## 迁移mysql数据库到oceanbase

安装mariadb并配置密码

yum install mariadb-server

　　在首次登陆mysql时，一定要注意修改以下内容，否则会出现远程登陆不上，或者本地登陆不上，或者本地登陆进去看不到全部的表的问题。

　　1、删除mysql数据库中user表里面，用户名为空的行。delete from user where user = '';

　　2、给root用户设置密码，密码必须是加密的。update user set password = password('123456') where user = 'root';

　　3、给root用户所有的权限。 grant all privileges on \*.\* to root@'%' identified by '123456' with grant option;





### Ob集群创建业务租户

MySQL [oceanbase]> CREATE resource unit 1C1G max\_cpu=1, min\_cpu=1, max\_memory='1G', min\_memory='1G', max\_iops=10000, min\_iops=1000, max\_session\_num=1000000, max\_disk\_size='10G';

Query OK, 0 rows affected (0.009 sec)

MySQL [oceanbase]> CREATE resource pool pool\_1 unit = '1C1G', unit\_num = 1;

Query OK, 0 rows affected (0.021 sec)

MySQL [oceanbase]> create tenant mysql\_t1 resource\_pool\_list=('pool\_1'), primary\_zone='RANDOM',comment 'mysql tenant/instance', charset='utf8' set ob\_tcp\_invited\_nodes='%', ob\_compatibility\_mode='mysql';

Query OK, 0 rows affected (1.924 sec)

登陆业务租户创建用户

MySQL [(none)]> alter user root identified by 'root';

Query OK, 0 rows affected (0.052 sec

MySQL [(none)]> grant all privileges on \*.\* to 'test'@'%' identified by 'test' with grant option;

Query OK, 0 rows affected (0.060 sec)

使用普通用户登陆

[admin@localhost ~]$ obclient -h xxx.xx.153.211 -utest@mysql\_t1#obcls01 -P2883 -p -c -A

Enter password:

Welcome to the OceanBase. Commands end with ; or \g.

Your MySQL connection id is 32

Server version: 5.6.25 OceanBase 3.1.2 (r10000392021123010-d4ace121deae5b81d8f0b40afbc4c02705b7fc1d) (Built Dec 30 2021 02:47:29)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

### 使用mysqldump

#### 模拟数据

创建测试用户

Database changed

MariaDB [mysql]> grant all privileges on \*.\* to 'test'@'%' identified by 'test' with grant option;

Query OK, 0 rows affected (0.00 sec)

[root@localhost sysbench]# sysbench ./oltp\_insert.lua --mysql-host=127.0.0.1 --mysql-port=3306 --mysql-user=test --mysql-password=test --mysql-db=test --table-size=100000 --tables=5 --threads=16 --events=999999999 prepare

sysbench 1.0.20 (using bundled LuaJIT 2.1.0-beta2)

Initializing worker threads...

Creating table 'sbtest1'...

Creating table 'sbtest3'...

Creating table 'sbtest5'...

Creating table 'sbtest4'...

Creating table 'sbtest2'...

Inserting 100000 records into 'sbtest1'

Inserting 100000 records into 'sbtest4'

Inserting 100000 records into 'sbtest3'

Inserting 100000 records into 'sbtest5'

Inserting 100000 records into 'sbtest2'

Creating a secondary index on 'sbtest5'...

Creating a secondary index on 'sbtest3'...

Creating a secondary index on 'sbtest2'...

Creating a secondary index on 'sbtest1'...

Creating a secondary index on 'sbtest4'...

