

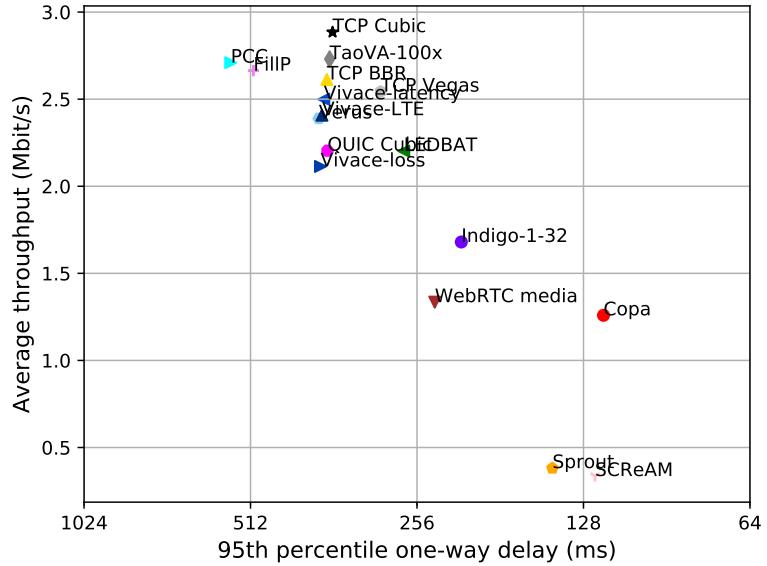
## Pantheon Report

Generated at 2018-01-31 12:29:14 (UTC).  
Data path: China ppp0 (*remote*) → AWS Korea Ethernet (*local*).  
Repeated the test of 17 congestion control schemes 3 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).  
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).  
NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

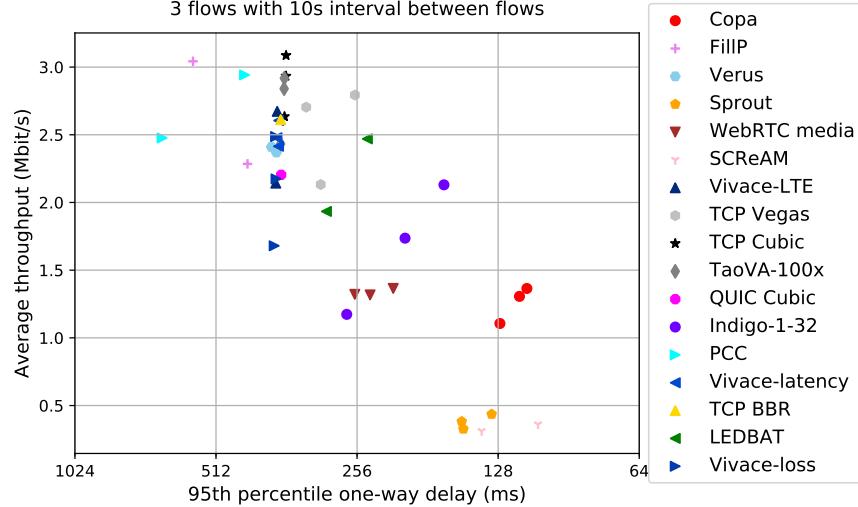
### Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  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 @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from China ppp0 to AWS Korea Ethernet, 3 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from China ppp0 to AWS Korea Ethernet, 3 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	1	1.85	0.81	0.72	371.64	372.66	376.82	7.18	11.31	21.33
TCP Cubic	3	2.02	1.00	0.66	363.08	364.30	359.88	2.30	4.51	7.45
LEDBAT	2	1.36	0.93	0.71	267.59	271.17	279.46	0.44	1.67	4.38
PCC	2	1.48	1.31	1.18	385.34	556.63	740.00	45.61	54.55	85.55
QUIC Cubic	1	1.48	0.75	0.74	371.39	367.19	377.24	4.53	8.19	12.94
SCReAM	2	0.16	0.17	0.18	127.58	117.06	113.65	0.31	0.72	1.39
WebRTC media	3	0.61	0.44	0.30	233.05	214.52	255.52	0.57	0.97	4.03
Sprout	3	0.19	0.19	0.20	145.82	147.40	145.18	0.71	1.55	2.38
TaoVA-100x	3	1.60	1.25	0.94	363.12	368.67	374.51	4.30	6.85	22.49
TCP Vegas	3	1.22	1.22	1.58	272.86	292.35	281.93	0.92	1.53	3.97
Verus	2	2.23	0.20	0.14	385.69	370.26	364.32	65.13	38.14	46.44
Copa	3	0.69	0.57	0.58	115.87	120.58	119.61	0.82	1.65	4.67
FillP	2	1.37	1.14	1.77	379.97	509.54	591.65	30.55	46.53	53.44
Indigo-1-32	3	0.83	0.80	1.03	201.54	194.87	248.65	1.00	2.64	6.31
Vivace-latency	3	1.37	1.13	1.18	374.90	377.59	382.68	14.04	19.91	36.44
Vivace-loss	3	1.30	0.88	0.75	381.71	383.79	384.15	28.24	35.74	43.19
Vivace-LTE	2	1.42	1.02	1.01	378.40	383.38	381.13	18.61	27.48	32.53

Run 1: Statistics of TCP BBR

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/bbr\_stats

Run 1: Report of TCP BBR — Data Link

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Figure is missing

Run 2: Statistics of TCP BBR

Start at: 2018-01-31 10:18:37

End at: 2018-01-31 10:19:07

Local clock offset: -1.21 ms

Remote clock offset: 3.821 ms

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

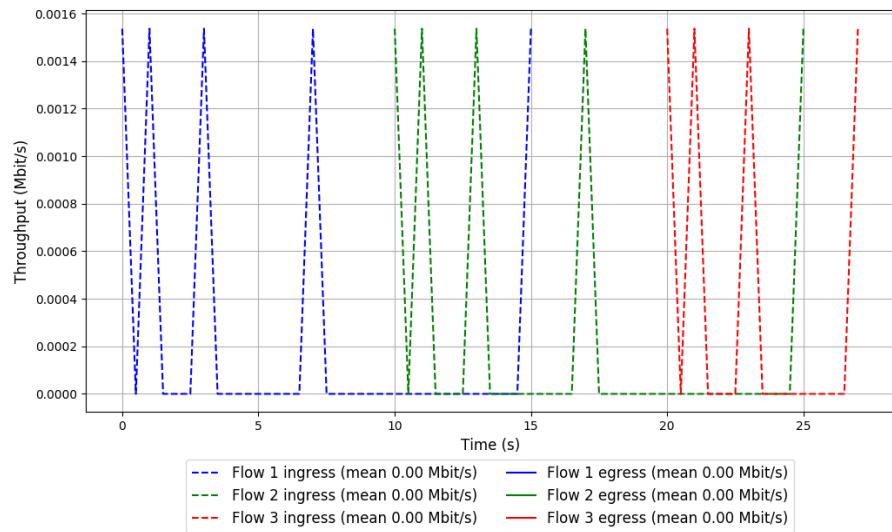


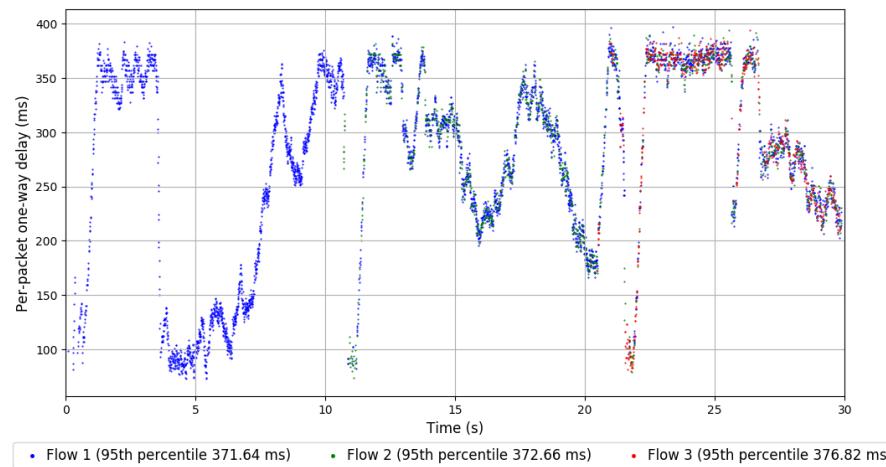
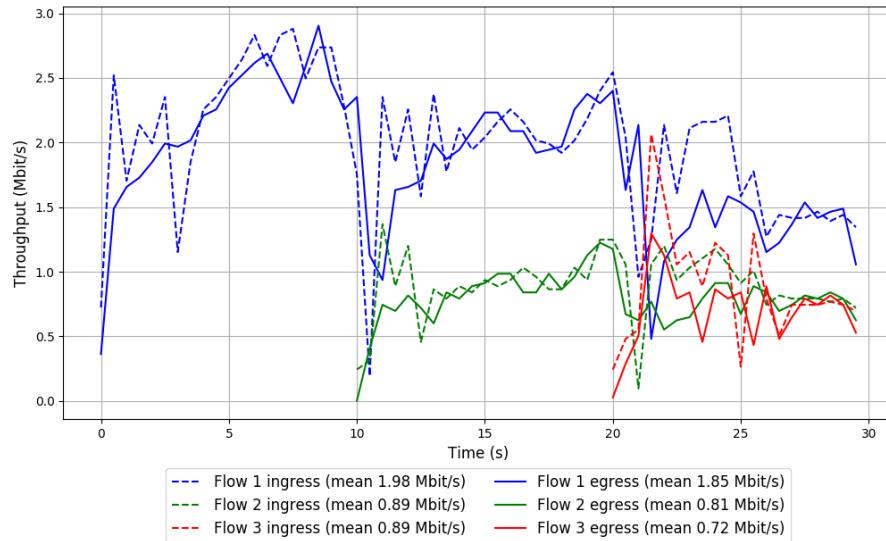
Figure is missing

Run 3: Statistics of TCP BBR

```
Start at: 2018-01-31 10:45:51
End at: 2018-01-31 10:46:21
Local clock offset: -1.305 ms
Remote clock offset: 4.432 ms

# Below is generated by plot.py at 2018-01-31 12:28:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 372.594 ms
Loss rate: 9.49%
-- Flow 1:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 371.644 ms
Loss rate: 7.18%
-- Flow 2:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 372.661 ms
Loss rate: 11.31%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 376.825 ms
Loss rate: 21.33%
```

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

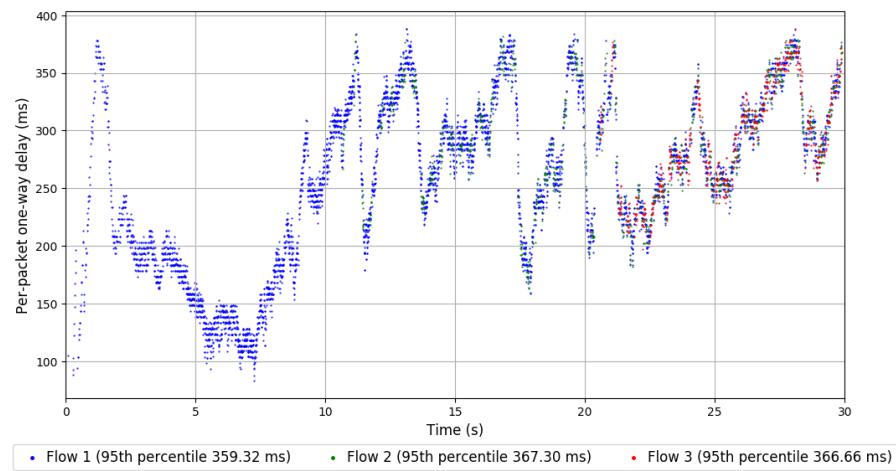
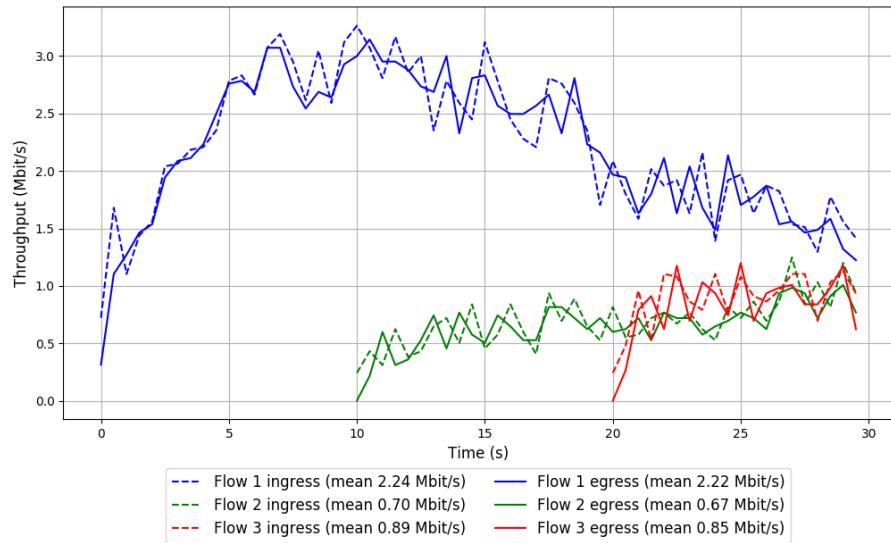


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2018-01-31 09:57:04
End at: 2018-01-31 09:57:34
Local clock offset: -1.459 ms
Remote clock offset: 4.368 ms

# Below is generated by plot.py at 2018-01-31 12:28:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.93 Mbit/s
95th percentile per-packet one-way delay: 363.110 ms
Loss rate: 2.88%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 359.322 ms
Loss rate: 1.73%
-- Flow 2:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 367.303 ms
Loss rate: 5.70%
-- Flow 3:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 366.662 ms
Loss rate: 7.17%
```

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

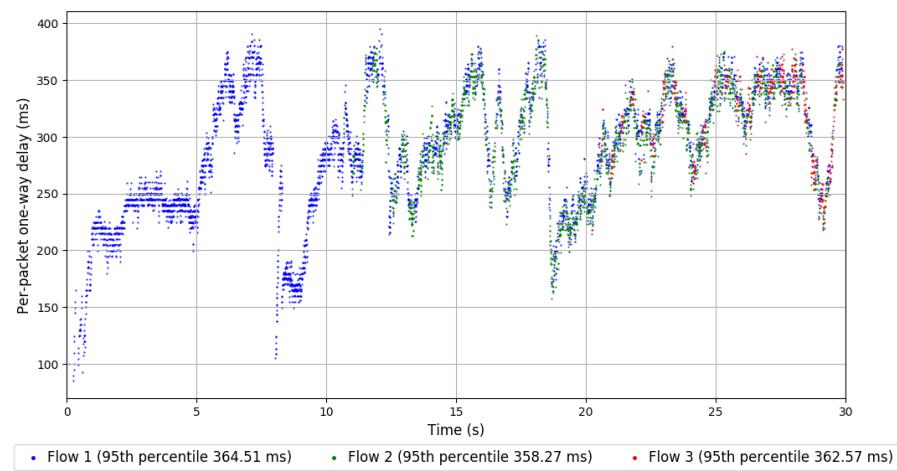
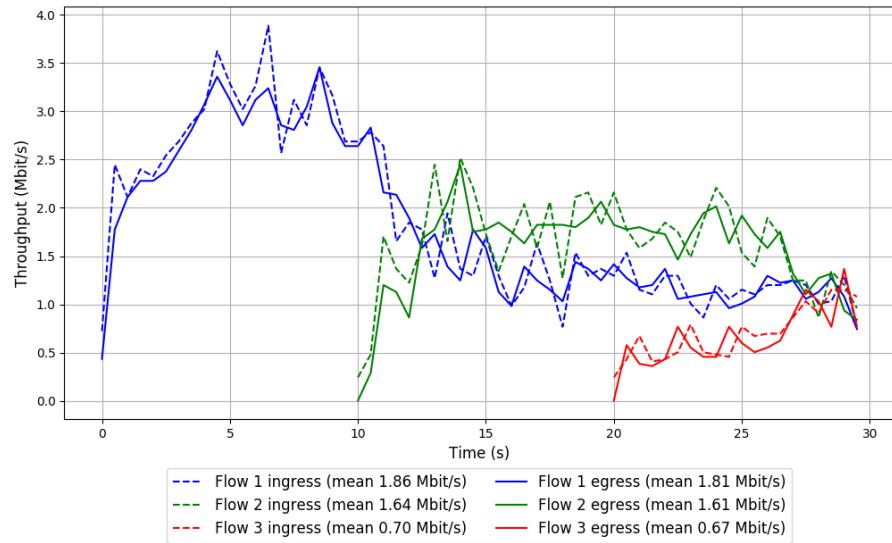


Run 2: Statistics of TCP Cubic

```
Start at: 2018-01-31 10:25:15
End at: 2018-01-31 10:25:45
Local clock offset: -1.237 ms
Remote clock offset: 3.782 ms

