Go-Back-N

Friday, July 12, 2019 3:19 PM

Malf Stropkey

Enter the number of messages to simulate: 70

Enter packet loss probability [enter 0.0 for no loss]:0.2

Enter packet corruption probability [0.0 for no corruption]:0.2

Enter average time between messages from sender's layer5 [> 0.0]:10

Enter TRACE:2

EVENT time: 18.705740, type: 1, fromlayer5 entity: 1

Sending packet 1 with acknowledgment 0 in B at time 18.705740

· Send pucket I for B

EVENT time: 26.070892, type: 2, fromlayer3_entity: 0

Send ACK For packet 1 Packet 1 received inside of A only contains valid data, no valid ACK

TOLAYER3: packet being lost

EVENT time: 28.172142, type: 1, fromlayer5 entity: 0

Sending packet 1 with acknowledgment for packet 1 in A at 28.172142

Send packet | with ACK in A

TOLAYER3: packet being lost

EVENT time: 38.705742, type: 0, timerinterrupt entity: 1

Resending a packet for B with sequence number 1 and acknum 0

opacket resent ove to ACK being lost in B

EVENT time: 45.141335, type: 1, fromlayer5 entity: 0

Sending packet 2 with acknowedgment for packet 1 in A at 45.141335

TOLAYER3: packet being lost

· sunding packet 2 with ACK I attacked

in A

EVENT time: 45.806259, type: 1, fromlayer5 entity: 0

Sending packet 3 with acknowedgment for packet 1 in A at 45.806259

EVENT time: 47.950279, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -2

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Sequence number and ACK Invalid for the pa

Resending packet 1 in A and acknum 1

TOLAYER3: packet being lost

Resending packet 2 in A and acknum 1

TOLAYER3: packet being corrupted

Resending packet 3 in A and acknum 1

. A recends all packets that were not acked when times interrupt coused

not acked when times interrupt coursed TOLAYER3: packet being corrupted for packet 1 Resending packet 3 in A and acknum 1 TOLAYER3: packet being corrupted o received packet 3 while still waiting EVENT time: 52.104671, type: 2, fromlayer3 entity: 1 Sequence number incorrect in B but ACK valid, sending NAK -1 · ACK received for packet as checksumvaled · B sending next packet, has yet to receive a validpacket from A EVENT time: 54.391605, type: 1, fromlayer5 entity: 1 Sending packet 2 with acknowedgment 0 in B at time 54.391605 EVENT time: 55.459679, type: 1, fromlayer5 entity: 0 Sending packet 4 with acknowedgment for packet 1 in A at 55.459679 · received NAK-1 indicating packet EVENT time: 56.263256, type: 2, fromlayer3 entity: 0 Resending packet 1 with acknum 1 due to a negative acknowledgement TOLAYER3: packet being lost only resends on NAK if time EVENT time: 58.134323, type: 2, fromlayer3 entity: 1 Received NAK in B but not resending as packet 2 resent recently is greater than the last time the packet was sunt + 70% of it value as it needs a chance to be delivered EVENT time: 58.893913, type: 2, fromlayer3 entity: 0 . Send All for packet 2 Packet 2 received inside of A only contains valid data, no valid ACK EVENT time: 62.197926, type: 2, fromlayer3 entity: 1 opacket corrupt so send NAL Checksum was invalid for the packet received by B, sending NAK -1 TOLAYER3: packet being lost EVENT time: 63.981850, type: 2, fromlayer3 entity: 1 · packet corrupt so send NAK Checksum was invalid for the packet received by B, sending NAK -1 TOLAYER3: packet being lost EVENT time: 65.040314, type: 2, fromlayer3 entity: 1 o received packet with incorrect sequence so send NAK The sequence number and the ack were invalid in B, sending NAK -1 TOLAYER3: packet being corrupted EVENT time: 70.314415, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets

EVENT time: 71.290253, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -3 EVENT time: 74.924683, type: 1, fromlayer5 entity: 0 Sending packet 5 with acknowedgment for packet 2 in A at 74.924683 EVENT time: 76.109535, type: 2, fromlayer3 entity: 1 May have received a negative acknowledgement in B but did not have any packets sent out that need acknowledged EVENT time: 83.228416, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -1 EVENT time: 84.505875, type: 2, fromlayer3 entity: 0 Received NAK in A but not resending as packet 1 resent recently EVENT time: 86.741089, type: 1, fromlayer5 entity: 1 Sending packet 3 with acknowedgment 0 in B at time 86.741089 TOLAYER3: packet being lost EVENT time: 88.172142, type: 0, timerinterrupt entity: 0 Resending packet 1 in A and acknum 2 TOLAYER3: packet being lost Resending packet 2 in A and acknum 2 TOLAYER3: packet being lost Resending packet 3 in A and acknum 2 TOLAYER3: packet being lost Resending packet 4 in A and acknum 2 TOLAYER3: packet being corrupted Resending packet 5 in A and acknum 2 TOLAYER3: packet being lost EVENT time: 89.978477, type: 2, fromlayer3_entity: 1 Checksum was invalid for the packet received by B, sending NAK -1 EVENT time: 92.995514, type: 2, fromlayer3 entity: 0 Resending packet 1 with acknum 2 due to a negative acknowledgement

