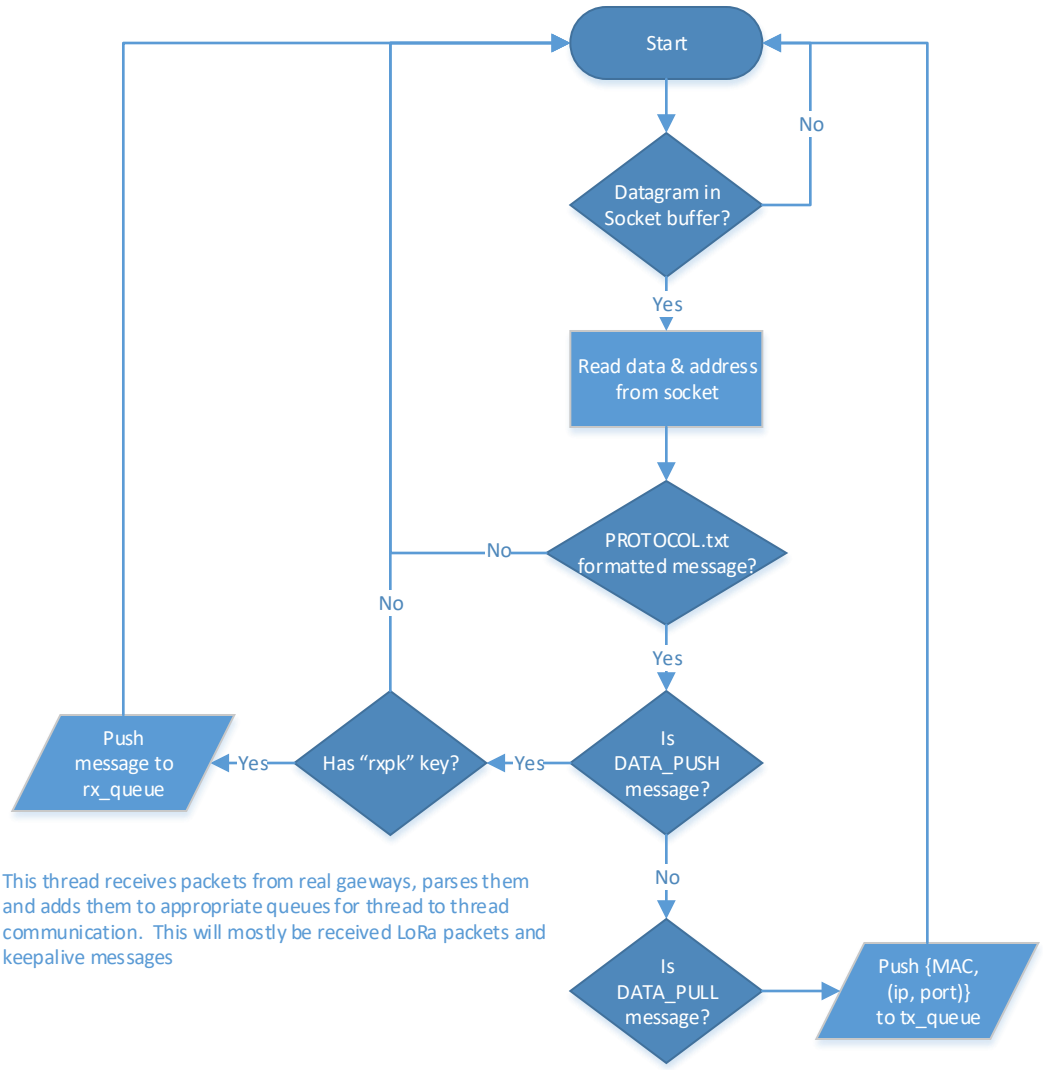
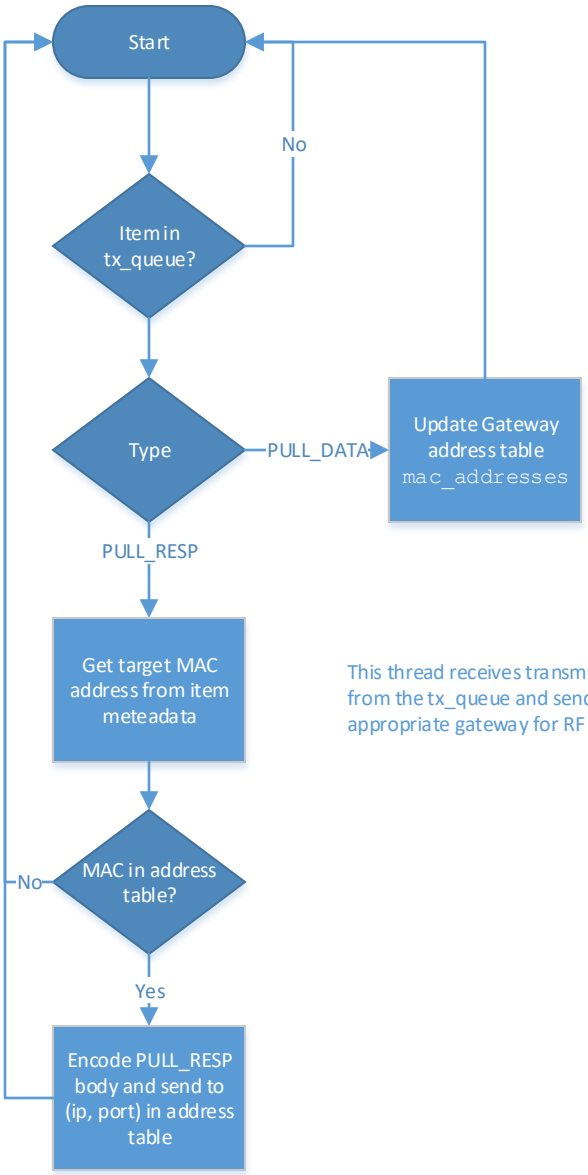
Server.py:listen()



