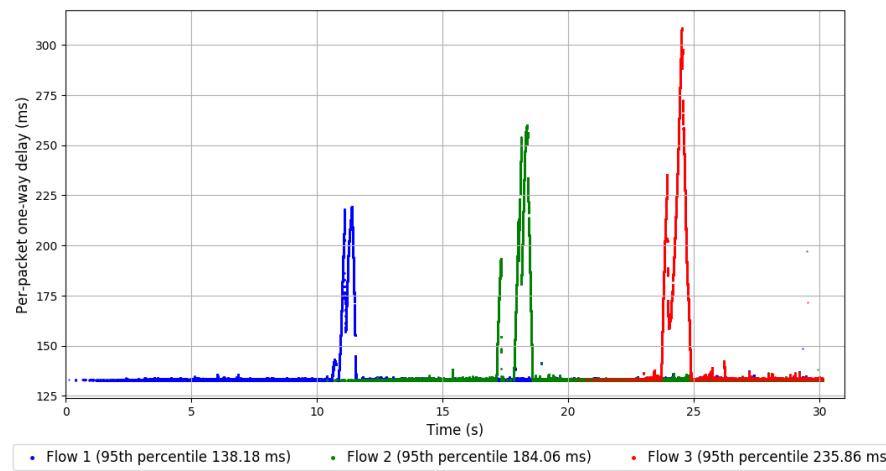
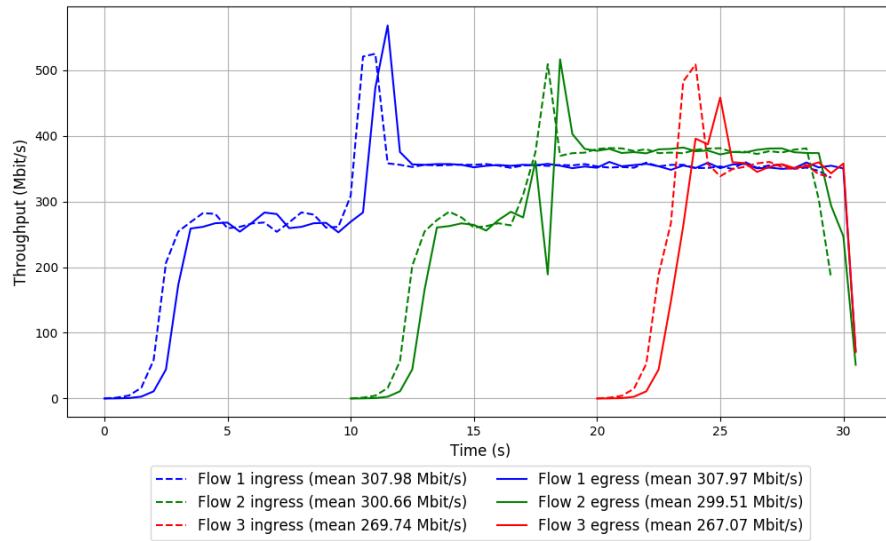


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-25 06:30:59
End at: 2019-01-25 06:31:29
Local clock offset: 0.071 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-01-25 11:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 596.16 Mbit/s
95th percentile per-packet one-way delay: 179.366 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 307.97 Mbit/s
95th percentile per-packet one-way delay: 138.176 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 299.51 Mbit/s
95th percentile per-packet one-way delay: 184.058 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 267.07 Mbit/s
95th percentile per-packet one-way delay: 235.857 ms
Loss rate: 0.99%
```

Run 2: Report of TCP Vegas — Data Link

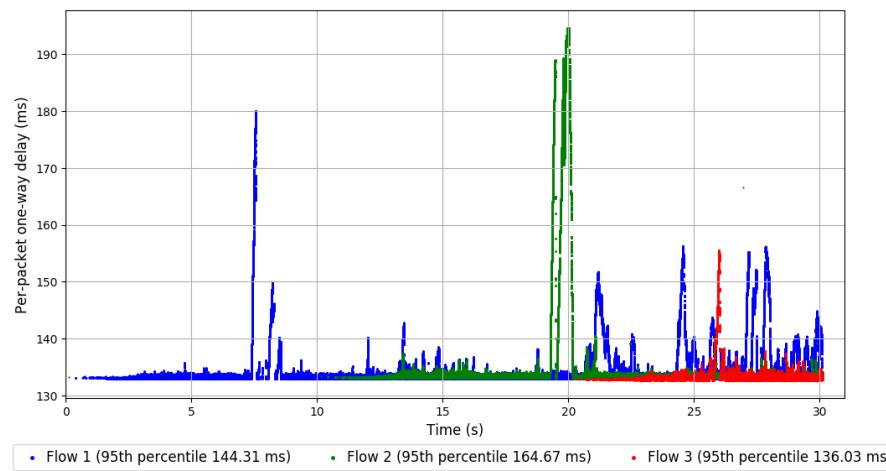
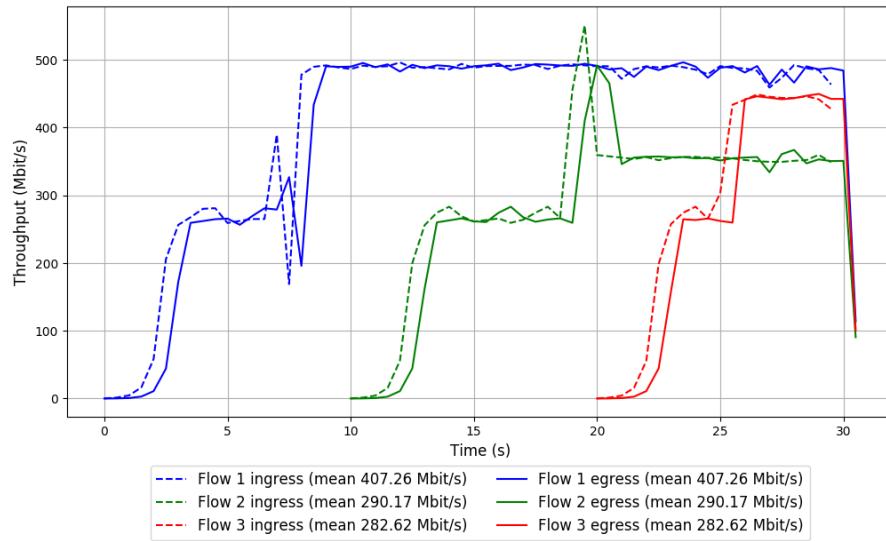


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-25 07:13:40
End at: 2019-01-25 07:14:10
Local clock offset: -0.076 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-01-25 11:18:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 694.47 Mbit/s
95th percentile per-packet one-way delay: 144.613 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 407.26 Mbit/s
95th percentile per-packet one-way delay: 144.308 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 290.17 Mbit/s
95th percentile per-packet one-way delay: 164.670 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 282.62 Mbit/s
95th percentile per-packet one-way delay: 136.027 ms
Loss rate: 0.00%
```