查看表大小

SELECT TABLE\_NAME,DATA\_LENGTH,INDEX\_LENGTH,(DATA\_LENGTH+INDEX\_LENGTH) as length,TABLE\_ROWS,concat(round((DATA\_LENGTH+INDEX\_LENGTH)/1024/1024,2), 'MB') as total\_size

 FROM information\_schema.TABLES

 WHERE TABLE\_SCHEMA='test'

 order by length desc

 ;



#### 导出数据

导出表结构

[root@localhost ~]# mysqldump -h 127.1 -utest -ptest -d test --compact>testdb.sql

导出数据

[root@localhost ~]# mysqldump -h 127.1 -utest -ptest -t test --compact>testdb\_data.sql

#### 导入数据

[admin@localhost ~]$ obclient -h xxx.xx.153.211 -utest@mysql\_t1#obcls01 -P2883 -p -c -A

Enter password:

Welcome to the OceanBase. Commands end with ; or \g.

Your MySQL connection id is 32

Server version: 5.6.25 OceanBase 3.1.2 (r10000392021123010-d4ace121deae5b81d8f0b40afbc4c02705b7fc1d) (Built Dec 30 2021 02:47:29)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.







#### 查看数据



### 通过datax同步mysql数据

#### 模拟数据

数据库为test1表为test1包括两行数据

MariaDB [(none)]> CREATE DATABASE `test1` DEFAULT CHARACTER SET = utf8mb4 ;

Query OK, 1 row affected (0.00 sec)

MariaDB [(none)]> use test1;

Database changed

MariaDB [test1]> create table test(id int,name varchar(2));

Query OK, 0 rows affected (0.01 sec)

MariaDB [test1]> insert into test values(1,'lu');

Query OK, 1 row affected (0.00 sec)

MariaDB [test1]> commit;

Query OK, 0 rows affected (0.00 sec)

MariaDB [test1]> insert into test values(2,'lu');

Query OK, 1 row affected (0.00 sec)

MariaDB [test1]> commit;

Query OK, 0 rows affected (0.00 sec)

#### 部署datax软件

1) 从[http://datax-opensource.oss-cn-hangzhou.aliyuncs.com/datax.tar.gz下载Datax](http://datax-opensource.oss-cn-hangzhou.aliyuncs.com/datax.tar.gz%E4%B8%8B%E8%BD%BDDatax)并解压

Cd /home/admin

tar -zxvf datax.tar.gz

2) 删除 plugin 文件夹下的隐藏文件

cd /home/admin/datax/plugin/writer && rm -rf .\*

cd /home/admin/datax/plugin/reader && rm -rf .\*

#### 生成 mysql 同步至 OceanBase 的配置模板

[root@localhost datax]# python bin/datax.py -r mysqlreader -w oceanbasev10writer > mysql2objob.json

4、修改模板

[root@localhost datax]# python ./bin/datax.py mysql2objob.json

#### 模板配置内容如下



[root@localhost datax]# cat mysql2objob.json

{

 "job": {

 "content": [

 {

 "reader": {

 "name": "mysqlreader",

 "parameter": {

 "column": ["id","name"],

 "connection": [

 {

 "jdbcUrl": ["jdbc:mysql://127.0.0.1:3306/test1?useUnicode=true&characterEncoding=utf8"],

 "table": ["test"]

 }

 ],

 "password": "test",

 "username": "test",

 "where": ""

 }

 },

 "writer": {

 "name": "oceanbasev10writer",

 "parameter": {

 "column": ["id","name"],

 "preSql": [

 "truncate table test"

 ],

 "connection": [

 {

 "jdbcUrl": "||\_dsc\_ob10\_dsc\_||obcls01:mysql\_t1||\_dsc\_ob10\_dsc\_||jdbc:oceanbase://xxx.xx.153.211:2883/test", 集群名：组合名

 "table": ["test"]

 }

 ],

 "obWriteMode": "insert",

 "password": "test",

 "username": "test"

 }

 }

 }

 ],

 "setting": {

 "speed": {

 "channel": 4

 }

 }

 }

}

#### 执行同步

[root@localhost datax]# python ./bin/datax.py mysql2objob.json



#### 同步日志



#### 同步结果查看

[admin@localhost ~]$ obclient -h xxx.xx.153.211 -utest@mysql\_t1#obcls01 -P2883 -p -c –A