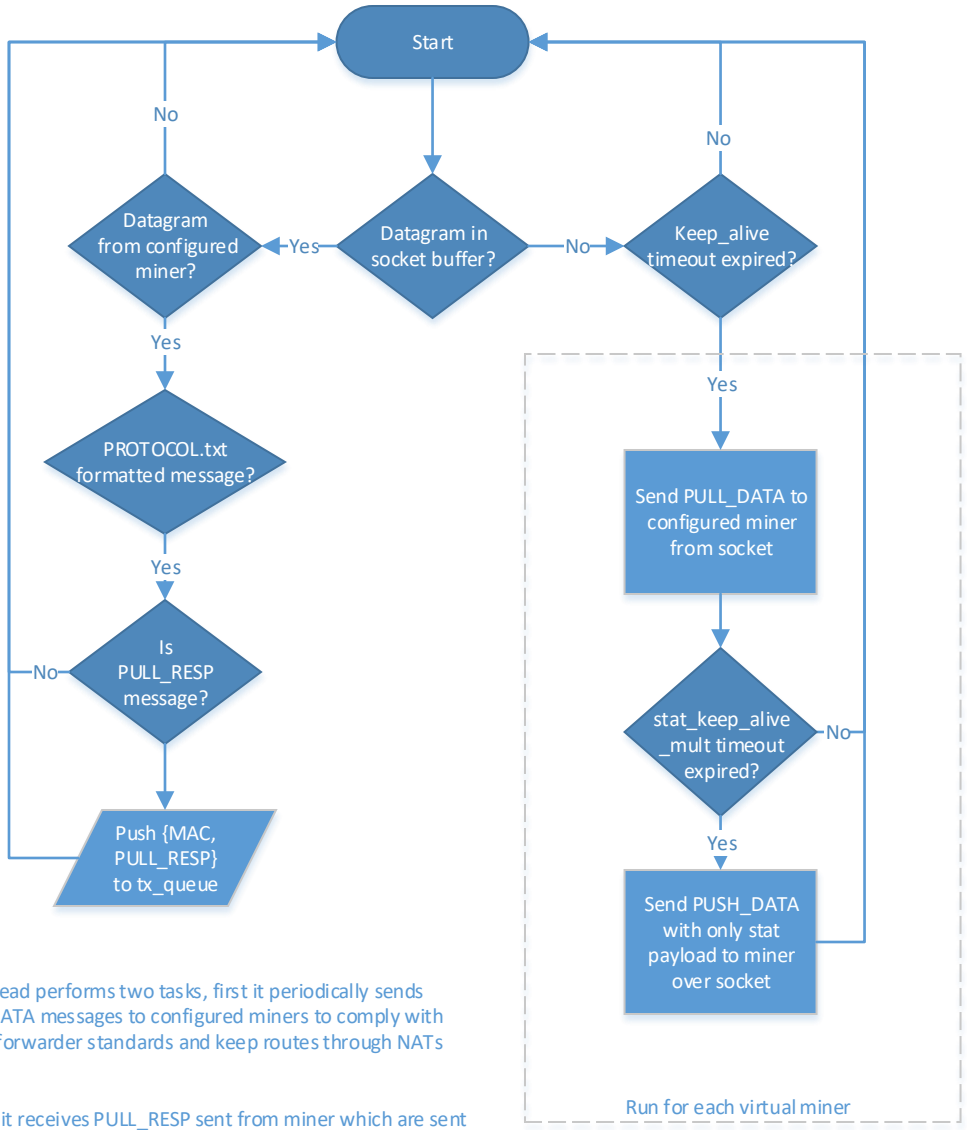
This thread receives packets from real gaeways, parses them and adds them to appropriate queues for thread to thread communication. This will mostly be received LoRa packets and keepalive messages

