

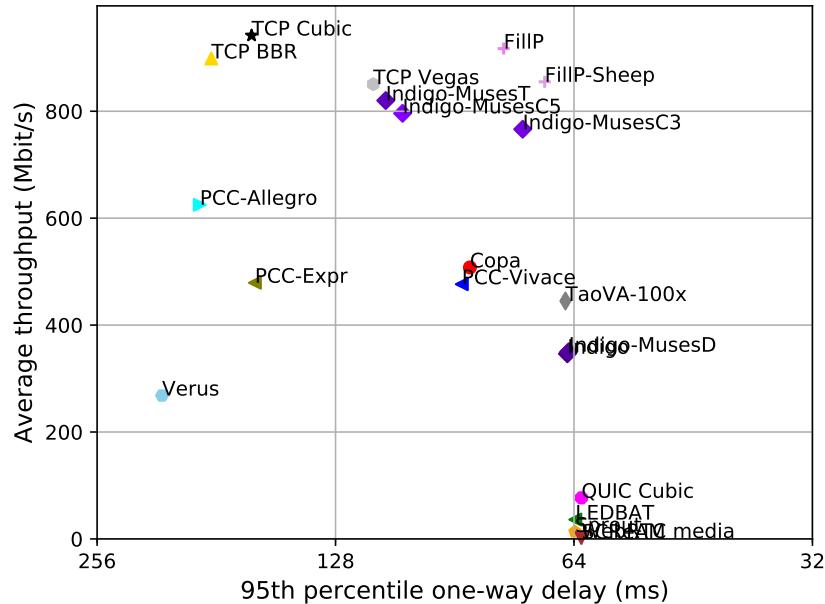
Pantheon Report

Generated at 2019-01-22 03:31:27 (UTC).
Data path: GCE Iowa on `ens4 (local)` → GCE Tokyo 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.

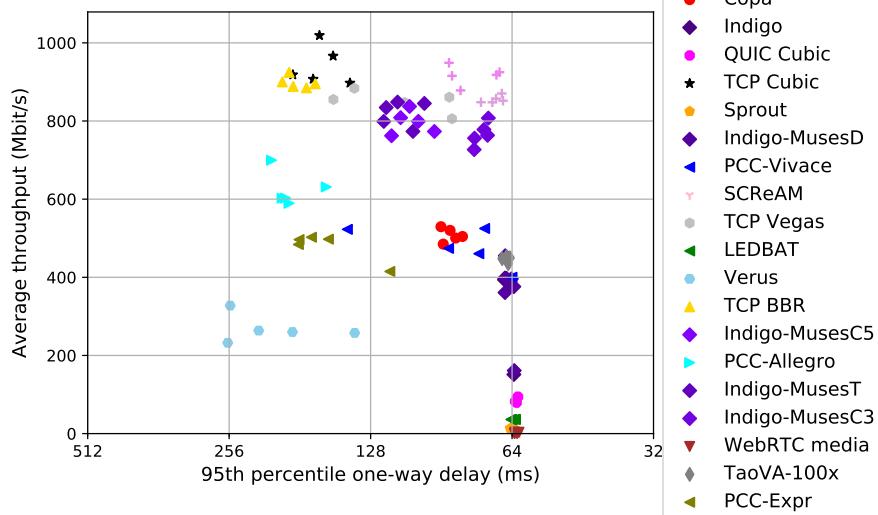
```
System info:  
Linux 4.15.0-1026-gcp  
net.core.default_qdisc = fq  
net.core.rmem_default = 16777216  
net.core.rmem_max = 536870912  
net.core.wmem_default = 16777216  
net.core.wmem_max = 536870912  
net.ipv4.tcp_rmem = 4096 16777216 536870912  
net.ipv4.tcp_wmem = 4096 16777216 536870912  
  
Git summary:  
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38  
third_party/fillp @ d6da1459332fce56963885d7eba17e6a32d4519  
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9  
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4  
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d  
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf  
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde  
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 Iowa to GCE Tokyo, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



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



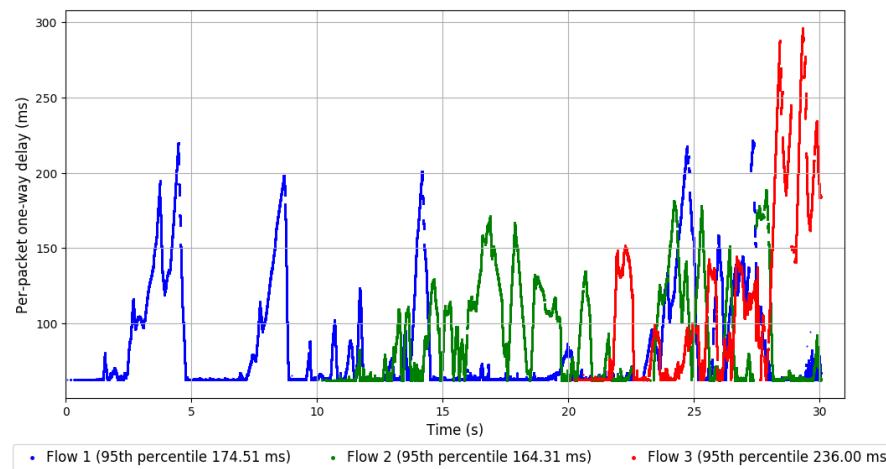
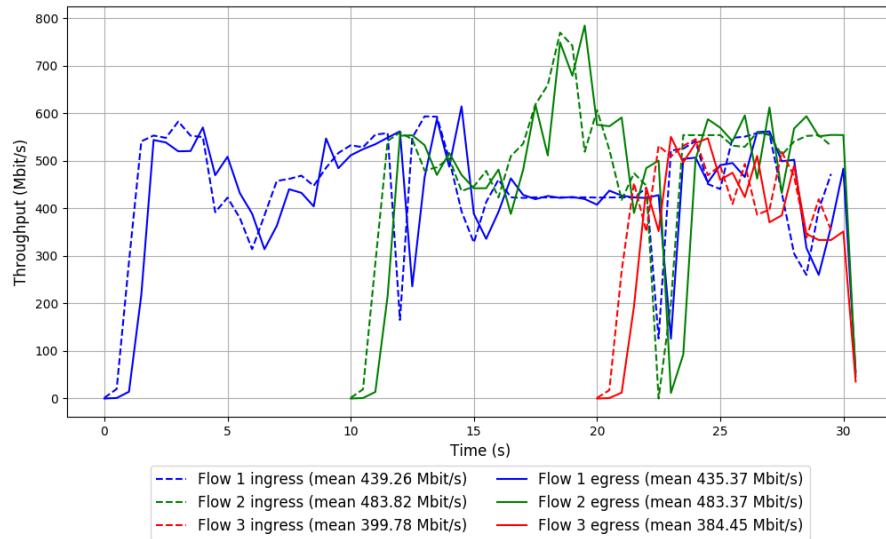
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	464.33	450.16	405.27	182.37	184.05	179.42	1.33	1.18	1.65
Copa	5	269.11	247.95	221.77	86.87	84.85	88.11	0.02	0.01	0.02
TCP Cubic	5	486.87	474.42	417.42	155.50	149.51	187.06	0.19	0.25	0.97
FillP	5	586.81	370.54	250.54	83.55	68.49	66.14	0.10	0.01	0.03
FillP-Sheep	5	541.44	343.04	255.79	71.97	65.86	65.09	0.00	0.00	0.00
Indigo	5	170.71	183.32	167.00	65.08	65.40	65.32	0.00	0.00	0.00
Indigo-MusesC3	5	458.57	364.94	266.42	77.51	67.08	66.65	0.00	0.01	0.00
Indigo-MusesC5	5	491.29	423.96	125.75	106.58	105.35	66.98	0.03	0.05	0.25
Indigo-MusesD	5	256.38	128.89	37.38	65.15	63.74	62.93	0.00	0.01	0.00
Indigo-MusesT	5	483.31	395.97	297.60	118.46	75.02	71.17	0.02	0.00	0.02
LEDBAT	5	23.33	15.59	7.68	63.86	63.53	63.28	0.01	0.00	0.00
PCC-Allegro	5	346.99	297.08	244.53	191.06	146.03	148.67	2.57	1.63	0.68
PCC-Expr	5	269.10	228.11	176.54	170.56	111.98	123.40	1.82	0.49	1.34
QUIC Cubic	5	41.30	36.32	35.13	62.59	62.54	62.55	0.00	0.00	0.00
SCReAM	5	0.22	0.22	0.22	62.57	62.58	62.53	0.00	0.00	0.00
Sprout	5	6.77	6.64	6.46	63.82	63.68	63.73	0.00	0.00	0.00
TaoVA-100x	5	231.91	219.20	201.31	65.07	65.57	67.51	0.00	0.00	0.00
TCP Vegas	5	456.16	396.71	391.52	111.54	97.73	133.16	0.05	0.06	0.15
Verus	5	158.08	127.18	79.03	197.33	216.03	106.69	4.21	6.42	0.01
PCC-Vivace	5	286.42	228.05	115.60	79.51	94.58	64.10	0.05	0.16	0.02
WebRTC media	5	0.83	0.83	0.33	62.62	62.58	62.58	0.00	0.00	0.01

Run 1: Statistics of TCP BBR

```
Start at: 2019-01-21 21:02:13
End at: 2019-01-21 21:02:43
Local clock offset: -0.012 ms
Remote clock offset: -0.623 ms

# Below is generated by plot.py at 2019-01-22 00:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 884.97 Mbit/s
95th percentile per-packet one-way delay: 175.301 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 435.37 Mbit/s
95th percentile per-packet one-way delay: 174.510 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 483.37 Mbit/s
95th percentile per-packet one-way delay: 164.314 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 384.45 Mbit/s
95th percentile per-packet one-way delay: 235.996 ms
Loss rate: 3.83%
```

Run 1: Report of TCP BBR — Data Link

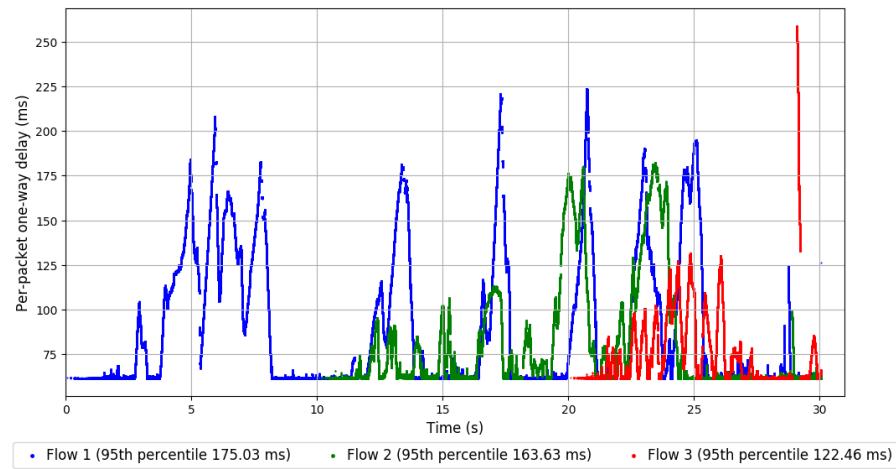
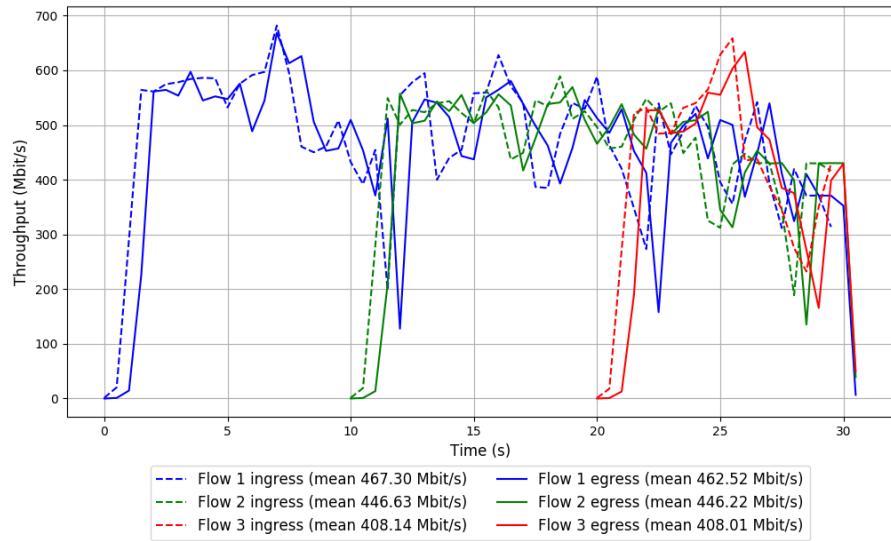


Run 2: Statistics of TCP BBR

```
Start at: 2019-01-21 21:38:29
End at: 2019-01-21 21:38:59
Local clock offset: 0.006 ms
Remote clock offset: -1.235 ms

# Below is generated by plot.py at 2019-01-22 00:28:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 895.32 Mbit/s
95th percentile per-packet one-way delay: 167.869 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 462.52 Mbit/s
95th percentile per-packet one-way delay: 175.027 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 446.22 Mbit/s
95th percentile per-packet one-way delay: 163.627 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 408.01 Mbit/s
95th percentile per-packet one-way delay: 122.459 ms
Loss rate: 0.03%
```

Run 2: Report of TCP BBR — Data Link

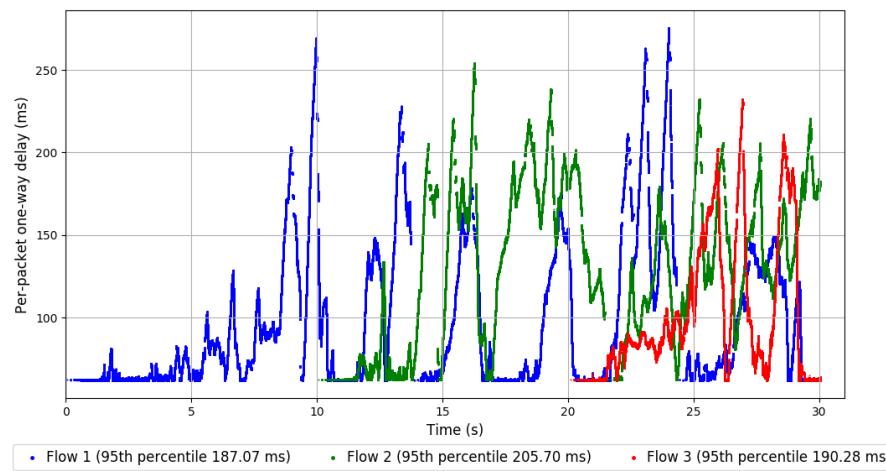
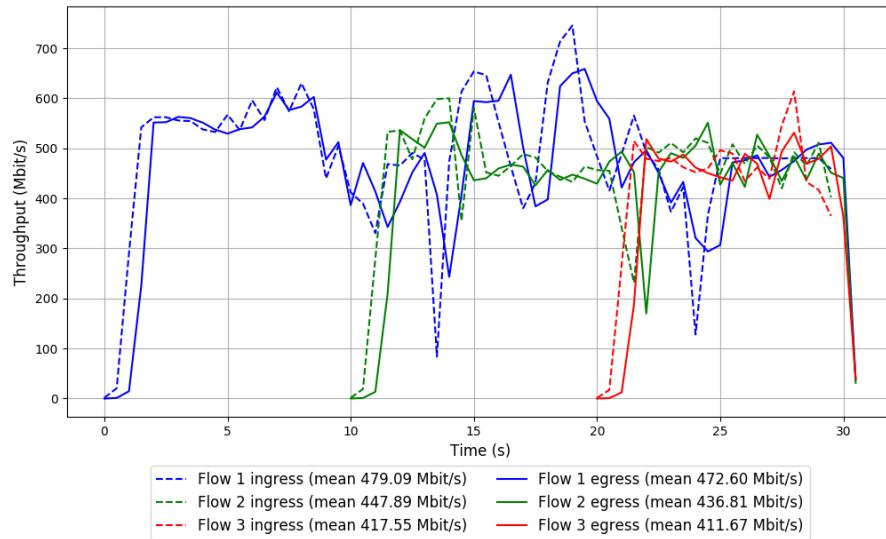


Run 3: Statistics of TCP BBR

```
Start at: 2019-01-21 22:14:49
End at: 2019-01-21 22:15:19
Local clock offset: 0.034 ms
Remote clock offset: -0.833 ms

# Below is generated by plot.py at 2019-01-22 00:28:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.10 Mbit/s
95th percentile per-packet one-way delay: 197.275 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 472.60 Mbit/s
95th percentile per-packet one-way delay: 187.075 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 436.81 Mbit/s
95th percentile per-packet one-way delay: 205.699 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 411.67 Mbit/s
95th percentile per-packet one-way delay: 190.278 ms
Loss rate: 1.41%
```

Run 3: Report of TCP BBR — Data Link

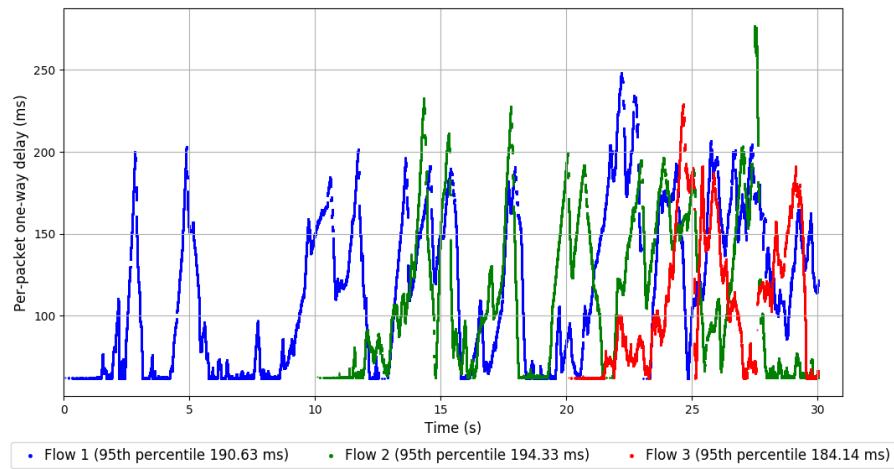
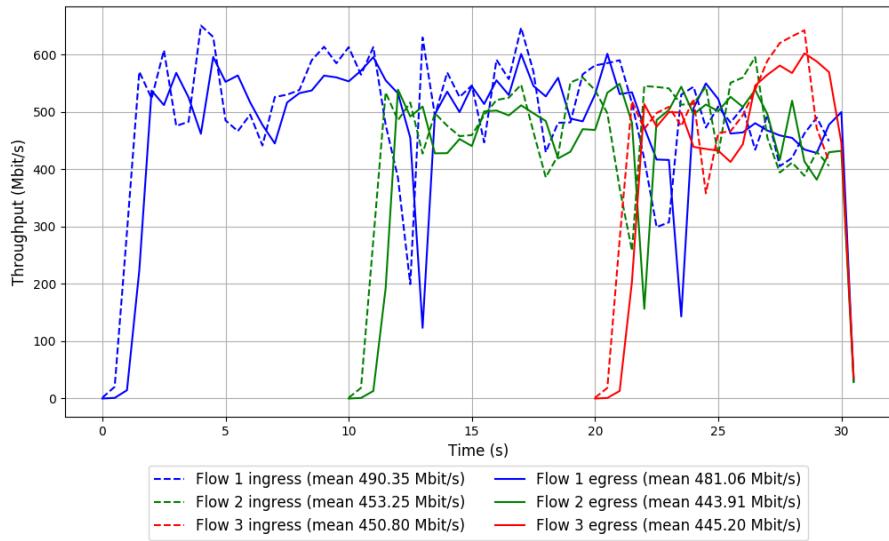


Run 4: Statistics of TCP BBR

```
Start at: 2019-01-21 22:51:03
End at: 2019-01-21 22:51:33
Local clock offset: -0.066 ms
Remote clock offset: -0.968 ms

# Below is generated by plot.py at 2019-01-22 00:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.51 Mbit/s
95th percentile per-packet one-way delay: 190.789 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 481.06 Mbit/s
95th percentile per-packet one-way delay: 190.627 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 443.91 Mbit/s
95th percentile per-packet one-way delay: 194.334 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 445.20 Mbit/s
95th percentile per-packet one-way delay: 184.138 ms
Loss rate: 1.23%
```

Run 4: Report of TCP BBR — Data Link

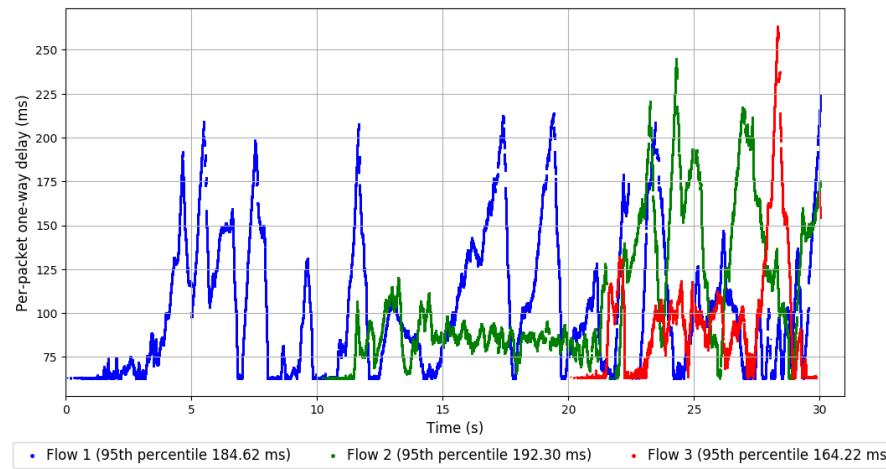
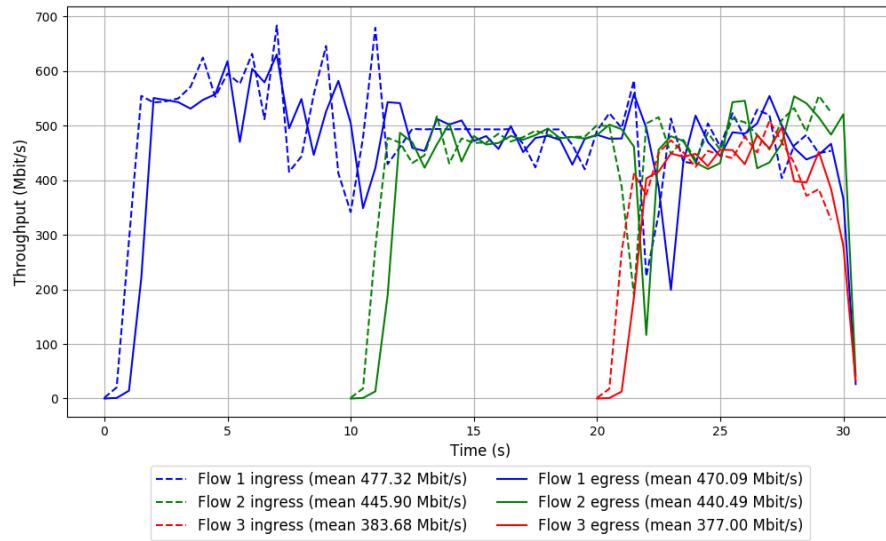


Run 5: Statistics of TCP BBR

```
Start at: 2019-01-21 23:27:26
End at: 2019-01-21 23:27:56
Local clock offset: 0.015 ms
Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2019-01-22 00:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 888.50 Mbit/s
95th percentile per-packet one-way delay: 187.077 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 470.09 Mbit/s
95th percentile per-packet one-way delay: 184.622 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 440.49 Mbit/s
95th percentile per-packet one-way delay: 192.299 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 377.00 Mbit/s
95th percentile per-packet one-way delay: 164.218 ms
Loss rate: 1.74%
```

Run 5: Report of TCP BBR — Data Link

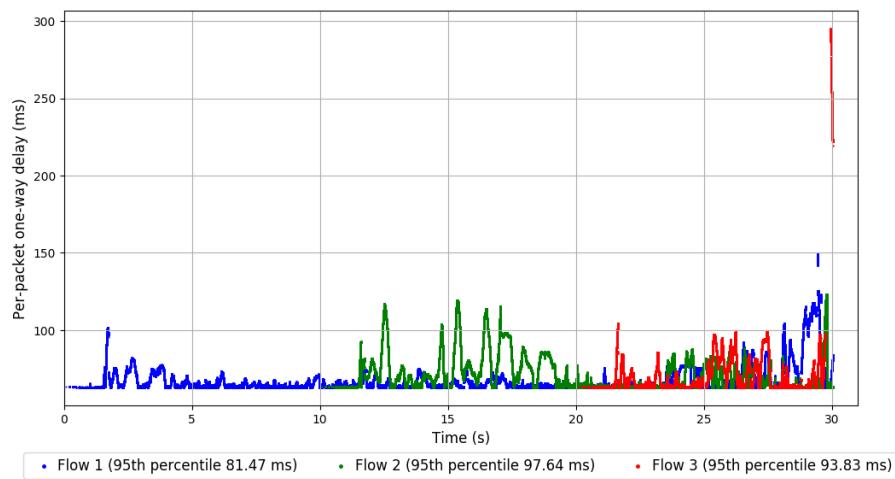
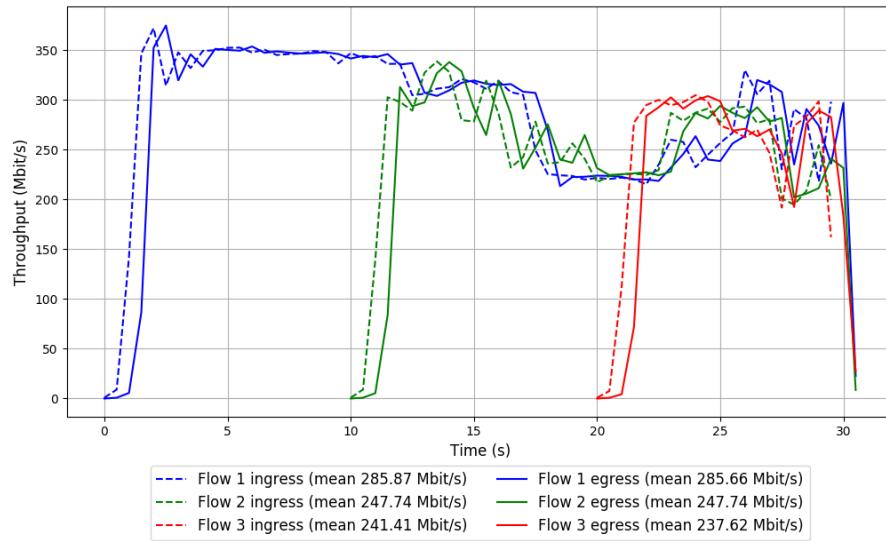


Run 1: Statistics of Copa

```
Start at: 2019-01-21 21:10:42
End at: 2019-01-21 21:11:12
Local clock offset: 0.007 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2019-01-22 00:29:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 529.47 Mbit/s
95th percentile per-packet one-way delay: 90.676 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 285.66 Mbit/s
95th percentile per-packet one-way delay: 81.474 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 247.74 Mbit/s
95th percentile per-packet one-way delay: 97.636 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 237.62 Mbit/s
95th percentile per-packet one-way delay: 93.829 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link

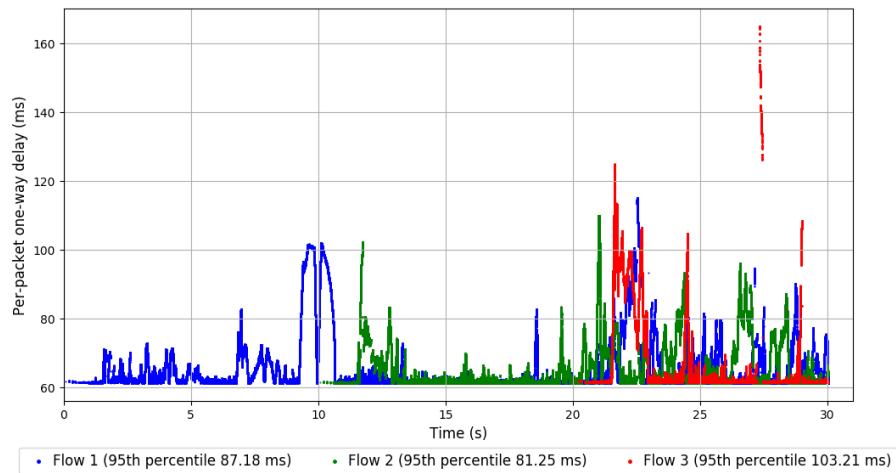
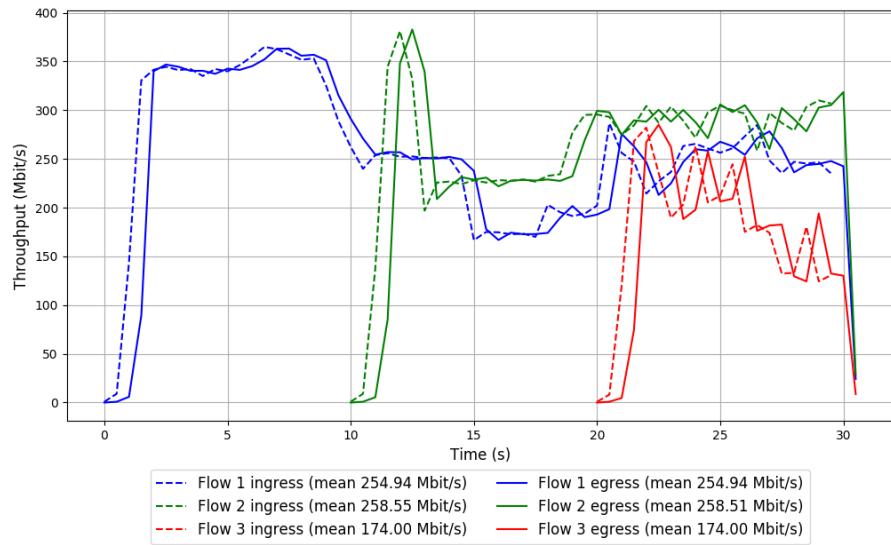


Run 2: Statistics of Copa

```
Start at: 2019-01-21 21:47:06
End at: 2019-01-21 21:47:36
Local clock offset: 0.014 ms
Remote clock offset: -1.353 ms

# Below is generated by plot.py at 2019-01-22 00:29:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.93 Mbit/s
95th percentile per-packet one-way delay: 89.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 254.94 Mbit/s
95th percentile per-packet one-way delay: 87.184 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.51 Mbit/s
95th percentile per-packet one-way delay: 81.252 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.00 Mbit/s
95th percentile per-packet one-way delay: 103.206 ms
Loss rate: 0.00%
```

Run 2: Report of Copa — Data Link

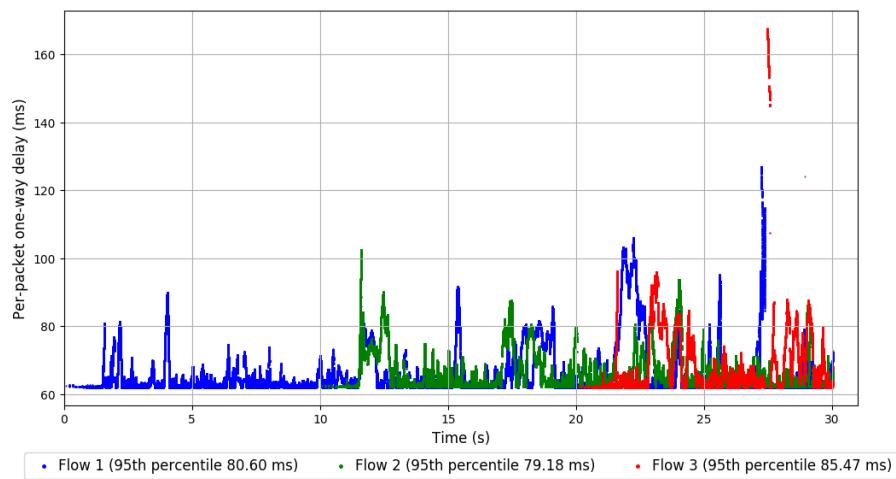
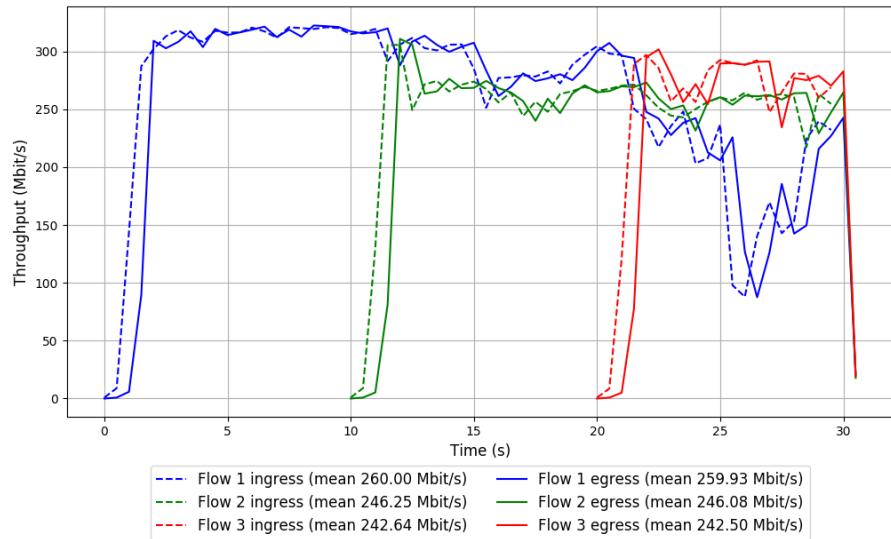


Run 3: Statistics of Copa

```
Start at: 2019-01-21 22:23:26
End at: 2019-01-21 22:23:56
Local clock offset: 0.033 ms
Remote clock offset: -0.718 ms

# Below is generated by plot.py at 2019-01-22 00:29:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 504.41 Mbit/s
95th percentile per-packet one-way delay: 81.607 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 259.93 Mbit/s
95th percentile per-packet one-way delay: 80.602 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 246.08 Mbit/s
95th percentile per-packet one-way delay: 79.180 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 242.50 Mbit/s
95th percentile per-packet one-way delay: 85.469 ms
Loss rate: 0.05%
```

Run 3: Report of Copa — Data Link

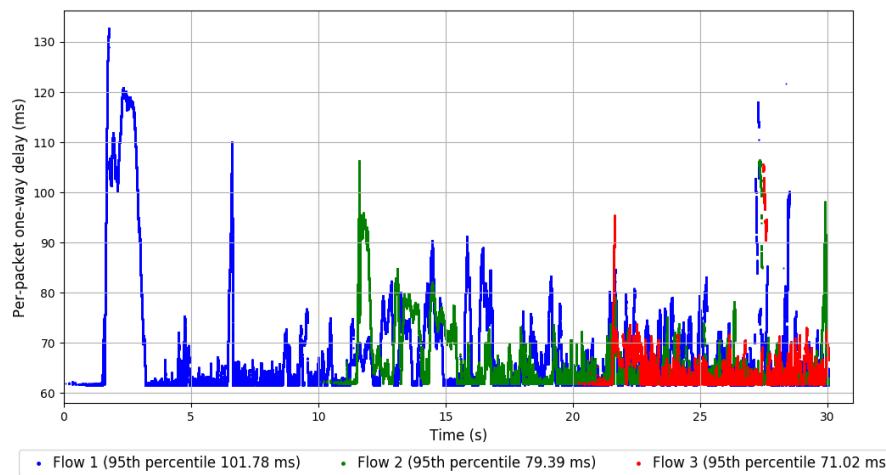
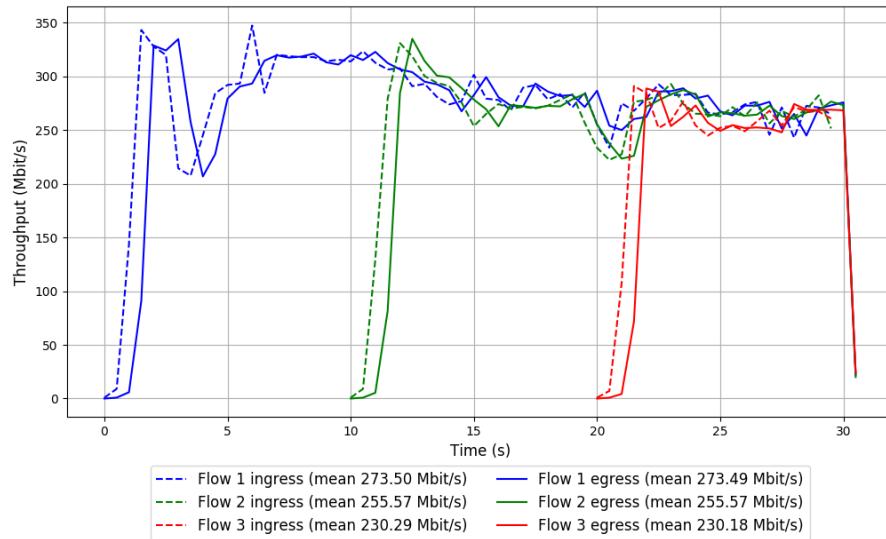


Run 4: Statistics of Copa

```
Start at: 2019-01-21 22:59:36
End at: 2019-01-21 23:00:06
Local clock offset: -0.078 ms
Remote clock offset: -1.31 ms

# Below is generated by plot.py at 2019-01-22 00:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 520.11 Mbit/s
95th percentile per-packet one-way delay: 86.725 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 273.49 Mbit/s
95th percentile per-packet one-way delay: 101.776 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 255.57 Mbit/s
95th percentile per-packet one-way delay: 79.392 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 230.18 Mbit/s
95th percentile per-packet one-way delay: 71.015 ms
Loss rate: 0.04%
```

Run 4: Report of Copa — Data Link

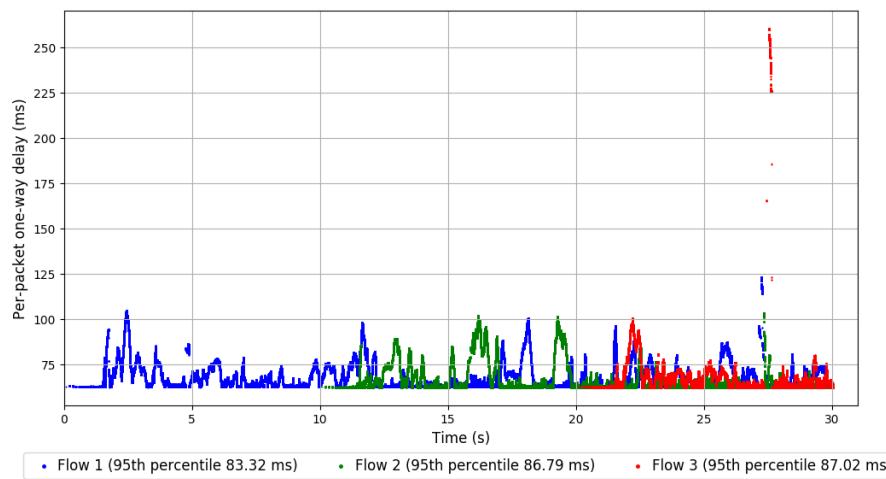
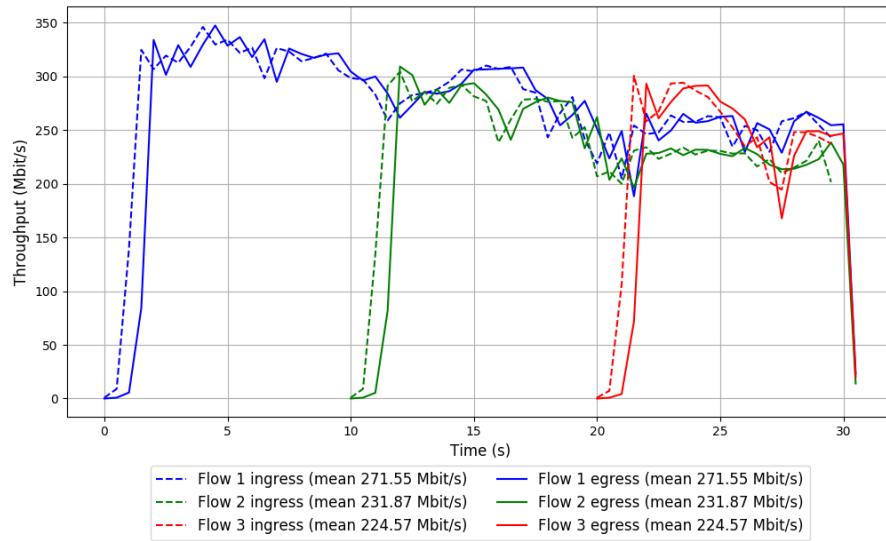


Run 5: Statistics of Copa

```
Start at: 2019-01-21 23:35:51
End at: 2019-01-21 23:36:21
Local clock offset: 0.01 ms
Remote clock offset: -0.537 ms

# Below is generated by plot.py at 2019-01-22 00:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 500.48 Mbit/s
95th percentile per-packet one-way delay: 84.375 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 271.55 Mbit/s
95th percentile per-packet one-way delay: 83.318 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 231.87 Mbit/s
95th percentile per-packet one-way delay: 86.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 224.57 Mbit/s
95th percentile per-packet one-way delay: 87.015 ms
Loss rate: 0.00%
```

Run 5: Report of Copa — Data Link

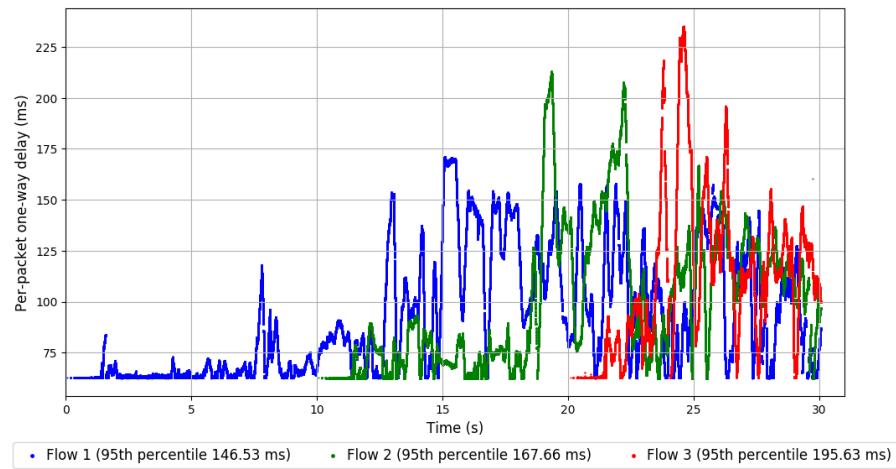
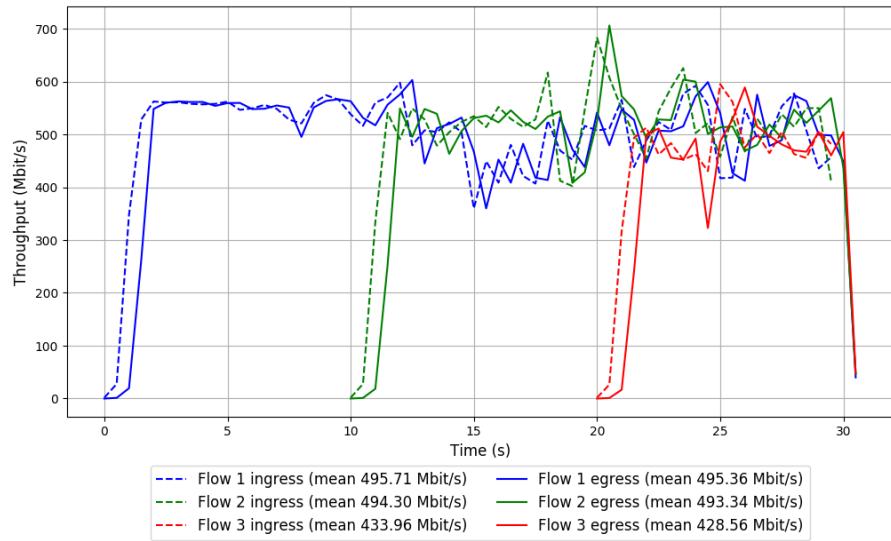


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2019-01-21 21:17:44
End at: 2019-01-21 21:18:14
Local clock offset: -0.015 ms
Remote clock offset: -0.445 ms

