

*interactive**turn*Process: P.send [def] (0)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: P -> Q (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.recv [ack]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: Q -> P (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.send [ack] (0)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

or automatic

Next

Next 20

Next 100

Controller (0)

total turns

Some packets not yet recieved.

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

p-window = 9

Process: P.send [def] (0)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

efficiency = unique / total

Channel: P -> Q (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

transfer = sent/rcvd

Process: Q.recv [ack]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

*throughput =
unique / turn
total / turn*

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

*avg. latency
per packet*

Channel: Q -> P (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.send [ack]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

total latency

Next

Next 20

Next 100

current automatic turn

Controller (0)

Some packets not yet recieved.

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

this packet will be auto sent when P.send turn comes

Process: P.send [def] (0)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

sent times

sent turn

Channel: P -> Q (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.recv [ack]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: Q -> P (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

no packets recieved

Process: Q.send [ack]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

no acknowledgements ready to send

Next

Next 20

Next 100

Controller (0)

Some packets not yet recieved.

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.send [def] (1)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: P -> Q (0)

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/1 (0%), Effic: 0/1 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.recv [ack]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: Q -> P (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.send [ack] (0)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Next

Next 20

Next 100

Controller (1)

Some packets not yet recieved.

Txfr: 0/1 (0%), Effic: 0/1 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.send [def] (1)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: P -> Q (1)

sent 1 from PQ to QR

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Sent: 1 [1], Rcvd: 1 [0]

Txfr: 1/1 (100%), Effic: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 1.00 (1)

Process: Q.recv [ack]

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 0.00 (1)

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: Q -> P (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.send [ack] (0)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

ready to ACK

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Next

Next 20

Next 100

Controller (2)

Some packets not yet recieved.

Txfr: 0/1 (0%), Effic: 0/1 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.send [def] (1)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: P -> Q (1)

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 1/1 (100%), Effic: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 1.00 (1)

Process: Q.recv [ack]

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Sent: 0 [0], Rcvd: 1 [1]

Rcvd: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 0.00 (1)

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: Q -> P (0)

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/0 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.send [ack] (0)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

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Controller (2)

Some packets not yet recieved.

Txfr: 0/1 (0%), Effic: 0/1 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: P.send [def] (1)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: P -> Q (1)

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 1/1 (100%), Effic: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 1.00 (1)

Process: Q.recv [ack]

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 1.00 (1)

Process: P.recv [def]

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 0/54 (0%), Effic: 0/0 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: Q -> P (0)

-1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 0/1 (0%), Effic: 0/1 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Process: Q.send [ack] (1)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 1/54 (2%), Effic: 1/1 (100%)
Thpt: 0.50/0.50 (2), Latn: 2.00 (2)

Q sent ACK for 1
to QP

Next

Next 20

Next 100

Controller (3)

Some packets not yet recieved.

Txfr: 0/1 (0%), Effic: 0/1 (0%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

← 1 packet sent by P but
not recieved 1 ACK

ActivitiesOperaMay 4 21:29

SlidingWindow3localhost:8000/src/SlidingWindow3.elm

Process: P.send [def] (1)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 1/54 (2%), Effc: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 0.00 (0)

Channel: P -> Q (1)

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 1/1 (100%), Effc: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 1.00 (1)

Process: Q.recv [ack]

1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 1/54 (2%), Effc: 1/1 (100%)
Thpt: 1.00/1.00 (1), Latn: 1.00 (1)

Process: P.recv [def]

-1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 1/54 (2%), Effc: 1/1 (100%)
Thpt: 0.33/0.33 (3), Latn: 3.00 (3)

Channel: Q -> P (1)

-1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Sent: 1 [3], Rcvd: 1 [2]
Txfr: 1/1 (100%), Effc: 1/1 (100%)
Thpt: 0.33/0.33 (3), Latn: 1.00 (1)

Process: Q.send [ack]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 1/54 (2%), Effc: 1/1 (100%)
Thpt: 0.50/0.50 (2), Latn: 2.00 (2)