# Below is generated by plot.py at 2018-01-31 12:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 362.871 ms
Loss rate: 3.43%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 364.511 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 358.267 ms
Loss rate: 3.36%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 362.571 ms
Loss rate: 6.71%
```

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

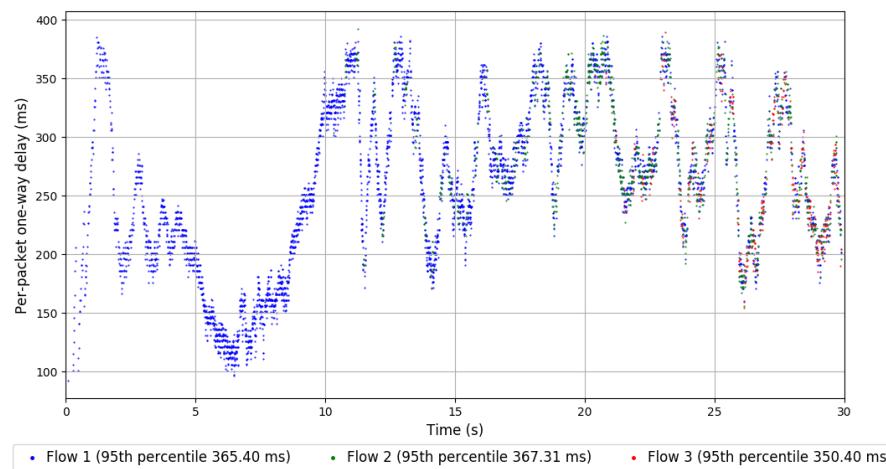
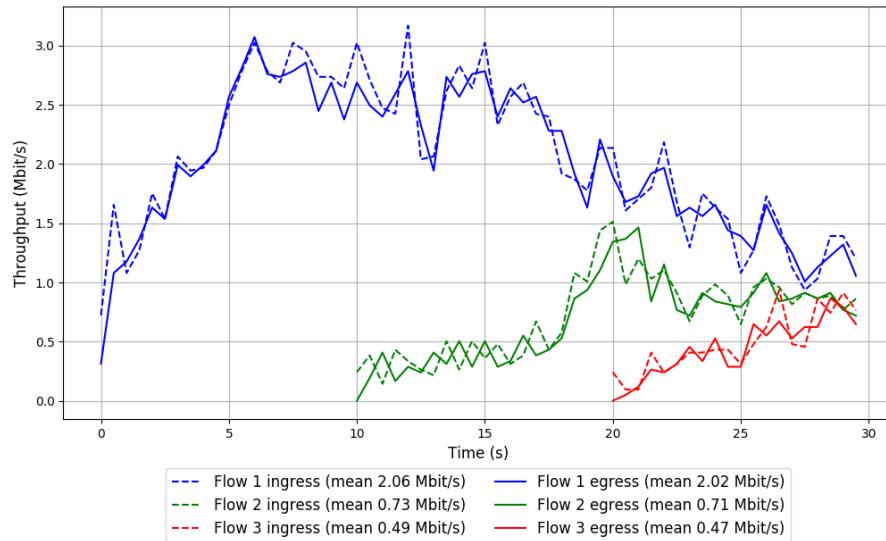


```
Run 3: Statistics of TCP Cubic
```

```
Start at: 2018-01-31 10:51:43
End at: 2018-01-31 10:52:13
Local clock offset: -1.37 ms
Remote clock offset: 4.532 ms

# Below is generated by plot.py at 2018-01-31 12:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 365.651 ms
Loss rate: 2.91%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 365.405 ms
Loss rate: 2.11%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 367.315 ms
Loss rate: 4.48%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 350.401 ms
Loss rate: 8.46%
```

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

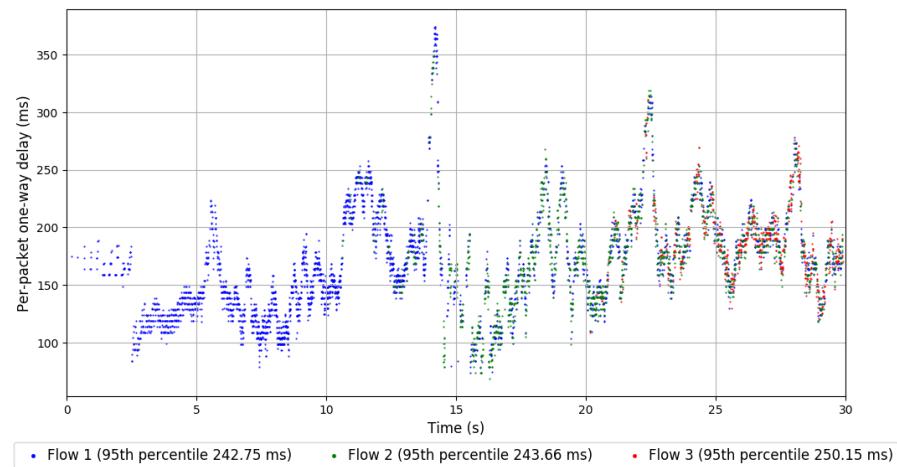
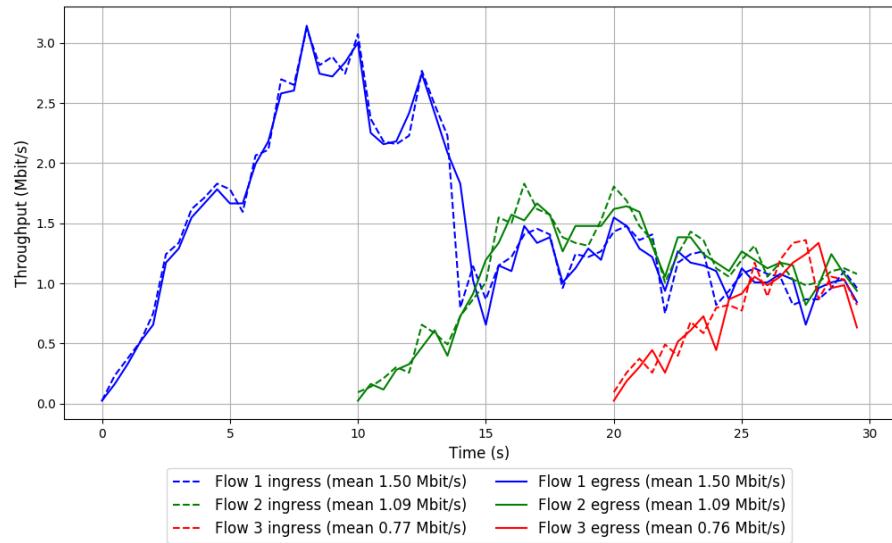


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-01-31 09:52:35
End at: 2018-01-31 09:53:05
Local clock offset: -1.276 ms
Remote clock offset: 4.239 ms

# Below is generated by plot.py at 2018-01-31 12:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.47 Mbit/s
95th percentile per-packet one-way delay: 243.425 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 242.747 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 243.661 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 250.145 ms
Loss rate: 3.53%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/ledbat\_st

Run 2: Report of LEDBAT — Data Link

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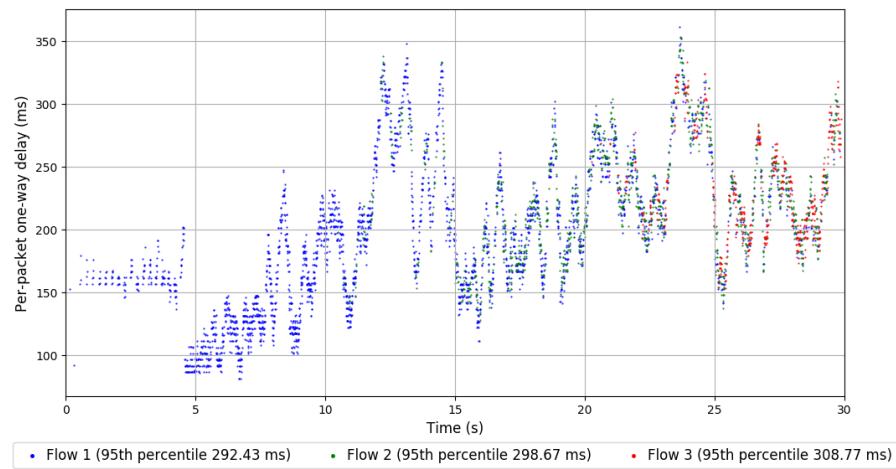
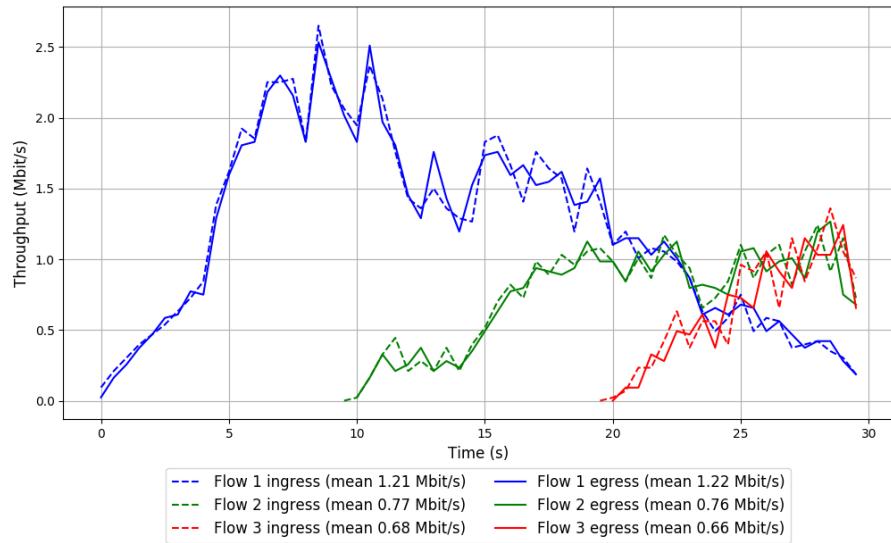
Figure is missing

Run 3: Statistics of LEDBAT

```
Start at: 2018-01-31 10:47:19
End at: 2018-01-31 10:47:49
Local clock offset: -0.934 ms
Remote clock offset: 4.512 ms

# Below is generated by plot.py at 2018-01-31 12:28:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 297.665 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 292.428 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 298.674 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 308.773 ms
Loss rate: 5.23%
```

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



Run 1: Statistics of PCC

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/pcc\_stats

Run 1: Report of PCC — Data Link

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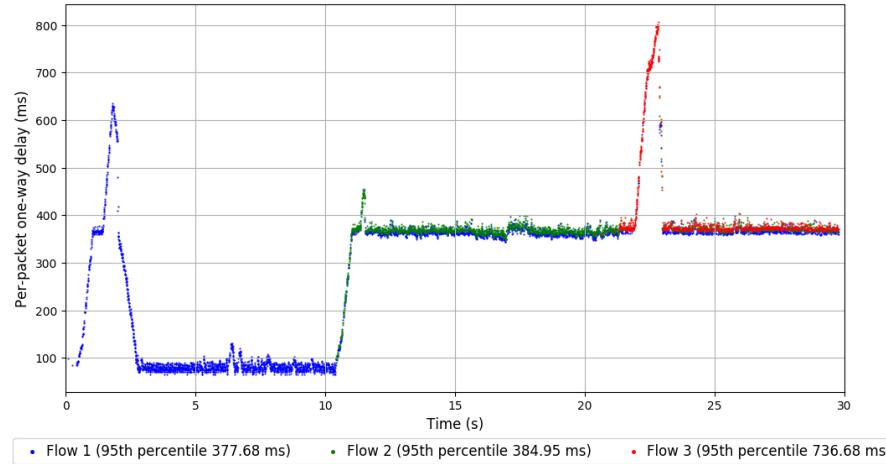
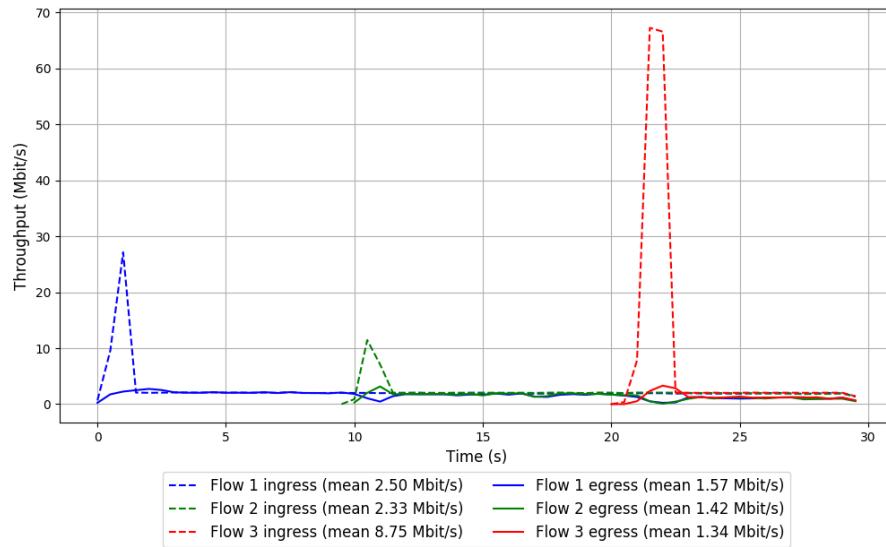
Figure is missing

Run 2: Statistics of PCC

```
Start at: 2018-01-31 10:15:39
End at: 2018-01-31 10:16:09
Local clock offset: -1.629 ms
Remote clock offset: 3.782 ms

# Below is generated by plot.py at 2018-01-31 12:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 444.835 ms
Loss rate: 57.81%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 377.679 ms
Loss rate: 37.45%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 384.953 ms
Loss rate: 39.59%
-- Flow 3:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 736.682 ms
Loss rate: 85.32%
```

## Run 2: Report of PCC — Data Link

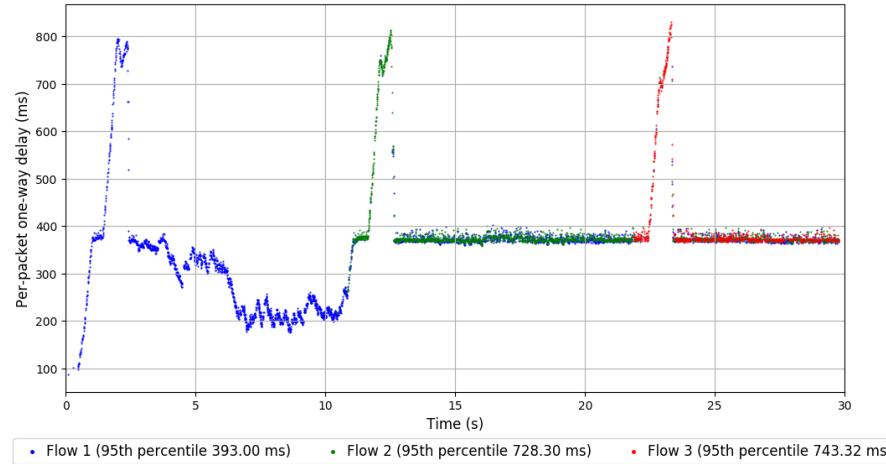
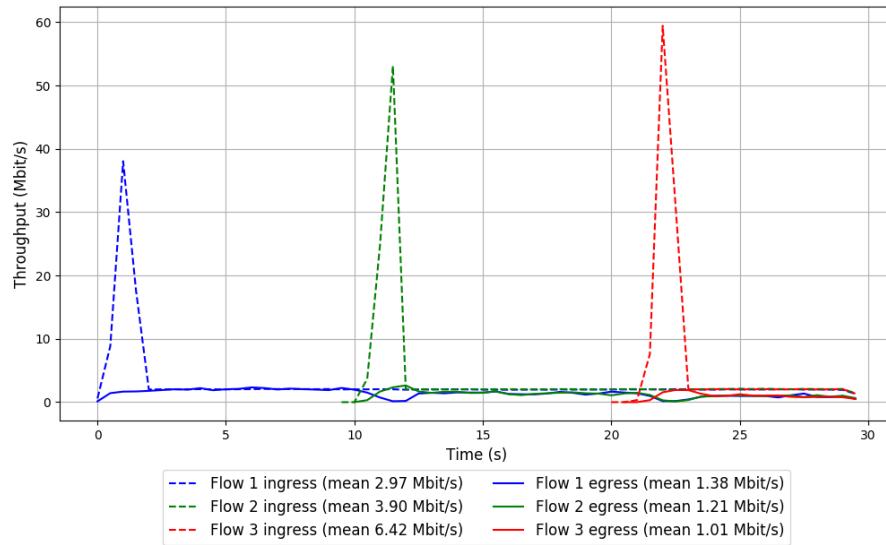


Run 3: Statistics of PCC

```
Start at: 2018-01-31 10:42:51
End at: 2018-01-31 10:43:21
Local clock offset: -1.132 ms
Remote clock offset: 4.288 ms

