**Go Back N**

**Packet 20, Loss : .2 , Corruption : .2, Time :15**

----- Stop and Wait Network Simulator Version 1.1 --------

Enter the number of messages to simulate: Enter packet loss probability [enter 0.0 for no loss]:Enter packet corruption probability [0.0 for no corruption]:Enter average time between messages from sender's layer5 [ > 0.0]:Enter TRACE:

EVENT time: 1.403546, type: 1, fromlayer5 entity: 0

A sending msg with seq 0 [window size : 1](0,)

EVENT time: 6.895993, type: 2, fromlayer3 entity: 1

Sending ack 0

EVENT time: 9.395123, type: 2, fromlayer3 entity: 0

[Ack 0] Acknum is within the window [window size 1](0,)

[Ack 0] Stopping timer after ack

EVENT time: 24.115726, type: 1, fromlayer5 entity: 0

A sending msg with seq 1 [window size : 1](1,)

EVENT time: 25.517014, type: 2, fromlayer3 entity: 1

Sending ack 1

EVENT time: 30.953703, type: 2, fromlayer3 entity: 0

[Ack 1] Acknum is within the window [window size 1](1,)

[Ack 1] Stopping timer after ack

EVENT time: 34.830471, type: 1, fromlayer5 entity: 0

A sending msg with seq 2 [window size : 1](2,)

EVENT time: 38.326641, type: 2, fromlayer3 entity: 1

Sending ack 2

EVENT time: 41.211678, type: 2, fromlayer3 entity: 0

[Ack 2] Acknum is within the window [window size 1](2,)

[Ack 2] Stopping timer after ack

EVENT time: 49.992065, type: 1, fromlayer5 entity: 0

A sending msg with seq 3 [window size : 1](3,)

EVENT time: 54.568501, type: 2, fromlayer3 entity: 1

Sending ack 3

EVENT time: 62.597767, type: 2, fromlayer3 entity: 0

[Ack 3] Acknum is within the window [window size 1](3,)

[Ack 3] Stopping timer after ack

EVENT time: 75.868408, type: 1, fromlayer5 entity: 0

A sending msg with seq 4 [window size : 1](4,)

EVENT time: 81.429794, type: 2, fromlayer3 entity: 1

Sending ack 4

TOLAYER3: packet being lost

EVENT time: 86.194954, type: 1, fromlayer5 entity: 0

A sending msg with seq 5 [window size : 2](4,5,)

EVENT time: 95.529984, type: 2, fromlayer3 entity: 1

Sending ack 5

TOLAYER3: packet being lost

EVENT time: 95.868408, type: 0, timerinterrupt entity: 0

[Seq 4] Time interrupted, retransmitting current window. [window size 2](4,5,)

EVENT time: 96.873077, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 6 got 4]

TOLAYER3: packet being corrupted

EVENT time: 100.251419, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 6 got 5]

EVENT time: 103.143715, type: 1, fromlayer5 entity: 0

A sending msg with seq 6 [window size : 3](4,5,6,)

EVENT time: 104.413986, type: 2, fromlayer3 entity: 1

Sending ack 6

EVENT time: 105.851868, type: 2, fromlayer3 entity: 0

[Ack 5] Packet corrupted, dropping

EVENT time: 107.771729, type: 2, fromlayer3 entity: 0

[Ack 5] Acknum is within the window [window size 3](4,5,6,)

[Ack 5] Stopping timer after ack

[Ack 5] Starting timer after ack for 6 [window size 1](6,)

EVENT time: 113.853058, type: 2, fromlayer3 entity: 0

[Ack 6] Acknum is within the window [window size 1](6,)

[Ack 6] Stopping timer after ack

EVENT time: 117.401657, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being corrupted

A sending msg with seq 7 [window size : 1](7,)

EVENT time: 122.140419, type: 2, fromlayer3 entity: 1

Checksum error.

EVENT time: 123.945190, type: 2, fromlayer3 entity: 0

[Ack 6] Duplicate ack found, retransmitting current window. [window size 1](7,)

EVENT time: 129.640884, type: 2, fromlayer3 entity: 1

Sending ack 7

EVENT time: 132.687775, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being lost

A sending msg with seq 0 [window size : 2](7,0,)

EVENT time: 137.494644, type: 2, fromlayer3 entity: 0

[Ack 7] Acknum is within the window [window size 2](7,0,)

[Ack 7] Stopping timer after ack

[Ack 7] Starting timer after ack for 0 [window size 1](0,)

EVENT time: 145.923950, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being corrupted

A sending msg with seq 1 [window size : 2](0,1,)

EVENT time: 147.960266, type: 2, fromlayer3 entity: 1

Checksum error.

