[MVS]GreatSQL创建function提示错误

性能分析和调优   **吴成井**   2024-05-22 发表

问题描述

在Greatsql 8.0.32-25中,执行如下命令报错
命令

```
set global sql_mode = default; set sql_mode = default; delimiter // CREATE OR REPLACE FUNCTION f1() returns int BEGIN RETURN 10; END; //
```

报错内容:

ERROR 1418 (HY000): This function has none of DETERMINISTIC, NO SQL, or READS SQL DATA in its declaration and binary logging is enabled (you *might* want to use the less safe log_bin_trust_function_creators variable)

解决方法

总结:

MySQL创建function 必须带deterministic参数,默认不带创建不成功,强制修改参数后可创建成功,但复制时不能保证数据一致。

正常创建命令

```
set global sql_mode = default; set sql_mode = default; delimiter // CREATE OR REPLACE FUNCTION f1() returns int DETERMINISTIC BEGIN RETURN 10; END; //
```

非正常创建命令:

```
set global sql_mode = default; set sql_mode = default; delimiter // CREATE OR REPLACE FUNCTION f1() returns int BEGIN RETURN 10; END; //
```

必须带的 DETERMINISTIC 参数:

If a stored program that modifies data is nondeterministic, it is not repeatable. This can result in different data on source and replica, or cause restored data to differ from the original data.

执行如下命令,没有deterministic参数也可创建成功,但有数据库不一致的风险.

```
SET GLOBAL log_bin_trust_function_creators = 1;
```

- log_bin_trust_function_creators

Command-Line Format	--log-bin-trust-function-creators[={OFF|ON}]
Deprecated	8.0.34
System Variable	log_bin_trust_function_creators
Scope	Global
Dynamic	Yes
SET_VAR Hint Applies	No
Type	Boolean
Default Value	OFF

This variable applies when binary logging is enabled. It controls whether stored function creators can be trusted not to create stored functions that may cause unsafe events to be written to the binary log. If set to 0 (the default), users are not permitted to create or alter stored functions unless they have the SUPER privilege in addition to the CREATE ROUTINE or ALTER ROUTINE privilege. A setting of 0 also enforces the restriction that a function must be declared with the DETERMINISTIC characteristic, or with the READS SQL DATA or NO SQL characteristic. If the variable is set to 1, MySQL does not enforce these restrictions on stored function creation. This variable also applies to trigger creation. See Section 27.7, "Stored Program Binary Logging".