

LD Lab 2 DB Version control

Database Explorer

postgres@localhost

lab2

tables 10

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

security_check

public

lab2 console_5 airport

play

stop

refresh

terminal

Tx: Auto

Playground

postgres.lab2

1 ALTER TABLE passengers

2 ADD CONSTRAINT chk_age CHECK (AGE(date_of_birth) >= INTERVAL '10 years');

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Services

Tx

Database

postgres@localhost

console_5 509 ms

airport 392 ms

[2025-10-14 23:55:34] Connected

[2025-10-14 23:55:34] postgres.lab2> set search_path = "lab2"

[2025-10-14 23:55:34] completed in 2 ms

[2025-10-14 23:55:34] postgres.lab2> ALTER TABLE passengers

ADD CONSTRAINT chk_age CHECK (AGE(date_of_birth) >= INTERVAL '10 years')

[2025-10-14 23:55:34] completed in 19 ms

Database Consoles > postgres@localhost > console_5

2:74 LF UTF-8 4 spaces

LD Lab 2 DB Version control

Database Explorer

postgres@localhost

- booking
- booking_flight
- flights
- passengers
 - columns 10
 - keys 1
 - indexes 1
 - checks 1
- security_check
- public
- Database Objects
- Server Objects

lab2 console_5

playground

postgres.lab2

1 ALTER TABLE booking

2 ADD CONSTRAINT chk_ticket_price CHECK (ticket_price <= 50000 AND ticket_price >= 0);

Services

Tx Database

- postgres@localhost
 - console_5 22 ms

[2025-10-14 23:55:34] Connected

[2025-10-14 23:55:34] postgres.lab2> set search_path = "lab2"

[2025-10-14 23:55:34] completed in 2 ms

[2025-10-14 23:55:34] postgres.lab2> ALTER TABLE passengers

ADD CONSTRAINT chk_age CHECK (AGE(date_of_birth) >= INTERVAL '10 years')

[2025-10-14 23:55:34] completed in 19 ms

[2025-10-15 00:16:07] postgres.lab2> ALTER TABLE booking

ADD CONSTRAINT chk_ticket_price CHECK (ticket_price <= 50000 AND ticket_price >= 0)

[2025-10-15 00:16:07] completed in 6 ms

Database Consoles > postgres@localhost > console_52:18 LF UTF-8 4 spaces

LD Lab 2 DB

Version control

Database Explorer

postgres@localhost

- booking
- booking_flight
- flights
- passengers
 - columns 10
 - keys 1
 - indexes 1
 - checks 1
- security_check
- public
- Database Objects
- Server Objects

lab2 console_5

playground

postgres.lab2

1 ALTER TABLE baggage

2 ADD CONSTRAINT chk_baggage_weight CHECK (weight_in_kg >= 1 AND weight_in_kg <= 23);

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Services

Tx

Database

- postgres@localhost
 - console_5 14 ms

Output postgres.lab2.baggage

[2025-10-15 00:29:51] postgres.lab2> SELECT baggage_id, weight_in_kg

FROM baggage

WHERE weight_in_kg < 1 OR weight_in_kg > 23

[2025-10-15 00:29:51] 0 rows retrieved in 343 ms (execution: 4 ms, fetching: 339 ms)

[2025-10-15 00:30:03] postgres.lab2> ALTER TABLE baggage

ADD CONSTRAINT chk_baggage_weight CHECK (weight_in_kg >= 1 AND weight_in_kg <= 23)

[2025-10-15 00:30:03] completed in 2 ms

Database Consoles

postgres@localhost

console_5

2:84 LF UTF-8 4 spaces

LD Lab 2 DB ▾

Version control ▾

Database Explorer

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▼ postgres@localhost 1 of 5

▼ postgres 2 of 4

▼ lab2

▼ tables 10

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

▼ columns 10

lab2

console_5

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Tx: Auto ▾

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Playground ▾

postgres.lab2 ▾

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ALTER TABLE airport

ADD CONSTRAINT chk_airport_name_length CHECK (LENGTH(airport_name) >= 8);

