Tag analyzer
Write Once, Read Many
Lock-free
STREAM
SQL
<table>
<thead>
<tr>
<th>Tag Table</th>
<th>Log Table</th>
<th>Volatile Table</th>
<th>Lookup Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;, &gt;</td>
<td>PLC ( )</td>
<td>Insert, Delete, Update, Select ( ) key-value</td>
<td>- SELECT, INSERT, UPDATE, DELETE</td>
</tr>
</tbody>
</table>

**PLC**

**DBMS**

**DBMS**

**Insert, Delete, Update, Select**

**Record Delete ( Primary Key )**

**Primary Key Update ( Primary Key )**

**INDEX**

3 Partitioning ( ) LSM Red/Black

**STREAM**

() / ( )

**Tag**

<table>
<thead>
<tr>
<th>Tag analyzer :</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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</tbody>
</table>
Write Once, Read Many

UPDATE

Lock-free

SELECT  Lock

SELECT

300,000  2,000,000
STREAM

5 Edge Edition Fog Edition STREAM.
STREAM DBMS.

SELECT * FROM table1 WHERE c1 = 1 and c2 = 2;

SQL

(Tag) Table (Log) Table.
SELECT _arrival_time (descending sort)

DURATION

-- 1) 10
SELECT SUM(traffic) FROM t1 DURATION 10 MINUTE;

-- 2) 1 30
SELECT SUM(traffic) FROM t1 DURATION 30 MINUTE BEFORE 1 HOUR;
-- 1) msg Error 102
SELECT id, ipv4 FROM devices WHERE msg SEARCH 'Error' or msg SEARCH '102';

-- 2) msg Error 102
SELECT id, ipv4 FROM devices WHERE msg SEARCH 'Error 102';

-- 1) 100
DELETE FROM devices OLDEST 100 ROWS;

-- 2) 1000
DELETE FROM devices EXCEPT 1000 ROWS;

-- 3)
DELETE FROM devices EXCEPT 1 DAY;

-- 4) 2014 6 1
DELETE FROM devices BEFORE TO_DATE('2014-06-01', 'YYYY-MM-DD');

-- 2016 6 15
DELETE FROM tag BEFORE TO_DATE('2016-06-15', 'YYYY-MM-DD');