Run 3: Report of TCP Vegas — Data Link

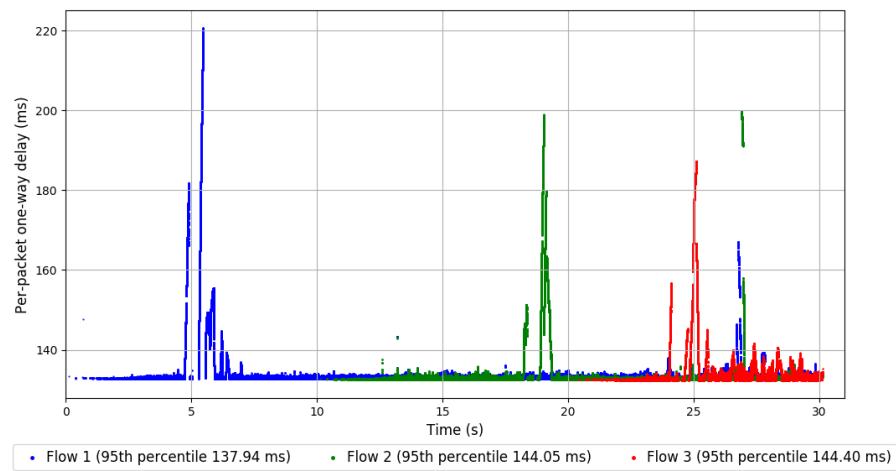
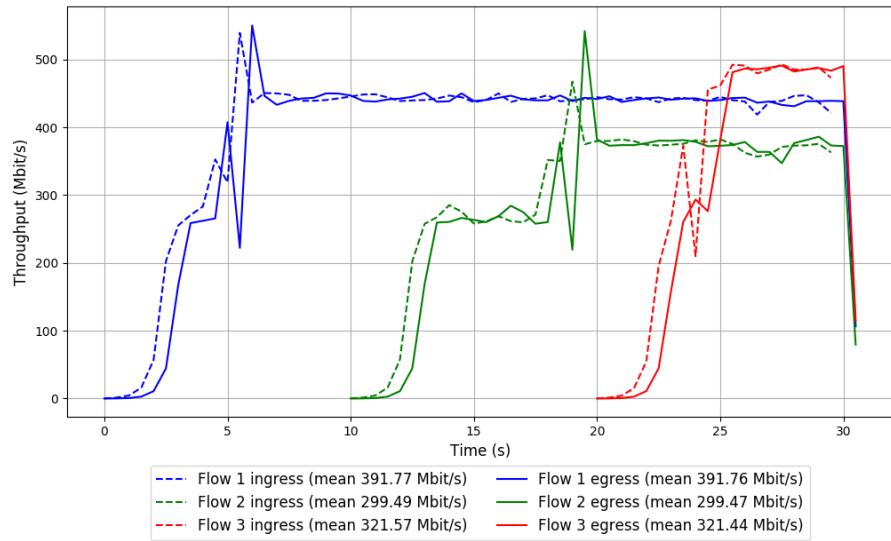


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-25 07:54:56
End at: 2019-01-25 07:55:26
Local clock offset: 0.242 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-01-25 11:19:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 698.09 Mbit/s
95th percentile per-packet one-way delay: 141.356 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 391.76 Mbit/s
95th percentile per-packet one-way delay: 137.935 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 299.47 Mbit/s
95th percentile per-packet one-way delay: 144.046 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 321.44 Mbit/s
95th percentile per-packet one-way delay: 144.398 ms
Loss rate: 0.03%
```

Run 4: Report of TCP Vegas — Data Link

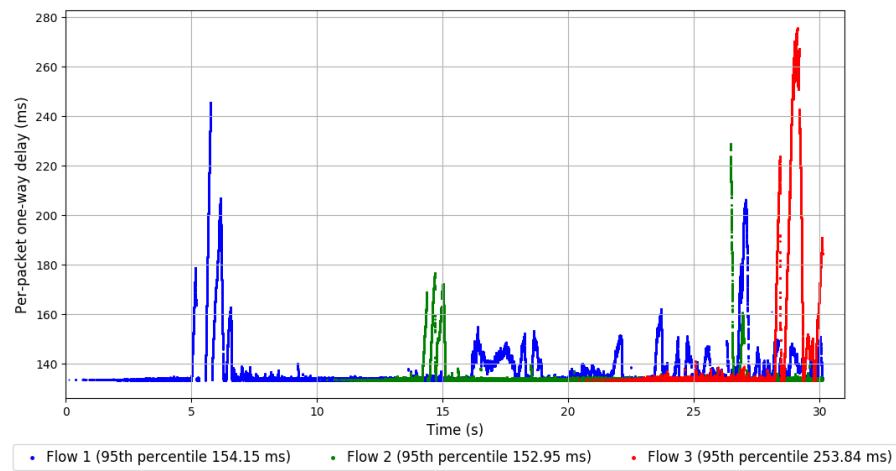
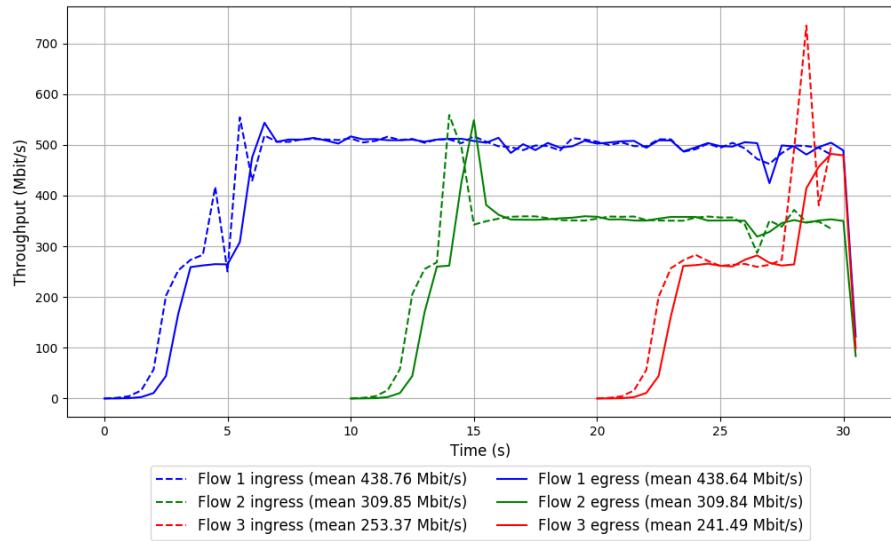


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-25 08:36:00
End at: 2019-01-25 08:36:30
Local clock offset: -0.259 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-01-25 11:20:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 725.37 Mbit/s
95th percentile per-packet one-way delay: 164.942 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 438.64 Mbit/s
95th percentile per-packet one-way delay: 154.147 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 309.84 Mbit/s
95th percentile per-packet one-way delay: 152.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.49 Mbit/s
95th percentile per-packet one-way delay: 253.837 ms
Loss rate: 4.67%
```