# Below is generated by plot.py at 2019-01-22 00:51:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 966.41 Mbit/s
95th percentile per-packet one-way delay: 153.808 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 495.36 Mbit/s
95th percentile per-packet one-way delay: 146.530 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 493.34 Mbit/s
95th percentile per-packet one-way delay: 167.665 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 428.56 Mbit/s
95th percentile per-packet one-way delay: 195.626 ms
Loss rate: 1.24%
```

Run 1: Report of TCP Cubic — Data Link

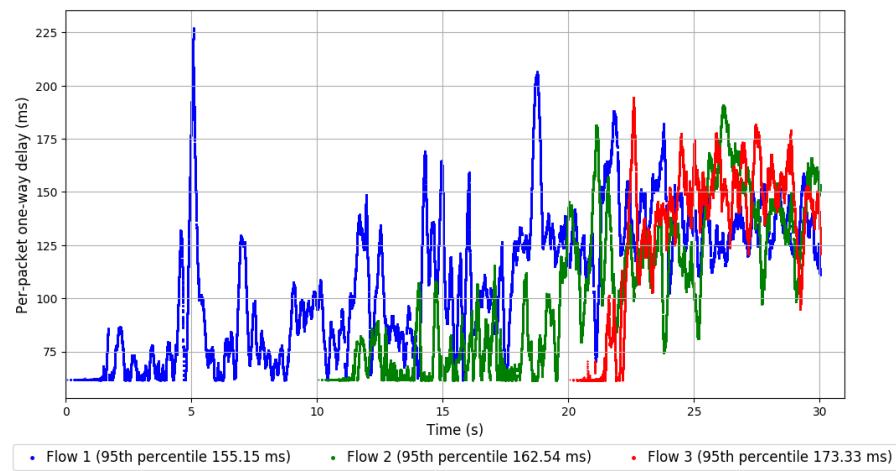
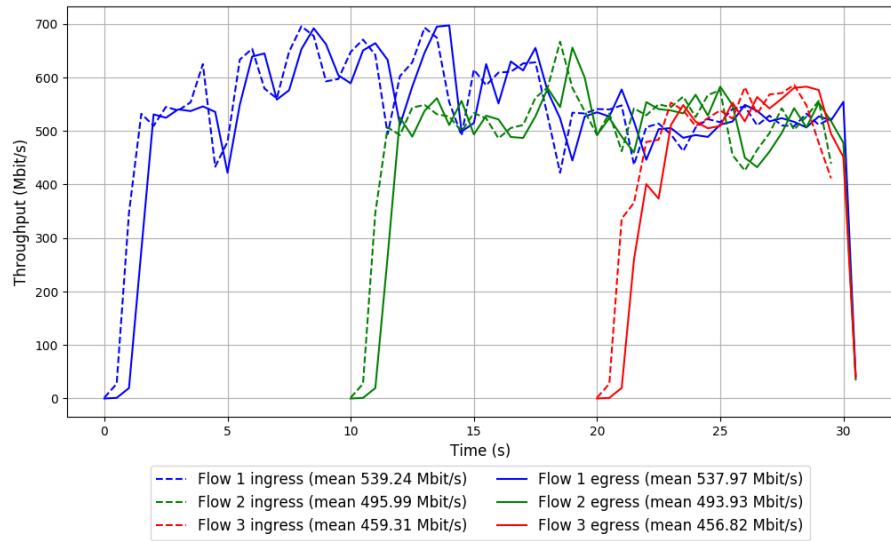


Run 2: Statistics of TCP Cubic

```
Start at: 2019-01-21 21:54:04
End at: 2019-01-21 21:54:34
Local clock offset: -0.007 ms
Remote clock offset: -1.262 ms

# Below is generated by plot.py at 2019-01-22 00:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1019.05 Mbit/s
95th percentile per-packet one-way delay: 164.451 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 537.97 Mbit/s
95th percentile per-packet one-way delay: 155.153 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 493.93 Mbit/s
95th percentile per-packet one-way delay: 162.540 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 456.82 Mbit/s
95th percentile per-packet one-way delay: 173.333 ms
Loss rate: 0.52%
```

Run 2: Report of TCP Cubic — Data Link

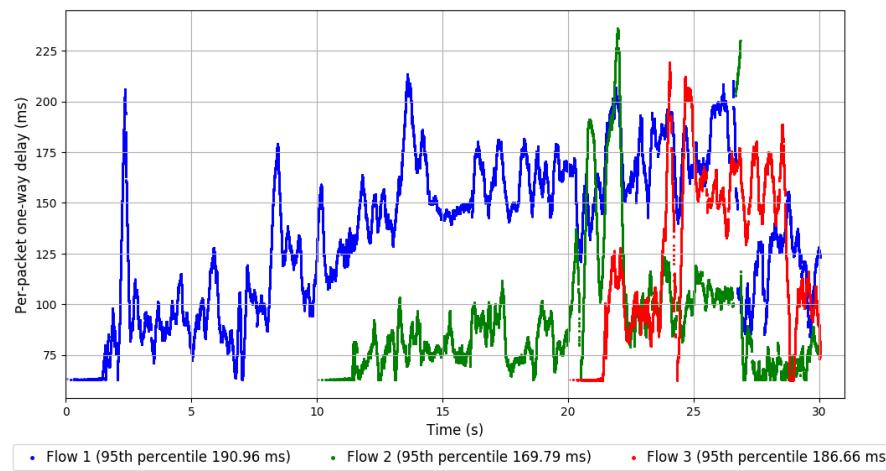
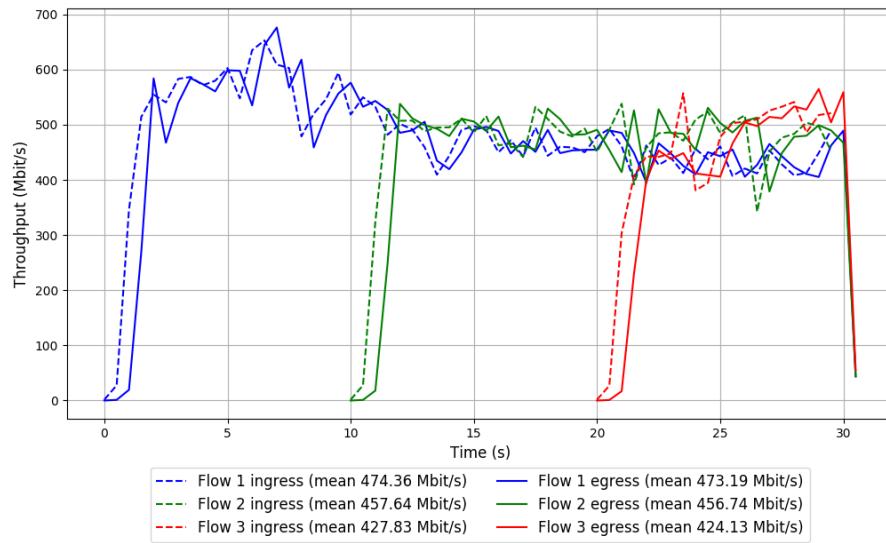


Run 3: Statistics of TCP Cubic

```
Start at: 2019-01-21 22:30:23
End at: 2019-01-21 22:30:53
Local clock offset: -0.035 ms
Remote clock offset: -0.295 ms

# Below is generated by plot.py at 2019-01-22 00:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 918.38 Mbit/s
95th percentile per-packet one-way delay: 187.369 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 473.19 Mbit/s
95th percentile per-packet one-way delay: 190.961 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 456.74 Mbit/s
95th percentile per-packet one-way delay: 169.786 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 424.13 Mbit/s
95th percentile per-packet one-way delay: 186.658 ms
Loss rate: 0.86%
```

Run 3: Report of TCP Cubic — Data Link

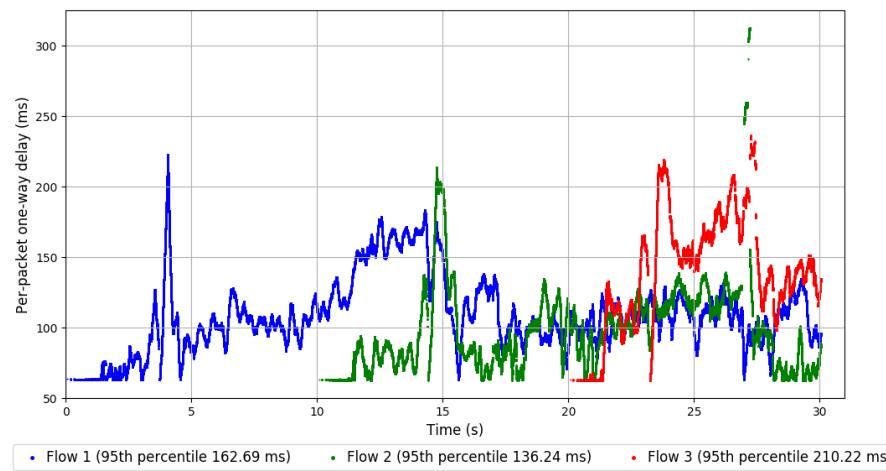
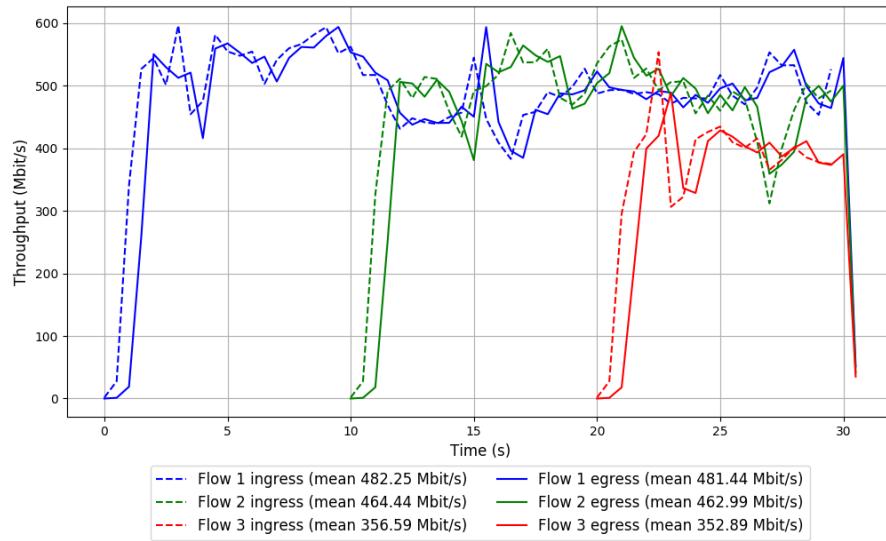


Run 4: Statistics of TCP Cubic

```
Start at: 2019-01-21 23:06:38
End at: 2019-01-21 23:07:08
Local clock offset: 0.003 ms
Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2019-01-22 00:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 907.26 Mbit/s
95th percentile per-packet one-way delay: 169.625 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 481.44 Mbit/s
95th percentile per-packet one-way delay: 162.689 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 462.99 Mbit/s
95th percentile per-packet one-way delay: 136.235 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 352.89 Mbit/s
95th percentile per-packet one-way delay: 210.220 ms
Loss rate: 1.03%
```

Run 4: Report of TCP Cubic — Data Link

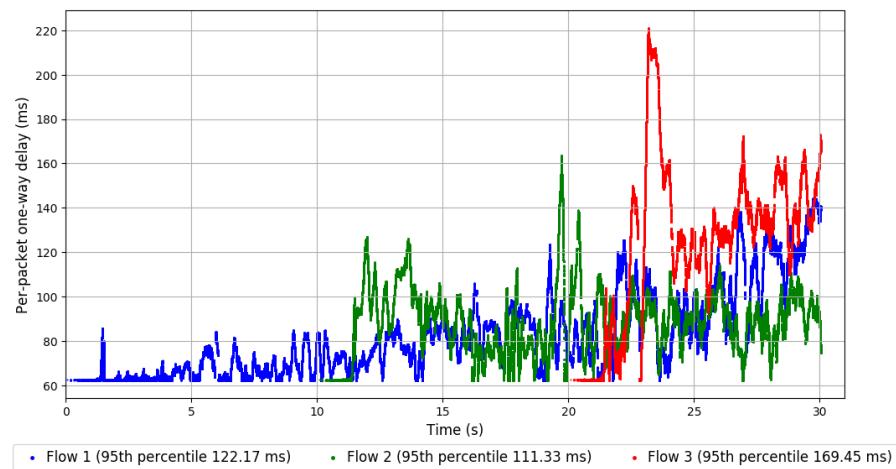
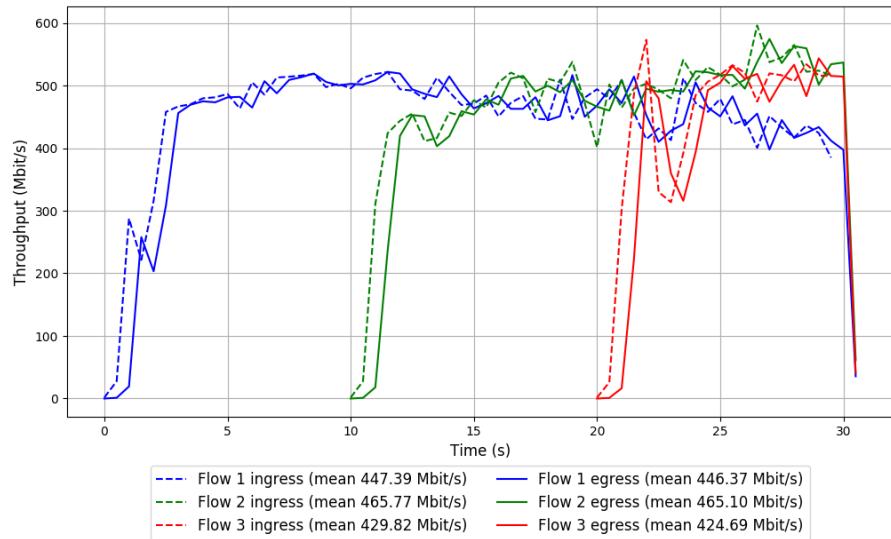


Run 5: Statistics of TCP Cubic

```
Start at: 2019-01-21 23:42:50
End at: 2019-01-21 23:43:20
Local clock offset: 0.106 ms
Remote clock offset: -0.625 ms

# Below is generated by plot.py at 2019-01-22 00:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 897.33 Mbit/s
95th percentile per-packet one-way delay: 141.626 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 446.37 Mbit/s
95th percentile per-packet one-way delay: 122.165 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 465.10 Mbit/s
95th percentile per-packet one-way delay: 111.331 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 424.69 Mbit/s
95th percentile per-packet one-way delay: 169.454 ms
Loss rate: 1.20%
```

Run 5: Report of TCP Cubic — Data Link

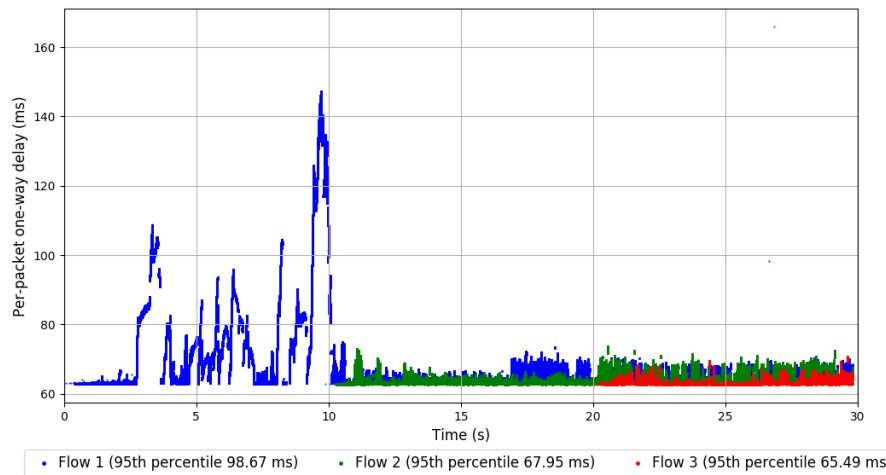
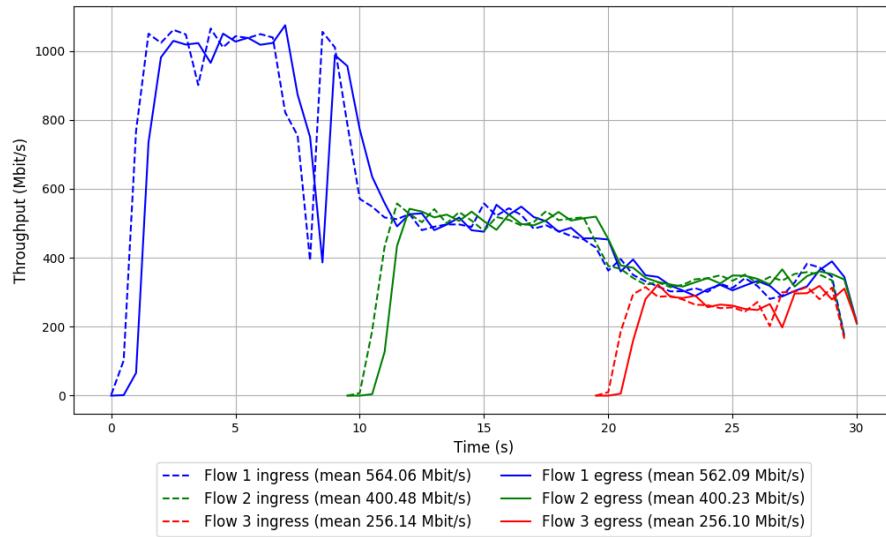


```
Run 1: Statistics of FillP

Start at: 2019-01-21 21:14:40
End at: 2019-01-21 21:15:10
Local clock offset: 0.014 ms
Remote clock offset: -0.165 ms

# Below is generated by plot.py at 2019-01-22 00:56:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 915.58 Mbit/s
95th percentile per-packet one-way delay: 85.888 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 562.09 Mbit/s
95th percentile per-packet one-way delay: 98.666 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 400.23 Mbit/s
95th percentile per-packet one-way delay: 67.950 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 256.10 Mbit/s
95th percentile per-packet one-way delay: 65.493 ms
Loss rate: 0.00%
```

Run 1: Report of FillP — Data Link

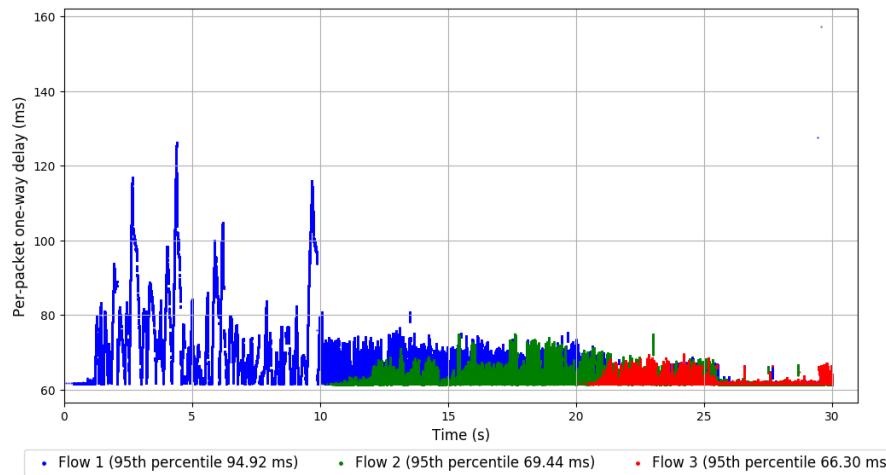
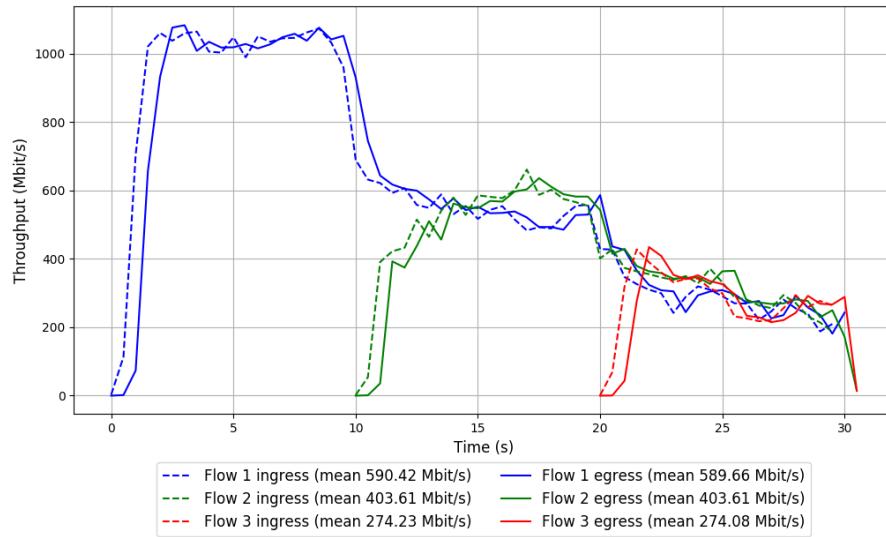


Run 2: Statistics of FillP

```
Start at: 2019-01-21 21:50:59
End at: 2019-01-21 21:51:29
Local clock offset: -0.016 ms
Remote clock offset: -1.399 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 948.95 Mbit/s
95th percentile per-packet one-way delay: 87.172 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 589.66 Mbit/s
95th percentile per-packet one-way delay: 94.924 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 403.61 Mbit/s
95th percentile per-packet one-way delay: 69.445 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 274.08 Mbit/s
95th percentile per-packet one-way delay: 66.298 ms
Loss rate: 0.06%
```

Run 2: Report of FillP — Data Link

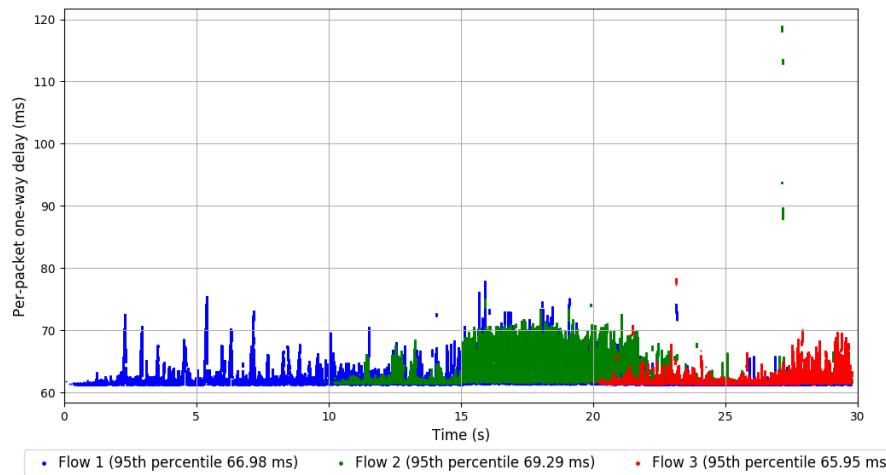
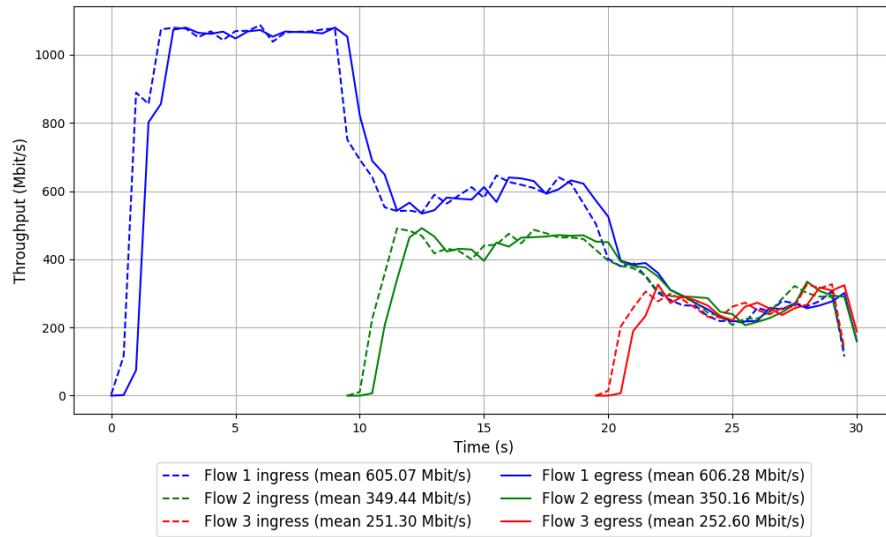


```
Run 3: Statistics of FillP

Start at: 2019-01-21 22:27:19
End at: 2019-01-21 22:27:49
Local clock offset: -0.007 ms
Remote clock offset: -1.466 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.90 Mbit/s
95th percentile per-packet one-way delay: 68.045 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 606.28 Mbit/s
95th percentile per-packet one-way delay: 66.976 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 350.16 Mbit/s
95th percentile per-packet one-way delay: 69.292 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 252.60 Mbit/s
95th percentile per-packet one-way delay: 65.953 ms
Loss rate: 0.01%
```

Run 3: Report of FillP — Data Link

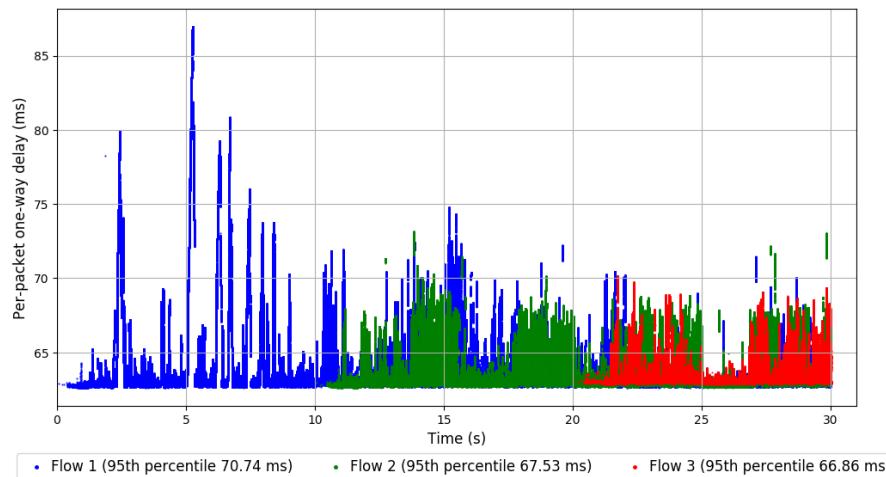
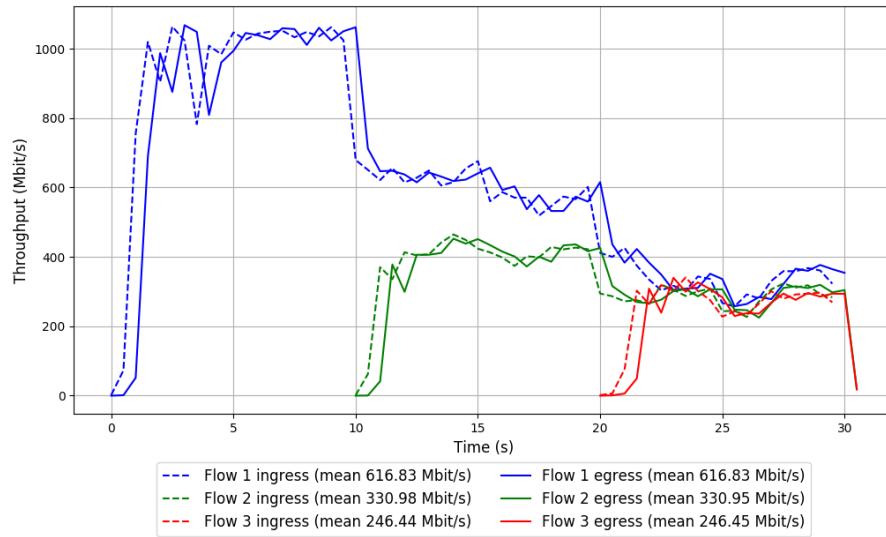


Run 4: Statistics of FillP

```
Start at: 2019-01-21 23:03:33
End at: 2019-01-21 23:04:03
Local clock offset: -0.017 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 918.15 Mbit/s
95th percentile per-packet one-way delay: 69.093 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 616.83 Mbit/s
95th percentile per-packet one-way delay: 70.744 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 330.95 Mbit/s
95th percentile per-packet one-way delay: 67.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 246.45 Mbit/s
95th percentile per-packet one-way delay: 66.859 ms
Loss rate: 0.00%
```

Run 4: Report of FillP — Data Link

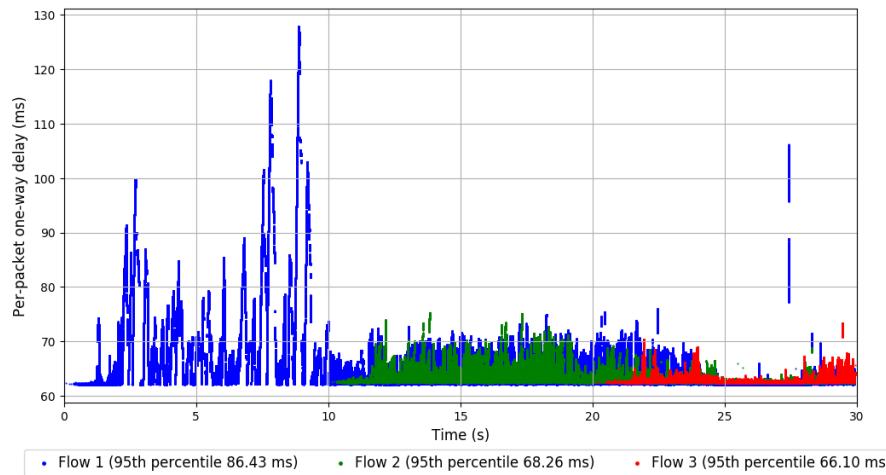
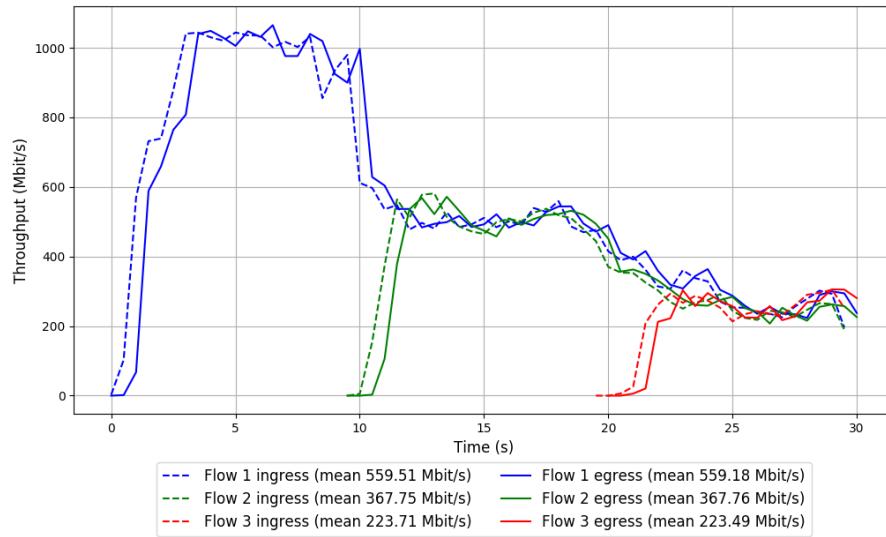


```
Run 5: Statistics of FillP
```

```
Start at: 2019-01-21 23:39:48
End at: 2019-01-21 23:40:18
Local clock offset: -0.031 ms
Remote clock offset: -0.684 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 878.32 Mbit/s
95th percentile per-packet one-way delay: 82.374 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 559.18 Mbit/s
95th percentile per-packet one-way delay: 86.427 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 367.76 Mbit/s
95th percentile per-packet one-way delay: 68.261 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 223.49 Mbit/s
95th percentile per-packet one-way delay: 66.096 ms
Loss rate: 0.09%
```

Run 5: Report of FillP — Data Link

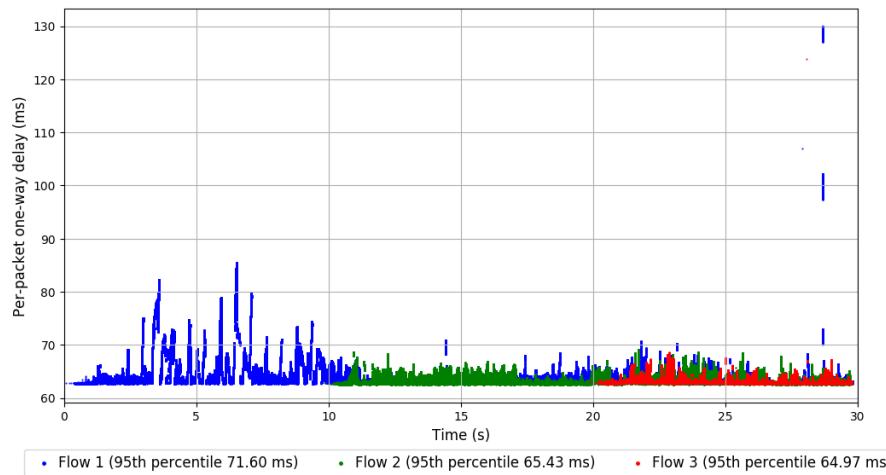
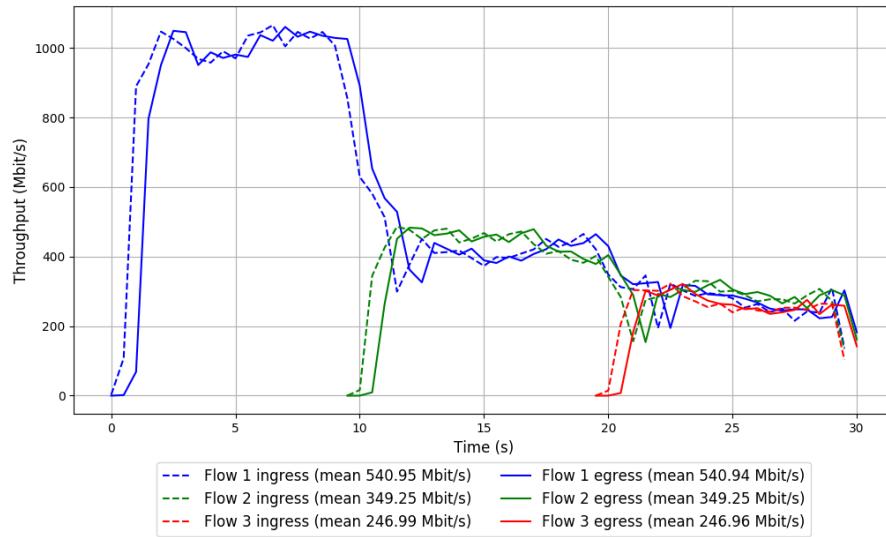


Run 1: Statistics of FillP-Sheep

```
Start at: 2019-01-21 21:05:31
End at: 2019-01-21 21:06:01
Local clock offset: -0.008 ms
Remote clock offset: -0.378 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.36 Mbit/s
95th percentile per-packet one-way delay: 69.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 540.94 Mbit/s
95th percentile per-packet one-way delay: 71.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 349.25 Mbit/s
95th percentile per-packet one-way delay: 65.434 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 246.96 Mbit/s
95th percentile per-packet one-way delay: 64.974 ms
Loss rate: 0.01%
```

Run 1: Report of FillP-Sheep — Data Link

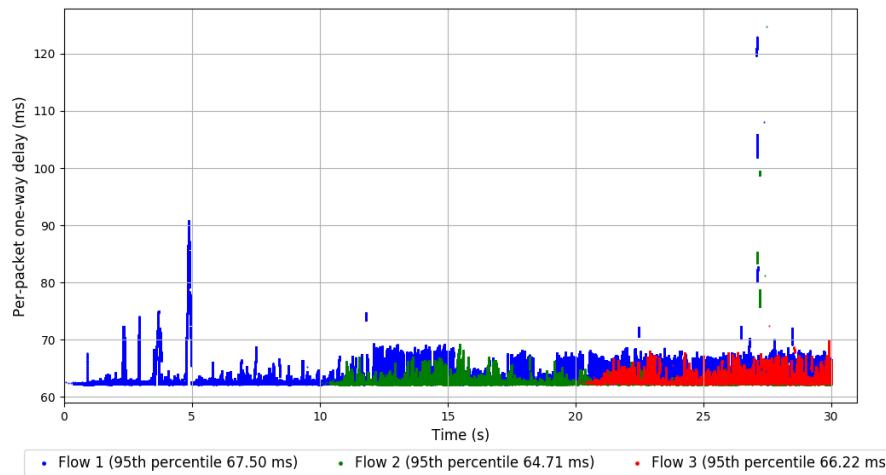
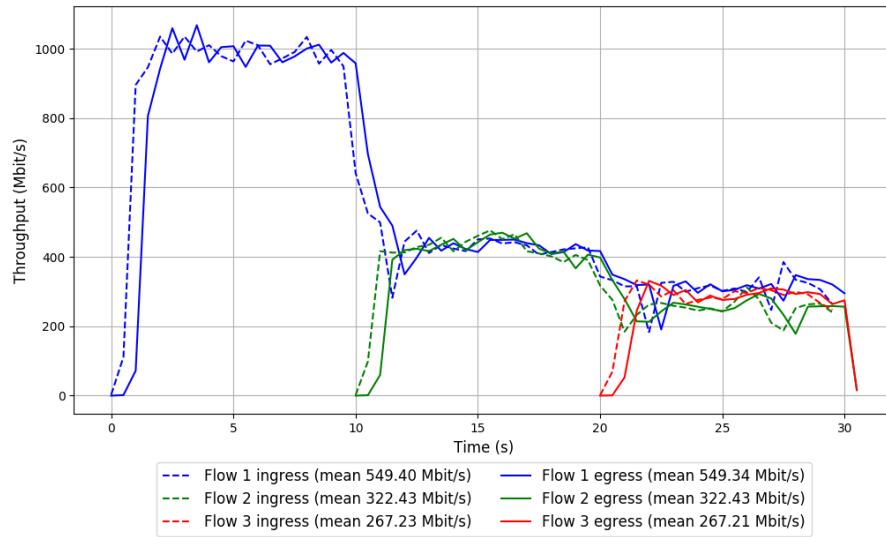


Run 2: Statistics of FillP-Sheep

```
Start at: 2019-01-21 21:41:54
End at: 2019-01-21 21:42:24
Local clock offset: -0.009 ms
Remote clock offset: -0.628 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 851.87 Mbit/s
95th percentile per-packet one-way delay: 66.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 549.34 Mbit/s
95th percentile per-packet one-way delay: 67.495 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 322.43 Mbit/s
95th percentile per-packet one-way delay: 64.712 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 267.21 Mbit/s
95th percentile per-packet one-way delay: 66.215 ms
Loss rate: 0.00%
```

Run 2: Report of FillP-Sheep — Data Link

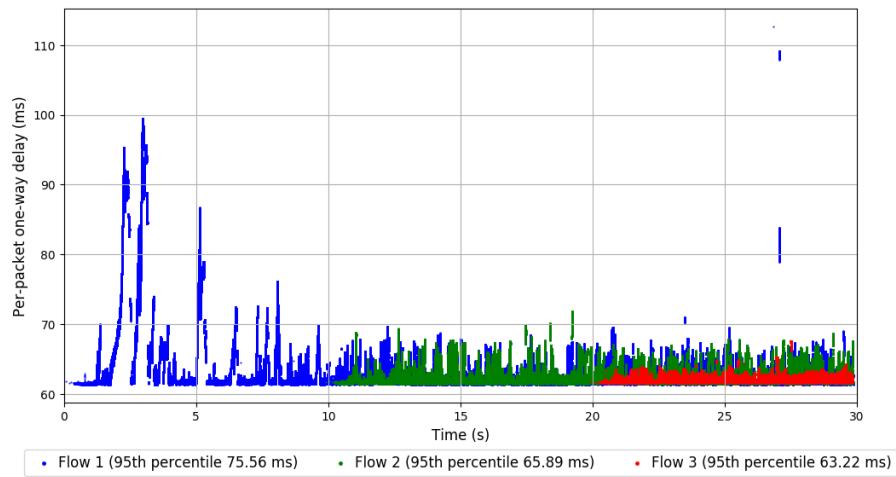
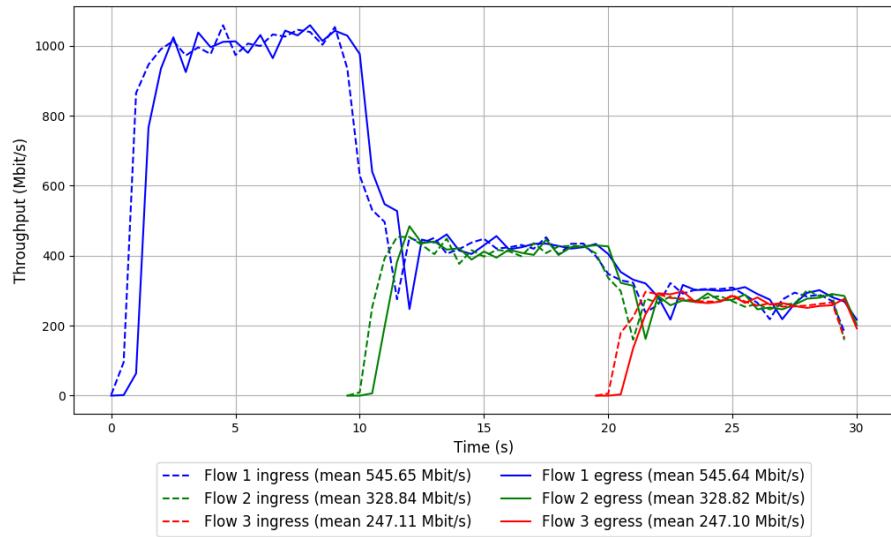


Run 3: Statistics of FillP-Sheep

```
Start at: 2019-01-21 22:18:12
End at: 2019-01-21 22:18:42
Local clock offset: 0.033 ms
Remote clock offset: -1.448 ms

# Below is generated by plot.py at 2019-01-22 01:18:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 847.82 Mbit/s
95th percentile per-packet one-way delay: 70.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 545.64 Mbit/s
95th percentile per-packet one-way delay: 75.563 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 328.82 Mbit/s
95th percentile per-packet one-way delay: 65.888 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 247.10 Mbit/s
95th percentile per-packet one-way delay: 63.224 ms
Loss rate: 0.00%
```

Run 3: Report of FillP-Sheep — Data Link

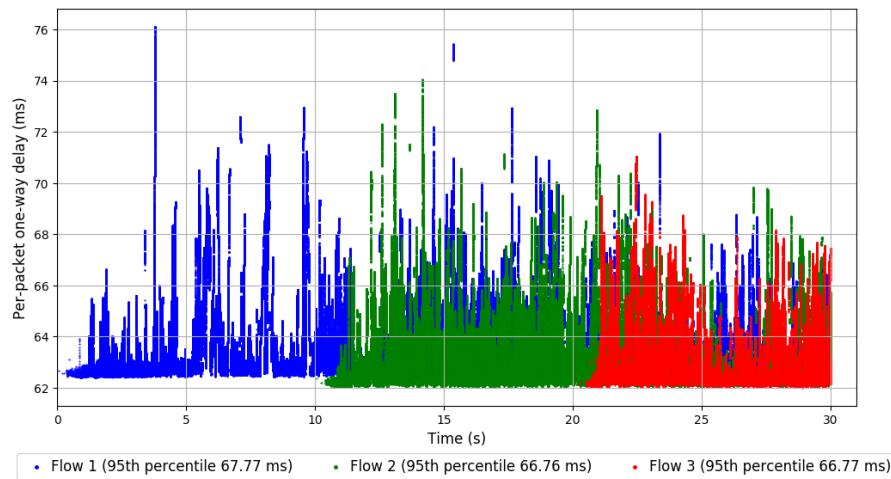
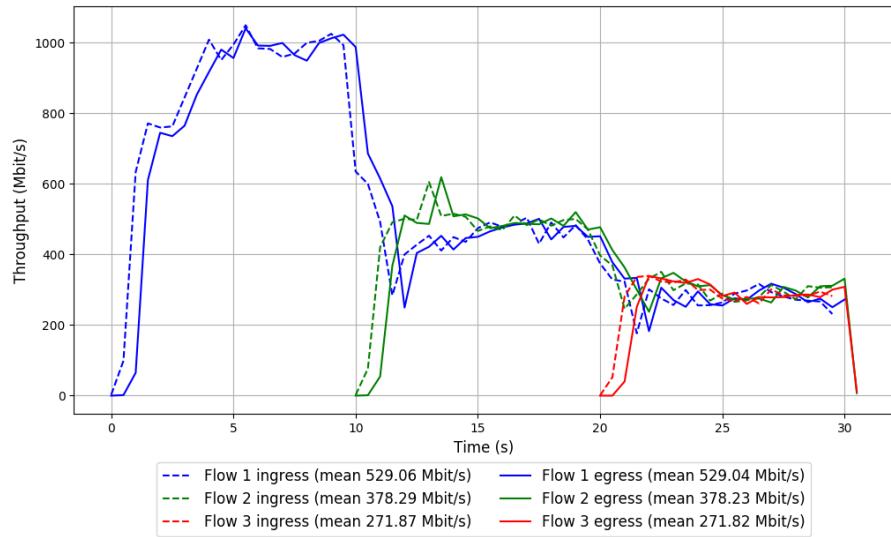


Run 4: Statistics of FillP-Sheep

```
Start at: 2019-01-21 22:54:27
End at: 2019-01-21 22:54:57
Local clock offset: -0.063 ms
Remote clock offset: -0.767 ms

