

Репликация и другие фоновые процессы

- Создал таблицу, добавил реплики на других серверах, наполнил данными:

```
PS E:\Work\ClickHouse\CHCluster> docker ps
```

```
CONTAINER ID   NAMES
8bf21beb2570   chcluster-clickhouse3-1
0314fc066495   chcluster-clickhouse1-1
80f7d37e0a11   chcluster-clickhouse2-1
50cdbef1df02   chcluster-zookeeper-1
```

```
PS E:\Work\ClickHouse\CHCluster> docker exec -it 0314fc066495
clickhouse-client
```

```
CREATE TABLE trips
```

```
(
  `trip_id` UInt32,
  `pickup_datetime` DateTime,
  `dropoff_datetime` DateTime,
  `pickup_longitude` Nullable(Float64),
  `pickup_latitude` Nullable(Float64),
  `dropoff_longitude` Nullable(Float64),
  `dropoff_latitude` Nullable(Float64),
  `passenger_count` UInt8,
  `trip_distance` Float32,
  `fare_amount` Float32,
  `extra` Float32,
  `tip_amount` Float32,
  `tolls_amount` Float32,
  `total_amount` Float32,
  `payment_type` Enum('CSH' = 1, 'CRE' = 2, 'NOC' = 3, 'DIS' =
4, 'UNK' = 5),
  `pickup_ntaname` LowCardinality(String),
  `dropoff_ntaname` LowCardinality(String)
)
ENGINE = ReplicatedMergeTree('/clickhouse/{database}/{table}',
'{replica}')
```

```
PRIMARY KEY (pickup_datetime, dropoff_datetime)
```

```
...
```

Вывод из system.replicas:

```
SELECT *  
FROM system.replicas
```

Row 1:

database:	default
table:	trips
engine:	ReplicatedMergeTree
is_leader:	1
can_become_leader:	1
is_readonly:	0
total_replicas:	3
active_replicas:	3
last_queue_update_exception:	
zookeeper_exception:	
replica_is_active:	{'ch3':1,'ch1':1,'ch2':1}

Наполнил данными:

```
INSERT INTO trips SELECT  
    trip_id,  
    pickup_datetime,  
    dropoff_datetime,  
    pickup_longitude,  
    pickup_latitude,  
    dropoff_longitude,  
    dropoff_latitude,  
    passenger_count,  
    trip_distance,  
    fare_amount,  
    extra,  
    tip_amount,  
    tolls_amount,  
    total_amount,
```

```

        payment_type,
        pickup_ntaname,
        dropoff_ntaname
FROM
gcs('https://storage.googleapis.com/clickhouse-public-datasets/ny
c-taxi/trips_{0..2}.gz', 'TabSeparatedWithNames') LIMIT 1000;

```

- Добавил колонку с TTL:

```

CREATE TABLE default.trips
(
    `trip_id` UInt32,
    `pickup_datetime` DateTime,
    `dropoff_datetime` DateTime,
    `pickup_longitude` Nullable(Float64),
    `pickup_latitude` Nullable(Float64),
    `dropoff_longitude` Nullable(Float64),
    `dropoff_latitude` Nullable(Float64),
    `passenger_count` UInt8,
    `trip_distance` Float32,
    `fare_amount` Float32,
    `extra` Float32,
    `tip_amount` Float32,
    `tolls_amount` Float32,
    `total_amount` Float32,
    `payment_type` Enum8('CSH' = 1, 'CRE' = 2, 'NOC' = 3, 'DIS'
= 4, 'UNK' = 5),
    `pickup_ntaname` LowCardinality(String),
    `dropoff_ntaname` LowCardinality(String),
    `ttl_date` Date TTL ttl_date + toIntervalDay(7)
)
ENGINE = ReplicatedMergeTree('/clickhouse/default/trips',
'{replica}')
PRIMARY KEY (pickup_datetime, dropoff_datetime)
ORDER BY (pickup_datetime, dropoff_datetime)
SETTINGS index_granularity = 8192

```