Run 5: Report of TCP Vegas — Data Link

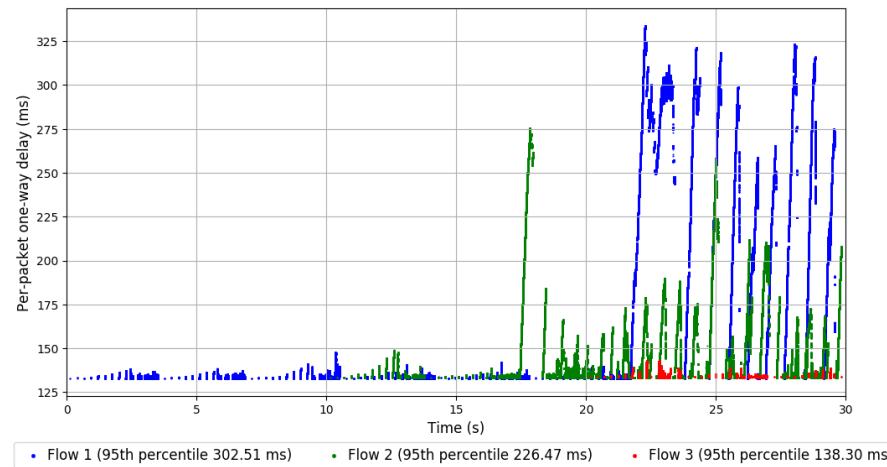
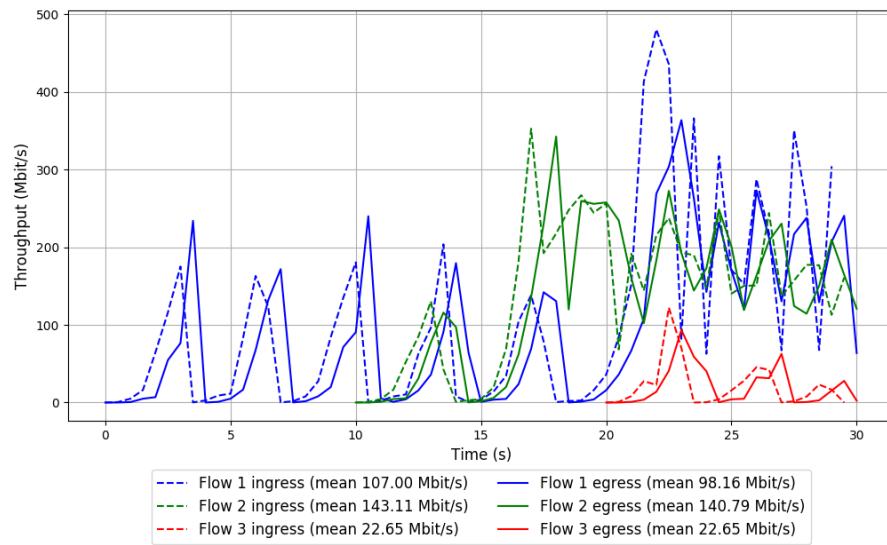


Run 1: Statistics of Verus

```
Start at: 2019-01-25 05:21:34
End at: 2019-01-25 05:22:04
Local clock offset: -0.613 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-01-25 11:20:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.04 Mbit/s
95th percentile per-packet one-way delay: 295.854 ms
Loss rate: 4.90%
-- Flow 1:
Average throughput: 98.16 Mbit/s
95th percentile per-packet one-way delay: 302.507 ms
Loss rate: 8.18%
-- Flow 2:
Average throughput: 140.79 Mbit/s
95th percentile per-packet one-way delay: 226.466 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 22.65 Mbit/s
95th percentile per-packet one-way delay: 138.300 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link

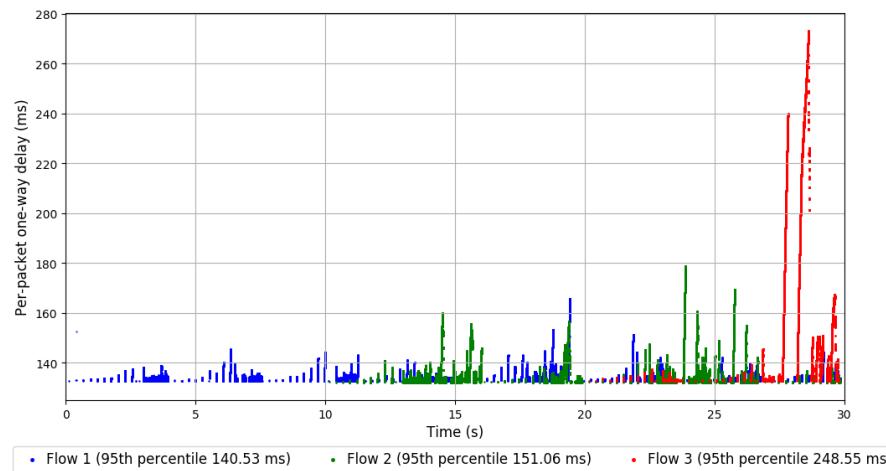
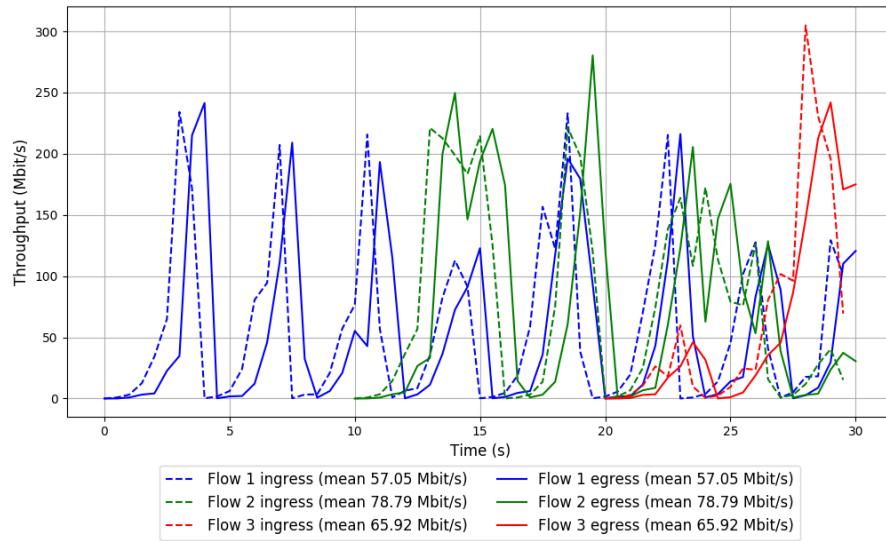


Run 2: Statistics of Verus

```
Start at: 2019-01-25 06:04:07
End at: 2019-01-25 06:04:37
Local clock offset: 0.1 ms
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2019-01-25 11:20:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.62 Mbit/s
95th percentile per-packet one-way delay: 165.897 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.05 Mbit/s
95th percentile per-packet one-way delay: 140.532 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.79 Mbit/s
95th percentile per-packet one-way delay: 151.064 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.92 Mbit/s
95th percentile per-packet one-way delay: 248.548 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

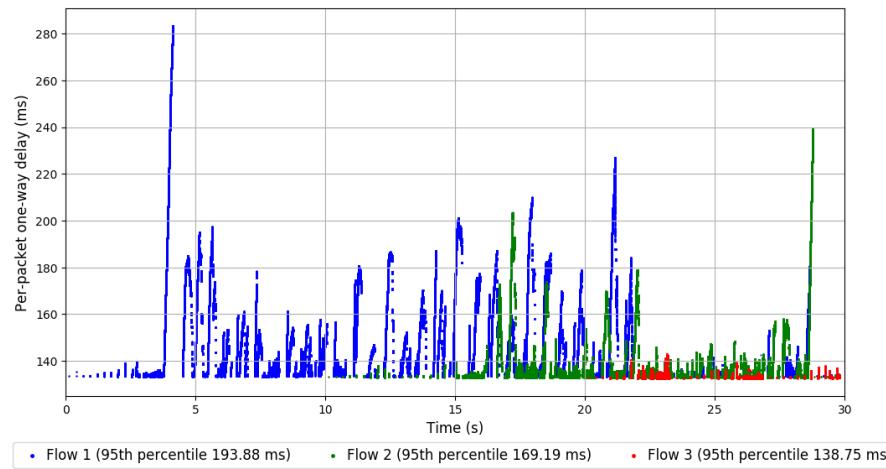
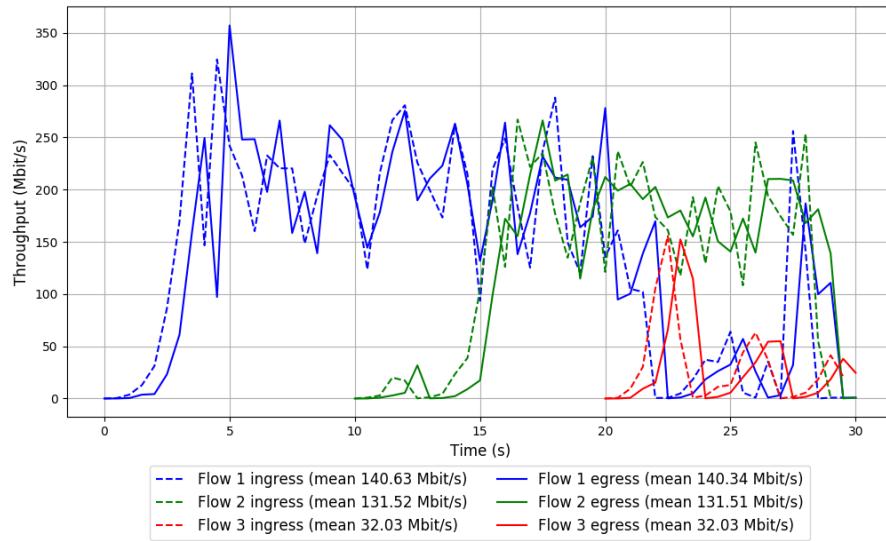


