

pgAdmin 4

File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

Query

```
1 ✓ CREATE INDEX idx_flights_actual_departure
2   ON flights(actual_departure);
3
```

Data Output Messages Notifications

ERROR: отношение "idx_flights_actual_departure" уже существует

ОШИБКА: отношение "idx_flights_actual_departure" уже существует
SQL state: 42P07

Total rows: 3 Query complete 00:00:00.066

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12:05 PM 11/12/2025

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Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

Query

```
1
2 ✓ CREATE INDEX idx_actual_departure
3   on flights(actual_departure)
```

Data Output Messages Notifications

ERROR: отношение "idx_actual_departure" уже существует

ОШИБКА: отношение "idx_actual_departure" уже существует
SQL state: 42P07

Total rows: 4 Query complete 00:00:00.100

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Welcome postgres/postgres@PostgreSQL 17* X

postgres/postgres@PostgreSQL 17* No limit Execute query [Alt+F5]

Query History

```
1
2 v CREATE INDEX idx_actual_departure
3   on flights(actual_departure)
4
5 --2
6 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
7   on flights(flight_no, scheduled_departure)
8
```

Data Output Messages Notifications

CREATE INDEX

Query returned successfully in 69 msec.

Total rows: Query complete 00:00:00.069

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✓ Query returned successfully in 69 msec. CRLF Ln 5, Col 4

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

Query

```
1
2 CREATE INDEX idx_actual_departure
3   on flights(actual_departure)
4
5 --2
6 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
7   on flights(flight_no, scheduled_departure)
8 --3
9 CREATE INDEX idx_flights_departure_arrival
10  on flights(departure_airport_id, arrival_airport_id)
```

Data Output Messages Notifications

CREATE INDEX

Query returned successfully in 60 msec.

Total rows: Query complete 00:00:00.060

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✓ Query returned successfully in 60 msec. CRLF Ln 8, Col 4

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

Query

```
1 CREATE INDEX idx_actual_departure
2   on flights(actual_departure)
3
4 --2
5 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
6   on flights(flight_no, scheduled_departure)
7
8 --3
9 CREATE INDEX idx_flights_departure_arrival
10  on flights(departure_airport_id, arrival_airport_id)
11
12 EXPLAIN ANALYZE
13 SELECT * FROM flights
14 WHERE departure_airport_id = 11 AND arrival_airport_id = 12
```

Data Output Messages Notifications

Showing rows: 1 to 7 Page No: 1 of 1

QUERY PLAN

text

```
1 Bitmap Heap Scan on flights (cost=4.30..9.97 rows=2 width=61) (actual time=0.055..0.060 rows=4 loops=1)
2   Recheck Cond: ((departure_airport_id = 11) AND (arrival_airport_id = 12))
3   Heap Blocks: exact=4
4   -> Bitmap Index Scan on idx_flights_departure_arrival (cost=0.00..4.29 rows=2 width=0) (actual time=0.039..0.040 rows=4 loops=1)
5     Index Cond: ((departure_airport_id = 11) AND (arrival_airport_id = 12))
6 Planning Time: 0.206 ms
7 Execution Time: 0.094 ms
```

Total rows: 7 Query complete 00:00:00.098 CRLF Ln 14, Col 60

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12:46 PM 11/12/2025

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Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

```
2 CREATE INDEX idx_actual_departure
3   on flights(actual_departure)
4
5 --2
6 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
7   on flights(flight_no, scheduled_departure)
8 --3
9 CREATE INDEX idx_flights_departure_arrival
10  on flights(departure_airport_id, arrival_airport_id)
11 --4
12 EXPLAIN ANALYZE
13 SELECT * FROM flights
14 WHERE departure_airport_id = 11 AND arrival_airport_id = 12
15 --5
16 EXPLAIN ANALYZE
17 SELECT * FROM flights
18 WHERE departure_airport_id = 11 AND arrival_airport_id = 12
```

Data Output Messages Notifications

Showing rows: 1 to 7 Page No: 1 of 1

QUERY PLAN

text

```
1 Bitmap Heap Scan on flights (cost=4.30..9.97 rows=2 width=61) (actual time=0.051..0.059 rows=4 loops=1)
2   Recheck Cond: ((departure_airport_id = 11) AND (arrival_airport_id = 12))
3   Heap Blocks: exact=4
4   -> Bitmap Index Scan on idx_flights_departure_arrival (cost=0.00..4.29 rows=2 width=0) (actual time=0.032..0.032 rows=4 loops=1)
5     Index Cond: ((departure_airport_id = 11) AND (arrival_airport_id = 12))
6 Planning Time: 0.265 ms
7 Execution Time: 0.100 ms
```