TOLAYER3: packet being lost

EVENT time: 152.000000, type: 0, timerinterrupt entity: 0

[Seq 0] Time interrupted, retransmitting current window. [window size 2](0,1,)

EVENT time: 153.160675, type: 2, fromlayer3 entity: 1

Sending ack 0

TOLAYER3: packet being lost

EVENT time: 157.356964, type: 2, fromlayer3 entity: 1

Sending ack 1

TOLAYER3: packet being lost

EVENT time: 168.793610, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being lost

A sending msg with seq 2 [window size : 3](0,1,2,)

EVENT time: 172.000000, type: 0, timerinterrupt entity: 0

[Seq 0] Time interrupted, retransmitting current window. [window size 3](0,1,2,)

EVENT time: 174.552414, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 2 got 0]

TOLAYER3: packet being lost

EVENT time: 183.264496, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 2 got 1]

EVENT time: 185.783401, type: 2, fromlayer3 entity: 1

Sending ack 2

EVENT time: 187.947220, type: 2, fromlayer3 entity: 0

[Ack 1] Acknum is within the window [window size 3](0,1,2,)

[Ack 1] Stopping timer after ack

[Ack 1] Starting timer after ack for 2 [window size 1](2,)

EVENT time: 190.915756, type: 2, fromlayer3 entity: 0

[Ack 2] Acknum is within the window [window size 1](2,)

[Ack 2] Stopping timer after ack

EVENT time: 198.121597, type: 1, fromlayer5 entity: 0

A sending msg with seq 3 [window size : 1](3,)

EVENT time: 206.103622, type: 2, fromlayer3 entity: 1

Sending ack 3

EVENT time: 207.765839, type: 2, fromlayer3 entity: 0

[Ack 3] Acknum is within the window [window size 1](3,)

[Ack 3] Stopping timer after ack

EVENT time: 209.869080, type: 1, fromlayer5 entity: 0

A sending msg with seq 4 [window size : 1](4,)

EVENT time: 216.797760, type: 2, fromlayer3 entity: 1

Sending ack 4

TOLAYER3: packet being lost

EVENT time: 225.666077, type: 1, fromlayer5 entity: 0

A sending msg with seq 5 [window size : 2](4,5,)

EVENT time: 229.310898, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being lost

A sending msg with seq 6 [window size : 3](4,5,6,)

EVENT time: 229.869080, type: 0, timerinterrupt entity: 0

[Seq 4] Time interrupted, retransmitting current window. [window size 3](4,5,6,)

EVENT time: 231.103043, type: 2, fromlayer3 entity: 1

Sending ack 5

EVENT time: 232.152756, type: 2, fromlayer3 entity: 0

[Ack 5] Acknum is within the window [window size 3](4,5,6,)

[Ack 5] Stopping timer after ack

[Ack 5] Starting timer after ack for 6 [window size 1](6,)

EVENT time: 235.057907, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 6 got 4]

TOLAYER3: packet being lost

EVENT time: 236.908173, type: 1, fromlayer5 entity: 0

A sending msg with seq 7 [window size : 2](6,7,)

EVENT time: 237.005234, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 6 got 5]

TOLAYER3: packet being lost

EVENT time: 238.348297, type: 2, fromlayer3 entity: 1

Sending ack 6

EVENT time: 243.025253, type: 2, fromlayer3 entity: 0

[Ack 6] Acknum is within the window [window size 2](6,7,)

[Ack 6] Stopping timer after ack

[Ack 6] Starting timer after ack for 7 [window size 1](7,)

EVENT time: 246.521759, type: 2, fromlayer3 entity: 1

Sending ack 7

EVENT time: 250.260178, type: 2, fromlayer3 entity: 0

[Ack 7] Acknum is within the window [window size 1](7,)

[Ack 7] Stopping timer after ack

EVENT time: 261.824097, type: 1, fromlayer5 entity: 0

A sending msg with seq 0 [window size : 1](0,)

EVENT time: 270.106598, type: 2, fromlayer3 entity: 1

Sending ack 0

EVENT time: 270.299377, type: 1, fromlayer5 entity: 0

A sending msg with seq 1 [window size : 2](0,1,)

EVENT time: 271.714172, type: 2, fromlayer3 entity: 0

[Ack 0] Acknum is within the window [window size 2](0,1,)

[Ack 0] Stopping timer after ack

[Ack 0] Starting timer after ack for 1 [window size 1](1,)

EVENT time: 271.740753, type: 2, fromlayer3 entity: 1

Sending ack 1

EVENT time: 273.104950, type: 2, fromlayer3 entity: 0

[Ack 1] Acknum is within the window [window size 1](1,)

[Ack 1] Stopping timer after ack

EVENT time: 297.066559, type: 1, fromlayer5 entity: 0

A sending msg with seq 2 [window size : 1](2,)

EVENT time: 299.926331, type: 2, fromlayer3 entity: 1

Sending ack 2

TOLAYER3: packet being corrupted

EVENT time: 304.970520, type: 2, fromlayer3 entity: 0

[Ack 2] Packet corrupted, dropping

EVENT time: 309.137238, type: 1, fromlayer5 entity: 0

A sending msg with seq 3 [window size : 2](2,3,)

EVENT time: 317.066559, type: 0, timerinterrupt entity: 0

[Seq 2] Time interrupted, retransmitting current window. [window size 2](2,3,)

TOLAYER3: packet being corrupted

EVENT time: 318.725800, type: 2, fromlayer3 entity: 1

Sending ack 3

TOLAYER3: packet being lost

EVENT time: 323.212128, type: 2, fromlayer3 entity: 1

Checksum error.

EVENT time: 326.506134, type: 2, fromlayer3 entity: 1

Unexpected sequence number. [expecting 4 got 3]

EVENT time: 327.034332, type: 2, fromlayer3 entity: 0

[Ack 3] Acknum is within the window [window size 2](2,3,)

[Ack 3] Stopping timer after ack

EVENT time: 333.856171, type: 2, fromlayer3 entity: 0

Ignoring ack 3 as window size 0

Simulator terminated at time 333.856171

after sending 20 msgs from layer5