Run 3: Statistics of Verus

```
Start at: 2019-01-25 06:45:57
End at: 2019-01-25 06:46:27
Local clock offset: -0.585 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2019-01-25 11:20:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.88 Mbit/s
95th percentile per-packet one-way delay: 185.782 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 140.34 Mbit/s
95th percentile per-packet one-way delay: 193.875 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 131.51 Mbit/s
95th percentile per-packet one-way delay: 169.189 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.03 Mbit/s
95th percentile per-packet one-way delay: 138.754 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

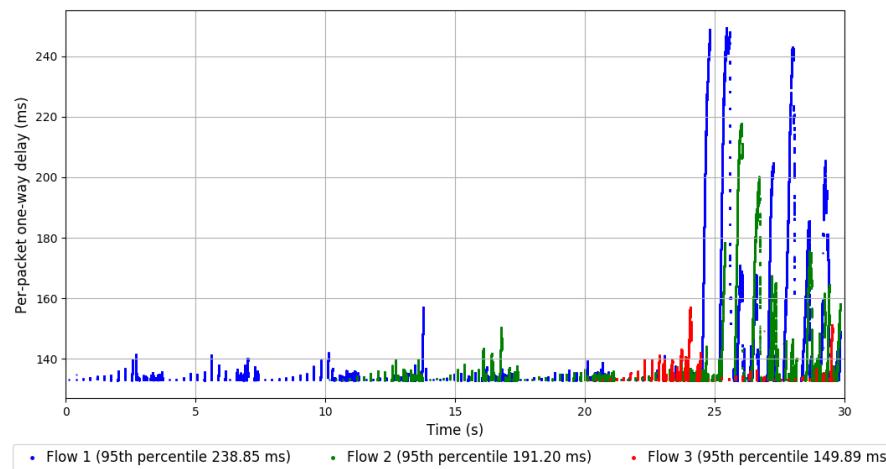
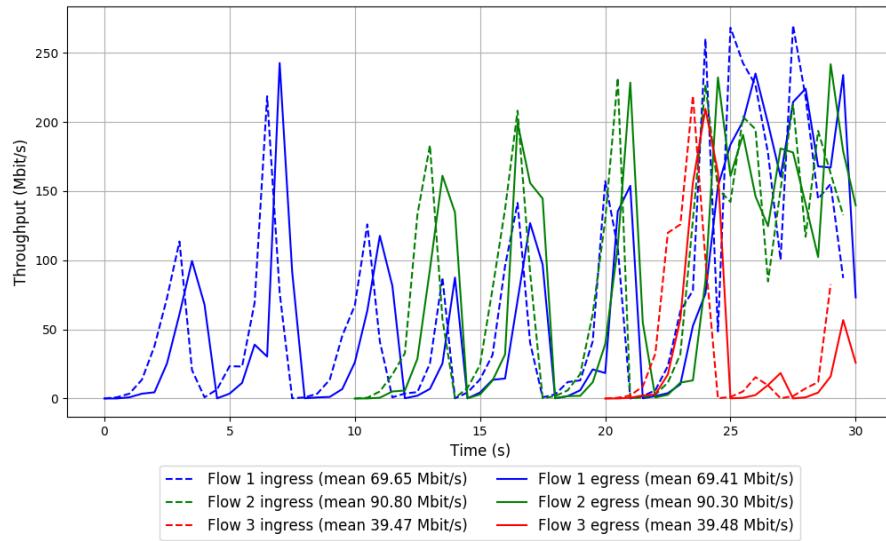


Run 4: Statistics of Verus

```
Start at: 2019-01-25 07:28:41
End at: 2019-01-25 07:29:11
Local clock offset: 0.066 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2019-01-25 11:20:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.83 Mbit/s
95th percentile per-packet one-way delay: 215.022 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 69.41 Mbit/s
95th percentile per-packet one-way delay: 238.852 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 191.200 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 149.891 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link

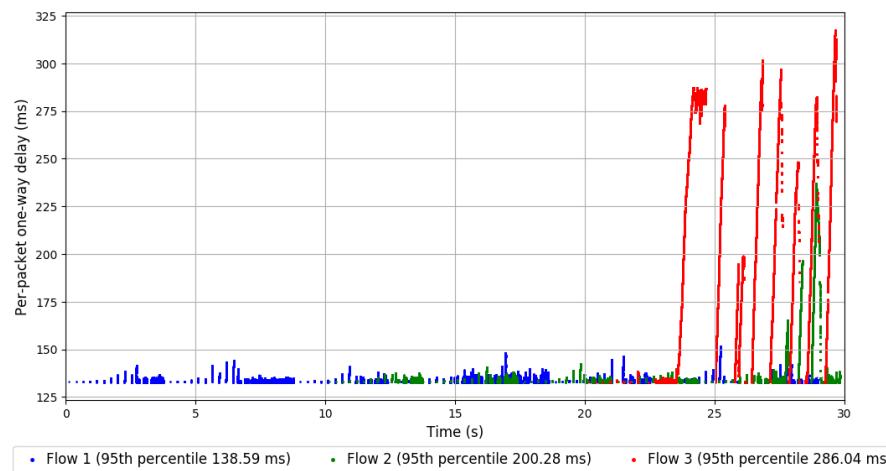
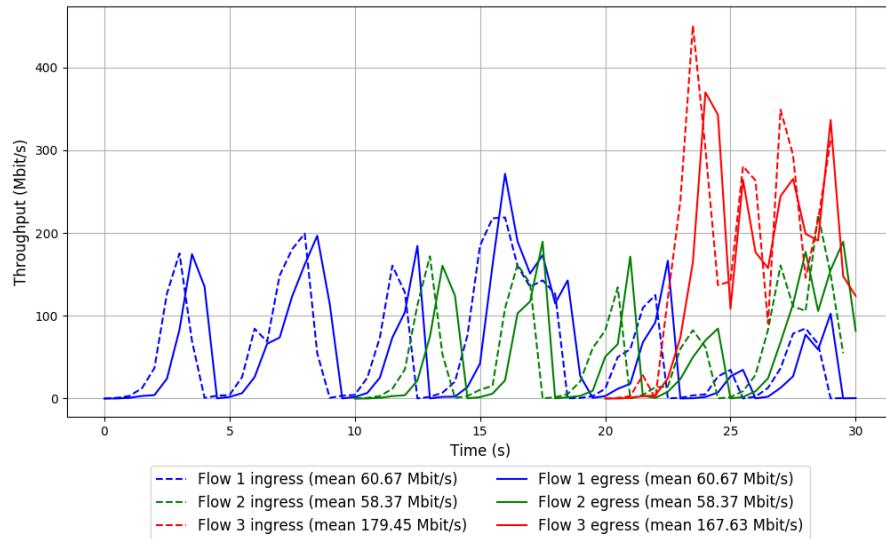