EVENT time: 97.749573, type: 2, fromlayer3 entity: 1

Packet received inside of B only contains valid data, sending ACK 1 TOLAYER3: packet being lost EVENT time: 103.404251, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 3 and acknum 1 EVENT time: 105.388680, type: 1, fromlayer5 entity: 1 Sending packet 4 with acknowedgment 1 in B at time 105.388680 TOLAYER3: packet being lost EVENT time: 109.388351, type: 2, fromlayer3 entity: 0 Received ACK in A for packet 1 Sending acknowledgement in A for packet 3 EVENT time: 110.912056, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets EVENT time: 122.051842, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 4 and acknum 1 EVENT time: 123.897598, type: 1, fromlayer5 entity: 1 Sending packet 5 with acknowedgment 1 in B at time 123.897598 EVENT time: 131.436401, type: 1, fromlayer5 entity: 1 Sending packet 6 with acknowedgment 1 in B at time 131.436401 TOLAYER3: packet being lost EVENT time: 131.486328, type: 2, fromlayer3 entity: 0 Packet 4 received inside of A only contains valid data, no valid ACK EVENT time: 137.151352, type: 2, fromlayer3 entity: 0 Packet 5 received inside of A only contains valid data, no valid ACK TOLAYER3: packet being corrupted EVENT time: 139.273453, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets

EVENT time: 139.651108, type: 1, fromlayer5 entity: 1

Sending packet 7 with acknowedgment 1 in B at time 139.651108 TOLAYER3: packet being corrupted EVENT time: 140.560760, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 5 and acknum 1 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 6 and acknum 1 Resending a packet for B with sequence number 7 and acknum 1 TOLAYER3: packet being corrupted EVENT time: 141.165207, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -6 EVENT time: 142.263229, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -6 TOLAYER3: packet being corrupted EVENT time: 143.072739, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -2 TOLAYER3: packet being corrupted EVENT time: 144.412613, type: 2, fromlayer3 entity: 0 Packet 6 received inside of A only contains valid data, no valid ACK EVENT time: 145.996475, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -7 TOLAYER3: packet being lost EVENT time: 148.172150, type: 0, timerinterrupt entity: 0 Resending packet 2 in A and acknum 6 TOLAYER3: packet being corrupted Resending packet 3 in A and acknum 6 Resending packet 4 in A and acknum 6 Resending packet 5 in A and acknum 6 EVENT time: 148.319870, type: 2, fromlayer3 entity: 1 Processing a negative acknowledgement in B that contains a valid ack Resending packet 6 with acknum 1 due to a negative acknowledgement EVENT time: 155.318924, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -7 EVENT time: 157.263611, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -2 TOLAYER3: packet being corrupted EVENT time: 157.499390, type: 1, fromlayer5 entity: 1 Sending packet 8 with acknowedgment 1 in B at time 157.499390 EVENT time: 160.259995, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets EVENT time: 161.409027, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -2 EVENT time: 164.449814, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 EVENT time: 167.771576, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -7 EVENT time: 168.977539, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -2 EVENT time: 170.318176, type: 1, fromlayer5 entity: 0 Sending packet 6 with acknowedgment for packet 6 in A at 170.318176 EVENT time: 173.151245, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -2 EVENT time: 173.887085, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 7 and acknum 1 Resending a packet for B with sequence number 8 and acknum 1 EVENT time: 174.270584, type: 1, fromlayer5 entity: 0

