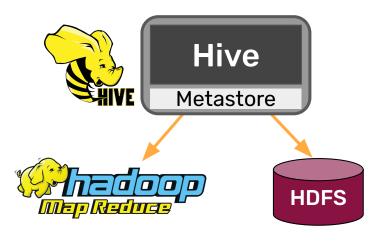


# **Hive DML**

**Драль Алексей**, study@bigdatateam.org CEO at BigData Team, https://bigdatateam.org https://www.facebook.com/bigdatateam

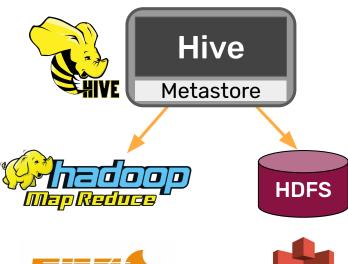


### Hive DDL, Hive DML и HiveQL





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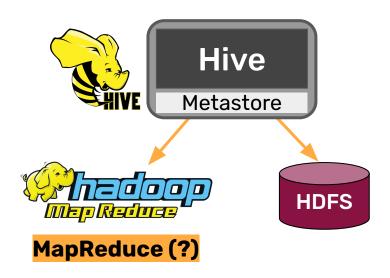






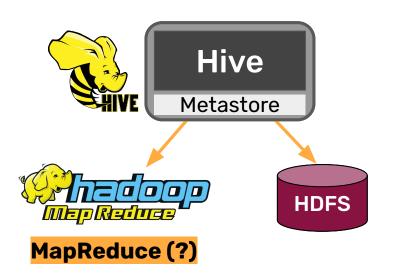






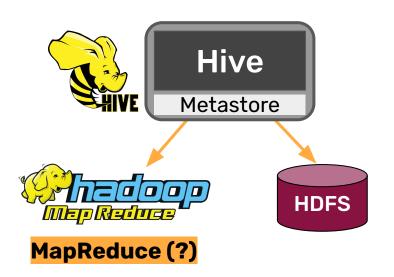
- SELECT .. FROM
- WHERE
- GROUP BY + HAVING
- JOIN
- ORDER BY / SORT BY





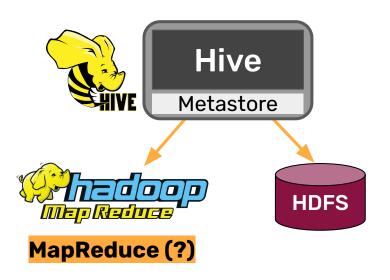
- SELECT .. FROM [<--Map]</p>
- WHERE
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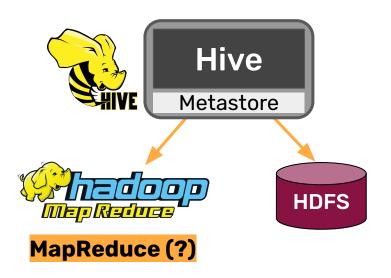
- SELECT .. FROM [<--Map]</p>
- ▶ WHERE [<--Map]</p>
- GROUP BY + HAVING
- ▶ JOIN
- ORDER BY / SORT BY





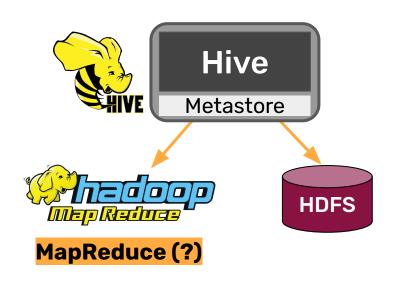
- SELECT .. FROM [<--Map]</p>
- ▶ WHERE [<--Map]</p>
- ► GROUP BY [<--Shuffle & Sort] + HAVING [<--Reduce]
- ▶ JOIN
- ▶ ORDER BY / SORT BY





- SELECT .. FROM [<--Map]</p>
- ▶ WHERE [<--Map]</p>
- ► GROUP BY [<--Shuffle & Sort] + HAVING [<--Reduce]
- ▶ JOIN [<--Map / Reduce "-side"]</p>
- ORDER BY / SORT BY





- SELECT .. FROM [<--Map]</p>
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# Explain B HiveQL

#### **EXPLAIN**

FROM src
INSERT OVERWRITE TABLE dest\_g1
SELECT src.key, sum(substr(src.value,4))
GROUP BY src.key;



## Explain в HiveQL

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(1) The Abstract Syntax Tree
ABSTRACT SYNTAX TREE:
(TOK_QUERY (TOK_FROM (TOK_TABREF src))
...
```



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#### (2) The Dependency Graph

STAGE DEPENDENCIES:

Stage-1 is a root stage

Stage-2 depends on stages: Stage-1

Stage-0 depends on stages: Stage-2



## Explain в HiveQL

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# (2) The Dependency Graph STAGE DEPENDENCIES:

Stage-1 is a root stage Stage-2 depends on stages: Stage-1 Stage-0 depends on stages: Stage-2 (3) The plans of each Stage
STAGE PLANS:
 Stage: Stage-1
 Map Reduce
 Alias -> Map Operator Tree:
 src
 Reduce Output Operator

Reduce Output Operato key expressions: expr: key

type: string
sort order: +