Run 5: Statistics of Verus

```
Start at: 2019-01-25 08:09:48
End at: 2019-01-25 08:10:18
Local clock offset: 0.064 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2019-01-25 11:20:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 153.06 Mbit/s
95th percentile per-packet one-way delay: 279.497 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 60.67 Mbit/s
95th percentile per-packet one-way delay: 138.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 200.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 167.63 Mbit/s
95th percentile per-packet one-way delay: 286.037 ms
Loss rate: 5.23%
```

Run 5: Report of Verus — Data Link

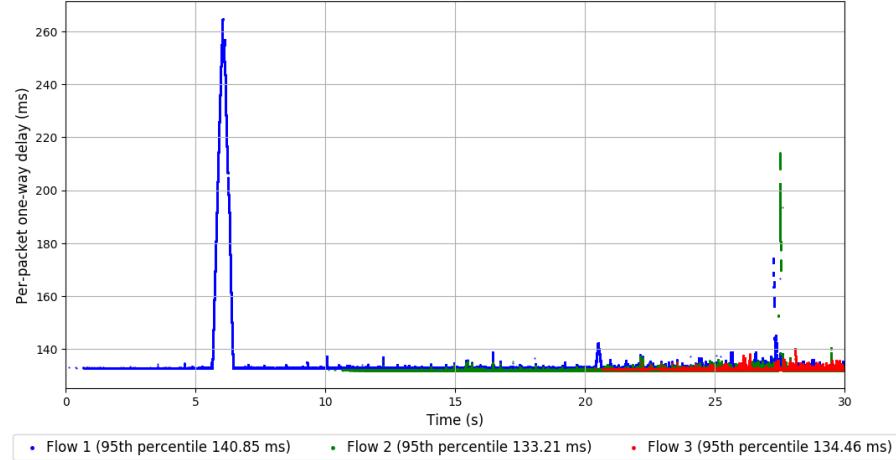
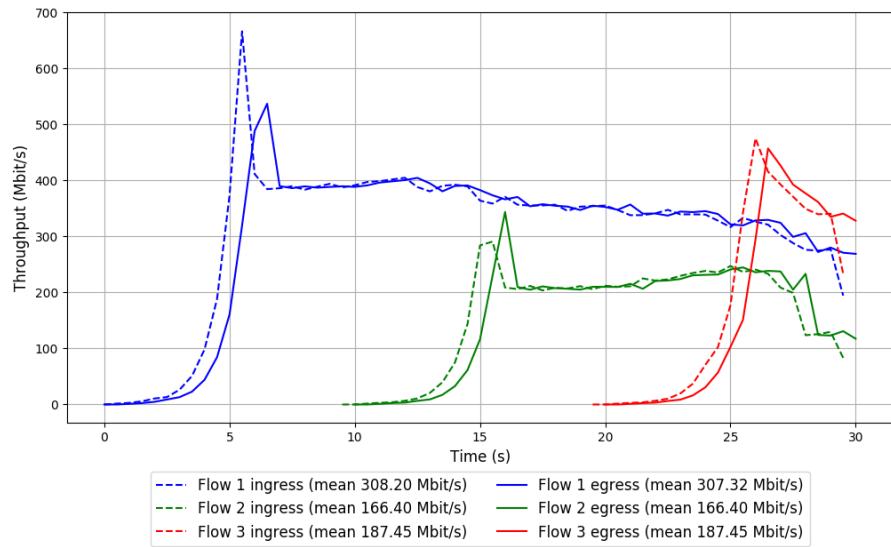


```
Run 1: Statistics of PCC-Vivace
```

```
Start at: 2019-01-25 05:40:32
End at: 2019-01-25 05:41:02
Local clock offset: -0.428 ms
Remote clock offset: -0.435 ms

# Below is generated by plot.py at 2019-01-25 11:23:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.99 Mbit/s
95th percentile per-packet one-way delay: 135.147 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 307.32 Mbit/s
95th percentile per-packet one-way delay: 140.848 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 166.40 Mbit/s
95th percentile per-packet one-way delay: 133.205 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.45 Mbit/s
95th percentile per-packet one-way delay: 134.462 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

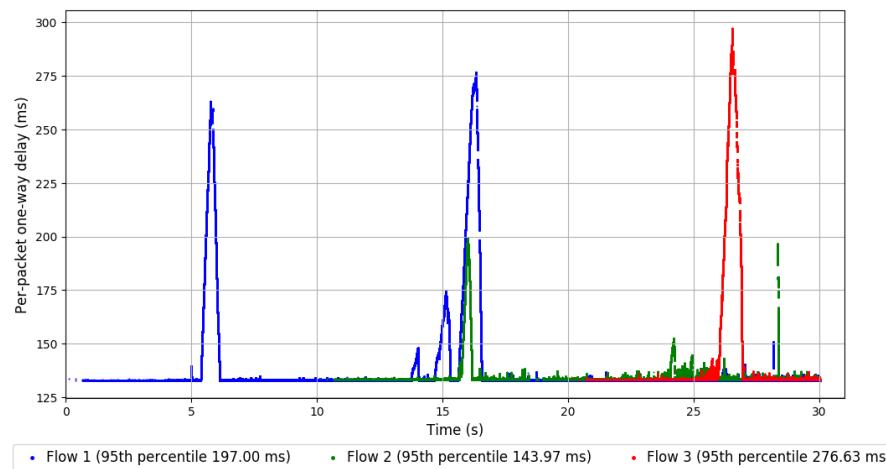
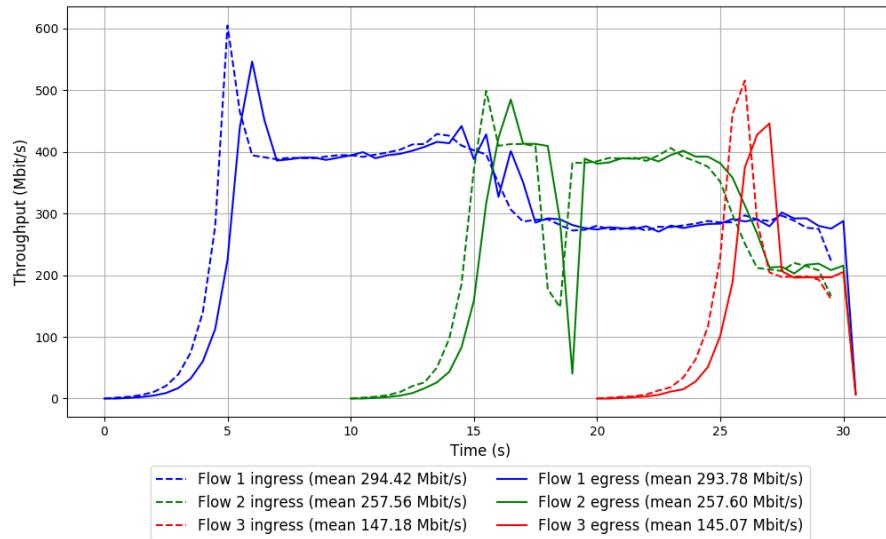


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-25 06:22:47
End at: 2019-01-25 06:23:17
Local clock offset: -0.388 ms
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2019-01-25 11:24:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 512.89 Mbit/s
95th percentile per-packet one-way delay: 196.163 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 293.78 Mbit/s
95th percentile per-packet one-way delay: 196.995 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 257.60 Mbit/s
95th percentile per-packet one-way delay: 143.973 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.07 Mbit/s
95th percentile per-packet one-way delay: 276.629 ms
Loss rate: 1.44%
```