# Below is generated by plot.py at 2019-01-22 01:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 870.50 Mbit/s
95th percentile per-packet one-way delay: 67.296 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 529.04 Mbit/s
95th percentile per-packet one-way delay: 67.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 378.23 Mbit/s
95th percentile per-packet one-way delay: 66.759 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 271.82 Mbit/s
95th percentile per-packet one-way delay: 66.765 ms
Loss rate: 0.01%
```

Run 4: Report of FillP-Sheep — Data Link

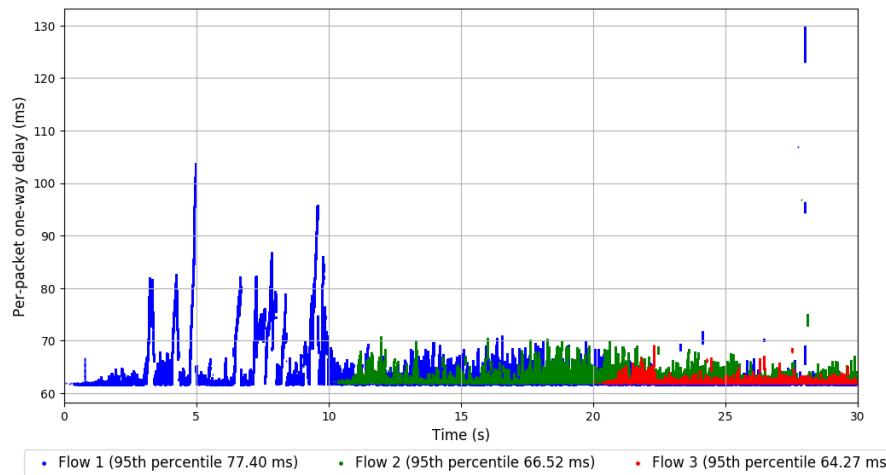
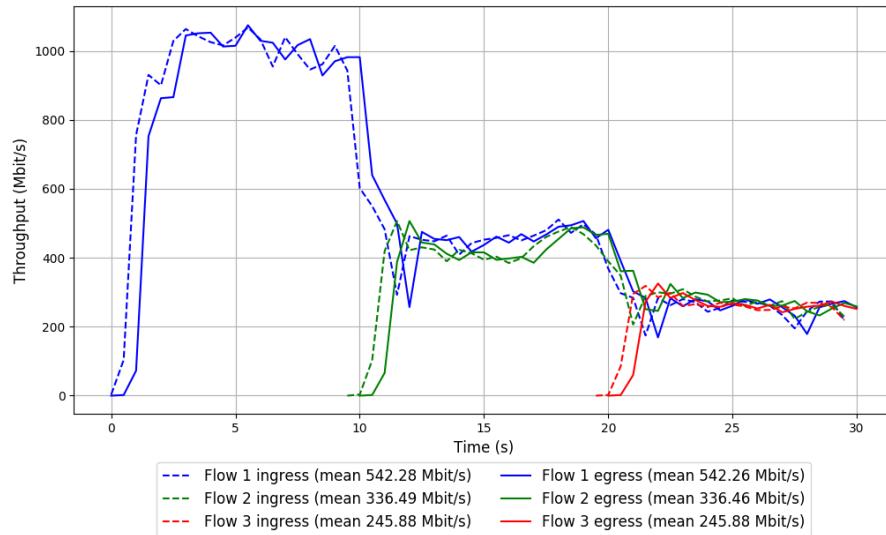


Run 5: Statistics of FillP-Sheep

```
Start at: 2019-01-21 23:30:48
End at: 2019-01-21 23:31:18
Local clock offset: 0.048 ms
Remote clock offset: -1.132 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 848.10 Mbit/s
95th percentile per-packet one-way delay: 74.539 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 542.26 Mbit/s
95th percentile per-packet one-way delay: 77.402 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 336.46 Mbit/s
95th percentile per-packet one-way delay: 66.521 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 245.88 Mbit/s
95th percentile per-packet one-way delay: 64.271 ms
Loss rate: 0.00%
```

Run 5: Report of FillP-Sheep — Data Link

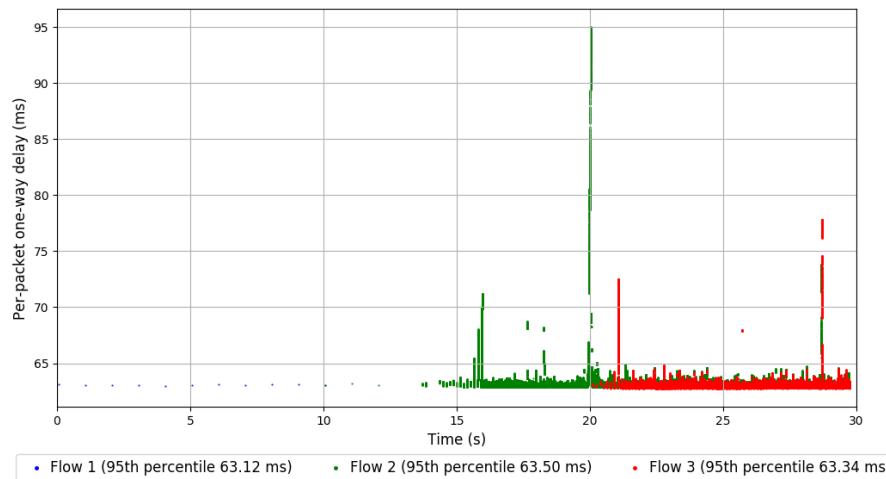
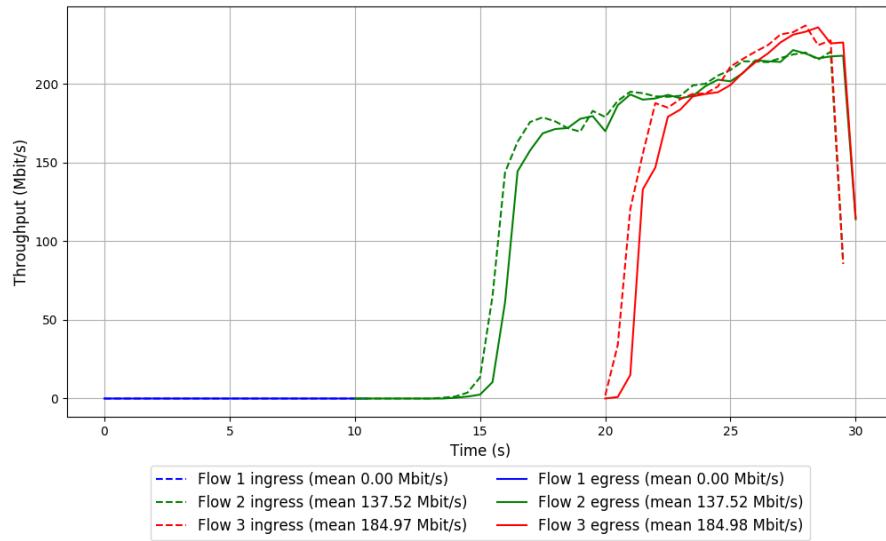


Run 1: Statistics of Indigo

```
Start at: 2019-01-21 20:53:37
End at: 2019-01-21 20:54:07
Local clock offset: 0.0 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.32 Mbit/s
95th percentile per-packet one-way delay: 63.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 63.115 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 137.52 Mbit/s
95th percentile per-packet one-way delay: 63.500 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 184.98 Mbit/s
95th percentile per-packet one-way delay: 63.342 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

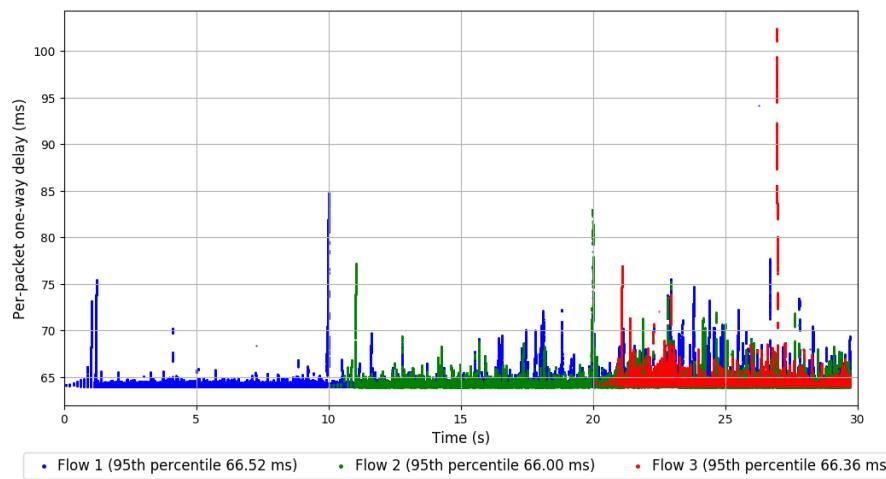
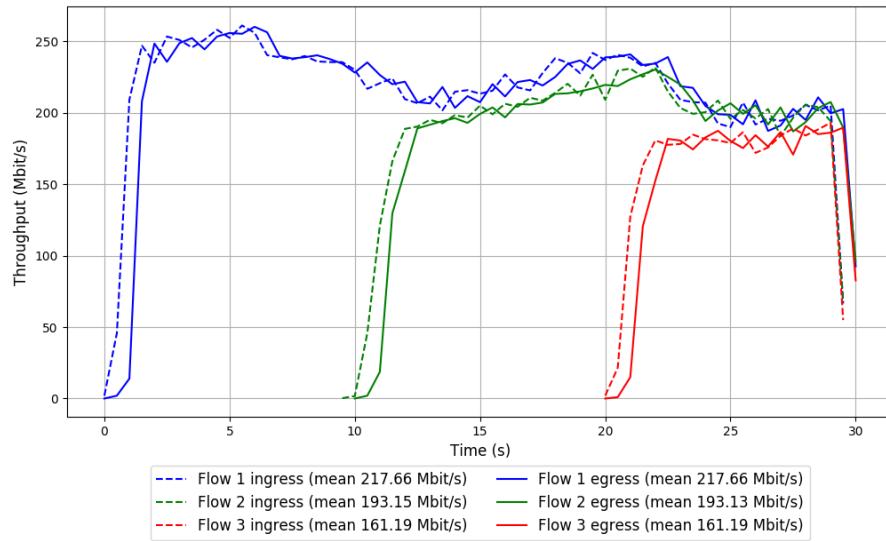


Run 2: Statistics of Indigo

```
Start at: 2019-01-21 21:29:38
End at: 2019-01-21 21:30:08
Local clock offset: -0.019 ms
Remote clock offset: 1.018 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.04 Mbit/s
95th percentile per-packet one-way delay: 66.291 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 217.66 Mbit/s
95th percentile per-packet one-way delay: 66.516 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.13 Mbit/s
95th percentile per-packet one-way delay: 66.000 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 161.19 Mbit/s
95th percentile per-packet one-way delay: 66.355 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link

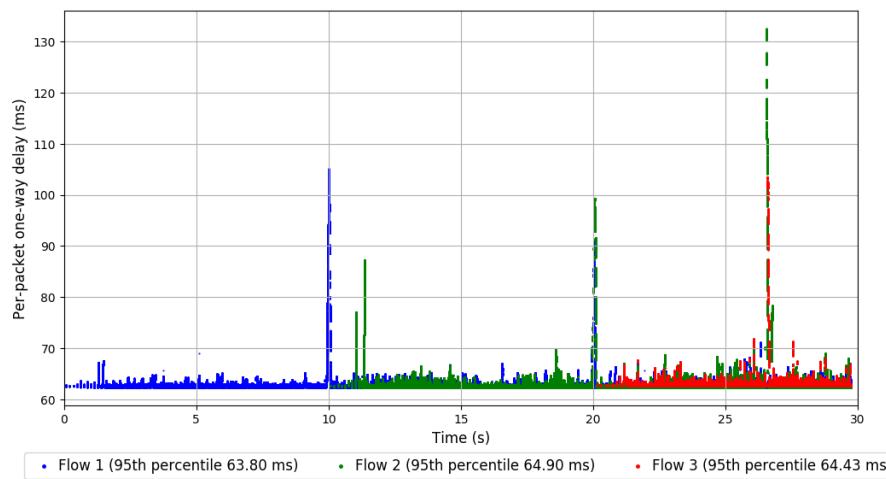
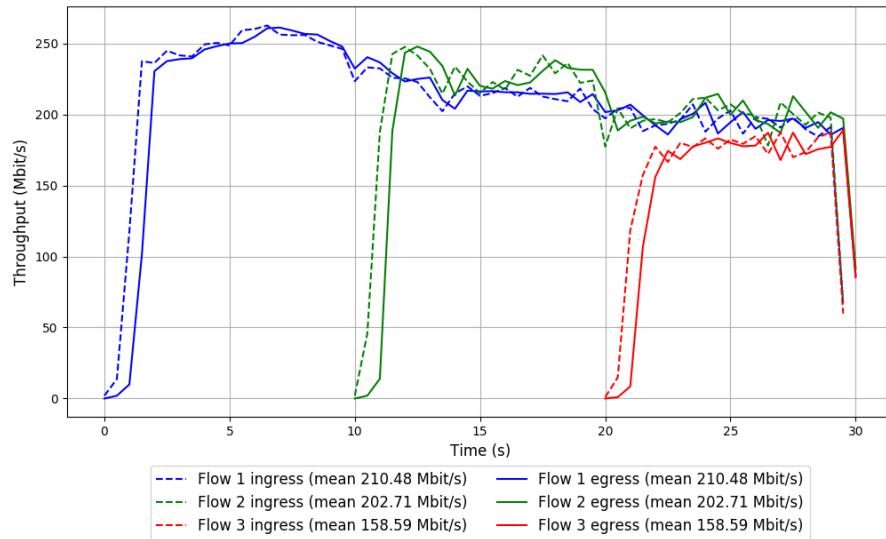


Run 3: Statistics of Indigo

```
Start at: 2019-01-21 22:06:01
End at: 2019-01-21 22:06:31
Local clock offset: 0.034 ms
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 395.91 Mbit/s
95th percentile per-packet one-way delay: 64.243 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.48 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 202.71 Mbit/s
95th percentile per-packet one-way delay: 64.900 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.59 Mbit/s
95th percentile per-packet one-way delay: 64.433 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo — Data Link

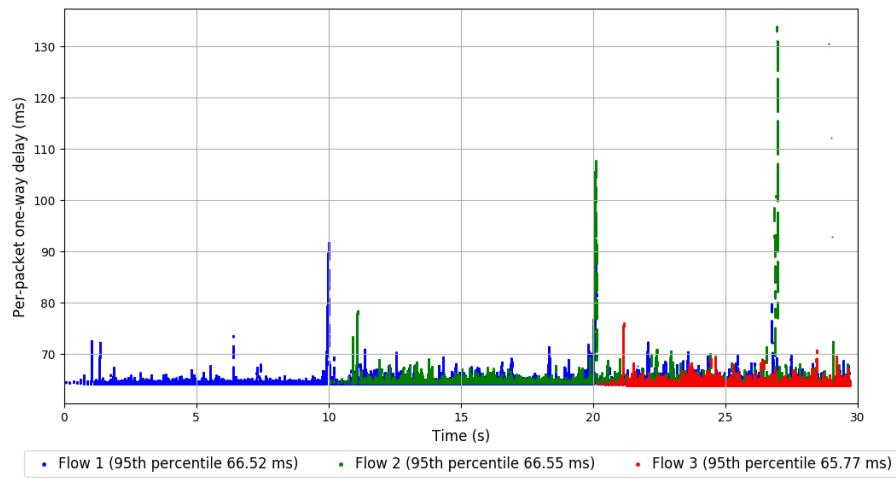
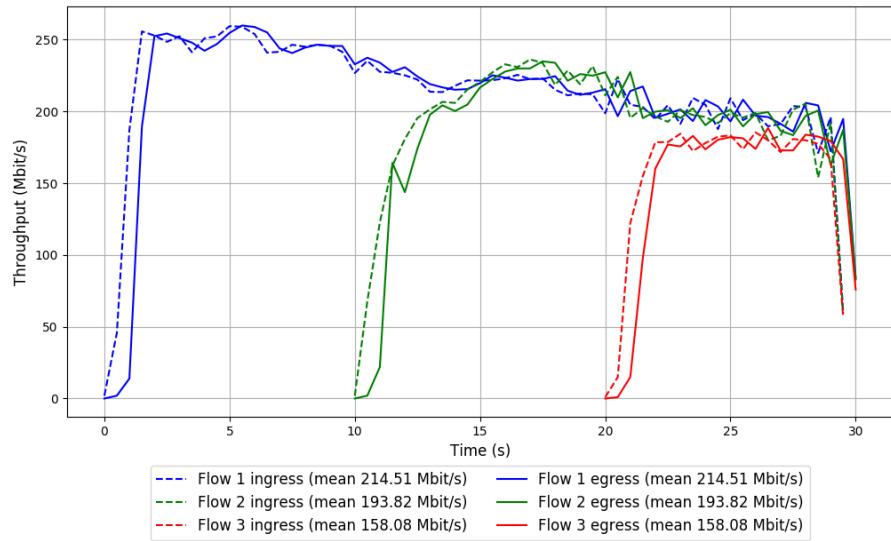


Run 4: Statistics of Indigo

```
Start at: 2019-01-21 22:42:13
End at: 2019-01-21 22:42:43
Local clock offset: -0.066 ms
Remote clock offset: 1.154 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.86 Mbit/s
95th percentile per-packet one-way delay: 66.444 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.51 Mbit/s
95th percentile per-packet one-way delay: 66.521 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.82 Mbit/s
95th percentile per-packet one-way delay: 66.547 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.08 Mbit/s
95th percentile per-packet one-way delay: 65.771 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

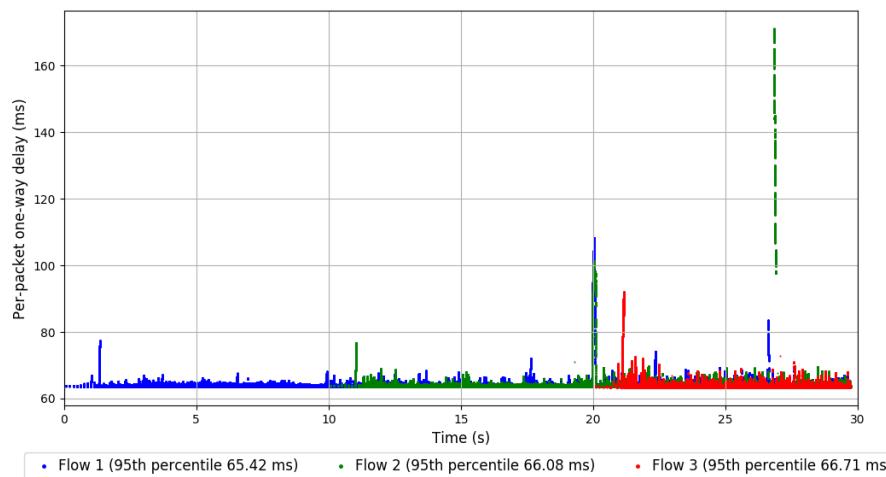
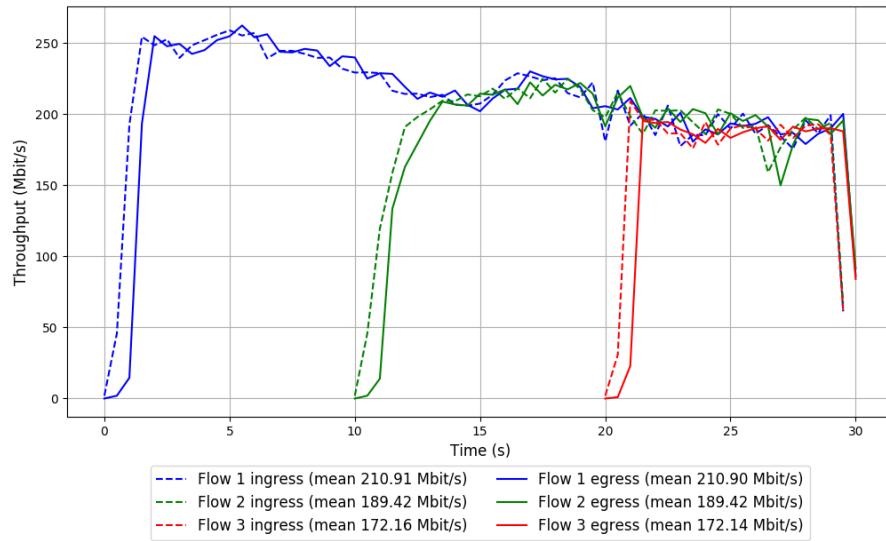


Run 5: Statistics of Indigo

```
Start at: 2019-01-21 23:18:32
End at: 2019-01-21 23:19:02
Local clock offset: 0.019 ms
Remote clock offset: 0.545 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.36 Mbit/s
95th percentile per-packet one-way delay: 65.809 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.90 Mbit/s
95th percentile per-packet one-way delay: 65.423 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.42 Mbit/s
95th percentile per-packet one-way delay: 66.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.14 Mbit/s
95th percentile per-packet one-way delay: 66.710 ms
Loss rate: 0.01%
```

Run 5: Report of Indigo — Data Link

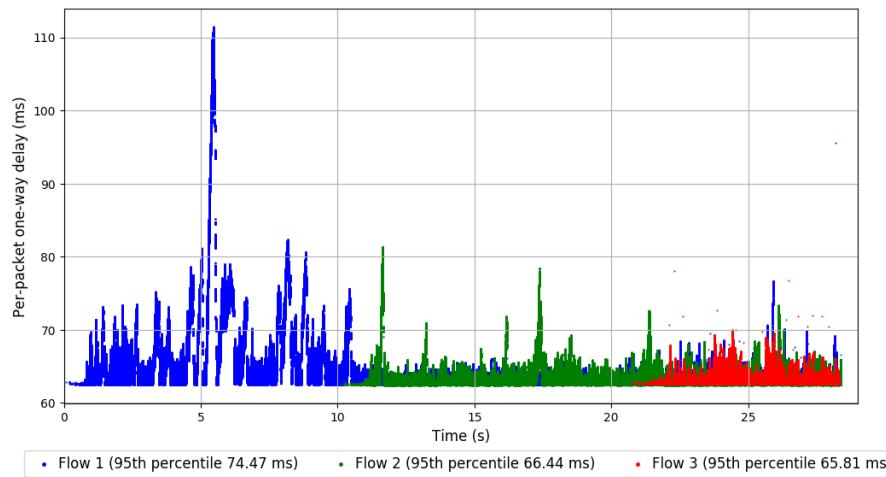
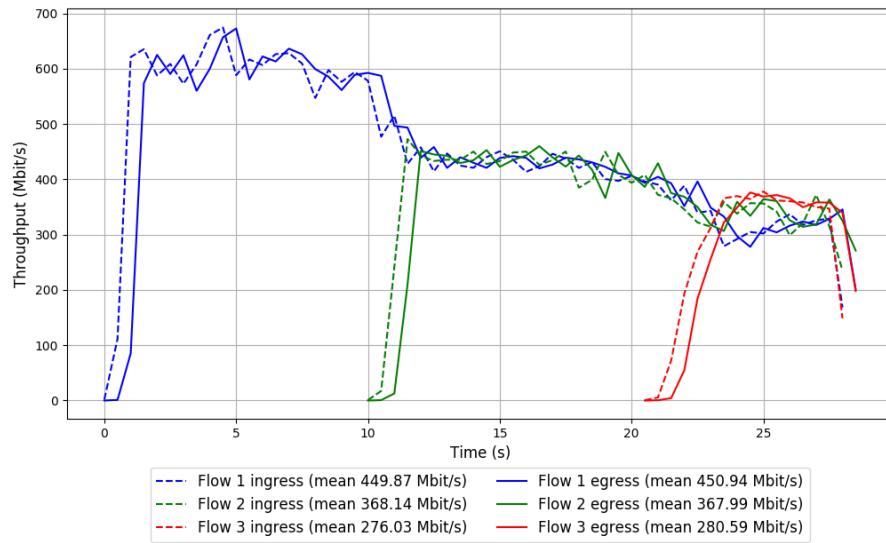


Run 1: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 21:08:52
End at: 2019-01-21 21:09:22
Local clock offset: 0.015 ms
Remote clock offset: -0.523 ms

# Below is generated by plot.py at 2019-01-22 01:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 763.36 Mbit/s
95th percentile per-packet one-way delay: 72.166 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 450.94 Mbit/s
95th percentile per-packet one-way delay: 74.469 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 367.99 Mbit/s
95th percentile per-packet one-way delay: 66.445 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 280.59 Mbit/s
95th percentile per-packet one-way delay: 65.813 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesC3 — Data Link

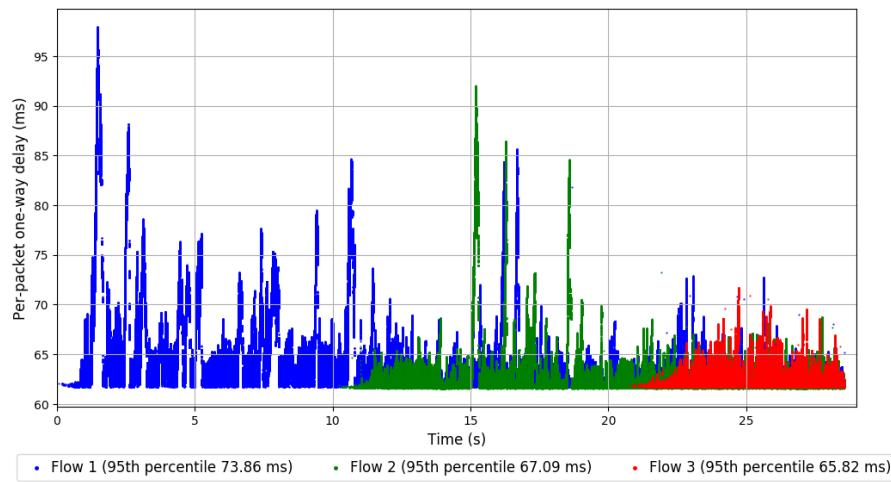
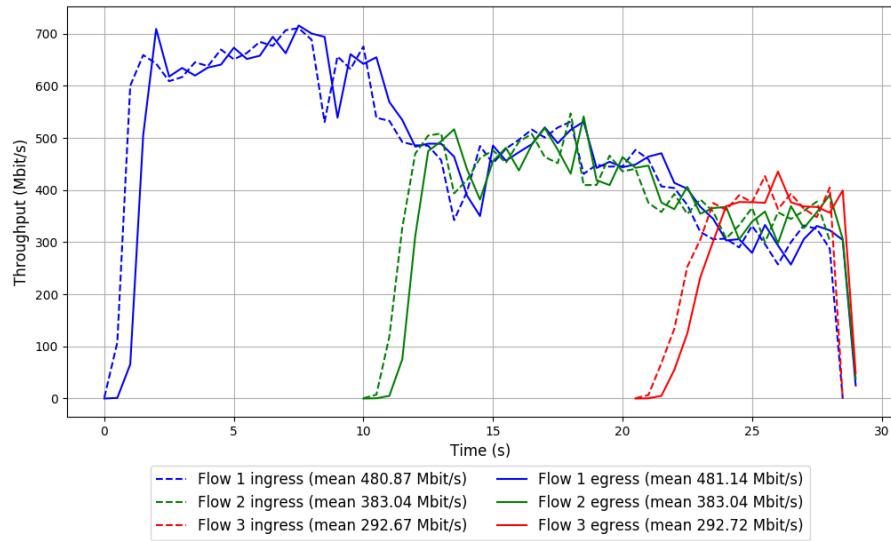


Run 2: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 21:45:14
End at: 2019-01-21 21:45:44
Local clock offset: -0.039 ms
Remote clock offset: -1.199 ms

# Below is generated by plot.py at 2019-01-22 01:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 807.47 Mbit/s
95th percentile per-packet one-way delay: 71.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 481.14 Mbit/s
95th percentile per-packet one-way delay: 73.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 383.04 Mbit/s
95th percentile per-packet one-way delay: 67.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 292.72 Mbit/s
95th percentile per-packet one-way delay: 65.821 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC3 — Data Link

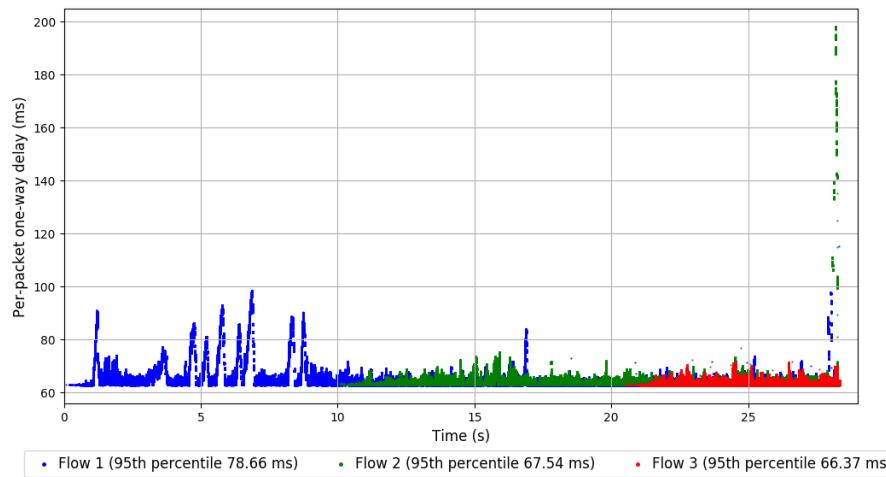
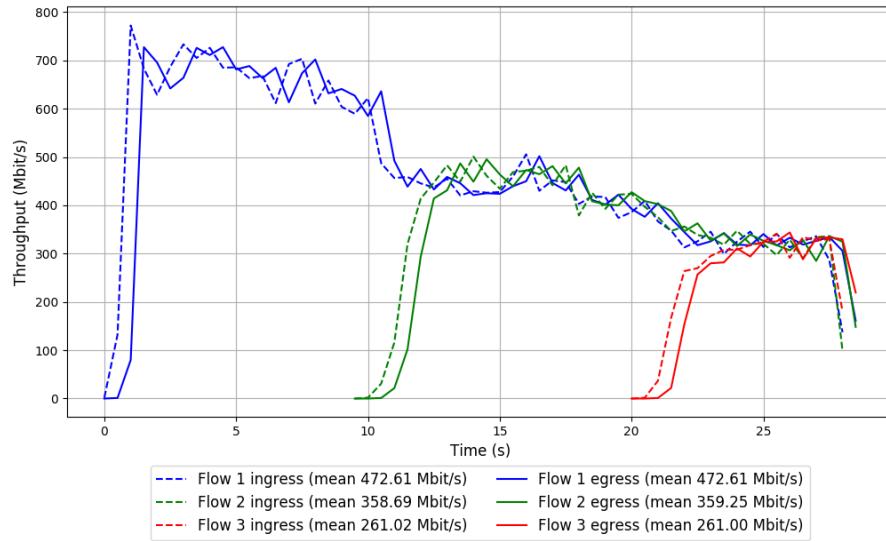


Run 3: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 22:21:36
End at: 2019-01-21 22:22:06
Local clock offset: 0.033 ms
Remote clock offset: -0.192 ms

# Below is generated by plot.py at 2019-01-22 01:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 778.13 Mbit/s
95th percentile per-packet one-way delay: 73.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 472.61 Mbit/s
95th percentile per-packet one-way delay: 78.655 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 359.25 Mbit/s
95th percentile per-packet one-way delay: 67.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 261.00 Mbit/s
95th percentile per-packet one-way delay: 66.373 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC3 — Data Link

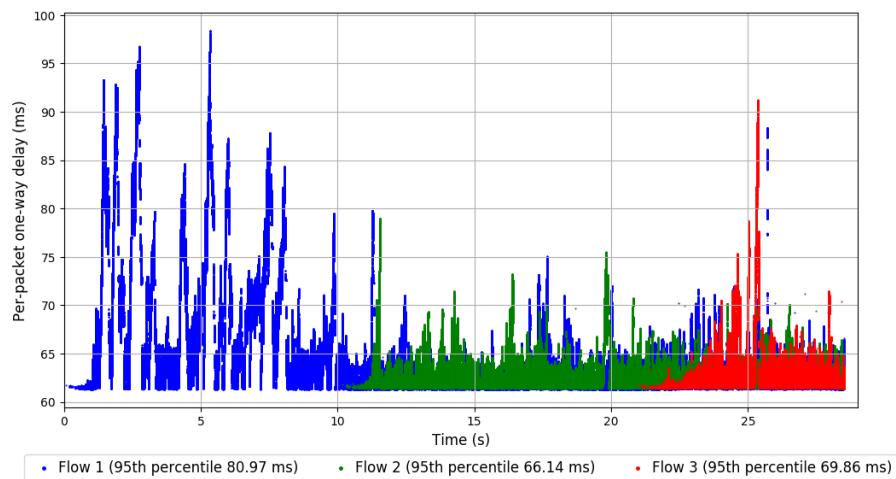
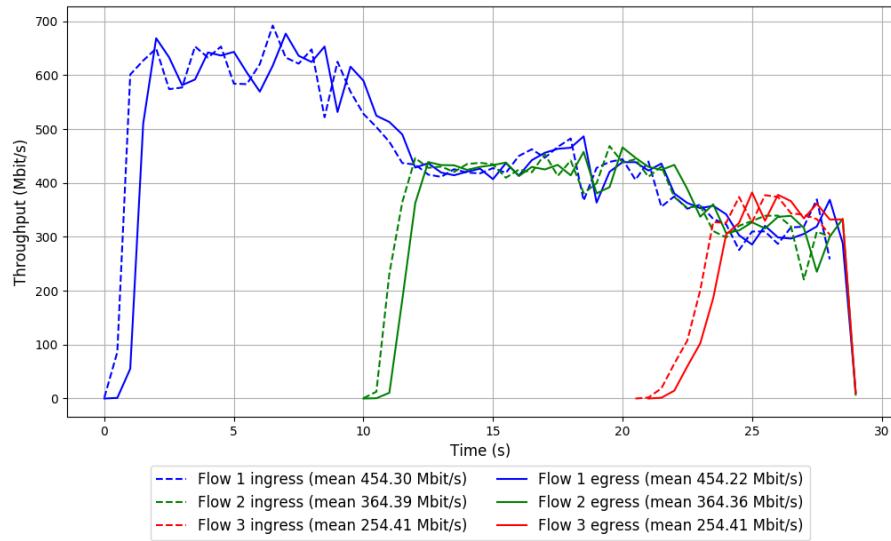


Run 4: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 22:57:47
End at: 2019-01-21 22:58:17
Local clock offset: -0.078 ms
Remote clock offset: -1.508 ms

# Below is generated by plot.py at 2019-01-22 01:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.00 Mbit/s
95th percentile per-packet one-way delay: 76.928 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 454.22 Mbit/s
95th percentile per-packet one-way delay: 80.967 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 364.36 Mbit/s
95th percentile per-packet one-way delay: 66.135 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 254.41 Mbit/s
95th percentile per-packet one-way delay: 69.860 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC3 — Data Link

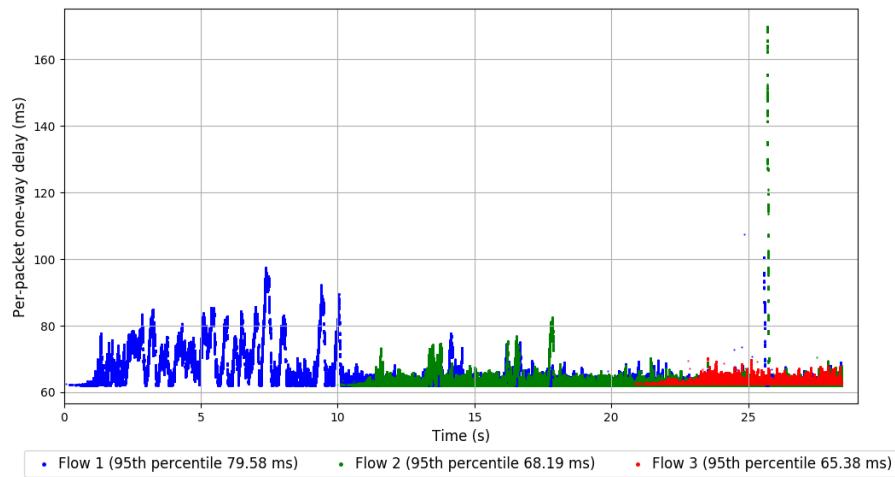
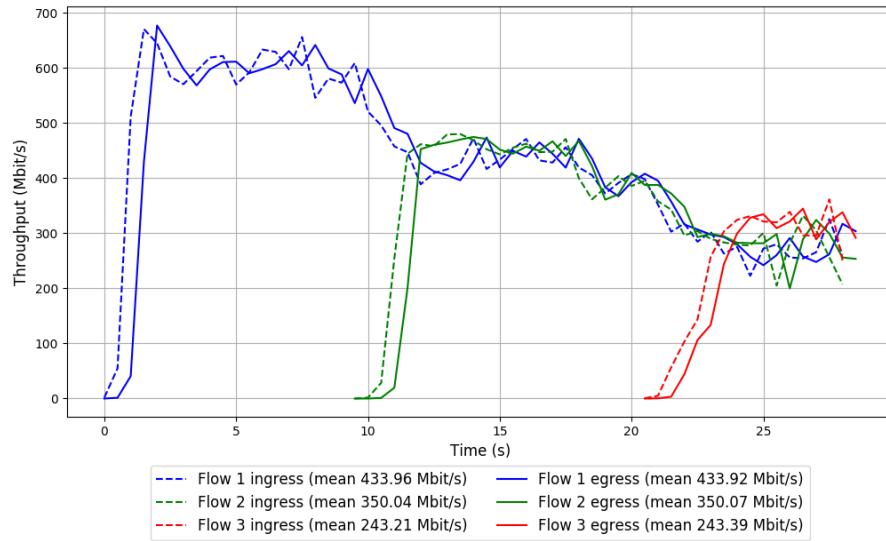


Run 5: Statistics of Indigo-MusesC3

```
Start at: 2019-01-21 23:34:01
End at: 2019-01-21 23:34:31
Local clock offset: 0.152 ms
Remote clock offset: -0.623 ms

# Below is generated by plot.py at 2019-01-22 01:53:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 726.77 Mbit/s
95th percentile per-packet one-way delay: 77.050 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 433.92 Mbit/s
95th percentile per-packet one-way delay: 79.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 350.07 Mbit/s
95th percentile per-packet one-way delay: 68.189 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 243.39 Mbit/s
95th percentile per-packet one-way delay: 65.375 ms
Loss rate: 0.02%
```

Run 5: Report of Indigo-MusesC3 — Data Link

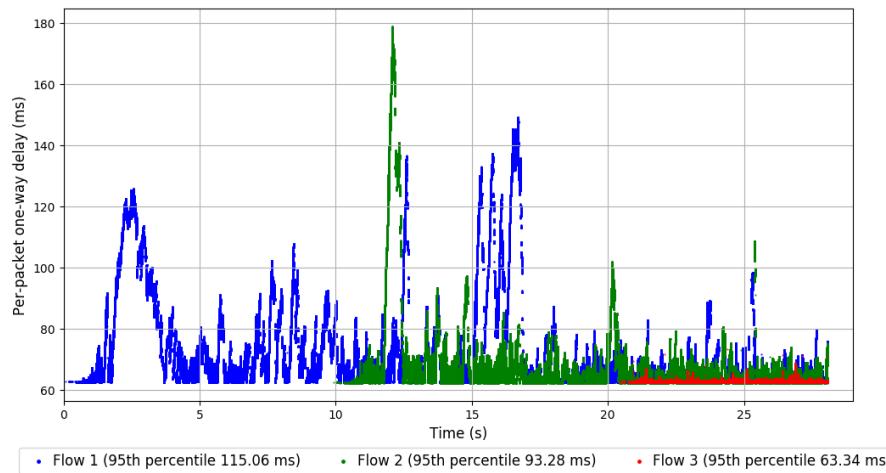
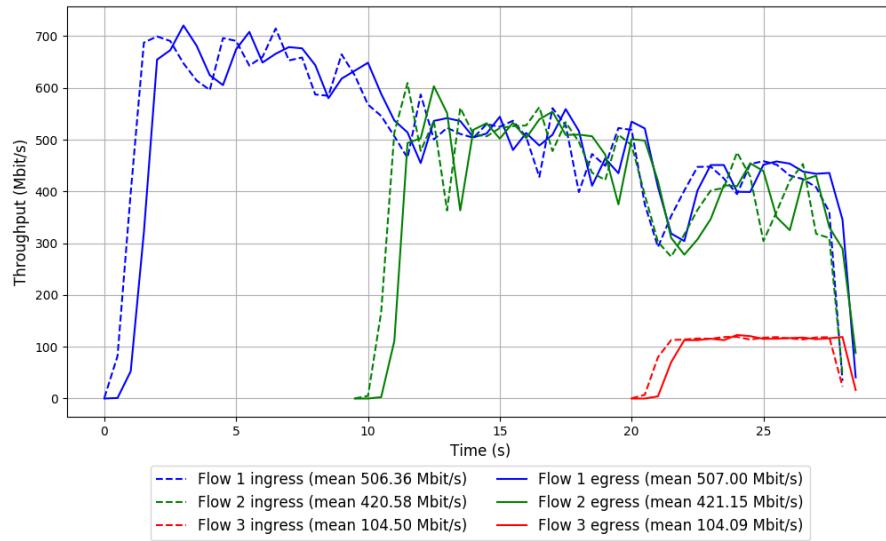


Run 1: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 20:58:24
End at: 2019-01-21 20:58:54
Local clock offset: -0.006 ms
Remote clock offset: -0.523 ms

# Below is generated by plot.py at 2019-01-22 01:55:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 808.57 Mbit/s
95th percentile per-packet one-way delay: 110.495 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 507.00 Mbit/s
95th percentile per-packet one-way delay: 115.057 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 421.15 Mbit/s
95th percentile per-packet one-way delay: 93.283 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 104.09 Mbit/s
95th percentile per-packet one-way delay: 63.341 ms
Loss rate: 1.27%
```

Run 1: Report of Indigo-MusesC5 — Data Link

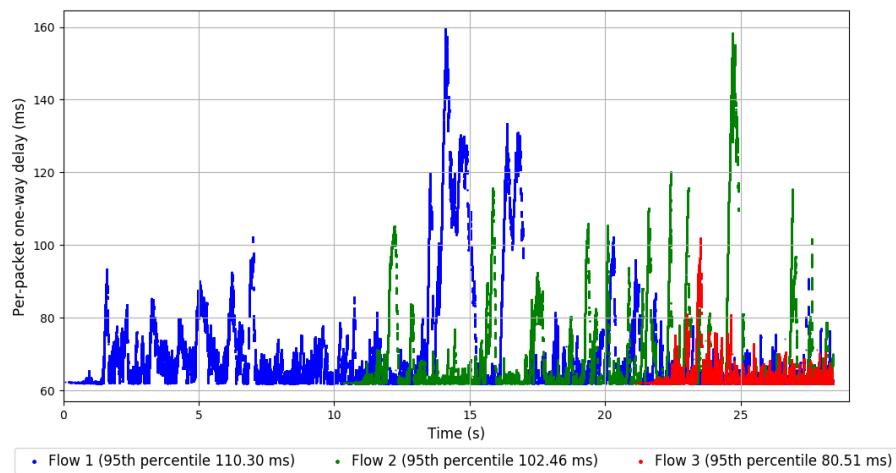
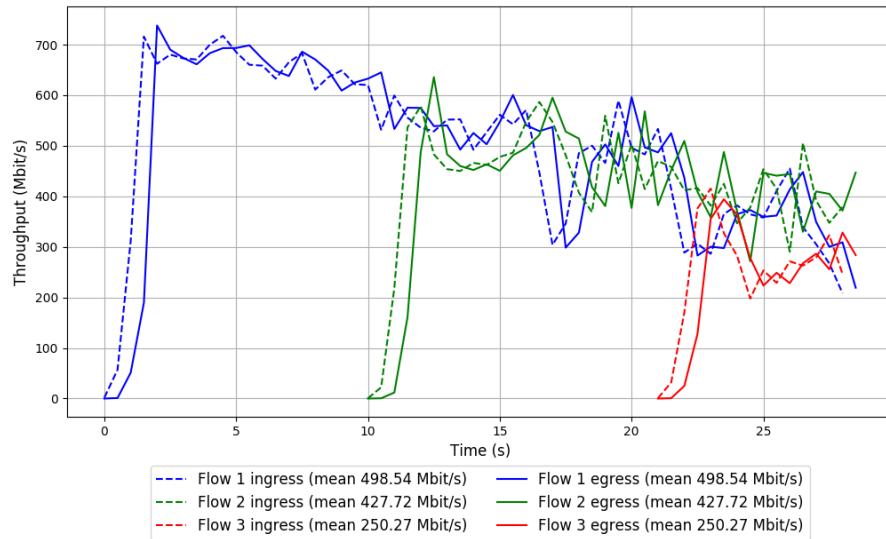


Run 2: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 21:34:39
End at: 2019-01-21 21:35:09
Local clock offset: -0.007 ms
Remote clock offset: -0.951 ms

# Below is generated by plot.py at 2019-01-22 01:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 837.22 Mbit/s
95th percentile per-packet one-way delay: 105.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 498.54 Mbit/s
95th percentile per-packet one-way delay: 110.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 427.72 Mbit/s
95th percentile per-packet one-way delay: 102.457 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 250.27 Mbit/s
95th percentile per-packet one-way delay: 80.511 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesC5 — Data Link