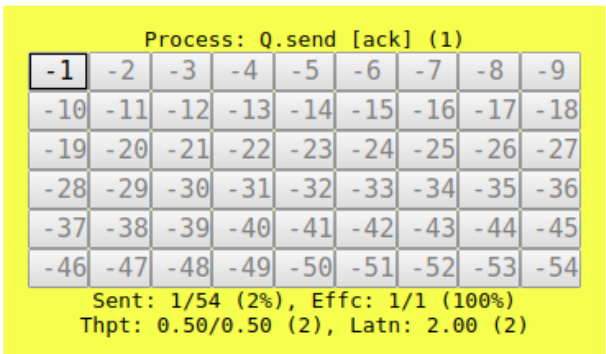
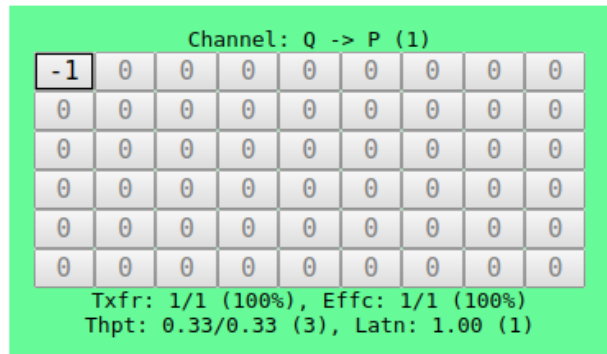
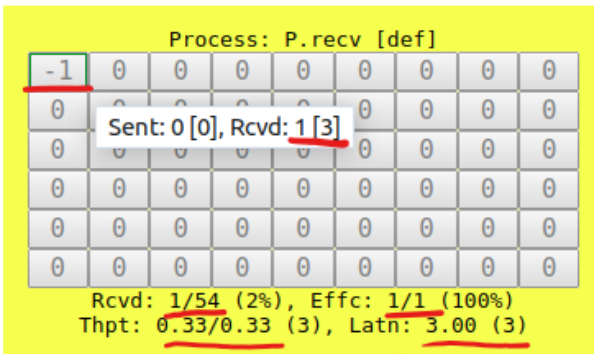
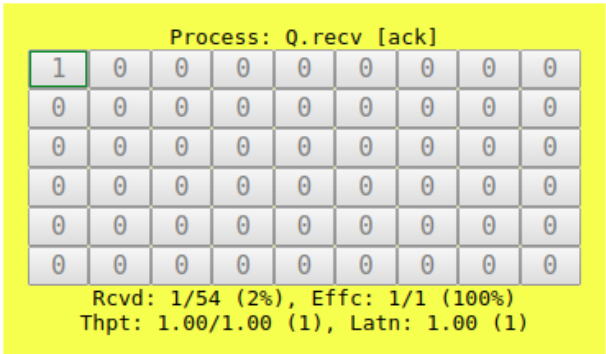
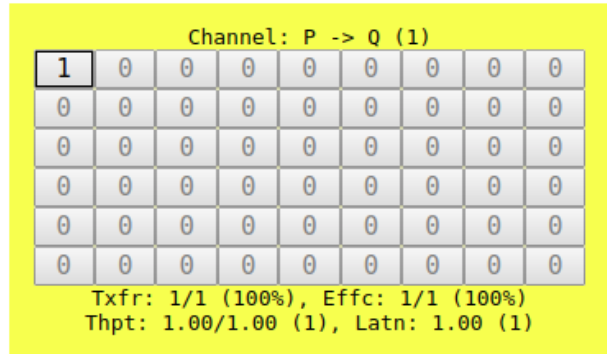
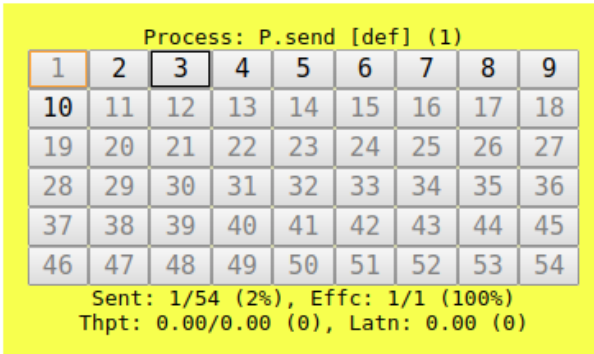
ACK for 1 has now been recieved

Next

Next 20

Next 100

Controller (4)
Some packets not yet recieved.
Txfr: 1/1 (100%), Effc: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 3.00 (3)



1 packet ↑
in 3 turns

3 turns
per packet

Next Next 20 Next 100

Controller (4)
Some packets not yet recieved.

Txfr: 1/1 (100%), Effic: 1/1 (100%)
Thpt: 0.00/0.00 (0), Latn: 3.00 (3)

Process: P.send [def] (6)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 6/54 (11%), Effic: 6/6 (100%)
Thpt: 0.26/0.26 (23), Latn: 3.83 (23)

Channel: P -> Q (6)

1	0	3	4	5	6	7	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 2/6 (33%), Effic: 2/6 (33%)
Thpt: 0.09/0.27 (22), Latn: 6.00 (12)

Process: Q.recv [ack]

1	0	0	4	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 2/54 (4%), Effic: 2/6 (33%)
Thpt: 0.09/0.27 (22), Latn: 23.00 (23)

Process: P.recv [def]

-1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 1/54 (2%), Effic: 1/5 (20%)
Thpt: 0.33/1.67 (3), Latn: 0.50 (3)

Channel: Q -> P (5)

-1	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 1/1 (100%), Effic: 1/6 (17%)
Thpt: 0.33/1.67 (3), Latn: 1.00 (1)

Process: Q.send [ack] (6)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 1/54 (2%), Effic: 1/6 (17%)
Thpt: 0.50/3.00 (2), Latn: 2.00 (2)

20 turns in auto

Next

Next 20

Next 100

Controller (24)

Some packets not yet recieved.

