

TAJO-2186

hyunsik

2017-12-03

# Contents

# Chapter 1

## Root issue TAJO-2186

### 1.1 Summary

TestResultSet.testDateTimeType fails in UTC timezone

### 1.2 Description

Please see this travis log. TestResultSet.testDateTimeType failed. I looked into this issue. I found that this test fails if the timezone is UTC. You can reproduce as follows:

```
$ cd tajo-jdbc
$ export TZ=UTC
$ mvn test
...
2017-12-03 10:05:09,386 INFO: org.apache.tajo.catalog.store.DerbyStore (shutdown(75))
- Shutdown database
```

Results :

Failed tests:

TestResultSet.testDateTimeType:243 expected: java.sql.Time<23:00:00> but  
was: java.sql.Time<23:00:00>

### 1.3 Attachments

No attachments

### 1.4 Comments

1. **hyunsik:** Please see some part of testDateTimeType test

```

1
2      // assert with timezone
3
4      // Current timezone + 1 hour
5
6      TimeZone tz = TimeZone.getDefault();
7
8      tz.setRawOffset(tz.getRawOffset() + (int) TimeUnit.HOURS.toMillis(1));
9
10
11
12      Calendar cal = Calendar.getInstance(tz);
13
14      assertEquals(tz.getRawOffset(), cal.getTimeZone().getRawOffset());
15
16
17
18      assertEquals(Time.valueOf("23:00:00"), res.getTime(1, cal)); // <----- Here

```

See the last line. A Time object contains a calendar object, and the calendar object is used for equals(). {{Time.valueOf()}} internally uses TimeZone.getDefault(), but {{res.getTime()}} uses a timezone derived from a given calendar object. That's why it causes this failure in some timezone.

2. **jhkim:** Thanks for your prepare work

{{Time}} class extends {{Date}} class, so it should consider a date.

I'll fix invalid unit case

3. **hyunsik:** [~jhkim] Thank you for taking this issue.