Yes, you are correct in assessing that your problem is the while loop; since while(1) will always be true, and since the RenegadeFDS is not multithreaded, your program will essentially stay in that loop and any code executed by it indefinitely until 1 is no longer equal to 1, which will obviously never happen.

As raven said, learn to write non blocking code or shove this code in a thread so it won't halt the FDS. I've heard plenty of people say creating threads in the FDS is not a good idea, though.