

Object Explorer

Foreign Data Wrappers

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public

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Tables (10)

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

security_check

Trigger Functions

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postgres

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Tablespaces

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query

Query History

1

2

3

4

5

6

#1

SELECT f.*

FROM flights f

JOIN airline a ON f.airline_id = a.airline_id

WHERE a.airline_name = 'Air Astana';

Data Output

Messages

Notifications

flight_id

[PK] integer

sch_departure_time

timestamp without time zone

sch_arrival_time

timestamp without time zone

departing_airport_id

integer

arriving_airport_id

integer

departing_gate

text

arriving_gate

character varying (50)

airline_id

integer

Total rows: 0

Query complete 00:00:00.394

LF

Ln 2, Col 1

Object Explorer

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Tables (10)

airline

airport

baggage

baggage_check

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booking

booking_flight

flights

Columns (12)

flight_id

sch_departure_time

sch_arrival_time

departing_airport_id

arriving_airport_id

departing_gate

arriving_gate

airline_id

act_departure_time

act_arrival_time

created_at

updated_at

Constraints

Indexes

RLS Policies

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query Query History

```
1 #1
2 SELECT f.*
3 FROM flights f
4 JOIN airline a ON f.airline_id = a.airline_id
5 WHERE a.airline_name = 'Air Astana';
6
7 #2
8 SELECT f.flight_id,
9        a.airline_name,
10       dep.airport_name AS departure_airport,
11       arr.airport_name AS arrival_airport,
12       f.sch_departure_time
13 FROM flights f
14 JOIN airline a ON f.airline_id = a.airline_id
15 JOIN airport dep ON f.departing_airport_id = dep.airport_id
16 JOIN airport arr ON f.arriving_airport_id = arr.airport_id;
17
```

Data Output Messages Notifications

Showing rows: 1 to 28 Page No: 1 of 1

flight_id	airline_name	departure_airport	arrival_airport	sch_departure_time
integer	character varying (50)	character varying (50)	character varying (50)	timestamp without time zone
1	1 KazAir	Airport_1	Airport_2	2025-01-01 08:00:00
2	2 AirFrance	Airport_3	Airport_4	2025-01-01 09:00:00
3	3 FlyBrazil	Airport_5	Airport_6	2025-01-01 10:00:00
4	4 PolAir	Airport_7	Airport_8	2025-01-02 07:30:00
5	5 TurkishWings	Airport_9	Airport_10	2025-01-02 12:00:00
6	6 USAir	Airport_11	Airport_12	2025-01-03 06:00:00
7	7 Lufthansa	Airport_13	Airport_14	2025-01-03 13:00:00

Total rows: 28 Query complete 00:00:00.175

Successfully run. Total query runtime: 175 msec. 28 rows affected

Object Explorer

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> Tables (10)

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> airport

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> baggage_check

> boarding_pass

> booking

> booking_flight

> flights

> Columns (12)

flight_id

sch_departure_time

sch_arrival_time

departing_airport_id

arriving_airport_id

departing_gate

arriving_gate

airline_id

act_departure_time

act_arrival_time

created_at

updated_at

> Constraints

> Indexes

> RLS Policies

BD_Lab2/postgres@PostgreSQL 17* X

BD_Lab2/postgres@PostgreSQL 17

Query

Query History

```
4 JOIN airline a ON f.airline_id = a.airline_id
5 WHERE a.airline_name = 'Air Astana';
6
7 #2
8 SELECT f.flight_id,
9        a.airline_name,
10       dep.airport_name AS departure_airport,
11       arr.airport_name AS arrival_airport,
12       f.sch_departure_time
13 FROM flights f
14 JOIN airline a ON f.airline_id = a.airline_id
15 JOIN airport dep ON f.departing_airport_id = dep.airport_id
16 JOIN airport arr ON f.arriving_airport_id = arr.airport_id;
17
18 #3
19 SELECT a.airline_name
20 FROM airline a
21 LEFT JOIN flights f
22     ON a.airline_id = f.airline_id
23     AND f.sch_departure_time BETWEEN date_trunc('month', current_date + interval '1 month')
24                               AND date_trunc('month', current_date + interval '2 month') - interval '1 day'
25 WHERE f.flight_id IS NULL;
26
```