Sending packet 7 with acknowedgment for packet 6 in A at 174.270584

EVENT time: 174.602402, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -7

EVENT time: 180.753250, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -2

EVENT time: 183.802643, type: 2, fromlayer3 entity: 0

Resending packet 2 with acknum 6 due to a negative acknowledgement

EVENT time: 185.131271, type: 2, fromlayer3 entity: 1

Resending packet 7 with acknum 1 due to a negative acknowledgement

EVENT time: 186.454132, type: 1, fromlayer5 entity: 0

Sending packet 8 with acknowedgment for packet 6 in A at 186.454132

TOLAYER3: packet being lost

EVENT time: 190.603119, type: 2, fromlayer3 entity: 0

Resending packet 2 with acknum 6 due to a negative acknowledgement

TOLAYER3: packet being lost

EVENT time: 192.008743, type: 2, fromlayer3 entity: 0

Resending packet 2 with acknum 6 due to a negative acknowledgement

TOLAYER3: packet being corrupted

EVENT time: 193.153076, type: 2, fromlayer3 entity: 0

Packet 7 received inside of A only contains valid data, no valid ACK

TOLAYER3: packet being lost

EVENT time: 194.480545, type: 2, fromlayer3 entity: 1

Resending packet 7 with acknum 1 due to a negative acknowledgement

TOLAYER3: packet being lost

EVENT time: 195.571442, type: 2, fromlayer3 entity: 0

Packet 8 received inside of A only contains valid data, no valid ACK

EVENT time: 195.771393, type: 1, fromlayer5 entity: 0

Sending packet 9 with acknowedgment for packet 8 in A at 195.771393

EVENT time: 197.434372, type: 2, fromlayer3 entity: 0

Resending packet 2 with acknum 8 due to a negative acknowledgement

TOLAYER3: packet being lost

EVENT time: 197.742584, type: 2, fromlayer3 entity: 1

Resending packet 7 with acknum 1 due to a negative acknowledgement

TOLAYER3: packet being corrupted

EVENT time: 198.701645, type: 1, fromlayer5 entity: 1

Sending packet 9 with acknowedgment 1 in B at time 198.701645

EVENT time: 202.501923, type: 1, fromlayer5 entity: 1

Sending packet 10 with acknowedgment 1 in B at time 202.501923

TOLAYER3: packet being lost

EVENT time: 204.247971, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -2

TOLAYER3: packet being corrupted

EVENT time: 205.007919, type: 1, fromlayer5 entity: 1

Sending packet 11 with acknowedgment 1 in B at time 205.007919

EVENT time: 207.359802, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -9

EVENT time: 207.561401, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -2

EVENT time: 209.207001, type: 2, fromlayer3 entity: 0

Checksum was invalid for the packet received by A, sending NAK -9

EVENT time: 210.075058, type: 2, fromlayer3 entity: 1

Resending packet 7 with acknum 1 due to a negative acknowledgement

EVENT time: 214.200027, type: 2, fromlayer3 entity: 1

Packet received inside of B only contains valid data, sending ACK 2

EVENT time: 215.042084, type: 2, fromlayer3 entity: 0 Packet 9 received inside of A only contains valid data, no valid ACK TOLAYER3: packet being corrupted EVENT time: 216.892258, type: 1, fromlayer5 entity: 1 Sending packet 12 with acknowedgment 2 in B at time 216.892258 EVENT time: 218.631012, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -3 TOLAYER3: packet being lost EVENT time: 220.168518, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 2 packets EVENT time: 221.243332, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 EVENT time: 222.216339, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -10 EVENT time: 227.084122, type: 1, fromlayer5 entity: 1 Sending packet 13 with acknowedgment 2 in B at time 227.084122 EVENT time: 228.101654, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 228.172150, type: 0, timerinterrupt entity: 0 Resending packet 2 in A and acknum 9 Resending packet 3 in A and acknum 9 TOLAYER3: packet being lost Resending packet 4 in A and acknum 9 Resending packet 5 in A and acknum 9 Resending packet 6 in A and acknum 9 TOLAYER3: packet being lost Resending packet 7 in A and acknum 9 Resending packet 8 in A and acknum 9 Resending packet 9 in A and acknum 9

EVENT time: 228.202194, type: 2, fromlayer3 entity: 1

Resending packet 9 with acknum 2 due to a negative acknowledgement

TOLAYER3: packet being lost

EVENT time: 230.179428, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -10

TOLAYER3: packet being corrupted

EVENT time: 236.554489, type: 2, fromlayer3 entity: 1

Resending packet 9 with acknum 2 due to a negative acknowledgement

TOLAYER3: packet being lost

EVENT time: 236.831680, type: 0, timerinterrupt entity: 1

Resending a packet for B with sequence number 9 and acknum 2

Resending a packet for B with sequence number 10 and acknum 2

Resending a packet for B with sequence number 11 and acknum 2

Resending a packet for B with sequence number 12 and acknum 2

TOLAYER3: packet being lost

Resending a packet for B with sequence number 13 and acknum 2

EVENT time: 238.456909, type: 2, fromlayer3 entity: 0

Resending packet 2 with acknum 9 due to a negative acknowledgement

EVENT time: 240.604736, type: 1, fromlayer5 entity: 0

Queueing a message for A since 8 packets have been sent and unaked

EVENT time: 241.013138, type: 2, fromlayer3 entity: 1

Checksum was invalid for the packet received by B, sending NAK -3

EVENT time: 244.069946, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -10

EVENT time: 246.363068, type: 2, fromlayer3 entity: 1

Processing a negative acknowledgement in B that contains a valid ack

Resending packet 10 with acknum 2 due to a negative acknowledgement

TOLAYER3: packet being corrupted

EVENT time: 249.652435, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -3 EVENT time: 249.815079, type: 2, fromlayer3 entity: 0 Recieved ACK in A for 1 packets at 249.815079 Sending packet 10 with acknowedgment for packet 9 in A at 249.815079 EVENT time: 251.721893, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -10 EVENT time: 253.873962, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 TOLAYER3: packet being corrupted EVENT time: 254.932968, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 TOLAYER3: packet being lost EVENT time: 258.563904, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 260.907074, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -10 EVENT time: 263.371399, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 EVENT time: 265.290039, type: 1, fromlayer5 entity: 1 Sending packet 14 with acknowedgment 2 in B at time 265.290039 TOLAYER3: packet being corrupted EVENT time: 268.055328, type: 2, fromlayer3 entity: 0 Packet 10 received inside of A only contains valid data, no valid ACK EVENT time: 269.265106, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 TOLAYER3: packet being lost

EVENT time: 270.332367, type: 2, fromlayer3 entity: 1

EVENT time: 272.162445, type: 2, fromlayer3 entity: 0 Packet 11 received inside of A only contains valid data, no valid ACK EVENT time: 272.370941, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -3 EVENT time: 274.547058, type: 2, fromlayer3 entity: 0 Packet 12 received inside of A only contains valid data, no valid ACK TOLAYER3: packet being corrupted EVENT time: 278.237610, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 TOLAYER3: packet being lost EVENT time: 280.471161, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 281.048615, type: 1, fromlayer5 entity: 1 Sending packet 15 with acknowedgment 2 in B at time 281.048615 TOLAYER3: packet being lost EVENT time: 284.283966, type: 2, fromlayer3 entity: 0 Received NAK in A but not resending as packet 3 resent recently EVENT time: 285.364899, type: 2, fromlayer3 entity: 1 Received NAK in B but not resending as packet 10 resent recently EVENT time: 286.821167, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 10 and acknum 2 TOLAYER3: packet being lost Resending a packet for B with sequence number 11 and acknum 2 Resending a packet for B with sequence number 12 and acknum 2 Resending a packet for B with sequence number 13 and acknum 2 Resending a packet for B with sequence number 14 and acknum 2 Resending a packet for B with sequence number 15 and acknum 2

