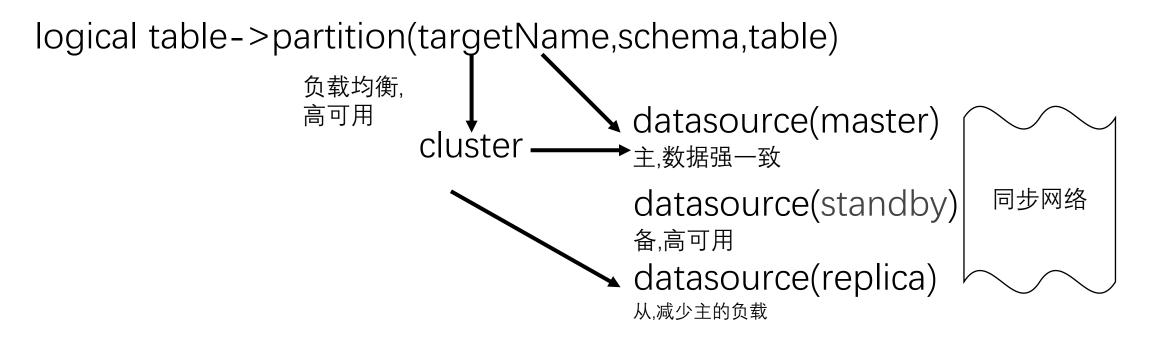
映射关系

Mycat2



QQ:294712221

数据源

```
/*+ mycat:createDataSource{ 主
"name":"dw0",
"url":"jdbc:mysql://127.0.0.1:330
6",
"user":"root",
"password":"123456"
} */;
```

targetName

数据源与集群(主从)

```
/*! mycat:createCluster{"name":"c0", _____
                                              "masters":["dw0"],
                                               "replicas":["dr0"]} */;
/*+ mycat:createDataSource{
                                    主
"name":"dw0",
"url":"jdbc:mysql://127.0.0.1:330
6",
"user":"root",
"password":"123456"
} */;
/*+
                                                从
mycat:createDataSource{
"name":"<mark>dr0</mark>",-
"url":"jdbc:mysql://127.0.0.
1:3306",
"user":"root",
"password":"123456"
} */;
```

targetName

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数据源与集群(主备)

"user":"root",

} */;

"password":"123456"

```
/*! mycat:createCluster{"name":"c0",
                                              "masters":["dw0"," dw0_0"],
                                              "replicas":[]} */;
/*+ mycat:createDataSource{
                                    主
"name":"dw0",
"url":"jdbc:mysql://127.0.0.1:330
6",
"user":"root",
"password":"123456"
} */;
/*+
                                                备
mycat:createDataSource{
"name":"dw0_<del>0",</del>
"url":"jdbc:mysql://127.0.0.
1:3306",
```

targetName

Q:294712221

数据源与集群(主备从)

"password":"123456"

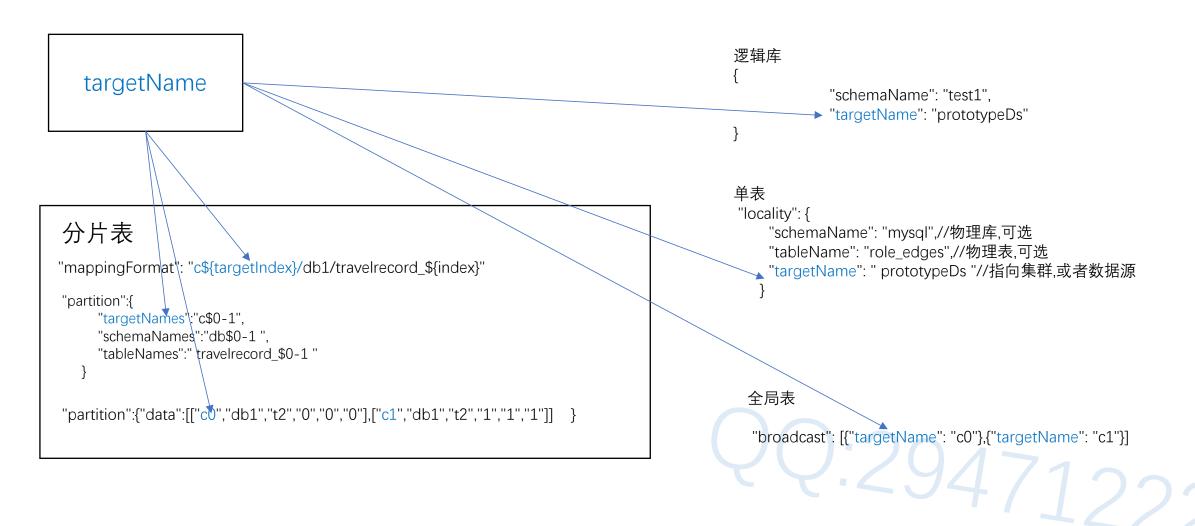
} */;

```
/*! mycat:createCluster{"name":"c0",
                                         "masters":["dw0"," dw0_0"],
                                          /*+ mycat:createDataSource{
                                 主
"name":"dw0",
"url":"jdbc:mysql://127.0.0.1:330
6",
"user":"root",
"password":"123456"
} */;
/*+
                                          备从
mycat:createDataSource{
"name":"dw0_<del>0",</del>
"url":"jdbc:mysql://127.0.0.
1:3306",
"user":"root",
```