Data Output

Messages

Notifications

Showing rows: 1 to 20

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◀ ◁ ▷ ▶

	airline_name character varying (50)
1	AirFrance
2	FlyBrazil
3	PolAir
4	TurkishWings
5	USAir
6	Lufthansa
7	BritishFly

Total rows: 20

Query complete 00:00:00.139

LF

Ln 19, Col 1

Object Explorer

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> Tables (10)

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> airport

> baggage

> baggage_check

> boarding_pass

> booking

> booking_flight

> flights

> passengers

> Columns (10)

passenger_id

first_name

last_name

date_of_birth

gender

country_of_citizenship

country_of_residence

passport_number

created_at

updated_at

> Constraints

> Indexes

> RLS Policies

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query

Query History

13 FROM flights f

14 JOIN airline a ON f.airline_id = a.airline_id

15 JOIN airport dep ON f.departing_airport_id = dep.airport_id

16 JOIN airport arr ON f.arriving_airport_id = arr.airport_id;

17

18 #3

19 SELECT a.airline_name

20 FROM airline a

21 LEFT JOIN flights f

22 ON a.airline_id = f.airline_id

23 AND f.sch_departure_time BETWEEN date_trunc('month', current_date + interval '1 month')

24 AND date_trunc('month', current_date + interval '2 month') - interval '1 day'

25 WHERE f.flight_id IS NULL;

26

27

28 #4

29 SELECT p.first_name, p.passport_number

30 FROM passengers p

31 JOIN booking b ON p.passenger_id = b.passenger_id

32 JOIN booking_flight bf ON b.booking_id = bf.booking_id

33 JOIN flights f ON bf.flight_id = f.flight_id

34 WHERE f.flight_id = 1;

35

Data Output

Messages

Notifications

Showing rows: 1 to 1

Page No: 1

of 1

	first_name character varying (50)	passport_number character varying (20)
1	John	P100001

Total rows: 1

Query complete 00:00:00.175

Successfully run. Total query runtime: 175 msec. 1 rows affected.

LF Ln 29, Col 1

Object Explorer

Foreign Tables

Functions

Materialized Views

Operators

Procedures

Sequences

Tables (10)

airline

airport

baggage

baggage_check

boarding_pass

booking

Columns (9)

booking_id

flight_id

passenger_id

booking_platform

created_at

updated_at

status

price

ticketdiscount

Constraints

Indexes

RLS Policies

Rules

Triggers

booking_flight

flights

Columns (12)

flight_id

sch_departure_time

sch_arrival_time

departing_airport_id

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query

Query History

```
25 WHERE f.flight_id IS NULL;
26
27
28 #4
29 SELECT p.first_name, p.passport_number
30 FROM passengers p
31 JOIN booking b ON p.passenger_id = b.passenger_id
32 JOIN booking_flight bf ON b.booking_id = bf.booking_id
33 JOIN flights f ON bf.flight_id = f.flight_id
34 WHERE f.flight_id = 1;
35
36
37 #5
38 SELECT b.booking_id,
39        ROUND(AVG(b.price), 2) AS avg_price,
40        SUM(b.price) AS total_price,
41        MAX(b.price) AS max_price,
42        MIN(b.price) AS min_price
43 FROM booking b
44 GROUP BY b.booking_id
45 ORDER BY b.booking_id;
46
47
```

Data Output

Messages

Notifications

Showing rows: 1 to 41

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	booking_id [PK] integer	avg_price numeric	total_price numeric	max_price numeric	min_price numeric
1	1	17250.00	17250.00	17250.00	17250.00
2	2	13800.58	13800.58	13800.58	13800.58
3	3	24150.00	24150.00	24150.00	24150.00
4	4	10350.00	10350.00	10350.00	10350.00
5	5	21275.86	21275.86	21275.86	21275.86
6	6	26450.00	26450.00	26450.00	26450.00
7	7	12650.00	12650.00	12650.00	12650.00