Total rows: 7 Query complete 00:00:00.075 ✓ Successfully run. Total query runtime: 75 msec. 7 rows affected. CRLF Ln 15, Col 4

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

```
5 --2
6 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
7 on flights(flight_no, scheduled_departure)
8 --3
9 CREATE INDEX idx_flights_departure_arrival
10 on flights(departure_airport_id, arrival_airport_id)
11 --4
12 EXPLAIN ANALYZE
13 SELECT * FROM flights
14 WHERE departure_airport_id = 11 and arrival_airport_id = 12
15 --5
16 EXPLAIN ANALYZE
17 SELECT * FROM flights
18 WHERE departure_airport_id = 11 and arrival_airport_id = 12
19 --6
20 CREATE UNIQUE INDEX idx_passengers_passport_number
21 on passengers(passport_number)
```

Data Output Messages Notifications

CREATE INDEX

Query returned successfully in 80 msec.

Total rows: Query complete 00:00:00.080

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CRLF Ln 19, Col 5

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

Query History

```
3 on flights(actual_departure)
4
5 --2
6 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
7 on flights(flight_no, scheduled_departure)
8 --3
9 CREATE INDEX idx_flights_departure_arrival
10 on flights(departure_airport_id, arrival_airport_id)
11 --4
12 EXPLAIN ANALYZE
13 SELECT * FROM flights
14 WHERE departure_airport_id = 11 and arrival_airport_id = 12
15 --5
16 EXPLAIN ANALYZE
17 SELECT * FROM flights
18 WHERE departure_airport_id = 11 and arrival_airport_id = 12
19 --6
20 CREATE UNIQUE INDEX idx_passengers_passport_number
21 on passengers(passport_number)
22
23 INSERT INTO passengers (passenger_id, first_name, last_name, passport_number, date_of_birth, country_of_citizenship)
24 VALUES (201, 'Alice', 'Lee', 'A1234567', '1984-05-12', 'Philippines');
```

Data Output Messages Notifications

ERROR: повторяющееся значение ключа нарушает ограничение уникальности "passengers_pkey"
Ключ "(passenger_id)=(201)" уже существует.

ОШИБКА: повторяющееся значение ключа нарушает ограничение уникальности "passengers_pkey"
SQL state: 23505
Detail: Ключ "(passenger_id)=(201)" уже существует.

Total rows: Query complete 00:00:00.057

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Search

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

```
6 CREATE UNIQUE INDEX idx_unique_flight_no_sched_dep
7 on flights(flight_no, scheduled_departure)
8 --3
9 CREATE INDEX idx_flights_departure_arrival
10 on flights(departure_airport_id, arrival_airport_id)
11 --4
12 EXPLAIN ANALYZE
13 SELECT * FROM flights
14 WHERE departure_airport_id = 11 and arrival_airport_id = 12
15 --5
16 EXPLAIN ANALYZE
17 SELECT * FROM flights
18 WHERE departure_airport_id = 11 and arrival_airport_id = 12
19 --6
20 CREATE UNIQUE INDEX idx_passengers_passport_number
21 on passengers(passport_number)
22
23 INSERT INTO passengers (passenger_id, first_name, last_name, passport_number, date_of_birth, country_of_citizenship)
24 VALUES (201, 'Alice', 'Lee', 'A1234567', '1984-05-12', 'Philippines');
25 --7
26 ✓ CREATE INDEX idx_passengers_full
27 on passengers(first_name, last_name, date_of_birth, country_of_citizenship)
```

Data Output Messages Notifications

CREATE INDEX

Query returned successfully in 50 msec.

Total rows: Query complete 00:00:00.050

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Search

CRLF Ln 25, Col 4

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

```
12 EXPLAIN ANALYZE
13 SELECT * FROM flights
14 WHERE departure_airport_id = 11 AND arrival_airport_id = 12
15 --5
16 EXPLAIN ANALYZE
17 SELECT * FROM flights
18 WHERE departure_airport_id = 11 AND arrival_airport_id = 12
19 --6
20 CREATE UNIQUE INDEX idx_passengers_passport_number
21 ON passengers(passport_number)
22
23 INSERT INTO passengers (passenger_id, first_name, last_name, passport_number, date_of_birth, country_of_citizenship)
24 VALUES (201, 'Alice', 'Lee', 'A1234567', '1984-05-12', 'Philippines');
25 --7
26 CREATE INDEX idx_passengers_full
27 ON passengers(first_name, last_name, date_of_birth, country_of_citizenship)
28
29 EXPLAIN ANALYZE
30 SELECT *
31 FROM passengers
32 WHERE country_of_citizenship = 'Philippines'
33 AND date_of_birth BETWEEN '1984-01-01' AND '1984-12-31';
```