Run 2: Report of PCC-Vivace — Data Link

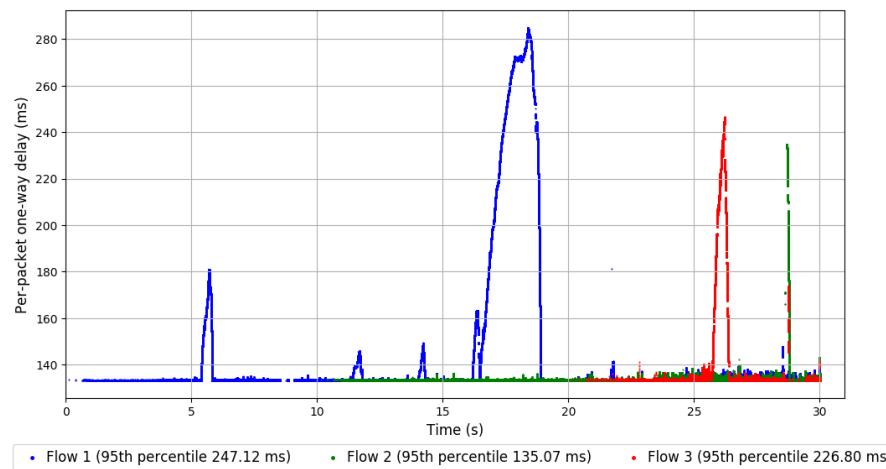
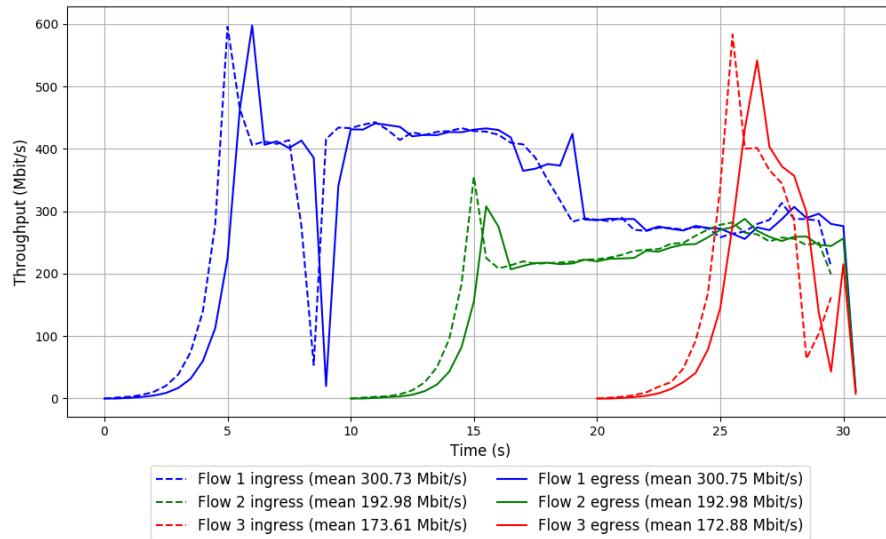


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-25 07:05:02
End at: 2019-01-25 07:05:32
Local clock offset: -0.538 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-01-25 11:24:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 486.07 Mbit/s
95th percentile per-packet one-way delay: 219.901 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 300.75 Mbit/s
95th percentile per-packet one-way delay: 247.122 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.98 Mbit/s
95th percentile per-packet one-way delay: 135.066 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.88 Mbit/s
95th percentile per-packet one-way delay: 226.796 ms
Loss rate: 0.42%
```

Run 3: Report of PCC-Vivace — Data Link

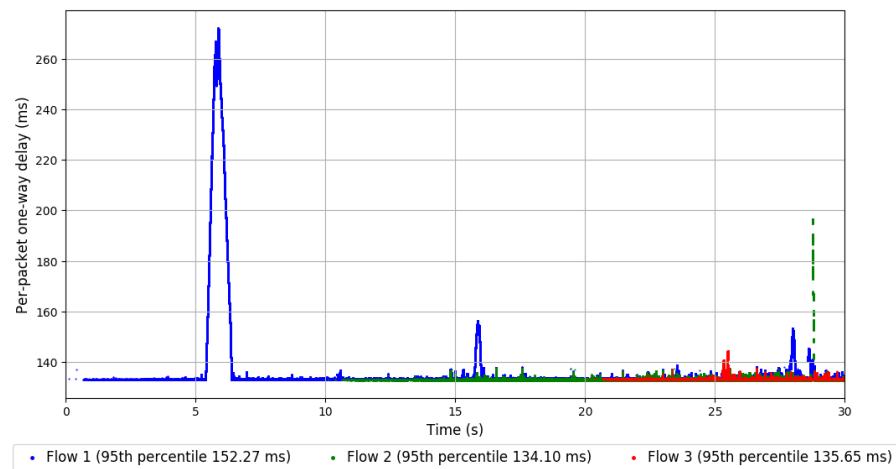
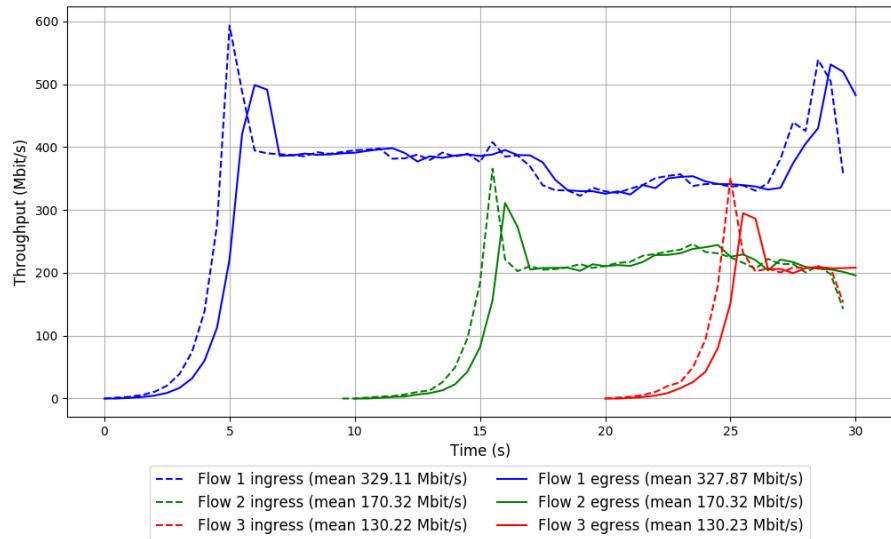


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-25 07:47:01
End at: 2019-01-25 07:47:31
Local clock offset: -0.098 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.18 Mbit/s
95th percentile per-packet one-way delay: 140.292 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 327.87 Mbit/s
95th percentile per-packet one-way delay: 152.274 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 170.32 Mbit/s
95th percentile per-packet one-way delay: 134.104 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.23 Mbit/s
95th percentile per-packet one-way delay: 135.646 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

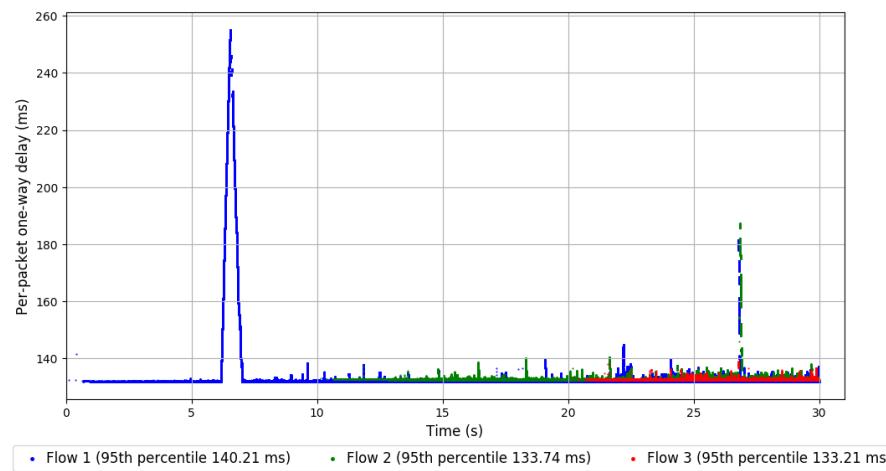
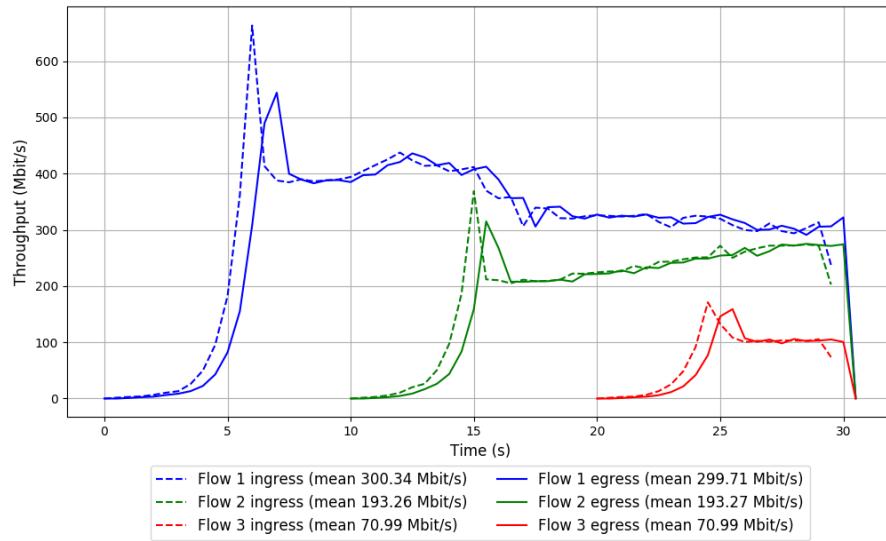


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-25 08:27:58
End at: 2019-01-25 08:28:28
Local clock offset: 0.343 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 451.59 Mbit/s
95th percentile per-packet one-way delay: 134.941 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 299.71 Mbit/s
95th percentile per-packet one-way delay: 140.213 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 193.27 Mbit/s
95th percentile per-packet one-way delay: 133.738 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.99 Mbit/s
95th percentile per-packet one-way delay: 133.212 ms
Loss rate: 0.00%
```

