

【MVS】MySQL创建指定目录下表空间报错ERROR 3121 (HY000):

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问题描述

创建表空间报错

```
mysql> CREATE TABLESPACE my_general_tbs16k
-> ADD DATAFILE '/data/dbfile/my_general_tbs16k1.ibd'
-> FILE_BLOCK_SIZE = 16384
-> ENGINE = InnoDB;
```

ERROR 3121 (HY000): The DATAFILE location must be in a known directory.

解决方法

创建表空间报错，是因为没有在参数文件中设置可信目录。

```
mysql> CREATE TABLESPACE my_general_tbs16k
-> ADD DATAFILE '/data/dbfile/my_general_tbs16k1.ibd'
-> FILE_BLOCK_SIZE = 16384
-> ENGINE = InnoDB;
ERROR 3121 (HY000): The DATAFILE location must be in a known directory.
```

如需创建mysql指定目录表，则需在参数中设置目录，或启动时临时设置。

参数文件永久设置：MySQL option file:

```
[mysqld]
innodb_directories="directory_path_1;directory_path_2"
```

注意：建议关闭实例设置参数，后启动校验。

或在启动临时设置：Startup command:

```
mysql --innodb-directories="directory_path_1;directory_path_2"
```

在配置文件中修改参数，后重启实例，查看参数配置情况

```
mysql> show variables like "%innodb_directories%";
+-----+-----+
| Variable_name | Value |
+-----+-----+
| innodb_directories | /data/dbfile |
+-----+-----+
1 row in set (0.01 sec)

mysql>
```

##创建指定目录表空间

```
CREATE TABLESPACE my_general_tbs16k
ADD DATAFILE '/data/dbfile/my_general_tbs16k1.ibd'
FILE_BLOCK_SIZE = 16384
ENGINE = InnoDB;
```

查询表空间情况

```
mysql> SELECT TABLESPACE_NAME, FILE_NAME FROM INFORMATION_SCHEMA.FILES;
+-----+-----+
| TABLESPACE_NAME | FILE_NAME |
+-----+-----+
| abc/my_independent_table | ./abc/my_independent_table.ibd |
| abc/t1 | ./abc/t1.ibd |
| employees/departments | ./employees/departments.ibd |
| employees/dept_emp | ./employees/dept_emp.ibd |
| employees/dept_manager | ./employees/dept_manager.ibd |
| employees/employees | ./employees/employees.ibd |
| employees/salaries#p#p01 | ./employees/salaries#p#p01.ibd |
| innodb_undo_001 | ./undo_001 |
| innodb_undo_002 | ./undo_002 |
| my_general_space | ./my_general_space.ibd |
| my_general_tbs16k | /data/dbfile/my_general_tbs16k1.ibd |
| mysql | ./mysql.ibd |
| mysql/backup_history | ./mysql/backup_history.ibd |
| mysql/backup_progress | ./mysql/backup_progress.ibd |
| sys/sys_config | ./sys/sys_config.ibd |
+-----+-----+
54 rows in set (0.00 sec)
```

#创建表并插入数据测试

```
mysql> CREATE TABLE tab1_gtbs (c1 INT PRIMARY KEY) TABLESPACE my_general_tbs16k;
mysql> insert into tab1_gtbs ('1');
mysql> INSERT INTO tab1_gtbs (c1) VALUES (1);
mysql> commit;
mysql> select * from tab1_gtbs;
+----+
| c1 |
+----+
| 1 |
+----+
1 row in set (0.01 sec)

备注:
```

innodb 表空间不能设置最大大小，是由文件系统决定的。