The sequence number and the ack were invalid in B, sending NAK -3

EVENT time: 288.439728, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -3 EVENT time: 289.056610, type: 2, fromlayer3 entity: 0 Packet 13 received inside of A only contains valid data, no valid ACK EVENT time: 291.620667, type: 2, fromlayer3 entity: 1 Resending packet 10 with acknum 2 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 296.660583, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -14 TOLAYER3: packet being corrupted EVENT time: 297.766724, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -14 EVENT time: 299.750641, type: 1, fromlayer5 entity: 1 Sending packet 16 with acknowedgment 2 in B at time 299.750641 TOLAYER3: packet being lost EVENT time: 300.514099, type: 2, fromlayer3 entity: 1 Resending packet 10 with acknum 2 due to a negative acknowledgement EVENT time: 301.052429, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -14 EVENT time: 303.817017, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets EVENT time: 303.898987, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -14 EVENT time: 306.108795, type: 2, fromlayer3 entity: 0 Received NAK in A but not resending as packet 3 resent recently EVENT time: 312.826569, type: 2, fromlayer3 entity: 1

Recieved ACK in B for 1 packets

EVENT time: 314.452911, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -14 EVENT time: 318.057251, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 319.923737, type: 2, fromlayer3 entity: 0 Received NAK in A but not resending as packet 3 resent recently EVENT time: 320.322296, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -3 TOLAYER3: packet being corrupted EVENT time: 321.778870, type: 1, fromlayer5 entity: 1 Sending packet 1 with acknowedgment 2 in B at time 321.778870 TOLAYER3: packet being lost EVENT time: 325.390381, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -14 EVENT time: 328.172150, type: 0, timerinterrupt entity: 0 Resending packet 3 in A and acknum 13 Resending packet 4 in A and acknum 13 Resending packet 5 in A and acknum 13 Resending packet 6 in A and acknum 13 Resending packet 7 in A and acknum 13 TOLAYER3: packet being corrupted Resending packet 8 in A and acknum 13 TOLAYER3: packet being corrupted Resending packet 9 in A and acknum 13 Resending packet 10 in A and acknum 13 EVENT time: 328.202698, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 2 packets TOLAYER3: packet being corrupted

EVENT time: 328.588898, type: 2, fromlayer3 entity: 0

Resending packet 3 with acknum 13 due to a negative acknowledgement TOLAYER3: packet being corrupted EVENT time: 330.798798, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -3 EVENT time: 332.721100, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 2 due to a negative acknowledgement EVENT time: 333.547699, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -14 TOLAYER3: packet being corrupted EVENT time: 333.944794, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 2 due to a negative acknowledgement EVENT time: 340.078674, type: 2, fromlayer3 entity: 0 Resending packet 3 with acknum 13 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 340.689758, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 341.146576, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 2 due to a negative acknowledgement EVENT time: 343.100220, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 2 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 345.396210, type: 1, fromlayer5 entity: 1 Sending packet 2 with acknowedgment 2 in B at time 345.396210 EVENT time: 346.394165, type: 2, fromlayer3 entity: 0 Resending packet 3 with acknum 13 due to a negative acknowledgement EVENT time: 350.006439, type: 2, fromlayer3 entity: 1