Run 5: Report of PCC-Vivace — Data Link

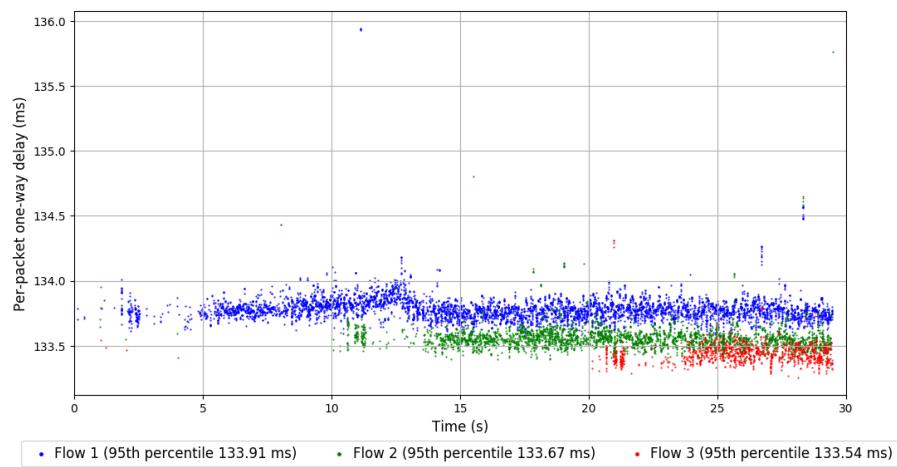
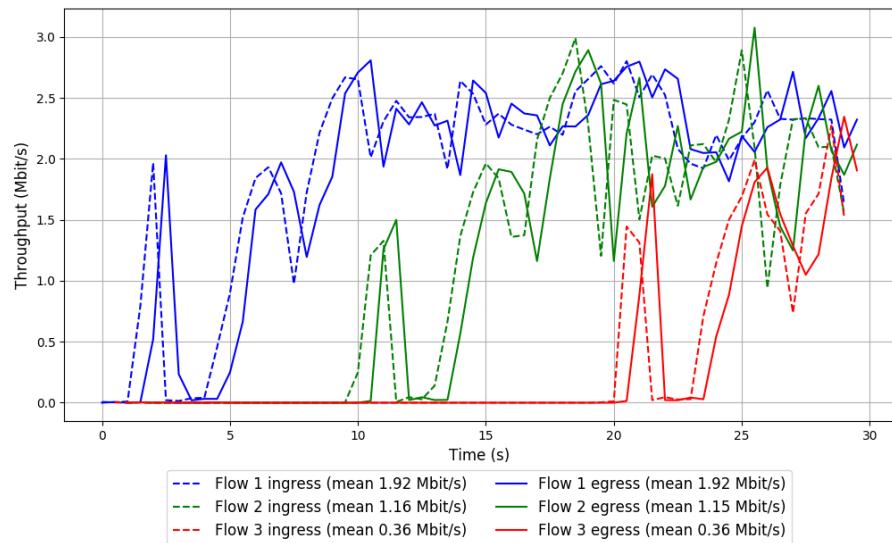


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-25 05:23:21
End at: 2019-01-25 05:23:51
Local clock offset: -0.31 ms
Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 133.878 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 133.907 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 133.666 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 133.540 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

