ACTIVE CLOSING

simultaneous closing process through the CLOSING state for both client and server here

...Connecting emonserver.
330138
randomSN : 361810725
[sendInternal..writePos:-1--length:0--HL:64--LPort:27696--RPort:80--LSN:361810725--ACKSN:0--flags:10--STATE:x1--appliFlags:0]
[HL:64--unAckLen:1--size:0--LPort:27696--destPortRCV:27696--RPort:80--RSN:0--LSN:361810725--SNRCV:3944348864--ACKSNRCV:361810726--flags:10010--STATE:x1--appliFlags:0]
found
[Send-ACK--HL:64--unAckLen:0--size:0--LPort:27696--RPort:80--LSN:361810726--ACKSN:3944348865--flags:10000--STATE:x3--appliFlags:64]
[sendInternal..writePos:98--length:98--HL:64--LPort:27696--RPort:80--LSN:361810726--ACKSN:3944348865--flags:10000--STATE:x3--appliFlags:64]
360177
sending 98 bytes of data...
Disconnecting...[HL:64--unAckLen:98--size:0--LPort:27696--destPortRCV:27696--RPort:80--RSN:3944348865--LSN:361810726--SNRCV:3944348865--ACKSNRCV:361810824--flags:10000--STATE:x13--appliFlags:64]
found
[Send-FIN-ACK--HL:64--unAckLen:1--size:0--LPort:27696--RPort:80--LSN:361810824--ACKSN:3944348865--flags:10001--STATE:x4--appliFlags:17]
[HL:64--unAckLen:1--size:2--LPort:27696--destPortRCV:27696--RPort:80--RSN:3944348865--LSN:361810824--SNRCV:3944348865--ACKSNRCV:361810824--flags:11000--STATE:x4--appliFlags:17]
found
[Srv answer: ok]
[Send-ACK--HL:64--unAckLen:1--size:0--LPort:27696--RPort:80--LSN:361810824--ACKSN:3944348867--flags:10000--STATE:x4--appliFlags:2]
[HL:64--unAckLen:1--size:0--LPort:27696--destPortRCV:27696--RPort:80--RSN:3944348867--LSN:361810824--SNRCV:3944348867--ACKSNRCV:361810824--flags:10001--STATE:x4--appliFlags:2]
found
[Send-ACK--HL:64--unAckLen:1--size:0--LPort:27696--RPort:80--LSN:361810824--ACKSN:3944348868--flags:10000--STATE:x6--appliFlags:16]
[HL:64--unAckLen:1--size:0--LPort:27696--destPortRCV:27696--RPort:80--RSN:3944348868--LSN:361810824--SNRCV:3944348868--ACKSNRCV:361810825--flags:10000--STATE:x6--appliFlags:16]
found
[STATE:x7]
[HL:64--unAckLen:0--size:0--LPort:27696--destPortRCV:27696--RPort:80--RSN:3944348868--LSN:361810825--SNRCV:3944348868--ACKSNRCV:361810825--flags:10000--STATE:x7--appliFlags:1]
found
[Send-ACK--HL:64--unAckLen:0--size:0--LPort:27696--RPort:80--LSN:361810825--ACKSN:3944348868--flags:10000--STATE:x7--appliFlags:0]
[STATE:x0]

..Connecting emonserver.

60024

randomSN : 1638013519

[sendInternal..writePos:-1--length:0--HL:64--LPort:27687--RPort:80--LSN:1638013519--ACKSN:0--flags:10--STATE:x1--appliFlags:0]

[HL:64--unAckLen:1--size:0--LPort:27687--destPortRCV:27687--RPort:80--RSN:0--LSN:1638013519--SNRCV:1206860561--ACKSNRCV:1638013520--flags:10010--STATE:x1--appliFlags:0]

found

[Send-ACK--HL:64--unAckLen:0--size:0--LPort:27687--RPort:80--LSN:1638013520--ACKSN:1206860562--flags:10000--STATE:x3--appliFlags:64]

[sendInternal..writePos:97--length:97--HL:64--LPort:27687--RPort:80--LSN:1638013520--ACKSN:1206860562--flags:10000--STATE:x3--appliFlags:64]

90064

sending 97 bytes of data...

Disconnecting...[HL:64--unAckLen:97--size:0--LPort:27687--destPortRCV:27687--RPort:80--RSN:1206860562--LSN:1638013520--SNRCV:1206860562--ACKSNRCV:1638013617--flags:10000--STATE:x13--appliFlags:64]

found

[HL:64--unAckLen:0--size:2--LPort:27687--destPortRCV:27687--RPort:80--RSN:1206860562--LSN:1638013617--SNRCV:1206860562--ACKSNRCV:1638013617--flags:11000--STATE:x13--appliFlags:1]

found

[Srv answer: ok]

[Send-FIN-ACK—HL:64--unAckLen:1--size:0--Lport:27687--Rport:80--LSN:1638013617--ACKSN:1206860564--flags:10001--STATE:x4--appliFlags:18]

