

Haliunaa Munkhuu
Xiwen Shen
Mingzhe Zhang

ERSS MINI-UPS PROJECT

Flakiness:

We save our acks and seqnums in the database instead of the stack. Main reason being during transactions with the world and amazon, if there is any issue with the connection/program, data is still persistent and we can pick up on where we left of. Separate thread (besides the main thread that handles all communications) periodically, every 5 seconds, check the ack and seqnum datatable and sends out messages that have not been ack-ed yet. Another reason for database save was to avoid possible buffer overflow.

Threads on Sockets:

In order to handle each communication separately we use threads which means there are multiple threads accessing the same amazon and world sockets.

Error Handling:

Our receive message function could potentially fail if the message we received from either party doesn't strictly follow the UCommand and AmazonCommand protocols we have set up. We should catch these exceptions and drop the packets and send back an error message.