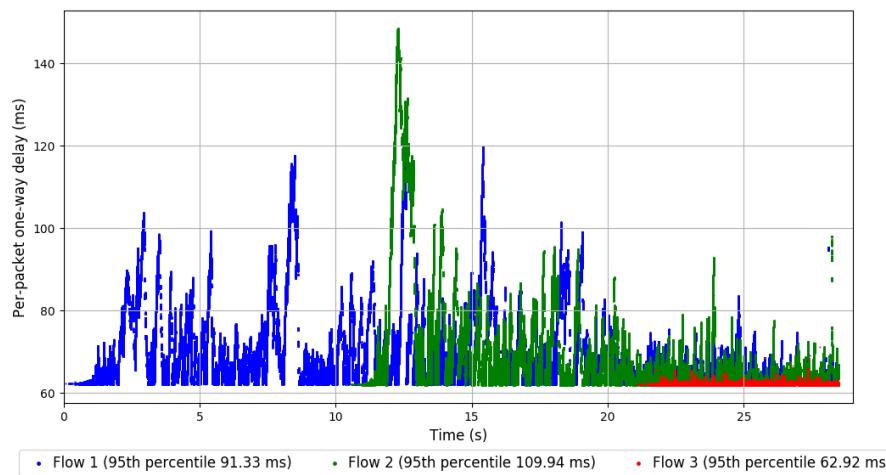
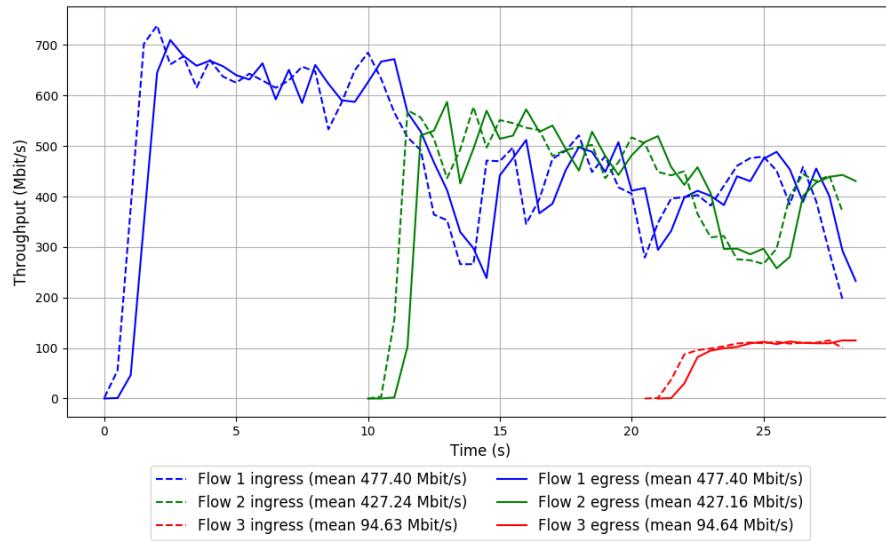


Run 3: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 22:11:02
End at: 2019-01-21 22:11:32
Local clock offset: 0.022 ms
Remote clock offset: -0.929 ms

# Below is generated by plot.py at 2019-01-22 01:56:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.24 Mbit/s
95th percentile per-packet one-way delay: 93.633 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 477.40 Mbit/s
95th percentile per-packet one-way delay: 91.334 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 427.16 Mbit/s
95th percentile per-packet one-way delay: 109.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.64 Mbit/s
95th percentile per-packet one-way delay: 62.917 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesC5 — Data Link

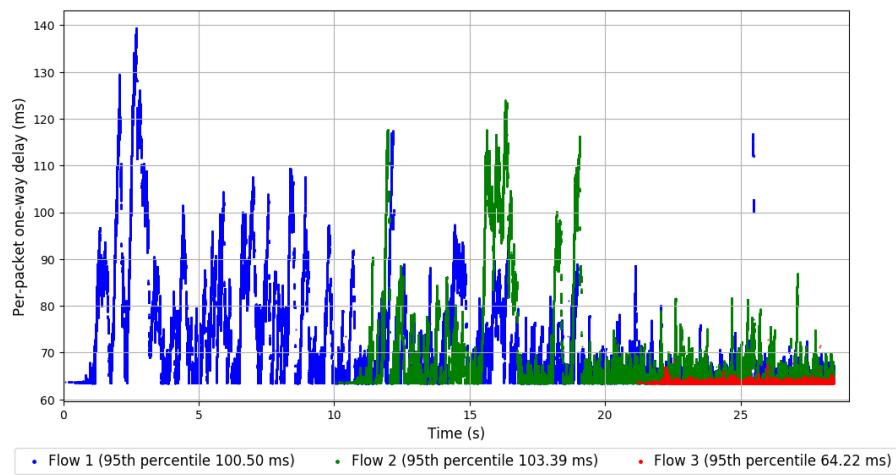
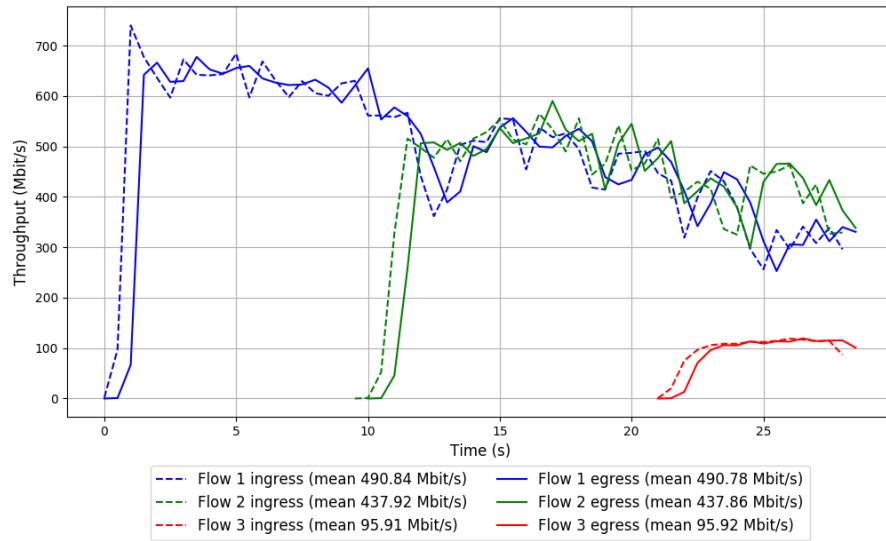


Run 4: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 22:47:14
End at: 2019-01-21 22:47:44
Local clock offset: -0.015 ms
Remote clock offset: 0.703 ms

# Below is generated by plot.py at 2019-01-22 02:00:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 799.15 Mbit/s
95th percentile per-packet one-way delay: 101.297 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 490.78 Mbit/s
95th percentile per-packet one-way delay: 100.496 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 437.86 Mbit/s
95th percentile per-packet one-way delay: 103.395 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 64.225 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesC5 — Data Link

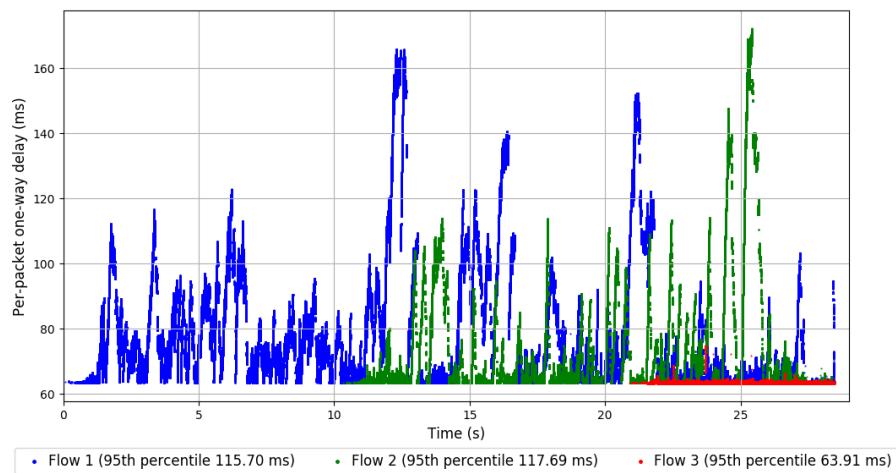
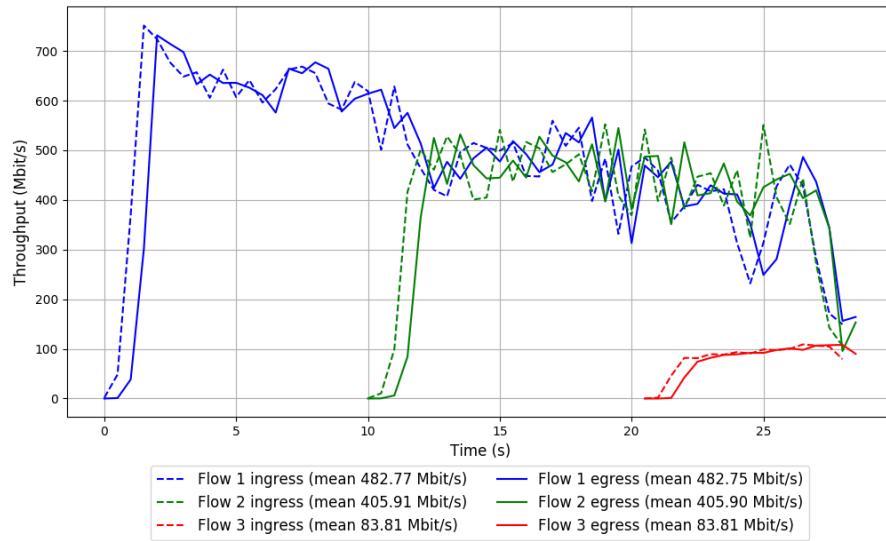


Run 5: Statistics of Indigo-MusesC5

```
Start at: 2019-01-21 23:23:38
End at: 2019-01-21 23:24:08
Local clock offset: 0.034 ms
Remote clock offset: 0.356 ms

# Below is generated by plot.py at 2019-01-22 02:00:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 762.31 Mbit/s
95th percentile per-packet one-way delay: 115.517 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 482.75 Mbit/s
95th percentile per-packet one-way delay: 115.703 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 405.90 Mbit/s
95th percentile per-packet one-way delay: 117.686 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.81 Mbit/s
95th percentile per-packet one-way delay: 63.907 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesC5 — Data Link

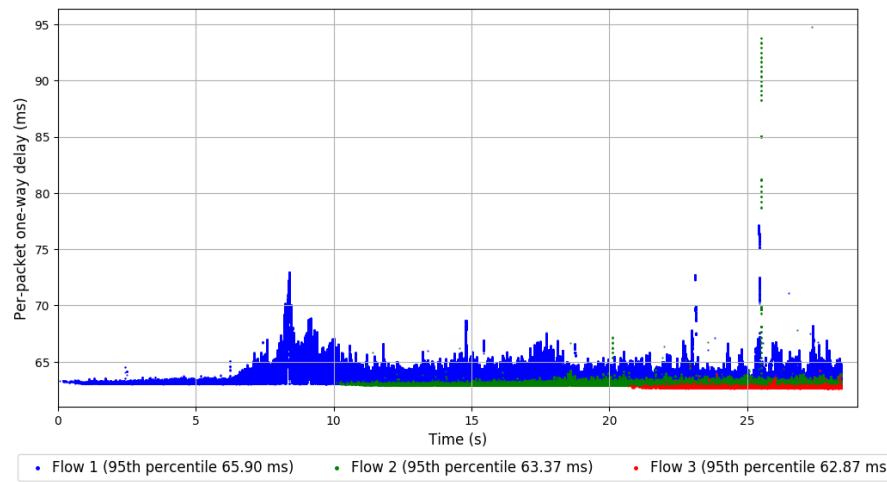
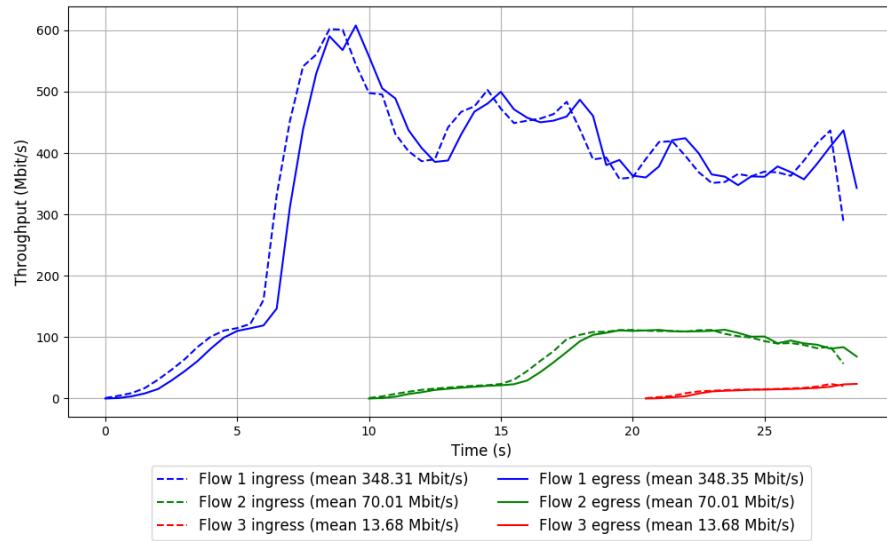


```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-21 21:07:20
End at: 2019-01-21 21:07:50
Local clock offset: 0.164 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-01-22 02:00:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.28 Mbit/s
95th percentile per-packet one-way delay: 65.762 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 348.35 Mbit/s
95th percentile per-packet one-way delay: 65.900 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.01 Mbit/s
95th percentile per-packet one-way delay: 63.372 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.68 Mbit/s
95th percentile per-packet one-way delay: 62.866 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesD — Data Link

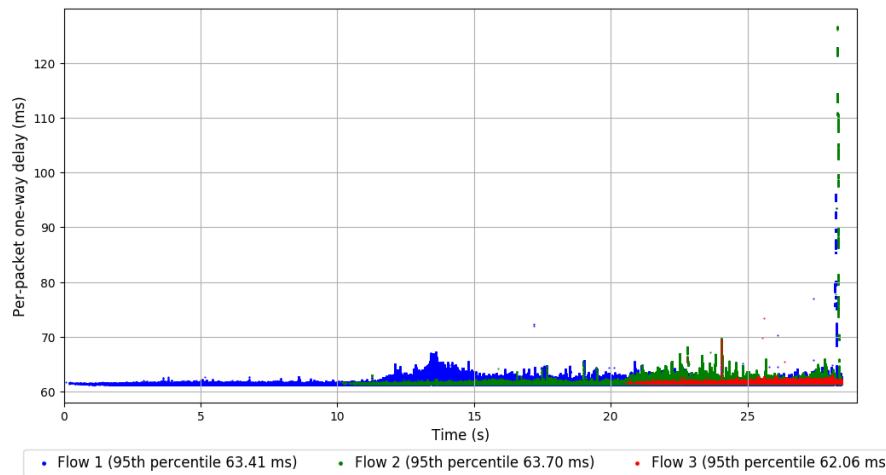
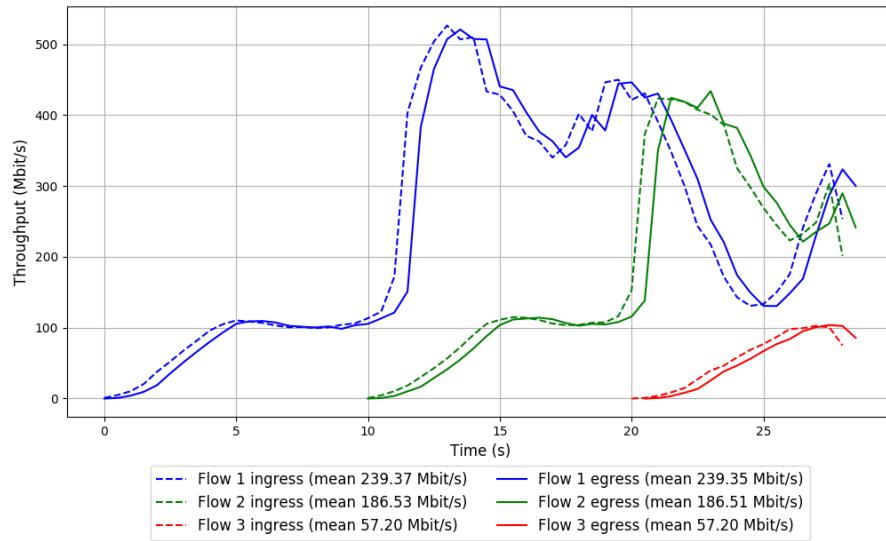


Run 2: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 21:43:42
End at: 2019-01-21 21:44:12
Local clock offset: -0.015 ms
Remote clock offset: -1.496 ms

# Below is generated by plot.py at 2019-01-22 02:01:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.11 Mbit/s
95th percentile per-packet one-way delay: 63.447 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 239.35 Mbit/s
95th percentile per-packet one-way delay: 63.406 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 186.51 Mbit/s
95th percentile per-packet one-way delay: 63.697 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 62.062 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-MusesD — Data Link

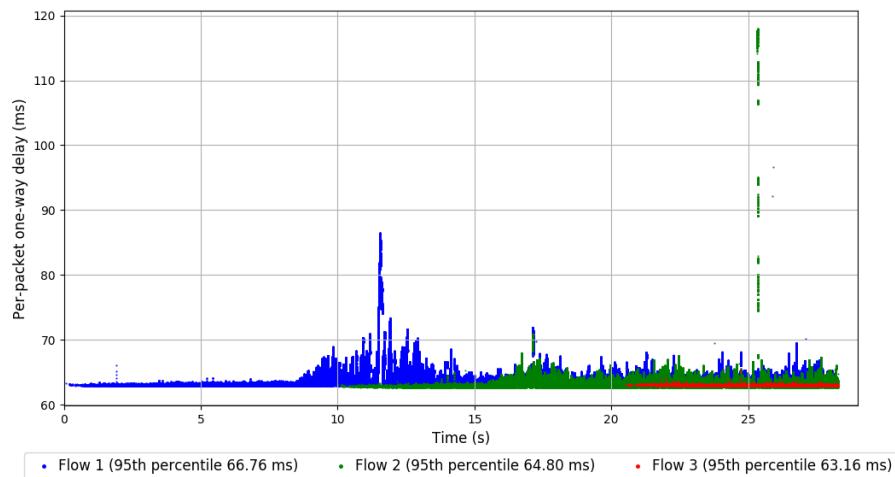
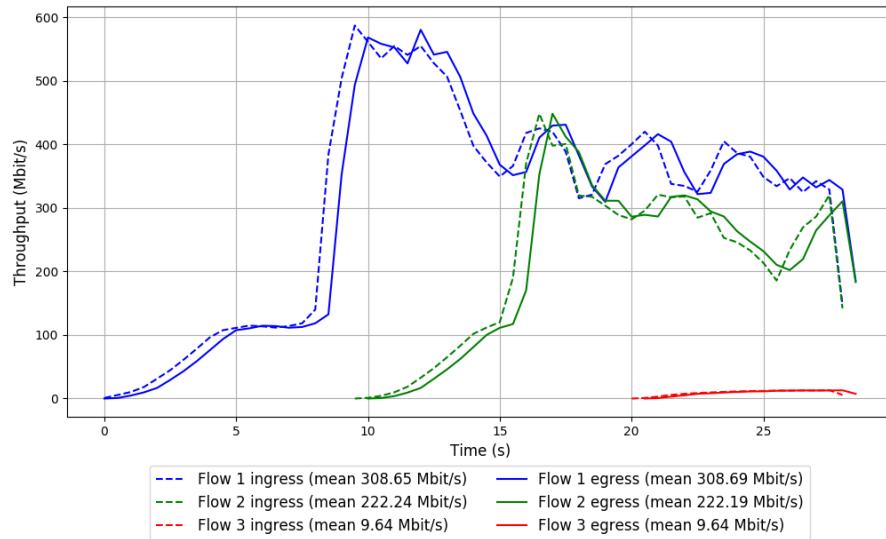


Run 3: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 22:20:00
End at: 2019-01-21 22:20:30
Local clock offset: -0.018 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-01-22 02:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.15 Mbit/s
95th percentile per-packet one-way delay: 66.163 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 308.69 Mbit/s
95th percentile per-packet one-way delay: 66.756 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 222.19 Mbit/s
95th percentile per-packet one-way delay: 64.799 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 9.64 Mbit/s
95th percentile per-packet one-way delay: 63.157 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-MusesD — Data Link

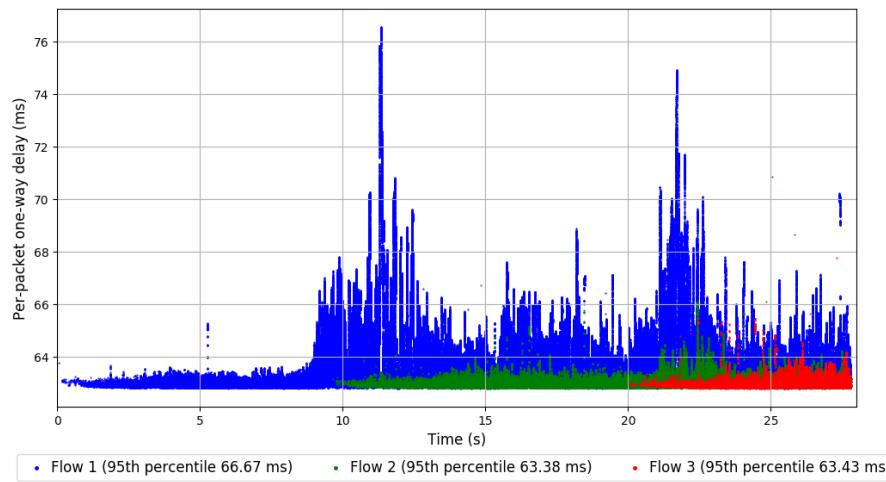
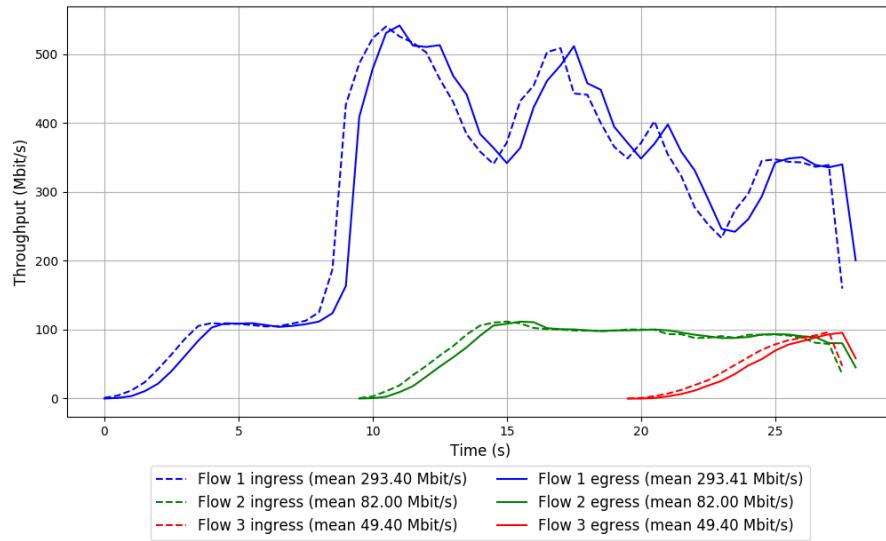


Run 4: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 22:56:16
End at: 2019-01-21 22:56:46
Local clock offset: -0.073 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2019-01-22 02:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.00 Mbit/s
95th percentile per-packet one-way delay: 66.258 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 293.41 Mbit/s
95th percentile per-packet one-way delay: 66.665 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 82.00 Mbit/s
95th percentile per-packet one-way delay: 63.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.40 Mbit/s
95th percentile per-packet one-way delay: 63.431 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesD — Data Link

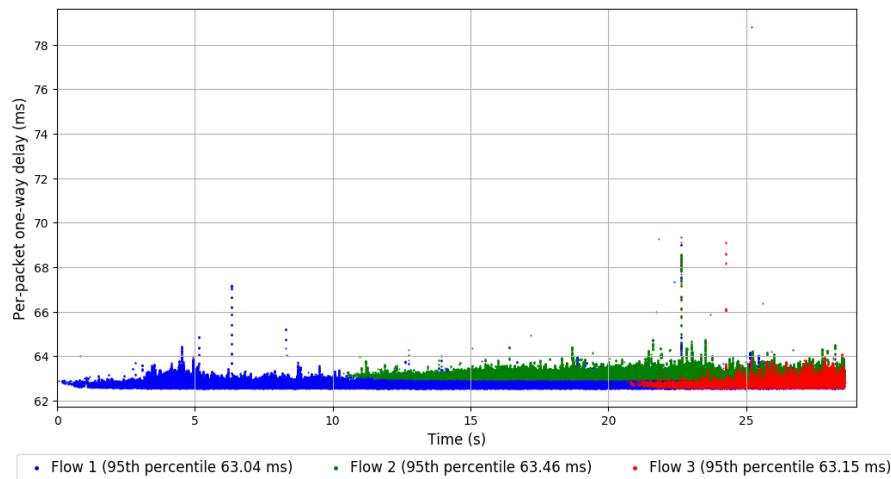
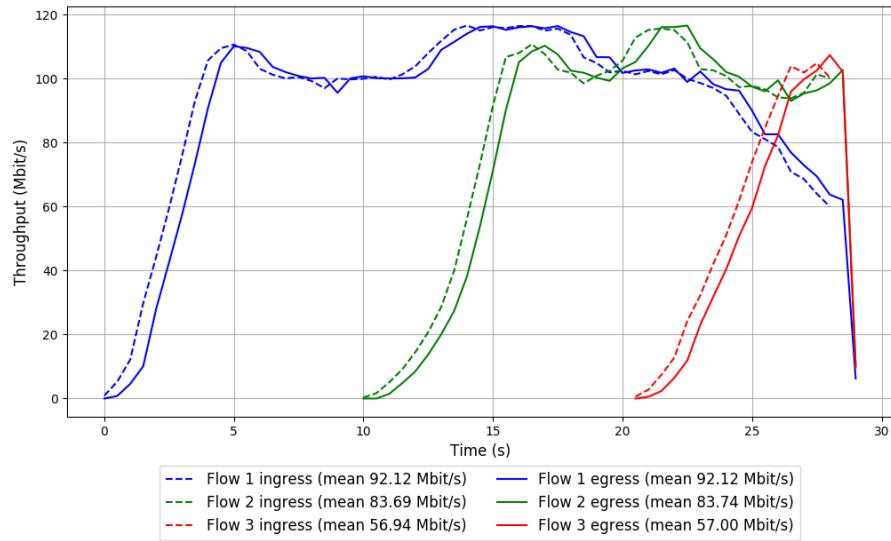


Run 5: Statistics of Indigo-MusesD

```
Start at: 2019-01-21 23:32:39
End at: 2019-01-21 23:33:09
Local clock offset: 0.203 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2019-01-22 02:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.27 Mbit/s
95th percentile per-packet one-way delay: 63.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 63.043 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 83.74 Mbit/s
95th percentile per-packet one-way delay: 63.463 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 57.00 Mbit/s
95th percentile per-packet one-way delay: 63.149 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-MusesD — Data Link

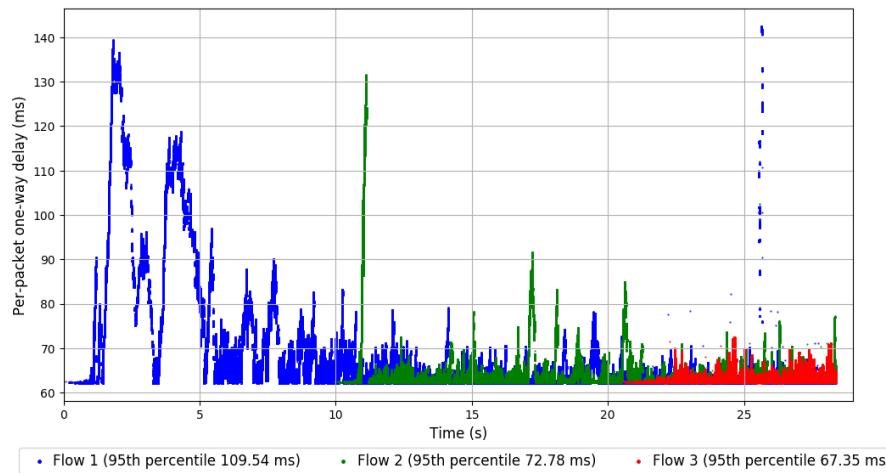
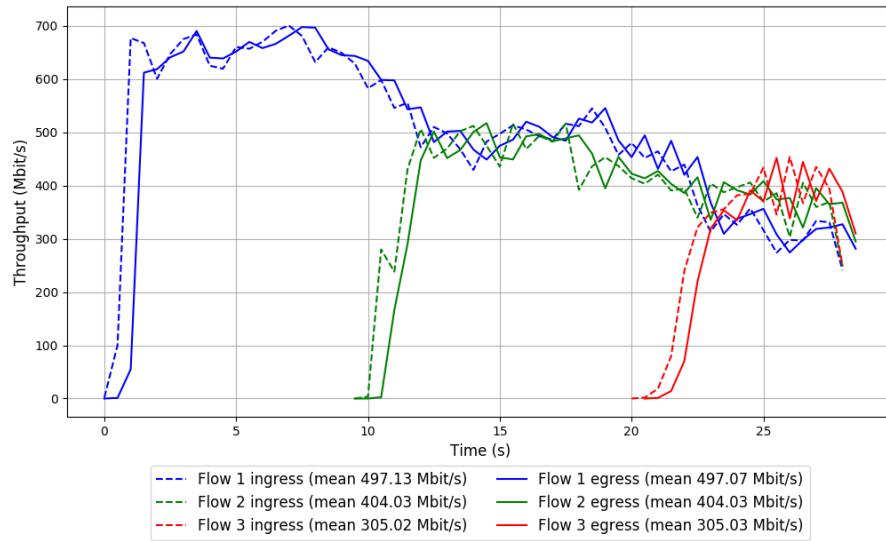


Run 1: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 21:12:45
End at: 2019-01-21 21:13:15
Local clock offset: 0.122 ms
Remote clock offset: -0.59 ms

# Below is generated by plot.py at 2019-01-22 02:15:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 844.92 Mbit/s
95th percentile per-packet one-way delay: 98.349 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 497.07 Mbit/s
95th percentile per-packet one-way delay: 109.542 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 404.03 Mbit/s
95th percentile per-packet one-way delay: 72.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 305.03 Mbit/s
95th percentile per-packet one-way delay: 67.349 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-MusesT — Data Link

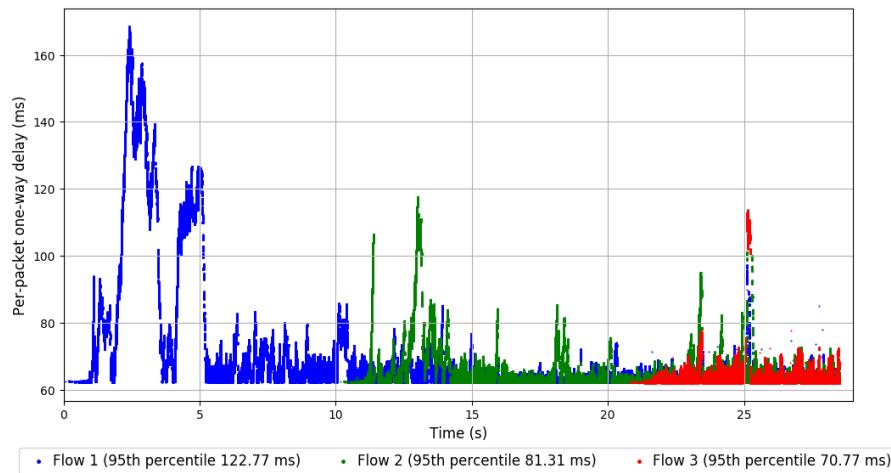
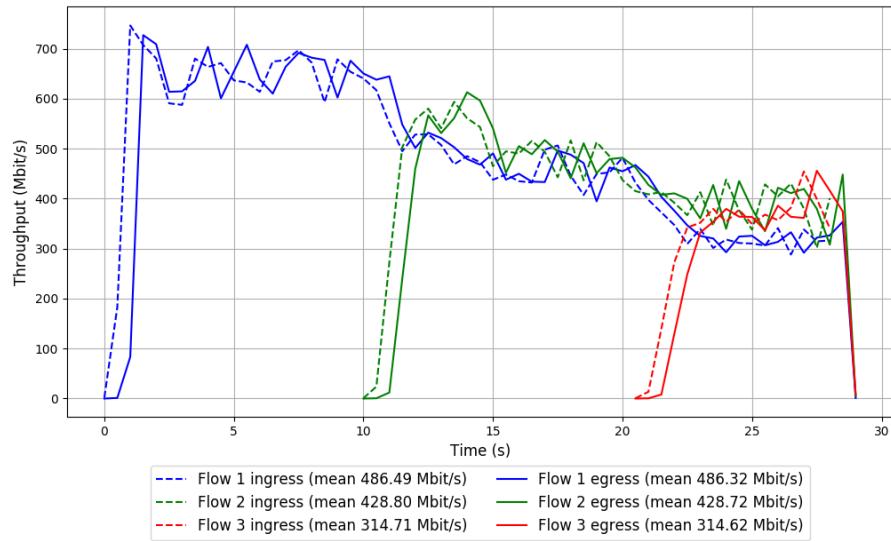


Run 2: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 21:49:04
End at: 2019-01-21 21:49:34
Local clock offset: -0.04 ms
Remote clock offset: -0.788 ms

# Below is generated by plot.py at 2019-01-22 02:15:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 848.40 Mbit/s
95th percentile per-packet one-way delay: 112.167 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 486.32 Mbit/s
95th percentile per-packet one-way delay: 122.766 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 428.72 Mbit/s
95th percentile per-packet one-way delay: 81.308 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 314.62 Mbit/s
95th percentile per-packet one-way delay: 70.774 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-MusesT — Data Link

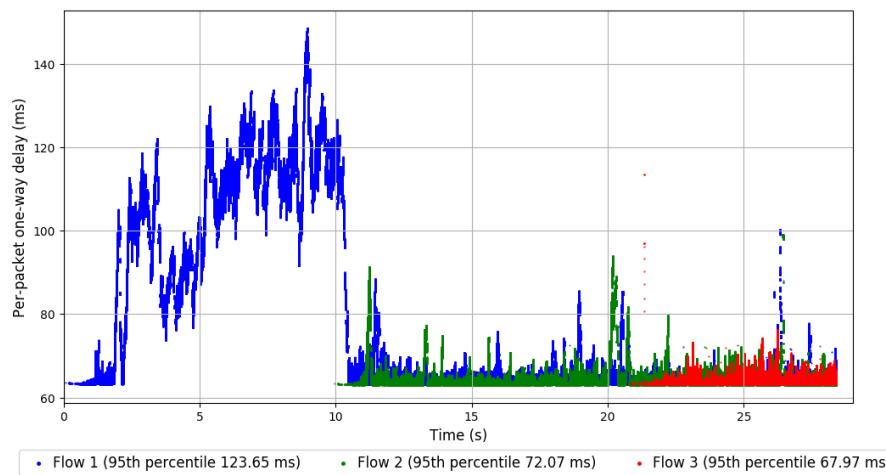
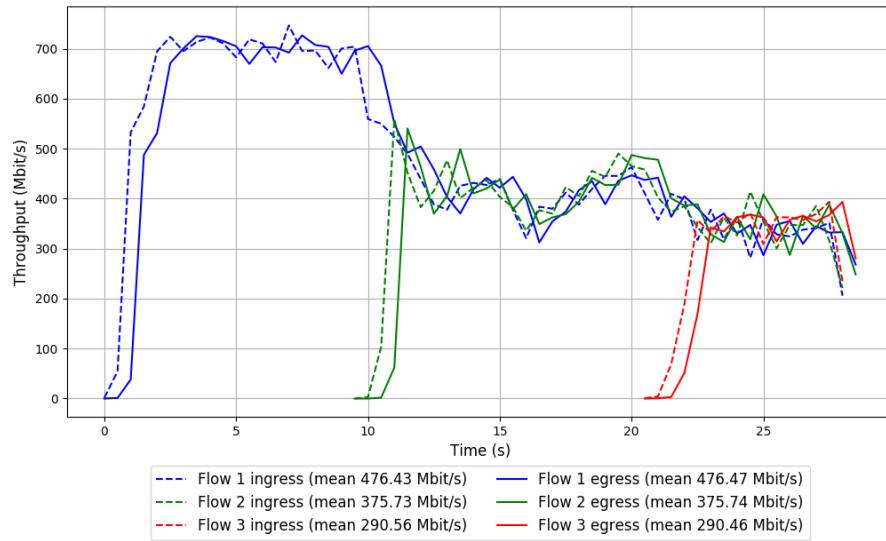


Run 3: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 22:25:28
End at: 2019-01-21 22:25:58
Local clock offset: 0.032 ms
Remote clock offset: 0.409 ms

# Below is generated by plot.py at 2019-01-22 02:17:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 798.98 Mbit/s
95th percentile per-packet one-way delay: 119.998 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 476.47 Mbit/s
95th percentile per-packet one-way delay: 123.650 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 375.74 Mbit/s
95th percentile per-packet one-way delay: 72.074 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 290.46 Mbit/s
95th percentile per-packet one-way delay: 67.968 ms
Loss rate: 0.02%
```

Run 3: Report of Indigo-MusesT — Data Link

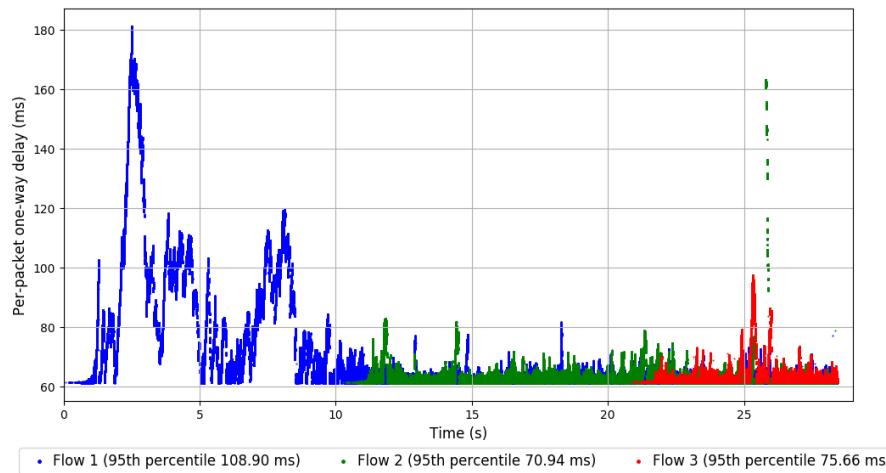
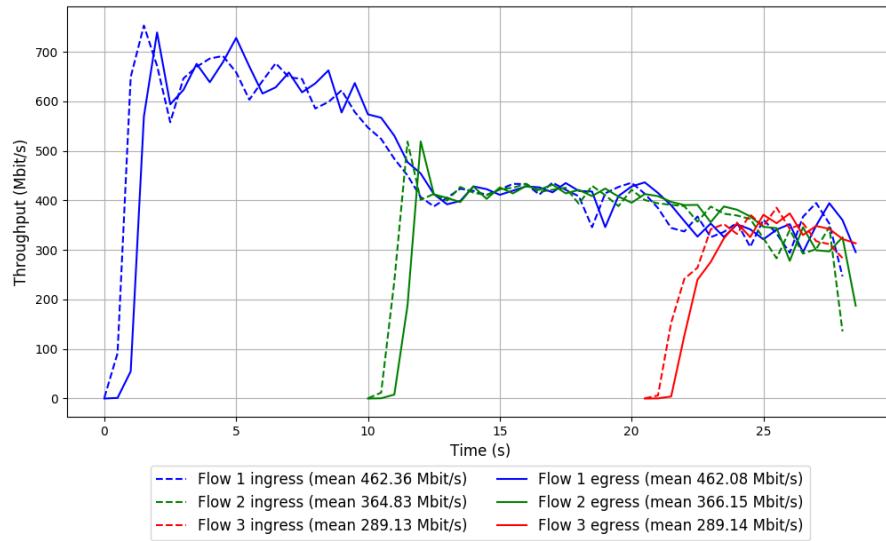


Run 4: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 23:01:41
End at: 2019-01-21 23:02:11
Local clock offset: 0.009 ms
Remote clock offset: -1.433 ms

# Below is generated by plot.py at 2019-01-22 02:18:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 773.41 Mbit/s
95th percentile per-packet one-way delay: 104.017 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 462.08 Mbit/s
95th percentile per-packet one-way delay: 108.901 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 366.15 Mbit/s
95th percentile per-packet one-way delay: 70.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 289.14 Mbit/s
95th percentile per-packet one-way delay: 75.663 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-MusesT — Data Link

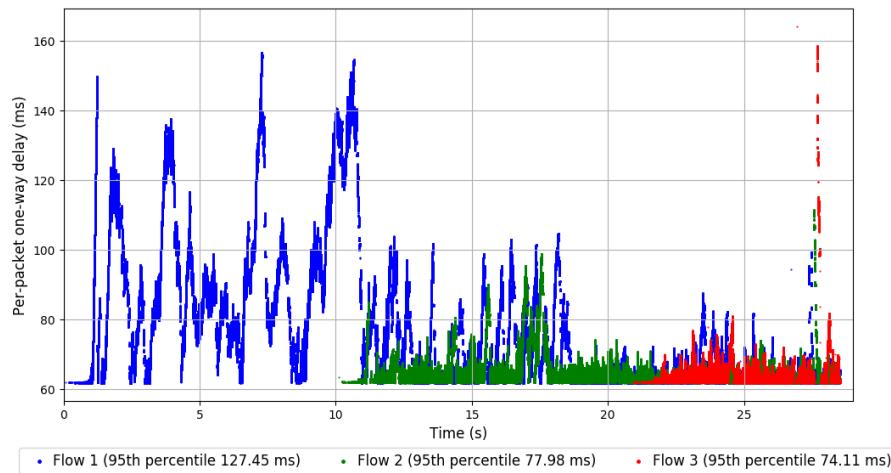
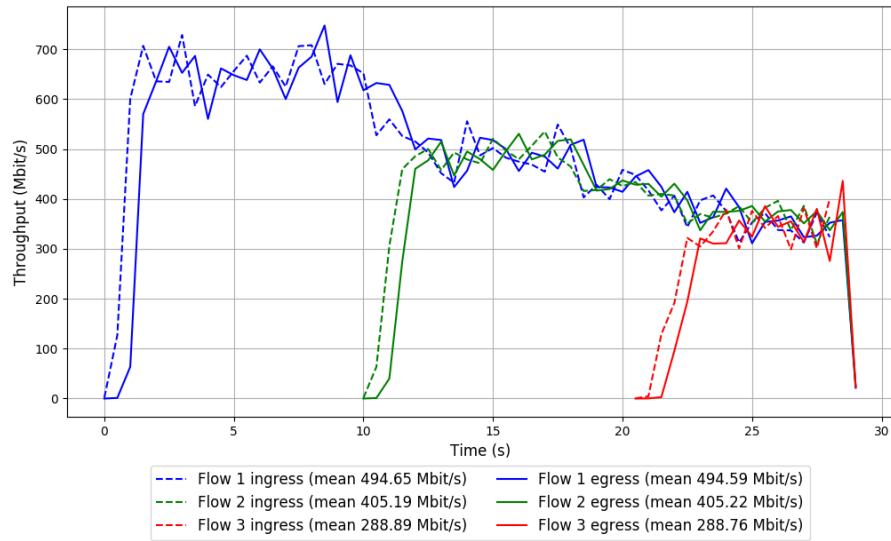


Run 5: Statistics of Indigo-MusesT

```
Start at: 2019-01-21 23:37:53
End at: 2019-01-21 23:38:23
Local clock offset: -0.004 ms
Remote clock offset: -1.235 ms

# Below is generated by plot.py at 2019-01-22 02:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 834.46 Mbit/s
95th percentile per-packet one-way delay: 118.580 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 494.59 Mbit/s
95th percentile per-packet one-way delay: 127.451 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 405.22 Mbit/s
95th percentile per-packet one-way delay: 77.985 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 288.76 Mbit/s
95th percentile per-packet one-way delay: 74.112 ms
Loss rate: 0.06%
```

Run 5: Report of Indigo-MusesT — Data Link

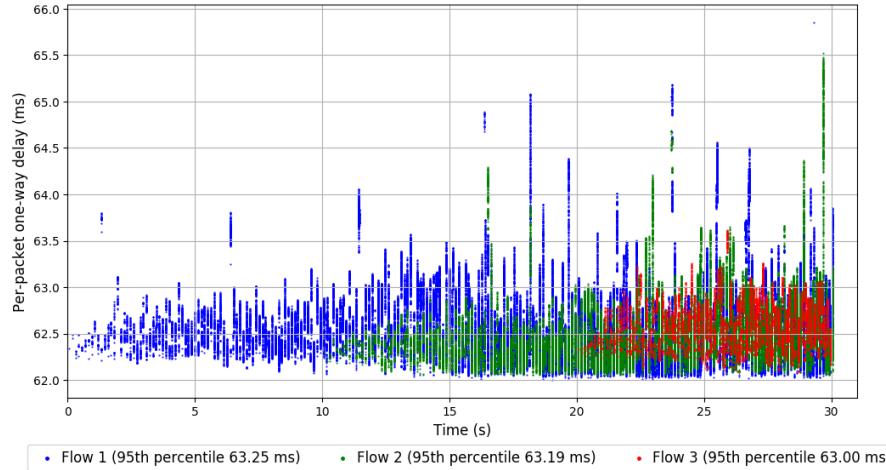
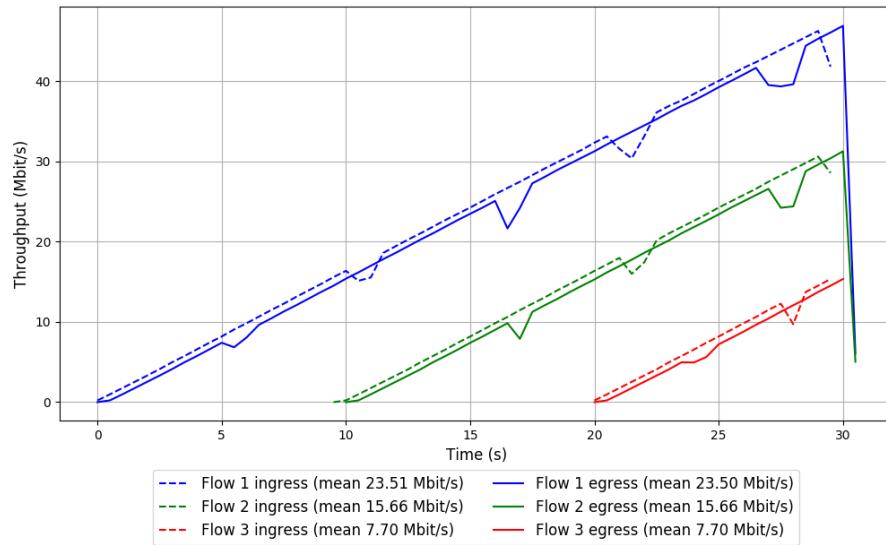