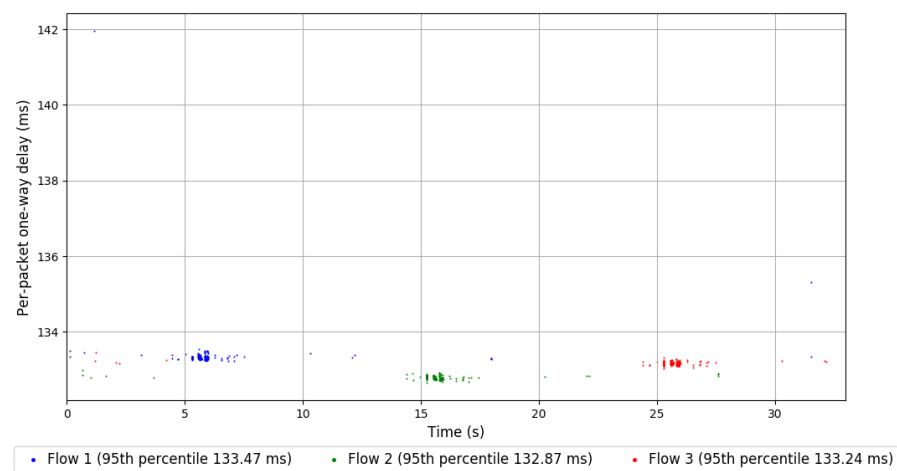
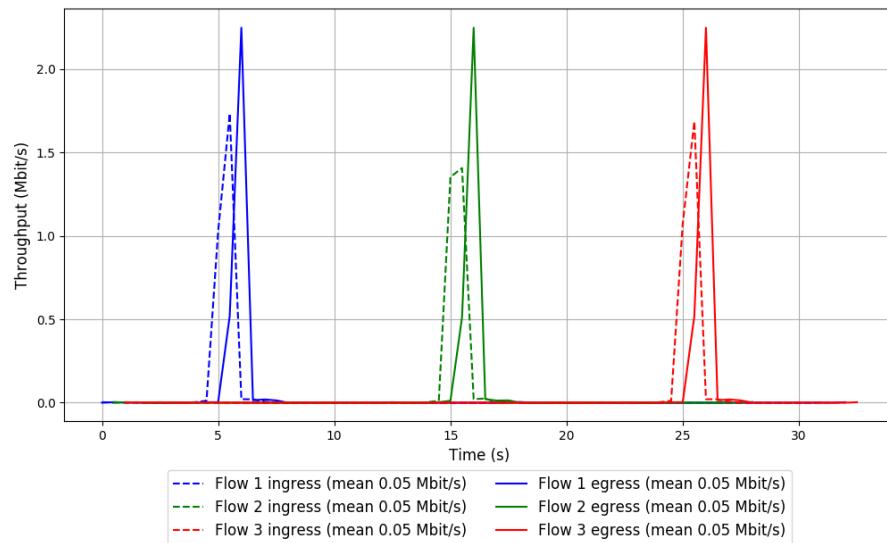


```
Run 2: Statistics of WebRTC media

Start at: 2019-01-25 06:05:43
End at: 2019-01-25 06:06:13
Local clock offset: -0.367 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.470 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 132.874 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.241 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

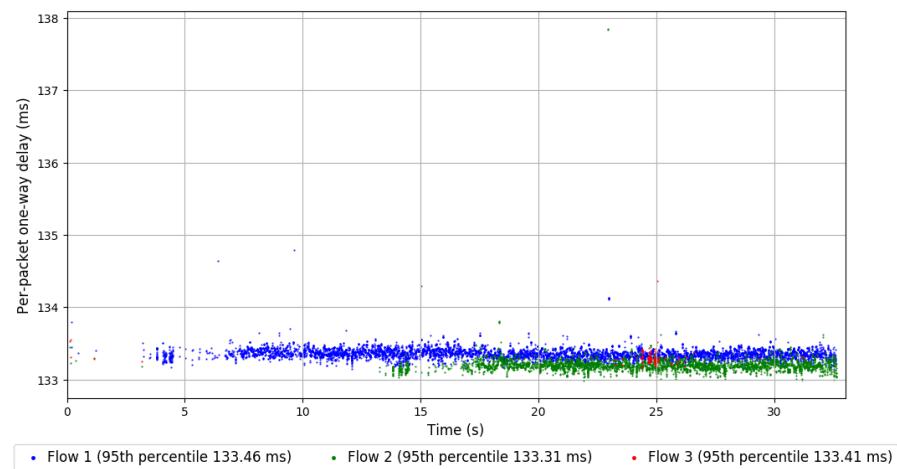
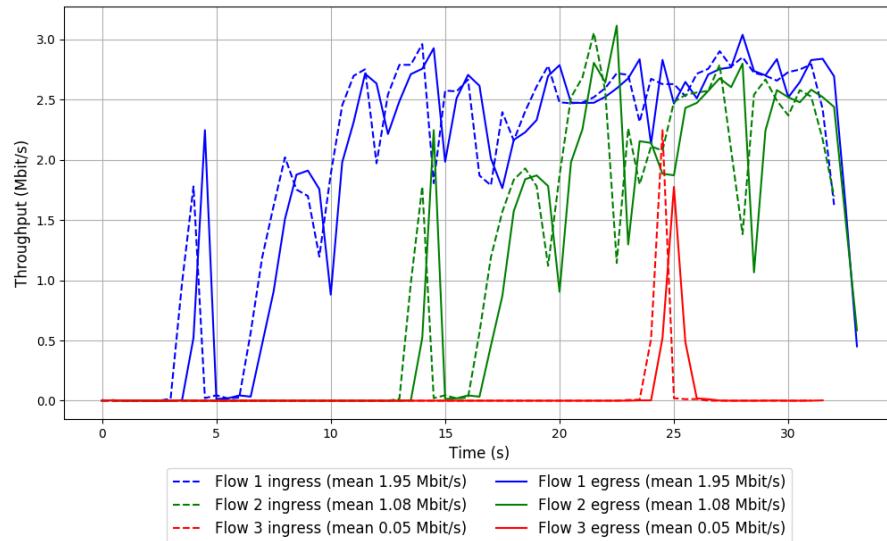


```
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 06:47:48
End at: 2019-01-25 06:48:18
Local clock offset: -0.356 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 133.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 133.461 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 133.308 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.411 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

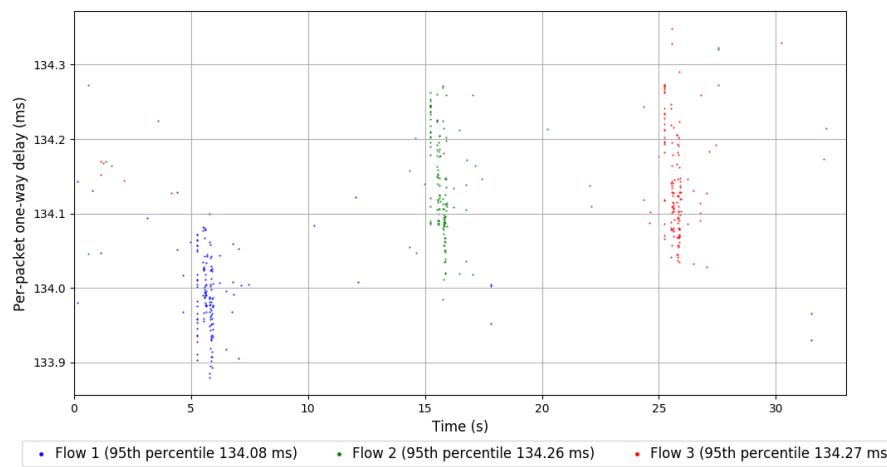
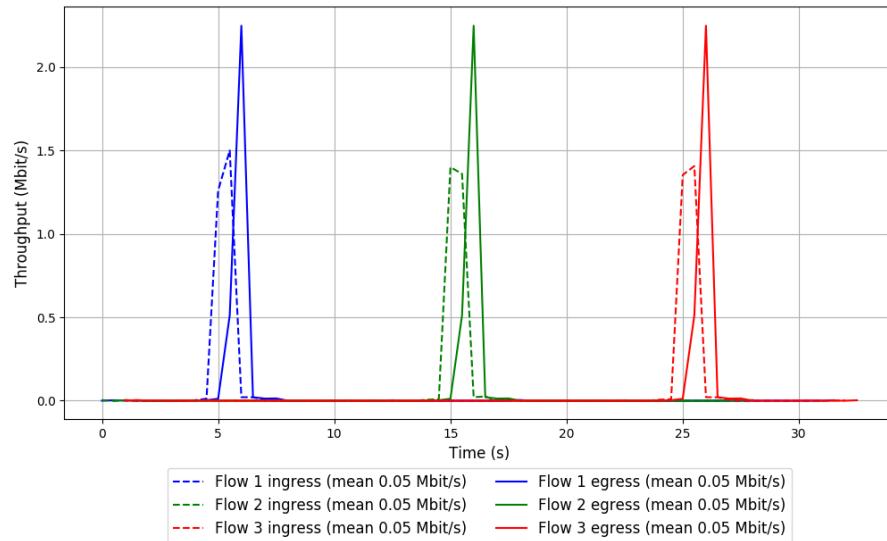


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-25 07:30:31
End at: 2019-01-25 07:31:01
Local clock offset: -0.578 ms
Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 134.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.260 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 134.271 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



```
Run 5: Statistics of WebRTC media

Start at: 2019-01-25 08:11:29
End at: 2019-01-25 08:11:59
Local clock offset: -0.125 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-01-25 11:24:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 133.172 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.202 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 133.055 ms
Loss rate: 0.00%
```

Run 5: Report of WebRTC media — Data Link