Resending packet 14 with acknum 2 due to a negative acknowledgement

EVENT time: 354.518829, type: 2, fromlayer3 entity: 1

Packet received inside of B only contains valid data, sending ACK 3

EVENT time: 355.280029, type: 1, fromlayer5 entity: 1

Sending packet 3 with acknowedgment 3 in B at time 355.280029

EVENT time: 355.857483, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -14

EVENT time: 358.269196, type: 2, fromlayer3 entity: 1

Packet received inside of B only contains valid data, sending ACK 4

EVENT time: 360.279602, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -14

EVENT time: 360.720856, type: 2, fromlayer3 entity: 1

Packet received inside of B only contains valid data, sending ACK 5

EVENT time: 361.529022, type: 0, timerinterrupt entity: 1

Resending a packet for B with sequence number 14 and acknum 5

Resending a packet for B with sequence number 15 and acknum 5

Resending a packet for B with sequence number 16 and acknum 5

Resending a packet for B with sequence number 1 and acknum 5

Resending a packet for B with sequence number 2 and acknum 5

TOLAYER3: packet being lost

Resending a packet for B with sequence number 3 and acknum 5

TOLAYER3: packet being corrupted

EVENT time: 365.295898, type: 2, fromlayer3 entity: 1

Packet received inside of B only contains valid data, sending ACK 6

EVENT time: 367.004639, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -14

EVENT time: 368.719360, type: 2, fromlayer3 entity: 1

Checksum was invalid for the packet received by B, sending NAK -7

EVENT time: 371.173645, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 EVENT time: 374.518677, type: 1, fromlayer5 entity: 1 Sending packet 4 with acknowedgment 6 in B at time 374.518677 EVENT time: 375.250122, type: 2, fromlayer3 entity: 0 Packet 14 received inside of A only contains valid data, no valid ACK EVENT time: 379.536591, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -7 EVENT time: 380.830933, type: 2, fromlayer3 entity: 0 Packet 15 received inside of A only contains valid data, no valid ACK EVENT time: 388.476837, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -7 EVENT time: 390.653992, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 EVENT time: 390.785706, type: 2, fromlayer3 entity: 0 Resending packet 3 with acknum 15 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 393.583008, type: 1, fromlayer5 entity: 1 Sending packet 5 with acknowedgment 6 in B at time 393.583008 TOLAYER3: packet being lost EVENT time: 396.485138, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 TOLAYER3: packet being lost EVENT time: 396.781677, type: 1, fromlayer5 entity: 1 EVENT time: 397.334229, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -1 EVENT time: 399.963715, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -1 TOLAYER3: packet being lost EVENT time: 401.465179, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -1 EVENT time: 405.727478, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -7 EVENT time: 410.068665, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -1 EVENT time: 410.573029, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 6 due to a negative acknowledgement EVENT time: 412.508209, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -1 TOLAYER3: packet being corrupted EVENT time: 412.854828, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 416.270752, type: 1, fromlayer5 entity: 1 EVENT time: 416.351593, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 6 due to a negative acknowledgement EVENT time: 418.202240, type: 2, fromlayer3 entity: 0 Packet 1 received inside of A only contains valid data, no valid ACK EVENT time: 423.323914, type: 2, fromlayer3 entity: 0 Resending packet 3 with acknum 1 due to a negative acknowledgement TOLAYER3: packet being corrupted EVENT time: 425.691864, type: 2, fromlayer3 entity: 1 Resending packet 14 with acknum 6 due to a negative acknowledgement

TOLAYER3: packet being corrupted

EVENT time: 427.962952, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -2

TOLAYER3: packet being corrupted

EVENT time: 430.865326, type: 1, fromlayer5 entity: 0

Queueing a message for A since 8 packets have been sent and unaked

EVENT time: 435.522156, type: 2, fromlayer3 entity: 1

Recieved ACK in B for 1 packets

TOLAYER3: packet being lost

TOLAYER3: packet being corrupted

Sending packet 6 with acknowedgment 6 in B at time 435.522156

EVENT time: 436.992828, type: 1, fromlayer5 entity: 0

Queueing a message for A since 8 packets have been sent and unaked

EVENT time: 437.578339, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -2

EVENT time: 440.104950, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -2

TOLAYER3: packet being corrupted

EVENT time: 441.269928, type: 2, fromlayer3 entity: 1

Recieved ACK in B for 1 packets

Sending packet 7 with acknowedgment 6 in B at time 441.269928

TOLAYER3: packet being lost

EVENT time: 442.224152, type: 2, fromlayer3 entity: 0

Packet 2 received inside of A only contains valid data, no valid ACK

EVENT time: 444.164703, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -3

EVENT time: 444.516937, type: 2, fromlayer3 entity: 1

Processing a negative acknowledgement in B that contains a valid ack

Resending packet 1 with acknum 6 due to a negative acknowledgement

EVENT time: 444.752411, type: 1, fromlayer5 entity: 1 Sending packet 8 with acknowedgment 6 in B at time 444.752411 EVENT time: 447.930817, type: 2, fromlayer3 entity: 1 Resending packet 1 with acknum 6 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 448.172150, type: 0, timerinterrupt entity: 0 Resending packet 3 in A and acknum 2 Resending packet 4 in A and acknum 2 TOLAYER3: packet being lost Resending packet 5 in A and acknum 2 Resending packet 6 in A and acknum 2 TOLAYER3: packet being lost Resending packet 7 in A and acknum 2 TOLAYER3: packet being lost Resending packet 8 in A and acknum 2 Resending packet 9 in A and acknum 2 Resending packet 10 in A and acknum 2 EVENT time: 450.226929, type: 2, fromlayer3 entity: 0 Recieved ACK in A for 1 packets at 450.226929 Sending packet 11 with acknowedgment for packet 2 in A at 450.226929 TOLAYER3: packet being lost EVENT time: 451.603119, type: 2, fromlayer3 entity: 1 Resending packet 1 with acknum 6 due to a negative acknowledgement EVENT time: 458.296936, type: 2, fromlayer3 entity: 0 Packet 3 received inside of A only contains valid data, no valid ACK EVENT time: 459.645782, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 TOLAYER3: packet being corrupted EVENT time: 464.286530, type: 1, fromlayer5 entity: 1

EVENT time: 467.858246, type: 2, fromlayer3 entity: 0 Recieved ACK in A for 1 packets at 467.858246 Sending packet 12 with acknowedgment for packet 3 in A at 467.858246 EVENT time: 468.829468, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets Sending packet 9 with acknowedgment 6 in B at time 468.829468 EVENT time: 473.423126, type: 2, fromlayer3_entity: 0 Recieved ACK in A for 1 packets at 473.423126 Sending packet 13 with acknowedgment for packet 3 in A at 473.423126 TOLAYER3: packet being lost EVENT time: 474.510071, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 EVENT time: 475.595154, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 EVENT time: 477.333313, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -4 EVENT time: 480.172058, type: 2, fromlayer3 entity: 1 Received NAK in B but not resending as packet 2 resent recently EVENT time: 483.603546, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 484.674469, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -4 EVENT time: 485.511627, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 2 and acknum 6 Resending a packet for B with sequence number 3 and acknum 6 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 4 and acknum 6 Resending a packet for B with sequence number 5 and acknum 6

