Oracle ALTER USER Statement

Summary: In this lab, you will learn how to use the Oracle `ALTER USER` statement to modify the authentication or database resource of a database user.

The `ALTER USER` statement allows you to change the authentication or database resource characteristics of a database user.

Generally speaking, to execute the `ALTER USER` statement, your account needs to have the `ALTER USER` system privilege. However, you can change your own password using the `ALTER USER` statement without having the `ALTER USER` system privilege.

Let's create a user named `dolphin` and grant the `CREATE SESSION` system privilege to `dolphin`:

```
CREATE USER dolphin IDENTIFIED BY abcd1234;

GRANT CREATE SESSION TO dolphin;
```
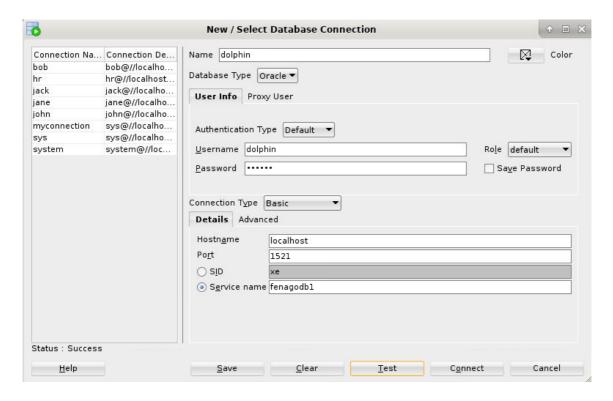
1. Using Oracle ALTER USER statement to change the password for a user

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The following example uses the `ALTER USER` statement to change the password for the user `dolphin`:

```
ALTER USER dolphin IDENTIFIED BY xyz123;
```

Log in to the Oracle Database using the dolphin user:

The user `dolphin` should be able to authenticate to the Oracle Database using the new password `xyz123`

2. Using Oracle ALTER USER statement to lock a user

This example uses the `ALTER USER` statement to lock the user `dolphin` :

```
ALTER USER dolphin ACCOUNT LOCK;
```

If you use the user `dolphin` to log in to the Oracle Database, you should see a message indicating that the user is locked:

Note: Disconnect as `dolphin` user and try to connect again in SQL Developer:

   3. Using Oracle ALTER USER statement to unlock a user

To unlock the user `dolphin` , you use the following statement:

```
ALTER USER dolphin ACCOUNT UNLOCK;
```

Now, the user `dolphin` should be able to log in to the Oracle Database.

   4. Using Oracle ALTER USER statement to set the default profile for a user

This statement returns the profile of the user `dolphin` :

```
SELECT
    username,
    profile
FROM
    dba_users
WHERE
    username ='DOLPHIN';
```

When you create a new user without specifying a profile, Oracle will assign the `DEFAULT` profile to the user.

Let's [create a new user profile] called `ocean` :

```
CREATE PROFILE ocean LIMIT
    SESSIONS_PER_USER         UNLIMITED
    CPU_PER_SESSION           UNLIMITED
    CPU_PER_CALL              3000
    CONNECT_TIME              60;
```

and assign it to the user `dolphin`:

```
ALTER USER dolphin
PROFILE ocean;
```

Now, the default profile of the user `dolphin` is `ocean`.

5. Using Oracle ALTER USER statement to set default roles for a user

Currently, the user `dolphin` has no assigned roles as shown in the output of the following query when executing from the dolphin's session:

```
SELECT * FROM session_roles;
```

First, create a new role called `rescue` from the user sys session:

```
CREATE ROLES rescue;

GRANT CREATE TABLE, CREATE VIEW TO rescue;
```

Second, grant this role to `dolphin`:

```
GRANT rescue TO dolphin;
```

Third, use the user `dolphin` to log in to the Oracle Database. The default role of the user `dolphin` is `rescue` now.

```
SELECT * FROM session_roles;
```

Here is the output:

```
ROLE

RESCUE
```

Fourth, create another role called `super` and grant all privileges to this role:

```
CREATE ROLE super;

GRANT ALL PRIVILEGES TO super;
```

Fifth, grant the role `super` to the user `dolphin`:

```
GRANT super TO dolphin;
```

Sixth, set the default role of the user `dolphin` to `super`:

```
ALTER USER dolphin DEFAULT ROLE super;
```

Seventh, disconnect the current session of the user dolphin and log in to the Oracle Database again. The default role of the user dolphin should be `super` as shown in the output of the following query:

```
SELECT * FROM session_roles;
```

The following shows the output:

```
ROLE

SUPER
```

In this lab, you have learned how to use the Oracle `ALTER USER` to change the authentication or database resource of a database user.