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Services

Tx

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▼ Database

▼ postgres@localhost

console_5 15 ms

[2025-10-15 00:57:50] postgres.lab2> ALTER TABLE airport

ADD CONSTRAINT chk_airport_name_length CHECK (LENGTH(airport_name) >= 8)

[2025-10-15 00:57:50] completed in 3 ms

Database Consoles > postgres@localhost > console_5

2:72 LF UTF-8 4 spaces

LD Lab 2 DB

Version control

Database Explorer

postgres@localhost

postgres

lab2

tables

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

security_check

public

Database Objects

lab2

console_5

1

2

3

4

5

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ALTER TABLE airline

ADD CONSTRAINT unique_airline_id UNIQUE (airline_id);

ALTER TABLE passengers

ADD CONSTRAINT unique_passenger_passport UNIQUE (passport_number);

ALTER TABLE booking

ADD CONSTRAINT unique_booking_platform UNIQUE (booking_id);

ALTER TABLE flights

ADD CONSTRAINT unique_flight_id UNIQUE (flight_id);

ALTER TABLE booking_flight

ADD CONSTRAINT unique_booking_flight UNIQUE (booking_flight_id);

ALTER TABLE boarding_pass

ADD CONSTRAINT unique_boarding_pass UNIQUE (boarding_pass_id);

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postgres.lab2

Lab 2 DB

Scratches

Services

Tx

Database

postgres@localhost

console_5 9 ms

[2025-10-15 01:20:30] postgres.lab2> ALTER TABLE passengers

ADD CONSTRAINT unique_passenger_passport UNIQUE (passport_number)

[2025-10-15 01:20:30] completed in 3 ms

[2025-10-15 01:20:30] postgres.lab2> ALTER TABLE booking

ADD CONSTRAINT unique_booking_platform UNIQUE (booking_id)

[2025-10-15 01:20:30] completed in 5 ms

[2025-10-15 01:20:30] postgres.lab2> ALTER TABLE flights

ADD CONSTRAINT unique_flight_id UNIQUE (flight_id)

[2025-10-15 01:20:30] completed in 4 ms

[2025-10-15 01:20:30] postgres.lab2> ALTER TABLE booking_flight

ADD CONSTRAINT unique_booking_flight UNIQUE (booking_flight_id)

[2025-10-15 01:20:30] completed in 3 ms

[2025-10-15 01:20:30] postgres.lab2> ALTER TABLE boarding_pass

ADD CONSTRAINT unique_boarding_pass UNIQUE (boarding_pass_id)

[2025-10-15 01:20:30] completed in 3 ms

Database Consoles

postgres@localhost

console_5

16:26

LF

UTF-8

4 spaces

LD Lab 2 DB

Version control

Database Explorer

postgres@localhost

postgres

lab2

tables

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

columns

passenger_id integer

first_name varchar(50)

lab2

console_5

passengers

1

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SELECT passenger_id, first_name, last_name, gender, date_of_birth

FROM passengers

WHERE (gender = 'Male' AND EXTRACT(YEAR FROM AGE(date_of_birth)) < 18)

OR (gender = 'Female' AND EXTRACT(YEAR FROM AGE(date_of_birth)) < 19);

✓

postgres.lab2

Services

Tx

Database

postgres@localhost

passengers 404 ms

console_5 335 ms

Output

postgres.lab2.passengers

passenger_id

first_name

last_name

gender

date_of_birth

0 rows

Database Consoles

postgres@localhost

console_5

4:74

LF

UTF-8

4 spaces

LD Lab 2 DB Version control

Database Explorer

postgres@localhost

postgres

lab2

tables

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

columns

passenger_id integer

first_name varchar(50)

lab2 console_5 passengers

TX: Auto Playground

postgres.lab2

1 ALTER TABLE passengers

2 ADD CONSTRAINT chk_gender_age CHECK (

3 (gender = 'Male' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 18) OR

4 (gender = 'Female' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 19)

