

## Alternating Bit

Note that 1) "Ack 10" acknowledges packet 9.

xinu01 56 \$ ./prog2

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

Enter the number of messages to simulate: 30

Enter packet loss probability [enter 0.0 for no loss]: 0.1

Enter packet corruption probability [0.0 for no corruption]: 0.3

Enter average time between messages from sender's layer5 [ > 0.0]: 1000

Enter TRACE: 2

EVENT time: 1962.025146, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being lost

EVENT time: 2962.025146, type: 0, timerinterrupt entity: 0

EVENT time: 2964.146729, type: 2, fromlayer3 entity: 1

Ack 0

EVENT time: 2970.918457, type: 2, fromlayer3 entity: 0

EVENT time: 3435.513672, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being corrupted

EVENT time: 3439.552490, type: 2, fromlayer3 entity: 1

Wrong checksum for data transmitted from A.

EVENT time: 4105.804688, type: 1, fromlayer5 entity: 0

Ignore message due to outstanding unacked message.

EVENT time: 4435.513672, type: 0, timerinterrupt entity: 0

EVENT time: 4444.278809, type: 2, fromlayer3 entity: 1

Ack 1

EVENT time: 4447.312012, type: 2, fromlayer3 entity: 0

EVENT time: 5874.507812, type: 1, fromlayer5 entity: 0

TOLAYER3: packet being corrupted

EVENT time: 5879.673828, type: 2, fromlayer3 entity: 1

Wrong checksum for data transmitted from A.

EVENT time: 6703.684570, type: 1, fromlayer5 entity: 0

Ignore message due to outstanding unacked message.

EVENT time: 6874.507812, type: 0, timerinterrupt entity: 0

TOLAYER3: packet being corrupted

EVENT time: 6881.054199, type: 2, fromlayer3 entity: 1

Wrong checksum for data transmitted from A.

EVENT time: 7769.629395, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 7874.507812, type: 0, timerinterrupt entity: 0

EVENT time: 7882.235840, type: 2, fromlayer3 entity: 1  
Ack 2

EVENT time: 7884.279785, type: 2, fromlayer3 entity: 0

EVENT time: 9480.233398, type: 1, fromlayer5 entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 9482.536133, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 10480.233398, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 10483.537109, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 10814.034180, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 11128.476562, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 11480.233398, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being lost

EVENT time: 12101.125977, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 12281.878906, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 12480.233398, type: 0, timerinterrupt entity: 0

EVENT time: 12485.280273, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being corrupted

Ack 3

EVENT time: 12486.939453, type: 2, fromlayer3 entity: 0

EVENT time: 14143.847656, type: 1, fromlayer5 entity: 0

EVENT time: 14147.743164, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being corrupted

Ack 4

EVENT time: 14153.329102, type: 2, fromlayer3 entity: 0

EVENT time: 15353.237305, type: 1, fromlayer5 entity: 0  
TOLAYER3: packet being lost

EVENT time: 15724.728516, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 16353.237305, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 16354.878906, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 17353.238281, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 17359.773438, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 17389.732422, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 17749.746094, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 18115.816406, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 18353.238281, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 18363.099609, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 19319.484375, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 19353.238281, type: 0, timerinterrupt entity: 0

EVENT time: 19363.093750, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being corrupted

Ack 5

EVENT time: 19371.517578, type: 2, fromlayer3 entity: 0  
Wrong checksum for acknowledgement from B.

EVENT time: 20353.238281, type: 0, timerinterrupt entity: 0

EVENT time: 20356.201172, type: 2, fromlayer3 entity: 1  
Ack 5

EVENT time: 20360.187500, type: 2, fromlayer3 entity: 0

EVENT time: 21057.007812, type: 1, fromlayer5 entity: 0

EVENT time: 21059.263672, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being lost

Ack 6

EVENT time: 22057.007812, type: 0, timerinterrupt entity: 0

EVENT time: 22061.023438, type: 2, fromlayer3 entity: 1  
Ack 6

EVENT time: 22067.175781, type: 2, fromlayer3 entity: 0

EVENT time: 22681.208984, type: 1, fromlayer5 entity: 0

EVENT time: 22689.767578, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being lost  
Ack 7

EVENT time: 22901.464844, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 23681.208984, type: 0, timerinterrupt entity: 0

EVENT time: 23686.191406, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being corrupted  
Ack 7

EVENT time: 23688.490234, type: 2, fromlayer3 entity: 0

EVENT time: 23732.187500, type: 1, fromlayer5 entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 23738.482422, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 24732.187500, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being lost

EVENT time: 25662.529297, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 25732.187500, type: 0, timerinterrupt entity: 0

EVENT time: 25739.011719, type: 2, fromlayer3 entity: 1  
Ack 8

EVENT time: 25742.791016, type: 2, fromlayer3 entity: 0

EVENT time: 26801.406250, type: 1, fromlayer5 entity: 0

EVENT time: 26804.619141, type: 2, fromlayer3 entity: 1  
Ack 9

EVENT time: 26812.062500, type: 2, fromlayer3 entity: 0

EVENT time: 28745.728516, type: 1, fromlayer5 entity: 0

EVENT time: 28752.458984, type: 2, fromlayer3 entity: 1  
TOLAYER3: packet being lost  
Ack 10

EVENT time: 29745.728516, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 29750.687500, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 30449.494141, type: 1, fromlayer5 entity: 0  
Ignore message due to outstanding unacked message.

EVENT time: 30745.728516, type: 0, timerinterrupt entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 30755.691406, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 31745.728516, type: 0, timerinterrupt entity: 0

EVENT time: 31747.712891, type: 2, fromlayer3 entity: 1  
Ack 10

EVENT time: 31749.134766, type: 2, fromlayer3 entity: 0

EVENT time: 31981.646484, type: 1, fromlayer5 entity: 0

EVENT time: 31990.089844, type: 2, fromlayer3 entity: 1  
Ack 11

EVENT time: 31998.494141, type: 2, fromlayer3 entity: 0

EVENT time: 32214.205078, type: 1, fromlayer5 entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 32220.814453, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 33214.203125, type: 0, timerinterrupt entity: 0

EVENT time: 33221.460938, type: 2, fromlayer3 entity: 1  
Ack 12

EVENT time: 33225.484375, type: 2, fromlayer3 entity: 0

EVENT time: 33552.660156, type: 1, fromlayer5 entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 33554.062500, type: 2, fromlayer3 entity: 1  
Wrong checksum for data transmitted from A.

EVENT time: 34552.660156, type: 0, timerinterrupt entity: 0

EVENT time: 34554.781250, type: 2, fromlayer3 entity: 1  
Ack 13

EVENT time: 34564.500000, type: 2, fromlayer3 entity: 0

EVENT time: 34815.281250, type: 1, fromlayer5 entity: 0  
TOLAYER3: packet being corrupted

EVENT time: 34823.417969, type: 2, fromlayer3 entity: 1