# Below is generated by plot.py at 2018-01-31 12:28:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 667.092 ms
Loss rate: 67.91%
-- Flow 1:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 392.997 ms
Loss rate: 53.77%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 728.303 ms
Loss rate: 69.52%
-- Flow 3:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 743.315 ms
Loss rate: 85.78%
```

### Run 3: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-01-31 09:46:14

End at: 2018-01-31 09:46:44

Local clock offset: -1.214 ms

Remote clock offset: 4.249 ms

Run 1: Report of QUIC Cubic — Data Link

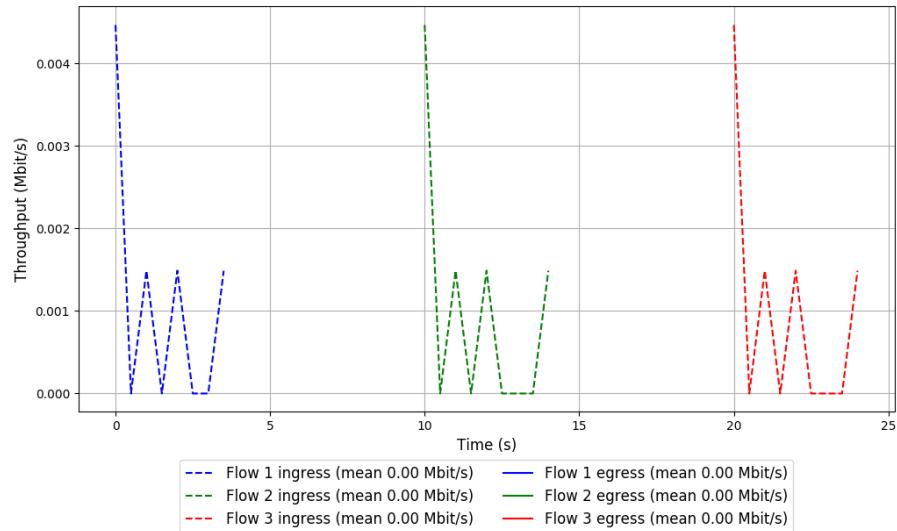


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Run 2: Statistics of QUIC Cubic

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/quic\_stat

Run 2: Report of QUIC Cubic — Data Link

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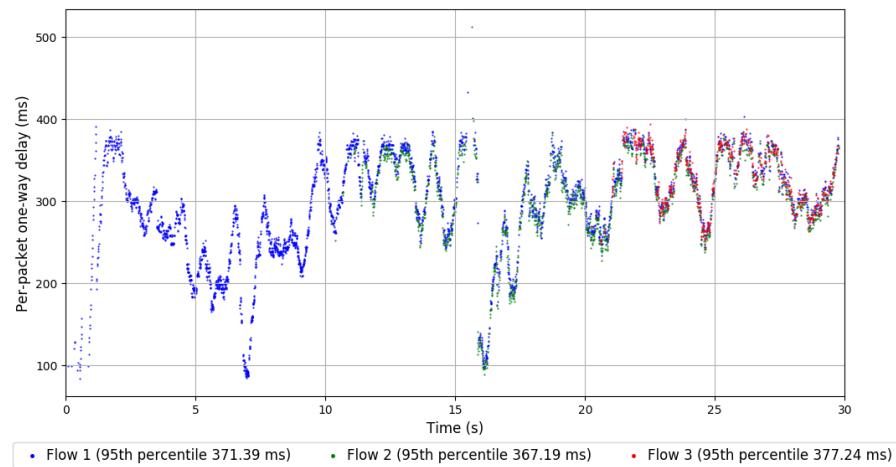
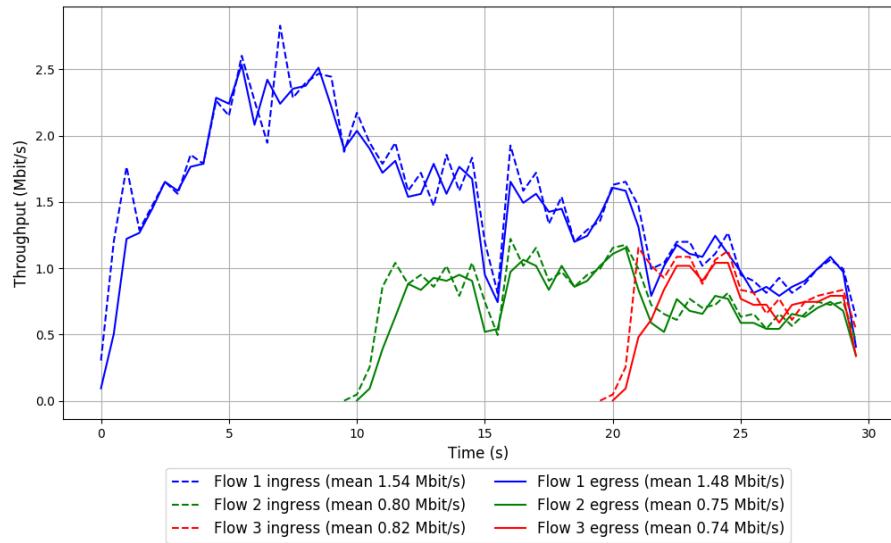
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```
Run 3: Statistics of QUIC Cubic
```

```
Start at: 2018-01-31 10:41:24
End at: 2018-01-31 10:41:54
Local clock offset: -1.325 ms
Remote clock offset: 4.258 ms

# Below is generated by plot.py at 2018-01-31 12:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 371.703 ms
Loss rate: 6.33%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 371.387 ms
Loss rate: 4.53%
-- Flow 2:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 367.185 ms
Loss rate: 8.19%
-- Flow 3:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 377.238 ms
Loss rate: 12.94%
```

Run 3: Report of QUIC Cubic — Data Link

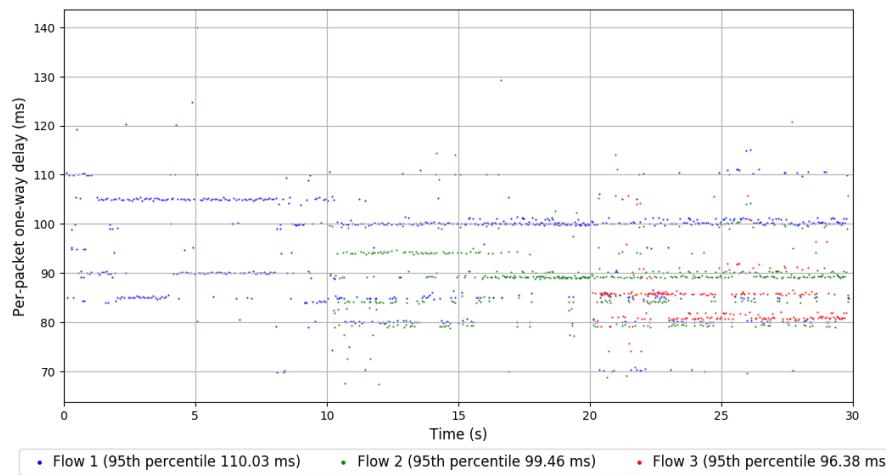
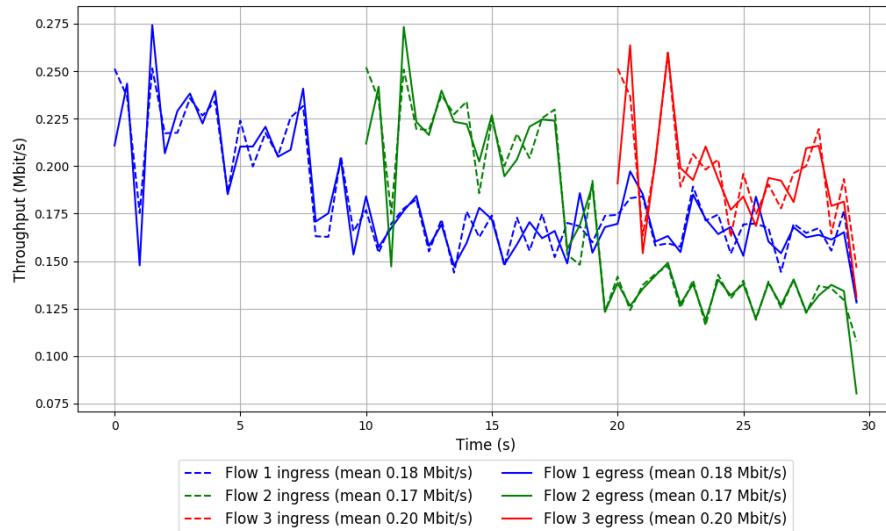


```
Run 1: Statistics of SCReAM

Start at: 2018-01-31 09:54:03
End at: 2018-01-31 09:54:33
Local clock offset: -1.282 ms
Remote clock offset: 4.275 ms

# Below is generated by plot.py at 2018-01-31 12:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 105.231 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 110.027 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 99.461 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 96.383 ms
Loss rate: 1.46%
```

## Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/scream\_st

Run 2: Report of SCReAM — Data Link

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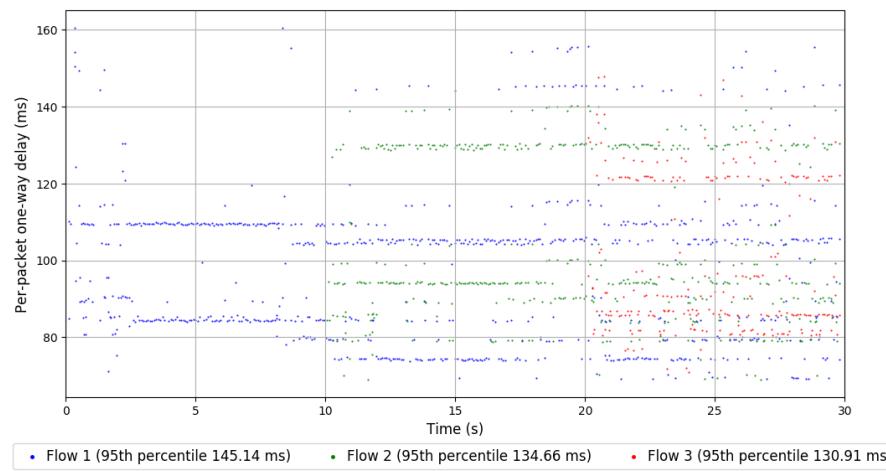
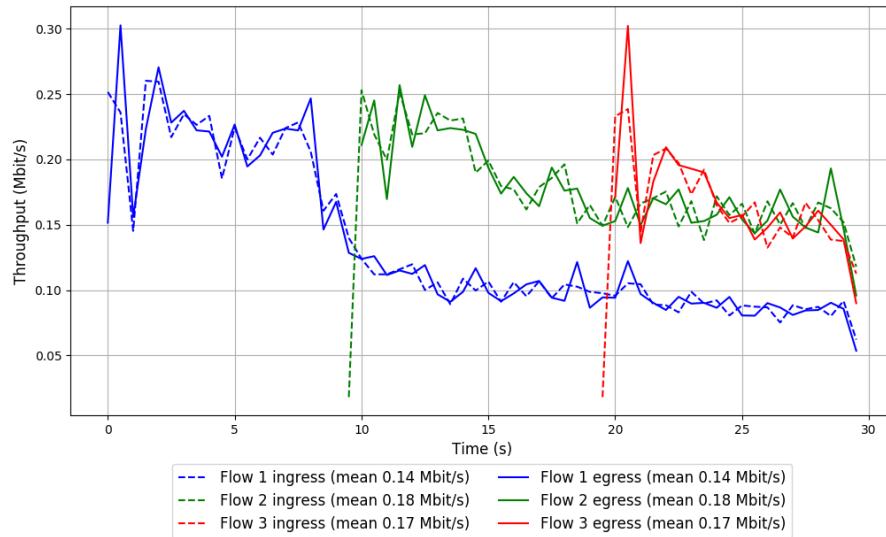
Figure is missing

Run 3: Statistics of SCReAM

```
Start at: 2018-01-31 10:48:47
End at: 2018-01-31 10:49:17
Local clock offset: -1.162 ms
Remote clock offset: 4.548 ms

# Below is generated by plot.py at 2018-01-31 12:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 138.820 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 145.142 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 134.655 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 130.911 ms
Loss rate: 1.31%
```

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

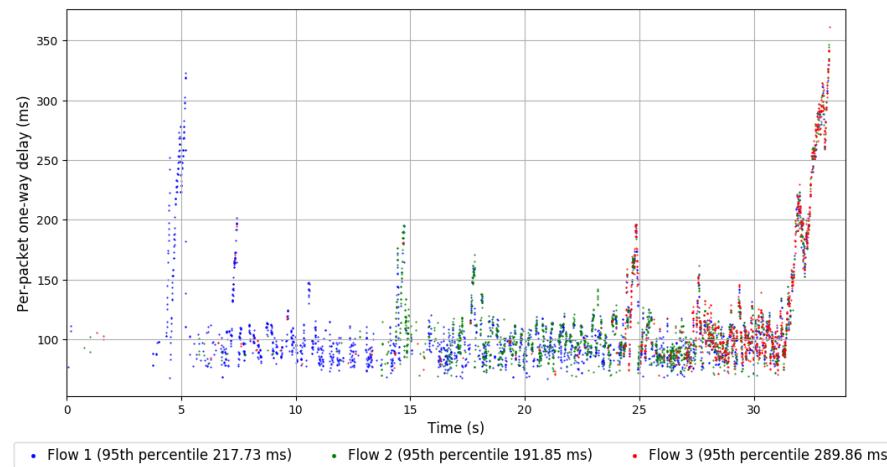
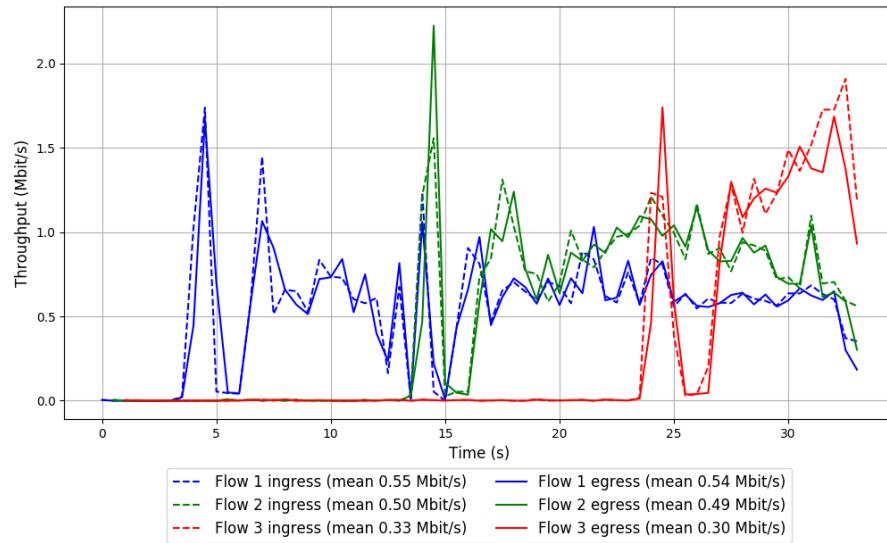


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-31 09:38:00
End at: 2018-01-31 09:38:30
Local clock offset: -1.163 ms
Remote clock offset: 4.452 ms

# Below is generated by plot.py at 2018-01-31 12:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 240.102 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 217.731 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 191.848 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 289.860 ms
Loss rate: 7.36%
```

## Run 1: Report of WebRTC media — Data Link

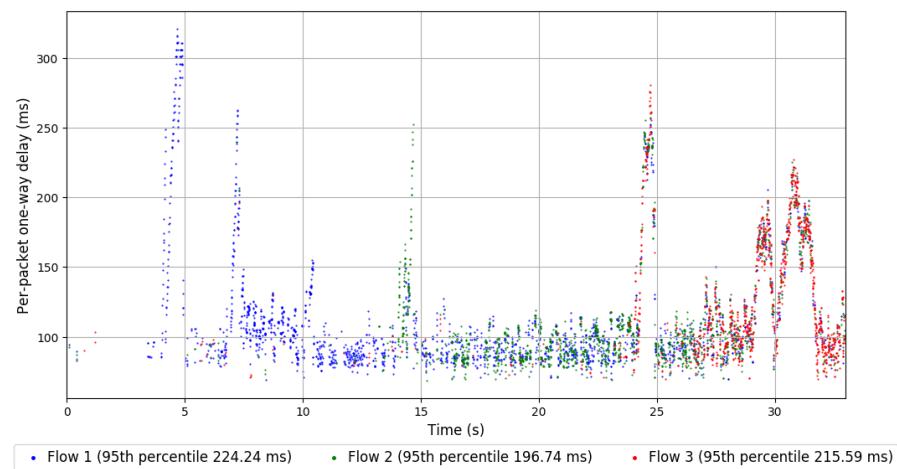
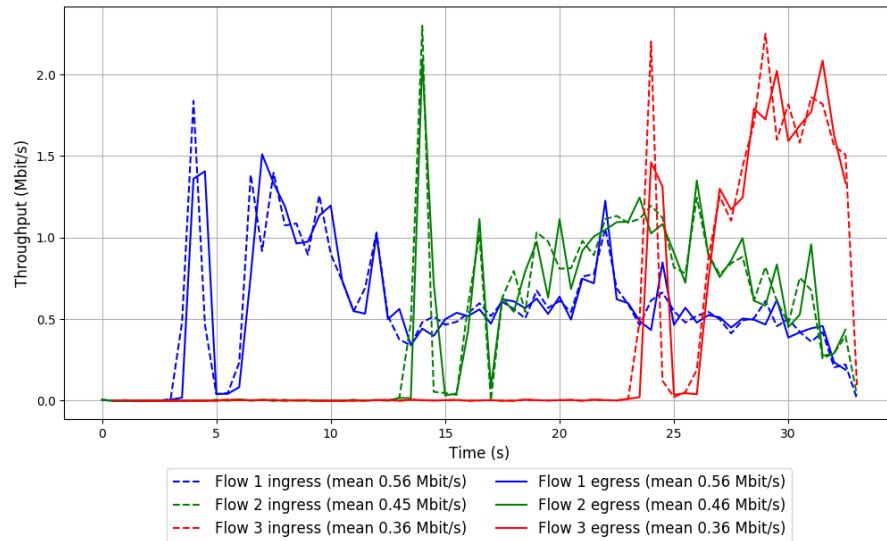


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-31 10:05:52
End at: 2018-01-31 10:06:22
Local clock offset: -1.175 ms
Remote clock offset: 4.083 ms

# Below is generated by plot.py at 2018-01-31 12:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 214.306 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 224.241 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 196.744 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 215.587 ms
Loss rate: 2.23%
```

Run 2: Report of WebRTC media — Data Link

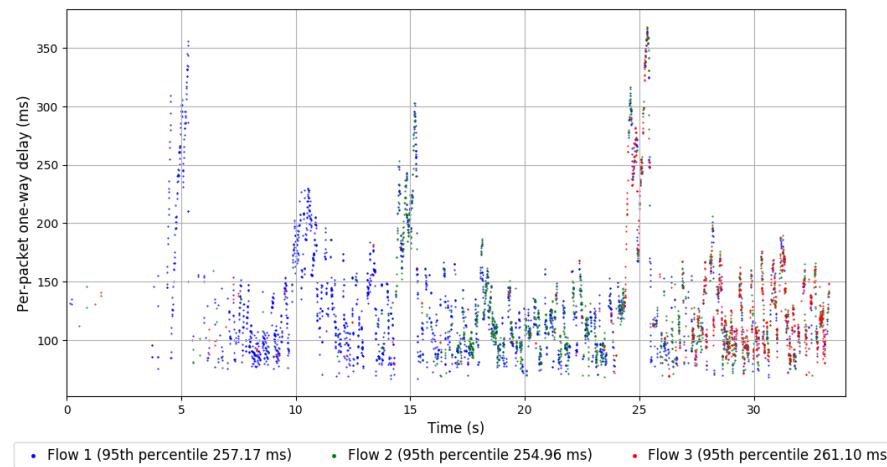
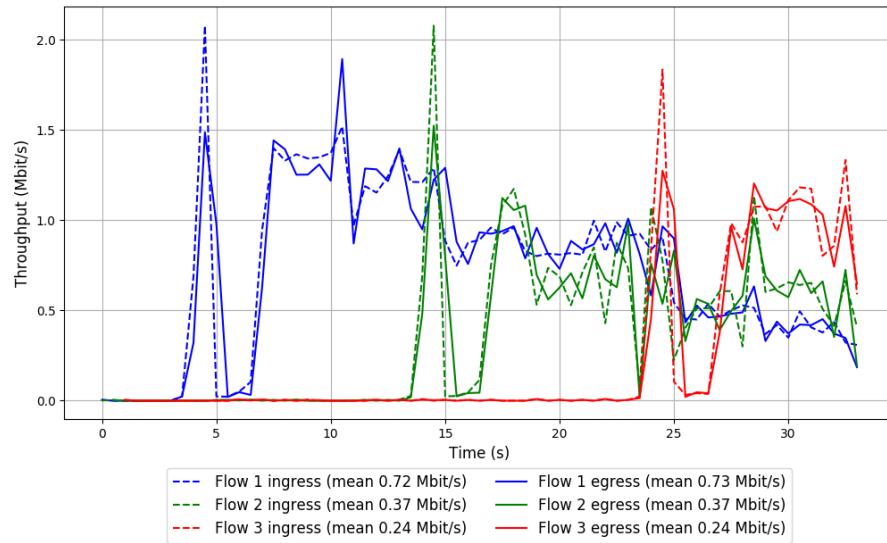


```
Run 3: Statistics of WebRTC media

Start at: 2018-01-31 10:34:03
End at: 2018-01-31 10:34:33
Local clock offset: -0.946 ms
Remote clock offset: 3.954 ms

# Below is generated by plot.py at 2018-01-31 12:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 258.872 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 257.173 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 254.964 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 261.098 ms
Loss rate: 2.51%
```

