

Семинар 13 05.05.2022

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DP 14_3.Task 1

- Disable constraint
- Cascade clause
- Alter table
- Enable constraint
- Drop constraint
- Drop column
- Cascade constraint

DP 14_3.Task 2

1)

1. What are four functions that an ALTER statement can perform on constraints?

1. Add
2. Drop
3. Enable
4. Disable

2)

2. Since the tables are copies of the original tables, the integrity rules are not passed onto the new tables; only the column datatype definitions remain. You will need to add a PRIMARY KEY constraint to the copy_d_clients table. Name the primary key copy_d_clients_pk . What is the syntax you used to create the PRIMARY KEY constraint to the copy_d_clients.table?

1) ALTER TABLE copy_d_clients

ADD CONSTRAINT copy_d_clt_client_number_pk PRIMARY KEY (client_number);

2)

SELECT *

FROM user_constraints

WHERE LOWER(table_name) = 'copy_d_clients' and constraint_type = 'P';

The screenshot shows the SQL Developer interface with the following SQL command executed:

```
SELECT *
FROM user_constraints
WHERE LOWER(table_name) = 'copy_d_clients' and constraint_type = 'P';
```

The results table shows one row:

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	SEARCH_CONDITION_VC	R_OWNER	R_CONSTRAINT_NAME	DEL
DB_202089	COPY_D_CLT_CLIENT_NUMBER_PK	P	COPY_D_CLIENTS					

1 rows returned in 0.08 seconds

3)

3. Create a FOREIGN KEY constraint in the copy_d_events table. Name the foreign key copy_d_events_fk. This key references the copy_d_clients table client_number column. What is the syntax you used to create the FOREIGN KEY constraint in the copy_d_events table?

1) ALTER TABLE copy_d_events

ADD CONSTRAINT copy_d_eve_client_number_fk FOREIGN KEY (client_number) REFERENCES copy_d_clients (client_number) ENABLE;

2) SELECT *

FROM user_constraints

WHERE LOWER(table_name) = 'copy_d_events' and constraint_type = 'R';

The screenshot shows the SQL Developer interface with the following SQL command executed:

```
SELECT *
FROM user_constraints
WHERE LOWER(table_name) = 'copy_d_events' and constraint_type = 'R';
```

OWNER	CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME	SEARCH_CONDITION	SEARCH_CONDITION_VC	R_OWNER	R_CONSTRAINT_NAME
DB_202089	COPY_D_EVT_CLIENT_NUMBER_FK	R	COPY_D_EVENTS	-	-	DB_202089	COPY_D_CLT_CLIENT_NUMBER

1 rows returned in 0.06 seconds

- 4)
4. Use a SELECT statement to verify the constraint names for each of the tables. Note that the tablenames must be capitalized.
- a. The constraint name for the primary key in the copy_d_clients table is _____.
- b. The constraint name for the foreign key in the copy_d_events table is _____.

1) SELECT constraint_name, constraint_type, table_name
FROM user_constraints
WHERE table_name = UPPER('copy_d_clients');

2)
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_EVT_CLIENT_NUMBER_FK

CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME
SPS_C00646542	C	COPY_D_CLIENTS
SPS_C00646543	C	COPY_D_CLIENTS
SPS_C00646544	C	COPY_D_CLIENTS
COPY_D_CLT_CLIENT_NUMBER_PK	P	COPY_D_CLIENTS

4 rows returned in 4.59 seconds

CONSTRAINT_NAME	CONSTRAINT_TYPE	TABLE_NAME
COPY_D_EVT_CLIENT_NUMBER_FK	R	COPY_D_EVENTS
SPS_C00646545	C	COPY_D_EVENTS
SPS_C00646546	C	COPY_D_EVENTS
SPS_C00646547	C	COPY_D_EVENTS
SPS_C00646548	C	COPY_D_EVENTS

6 rows returned in 4.59 seconds

- 5)
5. Drop the PRIMARY KEY constraint on the copy_d_clients table. Explain your results.

ALTER TABLE copy_d_clients
DROP CONSTRAINT COPY_D_CLT_CLIENT_NUMBER_PK ;

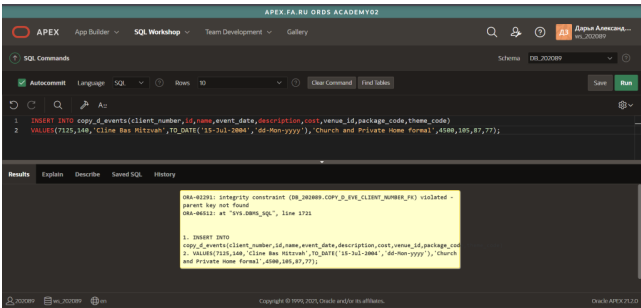
Ошибка, этот ключ используется где-то еще.