Txfr: 1/6 (17%), Effic: 1/6 (17%)
Thpt: 0.04/0.22 (23), Latn: 3.00 (3)

Process: P.send [def] (31)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 12/54 (22%), Effc: 12/31 (39%)
Thpt: 0.11/0.29 (107), Latn: 11.58 (139)

Channel: P -> Q (31)

1	2	3	4	5	6	7	8	9
10	11	12	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 12/12 (100%), Effc: 12/31 (39%)
Thpt: 0.10/0.26 (118), Latn: 23.17 (278)

Process: Q.recv [ack]

1	2	3	4	5	6	7	8	9
10	11	12	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 12/54 (22%), Effc: 12/31 (39%)
Thpt: 0.10/0.26 (118), Latn: 16.60 (166)

Process: P.recv [def]

-1	-2	-3	-4	0	0	0	0	-9
-10	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 6/54 (11%), Effc: 6/18 (33%)
Thpt: 0.05/0.15 (120), Latn: 17.00 (204)

Channel: Q -> P (18)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 6/10 (60%), Effc: 6/31 (19%)
Thpt: 0.05/0.15 (120), Latn: 8.67 (52)

Process: Q.send [ack] (31)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 10/54 (19%), Effc: 10/31 (32%)
Thpt: 0.09/0.26 (117), Latn: 12.10 (121)

100 turns in auto

Next

Next 20

Next 100

Controller (124)

Some packets not yet recieved.

Txfr: 6/12 (50%), Effc: 6/31 (19%)
Thpt: 0.06/0.17 (107), Latn: 55.33 (332)

pwindow

Process: P.send [def] (56)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 21/54 (39%), Effc: 21/56 (38%)
Thpt: 0.10/0.26 (215), Latn: 13.29 (279)

Channel: P -> Q (56)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 18/21 (86%), Effc: 18/56 (32%)
Thpt: 0.09/0.27 (210), Latn: 25.11 (452)

Process: Q.recv [ack]

1	2	3	4	5	6	7	8	9
10	11	12	0	0	15	16	17	18
19	20	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 18/54 (33%), Effc: 18/56 (32%)
Thpt: 0.09/0.27 (210), Latn: 32.33 (388)

Process: P.recv [def]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 12/54 (22%), Effc: 12/43 (28%)
Thpt: 0.06/0.21 (208), Latn: 12.95 (272)

Channel: Q -> P (43)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 12/12 (100%), Effc: 12/56 (21%)
Thpt: 0.06/0.21 (208), Latn: 21.50 (258)

Process: Q.send [ack] (56)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 12/54 (22%), Effc: 12/56 (21%)
Thpt: 0.08/0.36 (157), Latn: 16.75 (201)

qwindow

Next

Next 20

Next 100

Controller (224)

Some packets not yet recieved.

Txfr: 12/21 (57%), Effc: 12/56 (21%)
Thpt: 0.06/0.20 (215), Latn: 78.83 (946)

Process: P.send [def] (294)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 54/54 (100%), Effic: 54/294 (18%)
Thpt: 0.05/0.27 (1095), Latn: 23.17 (1251)

Channel: P -> Q (270)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Txfr: 54/54 (100%), Effic: 54/294 (18%)
Thpt: 0.05/0.24 (1118), Latn: 23.04 (1244)

Process: Q.recv [ack]

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Rcvd: 54/54 (100%), Effic: 54/270 (20%)
Thpt: 0.05/0.24 (1118), Latn: 27.37 (1478)

Process: P.recv [def]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Rcvd: 54/54 (100%), Effic: 54/251 (22%)
Thpt: 0.05/0.21 (1176), Latn: 36.59 (1976)

Channel: Q -> P (251)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Txfr: 54/54 (100%), Effic: 54/294 (18%)
Thpt: 0.05/0.21 (1176), Latn: 13.85 (748)

Process: Q.send [ack] (294)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 54/54 (100%), Effic: 54/294 (18%)
Thpt: 0.05/0.25 (1157), Latn: 35.06 (1893)

transfer completes

Next

Next 20

Next 100

Controller (1177)

All packets recieved.