targetName

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数据源与逻辑表



Mycat2

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Mycat2-单表

```
{
    "schemaName": "test1",
    "normalTables": {
        "role_edges": {
            "createTableSQL":null,//可选
            "locality": {
                "schemaName": "mysql",//物理库,可选
               "tableName": "role_edges",//物理表,可选
                "targetName": "prototypeDs "//指向集群,或者数据源
        }
    }
}
.....
```

逻辑库: test1

逻辑表: role_edges

数据源: prototypeDs

MySQL

物理库: mysql

物理表: role_edges

URL:jdbc:mysql://localhost:3306/mysql

QQ:294712221

Mycat2-全局表

```
"schemaName": "test1",
"globalTables": {
                                                                      逻辑库: test1
 "role edges": {
                                                                      逻辑表: role_edges
  "broadcast": [{"targetName": "c0"},{"targetName": "c1"}]
                                                                      数据源: c0,c1
MySQL
                   物理库: test1
                                                                       物理库: test1
                                                                       物理表: role_edges
                   物理表: role_edges
                                                                       URL:jdbc:mysql://localhost:3307/test1
                   URL:jdbc:mysql://localhost:3306/test1
```

Mycat2在处理test1. role_edges的insert/update语句会把SQL广播到3306,3307上面只查询test1. role_edges表的时候,会随机选一个MySQL查询

Mycat2-分片表-分库分表下标

```
"shardingTables": {
  "travelrecord": {
   "function": {
                                                                          逻辑库: test1
   "properties": {
                                                                          逻辑表: travelrecord
    "dbNum": "2",//分库数量
    "tableNum": "2",//分表数量
                                                                          数据源: c0,c1
    "tableMethod": "hash(id)",//分表分片函数
    "storeNum": 2,//实际存储节点数量
    "dbMethod": "hash(id)",//分库分片函数
    "mappingFormat":
"c${targetIndex}/db1 ${dbIndex}/travelrecord ${tableIndex}"
MySQL
                                                                           目标:c1
                     目标:c0
                                                                           物理库:db1_1
                    物理库:db1_0
                    物理表:
                                                                           物理表:
                    db1_0. travelrecord_0
                                                                           db1_1. travelrecord_0
                    db1_0. travelrecord_1
                                                                           db1 1. travelrecord 1
```

URL:jdbc:mysql://localhost:3306/db1_0

URL:jdbc:mysql://localhost:3307/db1_1

Mycat2-分片表-全局分区(分表)下标

URL:jdbc:mysql://localhost:3306/db1

```
"shardingTables": {
  "travelrecord": {
   "function": {
                                                                          逻辑库: test1
    "properties": {
                                                                          逻辑表: travelrecord
    "dbNum": "2",//分库数量
    "tableNum": "2",//分表数量
                                                                          数据源: c0,c1
    "tableMethod": "hash(id)",//分表分片函数
    "storeNum": 2,//实际存储节点数量
    "dbMethod": "hash(id)",//分库分片函数
    "mappingFormat":
"c${targetIndex}/db1/traveIrecord ${index}"
MySQL
                                                                           目标:c1
                     目标:c0
                    物理库:db1
                                                                           物理库:db1
                                                                           物理表:
                    物理表:
                                                                           db1. travelrecord_2
                    db1. travelrecord_0
                                                                           db1. travelrecord_3
                    db1. travelrecord 1
```