Run 1: Statistics of LEDBAT

```
Start at: 2019-01-21 20:55:05
End at: 2019-01-21 20:55:35
Local clock offset: 0.001 ms
Remote clock offset: -0.733 ms

# Below is generated by plot.py at 2019-01-22 02:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.47 Mbit/s
95th percentile per-packet one-way delay: 63.214 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 63.248 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 15.66 Mbit/s
95th percentile per-packet one-way delay: 63.187 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 63.002 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

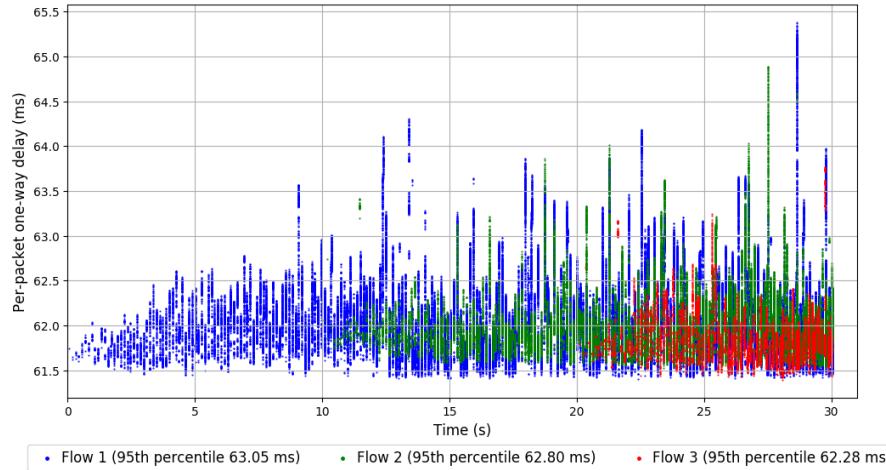
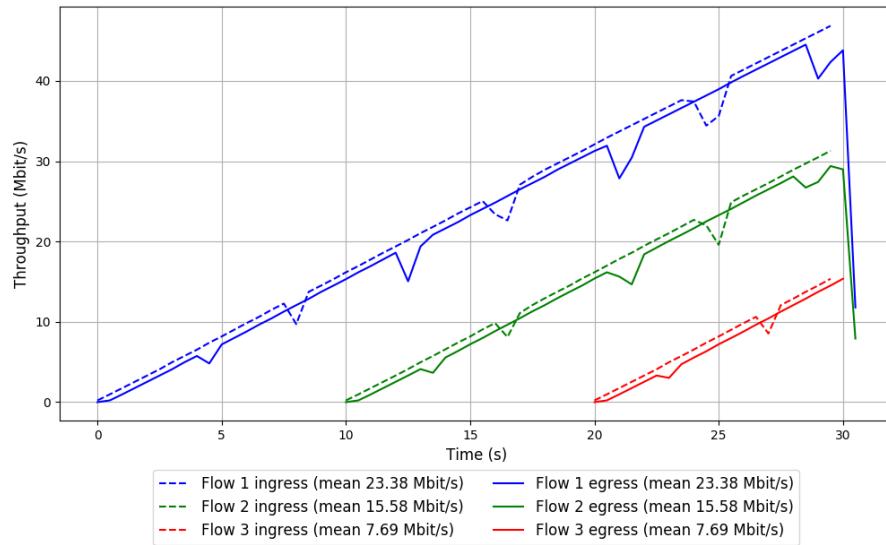


Run 2: Statistics of LEDBAT

```
Start at: 2019-01-21 21:31:29
End at: 2019-01-21 21:31:59
Local clock offset: -0.036 ms
Remote clock offset: -1.502 ms

# Below is generated by plot.py at 2019-01-22 02:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.30 Mbit/s
95th percentile per-packet one-way delay: 62.940 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.38 Mbit/s
95th percentile per-packet one-way delay: 63.046 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.58 Mbit/s
95th percentile per-packet one-way delay: 62.798 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 62.278 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

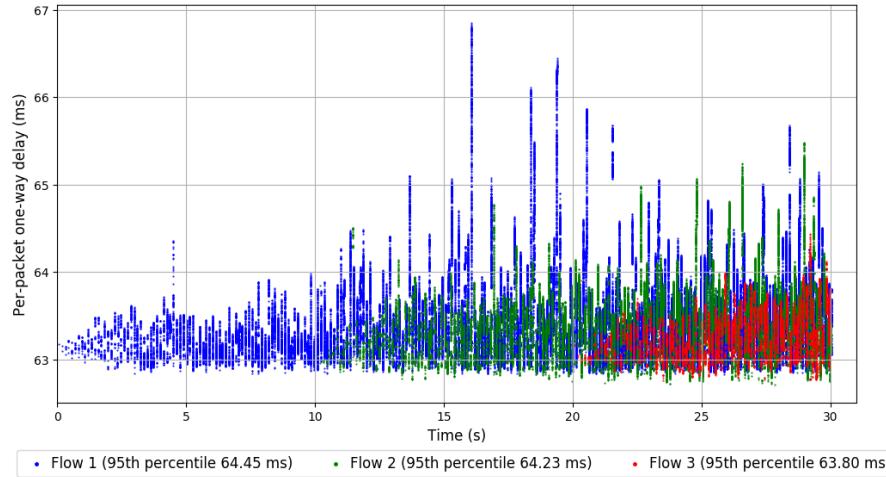
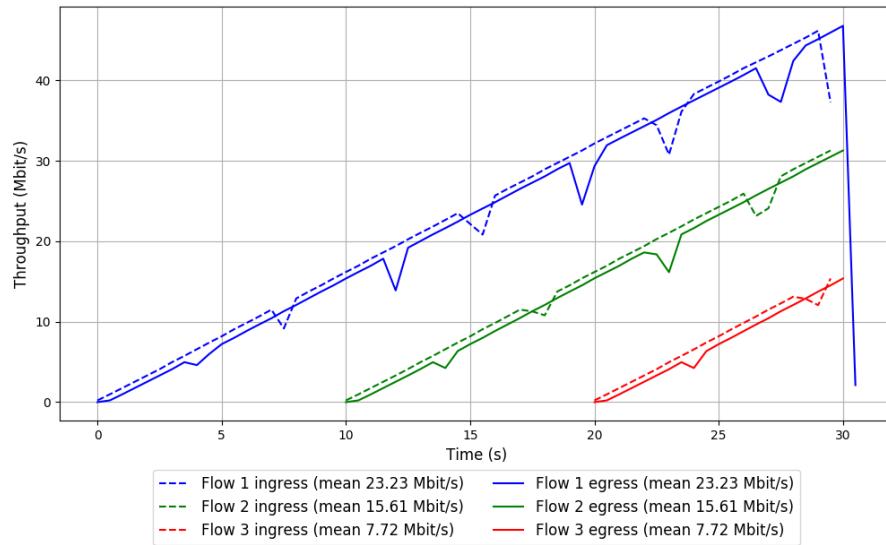


Run 3: Statistics of LEDBAT

```
Start at: 2019-01-21 22:07:51
End at: 2019-01-21 22:08:21
Local clock offset: -0.027 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2019-01-22 02:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 64.368 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.23 Mbit/s
95th percentile per-packet one-way delay: 64.453 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 64.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 63.795 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link

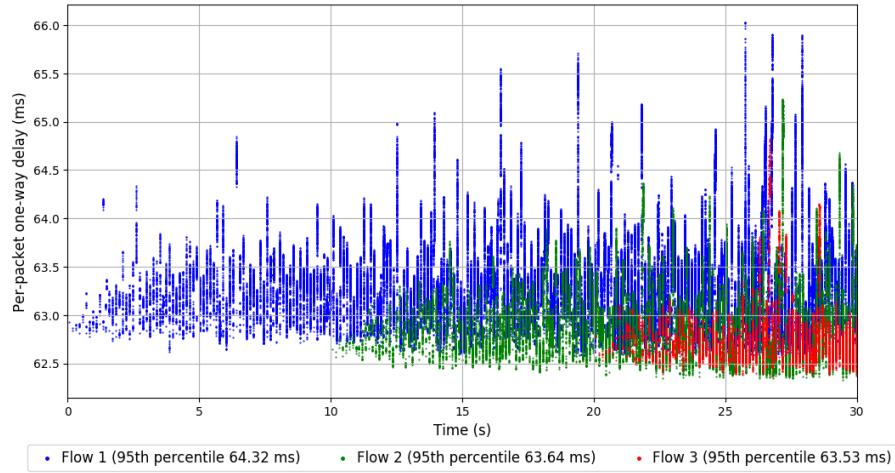
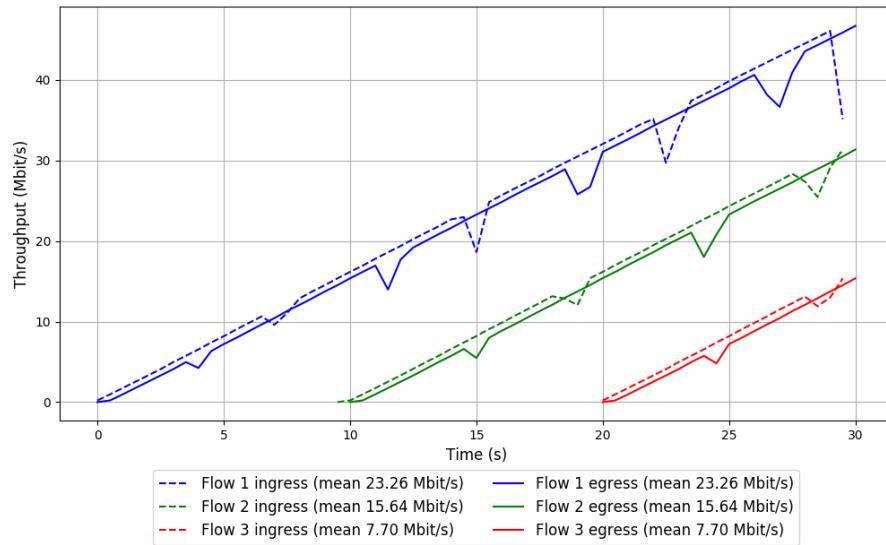


Run 4: Statistics of LEDBAT

```
Start at: 2019-01-21 22:44:04
End at: 2019-01-21 22:44:34
Local clock offset: -0.05 ms
Remote clock offset: -0.435 ms

# Below is generated by plot.py at 2019-01-22 02:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 64.156 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.26 Mbit/s
95th percentile per-packet one-way delay: 64.324 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.64 Mbit/s
95th percentile per-packet one-way delay: 63.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 63.532 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link

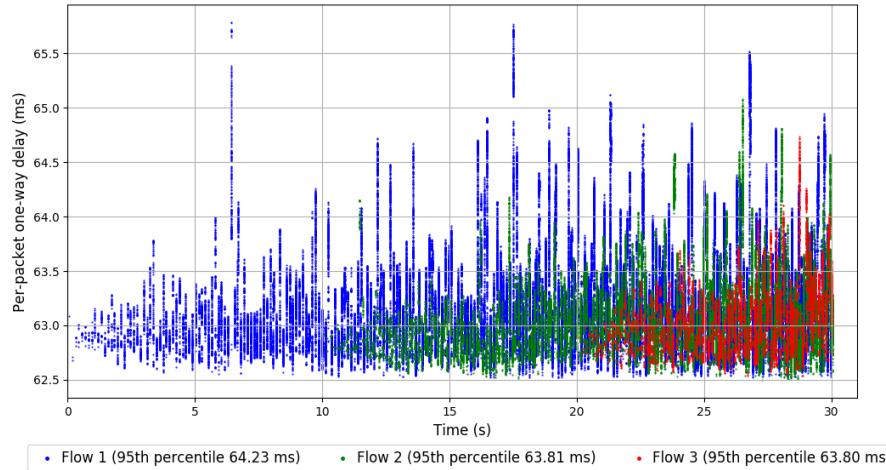
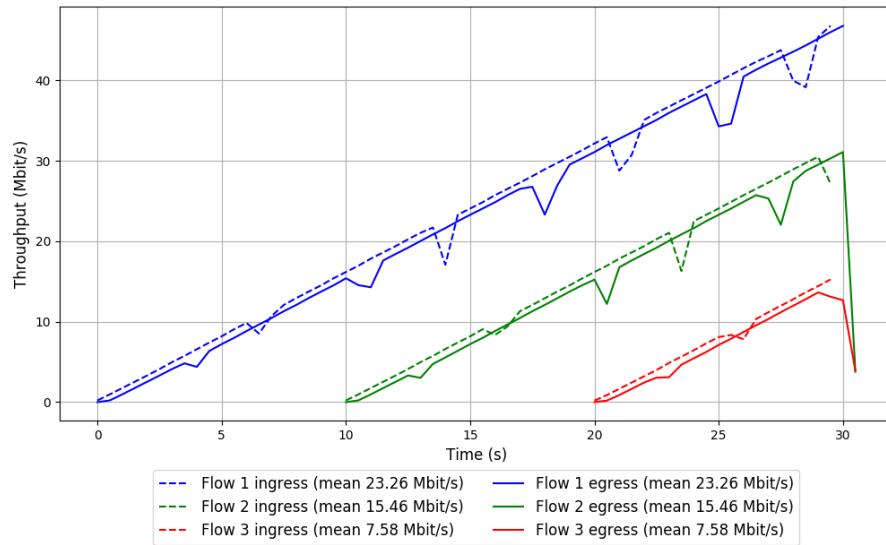


Run 5: Statistics of LEDBAT

```
Start at: 2019-01-21 23:20:25
End at: 2019-01-21 23:20:55
Local clock offset: 0.034 ms
Remote clock offset: -0.63 ms

# Below is generated by plot.py at 2019-01-22 02:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.00 Mbit/s
95th percentile per-packet one-way delay: 64.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.26 Mbit/s
95th percentile per-packet one-way delay: 64.231 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.46 Mbit/s
95th percentile per-packet one-way delay: 63.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 63.798 ms
Loss rate: 0.00%
```

Run 5: Report of LEDBAT — Data Link

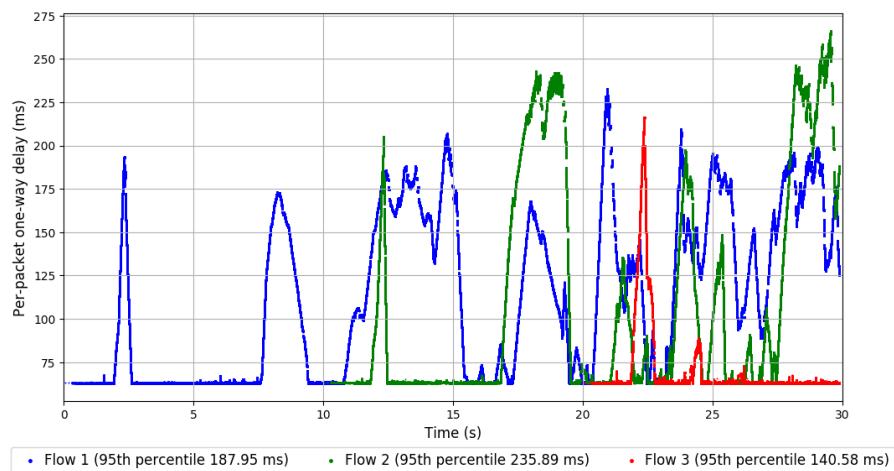
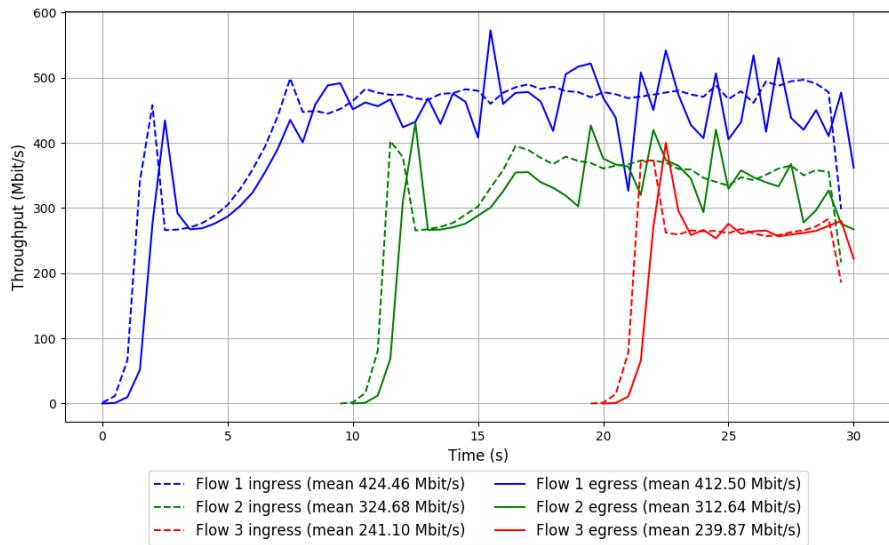


```
Run 1: Statistics of PCC-Allegro
```

```
Start at: 2019-01-21 20:56:22
End at: 2019-01-21 20:56:52
Local clock offset: -0.039 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2019-01-22 02:38:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.62 Mbit/s
95th percentile per-packet one-way delay: 208.015 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 412.50 Mbit/s
95th percentile per-packet one-way delay: 187.949 ms
Loss rate: 2.82%
-- Flow 2:
Average throughput: 312.64 Mbit/s
95th percentile per-packet one-way delay: 235.889 ms
Loss rate: 3.71%
-- Flow 3:
Average throughput: 239.87 Mbit/s
95th percentile per-packet one-way delay: 140.581 ms
Loss rate: 0.51%
```

Run 1: Report of PCC-Allegro — Data Link

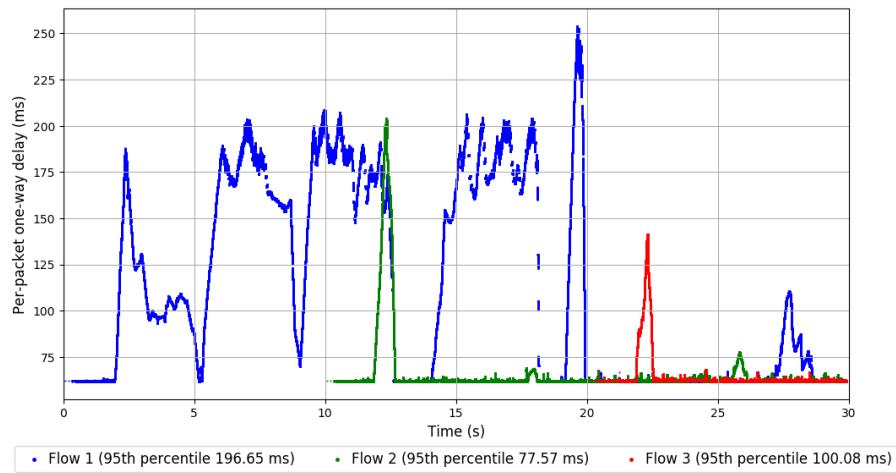
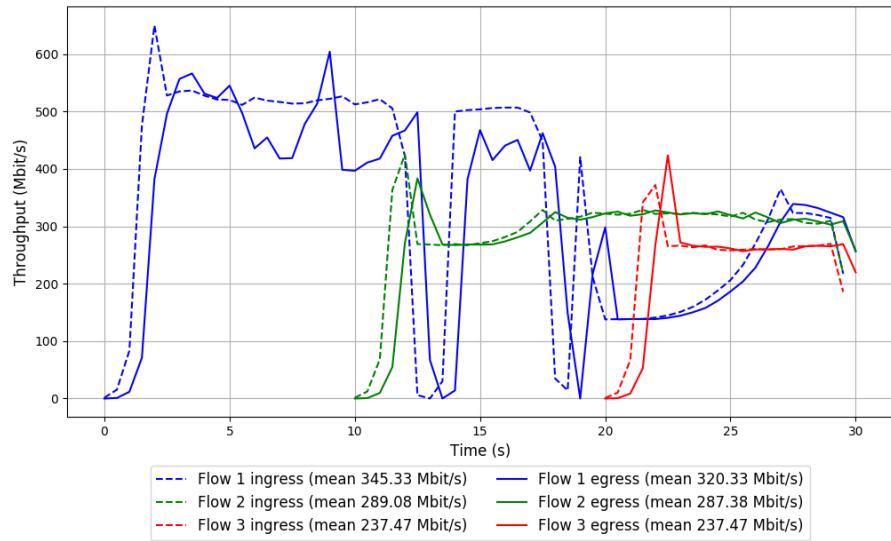


Run 2: Statistics of PCC-Allegro

```
Start at: 2019-01-21 21:32:46
End at: 2019-01-21 21:33:16
Local clock offset: -0.009 ms
Remote clock offset: -1.092 ms

# Below is generated by plot.py at 2019-01-22 02:38:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.43 Mbit/s
95th percentile per-packet one-way delay: 190.941 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 320.33 Mbit/s
95th percentile per-packet one-way delay: 196.651 ms
Loss rate: 7.24%
-- Flow 2:
Average throughput: 287.38 Mbit/s
95th percentile per-packet one-way delay: 77.567 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 237.47 Mbit/s
95th percentile per-packet one-way delay: 100.084 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Allegro — Data Link

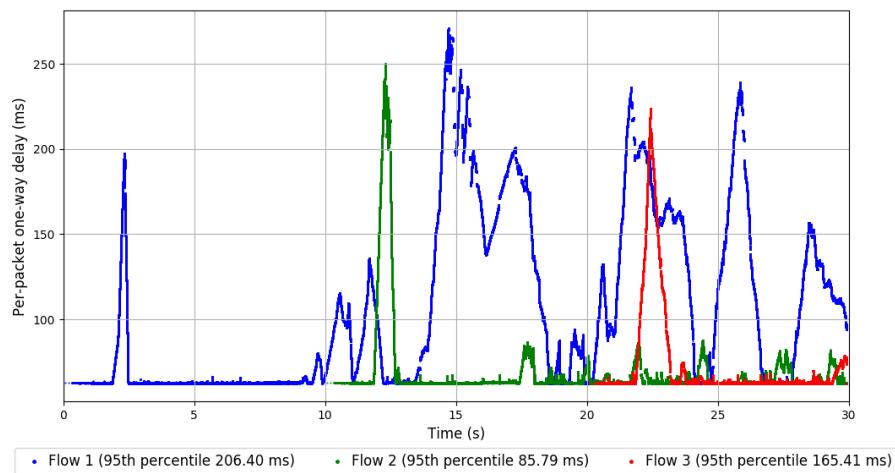
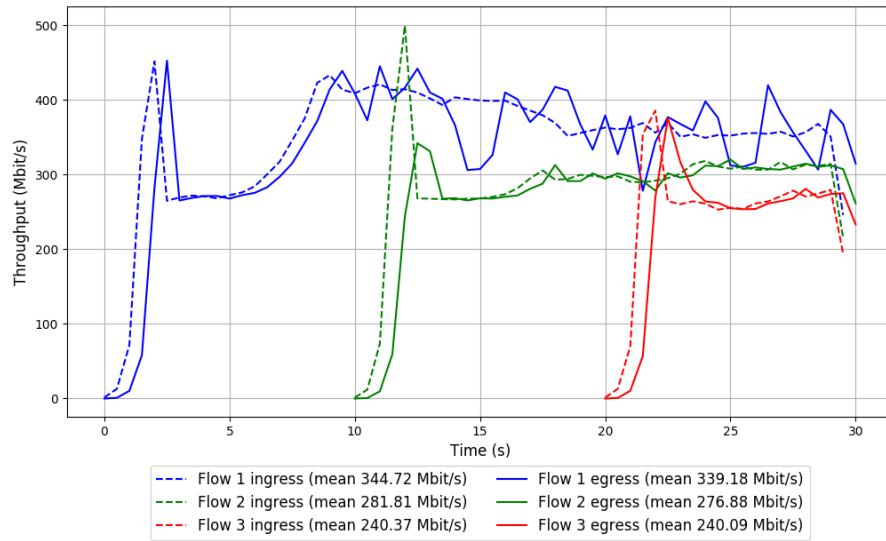


Run 3: Statistics of PCC-Allegro

```
Start at: 2019-01-21 22:09:08
End at: 2019-01-21 22:09:38
Local clock offset: -0.01 ms
Remote clock offset: -0.178 ms

# Below is generated by plot.py at 2019-01-22 02:38:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 602.28 Mbit/s
95th percentile per-packet one-way delay: 197.433 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 339.18 Mbit/s
95th percentile per-packet one-way delay: 206.399 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 276.88 Mbit/s
95th percentile per-packet one-way delay: 85.789 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 240.09 Mbit/s
95th percentile per-packet one-way delay: 165.407 ms
Loss rate: 0.12%
```

Run 3: Report of PCC-Allegro — Data Link

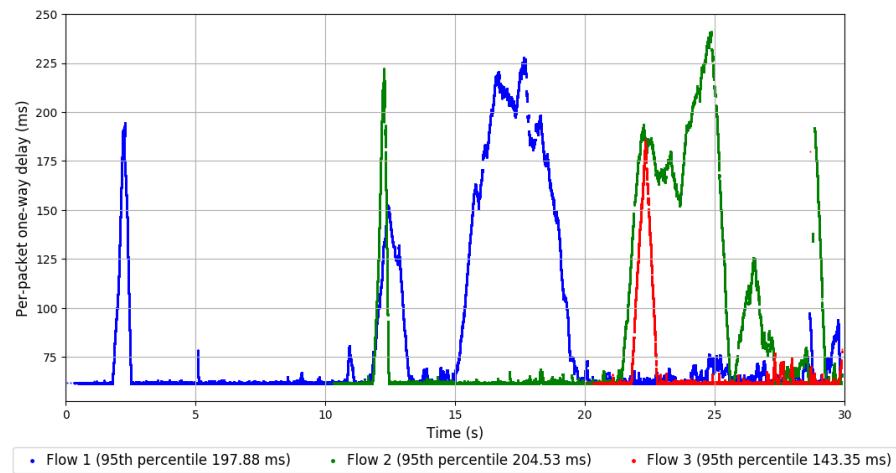
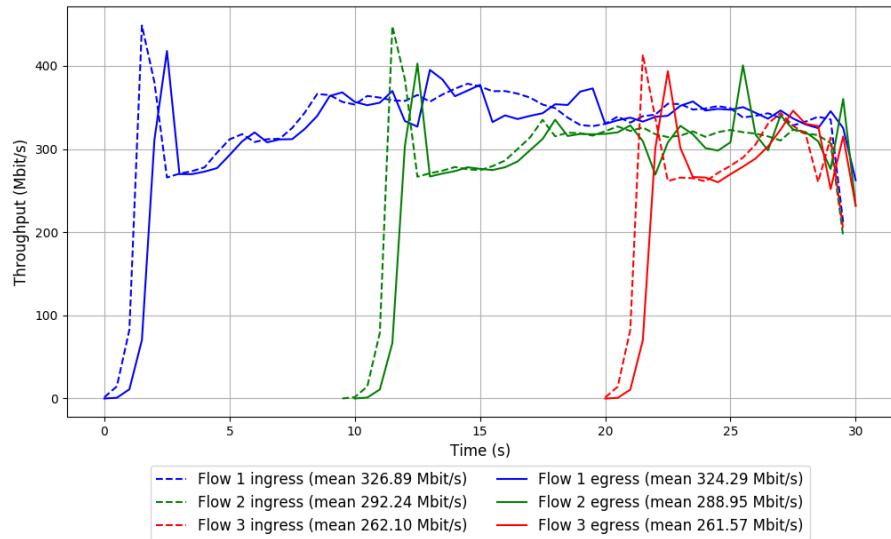


Run 4: Statistics of PCC-Allegro

```
Start at: 2019-01-21 22:45:20
End at: 2019-01-21 22:45:50
Local clock offset: -0.031 ms
Remote clock offset: -1.264 ms

# Below is generated by plot.py at 2019-01-22 02:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 602.71 Mbit/s
95th percentile per-packet one-way delay: 194.092 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 324.29 Mbit/s
95th percentile per-packet one-way delay: 197.877 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 288.95 Mbit/s
95th percentile per-packet one-way delay: 204.529 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 261.57 Mbit/s
95th percentile per-packet one-way delay: 143.348 ms
Loss rate: 0.19%
```

Run 4: Report of PCC-Allegro — Data Link

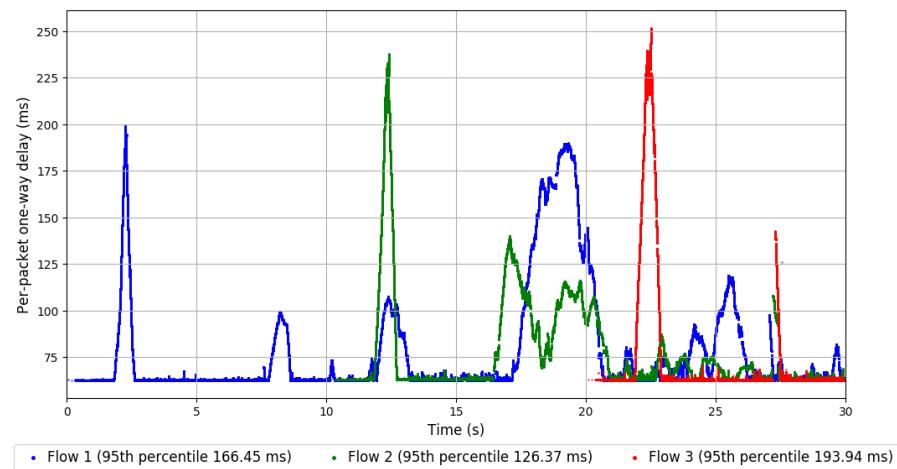
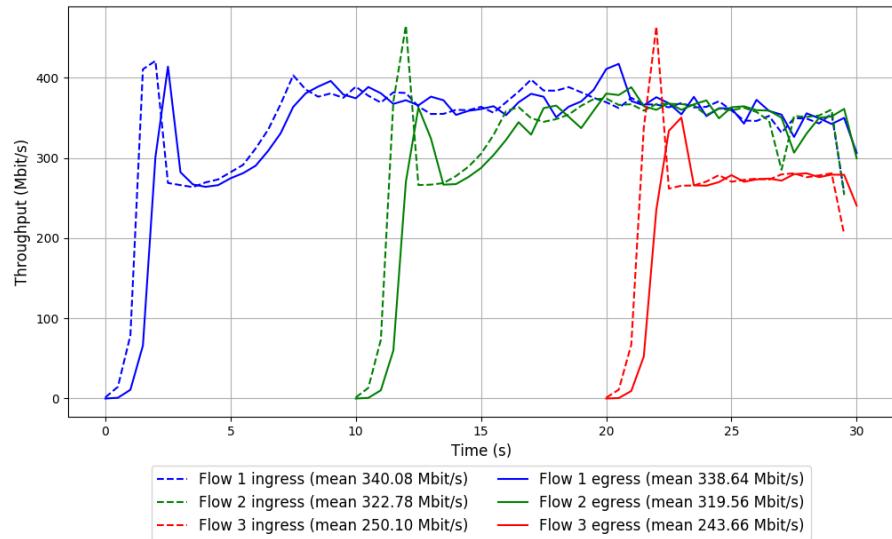


Run 5: Statistics of PCC-Allegro

```
Start at: 2019-01-21 23:21:42
End at: 2019-01-21 23:22:12
Local clock offset: 0.033 ms
Remote clock offset: -0.218 ms

# Below is generated by plot.py at 2019-01-22 02:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 631.20 Mbit/s
95th percentile per-packet one-way delay: 159.048 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 338.64 Mbit/s
95th percentile per-packet one-way delay: 166.449 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 319.56 Mbit/s
95th percentile per-packet one-way delay: 126.371 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 243.66 Mbit/s
95th percentile per-packet one-way delay: 193.940 ms
Loss rate: 2.57%
```

Run 5: Report of PCC-Allegro — Data Link

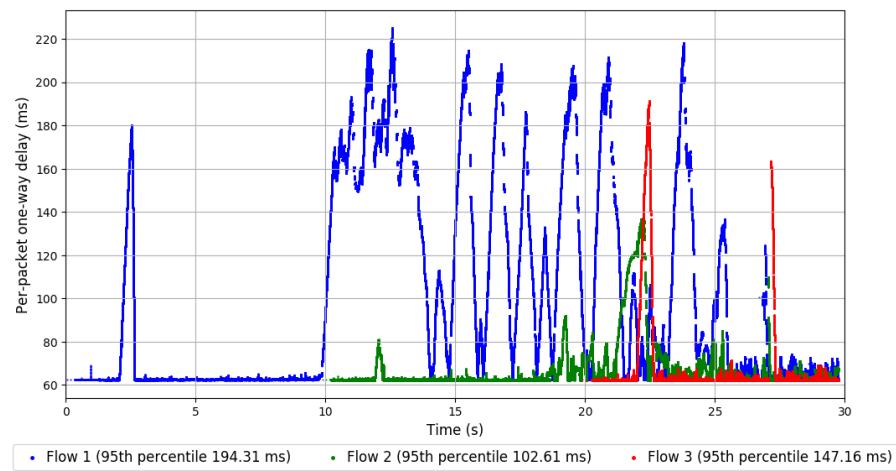
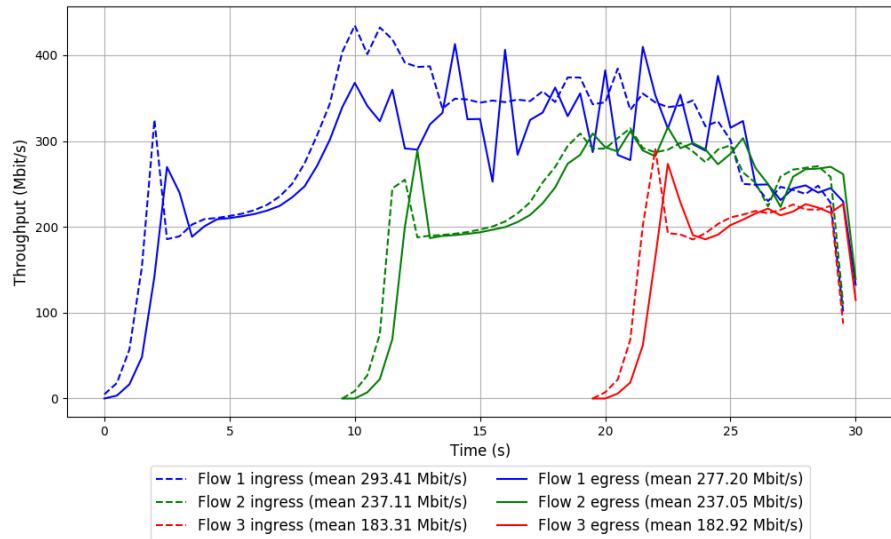


```
Run 1: Statistics of PCC-Expr
```

```
Start at: 2019-01-21 20:50:24
End at: 2019-01-21 20:50:54
Local clock offset: -0.048 ms
Remote clock offset: -0.847 ms

# Below is generated by plot.py at 2019-01-22 02:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.52 Mbit/s
95th percentile per-packet one-way delay: 181.787 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 277.20 Mbit/s
95th percentile per-packet one-way delay: 194.307 ms
Loss rate: 5.52%
-- Flow 2:
Average throughput: 237.05 Mbit/s
95th percentile per-packet one-way delay: 102.610 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 182.92 Mbit/s
95th percentile per-packet one-way delay: 147.160 ms
Loss rate: 0.22%
```

Run 1: Report of PCC-Expr — Data Link

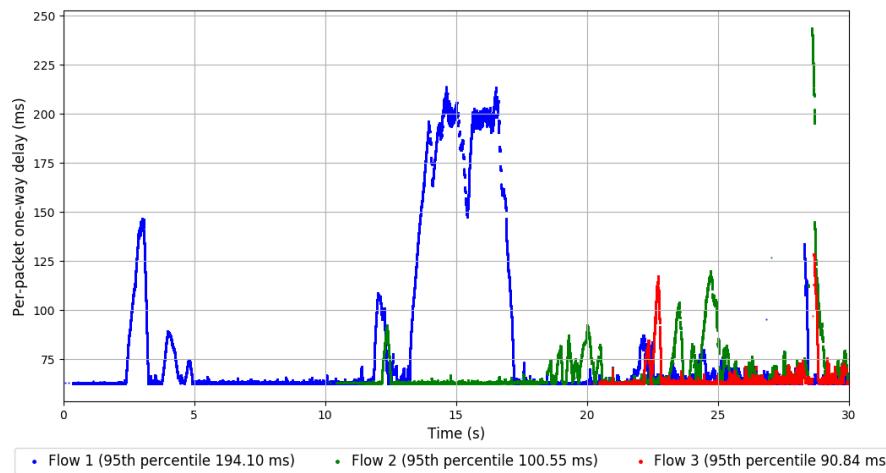
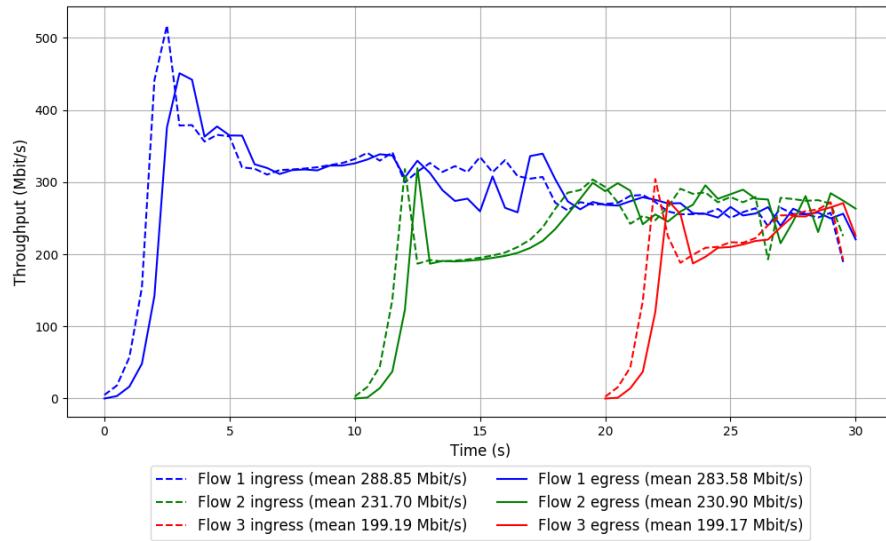


Run 2: Statistics of PCC-Expr

```
Start at: 2019-01-21 21:26:26
End at: 2019-01-21 21:26:56
Local clock offset: 0.01 ms
Remote clock offset: -0.321 ms

# Below is generated by plot.py at 2019-01-22 02:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.59 Mbit/s
95th percentile per-packet one-way delay: 171.057 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 283.58 Mbit/s
95th percentile per-packet one-way delay: 194.103 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 230.90 Mbit/s
95th percentile per-packet one-way delay: 100.549 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 199.17 Mbit/s
95th percentile per-packet one-way delay: 90.837 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Expr — Data Link

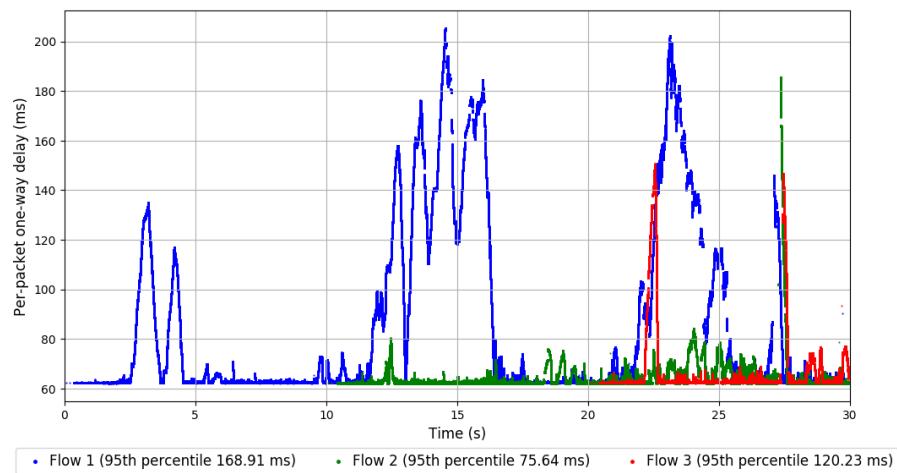
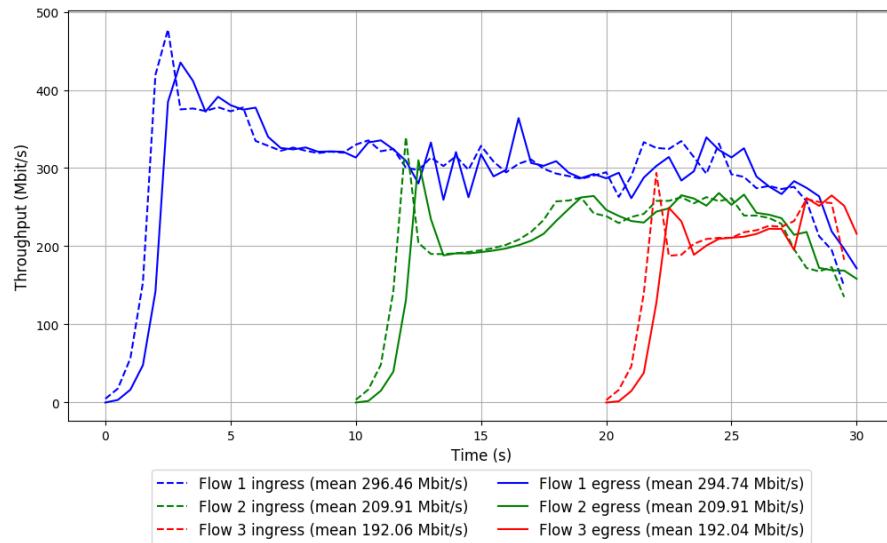


Run 3: Statistics of PCC-Expr

```
Start at: 2019-01-21 22:02:45
End at: 2019-01-21 22:03:15
Local clock offset: -0.003 ms
Remote clock offset: -0.729 ms

# Below is generated by plot.py at 2019-01-22 02:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 497.65 Mbit/s
95th percentile per-packet one-way delay: 157.430 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 294.74 Mbit/s
95th percentile per-packet one-way delay: 168.914 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 209.91 Mbit/s
95th percentile per-packet one-way delay: 75.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 192.04 Mbit/s
95th percentile per-packet one-way delay: 120.235 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Expr — Data Link

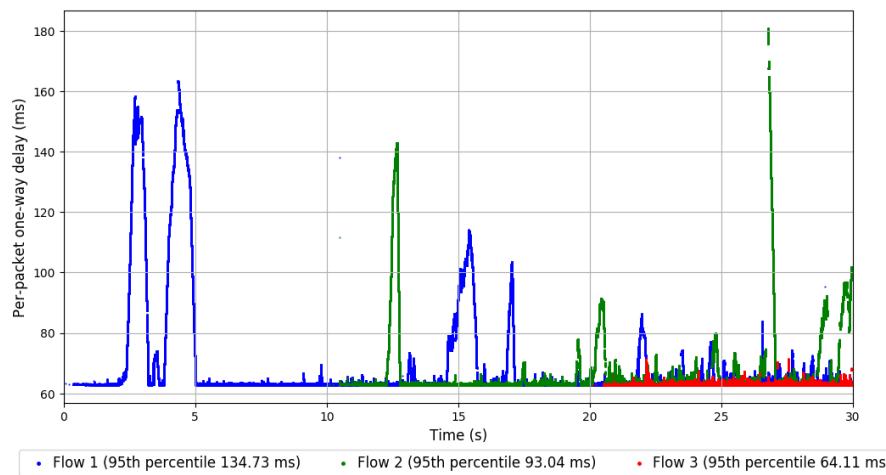
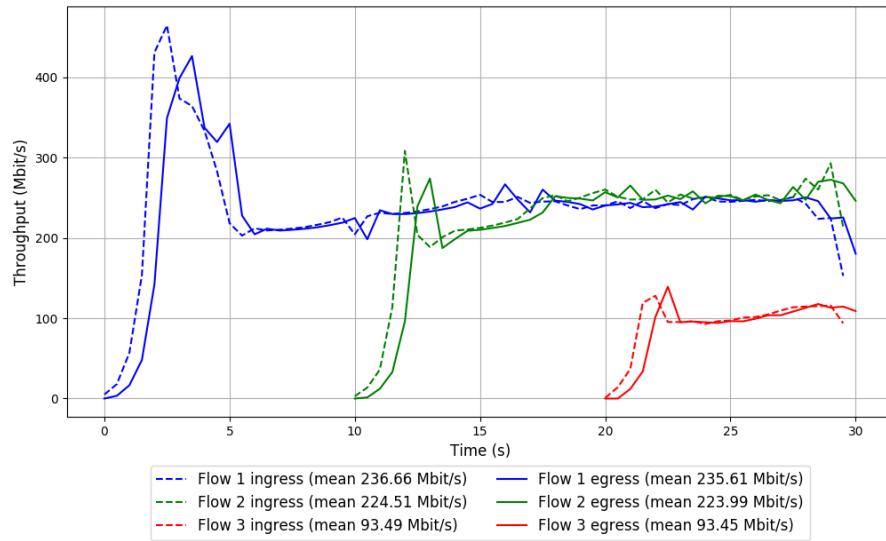


Run 4: Statistics of PCC-Expr