Total rows: 41

Query complete 00:00:00.113

✓ Successfully run. Total query runtime: 113 msec. 41 rows affected. ✕

LF Ln 38, Col 1

Object Explorer

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- Functions
- Materialized Views
- Operators
- Procedures
- Sequences
- Tables (10)
 - airline
 - airport
 - baggage
 - baggage_check
 - boarding_pass
 - booking
 - booking_flight
 - flights
 - Columns (12)
 - flight_id
 - sch_departure_time
 - sch_arrival_time
 - departing_airport_id
 - arriving_airport_id
 - departing_gate
 - arriving_gate
 - airline_id
 - act_departure_time
 - act_arrival_time
 - created_at
 - updated_at
- Constraints
- Indexes
- RLS Policies
- Rules
- Triggers
- passengers
 - Columns (10)

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query Query History

```
38 SELECT b.booking_id,
39        ROUND(AVG(b.price), 2) AS avg_price,
40        SUM(b.price) AS total_price,
41        MAX(b.price) AS max_price,
42        MIN(b.price) AS min_price
43 FROM booking b
44 GROUP BY b.booking_id
45 ORDER BY b.booking_id;
46
47 #6
48 SELECT f.flight_id,
49        a.airline_name,
50        dep.airport_name AS departure_airport,
51        arr.airport_name AS arrival_airport,
52        arr.country AS destination_country
53 FROM flights f
54 JOIN airline a ON f.airline_id = a.airline_id
55 JOIN airport dep ON f.departing_airport_id = dep.airport_id
56 JOIN airport arr ON f.arriving_airport_id = arr.airport_id
57 WHERE arr.country = 'Kazakhstan';
58
59
60
```

Data Output Messages Notifications

Showing rows: 1 to 2 Page No: 1 of 1

	flight_id	airline_name	departure_airport	arrival_airport	destination_country
	integer	character varying (50)	character varying (50)	character varying (50)	character varying (50)
1	20	Iberia	Airport_20	Airport_1	Kazakhstan
2	30	Iberia	Airport_9	Airport_11	Kazakhstan

Total rows: 2 Query complete 00:00:00.083

✓ Successfully run. Total query runtime: 83 msec. 2 rows affected. ✕

LF Ln 48, Col 1

Object Explorer

flight_id

sch_departure_time

sch_arrival_time

departing_airport_id

arriving_airport_id

departing_gate

arriving_gate

airline_id

act_departure_time

act_arrival_time

created_at

updated_at

> Constraints

> Indexes

> RLS Policies

> Rules

> Triggers

> passengers

> Columns (10)

passenger_id

first_name

last_name

date_of_birth

gender

country_of_citizenship

country_of_residence

passport_number

created_at

updated_at

> Constraints

> Indexes

> RLS Policies

> Rules

> Triggers

> security_check

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query Query History

```
53 FROM flights f
54 JOIN airline a ON f.airline_id = a.airline_id
55 JOIN airport dep ON f.departing_airport_id = dep.airport_id
56 JOIN airport arr ON f.arriving_airport_id = arr.airport_id
57 WHERE arr.country = 'Kazakhstan';
58
59
60 #7
61 SELECT
62     p.first_name,
63     p.date_of_birth,
64     EXTRACT(YEAR FROM age(p.date_of_birth)) AS age,
65     arr.airport_name AS arrival_airport,
66     arr.country AS arrival_country
67 FROM passengers p
68 JOIN booking b ON p.passenger_id = b.passenger_id
69 JOIN booking_flight bf ON b.booking_id = bf.booking_id
70 JOIN flights f ON bf.flight_id = f.flight_id
71 JOIN airport arr ON f.arriving_airport_id = arr.airport_id
72 WHERE EXTRACT(YEAR FROM age(p.date_of_birth)) < 30;
73
74
75
76
```

Data Output Messages Notifications

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

	first_name character varying (50)	date_of_birth date	age numeric	arrival_airport character varying (50)	arrival_country character varying (50)
1	Pedro	1996-06-06	29	Airport_18	UK
2	Algerim	1998-03-12	27	Airport_20	Spain
3	Sofia	1997-04-04	28	Airport_9	Italy
4	Olga	1999-10-10	26	Airport_1	Kazakhstan