Server.py:transmit()



This thread receives transmit commands from the tx_queue and sends them to the appropriate gateway for RF transmission

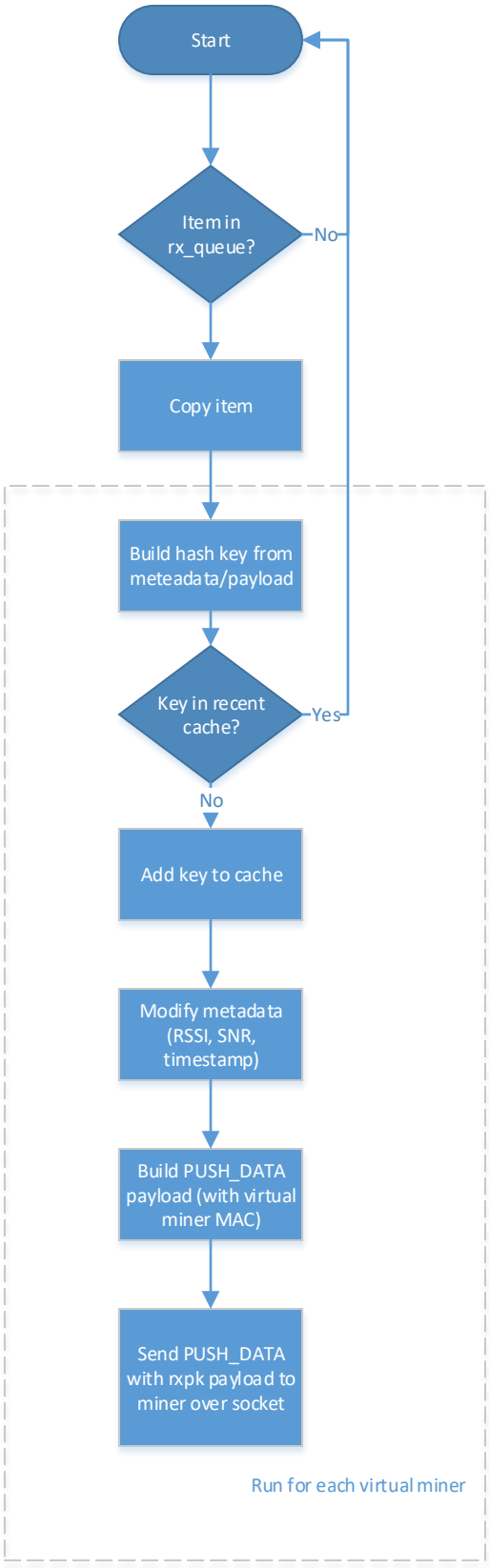
Virtual_gateway.py:handle_pull()



This thread performs two tasks, first it periodically sends PULL_DATA messages to configured miners to comply with packet forwarder standards and keep routes through NATs open.

Second it receives PULL_RESP sent from miner which are sent asynchronously when a LoRa transmit is needed. These are pushed on the tx_queue.

Virtual_gateway.py:handle_push()



This thread is responsible for taking received LoRa packets from any gateway and sending copies to each virtual miner. These virtual miners perform de-duplication, metadata modification as required to pass PoC thresholds and sends in a UDP datagram to miners.