Data Output Messages Notifications

Showing rows: 1 to 5 Page No: 1 of 1

QUERY PLAN text

```
1 Seq Scan on passengers (cost=0.00..6.52 rows=1 width=64) (actual time=0.034..0.071 rows=1 loops=1)
2   Filter: ((date_of_birth >= '1984-01-01'::date) AND (date_of_birth <= '1984-12-31'::date) AND ((country_of_citizenship)::text = 'Philippines'::text))
3   Rows Removed by Filter: 200
4 Planning Time: 7.454 ms
5 Execution Time: 0.097 ms
```

Total rows: 5 Query complete 00:00:00.080 ✓ Successfully run. Total query runtime: 80 msec. 5 rows affected. CRLF Ln 28, Col 11

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Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit Execute query AN F5

Query History

```
16 EXPLAIN ANALYZE
17 SELECT * FROM flights
18 WHERE departure_airport_id = 11 AND arrival_airport_id = 12
19 --6
20 CREATE UNIQUE INDEX idx_passengers_passport_number
21 ON passengers(passport_number)
22
23 INSERT INTO passengers (passenger_id, first_name, last_name, passport_number, date_of_birth, country_of_citizenship)
24 VALUES (201, 'Alice', 'Lee', 'A1234567', '1984-05-12', 'Philippines');
25 --7
26 CREATE INDEX idx_passengers_full
27 ON passengers(first_name, last_name, date_of_birth, country_of_citizenship)
28
29 EXPLAIN ANALYZE
30 SELECT *
31 FROM passengers
32 WHERE country_of_citizenship = 'Philippines'
33 AND date_of_birth BETWEEN '1984-01-01' AND '1984-12-31';
34 --8
35 SELECT tablename, indexname, indexdef
36 FROM pg_indexes
37 WHERE tablename = 'passengers'
```

Data Output Messages Notifications

Showing rows: 1 to 4 Page No: 1 of 1

	tablename	indexname	indexdef
1	passengers	passengers_pkey	CREATE UNIQUE INDEX passengers_pkey ON public.passengers USING btree (passenger_id)
2	passengers	uq_passenger_passport	CREATE UNIQUE INDEX uq_passenger_passport ON public.passengers USING btree (passport_number)
3	passengers	idx_passengers_passport_number	CREATE UNIQUE INDEX idx_passengers_passport_number ON public.passengers USING btree (passport_number)
4	passengers	idx_passengers_full	CREATE INDEX idx_passengers_full ON public.passengers USING btree (first_name, last_name, date_of_birth, country_of_citizenship)

Total rows: 4 Query complete 00:00:00.097 ✓ Successfully run. Total query runtime: 97 msec. 4 rows affected. CRLF Ln 34, Col 4

Air: Moderate Friday

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File Object Tools Edit View Window Help

Welcome postgres/postgres@PostgreSQL 17*

postgres/postgres@PostgreSQL 17* No limit

Query History

```
19 --6
20 CREATE UNIQUE INDEX idx_passengers_passport_number
21 on passengers(passport_number)
22
23 INSERT INTO passengers (passenger_id, first_name, last_name, passport_number, date_of_birth, country_of_citizenship)
24 VALUES (201, 'Alice', 'Lee', 'A1234567', '1984-05-12', 'Philippines');
25 --7
26 ✓ CREATE INDEX idx_passengers_full
27 on passengers(first_name, last_name, date_of_birth, country_of_citizenship)
28
29 EXPLAIN ANALYZE
30 SELECT *
31 FROM passengers
32 WHERE country_of_citizenship = 'Philippines'
33 AND date_of_birth BETWEEN '1984-01-01' AND '1984-12-31';
34 --8
35 ✓ SELECT tablename, indexname, indexdef
36 FROM pg_indexes
37 WHERE tablename = 'passengers'
38
39 DROP INDEX idx_passengers_passport_number
40 DROP INDEX idx_passengers_full
```

Data Output Messages Notifications

DROP INDEX

Query returned successfully in 77 msec.

Total rows: Query complete 00:00:00.077

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Search

CRLF Ln 38, Col 11