Total rows: 4 Query complete 00:00:00.059 LF Ln 76, Col 1

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> Sequences

> Tables (10)

> airline

> airport

> baggage

> baggage_check

> boarding_pass

> booking

> booking_flight

> flights

> Columns (12)

flight_id

sch_departure_time

sch_arrival_time

departing_airport_id

arriving_airport_id

departing_gate

arriving_gate

airline_id

act_departure_time

act_arrival_time

created_at

updated_at

> Constraints

> Indexes

> RLS Policies

> Rules

> Triggers

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query Query History

61 SELECT

62 p.first_name,

63 p.date_of_birth,

64 EXTRACT(YEAR FROM age(p.date_of_birth)) AS age,

65 arr.airport_name AS arrival_airport,

66 arr.country AS arrival_country

67 FROM passengers p

68 JOIN booking b ON p.passenger_id = b.passenger_id

69 JOIN booking_flight bf ON b.booking_id = bf.booking_id

70 JOIN flights f ON bf.flight_id = f.flight_id

71 JOIN airport arr ON f.arriving_airport_id = arr.airport_id

72 WHERE EXTRACT(YEAR FROM age(p.date_of_birth)) < 30;

73

74

75 #8

76 SELECT p.first_name,

77 p.passport_number,

78 f.sch_departure_time AS arrival_time

79 FROM passengers p

80 JOIN booking b ON p.passenger_id = b.passenger_id

81 JOIN booking_flight bf ON b.booking_id = bf.booking_id

82 JOIN flights f ON bf.flight_id = f.flight_id;

83

Data Output Messages Notifications

Showing rows: 1 to 19 Page No: 1 of 1

	first_name character varying (50)	passport_number character varying (20)	arrival_time timestamp without time zone
1	John	P100001	2025-01-01 08:00:00
2	Anna	P100002	2025-01-01 09:00:00
3	Ali	P100003	2025-01-01 10:00:00
4	Maria	P100004	2025-01-02 07:30:00
5	Luca	P100005	2025-01-02 12:00:00
6	Pierre	P100006	2025-01-03 06:00:00
7	Julia	P100007	2025-01-03 13:00:00

Total rows: 19 Query complete 00:00:00.077

Successfully run. Total query runtime: 77 msec. 19 rows affected.

LF Ln 76, Col 1

Object Explorer

> FTS Dictionaries

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> Foreign Tables

> Functions

> Materialized Views

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> Procedures

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> Tables (10)

airline

Columns (6)

airline_id

airline_code

airline_name

airline_country

created_at

updated_at

> Constraints

> Indexes

> RLS Policies

> Rules

> Triggers

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

Columns (10)

passenger_id

first_name

last_name

date_of_birth

BD_Lab2/postgres@PostgreSQL 17*

BD_Lab2/postgres@PostgreSQL 17

Query

Query History

73

74

75 #8

76 SELECT p.first_name,

77 p.passport_number,

78 f.sch_departure_time AS arrival_time

79 FROM passengers p

80 JOIN booking b ON p.passenger_id = b.passenger_id

81 JOIN booking_flight bf ON b.booking_id = bf.booking_id

82 JOIN flights f ON bf.flight_id = f.flight_id;

83

84 #9

85 SELECT f.flight_id,

86 a.airline_name,

87 dep.country AS origin_country

88 FROM flights f

89 JOIN airline a ON f.airline_id = a.airline_id

90 JOIN airport dep ON f.departing_airport_id = dep.airport_id

91 WHERE a.airline_country = dep.country

92 GROUP BY f.flight_id, a.airline_name, dep.country

93 ORDER BY dep.country;

94

95

Data Output

Messages

Notifications

Showing rows: 1 to 2

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SQL

flight_id	airline_name	origin_country
integer	character varying (50)	character varying (50)
1	20 Iberia	Spain
2	26 USAir	USA

Total rows: 2

Query complete 00:00:00.072

LF

Ln 85, Col 1