Run 3: Report of WebRTC media — Data Link

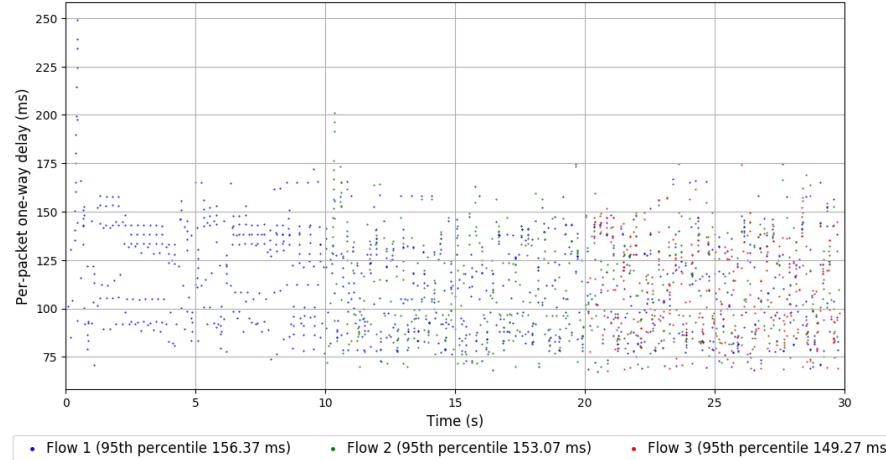
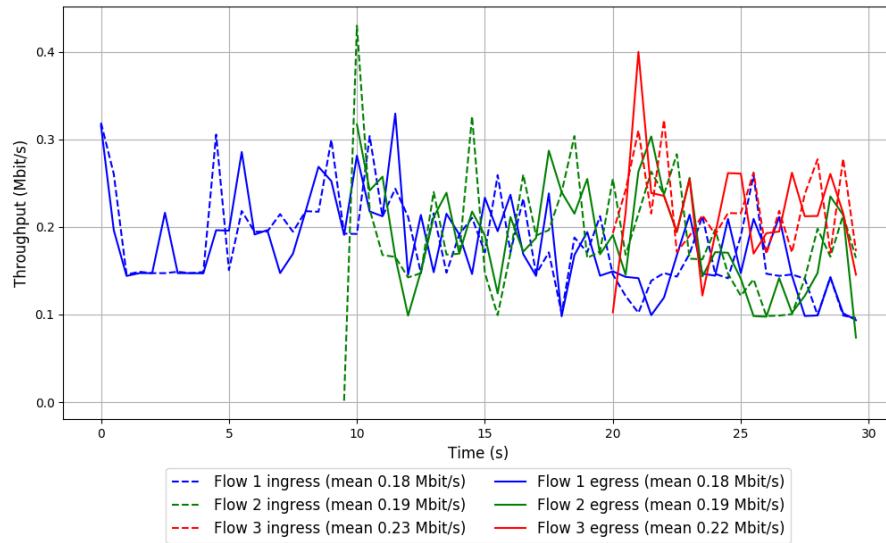


Run 1: Statistics of Sprout

```
Start at: 2018-01-31 09:58:31
End at: 2018-01-31 09:59:01
Local clock offset: -1.819 ms
Remote clock offset: 4.392 ms

# Below is generated by plot.py at 2018-01-31 12:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 153.067 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 156.372 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 153.067 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 149.267 ms
Loss rate: 2.08%
```

## Run 1: Report of Sprout — Data Link

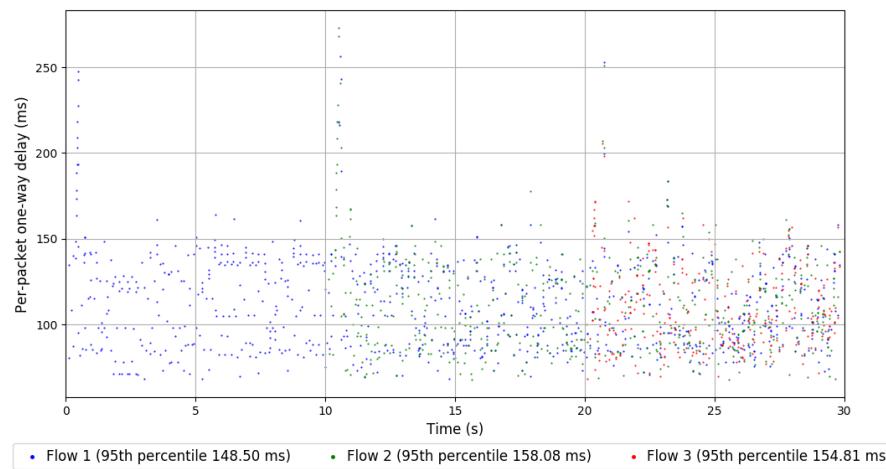
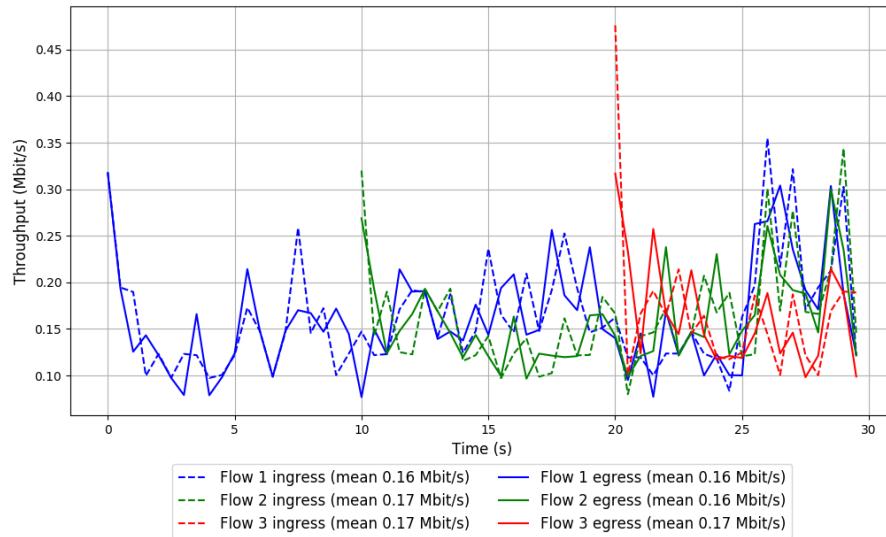


Run 2: Statistics of Sprout

```
Start at: 2018-01-31 10:26:46
End at: 2018-01-31 10:27:16
Local clock offset: -1.346 ms
Remote clock offset: 3.812 ms

# Below is generated by plot.py at 2018-01-31 12:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 151.840 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 148.499 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 158.081 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 154.812 ms
Loss rate: 2.77%
```

## Run 2: Report of Sprout — Data Link

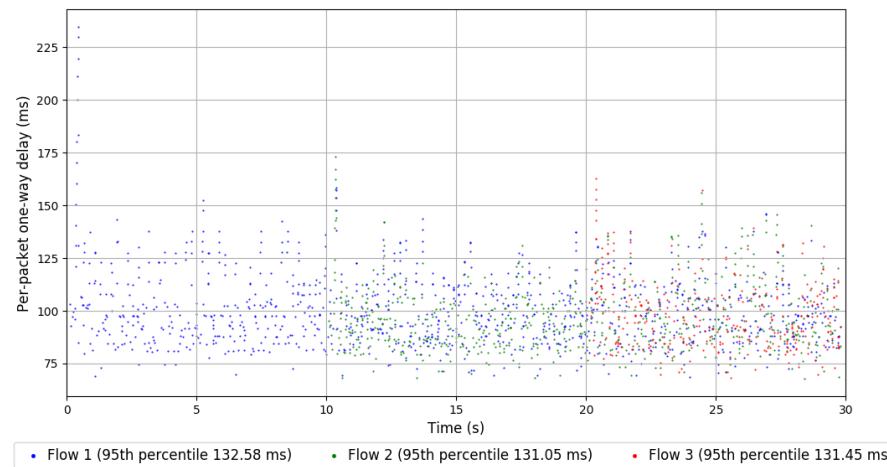
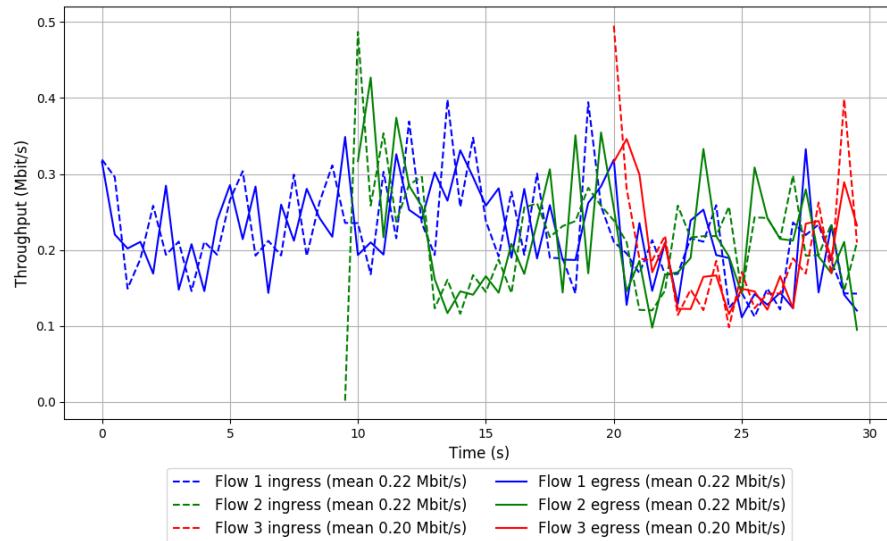


Run 3: Statistics of Sprout

```
Start at: 2018-01-31 10:53:09
End at: 2018-01-31 10:53:39
Local clock offset: -1.374 ms
Remote clock offset: 4.526 ms

# Below is generated by plot.py at 2018-01-31 12:28:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 132.148 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 132.579 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 131.054 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 131.454 ms
Loss rate: 2.29%
```

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

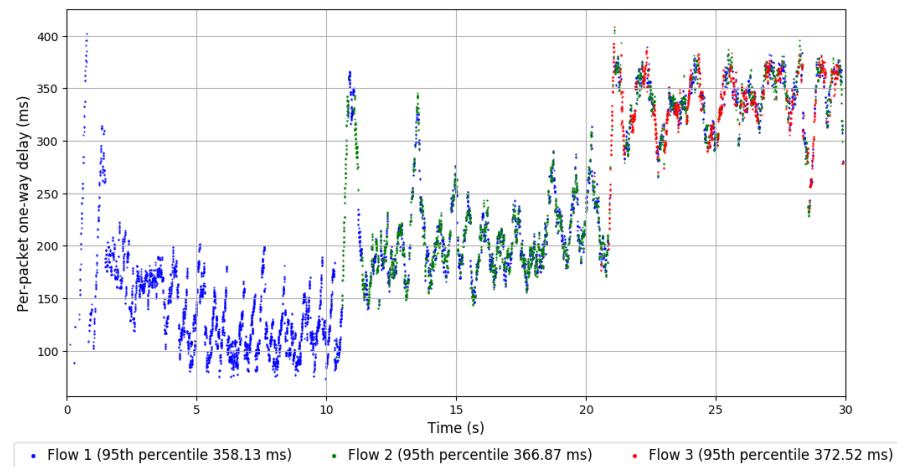
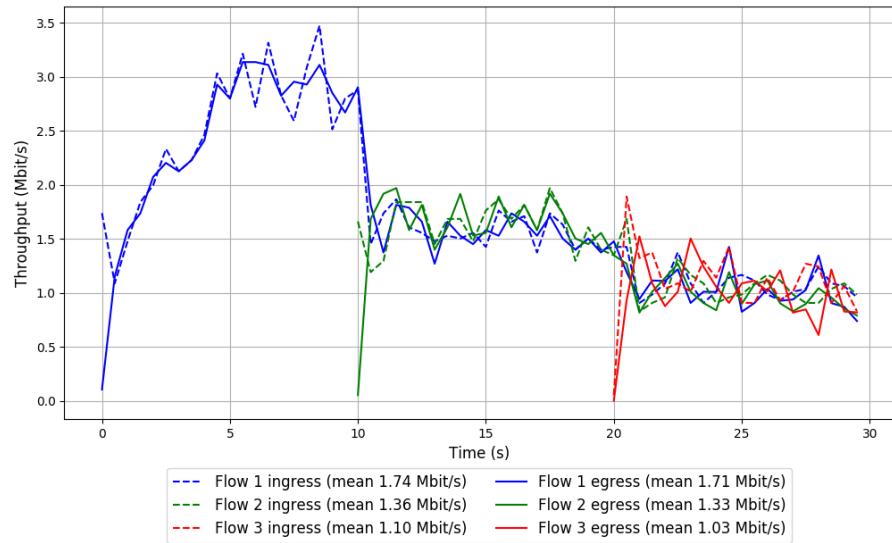


Run 1: Statistics of TaoVA-100x

```
Start at: 2018-01-31 09:39:26
End at: 2018-01-31 09:39:56
Local clock offset: -1.672 ms
Remote clock offset: 4.348 ms

# Below is generated by plot.py at 2018-01-31 12:28:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 365.975 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 358.132 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 366.866 ms
Loss rate: 3.43%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 372.516 ms
Loss rate: 9.81%
```

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

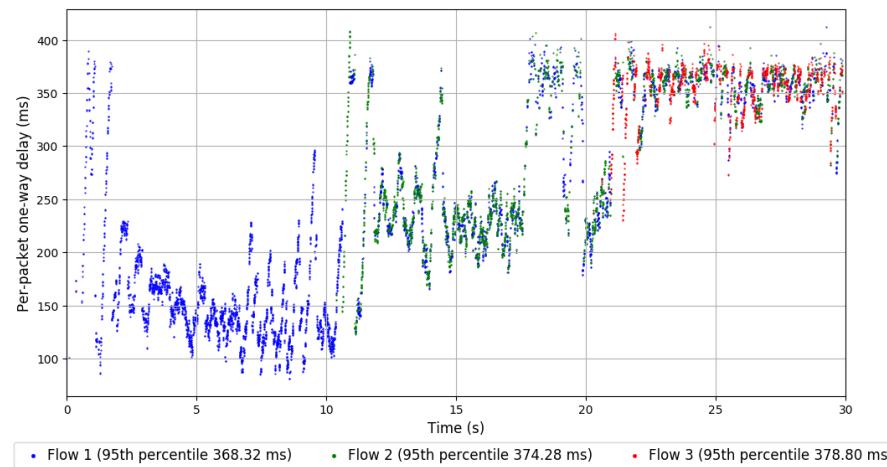
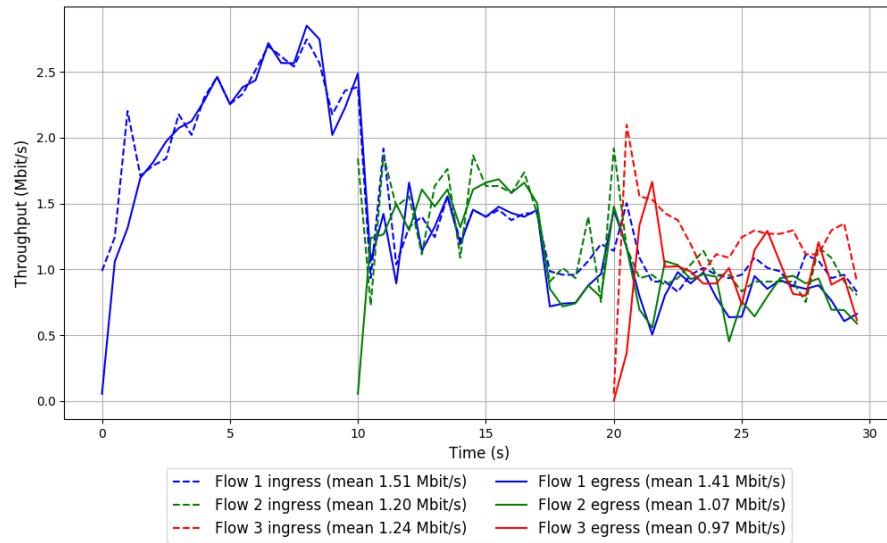


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-01-31 10:07:19
End at: 2018-01-31 10:07:49
Local clock offset: -1.647 ms
Remote clock offset: 3.978 ms

