

BÀI TẬP THỰC HÀNH 9

Cơ chế Locking

1. Mục tiêu

- Mô tả lock conflict
- Mô tả deadlock

2. Thực hiện

- Set các biến môi trường

```
export ORACLE_SID=orcl
export ORACLE_HOME=/u01/app/oracle/product/11.2.0/dbhome_1
export PATH=$PATH:$ORACLE_HOME/bin
```

- Giả lập tình huống Lock Conflict

Login vào database bằng 2 transaction:

Transaction 1:

```
SQL> conn scott/oracle
```

```
SQL> select * from dept;
```

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

```
SQL> update dept set LOC='VIETNAM' where DEPTNO=40;
```

Transaction 2:

```
SQL> conn scott/oracle
```

```
SQL> select * from dept;
```

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

```
SQL> update dept set LOC='VIETNAME1' where DEPTNO=40;
```

Hiện tượng gì xảy ra?

- Thực hiện kiểm tra lock và kill transaction

```

set linesize 300
SELECT INST_ID,DECODE(request,0,'Holder: ','Waiter: ') ||sid sess,
id1, id2, lmode, request, type
FROM GV$LOCK WHERE (id1, id2, type) IN (SELECT id1, id2, type FROM
GV$LOCK WHERE request > 0) ORDER BY id1, request;

```

INST_ID	SESS	ID1	ID2	LMODE	REQUEST	TY
1	Holder: 46	131086	700	6	0	TX
1	Waiter: 51	131086	700	0	6	TX

```

SQL> select username,terminal,program from v$session where sid=46;

```

USERNAME	TERMINAL	PROGRAM
TATC_APP	pts/1	sqlplus@oraserver (TNS V1-V3)

```

SELECT sid,serial# from v$session where sid=46;

```

SID	SERIAL#
46	18819

- Kill session Holder

```

ALTER SYSTEM KILL SESSION '46,18819' IMMEDIATE;

```

- Giả lập tình huống Deadlock

Transaction 1:

```

SQL> update dept set LOC='VIETNAM' where DEPTNO=40;

```

Transaction 2:

```

SQL> update dept set LOC='CAMPUCHIA' where DEPTNO=30;

```

Transaction 1:

```

SQL> update dept set LOC='LAO' where DEPTNO=30;

```

Transaction 2:

```

SQL> update dept set LOC='SINGAPO' where DEPTNO=40;

```