```
Start at: 2019-01-21 22:39:07
End at: 2019-01-21 22:39:37
Local clock offset: -0.047 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-01-22 02:52:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.97 Mbit/s
95th percentile per-packet one-way delay: 116.499 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 235.61 Mbit/s
95th percentile per-packet one-way delay: 134.733 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 223.99 Mbit/s
95th percentile per-packet one-way delay: 93.041 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 64.113 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Expr — Data Link

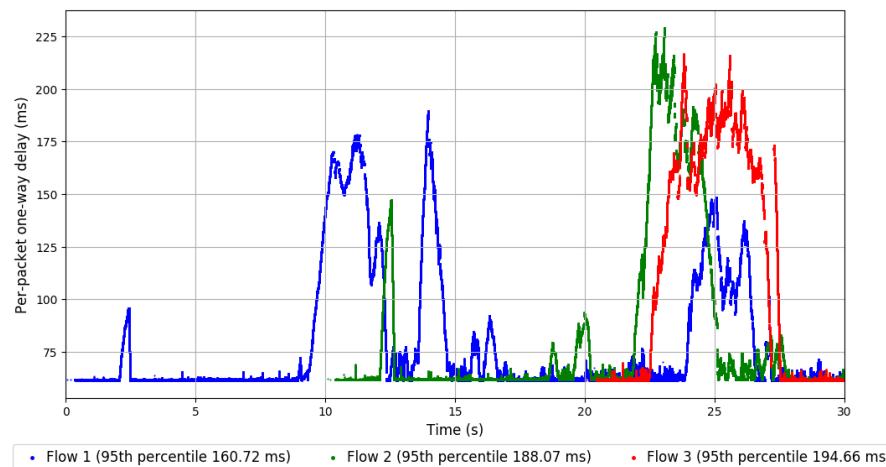
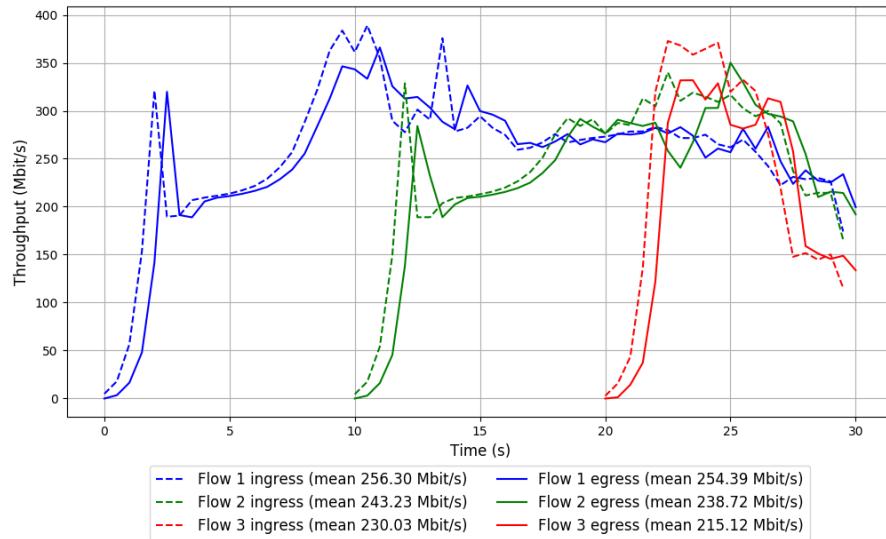


Run 5: Statistics of PCC-Expr

```
Start at: 2019-01-21 23:15:16
End at: 2019-01-21 23:15:46
Local clock offset: -0.022 ms
Remote clock offset: -1.51 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 483.97 Mbit/s
95th percentile per-packet one-way delay: 182.387 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 254.39 Mbit/s
95th percentile per-packet one-way delay: 160.718 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 238.72 Mbit/s
95th percentile per-packet one-way delay: 188.071 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 215.12 Mbit/s
95th percentile per-packet one-way delay: 194.660 ms
Loss rate: 6.48%
```

Run 5: Report of PCC-Expr — Data Link

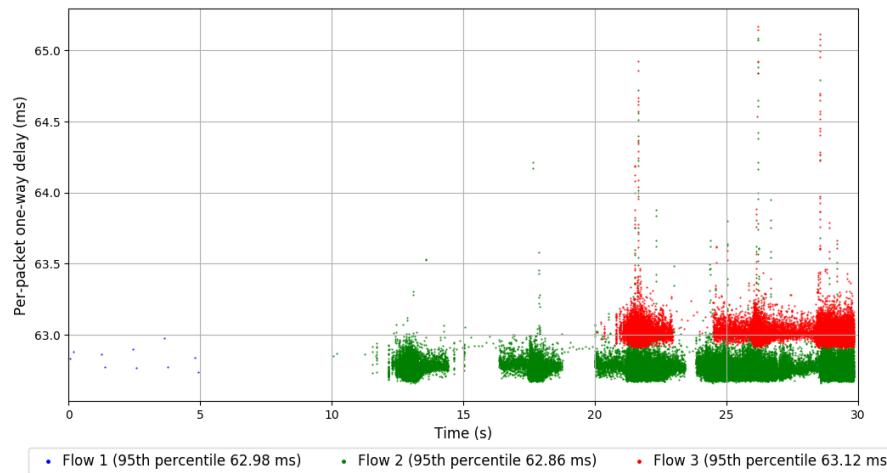
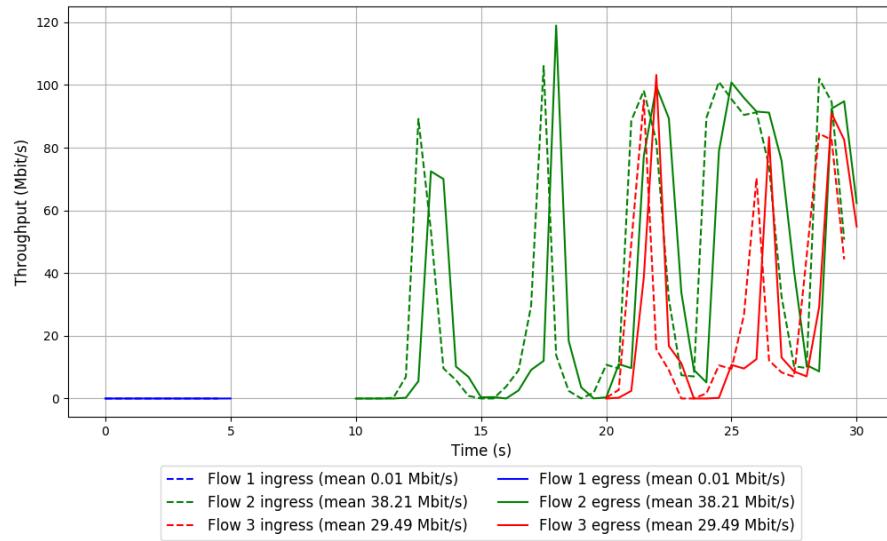


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-21 21:04:16
End at: 2019-01-21 21:04:46
Local clock offset: 0.001 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.02 Mbit/s
95th percentile per-packet one-way delay: 63.058 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 62.976 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 62.856 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 63.122 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

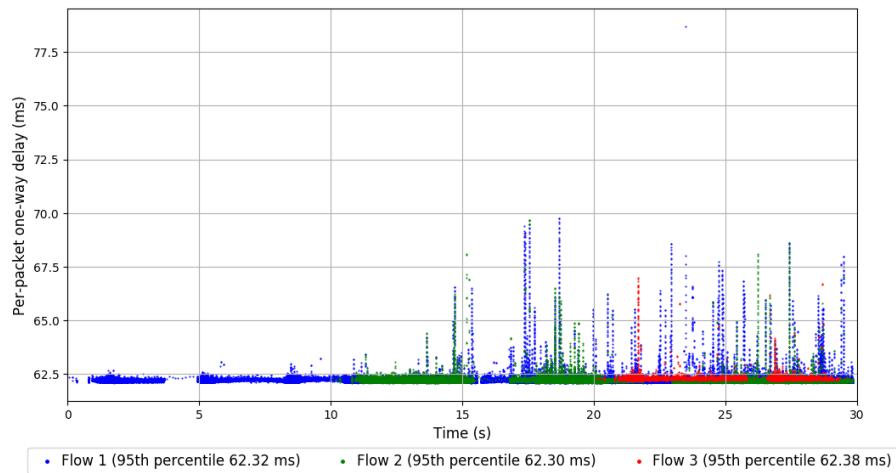
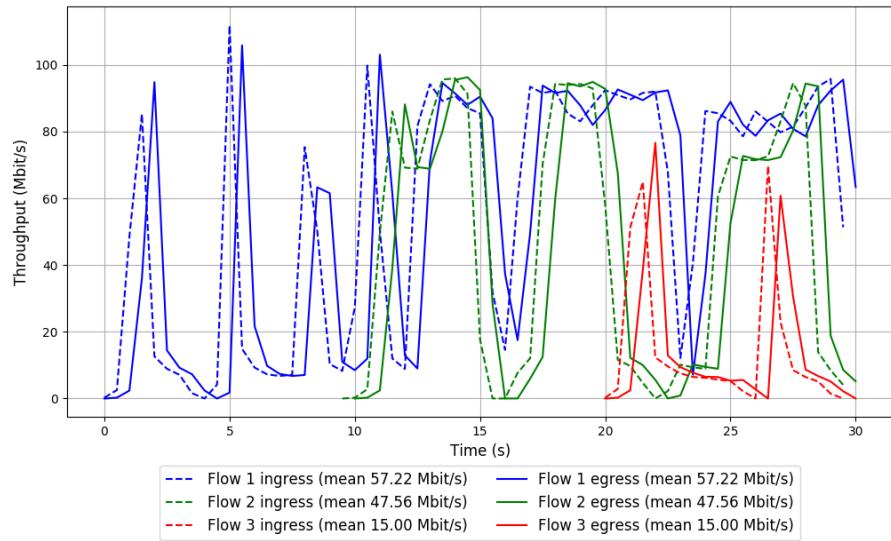


Run 2: Statistics of QUIC Cubic

```
Start at: 2019-01-21 21:40:36
End at: 2019-01-21 21:41:06
Local clock offset: -0.025 ms
Remote clock offset: -0.668 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.65 Mbit/s
95th percentile per-packet one-way delay: 62.322 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.22 Mbit/s
95th percentile per-packet one-way delay: 62.317 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.56 Mbit/s
95th percentile per-packet one-way delay: 62.297 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.00 Mbit/s
95th percentile per-packet one-way delay: 62.383 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

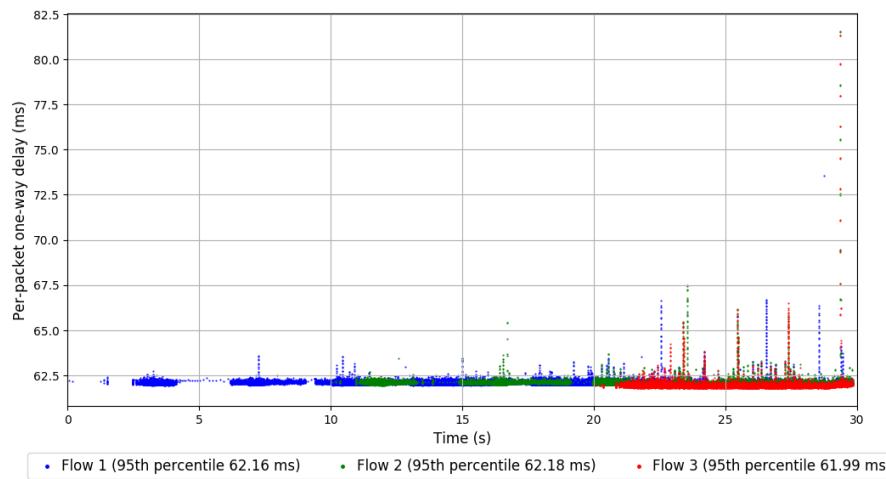
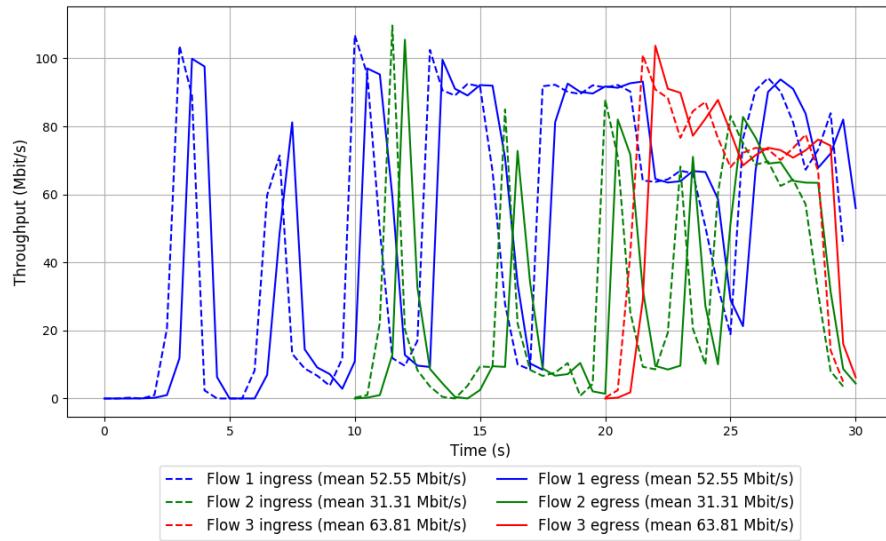


Run 3: Statistics of QUIC Cubic

```
Start at: 2019-01-21 22:16:53
End at: 2019-01-21 22:17:23
Local clock offset: 0.039 ms
Remote clock offset: -0.809 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.24 Mbit/s
95th percentile per-packet one-way delay: 62.154 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.55 Mbit/s
95th percentile per-packet one-way delay: 62.162 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.31 Mbit/s
95th percentile per-packet one-way delay: 62.177 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 61.987 ms
Loss rate: 0.00%
```

Run 3: Report of QUIC Cubic — Data Link

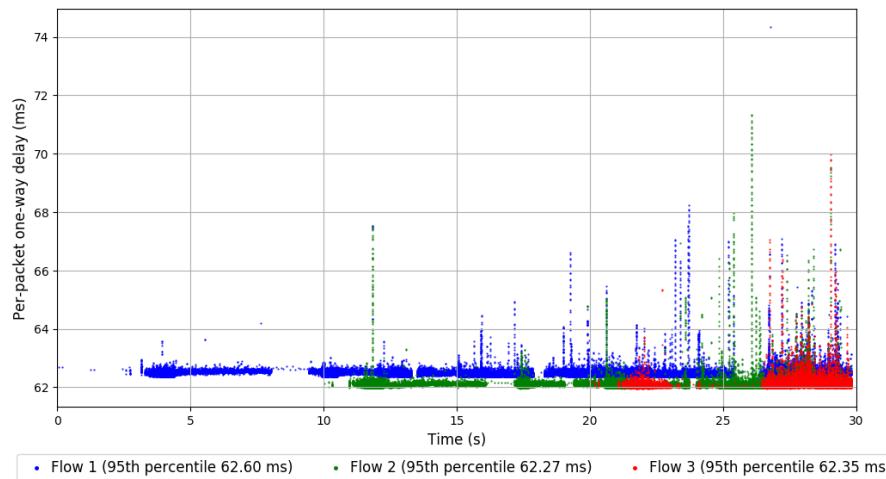
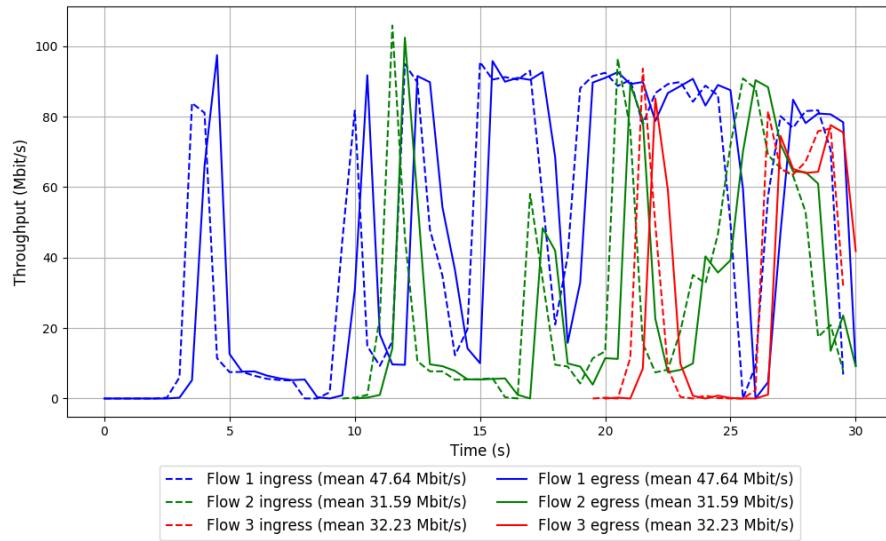


Run 4: Statistics of QUIC Cubic

```
Start at: 2019-01-21 22:53:09
End at: 2019-01-21 22:53:39
Local clock offset: -0.053 ms
Remote clock offset: -0.808 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.20 Mbit/s
95th percentile per-packet one-way delay: 62.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.64 Mbit/s
95th percentile per-packet one-way delay: 62.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 62.275 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 62.346 ms
Loss rate: 0.00%
```

Run 4: Report of QUIC Cubic — Data Link

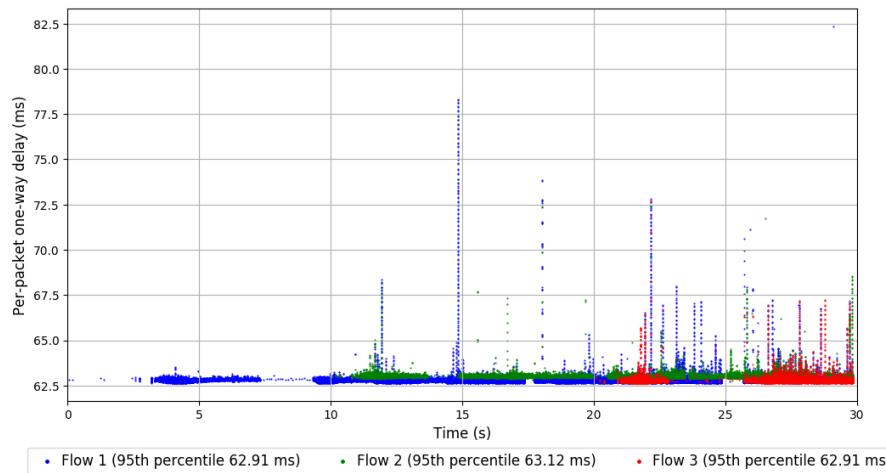
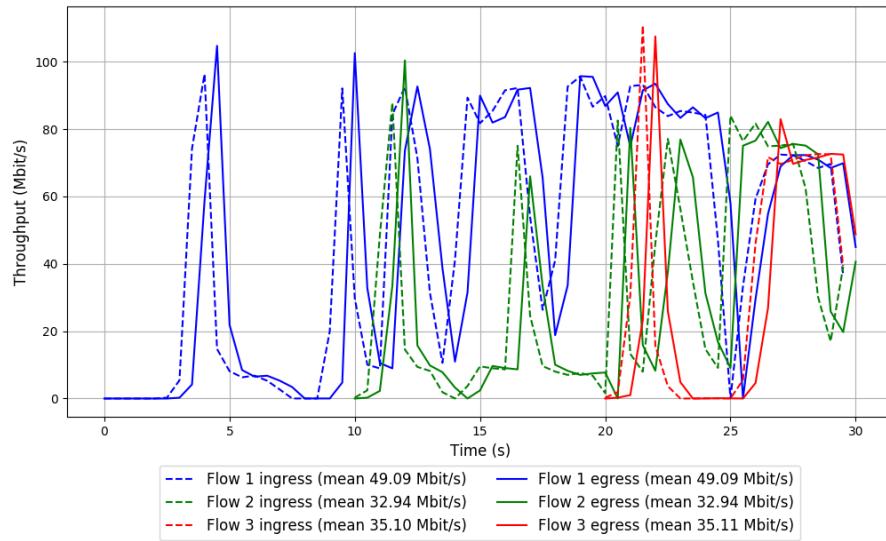


Run 5: Statistics of QUIC Cubic

```
Start at: 2019-01-21 23:29:30
End at: 2019-01-21 23:30:00
Local clock offset: 0.037 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.44 Mbit/s
95th percentile per-packet one-way delay: 63.055 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 62.909 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.94 Mbit/s
95th percentile per-packet one-way delay: 63.116 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 62.914 ms
Loss rate: 0.00%
```

Run 5: Report of QUIC Cubic — Data Link

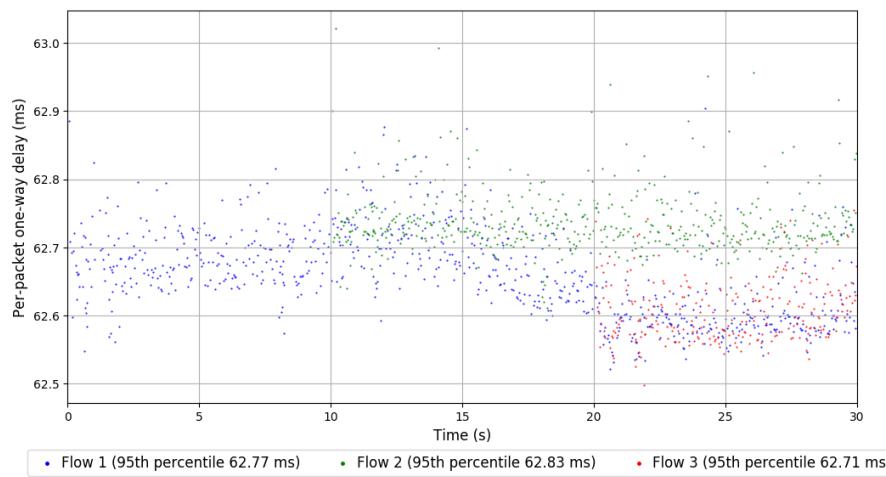
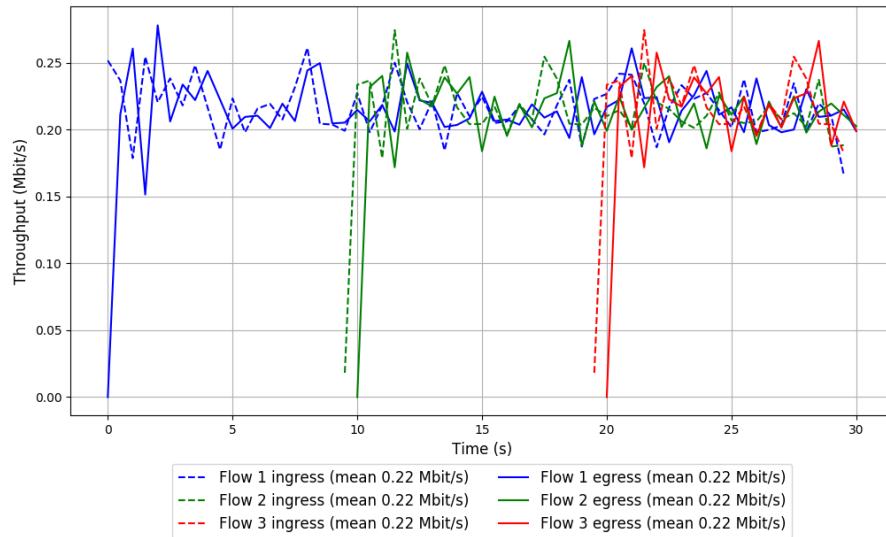


```
Run 1: Statistics of SCReAM

Start at: 2019-01-21 21:16:31
End at: 2019-01-21 21:17:01
Local clock offset: 0.002 ms
Remote clock offset: -0.546 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.771 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.829 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.706 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

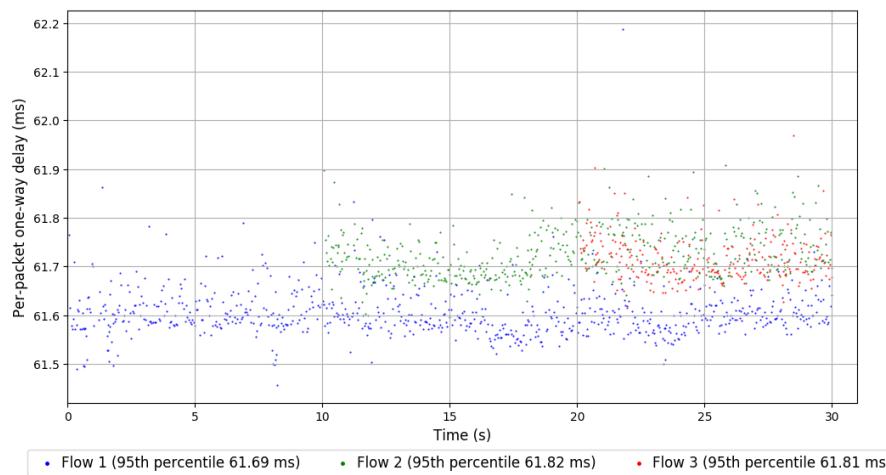
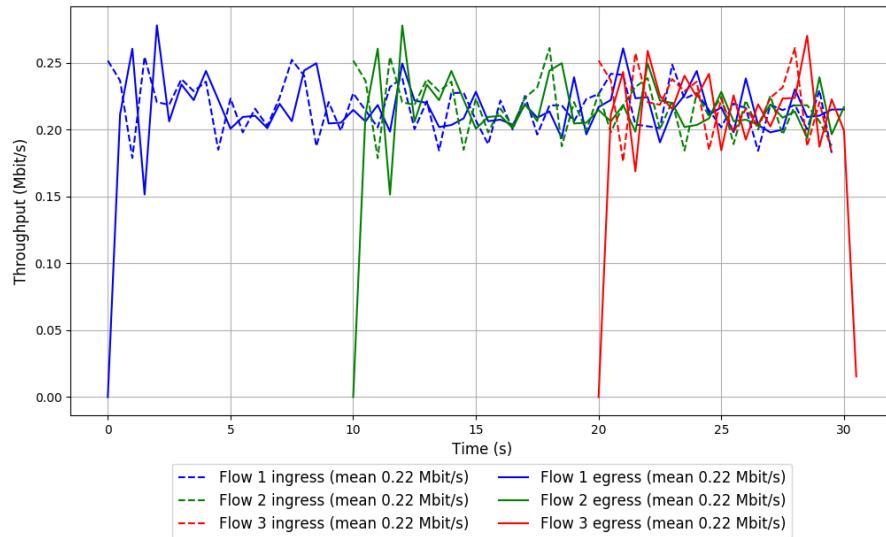


Run 2: Statistics of SCReAM

```
Start at: 2019-01-21 21:52:51
End at: 2019-01-21 21:53:21
Local clock offset: 0.021 ms
Remote clock offset: -1.377 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.788 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.687 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.807 ms
Loss rate: 0.00%
```

Run 2: Report of SCReAM — Data Link

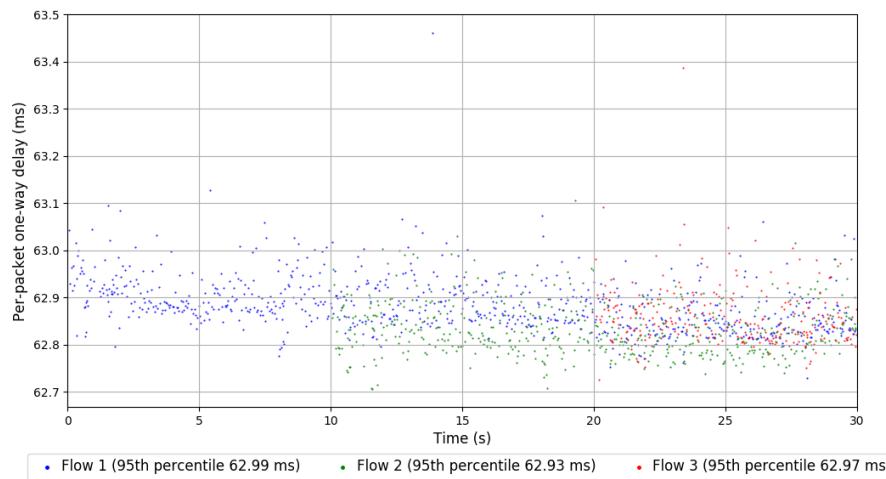
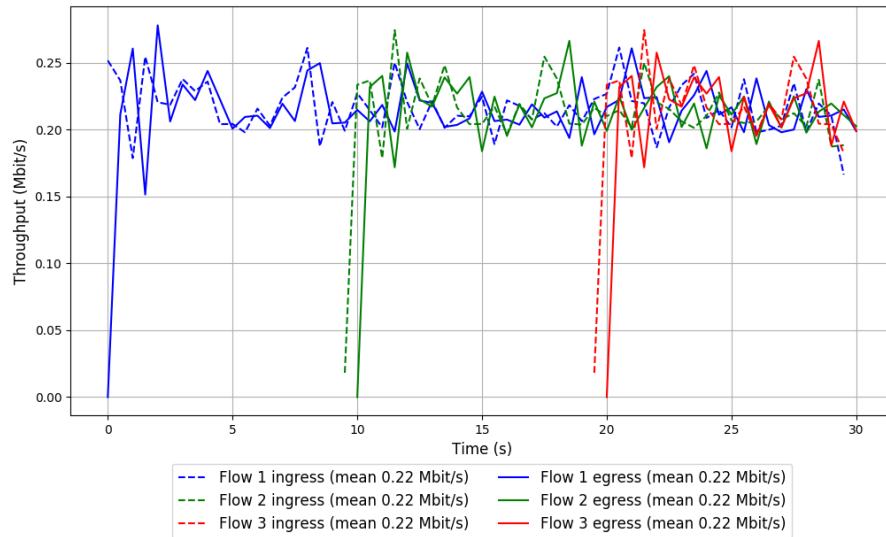


Run 3: Statistics of SCReAM

```
Start at: 2019-01-21 22:29:11
End at: 2019-01-21 22:29:41
Local clock offset: 0.014 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.973 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.988 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.930 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.972 ms
Loss rate: 0.00%
```

Run 3: Report of SCReAM — Data Link

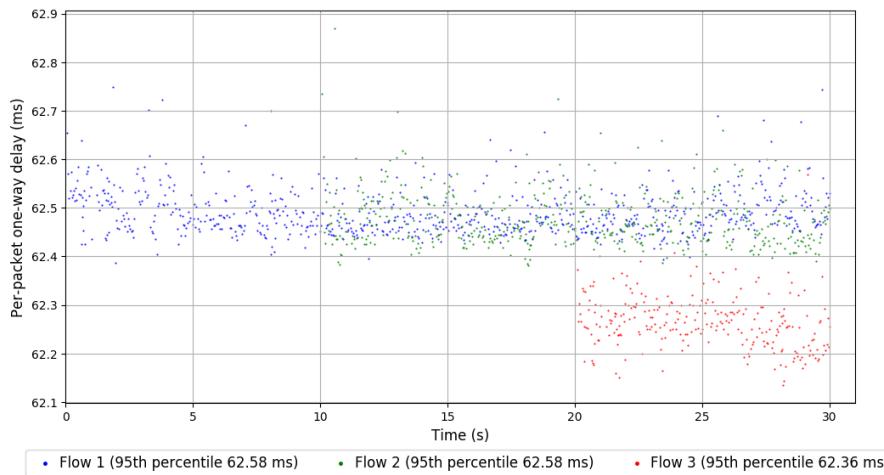
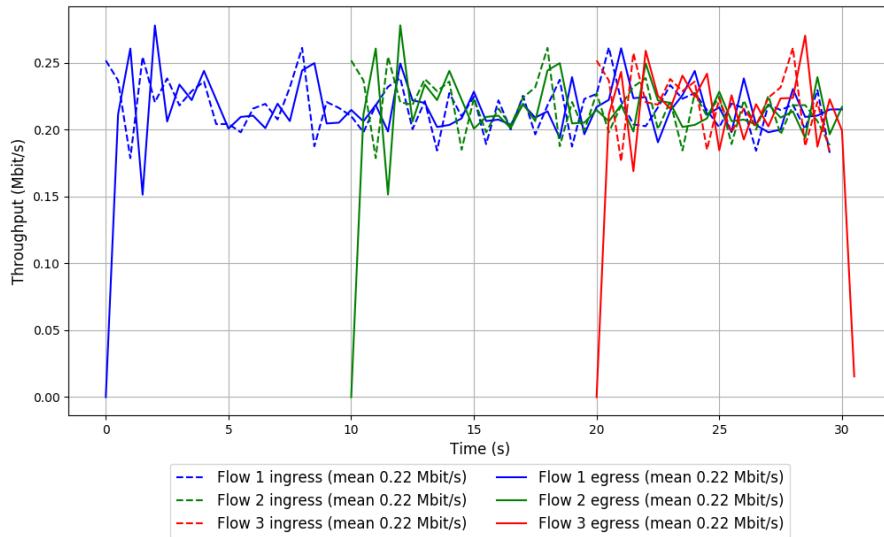


Run 4: Statistics of SCReAM

```
Start at: 2019-01-21 23:05:25
End at: 2019-01-21 23:05:55
Local clock offset: -0.011 ms
Remote clock offset: -0.763 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.576 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.581 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.357 ms
Loss rate: 0.00%
```

Run 4: Report of SCReAM — Data Link

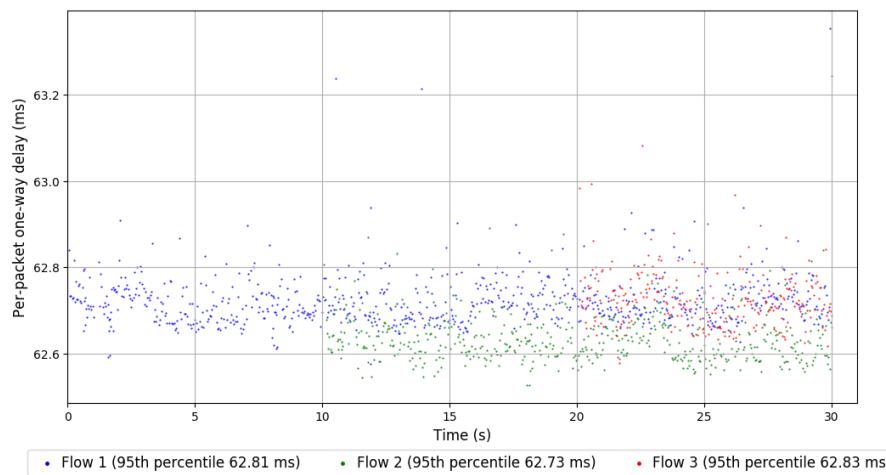
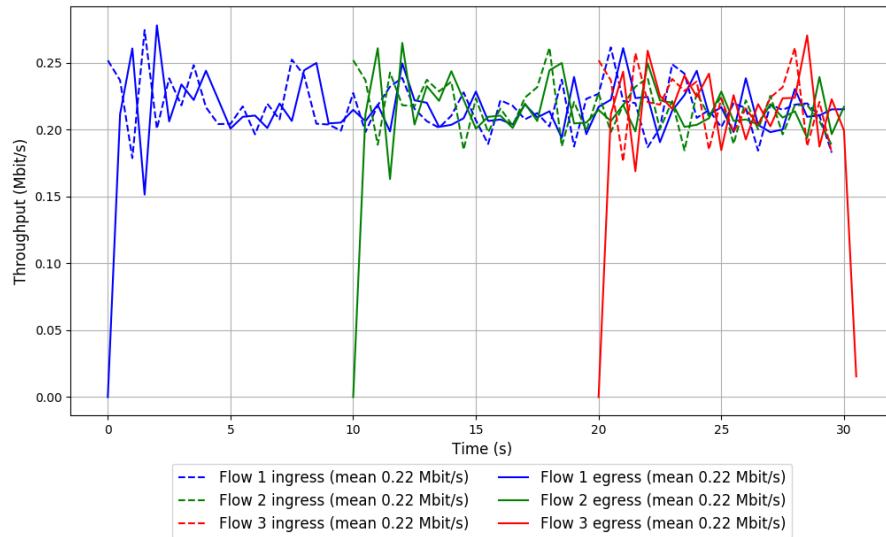


Run 5: Statistics of SCReAM

```
Start at: 2019-01-21 23:41:38
End at: 2019-01-21 23:42:08
Local clock offset: 0.024 ms
Remote clock offset: -0.474 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.810 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.725 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.826 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link

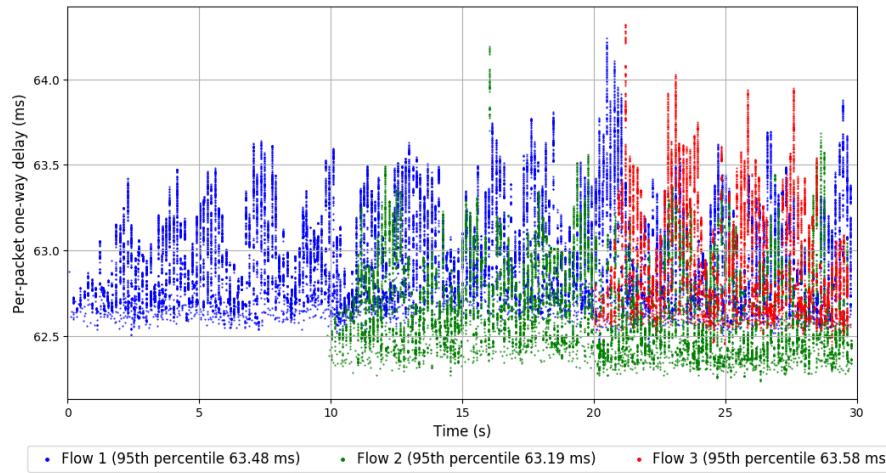
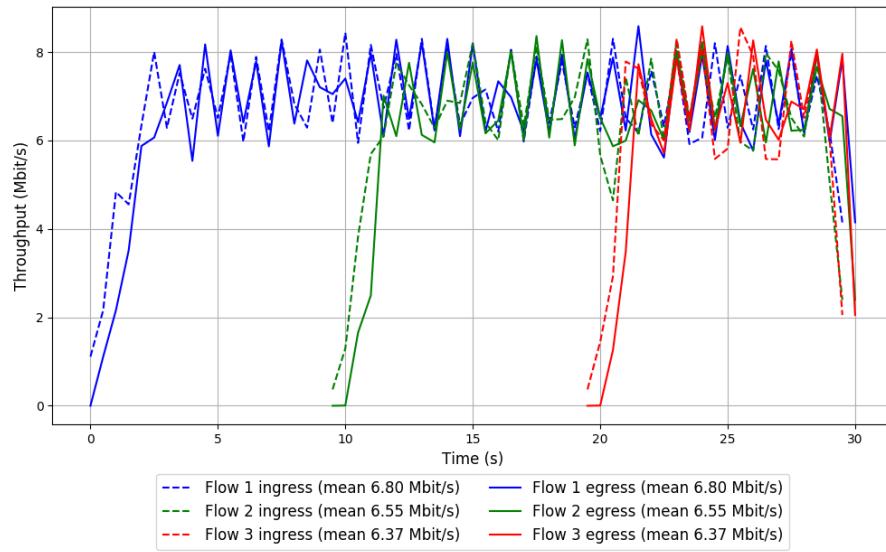


Run 1: Statistics of Sprout

```
Start at: 2019-01-21 21:21:33
End at: 2019-01-21 21:22:03
Local clock offset: 0.002 ms
Remote clock offset: -0.745 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 63.458 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 63.480 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 63.191 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.37 Mbit/s
95th percentile per-packet one-way delay: 63.583 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link

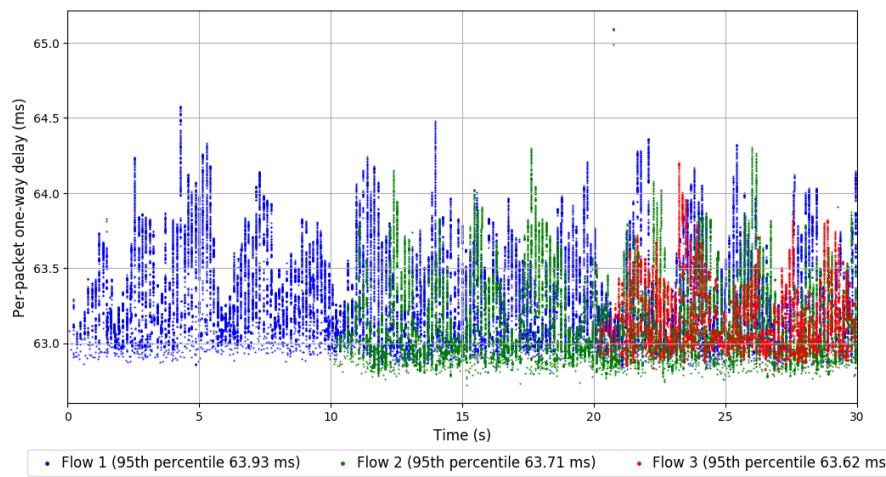
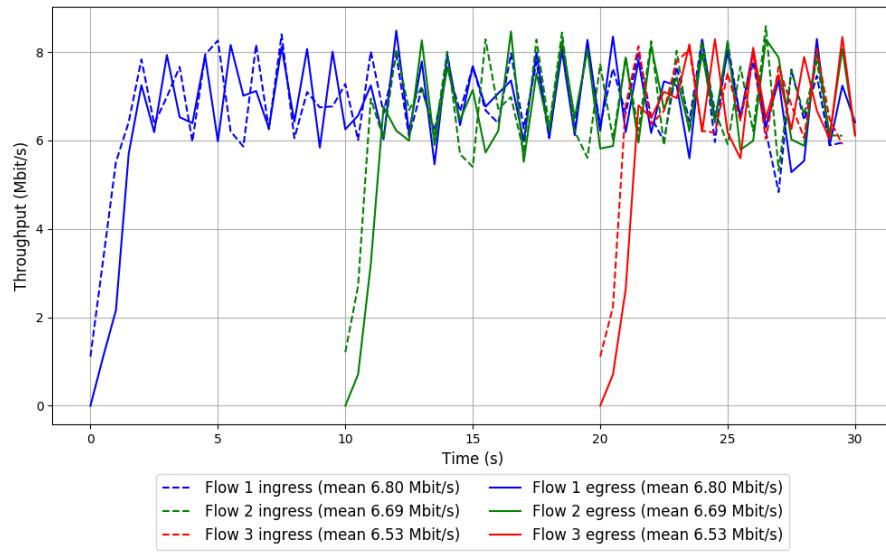


Run 2: Statistics of Sprout

```
Start at: 2019-01-21 21:57:50
End at: 2019-01-21 21:58:20
Local clock offset: -0.003 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.40 Mbit/s
95th percentile per-packet one-way delay: 63.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 63.926 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 63.707 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 63.620 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

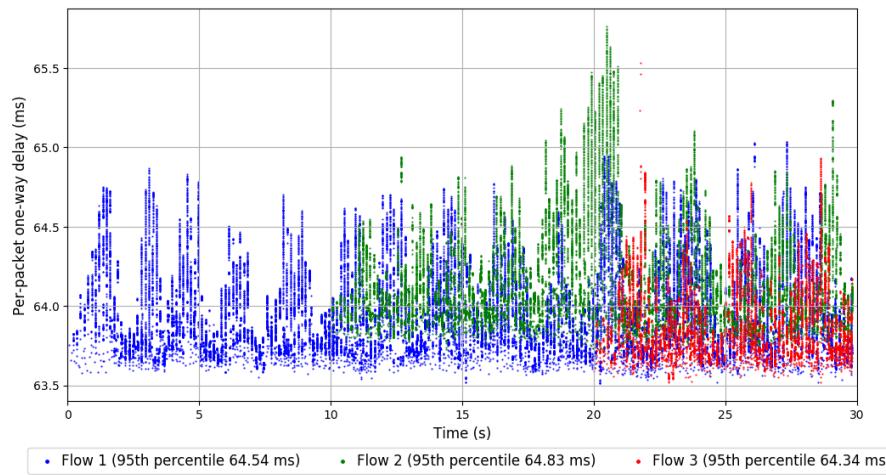
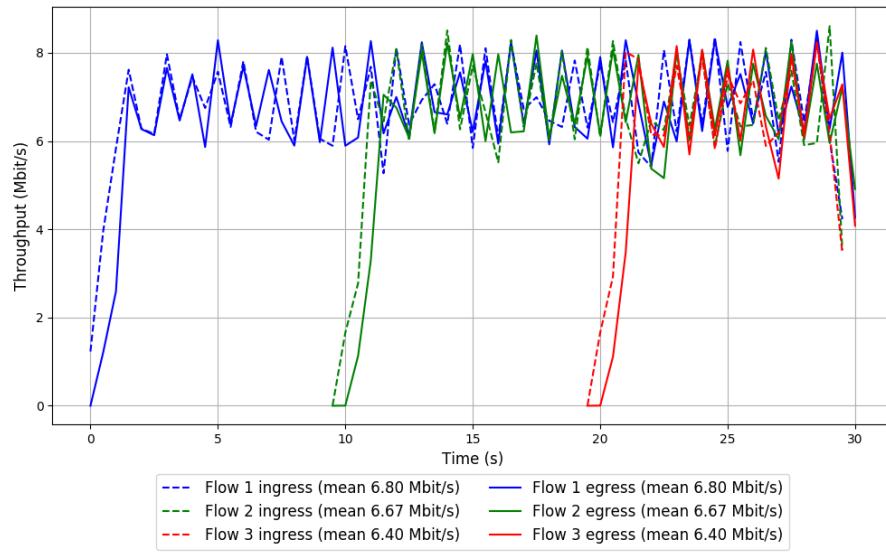


Run 3: Statistics of Sprout