# Below is generated by plot.py at 2018-01-31 12:28:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 372.721 ms
Loss rate: 11.06%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 368.317 ms
Loss rate: 6.95%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 374.276 ms
Loss rate: 12.13%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 378.803 ms
Loss rate: 24.07%
```

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

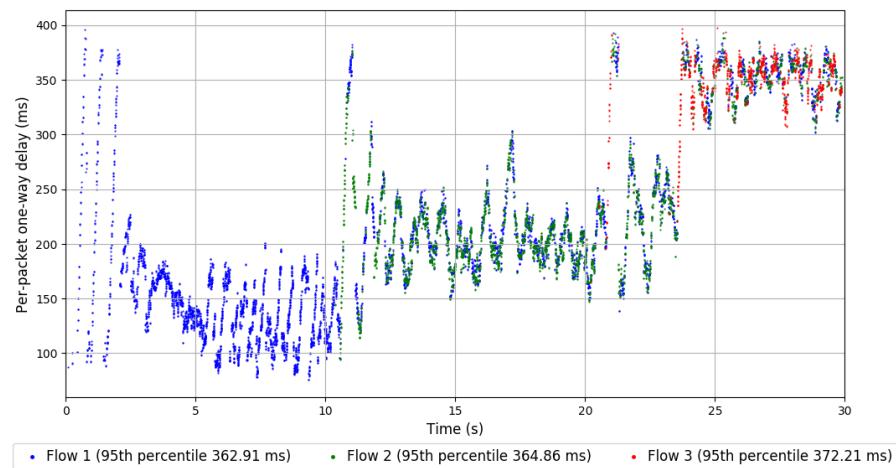
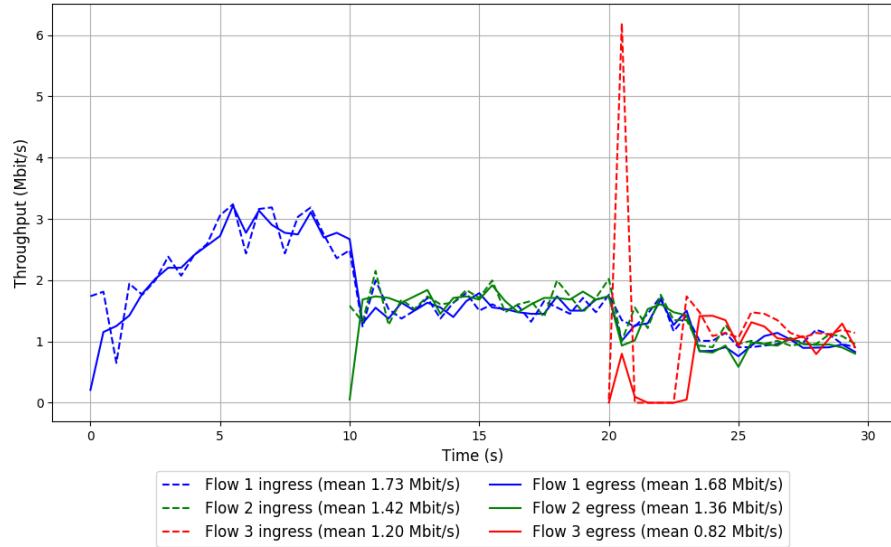


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-01-31 10:35:30
End at: 2018-01-31 10:36:00
Local clock offset: -1.747 ms
Remote clock offset: 4.064 ms

# Below is generated by plot.py at 2018-01-31 12:28:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 366.347 ms
Loss rate: 7.85%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 362.913 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 364.857 ms
Loss rate: 4.99%
-- Flow 3:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 372.207 ms
Loss rate: 33.59%
```

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

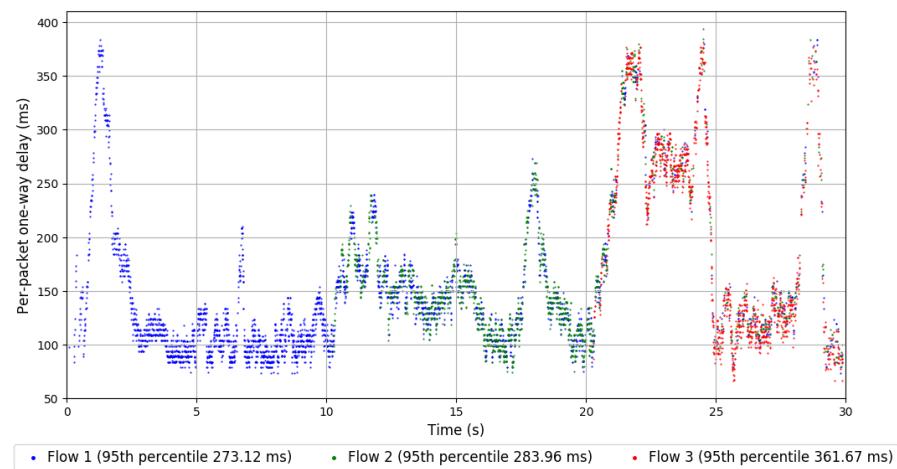
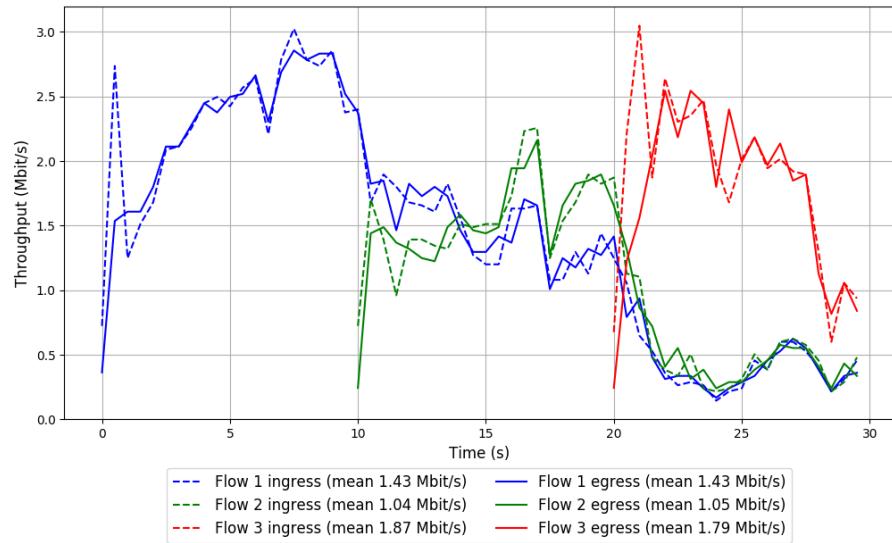


Run 1: Statistics of TCP Vegas

```
Start at: 2018-01-31 09:40:58
End at: 2018-01-31 09:41:28
Local clock offset: -1.39 ms
Remote clock offset: 4.324 ms

# Below is generated by plot.py at 2018-01-31 12:28:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 328.700 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 273.117 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 283.960 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 361.670 ms
Loss rate: 6.02%
```

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

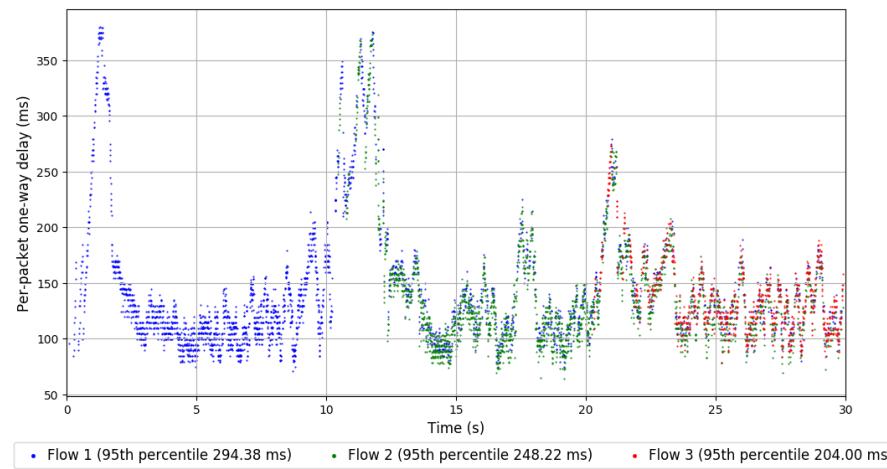
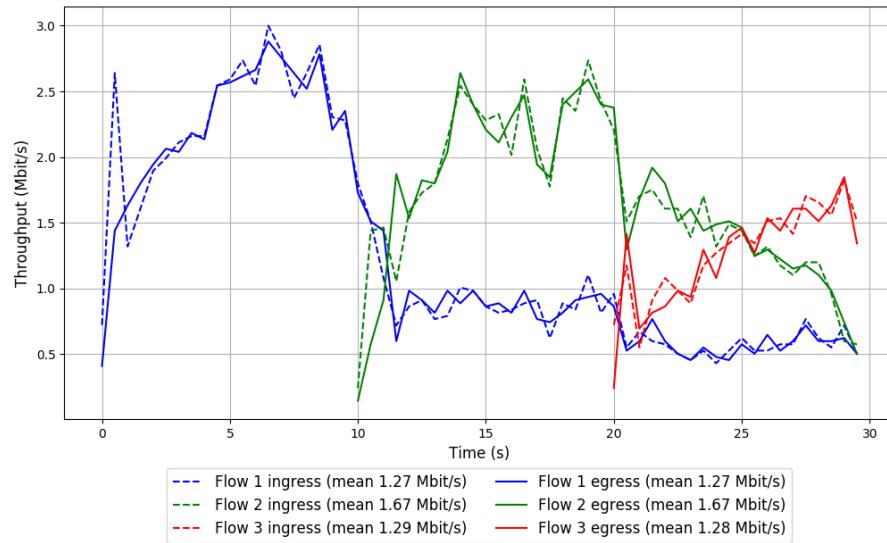


Run 2: Statistics of TCP Vegas

```
Start at: 2018-01-31 10:08:48
End at: 2018-01-31 10:09:18
Local clock offset: -1.182 ms
Remote clock offset: 4.023 ms

# Below is generated by plot.py at 2018-01-31 12:28:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 258.746 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 294.377 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 248.217 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 204.000 ms
Loss rate: 2.34%
```

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

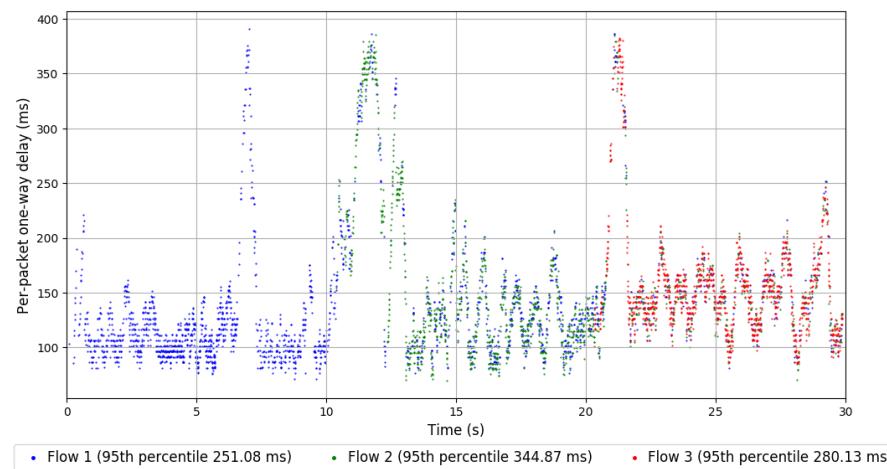
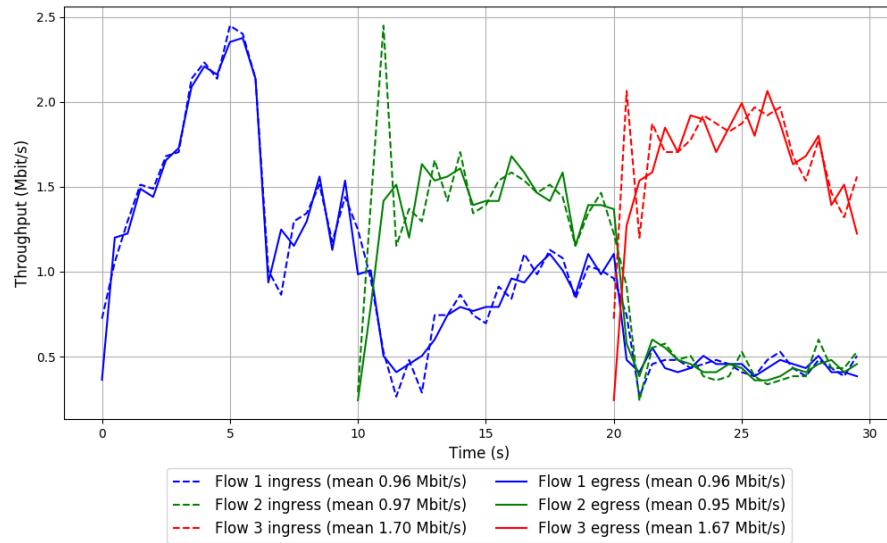


Run 3: Statistics of TCP Vegas

```
Start at: 2018-01-31 10:37:00
End at: 2018-01-31 10:37:30
Local clock offset: -1.337 ms
Remote clock offset: 4.131 ms

# Below is generated by plot.py at 2018-01-31 12:28:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 306.055 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 251.082 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 344.867 ms
Loss rate: 3.18%
-- Flow 3:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 280.131 ms
Loss rate: 3.56%
```

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

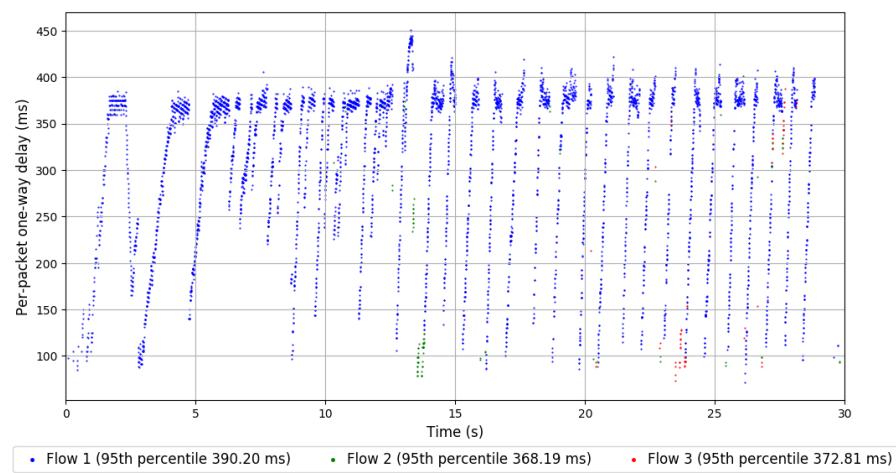
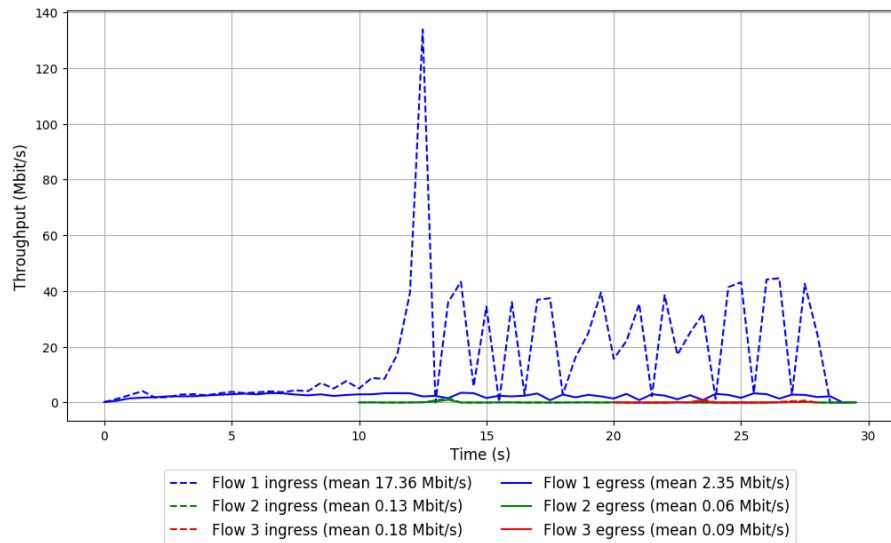


Run 1: Statistics of Verus

```
Start at: 2018-01-31 09:55:29
End at: 2018-01-31 09:55:59
Local clock offset: -1.277 ms
Remote clock offset: 4.294 ms

# Below is generated by plot.py at 2018-01-31 12:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 389.960 ms
Loss rate: 86.27%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 390.200 ms
Loss rate: 86.54%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 368.192 ms
Loss rate: 52.13%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 372.814 ms
Loss rate: 50.42%
```

## Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/verus\_st

Run 2: Report of Verus — Data Link

Figure is missing

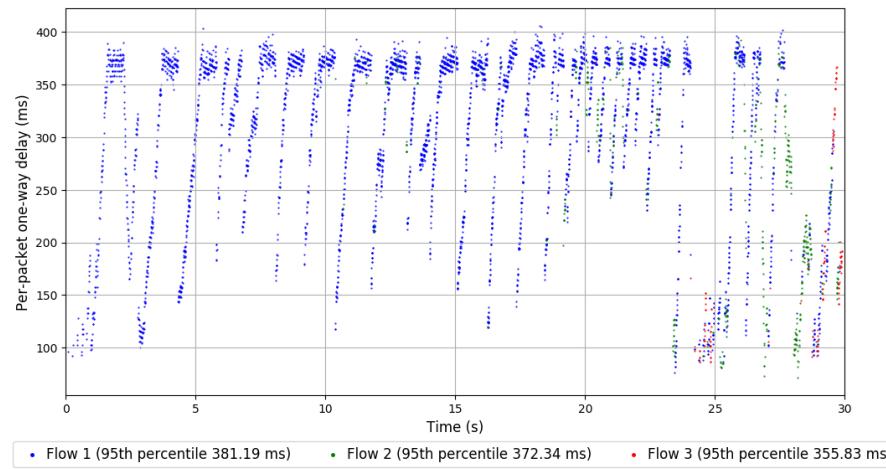
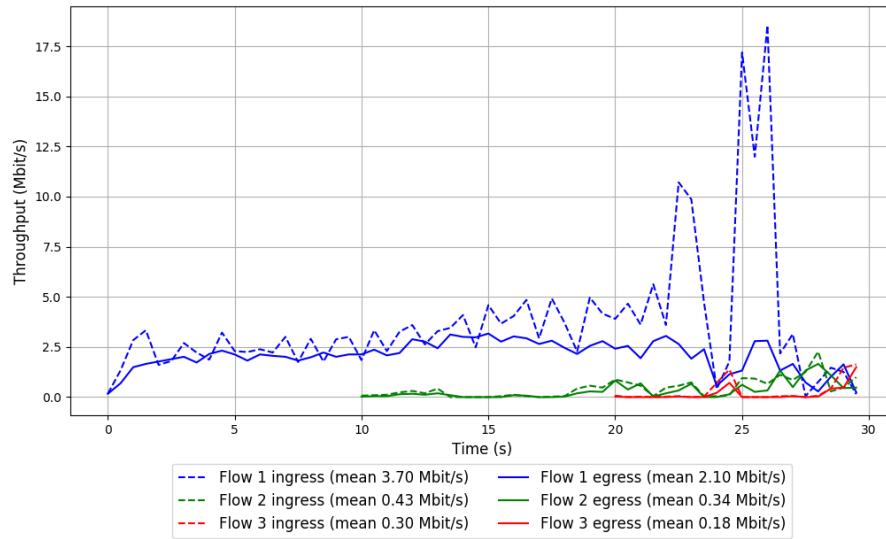
Figure is missing