URL:jdbc:mysql://localhost:3307/db1

Mycat2-分片表-分区枚举-多实例分库

```
"shardingTables": {
  "travelrecord": {
    "function": {
        "clazz": ,//具体自定义分片算法
        "properties": {
        ...分片算法参数
      }
    },
    "partition":{
        "targetNames":"c$0-1",
        "schemaNames":"db1",
        "tableNames":" travelrecord "
    }
}
```

MySQL

目标:c0 物理库:db1 物理表: db1. travelrecord URL:jdbc:mysql://localhost:3306/db1

目标:c1 物理库:db1 物理表: db1. travelrecord

逻辑库: test1

数据源: c0,c1

逻辑表: travelrecord

URL:jdbc:mysql://localhost:3307/db1

for (String target : targets) {

for (String schema: schemas) {

for (String table : tables) {

....生成存储节点

Mycat2-分片表-分区枚举-单实例单库分表

```
"shardingTables": {
  "travelrecord": {
  "function": {
    "clazz": ,//具体自定义分片算法
    "properties": {
    ...分片算法参数
    }
  },
  "partition": {
    "targetNames": "c0",
    "schemaNames": "db1",
    "tableNames": "travelrecord_$0-1"
  }
}
```

```
for (String target: targets) {
    for (String schema: schemas) {
        for (String table: tables) {
            ....生成存储节点
        }
    }
}
```

MySQL

目标:c0 物理库:db1 物理表: db1. travelrecord_0 db1. travelrecord_1 URL:jdbc:mysql://localhost:3306/db1

QQ:294712221

逻辑库: test1

数据源: c0

逻辑表: travelrecord

Mycat2-分片表-分区枚举-层次化分库分表(与分片算法结合)

```
"shardingTables": {
  "travelrecord": {
                                                                                                   for (String target : targets) {
  "function": {
                                                                          逻辑库: test1
                                                                                                     for (String schema : schemas) {
   "clazz": //具体自定义分片算法
                                                                                                       for (String table : tables) {
                                                                          逻辑表: travelrecord
    "properties": {
                                                                                                          .... 生成存储节点
                                                                          数据源: c0,c1
    ...分片算法参数
  'partition":{
    "targetNames":"c$0-1",
    "schemaNames": "db$0-1",
    "tableNames":" travelrecord $0-1 "
MySQL
                                                                           目标:c1
                     目标:c0
                                                                           物理库: db0 ,db1
                    物理库: db0,db1
                    物理表:
                                                                          物理表:
                                                                          db0. travelrecord_0, db0. travelrecord_1
                    db0. travelrecord_0, db0. travelrecord_1
                                                                          db1. travelrecord_0, db1. travelrecord_1
                    db1. travelrecord_0, db1. travelrecord_1
                    URL:jdbc:mysql://localhost:3306/db1
                                                                          URL:jdbc:mysql://localhost:3307/db1
```

Mycat2-分片表-自定义分区(结合分片算法)

```
"shardingTable":{
 "createTableSQL":"...",
 "function":{},
                                                                    逻辑库: test1
 "partition":{
                                                                    逻辑表: travelrecord
"data":[["c0","db1","t2","0","0","0"],["c1","db1","t2","1","1","1"]]
                                                                    数据源: c0,c1
          物理分库下标
          物理分表下标
          全局分区(分表)下标
MySQL
                                                                    目标:c1
                   目标:c0
                   物理库: db1
                                                                    物理库: db1
                                                                    物理表:
                   物理表:
                   db1. t2
                                                                    db1. t2
                                                                    URL:jdbc:mysql://localhost:3307/db1
                   URL:jdbc:mysql://localhost:3306/db1
```