```
Start at: 2019-01-21 22:34:04
End at: 2019-01-21 22:34:34
Local clock offset: -0.054 ms
Remote clock offset: 0.398 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.38 Mbit/s
95th percentile per-packet one-way delay: 64.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 64.539 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 64.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 64.338 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

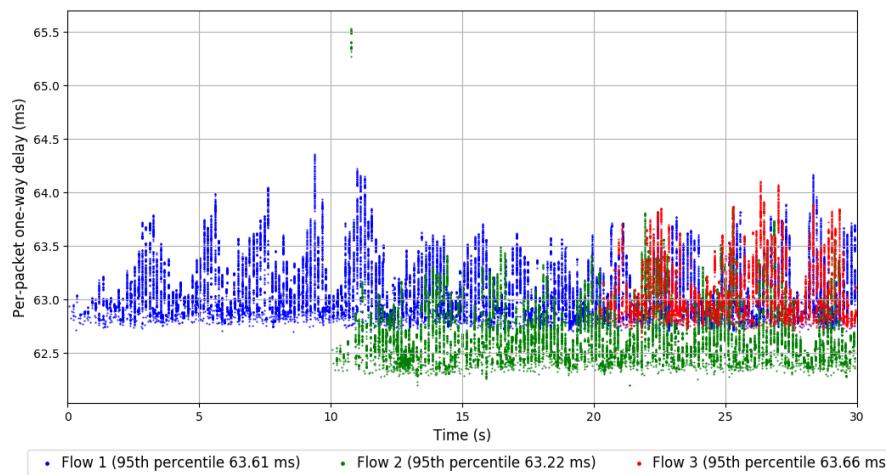
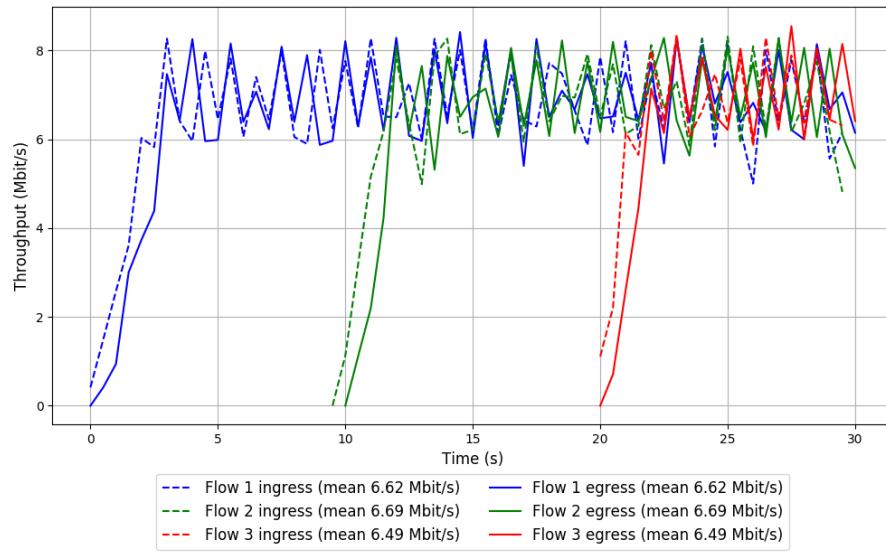


Run 4: Statistics of Sprout

```
Start at: 2019-01-21 23:10:18
End at: 2019-01-21 23:10:48
Local clock offset: -0.008 ms
Remote clock offset: -0.606 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.20 Mbit/s
95th percentile per-packet one-way delay: 63.570 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 63.612 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 63.218 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.49 Mbit/s
95th percentile per-packet one-way delay: 63.664 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

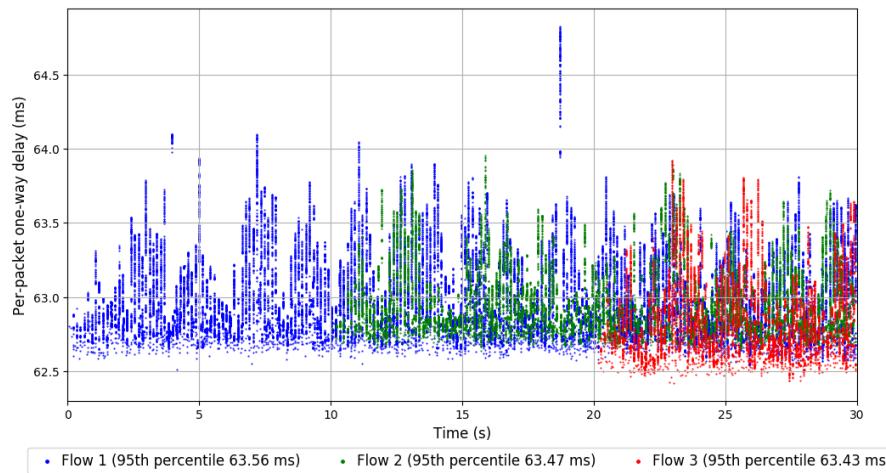
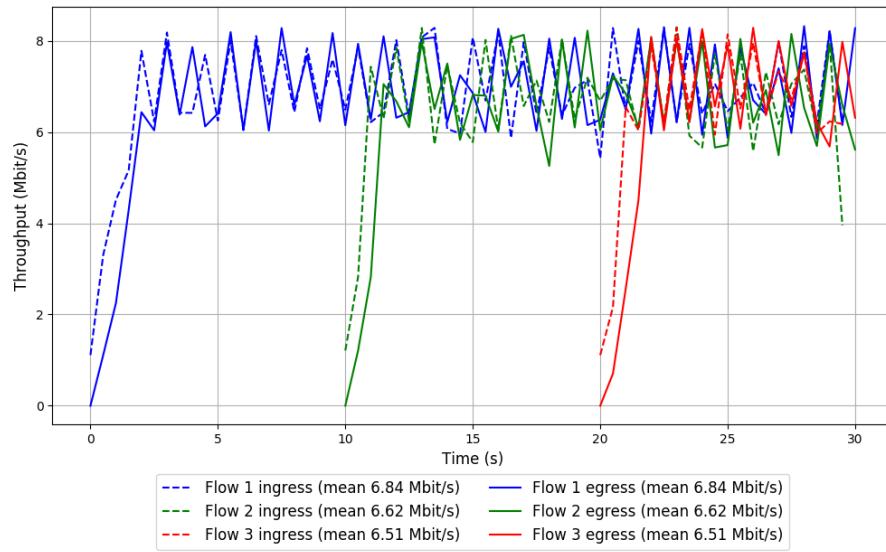


Run 5: Statistics of Sprout

```
Start at: 2019-01-21 23:46:27
End at: 2019-01-21 23:46:57
Local clock offset: -0.057 ms
Remote clock offset: -0.535 ms

# Below is generated by plot.py at 2019-01-22 02:55:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: 63.520 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 63.556 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 63.473 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 63.432 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

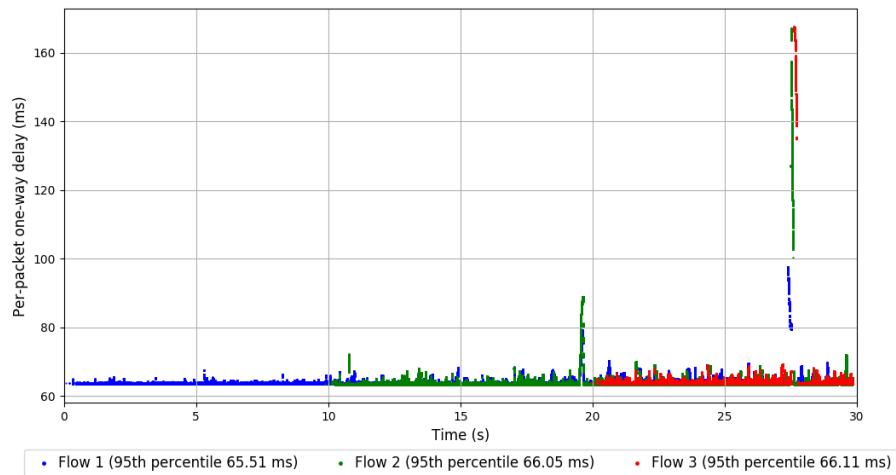
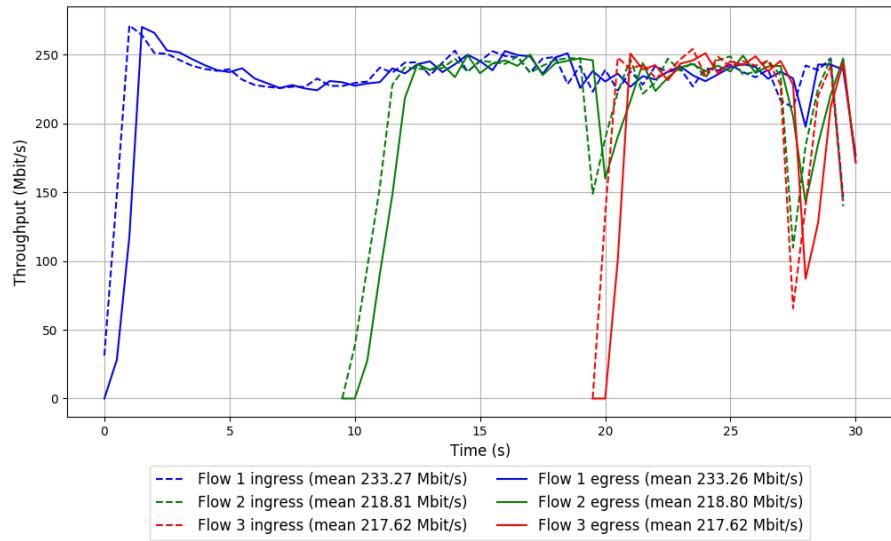


Run 1: Statistics of TaoVA-100x

```
Start at: 2019-01-21 21:00:16
End at: 2019-01-21 21:00:46
Local clock offset: -0.002 ms
Remote clock offset: 0.441 ms

# Below is generated by plot.py at 2019-01-22 03:06:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.59 Mbit/s
95th percentile per-packet one-way delay: 65.788 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 233.26 Mbit/s
95th percentile per-packet one-way delay: 65.508 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 218.80 Mbit/s
95th percentile per-packet one-way delay: 66.051 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 217.62 Mbit/s
95th percentile per-packet one-way delay: 66.113 ms
Loss rate: 0.00%
```

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

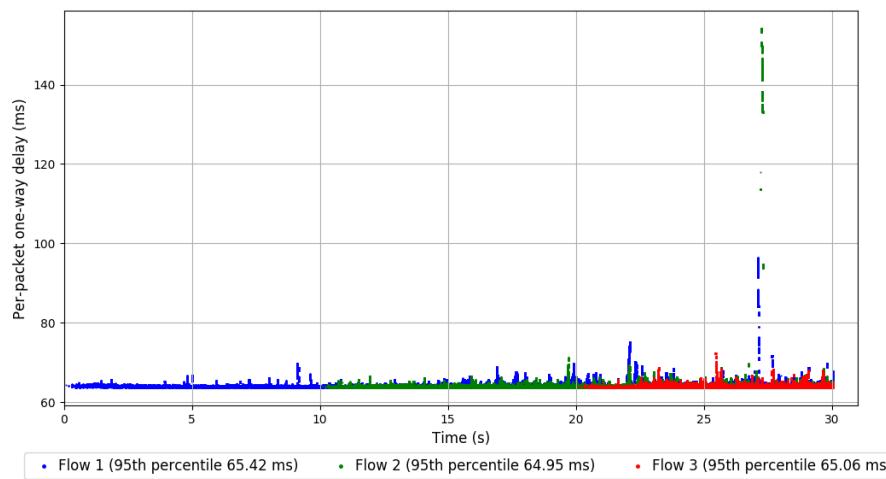
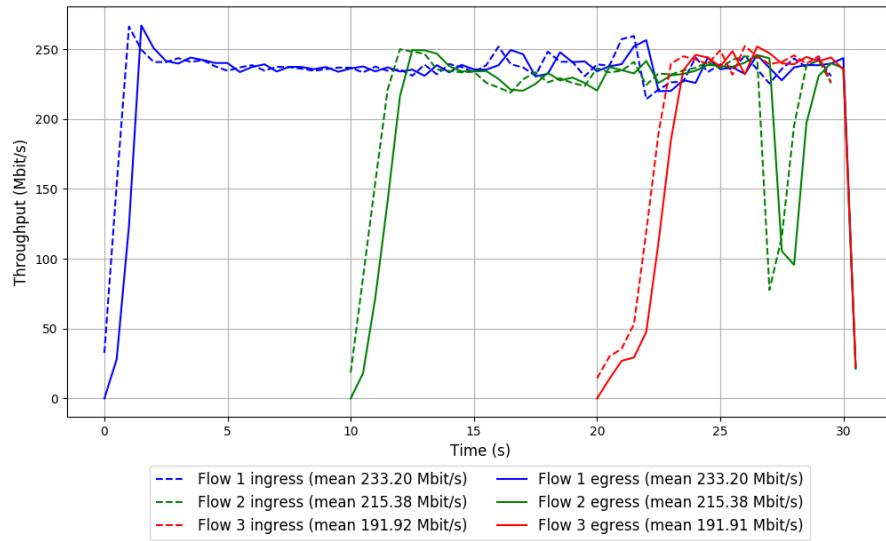


Run 2: Statistics of TaoVA-100x

```
Start at: 2019-01-21 21:36:33
End at: 2019-01-21 21:37:03
Local clock offset: -0.001 ms
Remote clock offset: 0.819 ms

# Below is generated by plot.py at 2019-01-22 03:06:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.43 Mbit/s
95th percentile per-packet one-way delay: 65.239 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 233.20 Mbit/s
95th percentile per-packet one-way delay: 65.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.38 Mbit/s
95th percentile per-packet one-way delay: 64.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.91 Mbit/s
95th percentile per-packet one-way delay: 65.057 ms
Loss rate: 0.00%
```

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

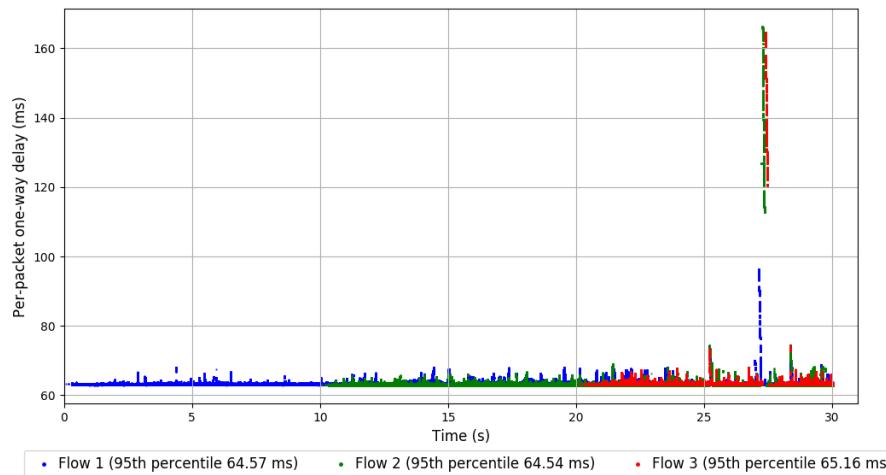
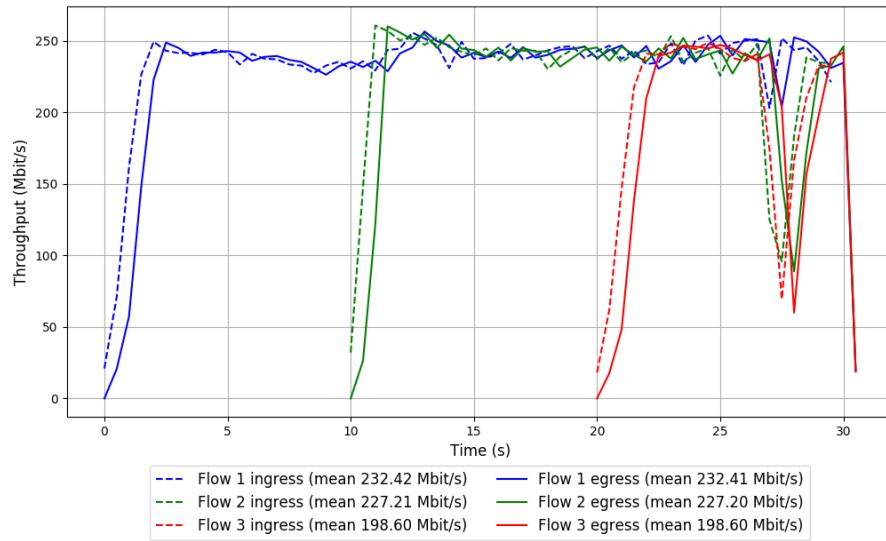


Run 3: Statistics of TaoVA-100x

```
Start at: 2019-01-21 22:12:53
End at: 2019-01-21 22:13:23
Local clock offset: -0.004 ms
Remote clock offset: -0.2 ms

# Below is generated by plot.py at 2019-01-22 03:06:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.77 Mbit/s
95th percentile per-packet one-way delay: 64.649 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.41 Mbit/s
95th percentile per-packet one-way delay: 64.566 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 227.20 Mbit/s
95th percentile per-packet one-way delay: 64.536 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 198.60 Mbit/s
95th percentile per-packet one-way delay: 65.158 ms
Loss rate: 0.00%
```

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

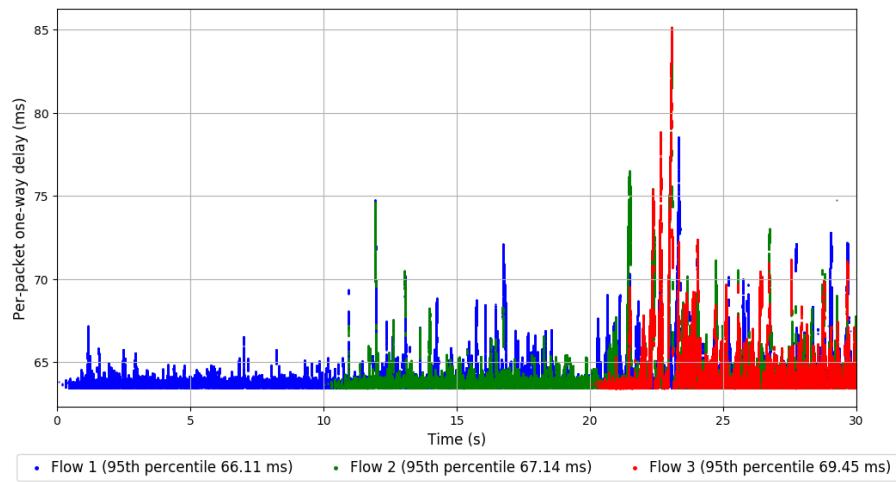
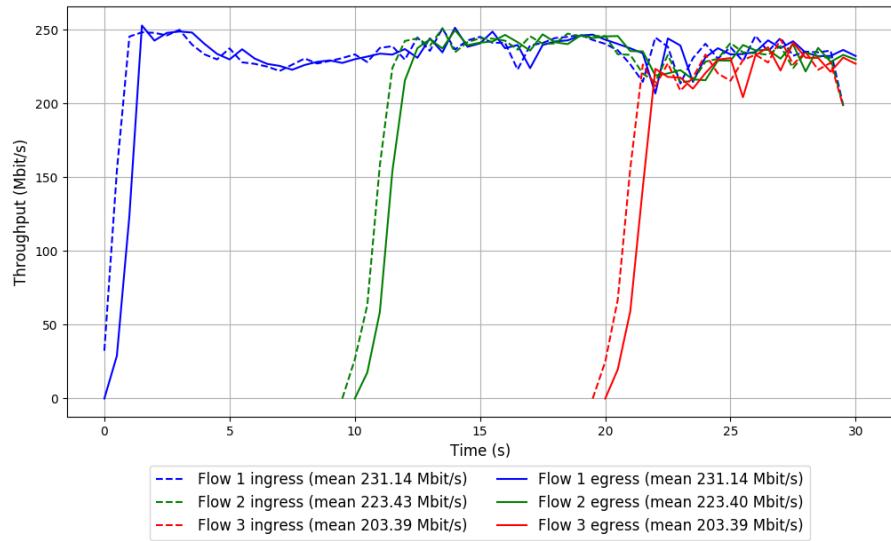


Run 4: Statistics of TaoVA-100x

```
Start at: 2019-01-21 22:49:07
End at: 2019-01-21 22:49:37
Local clock offset: -0.086 ms
Remote clock offset: 0.638 ms

# Below is generated by plot.py at 2019-01-22 03:06:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.82 Mbit/s
95th percentile per-packet one-way delay: 67.187 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.14 Mbit/s
95th percentile per-packet one-way delay: 66.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 223.40 Mbit/s
95th percentile per-packet one-way delay: 67.141 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.39 Mbit/s
95th percentile per-packet one-way delay: 69.446 ms
Loss rate: 0.00%
```

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

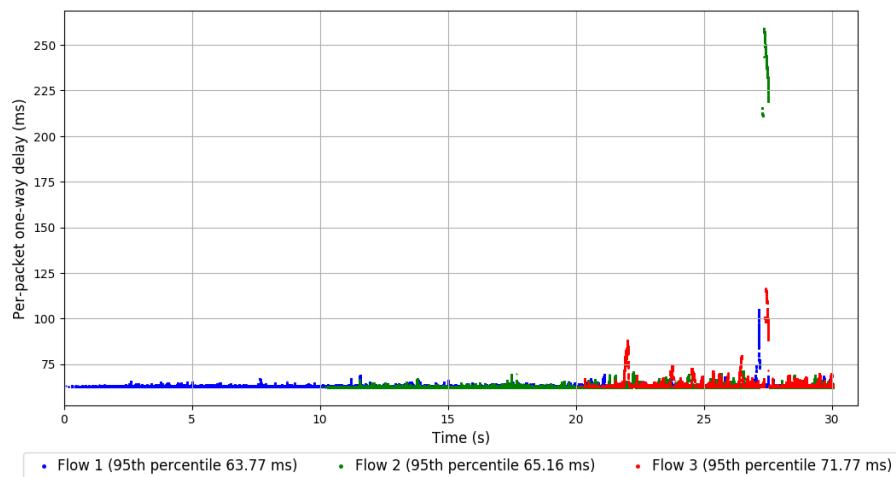
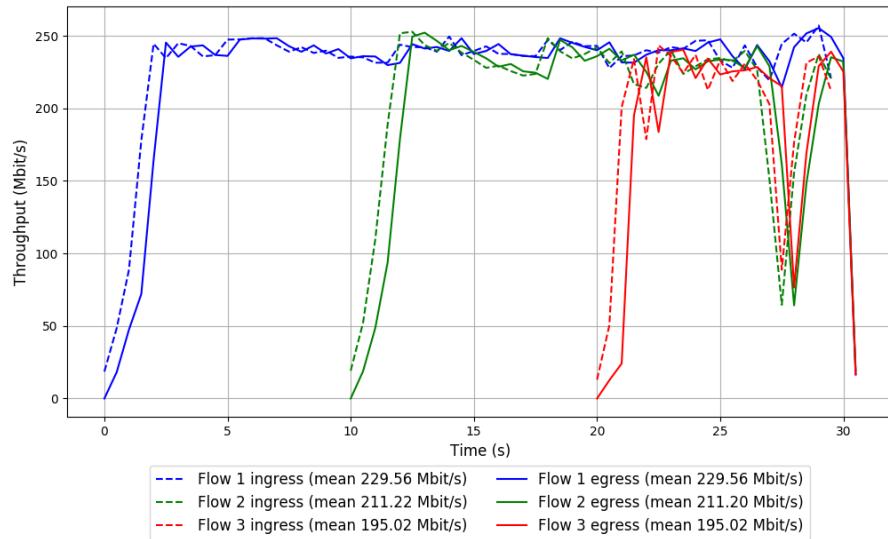


Run 5: Statistics of TaoVA-100x

```
Start at: 2019-01-21 23:25:29
End at: 2019-01-21 23:25:59
Local clock offset: 0.034 ms
Remote clock offset: -0.583 ms

# Below is generated by plot.py at 2019-01-22 03:06:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.96 Mbit/s
95th percentile per-packet one-way delay: 65.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.56 Mbit/s
95th percentile per-packet one-way delay: 63.769 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 211.20 Mbit/s
95th percentile per-packet one-way delay: 65.163 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 195.02 Mbit/s
95th percentile per-packet one-way delay: 71.773 ms
Loss rate: 0.00%
```

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

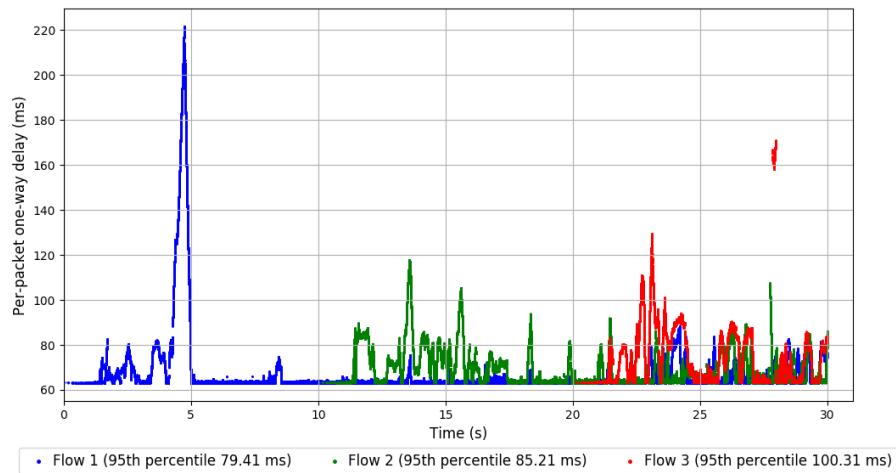
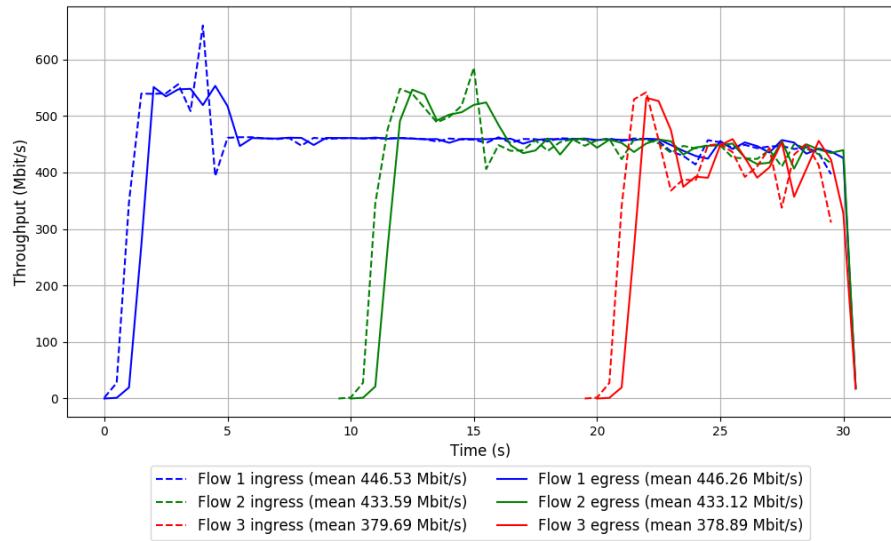


Run 1: Statistics of TCP Vegas

```
Start at: 2019-01-21 20:48:27
End at: 2019-01-21 20:48:57
Local clock offset: -0.046 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-01-22 03:09:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 860.93 Mbit/s
95th percentile per-packet one-way delay: 87.039 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 446.26 Mbit/s
95th percentile per-packet one-way delay: 79.410 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 433.12 Mbit/s
95th percentile per-packet one-way delay: 85.210 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 378.89 Mbit/s
95th percentile per-packet one-way delay: 100.309 ms
Loss rate: 0.21%
```

Run 1: Report of TCP Vegas — Data Link

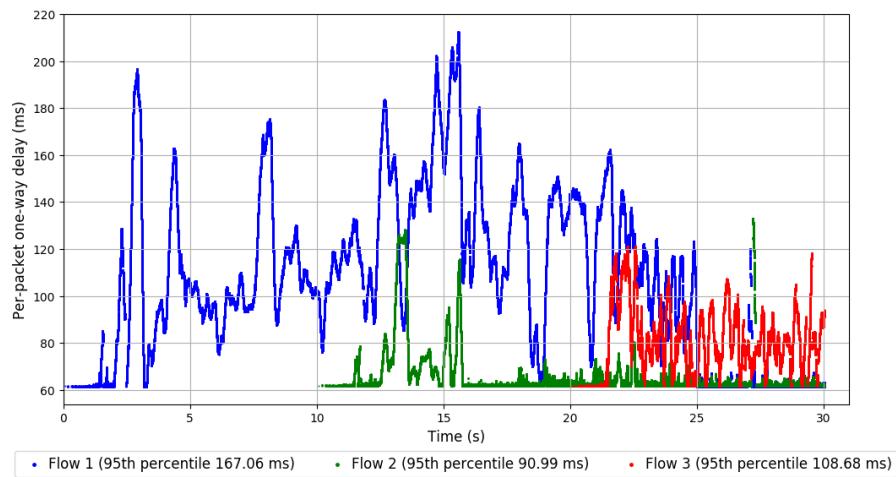
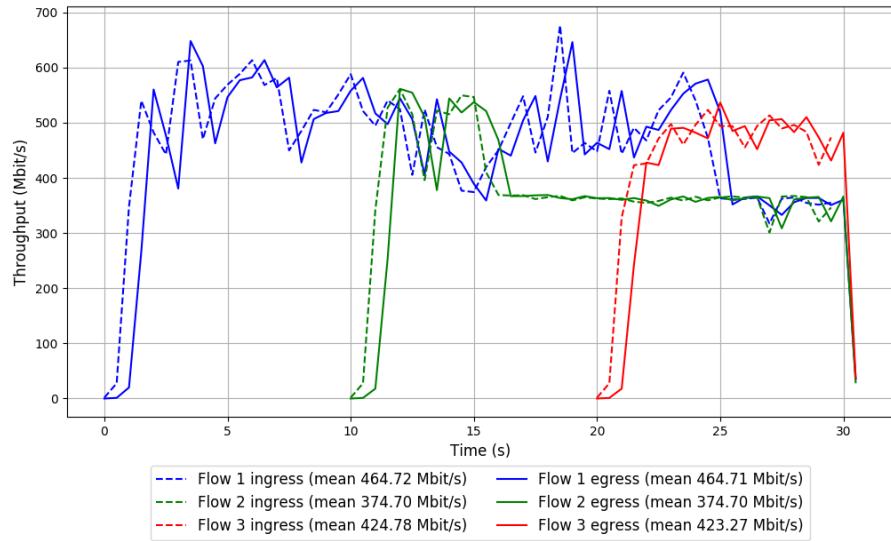


Run 2: Statistics of TCP Vegas

```
Start at: 2019-01-21 21:24:29
End at: 2019-01-21 21:24:59
Local clock offset: -0.005 ms
Remote clock offset: -1.506 ms

# Below is generated by plot.py at 2019-01-22 03:14:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 855.05 Mbit/s
95th percentile per-packet one-way delay: 153.603 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 464.71 Mbit/s
95th percentile per-packet one-way delay: 167.065 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 374.70 Mbit/s
95th percentile per-packet one-way delay: 90.994 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 423.27 Mbit/s
95th percentile per-packet one-way delay: 108.683 ms
Loss rate: 0.35%
```

Run 2: Report of TCP Vegas — Data Link

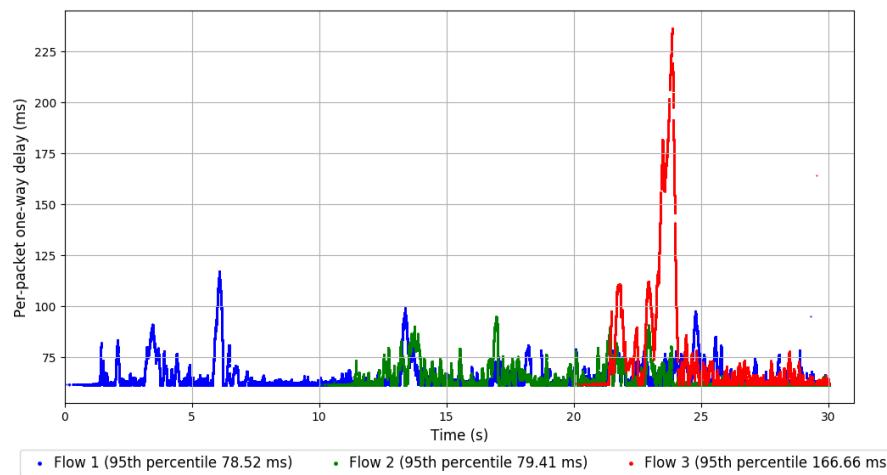
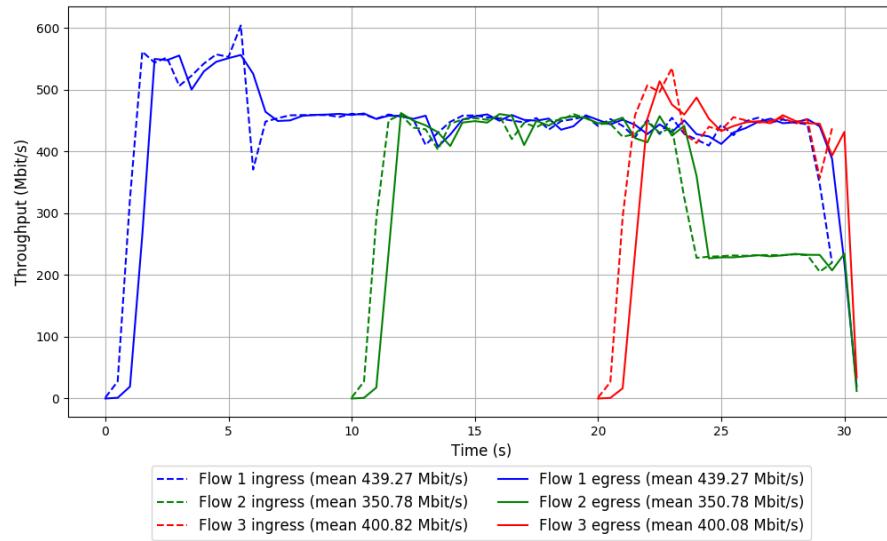


Run 3: Statistics of TCP Vegas

```
Start at: 2019-01-21 22:00:51
End at: 2019-01-21 22:01:21
Local clock offset: -0.007 ms
Remote clock offset: -1.226 ms

# Below is generated by plot.py at 2019-01-22 03:18:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 805.79 Mbit/s
95th percentile per-packet one-way delay: 85.920 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 439.27 Mbit/s
95th percentile per-packet one-way delay: 78.515 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 350.78 Mbit/s
95th percentile per-packet one-way delay: 79.405 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 400.08 Mbit/s
95th percentile per-packet one-way delay: 166.658 ms
Loss rate: 0.19%
```

Run 3: Report of TCP Vegas — Data Link

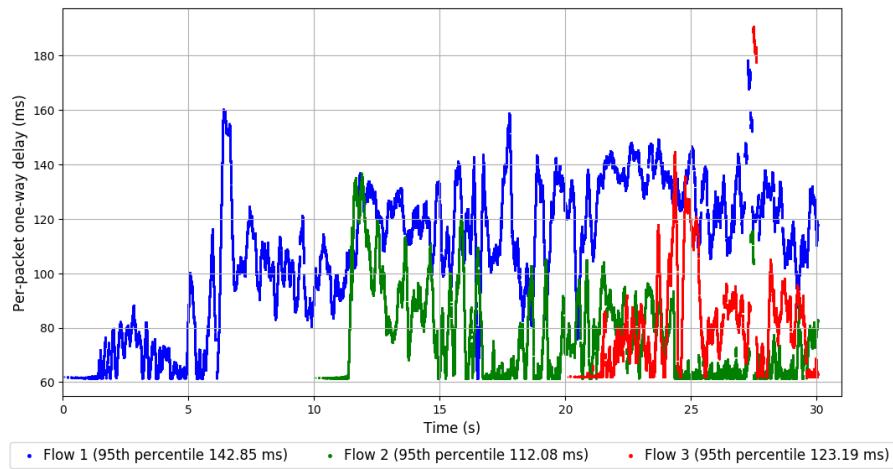
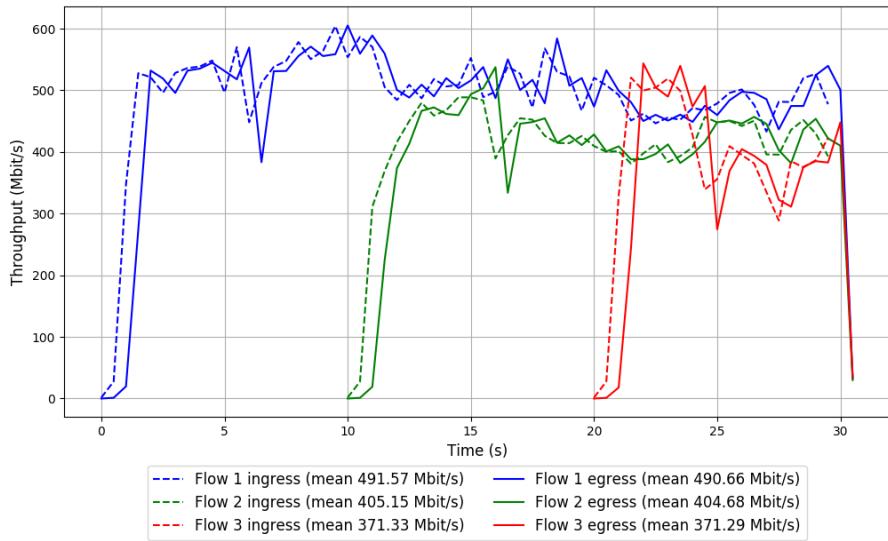


Run 4: Statistics of TCP Vegas

```
Start at: 2019-01-21 22:37:08
End at: 2019-01-21 22:37:38
Local clock offset: -0.04 ms
Remote clock offset: -1.359 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 883.70 Mbit/s
95th percentile per-packet one-way delay: 138.614 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 490.66 Mbit/s
95th percentile per-packet one-way delay: 142.846 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 404.68 Mbit/s
95th percentile per-packet one-way delay: 112.079 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 371.29 Mbit/s
95th percentile per-packet one-way delay: 123.188 ms
Loss rate: 0.00%
```

Run 4: Report of TCP Vegas — Data Link

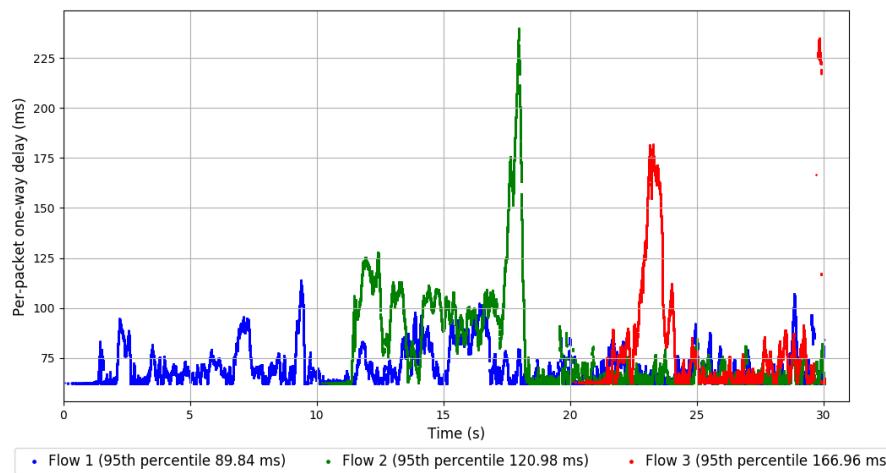
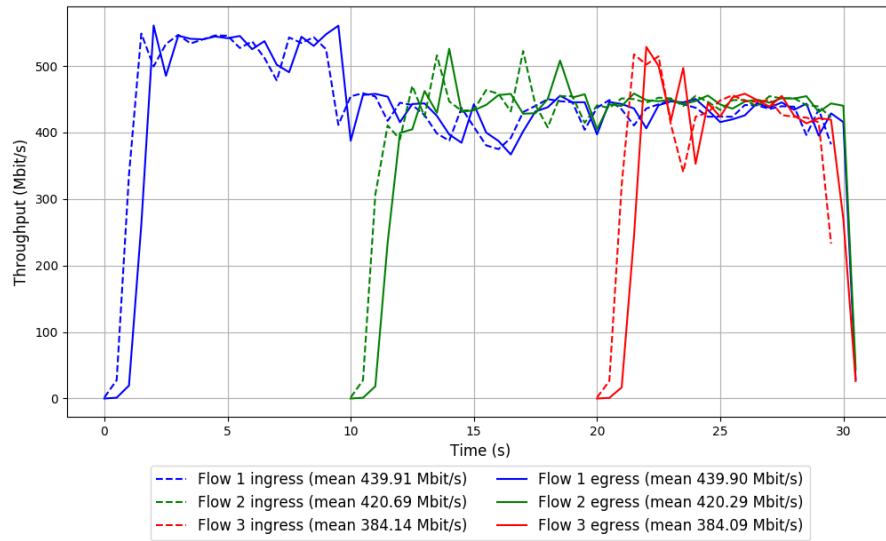


Run 5: Statistics of TCP Vegas

```
Start at: 2019-01-21 23:13:17
End at: 2019-01-21 23:13:47
Local clock offset: 0.026 ms
Remote clock offset: -0.648 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 847.53 Mbit/s
95th percentile per-packet one-way delay: 108.359 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 439.90 Mbit/s
95th percentile per-packet one-way delay: 89.845 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 420.29 Mbit/s
95th percentile per-packet one-way delay: 120.981 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 384.09 Mbit/s
95th percentile per-packet one-way delay: 166.960 ms
Loss rate: 0.01%
```

Run 5: Report of TCP Vegas — Data Link

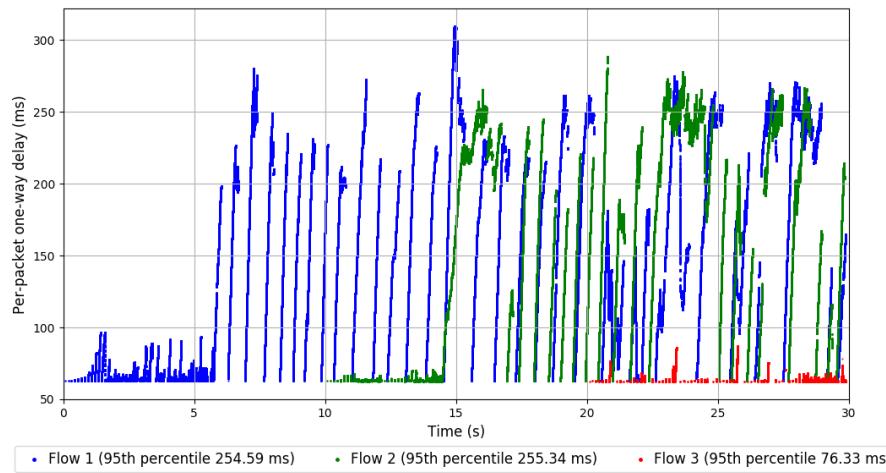
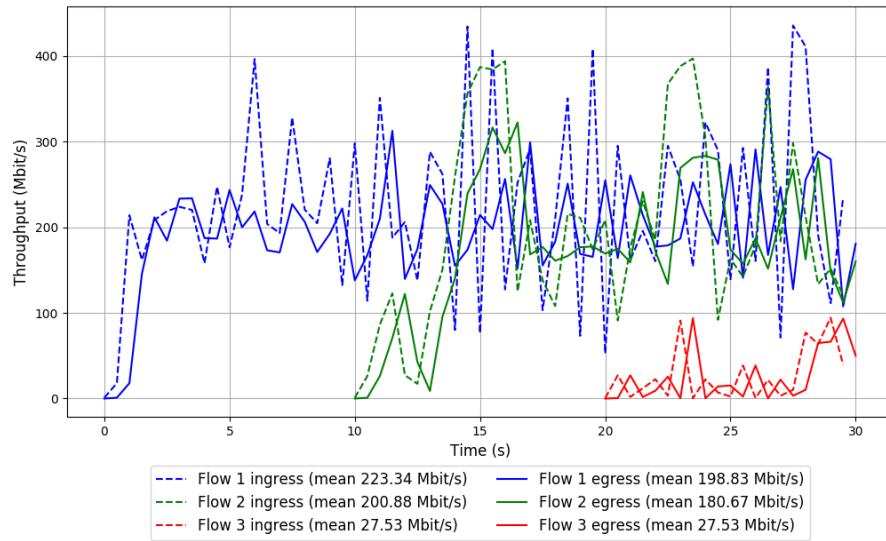


