

本文总结了在CentOS7上使用 LOAD DATA <LOCAL> INFILE 语句向MySQL8.0数据库导入txt文件和csv文件数据的方法和遇到的错误。由于两者方法一样，就先介绍导入txt文件的操作和错误，csv的直接在最后附上命令和简要说明。

原始数据

name	owner	species	sex	birth	death
Fluffy	Harold	cat	f	1993-02-04	
Claws	Gwen	cat	m	1994-03-17	
Buffy	Harold	dog	f	1989-05-13	
Fang	Benny	dog	m	1990-08-27	
Bowser	Diane	dog	m	1979-08-31	1995-07-29
Chirpy	Gwen	bird	f	1998-09-11	
Whistler	Gwen	bird		1997-12-09	
Slim Benny	snake	m		1996-04-29	

准备txt文件

将空值用\N代替，每行数据内的分隔符为\t，行与行之间换行符为\r\n。然后将txt文件放到/var/lib/mysql-files路径下。

准备数据表

```
mysql> use testdb2;
mysql> create table tbl_pet (
  -> name varchar(10),
  -> owner varchar(10),
  -> species varchar(10),
  -> sex varchar(1),
  -> birth date,
  -> death date)CHARSET = utf8;
```

导入数据

```
mysql> LOAD DATA INFILE '/var/lib/mysql-files/pet.txt' INTO TABLE tbl_pet LINES
TERMINATED BY '\r\n';
```

导入后结果:

```
mysql> select * from tbl_pet;
```

name	owner	species	sex	birth	death
Fluffy	Harold	cat	f	1993-02-04	NULL
Claws	Gwen	cat	m	1994-03-17	NULL
Buffy	Harold	dog	f	1989-05-13	NULL
Fang	Benny	dog	m	1990-08-27	NULL
Bowser	Diane	dog	m	1979-08-31	1995-07-29

```
| Chirpy | Gwen | bird | f | 1998-09-11 | NULL |
| Whistler | Gwen | bird | NULL | 1997-12-09 | NULL |
| Slim | Benny | snake | m | 1996-04-29 | NULL |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

可以向表内继续导入新的数据，会自动追加在原有记录的后面。

错误小结：

#Issue1: ERROR 1148 (42000): The used command is not allowed with this MySQL version

错误语句: `mysql> LOAD DATA LOCAL INFILE '/var/lib/mysql/pet.txt' INTO TABLE tbl_pet;`

出错原因：多了一个LOCAL关键词。当文件在客户端时要写LOCAL，在服务器端时不用写。我的txt文件是和MySQL数据库在同一虚拟机上的，所以不用加LOCAL。

#Issue2: ERROR 1290 (HY000): The MySQL server is running with the --secure-file-priv option so it cannot execute this statement

出错原因：MySQL设置了secure-file-priv属性对应的路径，当数据文件从其他路径导入时便会报错。

解决办法：查看secure-file-priv指定路径并把数据文件放进去。参考  
<https://blog.csdn.net/FallingU/article/details/75675220>

```
mysql> show variables like '%secure%';
+-----+-----+
| Variable_name | Value |
+-----+-----+
| secure_file_priv | /var/lib/mysql-files/ |
+-----+-----+
```

#Issue3: ERROR 1292 (22007): Incorrect date value: '' for column 'death' at row 1

出错原因：一开始直接把原始表格里的数据复制到txt文件里没有处理，空值的地方是空的，不符合MySQL里空值的表示方式，所以报错。

解决办法：将空值用\N代替。参考<https://dev.mysql.com/doc/refman/8.0/en/loading-tables.html>

#Issue4: 使用 LOAD DATA INFILE '/var/lib/mysql-files/pet.txt' INTO TABLE tbl\_pet; 导入数据仍然失败

错误提示：' for column 'death' at row 1 date value: 'N

出错原因：fields terminated by 默认值是'\t'，lines terminated by 默认值是'\n'，而Windows上的文件换行是'\r\n'，Mac OS X是'\r'。

解决办法：加上LINES TERMINATED BY '\r\n'，如下：

```
mysql> LOAD DATA INFILE '/var/lib/mysql-files/pet.txt' INTO TABLE tbl_pet LINES
TERMINATED BY '\r\n';
```

导入csv文件数据

原始数据文件：来源<https://blog.csdn.net/u013378642/article/details/80952849>

```
mysql> use testdb;
```

```
mysql> show tables;
```

```
+-----+
| Tables_in_testdb |
```

```
+-----+
| movie_tbl |
+-----+
```

```
mysql> desc movie_tbl;
```

```
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id         | int(10) unsigned | NO   | PRI | NULL    | auto_increment |
| movie_id   | int(11)         | YES  |     | NULL    |                |
| movie_name | varchar(40)     | NO   |     | NULL    |                |
| movie_score | float unsigned  | YES  |     | NULL    |                |
| region     | varchar(16)     | YES  |     | NULL    |                |
| year       | year(4)         | YES  |     | NULL    |                |
| movie_type | varchar(30)     | YES  |     | NULL    |                |
| director   | varchar(80)     | YES  |     | NULL    |                |
| actor      | varchar(60)     | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
```

```
mysql> LOAD DATA INFILE '/var/lib/mysql-files/Movies.csv' INTO TABLE movie_tbl
-> CHARACTER SET utf8
-> FIELDS TERMINATED BY ','
-> LINES TERMINATED BY '\r\n'
-> IGNORE 1 LINES
-> (movie_id,movie_name,movie_score,region,year,movie_type,director,actor);
```

补充说明：

1. CHARACTER SET utf8: 因为有中文数据，所以指定utf-8编码。
2. FIELDS TERMINATED BY ',': csv文件以 ',' 分隔数据。
3. IGNORE 1 LINES: 跳过原始文件中的第一行表头数据。如果不写，表头也会被当作数据导入。如果要跳过从头开始的多行，可以改变LINES前面的数字。
4. 要导入数据的字段放在最后，将字段顺序和原始文件里的顺序保持一致。