

Enables setting the effective authorization ID when executing a view or stored program. A user with this privilege can specify any account as the [DEFINER](#) attribute of a view or stored program.

As of MySQL 8.0.22, [SET_USER_ID](#) also enables overriding security checks designed to prevent operations that (perhaps inadvertently) cause stored objects to become orphaned or that cause adoption of stored objects that are currently orphaned. For details, see [Orphan Stored Objects](#).

- [SHOW_ROUTINE](#) (added in MySQL 8.0.20)

Enables a user to access definitions and properties of all stored routines (stored procedures and functions), even those for which the user is not named as the routine [DEFINER](#). This access includes:

- The contents of the [INFORMATION_SCHEMA.ROUTINES](#) table.
- The [SHOW CREATE FUNCTION](#) and [SHOW CREATE PROCEDURE](#) statements.
- The [SHOW FUNCTION CODE](#) and [SHOW PROCEDURE CODE](#) statements.
- The [SHOW FUNCTION STATUS](#) and [SHOW PROCEDURE STATUS](#) statements.

Prior to MySQL 8.0.20, for a user to access definitions of routines the user did not define, the user must have the global [SELECT](#) privilege, which is very broad. As of 8.0.20, [SHOW_ROUTINE](#) may be granted instead as a privilege with a more restricted scope that permits access to routine definitions. (That is, an administrator can rescind global [SELECT](#) from users that do not otherwise require it and grant [SHOW_ROUTINE](#) instead.) This enables an account to back up stored routines without requiring a broad privilege.

- [SYSTEM_USER](#) (added in MySQL 8.0.16)

The [SYSTEM_USER](#) privilege distinguishes system users from regular users:

- A user with the [SYSTEM_USER](#) privilege is a system user.
- A user without the [SYSTEM_USER](#) privilege is a regular user.

The [SYSTEM_USER](#) privilege has an effect on the accounts to which a given user can apply its other privileges, as well as whether the user is protected from other accounts:

- A system user can modify both system and regular accounts. That is, a user who has the appropriate privileges to perform a given operation on regular accounts is enabled by possession of [SYSTEM_USER](#) to also perform the operation on system accounts. A system account can be modified only by system users with appropriate privileges, not by regular users.
- A regular user with appropriate privileges can modify regular accounts, but not system accounts. A regular account can be modified by both system and regular users with appropriate privileges.

For more information, see [Section 6.2.11, “Account Categories”](#).

The protection against modification by regular accounts that is afforded to system accounts by the [SYSTEM_USER](#) privilege does not apply to regular accounts that have privileges on the `mysql` system schema and thus can directly modify the grant tables in that schema. For full protection, do not grant `mysql` schema privileges to regular accounts. See [Protecting System Accounts Against Manipulation by Regular Accounts](#).