

## 14-3: Managing Constraints

### Vocabulary

- 1.disable
- 2.cascade
- 3.alter table
- 4.enable
- 5.DROP CONSTRAINT
- 6.DROP COLUMN
- 7.CASCADE CONSTRAINTS

### Try It / Solve It

1.
  - ADD (uses modify clause to add not null on a column though)
  - DROP
  - ENABLE/DISABLE
2.  
ALTER TABLE copy\_d\_clients  
ADD CONSTRAINT copy\_d\_clt\_client\_number\_pk PRIMARY KEY (client\_number);
3.  
Alter table copy\_d\_events  
Add constraint COPY\_D\_EVE\_CLIENT\_NUMBER\_FK  
Foreign key (client\_number ) REFERENCES copy\_d\_clients (client\_number) ENABLE;
4.  
SELECT constraint\_name, constraint\_type, table\_name  
FROM user\_constraints  
WHERE table\_name = UPPER('copy\_d\_events') ;  
  
a.COPY\_D\_CLT\_CLIENT\_NUMBER\_PK  
b.COPY\_D\_EVE\_CLIENT\_NUMBER\_FK
5.  
ALTER TABLE copy\_d\_clients  
DROP CONSTRAINT COPY\_D\_CLT\_CLIENT\_NUMBER\_PK CASCADE ;

6.

INSERT INTO

copy\_d\_events(client\_number,id,name,event\_date,description,cost,venue\_id,package\_code,theme\_code)

VALUES(7125,140,'Cline Bas Mitzvah',TO\_DATE('15-Jul-2004','dd-Mon-yyyy'),'Church and Private Home formal',4500,105,87,77);—parent key not found

7.

ALTER TABLE copy\_d\_clients

DISABLE CONSTRAINT COPY\_D\_CLT\_CLIENT\_NUMBER\_PK CASCADE;

8.

INSERT INTO

copy\_d\_events(client\_number,id,name,event\_date,description,cost,venue\_id,package\_code,theme\_code)

VALUES(7125,140,'Cline Bas Mitzvah',TO\_DATE('15-Jul-2004','dd-Mon-yyyy'),'Church and Private Home formal',4500,105,87,77);

9.

ALTER TABLE copy\_d\_clients

ENABLE CONSTRAINT COPY\_D\_CLT\_CLIENT\_NUMBER\_PK ;

10.

So first I need to fix the row with client\_number to a valid value/null.

But since client\_number is not nullable, I will either have to delete invalid row or update that row.

DELETE FROM copy\_d\_events WHERE

client\_number NOT IN ( SELECT client\_number FROM copy\_d\_clients);

1 row(s) deleted.

ALTER TABLE copy\_d\_events

ENABLE CONSTRAINT COPY\_D\_EVE\_CLIENT\_NUMBER\_FK;

11.

Generally to make bulk operations fast, where my input data is diligently sanitized and I am sure, it is safe to save some time in this clumsy process.

12.

I can check value of CONSTRAINT\_TYPE in all\_constraints/user\_constraints view.

- C - Check constraint
- P - Primary key
- R - Referential integrity (fk)
- U - Unique key