CLIENT SEND A FIN AND MOVES TO FINWAIT1

[HL:64—unAckLen:1--size:0--Lport:27687--destPortRCV:27687--Rport:80--RSN:1206860564--LSN:1638013617--SNRCV:1206860564--ACKSNRCV:1638013617--flags:10001--STATE:x4--appliFlags:18]

found

CLIENT RECEIVES SERVER FIN, IS IS ONLY A FIN, NOT AN ACK OF THE CLIENT FIN
CLIENT SENDS AN ACK FOR THE SERVER FIN AND FLIPS TO CLOSING (x6)
THE SERVER IS STILL IN FINWAIT1

[Send-ACK—HL:64--unAckLen:1--size:0--Lport:27687--Rport:80--LSN:1638013617--ACKSN:1206860565--flags:10000--STATE:x6--appliFlags:16]

[HL:64--unAckLen:1--size:0--LPort:27687--destPortRCV:27687--RPort:80--RSN:1206860565--LSN:1638013617--SNRCV:1206860565--ACKSNRCV:1638013618--flags:10000--STATE:x6--appliFlags:16]

found

CLIENT RECEIVES THE SERVER ACK FOR ITS OWN FIN. CLIENT FLIPS TO TIMEWAIT
SERVER SHOULD BE IN CLOSING TILL IT RECEIVES THE CLIENT ACK FOR ITS FIN

[HL:64—unAckLen:0--size:0--Lport:27687--destPortRCV:27687--Rport:80--RSN:1206860565--LSN:1638013618--SNRCV:1206860565--ACKSNRCV:1638013618--flags:10000--STATE:x7--appliFlags:1]

GOING TO CLOSING THE SERVER HAS SENT AN ACK, WHICH THE CLIENT RECEIVES NOW

found

AS IT RECEIVES A PACKET FOR HIM, CLIENT IN TIMEWAIT SENDS THE FINAL ACK

[Send-ACK--HL:64--unAckLen:0--size:0--LPort:27687--RPort:80--LSN:1638013618--ACKSN:1206860565--flags:10000--STATE:x7--appliFlags:0]

[STATE:x0]

BOTH CLIENT AND SERVER ARE IN TIMEWAIT AND TOGGLE TO DISCONNECTED AFTER 120 pulses

EtherSia - TCPClient architecture – tests of version 4

PASSIVE CLOSING

...Connecting emonserver.
0
randomSN : 2041495395
[sendInternal..writePos:-1--length:0--HL:64--LPort:27685--RPort:80--LSN:2041495395--ACKSN:0--flags:10--STATE:x1--appliFlags:0]
[HL:64--unAckLen:1--size:0--LPort:27685--destPortRCV:27685--RPort:80--RSN:0--LSN:2041495395--SNRCV:307855054--ACKSNRCV:2041495396--flags:10010--STATE:x1--appliFlags:0]
found
[Send-ACK--HL:64--unAckLen:0--size:0--LPort:27685--RPort:80--LSN:2041495396--ACKSN:307855055--flags:10000--STATE:x3--appliFlags:64]
[sendInternal..writePos:97--length:97--HL:64--LPort:27685--RPort:80--LSN:2041495396--ACKSN:307855055--flags:10000--STATE:x3--appliFlags:64]
30039
sending 97 bytes of data...
[HL:64--unAckLen:97--size:0--LPort:27685--destPortRCV:27685--RPort:80--RSN:307855055--LSN:2041495396--SNRCV:307855055--ACKSNRCV:2041495493--flags:10000--STATE:x3--appliFlags:64]
found
[HL:64--unAckLen:0--size:2--LPort:27685--destPortRCV:27685--RPort:80--RSN:307855055--LSN:2041495493--SNRCV:307855055--ACKSNRCV:2041495493--flags:11000--STATE:x3--appliFlags:1]
found
[Srv answer: ok]
[Send-ACK--HL:64--unAckLen:0--size:0--LPort:27685--RPort:80--LSN:2041495493--ACKSN:307855057--flags:10000--STATE:x3--appliFlags:2]
[HL:64--unAckLen:0--size:0--LPort:27685--destPortRCV:27685--RPort:80--RSN:307855057--LSN:2041495493--SNRCV:307855057--ACKSNRCV:2041495493--flags:10001--STATE:x3--appliFlags:2]
found
[Send-FIN-ACK--HL:64--unAckLen:1--size:0--LPort:27685--RPort:80--LSN:2041495493--ACKSN:307855058--flags:10001--STATE:x8--appliFlags:16]
[HL:64--unAckLen:1--size:0--LPort:27685--destPortRCV:27685--RPort:80--RSN:307855058--LSN:2041495493--SNRCV:307855058--ACKSNRCV:2041495494--flags:10000--STATE:x8--appliFlags:16]
found
[STATE:x0]

PASSIVE CLOSE GENERAL PROCESS

CLIENT SIDE

X3 : CONNECTED	> FIN reception >	X8 : LAST ACK > sending FIN ACK	> ACK reception >	X0 DISCONNECTED

SERVER SIDE

CONNECTED	SENDING FIN(ACK)	FIN WAIT1	> FINACK reception	TIME WAIT Then moving to DISCONNECTED after 120 timer pulses