

TRAIN

F * position_block_id INTEGER
train_id INTEGER
begin_date TIMESTAMP
end_date TIMESTAMP

TRAIN_TRACK_BLOCKS_FK (position_block_id)

Partitioned table by train_id.

Each time when train switch to another block end_date column need to be updated with systimestamp and new record need to be added with train_id where the begin_date will be the switch timestamp and the end_date will some default data in the future.

update train set end_date(systimestamp)
where train_id=? and systimestamp is between begin_date and end_date;

insert into

train(position_block_id, train_id,begin_date,end_date)
values(?position_block_id, ?train_id, CURRENT_TIMESTAMP(),
CAST(("2050-00-00 00:00:00.000000") as TIMESTAMP);

To get the latest position - select train_id, position_block_id from train where sysdate between begin_date and end_date;