RFC-001: Supporting system databases and tables

Authors

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Status

Accepted

Problem

There is no place to store status data like jobs info in Task Manager other than ZooKeeper currently. But ZooKeeper is not suitable to store these data, which is a centralized service for maintaining configuration information, naming, providing distributed synchronization, and providing group services.

Solution

We plan to store the jobs info in a system table called <code>JOB_INFO</code> which is auto created when OpenMLDB startup. Moreover, <code>tablet</code> need to be started before <code>nameserver</code>. All system tables will be stored in <code>__INTERNAL_DB</code> database which is not seen in <code>SHOW DATABASES</code> command.

Name	Value
DATABASE	INTERNAL_DB
TABLE NAME	JOB_INFO
PARTITION_NU M	1
REPLICA NUM	2 if the number of tablet > 1
TTL	latest ttl 1

The schema of JOB_INFO is shown as below:

Field Name	Туре	Examples
id	bigint	1122, 1123
job	string	SparkBatchSql, ImportOfflineData, ImportOnineData
state	string	Submitted, Running, Failed, Success, Pending
start_time	timestamp	145954243
end_time	timestamp	145954243
cluster	string	Local, Yarn
parameter	string	"{fileType: parquet, filePath: hdfs:///tmp/, db: db1, outputTable, t2}"
application_id	string	application_1459542433815_0002
error	string	

All the relevant records will be selected from JOB_INFO when executing SHOW JOB/SHOW JOBS command.

Issues

• Create system table when OpenMLDB startup #697

Changes and Additions to Public Interfaces

N.A

Performance Impact

N.A

Backwards Compatibility and Upgrade Path

N.A