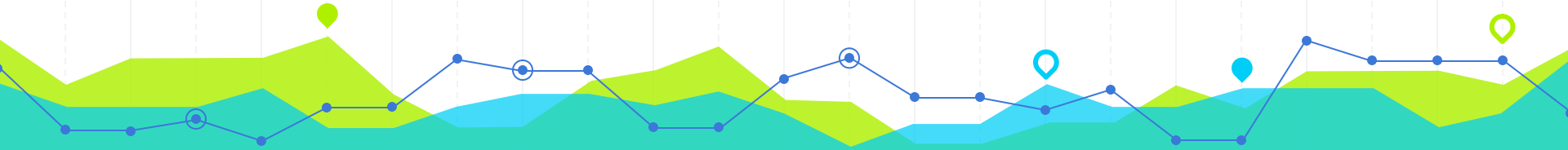


CYGNO Technical Meeting 2024, 5 June



# Source-Source SQL replication

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# Source-Replica SQL

CYGNO database works today as Source-Replica :

1. Source is the DB running locally on the DAQ;
2. Replica is the DB running on Cloud;
3. For our use-case this is not the best choice.
  - a. We saw that every now and then the **Source-Replica loses its synchronization**;
  - b. The problem is that we write some data on Source side and some other on Replica side;

# Source-Source SQL, possible solution?

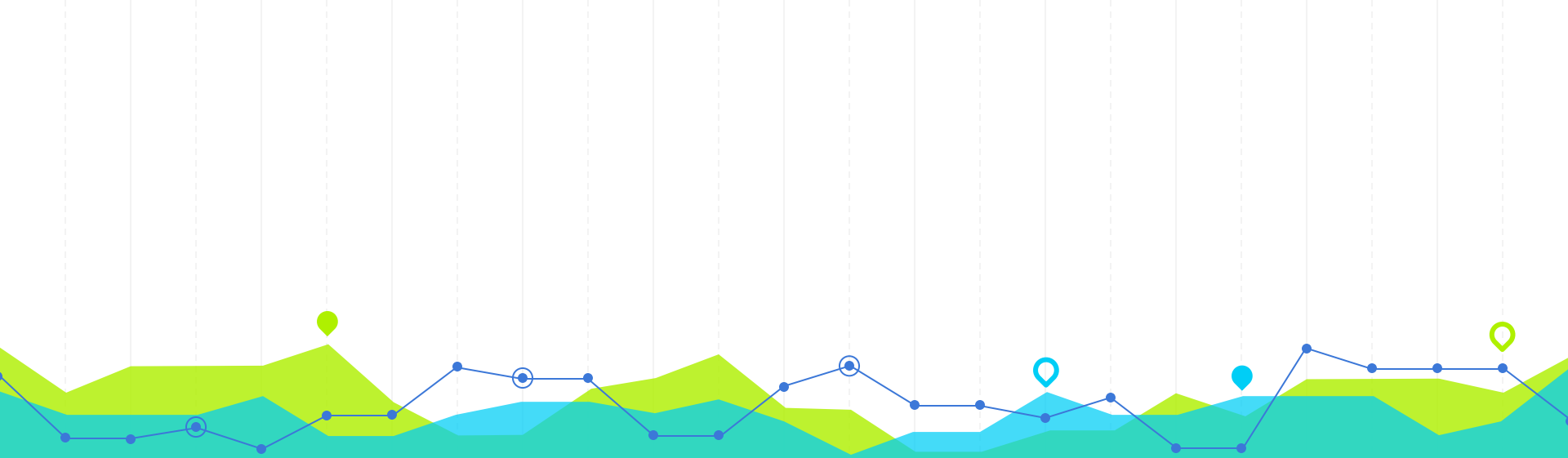
Move our environment to Source-Source configuration could be a solution.

- ⦿ This means that the **Local DB will write on the Cloud DB,** and **Cloud DB will write on Local DB.**
- ⦿ with this we expect to always have the two DBs updated and solve the synchronization problem.

# Source-Source SQL, possible solution?

If the group accept this as a solution we can proceed as follow:

1. Configure the Source-Source SQL on LNF environment;
2. Test the new system for over 15-30 days;
3. If it passes the test, plan a shutdown of the data taking and configure the Source-Source SQL also at LIME
4. And after that for Mango;



# Bonus problem

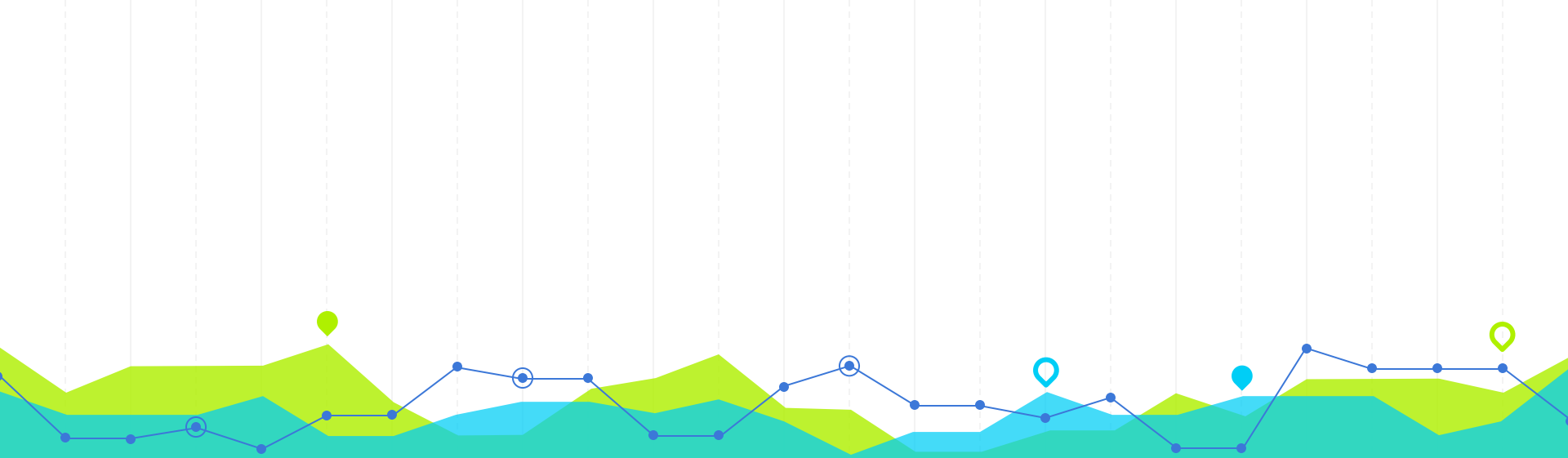
# Date/hour on the DB

By now, we are saving “start\_time” and “end\_time” **not as a Unix Timestamp** but as the “clock hour” at the moment.

The implications are that half of the year our **start\_time/end\_time** is on **UTC+1** and the other half on **UTC+2**.

Two possible solutions are:

1. Change the way that start\_time and end\_time are been collected;
2. Add a new column with unix timestamp.



**THANK YOU!**