Run 1: Statistics of Verus

```
Start at: 2019-01-21 21:19:47
End at: 2019-01-21 21:20:17
Local clock offset: 0.006 ms
Remote clock offset: -0.564 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.59 Mbit/s
95th percentile per-packet one-way delay: 254.680 ms
Loss rate: 10.14%
-- Flow 1:
Average throughput: 198.83 Mbit/s
95th percentile per-packet one-way delay: 254.588 ms
Loss rate: 10.98%
-- Flow 2:
Average throughput: 180.67 Mbit/s
95th percentile per-packet one-way delay: 255.340 ms
Loss rate: 9.41%
-- Flow 3:
Average throughput: 27.53 Mbit/s
95th percentile per-packet one-way delay: 76.325 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link

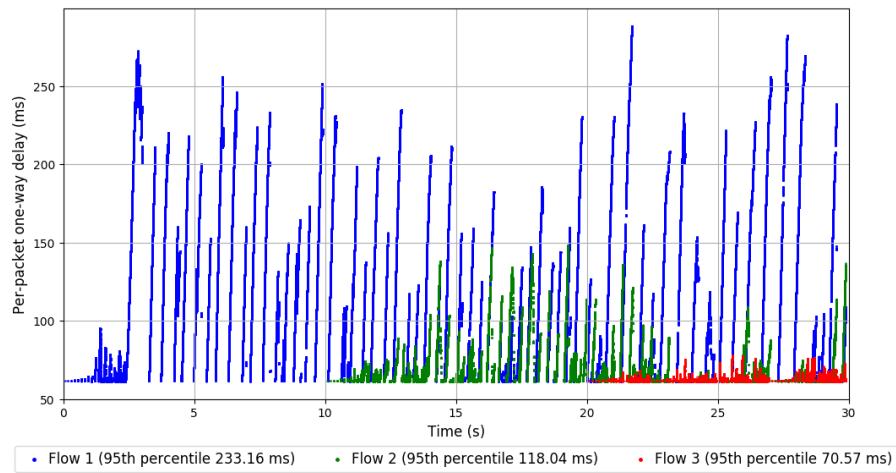
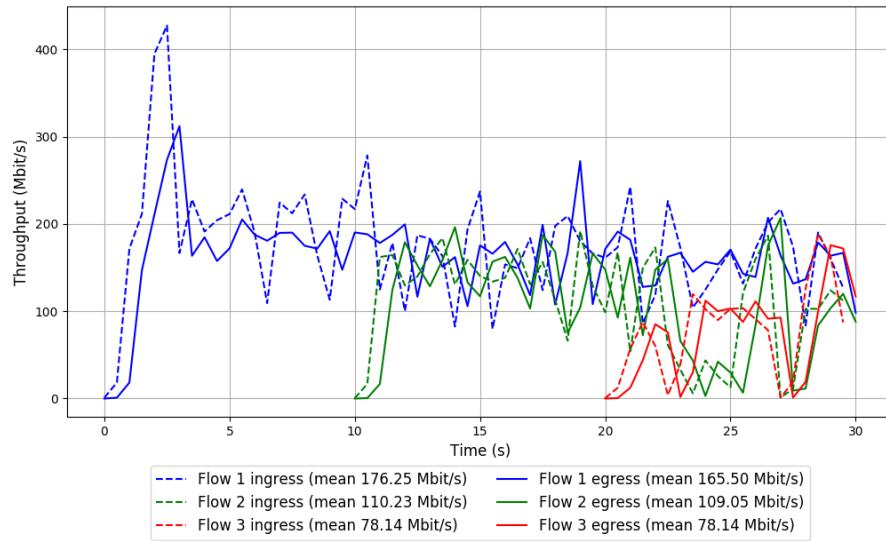


Run 2: Statistics of Verus

```
Start at: 2019-01-21 21:56:11
End at: 2019-01-21 21:56:41
Local clock offset: -0.001 ms
Remote clock offset: -1.44 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.63 Mbit/s
95th percentile per-packet one-way delay: 221.475 ms
Loss rate: 4.19%
-- Flow 1:
Average throughput: 165.50 Mbit/s
95th percentile per-packet one-way delay: 233.165 ms
Loss rate: 6.09%
-- Flow 2:
Average throughput: 109.05 Mbit/s
95th percentile per-packet one-way delay: 118.042 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 78.14 Mbit/s
95th percentile per-packet one-way delay: 70.567 ms
Loss rate: 0.00%
```

Run 2: Report of Verus — Data Link

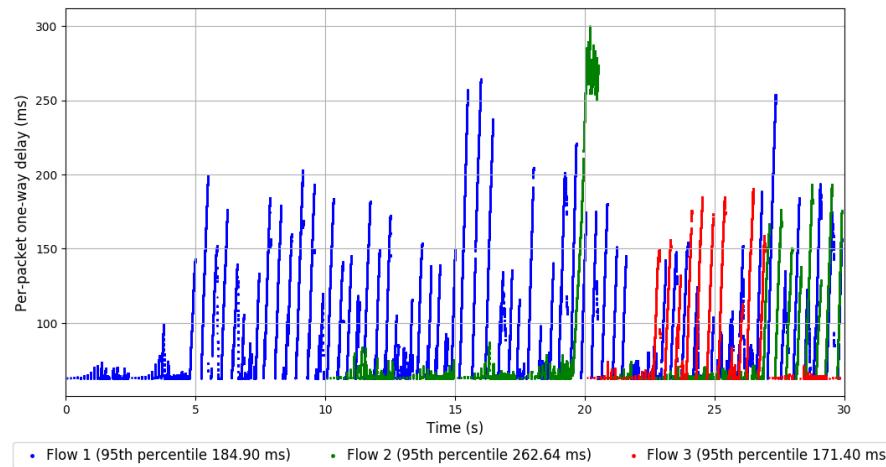
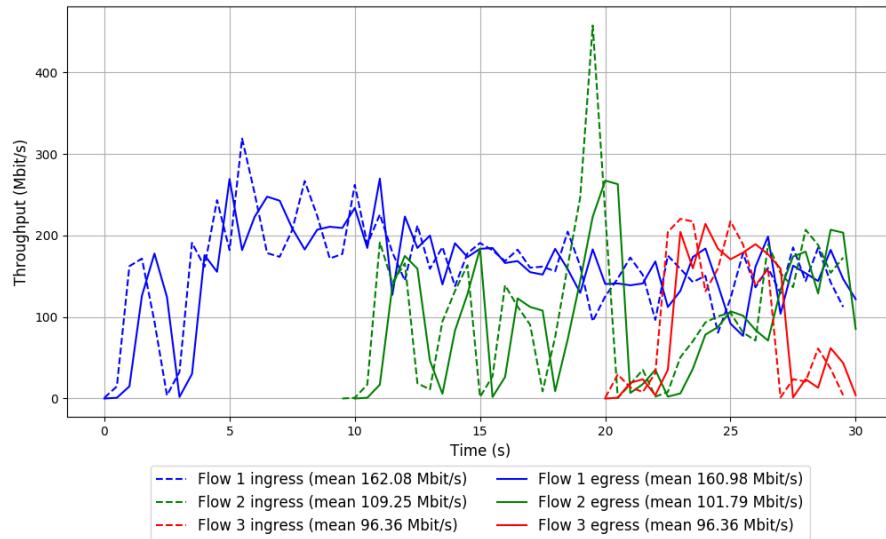


Run 3: Statistics of Verus

```
Start at: 2019-01-21 22:32:25
End at: 2019-01-21 22:32:56
Local clock offset: 0.121 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.99 Mbit/s
95th percentile per-packet one-way delay: 187.686 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 160.98 Mbit/s
95th percentile per-packet one-way delay: 184.902 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 101.79 Mbit/s
95th percentile per-packet one-way delay: 262.643 ms
Loss rate: 6.72%
-- Flow 3:
Average throughput: 96.36 Mbit/s
95th percentile per-packet one-way delay: 171.400 ms
Loss rate: 0.00%
```

Run 3: Report of Verus — Data Link

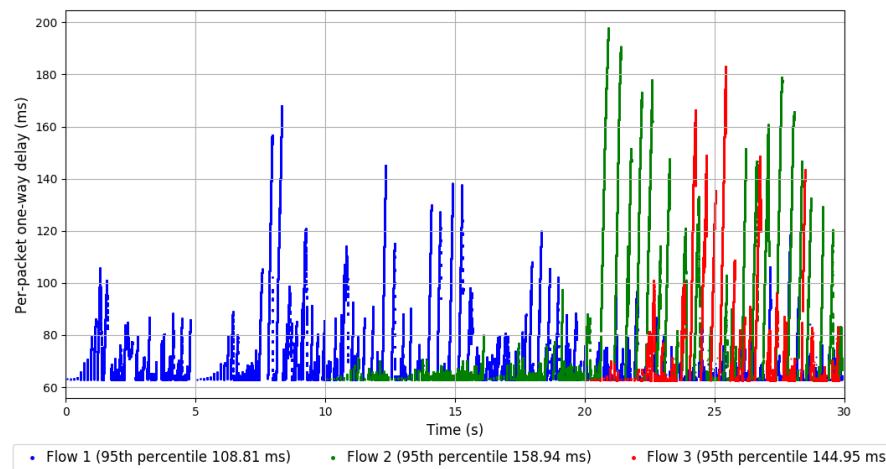
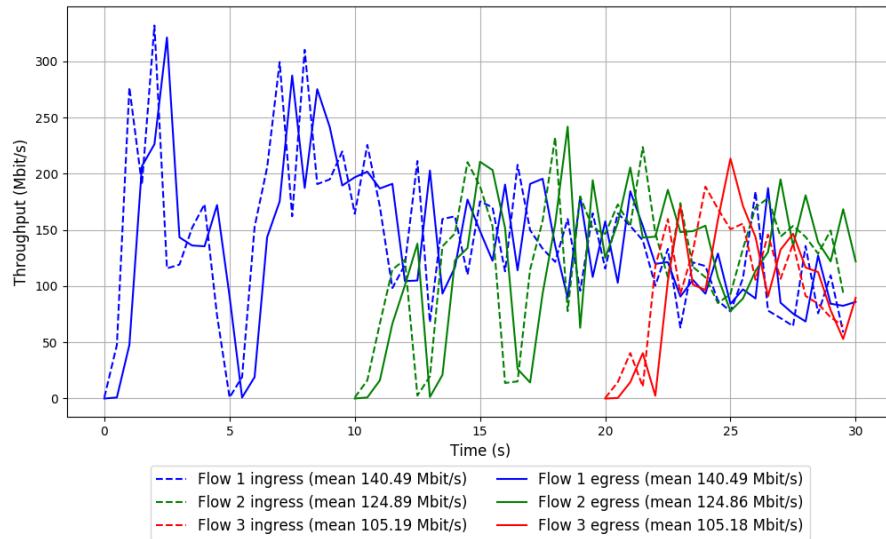


Run 4: Statistics of Verus

```
Start at: 2019-01-21 23:08:39
End at: 2019-01-21 23:09:09
Local clock offset: 0.011 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.64 Mbit/s
95th percentile per-packet one-way delay: 138.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 140.49 Mbit/s
95th percentile per-packet one-way delay: 108.815 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 124.86 Mbit/s
95th percentile per-packet one-way delay: 158.945 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 105.18 Mbit/s
95th percentile per-packet one-way delay: 144.946 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link

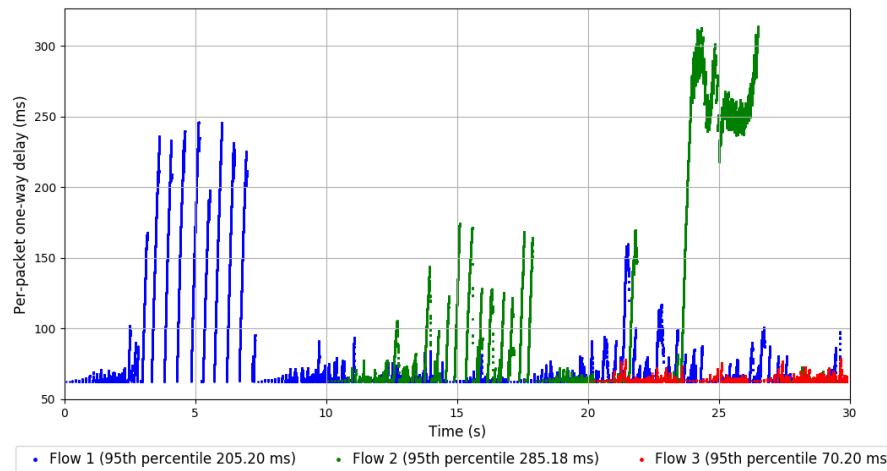
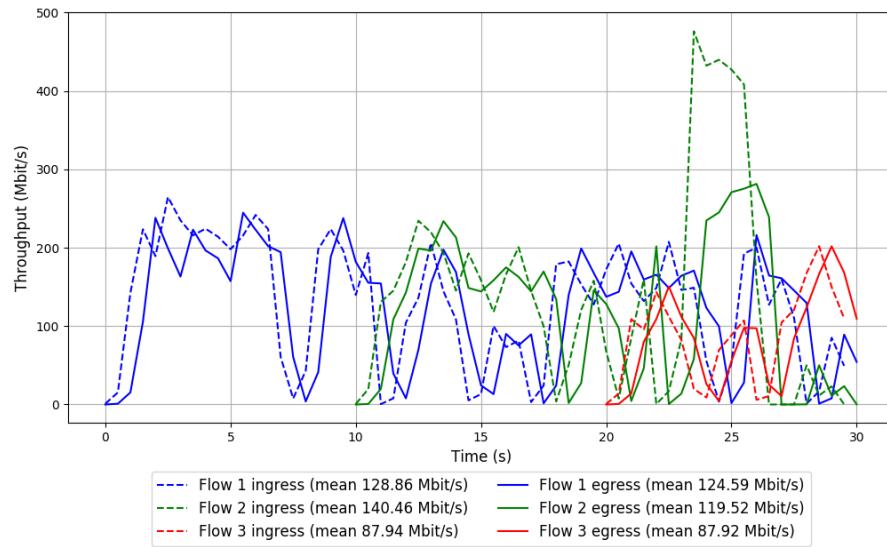


Run 5: Statistics of Verus

```
Start at: 2019-01-21 23:44:50
End at: 2019-01-21 23:45:20
Local clock offset: -0.06 ms
Remote clock offset: -0.55 ms

# Below is generated by plot.py at 2019-01-22 03:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.35 Mbit/s
95th percentile per-packet one-way delay: 257.775 ms
Loss rate: 7.23%
-- Flow 1:
Average throughput: 124.59 Mbit/s
95th percentile per-packet one-way delay: 205.198 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 119.52 Mbit/s
95th percentile per-packet one-way delay: 285.180 ms
Loss rate: 14.91%
-- Flow 3:
Average throughput: 87.92 Mbit/s
95th percentile per-packet one-way delay: 70.203 ms
Loss rate: 0.03%
```

Run 5: Report of Verus — Data Link

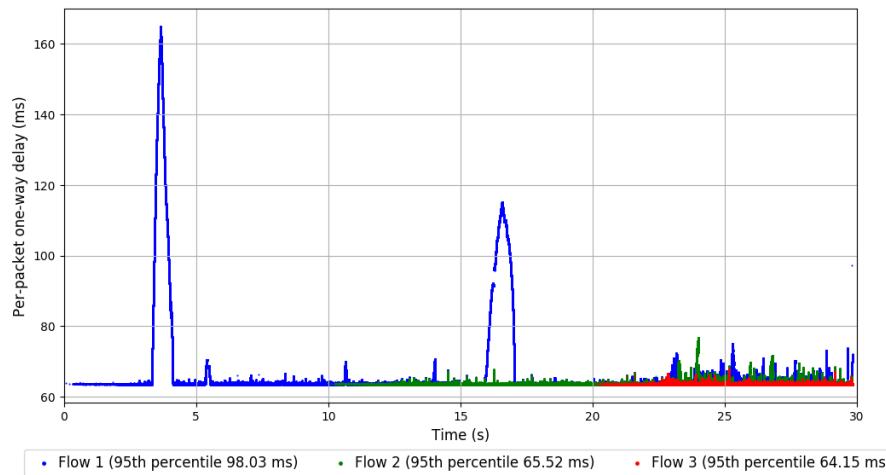
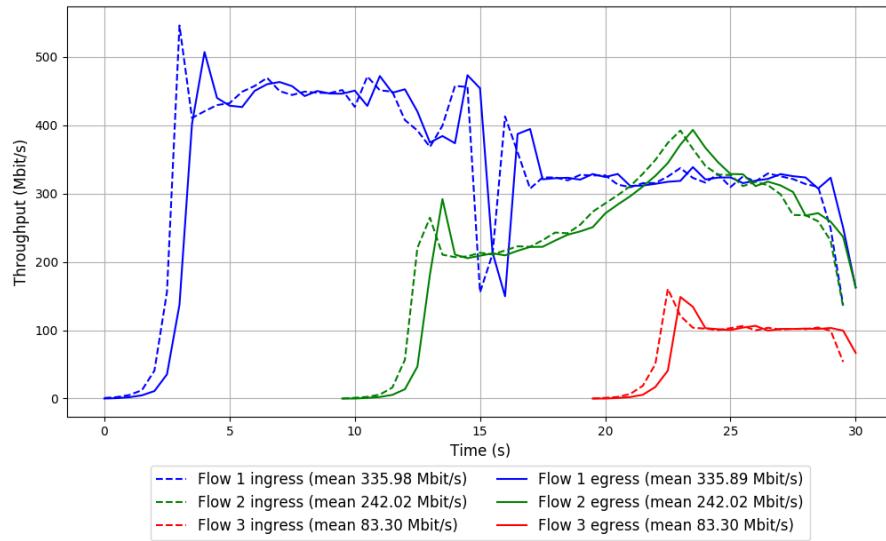


```
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-21 20:46:37
End at: 2019-01-21 20:47:07
Local clock offset: -0.064 ms
Remote clock offset: 0.454 ms

# Below is generated by plot.py at 2019-01-22 03:30:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 524.96 Mbit/s
95th percentile per-packet one-way delay: 73.211 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 335.89 Mbit/s
95th percentile per-packet one-way delay: 98.034 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 242.02 Mbit/s
95th percentile per-packet one-way delay: 65.522 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.30 Mbit/s
95th percentile per-packet one-way delay: 64.153 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Vivace — Data Link

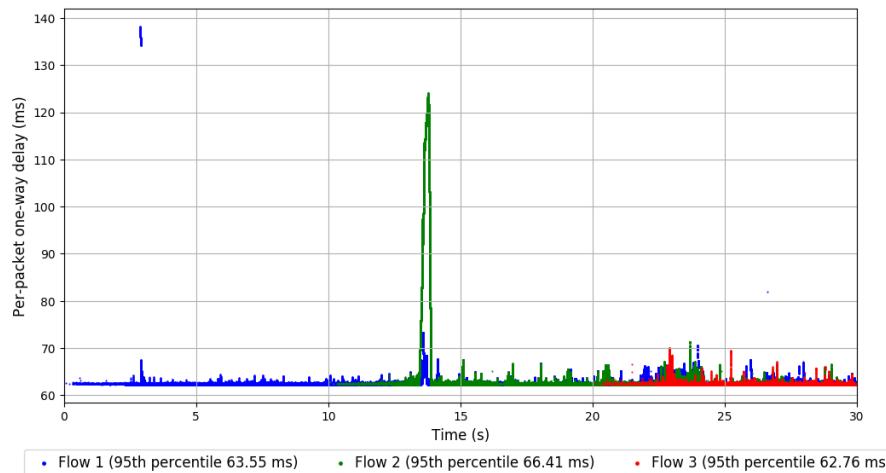
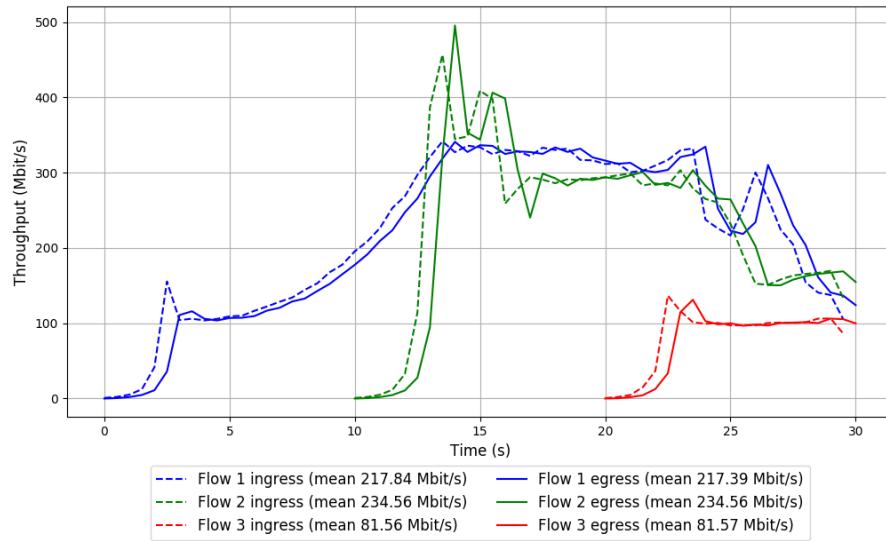


Run 2: Statistics of PCC-Vivace

```
Start at: 2019-01-21 21:22:48
End at: 2019-01-21 21:23:18
Local clock offset: 0.029 ms
Remote clock offset: -0.687 ms

# Below is generated by plot.py at 2019-01-22 03:30:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.19 Mbit/s
95th percentile per-packet one-way delay: 64.030 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 217.39 Mbit/s
95th percentile per-packet one-way delay: 63.553 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 234.56 Mbit/s
95th percentile per-packet one-way delay: 66.410 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.57 Mbit/s
95th percentile per-packet one-way delay: 62.759 ms
Loss rate: 0.00%
```

Run 2: Report of PCC-Vivace — Data Link

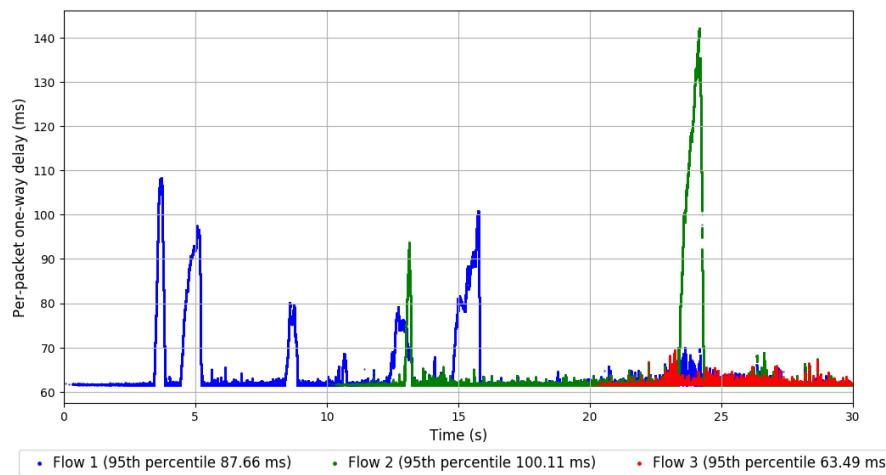
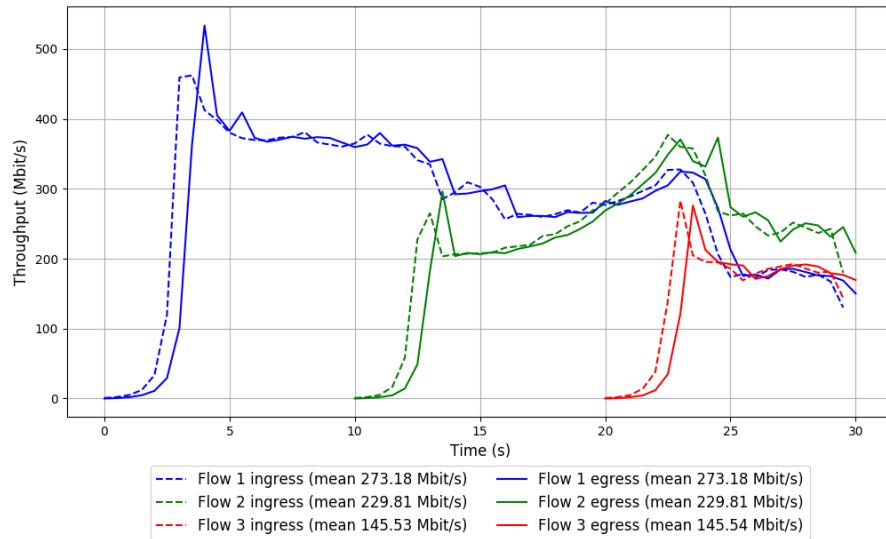


Run 3: Statistics of PCC-Vivace

```
Start at: 2019-01-21 21:59:04
End at: 2019-01-21 21:59:34
Local clock offset: 0.029 ms
Remote clock offset: -1.328 ms

# Below is generated by plot.py at 2019-01-22 03:30:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.99 Mbit/s
95th percentile per-packet one-way delay: 87.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 273.18 Mbit/s
95th percentile per-packet one-way delay: 87.656 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 229.81 Mbit/s
95th percentile per-packet one-way delay: 100.106 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.54 Mbit/s
95th percentile per-packet one-way delay: 63.489 ms
Loss rate: 0.00%
```

Run 3: Report of PCC-Vivace — Data Link

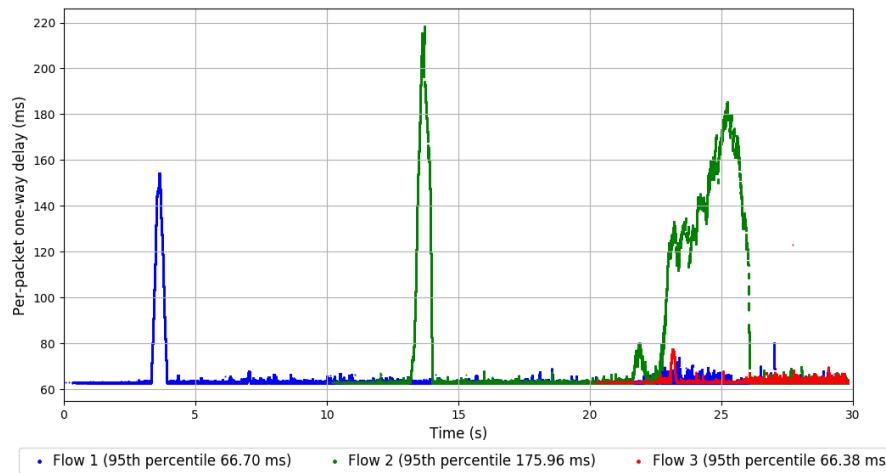
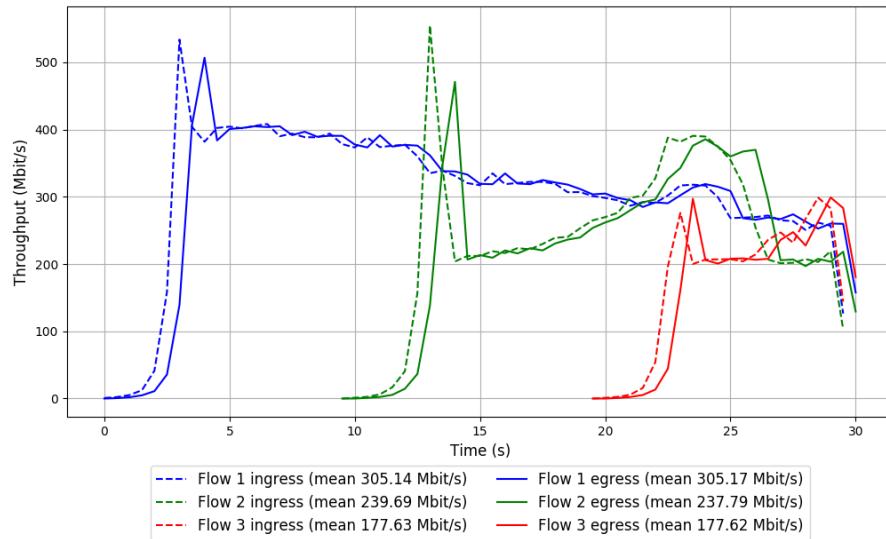


Run 4: Statistics of PCC-Vivace

```
Start at: 2019-01-21 22:35:18
End at: 2019-01-21 22:35:48
Local clock offset: -0.047 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 522.75 Mbit/s
95th percentile per-packet one-way delay: 143.456 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 305.17 Mbit/s
95th percentile per-packet one-way delay: 66.705 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 237.79 Mbit/s
95th percentile per-packet one-way delay: 175.960 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 177.62 Mbit/s
95th percentile per-packet one-way delay: 66.382 ms
Loss rate: 0.00%
```

Run 4: Report of PCC-Vivace — Data Link

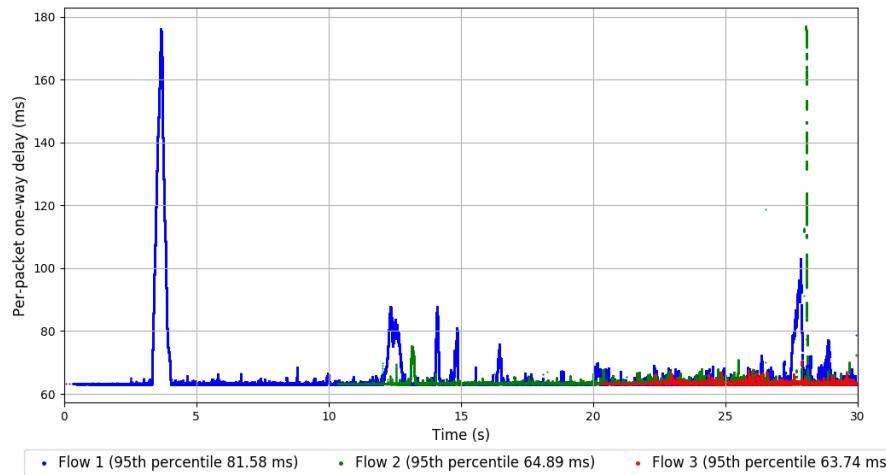
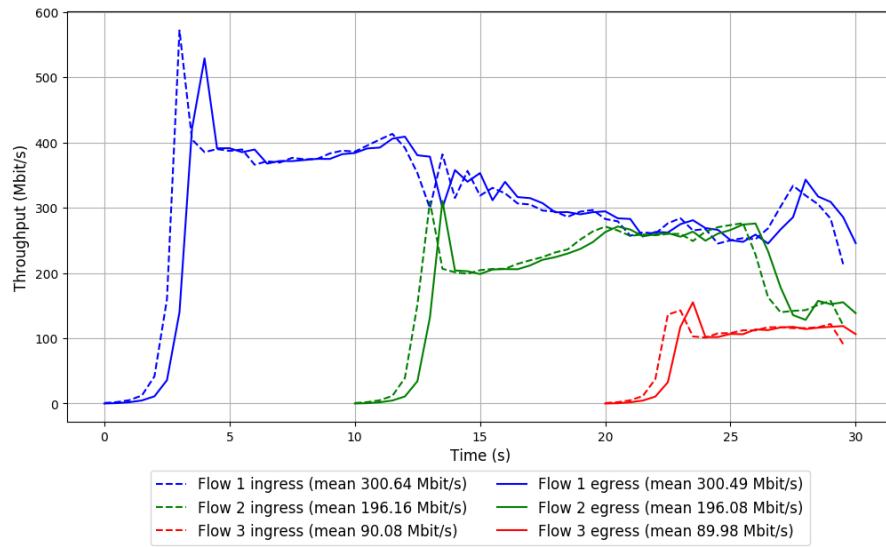


Run 5: Statistics of PCC-Vivace

```
Start at: 2019-01-21 23:11:31
End at: 2019-01-21 23:12:01
Local clock offset: 0.013 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.47 Mbit/s
95th percentile per-packet one-way delay: 75.333 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 300.49 Mbit/s
95th percentile per-packet one-way delay: 81.579 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 196.08 Mbit/s
95th percentile per-packet one-way delay: 64.895 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 89.98 Mbit/s
95th percentile per-packet one-way delay: 63.738 ms
Loss rate: 0.10%
```

Run 5: Report of PCC-Vivace — Data Link

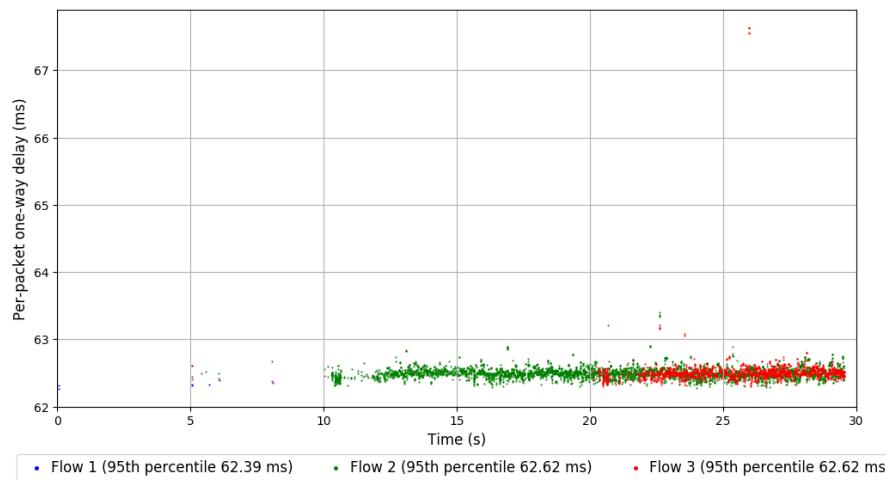
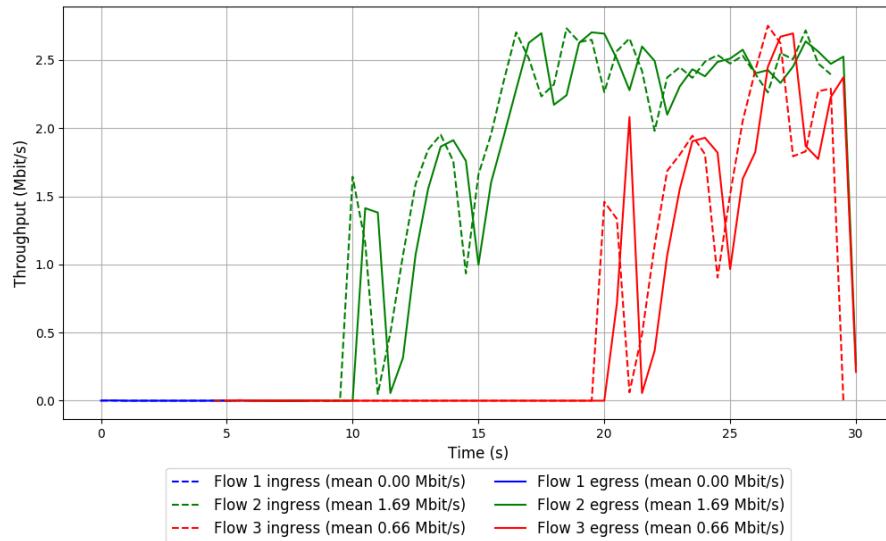


```
Run 1: Statistics of WebRTC media

Start at: 2019-01-21 20:52:24
End at: 2019-01-21 20:52:54
Local clock offset: -0.023 ms
Remote clock offset: -0.766 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 62.618 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 62.393 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 62.619 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 62.618 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link

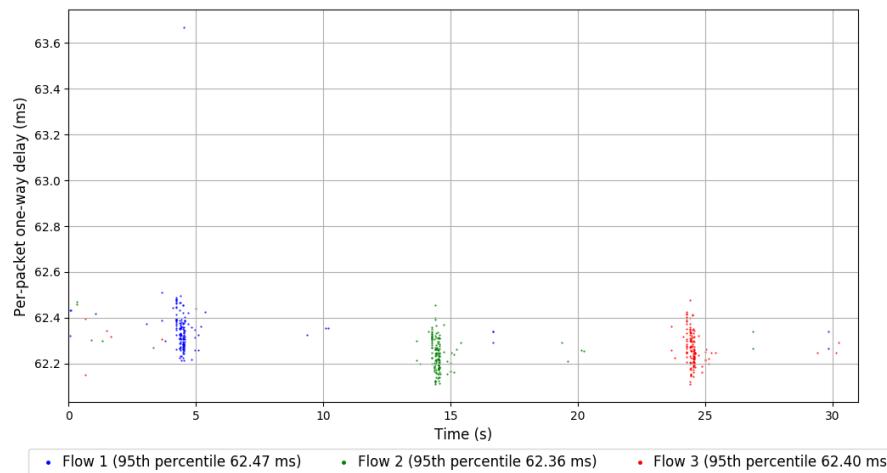
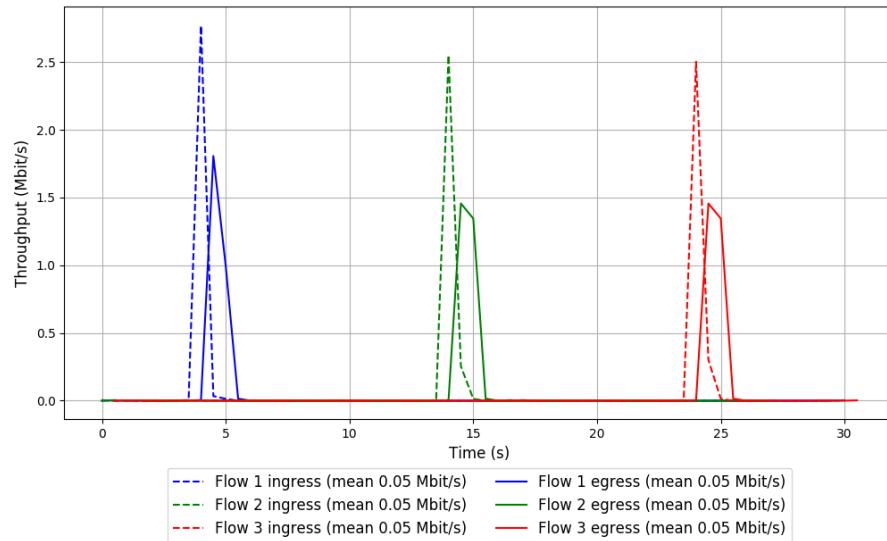


Run 2: Statistics of WebRTC media

```
Start at: 2019-01-21 21:28:26
End at: 2019-01-21 21:28:56
Local clock offset: -0.017 ms
Remote clock offset: -0.843 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 62.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.466 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.356 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.398 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

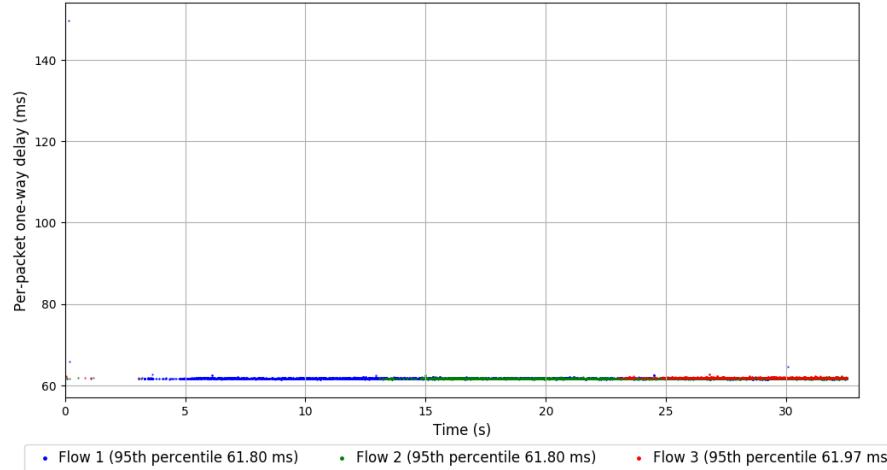
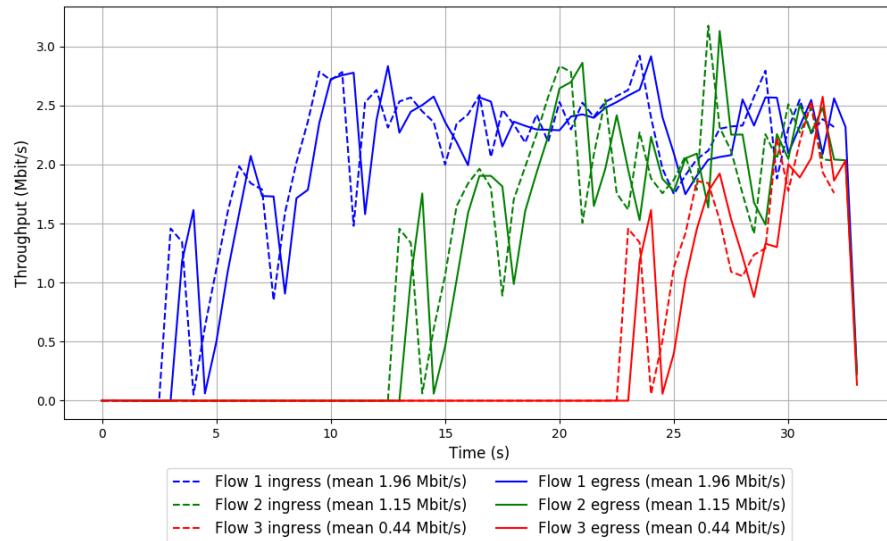


```
Run 3: Statistics of WebRTC media

Start at: 2019-01-21 22:04:47
End at: 2019-01-21 22:05:17
Local clock offset: -0.002 ms
Remote clock offset: -1.375 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 61.877 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 61.801 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 61.797 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 61.971 ms
Loss rate: 0.00%
```

Run 3: Report of WebRTC media — Data Link

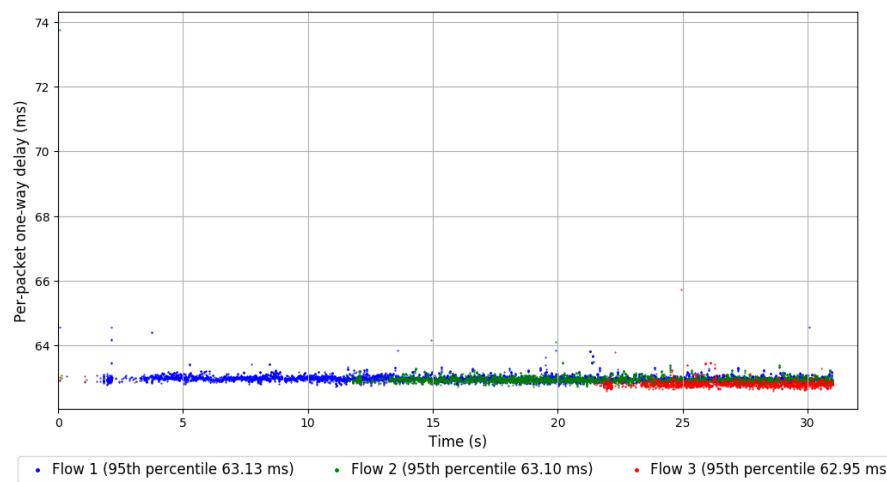
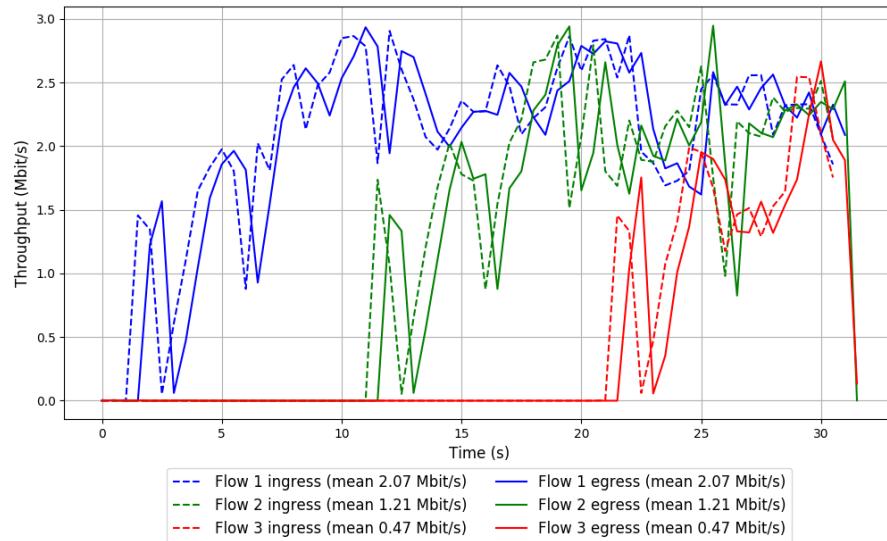


Run 4: Statistics of WebRTC media

```
Start at: 2019-01-21 22:41:00
End at: 2019-01-21 22:41:30
Local clock offset: 0.031 ms
Remote clock offset: -0.384 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 63.113 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 63.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 63.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 62.954 ms
Loss rate: 0.00%
```

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

```
Start at: 2019-01-21 23:17:19
End at: 2019-01-21 23:17:49
Local clock offset: 0.019 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2019-01-22 03:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.256 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.308 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.052 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.968 ms
Loss rate: 0.05%
```

Run 5: Report of WebRTC media — Data Link

