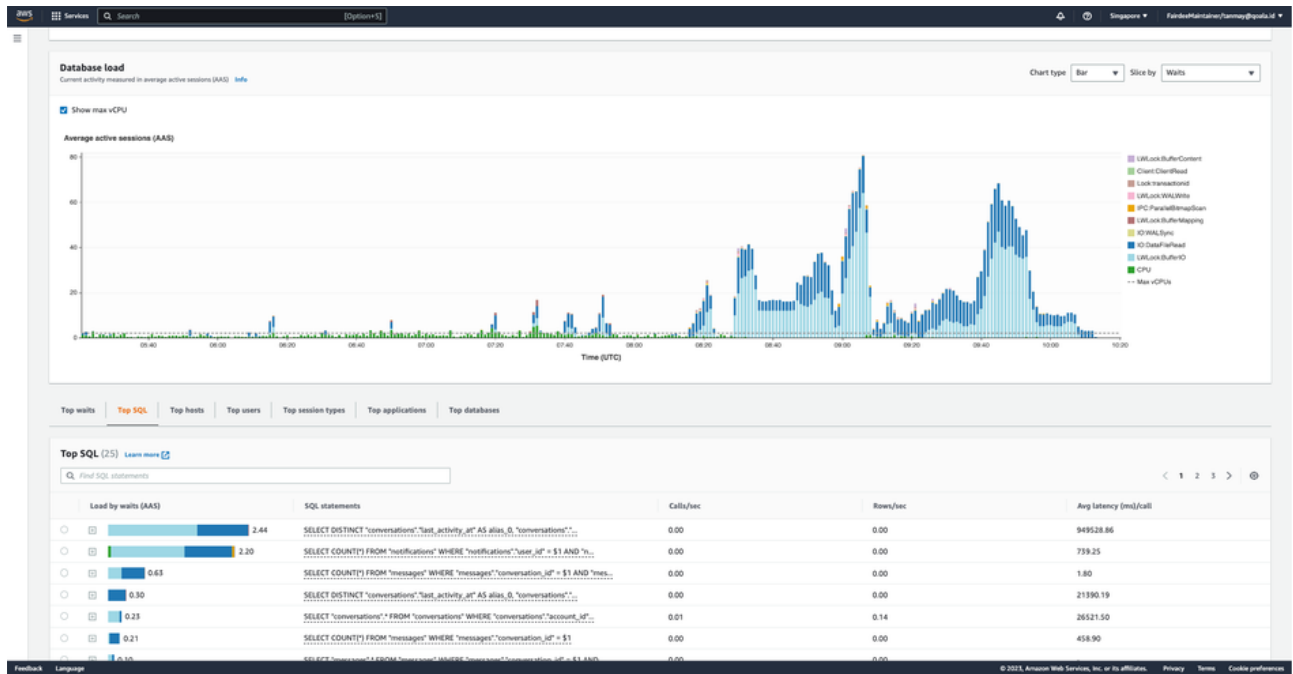


13th March Chatwoot Issue

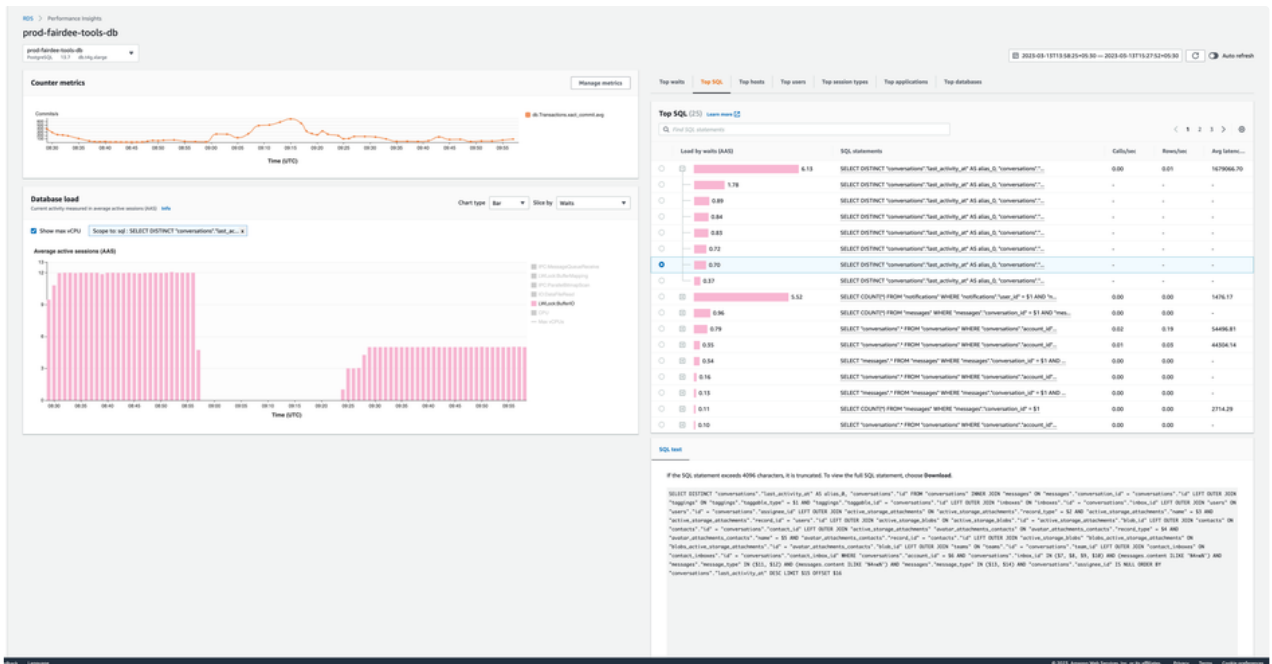
There were a few issues on 13th March we faced in Chatwoot today:

1. Increased number of connection timeout errors and request timeout errors.
2. Unusual LWLock:BufferIO on the database.



FINDINGS:

1. Increased number of connection timeout errors and request timeout errors.
 - a. The reason for the spike was that all the db connections were busy and were giving request timeouts, and after a point when all the connections were occupied the API start throwing ConnectionTimeout.
2. Unusual LWLock:BufferIO on the database.
 - a. The `LWLock:BufferIO` event occurs when PostgreSQL is waiting for other processes to finish their input/output (I/O) operations when concurrently trying to access a page. Its purpose is for the same page to be read into the shared buffer.



- b. The increase in the number of search queries around the same time may have caused the issue, as multiple queries may have been trying to search for a common keyword present in all conversations, leading to the acquisition of the LWLock:BufferIO lock for all conversations. This, in turn, caused the conversations' read/write operations to wait for a read/write lock that they were unable to obtain, resulting in RequestTimeout errors after 15 seconds.



- c. Upgrading the database resources appears to have resolved the issue. Previously, restarting the database or killing the culprit query would have resolved the issue, but now that resources have been increased, it may be possible to reconsider downgrading them.