Run 3: Statistics of Verus

```
Start at: 2018-01-31 10:50:13
End at: 2018-01-31 10:50:43
Local clock offset: -0.958 ms
Remote clock offset: 4.539 ms

# Below is generated by plot.py at 2018-01-31 12:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 380.560 ms
Loss rate: 42.31%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 381.188 ms
Loss rate: 43.72%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 372.337 ms
Loss rate: 24.14%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 355.833 ms
Loss rate: 42.46%
```

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

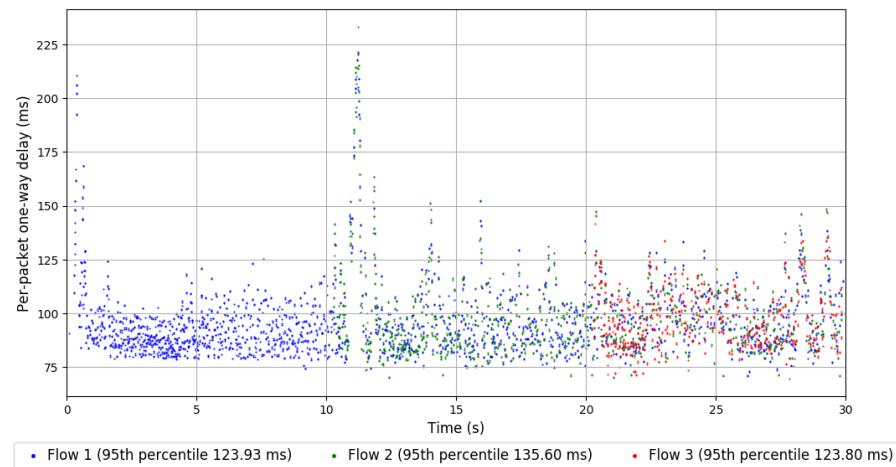
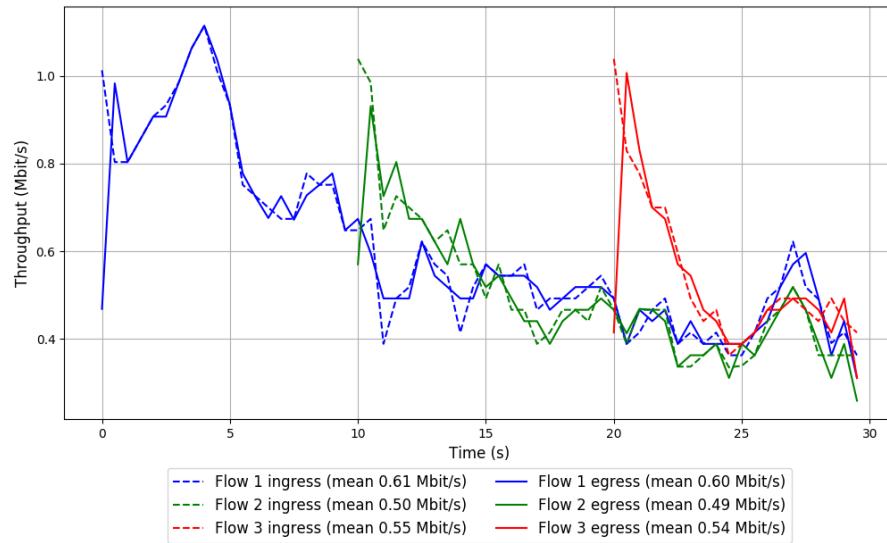


Run 1: Statistics of Copa

```
Start at: 2018-01-31 09:42:26
End at: 2018-01-31 09:42:56
Local clock offset: -1.444 ms
Remote clock offset: 4.289 ms

# Below is generated by plot.py at 2018-01-31 12:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 126.895 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 123.934 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 135.601 ms
Loss rate: 2.23%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 123.796 ms
Loss rate: 4.31%
```

## Run 1: Report of Copa — Data Link

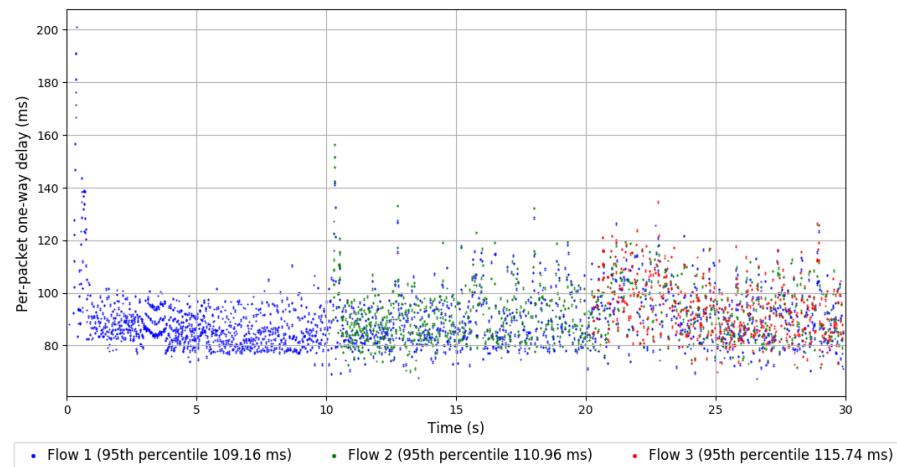
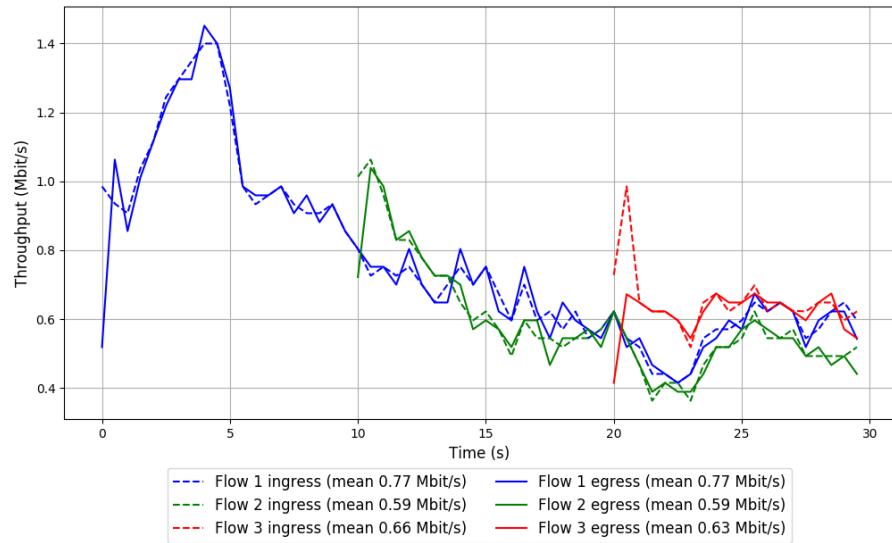


Run 2: Statistics of Copa

```
Start at: 2018-01-31 10:10:16
End at: 2018-01-31 10:10:46
Local clock offset: -1.211 ms
Remote clock offset: 3.924 ms

# Below is generated by plot.py at 2018-01-31 12:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 111.152 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 109.157 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 110.957 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 115.740 ms
Loss rate: 5.40%
```

## Run 2: Report of Copa — Data Link

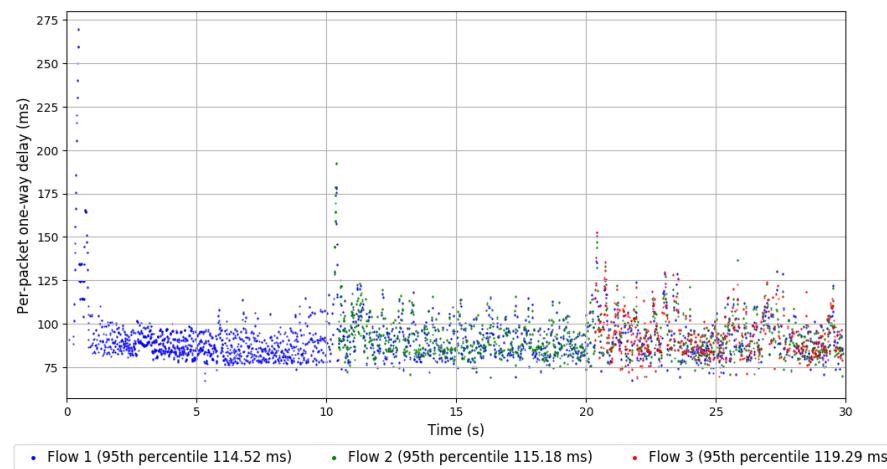
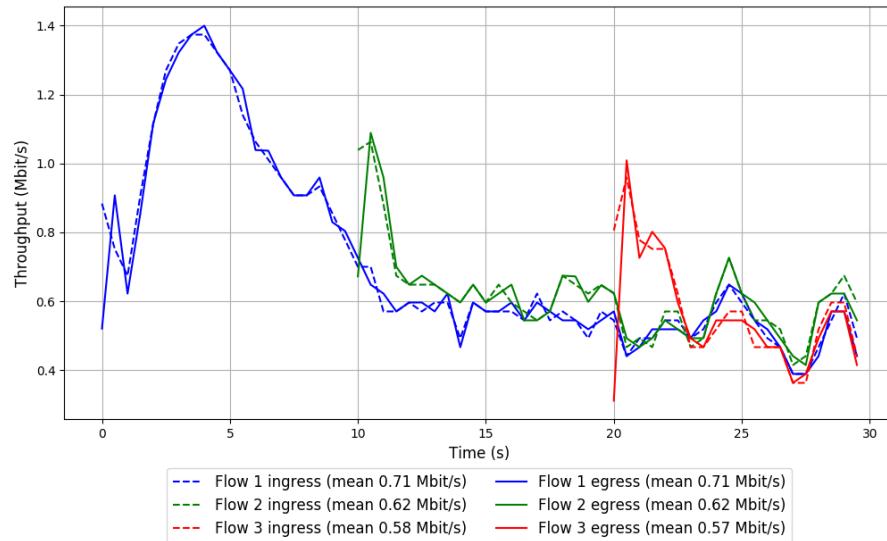


Run 3: Statistics of Copa

```
Start at: 2018-01-31 10:38:28
End at: 2018-01-31 10:38:58
Local clock offset: -1.725 ms
Remote clock offset: 4.156 ms

# Below is generated by plot.py at 2018-01-31 12:29:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 115.272 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 114.520 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 115.183 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 119.293 ms
Loss rate: 4.30%
```

### Run 3: Report of Copa — Data Link



Run 1: Statistics of FillP

/home/ubuntu/pantheon\_data/2018-01-31T09-34-China-ppp0-to-AWS-Korea-3-runs-3-flows/fillp\_st

Run 1: Report of FillP — Data Link

Figure is missing

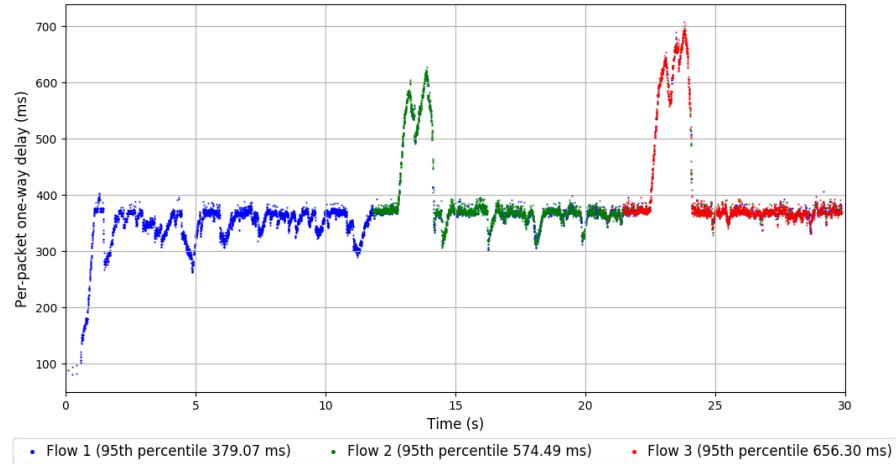
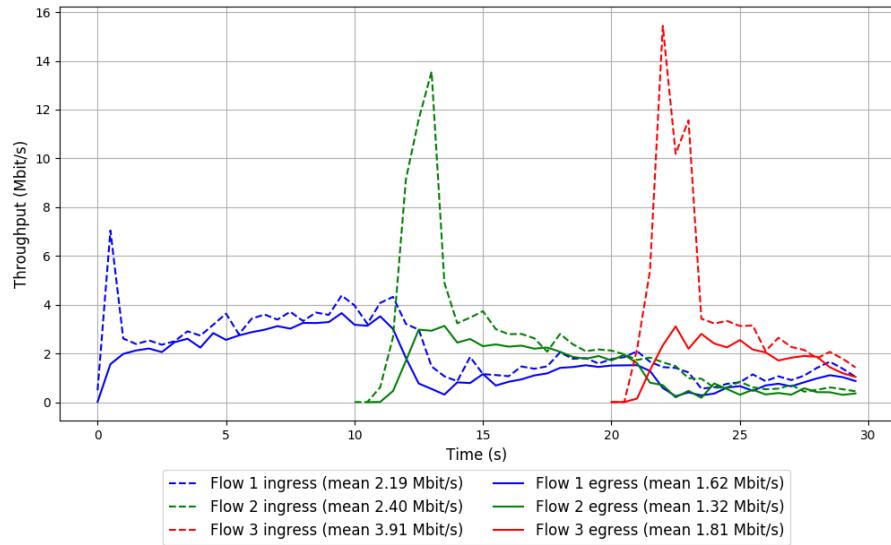
Figure is missing

Run 2: Statistics of FillP

```
Start at: 2018-01-31 10:11:43
End at: 2018-01-31 10:12:13
Local clock offset: -1.228 ms
Remote clock offset: 3.91 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 573.264 ms
Loss rate: 40.27%
-- Flow 1:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 379.069 ms
Loss rate: 26.11%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 574.488 ms
Loss rate: 47.23%
-- Flow 3:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 656.301 ms
Loss rate: 55.65%
```

## Run 2: Report of FillP — Data Link

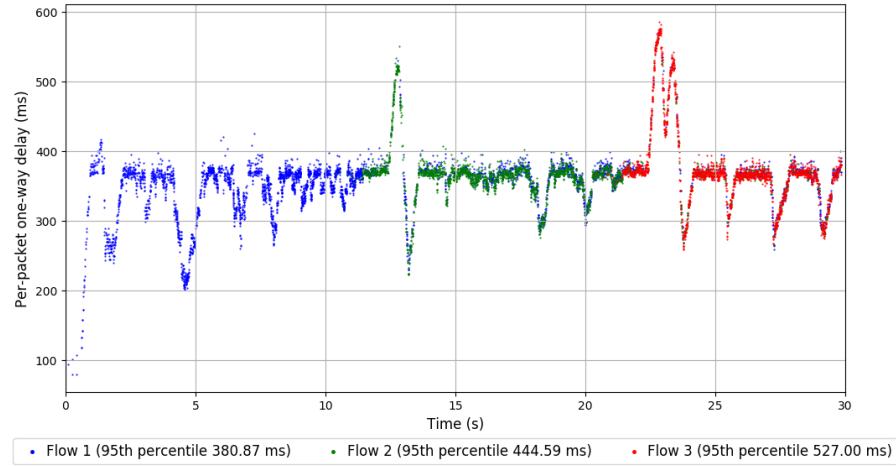
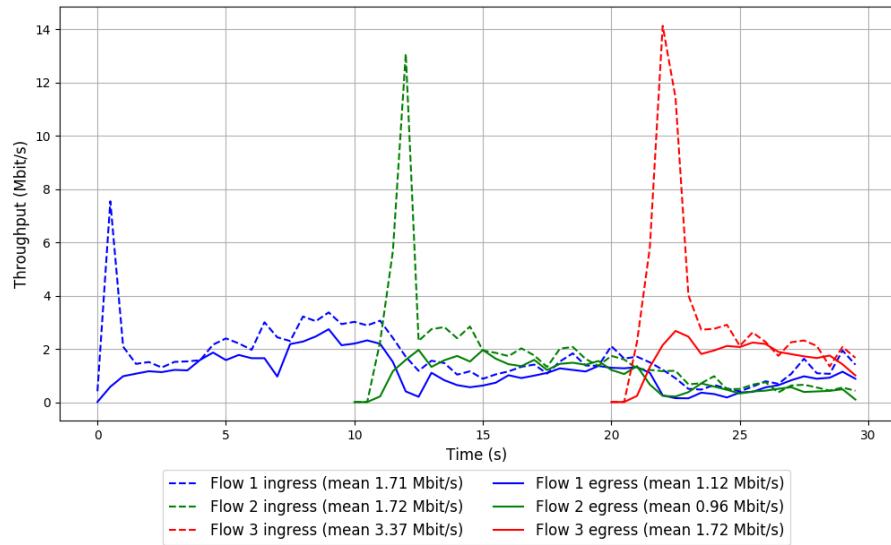