Txfr: 54/54 (100%), Effic: 54/294 (18%)
Thpt: 0.05/0.23 (1095), Latn: 114.22 (6168)

$P_w = 9$

Process: P.send [def] (389)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 54/54 (100%), Effic: 54/389 (14%)
 Thpt: 0.04/0.30 (1307), Latn: 25.83 (1395)

lossy channels

Channel: P -> Q (270)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Txfr: 54/54 (100%), Effic: 54/389 (14%)
 Thpt: 0.04/0.19 (1386), Latn: 76.48 (4130)

 $q_w = 9$

Process: Q.recv [ack]

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Rcvd: 54/54 (100%), Effic: 54/270 (20%)
 Thpt: 0.04/0.19 (1386), Latn: 29.96 (1618)

Process: P.recv [def]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Rcvd: 54/54 (100%), Effic: 54/262 (21%)
 Thpt: 0.03/0.17 (1556), Latn: 31.04 (1676)

Channel: Q -> P (262)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Txfr: 54/54 (100%), Effic: 54/369 (15%)
 Thpt: 0.03/0.17 (1556), Latn: 76.48 (4130)

Process: Q.send [ack] (369)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 54/54 (100%), Effic: 54/369 (15%)
 Thpt: 0.04/0.25 (1481), Latn: 33.06 (1785)

drop 2/3 packets

transfer completes

Next

Next 20

Next 100

Controller (1557)

All packets recieved.

Txfr: 54/54 (100%), Effic: 54/389 (14%)
 Thpt: 0.04/0.20 (1307), Latn: 211.89 (11442)

$P_w = 9$

lossy channel

 $Q_w = 5$

Process: P.send [def] (750)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 9/54 (17%), Effic: 9/750 (1%)
 Thpt: 0.26/21.43 (35), Latn: 3.89 (35)

Channel: P -> Q (45)

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 9/9 (100%), Effic: 9/750 (1%)
 Thpt: 0.08/0.41 (110), Latn: 75.00 (675)

Process: Q.recv [ack]

1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 9/54 (17%), Effic: 9/45 (20%)
 Thpt: 0.08/0.41 (110), Latn: 12.22 (110)

Process: P.recv [def]

0	-2	-3	-4	-5	-6	-7	-8	-9
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Rcvd: 8/54 (15%), Effic: 8/40 (20%)
 Thpt: 0.04/0.19 (208), Latn: 23.11 (208)

Channel: Q -> P (40)

-1	-2	-3	-4	-5	-6	-7	-8	-9
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Txfr: 8/9 (89%), Effic: 8/730 (1%)
 Thpt: 0.04/0.19 (208), Latn: 47.50 (380)

Process: Q.send [ack] (730)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 9/54 (17%), Effic: 9/730 (1%)
 Thpt: 0.05/4.22 (173), Latn: 19.22 (173)

drops 2/3 packets

transfer fails

 P, Q get stuck

Next

Next 20

Next 100

Controller (3000)

Some packets not yet recieved.

Txfr: 8/9 (89%), Effic: 8/750 (1%)
 Thpt: 0.23/1.14 (35), Latn: 142.50 (1140)

$P_w = 5$

lossy channel

 $q_w = 9$

Process: P.send [def] (470)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Sent: 54/54 (100%), Effic: 54/470 (11%)
 Thpt: 0.03/0.28 (1699), Latn: 32.35 (1747)

Channel: P -> Q (270)

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Txfr: 54/54 (100%), Effic: 54/470 (11%)
 Thpt: 0.03/0.16 (1730), Latn: 45.52 (2458)

Process: Q.recv [ack]

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54

Rcvd: 54/54 (100%), Effic: 54/270 (20%)
 Thpt: 0.03/0.16 (1730), Latn: 34.11 (1842)

Process: P.recv [def]

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Rcvd: 54/54 (100%), Effic: 54/266 (20%)
 Thpt: 0.03/0.14 (1880), Latn: 37.33 (2016)

Channel: Q -> P (266)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Txfr: 54/54 (100%), Effic: 54/458 (12%)
 Thpt: 0.03/0.14 (1880), Latn: 61.15 (3302)

Process: Q.send [ack] (458)

-1	-2	-3	-4	-5	-6	-7	-8	-9
-10	-11	-12	-13	-14	-15	-16	-17	-18
-19	-20	-21	-22	-23	-24	-25	-26	-27
-28	-29	-30	-31	-32	-33	-34	-35	-36
-37	-38	-39	-40	-41	-42	-43	-44	-45
-46	-47	-48	-49	-50	-51	-52	-53	-54

Sent: 54/54 (100%), Effic: 54/458 (12%)
 Thpt: 0.03/0.25 (1805), Latn: 35.72 (1929)

drops 2/3 packets

transfer successful

Next

Next 20

Next 100

Controller (1881)

All packets recieved.

Txfr: 54/54 (100%), Effic: 54/470 (11%)
 Thpt: 0.03/0.16 (1699), Latn: 154.04 (8318)