- For `ALTER USER`, if you change the authentication plugin assigned to the account, the secondary password is discarded. If you change the authentication plugin and also specify `RETAIN CURRENT PASSWORD`, the statement fails.
- For `ALTER USER`, `DISCARD OLD PASSWORD` discards the secondary password, if one exists. The account retains only its primary password, and clients can use the account to connect to the server only with the primary password.

Statements that modify secondary passwords require these privileges:

- The `APPLICATION_PASSWORD_ADMIN` privilege is required to use the `RETAIN CURRENT PASSWORD` or `DISCARD OLD PASSWORD` clause for `ALTER USER` and `SET PASSWORD` statements that apply to your own account. The privilege is required to manipulate your own secondary password because most users require only one password.
- If an account is to be permitted to manipulate secondary passwords for all accounts, it should be granted the `CREATE USER` privilege rather than `APPLICATION_PASSWORD_ADMIN`.

Random Password Generation

As of MySQL 8.0.18, the `CREATE USER`, `ALTER USER`, and `SET PASSWORD` statements have the capability of generating random passwords for user accounts, as an alternative to requiring explicit administrator-specified literal passwords. See the description of each statement for details about the syntax. This section describes the characteristics common to generated random passwords.

By default, generated random passwords have a length of 20 characters. This length is controlled by the `generated_random_password_length` system variable, which has a range from 5 to 255.

For each account for which a statement generates a random password, the statement stores the password in the `mysql.user` system table, hashed appropriately for the account authentication plugin. The statement also returns the cleartext password in a row of a result set to make it available to the user or application executing the statement. The result set columns are named `user`, `host`, and `generated password`, indicating the user name and host name values that identify the affected row in the `mysql.user` system table, and the cleartext generated password.

```
mysql> CREATE USER
       'u1'@'localhost' IDENTIFIED BY RANDOM PASSWORD,
       'u2'@'%.example.com' IDENTIFIED BY RANDOM PASSWORD,
       'u3'@'%.org' IDENTIFIED BY RANDOM PASSWORD;
+------+---------------+----------------------+
| user | host          | generated password   |
+------+---------------+----------------------+
| u1   | localhost     | BA;42VpXqQ@i+y{&TDFF |
| u2   | %.example.com | YX5>XRAJRP@>sn9azmD4 |
| u3   | %.org         | ;GfD44l,)C}PI/6)4TwZ |
+------+---------------+----------------------+
mysql> ALTER USER
       'u1'@'localhost' IDENTIFIED BY RANDOM PASSWORD,
       'u2'@'%.example.com' IDENTIFIED BY RANDOM PASSWORD;
+------+---------------+----------------------+
| user | host          | generated password   |
+------+---------------+----------------------+
| u1   | localhost     | yhXBrBp.;Y6abB)e_UWr |
| u2   | %.example.com | >M-vmjp9DTY6}hkp,RcC |
+------+---------------+----------------------+
mysql> SET PASSWORD FOR 'u3'@'%.org' TO RANDOM;
+------+-------+----------------------+
| user | host  | generated password   |
+------+-------+----------------------+
| u3   | %.org | o(._oNn)d;FC<vJIDg9M |
+------+-------+----------------------+
```