Run 3: Statistics of FillP

```
Start at: 2018-01-31 10:39:55
End at: 2018-01-31 10:40:25
Local clock offset: -1.341 ms
Remote clock offset: 4.205 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 438.566 ms
Loss rate: 42.68%
-- Flow 1:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 380.865 ms
Loss rate: 35.00%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 444.591 ms
Loss rate: 45.83%
-- Flow 3:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 527.000 ms
Loss rate: 51.23%
```

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

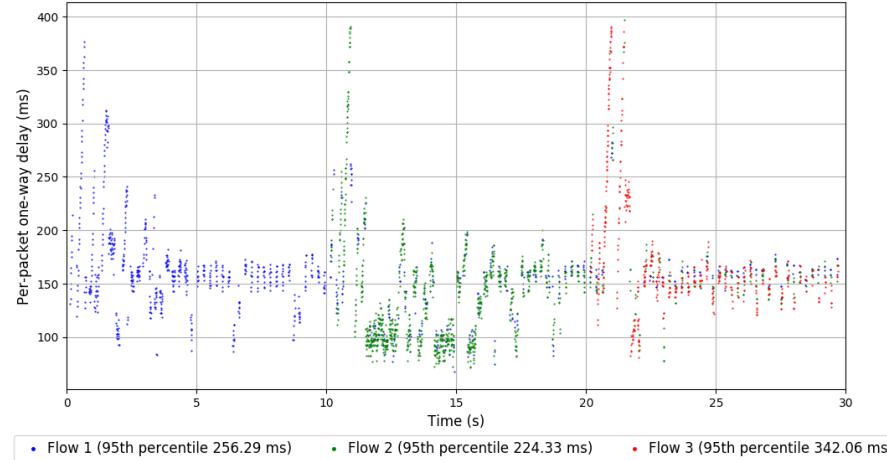
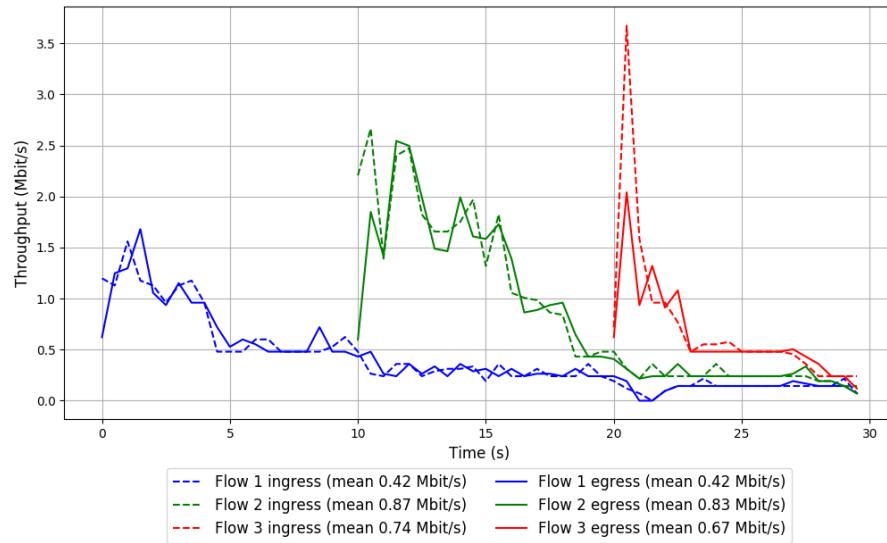


Run 1: Statistics of Indigo-1-32

```
Start at: 2018-01-31 09:59:56
End at: 2018-01-31 10:00:26
Local clock offset: -1.448 ms
Remote clock offset: 4.41 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 269.335 ms
Loss rate: 5.58%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 256.285 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 224.329 ms
Loss rate: 6.02%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 342.064 ms
Loss rate: 12.89%
```

Run 1: Report of Indigo-1-32 — Data Link

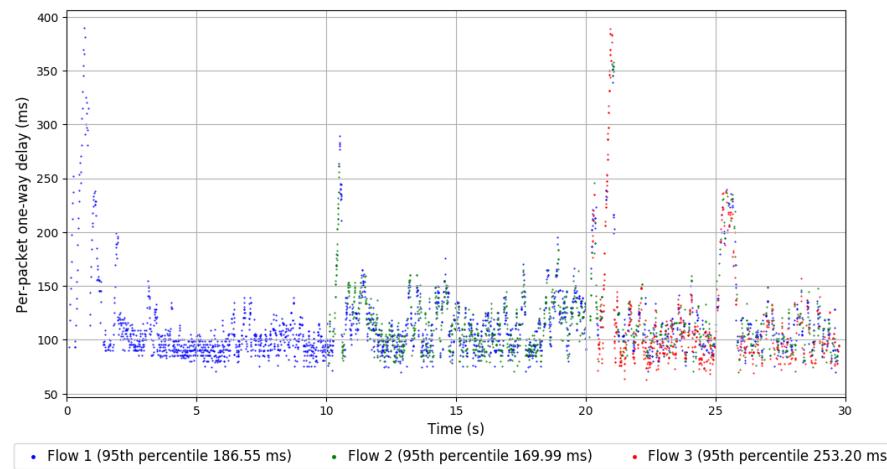
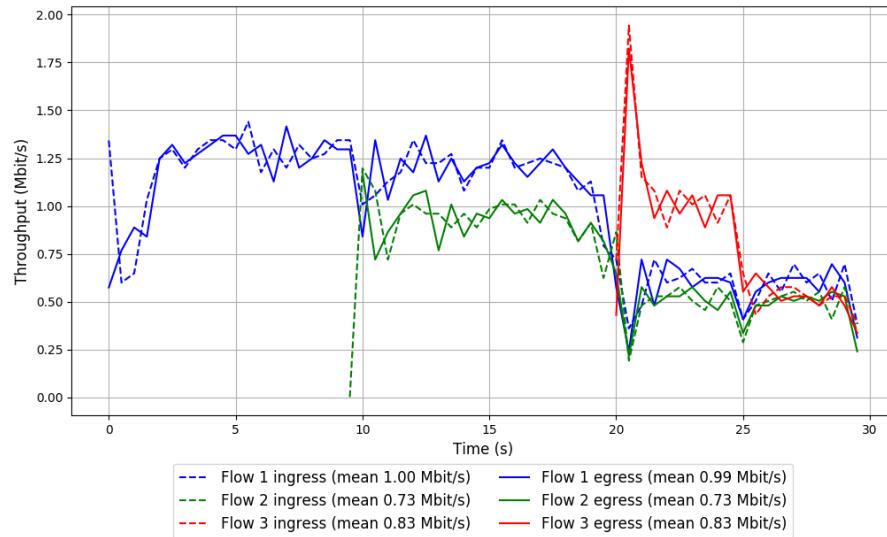


Run 2: Statistics of Indigo-1-32

```
Start at: 2018-01-31 10:28:12
End at: 2018-01-31 10:28:42
Local clock offset: -1.118 ms
Remote clock offset: 3.79 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 202.242 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 186.549 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 169.985 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 253.198 ms
Loss rate: 2.38%
```

## Run 2: Report of Indigo-1-32 — Data Link

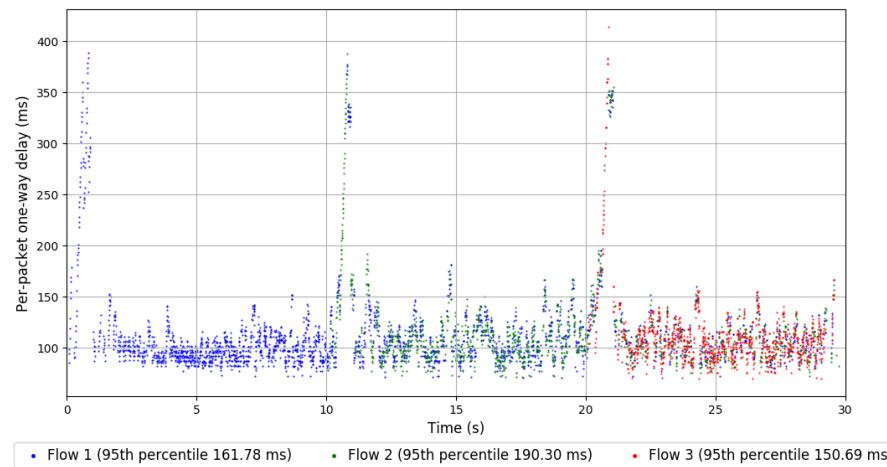
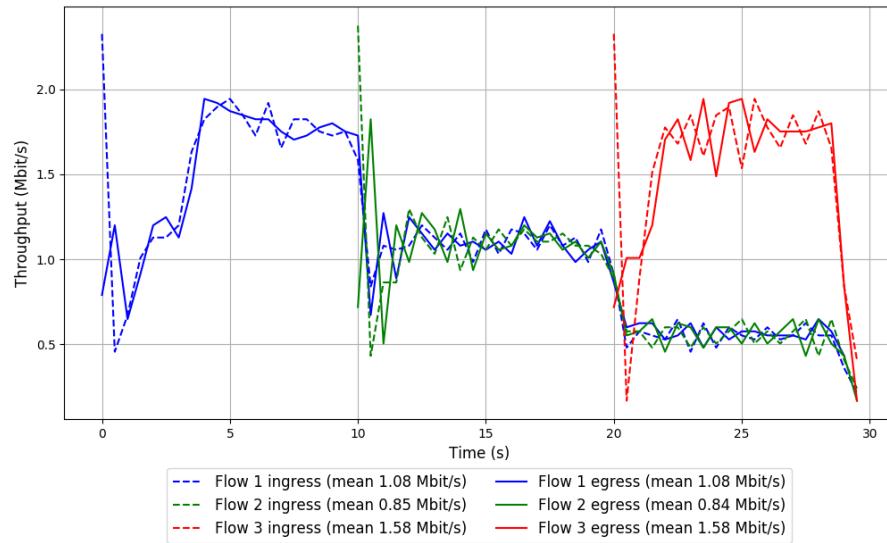


Run 3: Statistics of Indigo-1-32

```
Start at: 2018-01-31 10:54:36
End at: 2018-01-31 10:55:06
Local clock offset: -1.297 ms
Remote clock offset: 4.472 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.13 Mbit/s
95th percentile per-packet one-way delay: 167.056 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 161.778 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 190.303 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 150.685 ms
Loss rate: 3.67%
```

Run 3: Report of Indigo-1-32 — Data Link

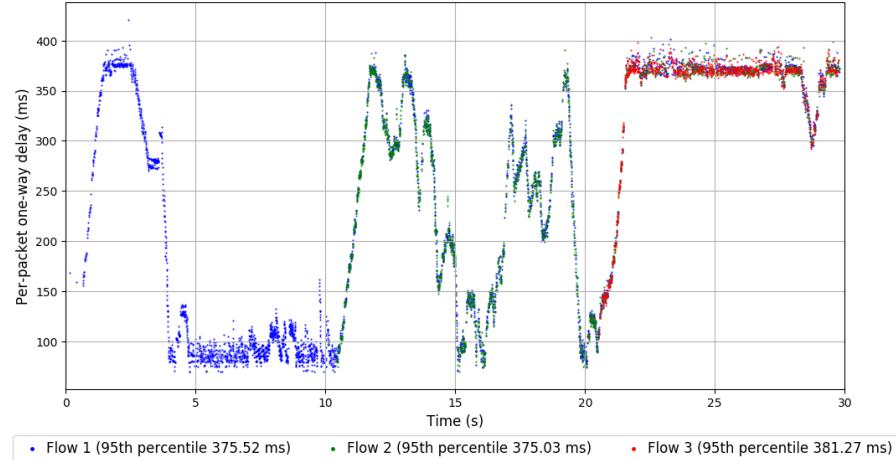
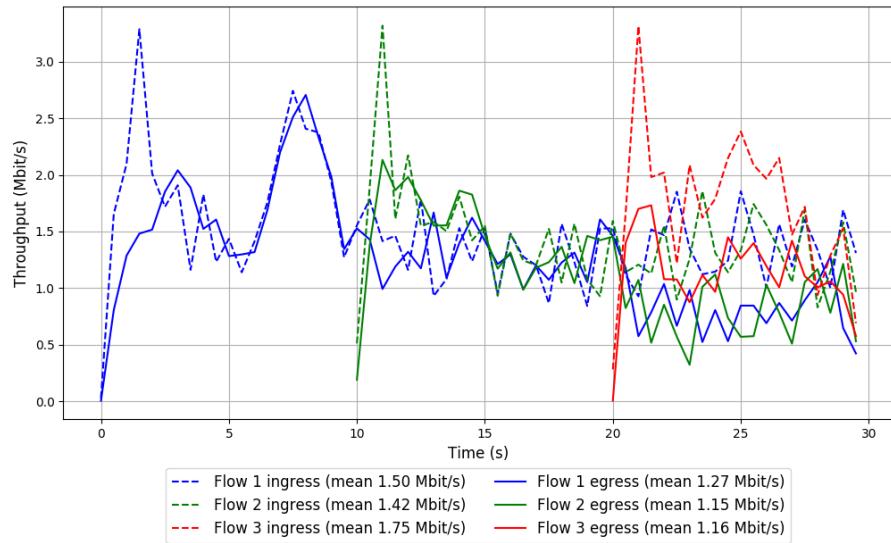


```
Run 1: Statistics of Vivace-latency
```

```
Start at: 2018-01-31 09:36:31
End at: 2018-01-31 09:37:01
Local clock offset: -1.05 ms
Remote clock offset: 4.511 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 376.603 ms
Loss rate: 20.52%
-- Flow 1:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 375.517 ms
Loss rate: 15.81%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 375.027 ms
Loss rate: 19.22%
-- Flow 3:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 381.272 ms
Loss rate: 34.89%
```

Run 1: Report of Vivace-latency — Data Link

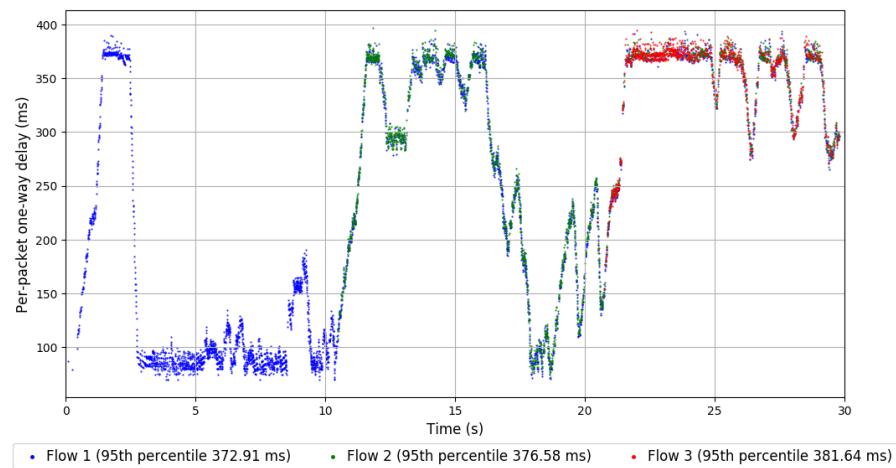
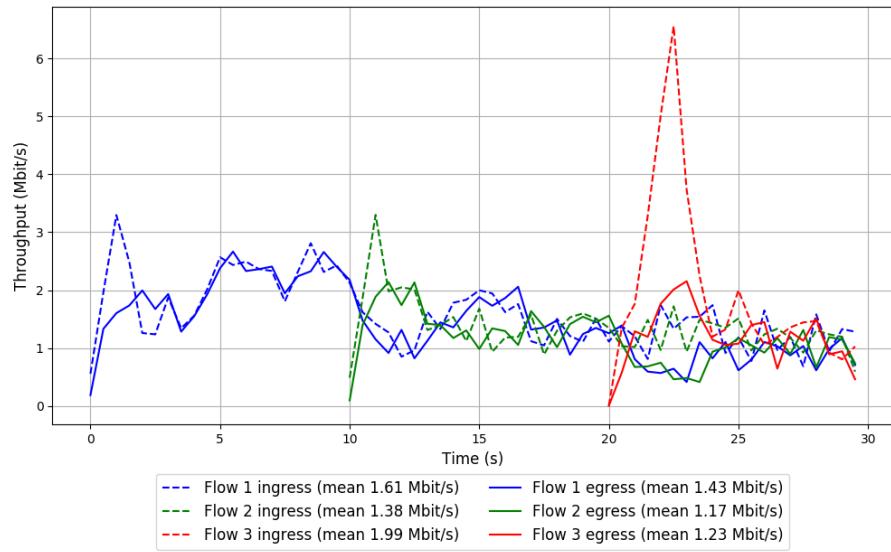


Run 2: Statistics of Vivace-latency

```
Start at: 2018-01-31 10:04:20
End at: 2018-01-31 10:04:50
Local clock offset: -1.395 ms
Remote clock offset: 4.156 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 376.321 ms
Loss rate: 18.47%
-- Flow 1:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 372.911 ms
Loss rate: 11.27%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 376.580 ms
Loss rate: 15.76%
-- Flow 3:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 381.639 ms
Loss rate: 39.92%
```

