Container databases unplug and plug operation with common users and roles…

Last week I presented a session on Oracle 12c container databases at East Coast Oracle Conference. One of the topic we discussed was how Oracle handles common users and roles if we do unplug a pluggable database and plug it back in different container database. Though to do a quick blog to show how it works..

Create a common user and common roles and grant it to common user

```
 SQL> create user C##_main identified by qweasdzxc container=ALL;
User created.
SQL> create role C##_role container=ALL;
Role created.
SQL> grant C##_role to C##_main container=ALL;
Grant succeeded.
```

Check if common role is granted to PDB

```
SQL> SQL> alter session set container=PDB1;
Session altered.
SQL> show con_id
CON_ID
----------------------------
3
SQL> select grantee, granted_role from dba_role_privs where grantee like 'C##%';
GRANTEE            GRANTED_ROLE
----------------------------------------------------------------------------
C##_MAIN          C##_ROLE
```

Unplug PDB1 from source container

```
SQL> SQL> alter pluggable database PDB1 close;
Pluggable database altered.
SQL> alter pluggable database PDB1 unplug into '/home/oracle/PDB1.xml';
Pluggable database altered.
```

Plug this PDB into another container database and check if common roles are transferred ?

```
SQL> select con_id,name,open_mode from v$pdbs;

CON_ID NAME                              OPEN_MODE
```

```
---------- ---------------------------- ----------
 2 PDB$SEED                             READ ONLY
 3 REMOTEDBP                            READ WRITE
```

SQL> create pluggable database PDB1 using '/home/oracle/PDB1.xml';

Pluggable database created.

SQL> select con_id,name,open_mode from v$pdbs;

```
 CON_ID NAME                           OPEN_MODE
---------- ---------------------------- ----------
 2 PDB$SEED                             READ ONLY
 3 REMOTEDBP                            READ WRITE
 4 PDB1                                 MOUNTED
```

SQL> alter pluggable database all open;

Pluggable database altered.

SQL> alter session set container=PDB1;

Session altered.

SQL> select grantee, granted_role from dba_role_privs where grantee like 'C##%';

no rows selected

SQL> select username from dba_users where username like 'C##%';

```
USERNAME
--------------------------------------------------------------------------
C##_MAIN
```

Conclusion: Common users will get transferred in unplug/plug operation but commons roles will not

Thanks for reading…