ALTER TABLE copy_d_clients
DROP CONSTRAINT COPY_D_CLT_CLIENT_NUMBER_PK CASCADE;
Успешно

- 6)
6. Add the following event to the copy_d_events table. Explain your results.

ID	NAME	EVENT_DATE	DESCRIPTION	COST	VENUE_ID	PACKAGE_CODE	THEME_CODE	CLIENT_NUMBER
140	Cline Bas Mitzvah	15-Jul-2004	Church and Private Home formal	4500	105	87	77	7125

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);

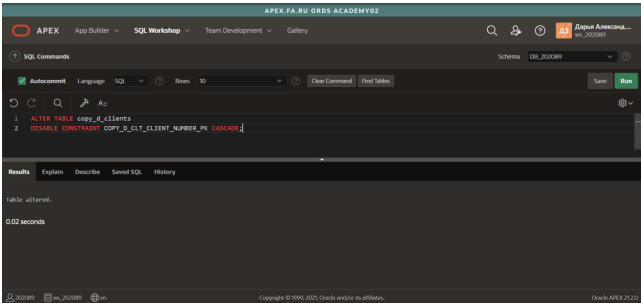


Ошибка с ключом не дает добавить

7)

- 7. Create an ALTER TABLE query to disable the primary key in the copy_d_clients table. Then add the values from #6 to the copy_d_events table. Explain your results.

ALTER TABLE copy_d_clients
 DISABLE CONSTRAINT COPY_D_CLT_CLIENT_NUMBER_PK CASCADE;

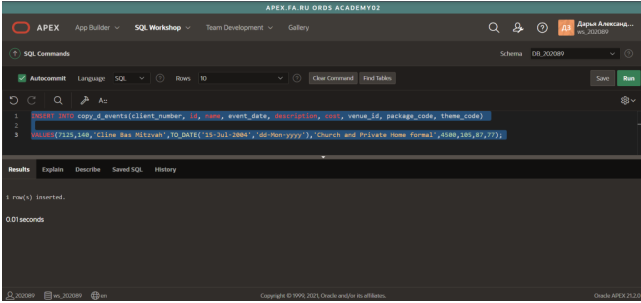


8)

- 8. Repeat question 6: Insert the new values in the copy_d_events table. Explain your results.

INSERT INTO copy_d_events(client_number, id, name, event_date, description, cost, venue_id,
 package_code, theme_code)

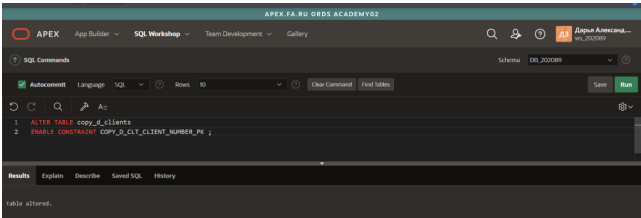
VALUES(7125,140,'Cline Bas Mitzvah',TO_DATE('15-Jul-2004','dd-mon-yyyy'),'Church and Private Home
 formal',4500,105,87,77);

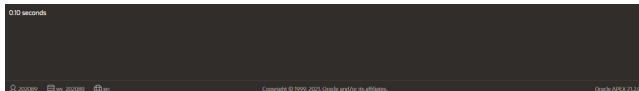


9)

- 9. Enable the primary-key constraint in the copy_d_clients table. Explain your results.

ALTER TABLE copy_d_clients
 ENABLE CONSTRAINT COPY_D_CLT_CLIENT_NUMBER_PK ;





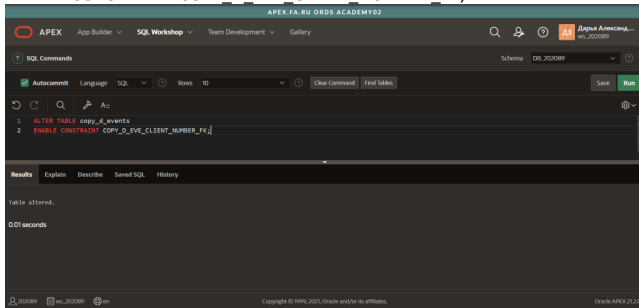
10)

10. If you wanted to enable the foreign-key column and reestablish the referential integrity between these two tables, what must be done?

Fix row with client number

1) DELETE FROM copy_d_events WHERE
client_number NOT IN (SELECT client_number FROM copy_d_clients);

2) ALTER TABLE copy_d_events
ENABLE CONSTRAINT COPY_D_EVE_CLIENT_NUMBER_FK;



11)

11. Why might you want to disable and then re-enable a constraint?

Для ускорения нескольких процессов, если уверен в целостности данных

12)

12. Query the data dictionary for some of the constraints that you have created. How does the data dictionary identify each constraint type?

C - Check

P – primary

R – foreign key

U - unique