Resending a packet for B with sequence number 6 and acknum 6

TOLAYER3: packet being lost
Resending a packet for B with sequence number 7 and acknum 6
TOLAYER3: packet being corrupted
Resending a packet for B with sequence number 8 and acknum 6
Resending a packet for B with sequence number 9 and acknum 6
EVENT time: 487.506348, type: 2, fromlayer3_entity: 1
Checksum was invalid for the packet received by B, sending NAK -7
EVENT time: 488.109985, type: 1, fromlayer5 entity: 0
Queueing a message for A since 8 packets have been sent and unaked
EVENT time: 494.285034, type: 2, fromlayer3 entity: 1
Recieved ACK in B for 1 packets
EVENT time: 494.607452, type: 2, fromlayer3 entity: 0
Sequence number and ACK Invalid for the packet received by A, sending NAK -4
EVENT time: 496.653442, type: 2, fromlayer3 entity: 1
Resending packet 3 with acknum 6 due to a negative acknowledgement
EVENT time: 498.256989, type: 1, fromlayer5 entity: 1
Sending packet 10 with acknowedgment 6 in B at time 498.256989
EVENT time: 498.719818, type: 2, fromlayer3 entity: 1
The sequence number and the ack were invalid in B, sending NAK -7
EVENT time: 500.591949, type: 2, fromlayer3 entity: 0
Sequence number and ACK Invalid for the packet received by A, sending NAK -4
EVENT time: 507.932983, type: 2, fromlayer3 entity: 1
The sequence number and the ack were invalid in B, sending NAK -7
EVENT time: 508.350616, type: 2, fromlayer3 entity: 0
Checksum was invalid for the packet received by A, sending NAK -4
EVENT time: 514.505737, type: 2, fromlayer3 entity: 0
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Recieved ACK in A for 1 packets at 514.505737

Sending packet 14 with acknowedgment for packet 3 in A at 514.505737 TOLAYER3: packet being corrupted EVENT time: 516.981018, type: 1, fromlayer5 entity: 1 EVENT time: 517.043701, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -7 EVENT time: 519.015442, type: 2, fromlayer3 entity: 0 Received NAK in A but not resending as packet 7 resent recently EVENT time: 520.517639, type: 2, fromlayer3 entity: 0 Received NAK in A but not resending as packet 7 resent recently EVENT time: 524.006775, type: 2, fromlayer3 entity: 0 Packet 4 received inside of A only contains valid data, no valid ACK TOLAYER3: packet being corrupted EVENT time: 526.661926, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -7 EVENT time: 528.172119, type: 0, timerinterrupt entity: 0 Resending packet 7 in A and acknum 4 Resending packet 8 in A and acknum 4 Resending packet 9 in A and acknum 4 Resending packet 10 in A and acknum 4 Resending packet 11 in A and acknum 4 Resending packet 12 in A and acknum 4 Resending packet 13 in A and acknum 4 Resending packet 14 in A and acknum 4 EVENT time: 532.431824, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 533.770020, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 4 due to a negative acknowledgement EVENT time: 535.641785, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -7 EVENT time: 539.970337, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 543.514160, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 4 due to a negative acknowledgement EVENT time: 544.606689, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 1 packets TOLAYER3: packet being lost TOLAYER3: packet being lost TOLAYER3: packet being lost TOLAYER3: packet being lost Sending packet 11 with acknowedgment 6 in B at time 544.606689 TOLAYER3: packet being lost EVENT time: 546.365723, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -7 TOLAYER3: packet being lost EVENT time: 551.681152, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 4 due to a negative acknowledgement EVENT time: 555.285400, type: 2, fromlayer3 entity: 1 Resending packet 4 with acknum 6 due to a negative acknowledgement TOLAYER3: packet being corrupted EVENT time: 556.470642, type: 2, fromlayer3 entity: 1 Resending packet 4 with acknum 6 due to a negative acknowledgement EVENT time: 558.457275, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 559.466492, type: 2, fromlayer3 entity: 1 Resending packet 4 with acknum 6 due to a negative acknowledgement EVENT time: 561.301575, type: 2, fromlayer3 entity: 0

Resending packet 7 with acknum 4 due to a negative acknowledgement EVENT time: 563.608398, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -5 EVENT time: 565.009033, type: 1, fromlayer5 entity: 1 EVENT time: 568.748657, type: 2, fromlayer3 entity: 1 Resending packet 4 with acknum 6 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 570.983093, type: 2, fromlayer3 entity: 1 Resending packet 4 with acknum 6 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 572.615356, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -5 EVENT time: 575.778931, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -5 EVENT time: 579.024109, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 EVENT time: 580.843140, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -5 EVENT time: 581.781372, type: 1, fromlayer5 entity: 1 EVENT time: 582.340698, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -7 EVENT time: 583.950012, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -5 TOLAYER3: packet being lost EVENT time: 585.870056, type: 2, fromlayer3 entity: 1 The packet sequence number and ack number are valid in the received packet in