## Run 2: Report of Vivace-latency — Data Link

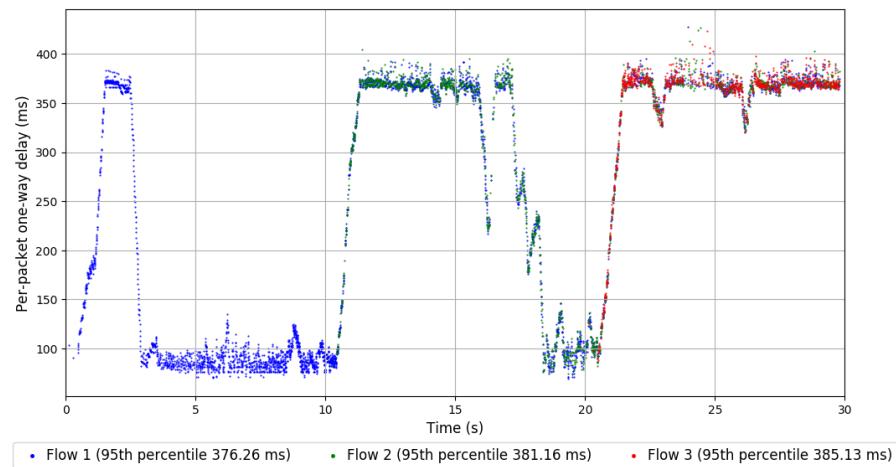
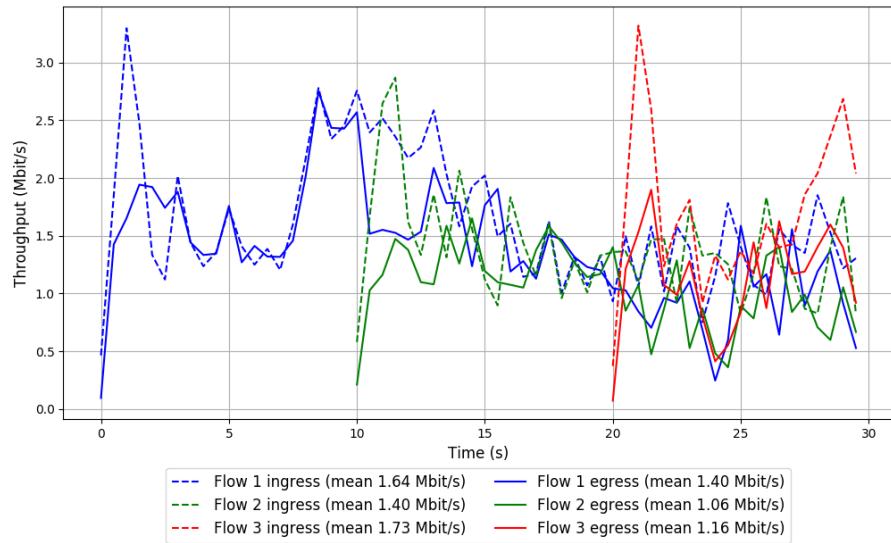


Run 3: Statistics of Vivace-latency

```
Start at: 2018-01-31 10:32:34
End at: 2018-01-31 10:33:04
Local clock offset: -1.206 ms
Remote clock offset: 3.892 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 379.543 ms
Loss rate: 21.45%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 376.260 ms
Loss rate: 15.03%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 381.163 ms
Loss rate: 24.74%
-- Flow 3:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 385.135 ms
Loss rate: 34.50%
```

Run 3: Report of Vivace-latency — Data Link

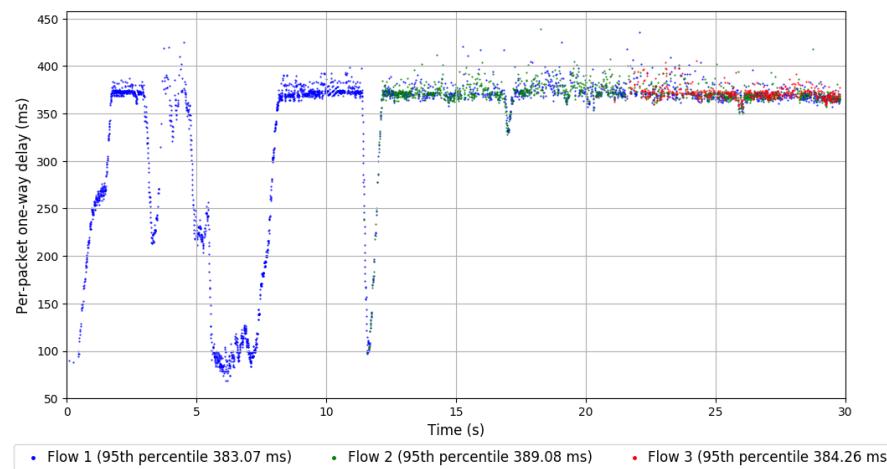
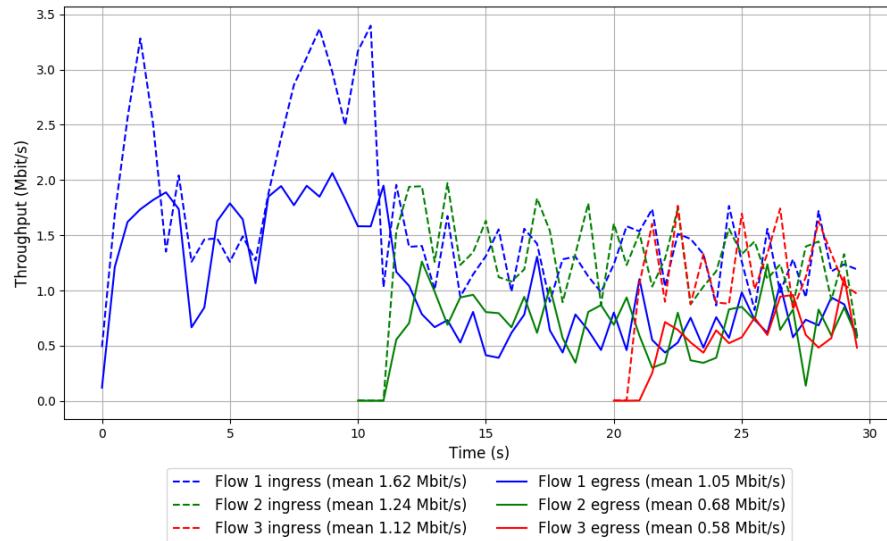


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-31 09:35:03
End at: 2018-01-31 09:35:33
Local clock offset: -1.708 ms
Remote clock offset: 4.621 ms

# Below is generated by plot.py at 2018-01-31 12:29:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 384.669 ms
Loss rate: 40.68%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 383.069 ms
Loss rate: 35.48%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 389.083 ms
Loss rate: 46.39%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 384.256 ms
Loss rate: 50.84%
```

## Run 1: Report of Vivace-loss — Data Link

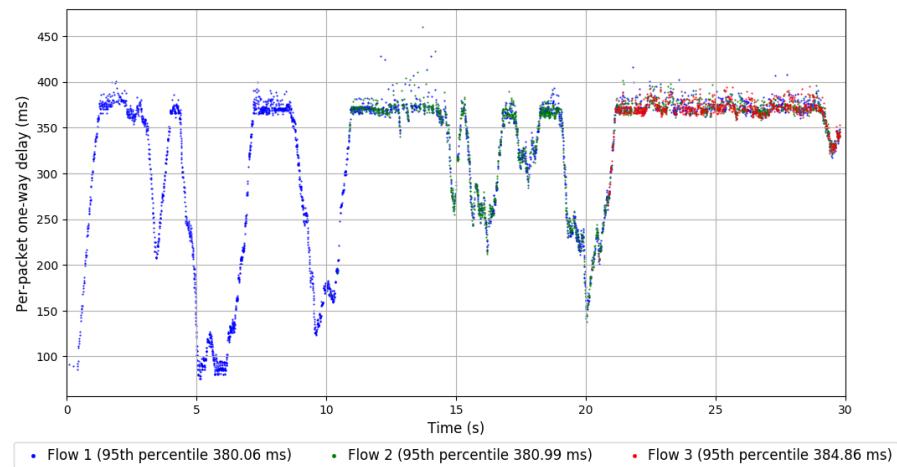
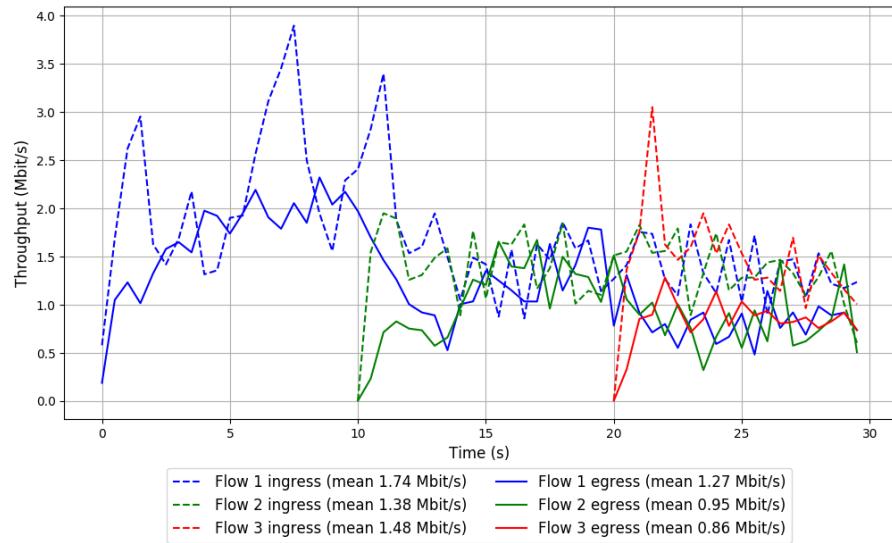


Run 2: Statistics of Vivace-loss

```
Start at: 2018-01-31 10:02:49
End at: 2018-01-31 10:03:19
Local clock offset: -1.461 ms
Remote clock offset: 4.266 ms

# Below is generated by plot.py at 2018-01-31 12:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 381.155 ms
Loss rate: 31.12%
-- Flow 1:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 380.060 ms
Loss rate: 27.20%
-- Flow 2:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 380.994 ms
Loss rate: 31.98%
-- Flow 3:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 384.855 ms
Loss rate: 43.47%
```

## Run 2: Report of Vivace-loss — Data Link

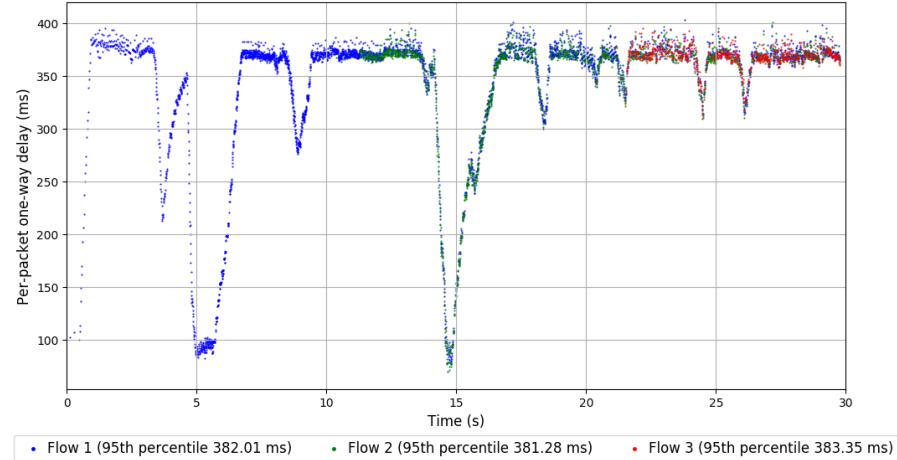
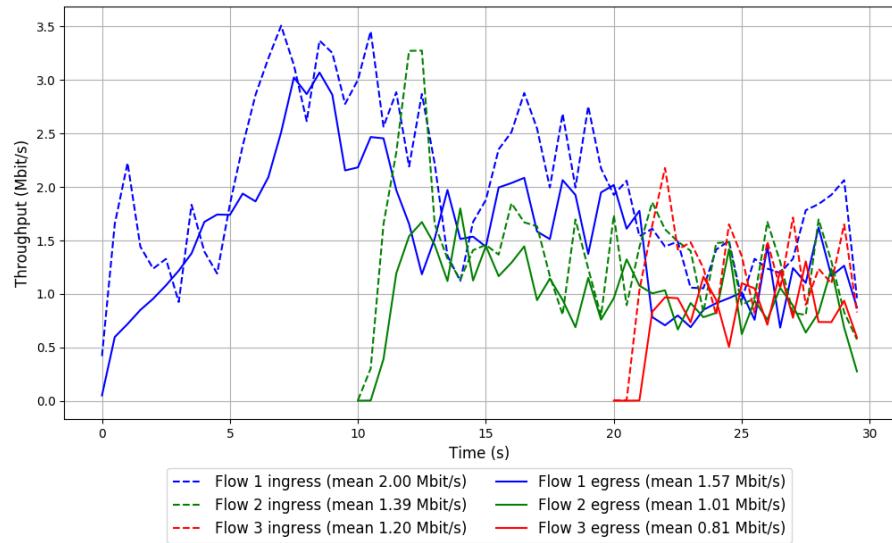


```
Run 3: Statistics of Vivace-loss
```

```
Start at: 2018-01-31 10:31:05
End at: 2018-01-31 10:31:35
Local clock offset: -1.217 ms
Remote clock offset: 3.843 ms

# Below is generated by plot.py at 2018-01-31 12:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 382.020 ms
Loss rate: 25.50%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 382.015 ms
Loss rate: 22.04%
-- Flow 2:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 381.284 ms
Loss rate: 28.84%
-- Flow 3:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 383.353 ms
Loss rate: 35.25%
```

Run 3: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-01-31 09:49:25

End at: 2018-01-31 09:49:55

Local clock offset: -1.865 ms

Remote clock offset: 4.251 ms

## Run 1: Report of Vivace-LTE — Data Link

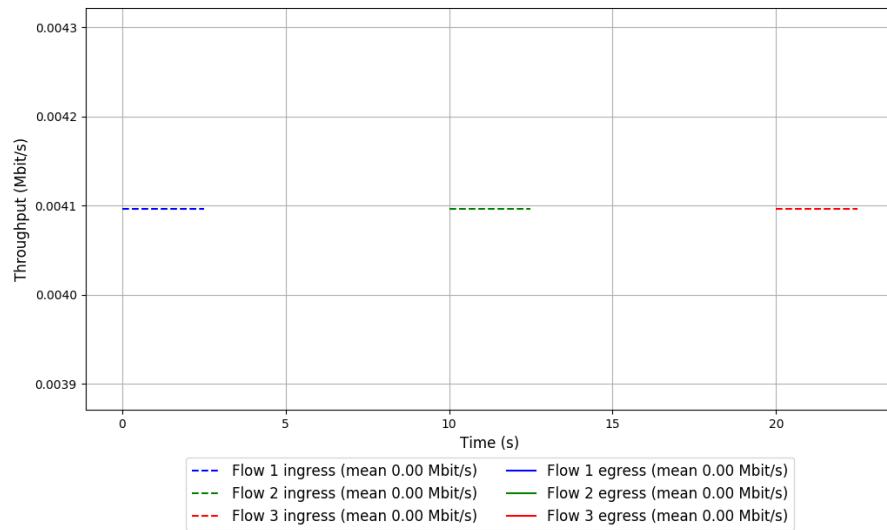


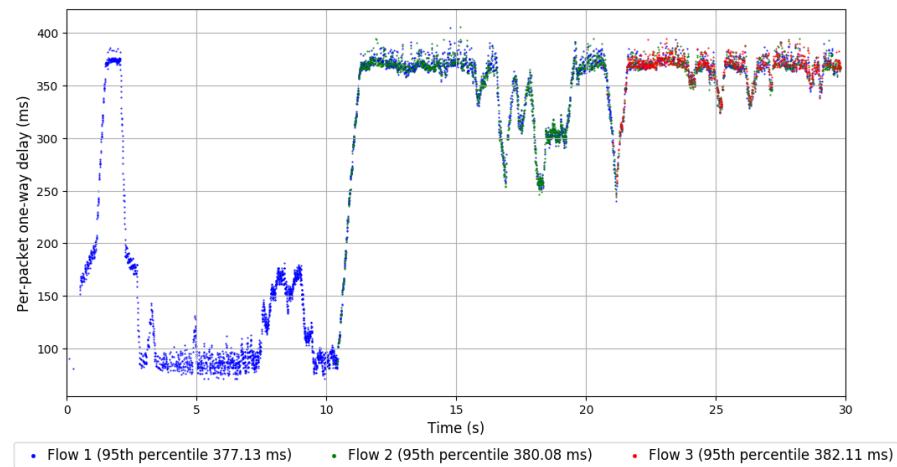
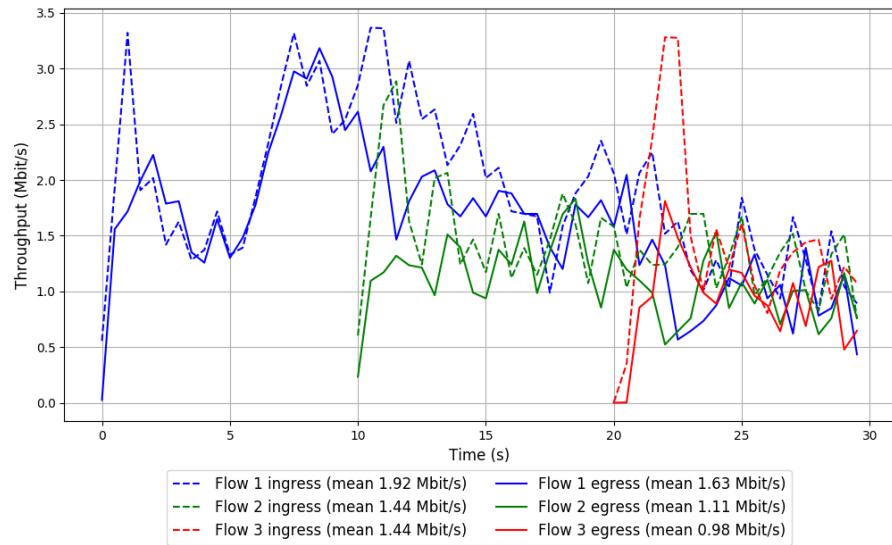
Figure is missing

Run 2: Statistics of Vivace-LTE

```
Start at: 2018-01-31 10:17:09
End at: 2018-01-31 10:17:39
Local clock offset: -1.272 ms
Remote clock offset: 3.788 ms

# Below is generated by plot.py at 2018-01-31 12:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 378.971 ms
Loss rate: 20.74%
-- Flow 1:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 377.128 ms
Loss rate: 15.62%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 380.081 ms
Loss rate: 23.91%
-- Flow 3:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 382.114 ms
Loss rate: 34.97%
```

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

```
Start at: 2018-01-31 10:44:21
End at: 2018-01-31 10:44:51
Local clock offset: -1.123 ms
Remote clock offset: 4.343 ms

# Below is generated by plot.py at 2018-01-31 12:29:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 381.641 ms
Loss rate: 25.89%
-- Flow 1:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 379.665 ms
Loss rate: 21.59%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 386.688 ms
Loss rate: 31.05%
-- Flow 3:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 380.137 ms
Loss rate: 30.10%
```

Run 3: Report of Vivace-LTE — Data Link