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Received a ACK for packet 4 in B Sending acknowledgement in B for packet 7 Sending packet 12 with acknowedgment 7 in B at time 585.870056 EVENT time: 587.640564, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 8 EVENT time: 588.594055, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -5 TOLAYER3: packet being lost EVENT time: 588.693237, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 9 TOLAYER3: packet being lost EVENT time: 589.519836, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 590.265686, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 10 EVENT time: 593.072632, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 11 EVENT time: 594.098450, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -5 EVENT time: 597.516479, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -5 EVENT time: 600.317078, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 602.920593, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 12 EVENT time: 603.456909, type: 1, fromlayer5 entity: 1

EVENT time: 603.545044, type: 2, fromlayer3 entity: 0 Packet 5 received inside of A only contains valid data, no valid ACK TOLAYER3: packet being lost EVENT time: 606.180664, type: 2, fromlayer3 entity: 0 Packet 6 received inside of A only contains valid data, no valid ACK EVENT time: 610.706360, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 EVENT time: 610.721436, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 13 EVENT time: 611.259338, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 5 and acknum 13 Resending a packet for B with sequence number 6 and acknum 13 Resending a packet for B with sequence number 7 and acknum 13 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 8 and acknum 13 Resending a packet for B with sequence number 9 and acknum 13 Resending a packet for B with sequence number 10 and acknum 13 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 11 and acknum 13 Resending a packet for B with sequence number 12 and acknum 13 TOLAYER3: packet being lost EVENT time: 612.010925, type: 2, fromlayer3 entity: 1 Packet received inside of B only contains valid data, sending ACK 14 EVENT time: 613.914734, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 EVENT time: 614.697083, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 TOLAYER3: packet being lost

EVENT time: 615.786682, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -15

TOLAYER3: packet being lost

EVENT time: 617.246704, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -15

EVENT time: 619.353943, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -7

EVENT time: 621.645142, type: 1, fromlayer5 entity: 0

Queueing a message for A since 8 packets have been sent and unaked

EVENT time: 624.008728, type: 2, fromlayer3 entity: 0

Checksum was invalid for the packet received by A, sending NAK -7

EVENT time: 626.124695, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -15

TOLAYER3: packet being lost

EVENT time: 628.172119, type: 0, timerinterrupt entity: 0

Resending packet 7 in A and acknum 6

Resending packet 8 in A and acknum 6

Resending packet 9 in A and acknum 6

Resending packet 10 in A and acknum 6

Resending packet 11 in A and acknum 6

TOLAYER3: packet being lost

Resending packet 12 in A and acknum 6

Resending packet 13 in A and acknum 6

Resending packet 14 in A and acknum 6

TOLAYER3: packet being corrupted

EVENT time: 628.469788, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -7

EVENT time: 633.473572, type: 2, fromlayer3 entity: 1

Resending packet 5 with acknum 14 due to a negative acknowledgement

TOLAYER3: packet being lost

EVENT time: 634.394653, type: 2, fromlayer3 entity: 0

Resending packet 7 with acknum 6 due to a negative acknowledgement EVENT time: 637.022156, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement EVENT time: 637.662354, type: 2, fromlayer3 entity: 1 Resending packet 5 with acknum 14 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 640.212402, type: 1, fromlayer5 entity: 1 EVENT time: 641.304993, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 EVENT time: 642.021667, type: 2, fromlayer3 entity: 1 Resending packet 5 with acknum 14 due to a negative acknowledgement EVENT time: 648.475769, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -7 EVENT time: 649.907043, type: 2, fromlayer3 entity: 1 Resending packet 5 with acknum 14 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 656.150208, type: 1, fromlayer5 entity: 1 EVENT time: 657.133179, type: 2, fromlayer3 entity: 1 Resending packet 5 with acknum 14 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 658.217834, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 TOLAYER3: packet being lost EVENT time: 659.718933, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 EVENT time: 662.244690, type: 2, fromlayer3 entity: 1

Resending packet 5 with acknum 14 due to a negative acknowledgement EVENT time: 663.233582, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 666.822571, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -7 EVENT time: 666.955994, type: 1, fromlayer5 entity: 1 EVENT time: 667.566406, type: 2, fromlayer3 entity: 1 Recieved ACK in B for 2 packets Sending packet 13 with acknowedgment 14 in B at time 667.566406 Sending packet 14 with acknowedgment 14 in B at time 667.566406 EVENT time: 668.537231, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 TOLAYER3: packet being corrupted EVENT time: 672.016357, type: 1, fromlayer5 entity: 1 EVENT time: 675.343811, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 TOLAYER3: packet being corrupted EVENT time: 675.436096, type: 2, fromlayer3 entity: 1 Received NAK in B but not resending as packet 7 resent recently EVENT time: 677.911987, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 7 and acknum 14 TOLAYER3: packet being lost Resending a packet for B with sequence number 8 and acknum 14 Resending a packet for B with sequence number 9 and acknum 14 Resending a packet for B with sequence number 10 and acknum 14 Resending a packet for B with sequence number 11 and acknum 14 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 12 and acknum 14 Resending a packet for B with sequence number 13 and acknum 14

Resending a packet for B with sequence number 14 and acknum 14 TOLAYER3: packet being lost EVENT time: 681.787048, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement EVENT time: 685.255615, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement TOLAYER3: packet being corrupted EVENT time: 689.636536, type: 1, fromlayer5 entity: 1 EVENT time: 690.695679, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 693.646057, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 TOLAYER3: packet being lost EVENT time: 696.097900, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement EVENT time: 696.338989, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -7 TOLAYER3: packet being lost EVENT time: 703.963318, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 TOLAYER3: packet being corrupted EVENT time: 704.580139, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement EVENT time: 706.099915, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement

EVENT time: 707.382080, type: 2, fromlayer3 entity: 1

The sequence number and the ack were invalid in B, sending NAK -15 EVENT time: 708.898499, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 709.588562, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement EVENT time: 711.424988, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement EVENT time: 716.328064, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 EVENT time: 719.844788, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 6 due to a negative acknowledgement EVENT time: 721.559570, type: 2, fromlayer3 entity: 0 Packet 7 received inside of A only contains valid data, no valid ACK EVENT time: 725.081299, type: 2, fromlayer3 entity: 0 Packet 8 received inside of A only contains valid data, no valid ACK EVENT time: 725.715149, type: 1, fromlayer5 entity: 1 EVENT time: 726.122925, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 EVENT time: 728.450989, type: 2, fromlayer3 entity: 0 Packet 9 received inside of A only contains valid data, no valid ACK TOLAYER3: packet being corrupted EVENT time: 732.517090, type: 2, fromlayer3 entity: 0 Checksum was invalid for the packet received by A, sending NAK -10 TOLAYER3: packet being lost EVENT time: 735.535706, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15

EVENT time: 736.581055, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 EVENT time: 740.425781, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 740.548706, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -10 TOLAYER3: packet being corrupted EVENT time: 740.756348, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -15 TOLAYER3: packet being lost EVENT time: 742.931824, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement EVENT time: 749.320190, type: 2, fromlayer3 entity: 0 Sequence number and ACK Invalid for the packet received by A, sending NAK -10 TOLAYER3: packet being corrupted EVENT time: 750.401978, type: 2, fromlayer3_entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 EVENT time: 751.418335, type: 2, fromlayer3 entity: 1 The sequence number and the ack were invalid in B, sending NAK -15 TOLAYER3: packet being lost EVENT time: 752.540222, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement EVENT time: 754.139465, type: 2, fromlayer3 entity: 0 Resending packet 7 with acknum 9 due to a negative acknowledgement EVENT time: 757.761902, type: 1, fromlayer5 entity: 1

EVENT time: 758.375427, type: 2, fromlayer3 entity: 0

Resending packet 7 with acknum 9 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 759.063599, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement TOLAYER3: packet being lost EVENT time: 761.227783, type: 0, timerinterrupt entity: 1 Resending a packet for B with sequence number 7 and acknum 14 TOLAYER3: packet being lost Resending a packet for B with sequence number 8 and acknum 14 Resending a packet for B with sequence number 9 and acknum 14 TOLAYER3: packet being lost Resending a packet for B with sequence number 10 and acknum 14 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 11 and acknum 14 Resending a packet for B with sequence number 12 and acknum 14 TOLAYER3: packet being corrupted Resending a packet for B with sequence number 13 and acknum 14 Resending a packet for B with sequence number 14 and acknum 14 EVENT time: 763.961487, type: 1, fromlayer5 entity: 0 Queueing a message for A since 8 packets have been sent and unaked EVENT time: 764.411377, type: 2, fromlayer3 entity: 0 Recieved ACK in A for 1 packets at 764.411377 TOLAYER3: packet being lost Sending packet 15 with acknowedgment for packet 9 in A at 764.411377

EVENT time: 764.616455, type: 2, fromlayer3 entity: 1

Resending packet 7 with acknum 14 due to a negative acknowledgement

EVENT time: 767.950134, type: 1, fromlayer5 entity: 0

Queueing a message for A since 8 packets have been sent and unaked

EVENT time: 769.325256, type: 2, fromlayer3 entity: 0

Sequence number and ACK Invalid for the packet received by A, sending NAK -10

EVENT time: 771.588013, type: 2, fromlayer3 entity: 0 Recieved ACK in A for 1 packets at 771.588013 Sending packet 16 with acknowedgment for packet 9 in A at 771.588013 TOLAYER3: packet being lost EVENT time: 773.761658, type: 2, fromlayer3 entity: 1 Resending packet 7 with acknum 14 due to a negative acknowledgement EVENT time: 780.635559, type: 2, fromlayer3 entity: 0 Recieved ACK in A for 2 packets at 780.635559 Sending packet 1 with acknowedgment for packet 9 in A at 780.635559 Sending packet 2 with acknowedgment for packet 9 in A at 780.635559 TOLAYER3: packet being lost EVENT time: 780.771240, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -15 EVENT time: 782.032532, type: 2, fromlayer3 entity: 1 Checksum was invalid for the packet received by B, sending NAK -15 EVENT time: 782.677673, type: 1, fromlayer5 entity: 1 EVENT time: 783.739990, type: 1, fromlayer5 entity: 1 EVENT time: 784.042419, type: 2, fromlayer3 entity: 0 Simulator terminated at time 784.042419 after sending 70 msgs from layer5 Packets received A: 10 B 22