5);

[23514] ERROR: check constraint "chk_gender_age" of relation "passengers" is violated by some row

Services

Database

postgres@localhost

passengers 404 ms

console_5 17 ms

Output postgres.lab2.passengers

[2025-10-15 01:40:58] postgres.lab2> SELECT passenger_id, first_name, last_name, gender, date_of_birth

FROM passengers

WHERE (gender = 'Male' AND EXTRACT(YEAR FROM AGE(date_of_birth)) < 18)

OR (gender = 'Female' AND EXTRACT(YEAR FROM AGE(date_of_birth)) < 19)

[2025-10-15 01:40:58] 0 rows retrieved in 322 ms (execution: 6 ms, fetching: 316 ms)

[2025-10-15 01:41:15] postgres.lab2> ALTER TABLE passengers

ADD CONSTRAINT chk_gender_age CHECK (

(gender = 'Male' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 18) OR

(gender = 'Female' AND EXTRACT(YEAR FROM AGE(date_of_birth)) >= 19)

)

[2025-10-15 01:41:15] [23514] ERROR: check constraint "chk_gender_age" of relation "passengers" is violated by some row

Database Consoles > postgres@localhost > console_5

1:1 LF UTF-8 4 spaces

LD Lab 2 DB

Version control

Database Explorer

postgres@localhost

postgres

lab2

tables

airline

airport

baggage

baggage_check

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booking_flight

flights

passengers

columns

passenger_id integer

first_name varchar(50)

lab2

console_5

passengers

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✓

ALTER TABLE passengers

ADD CONSTRAINT chk_country_age CHECK (

(country_of_citizenship = 'Kazakhstan' AND AGE(date_of_birth) >= INTERVAL '18 years') OR

(country_of_citizenship = 'France' AND AGE(date_of_birth) >= INTERVAL '17 years') OR

(country_of_citizenship NOT IN ('Kazakhstan', 'France') AND AGE(date_of_birth) >= INTERVAL '19 years')

);

✓

postgres.lab2

Services

Tx

Database

postgres@localhost

passengers 404 ms

console_5 19 ms

Output

postgres.lab2.passengers

[2025-10-15 01:39:45] postgres.lab2> ALTER TABLE passengers

ADD CONSTRAINT chk_country_age CHECK (

(country_of_citizenship = 'Kazakhstan' AND AGE(date_of_birth) >= INTERVAL '18

years') OR

(country_of_citizenship = 'France' AND AGE(date_of_birth) >= INTERVAL '17

years') OR

(country_of_citizenship NOT IN ('Kazakhstan', 'France') AND AGE(date_of_birth)

>= INTERVAL '19 years')

)

[2025-10-15 01:39:45] completed in 5 ms

Database Consoles

postgres@localhost

console_5

6:3

LF

UTF-8

4 spaces

LD Lab 2 DB

Version control

Database Explorer

postgres@localhost

postgres

lab2

tables

airline

airport

baggage

baggage_check

boarding_pass

booking

booking_flight

flights

passengers

columns

passenger_id integer

first_name varchar(50)

lab2

console_5

passengers

play

stop

refresh

settings

terminal

Tx: Auto

Playground

postgres.lab2

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6

ALTER TABLE booking

ADD COLUMN ticket_discount DECIMAL(5,2),

ADD CONSTRAINT chk_ticket_discount CHECK (

(created_at > '2024-01-01' AND ticket_discount = 5) OR

(created_at <= '2024-01-01' AND ticket_discount = 10)

);

Services

Tx

Database

postgres@localhost

passengers 404 ms

console_5 17 ms

Output

postgres.lab2.passengers

[2025-10-15 01:40:14] postgres.lab2> ALTER TABLE booking

ADD COLUMN ticket_discount DECIMAL(5,2),

ADD CONSTRAINT chk_ticket_discount CHECK (

(created_at > '2024-01-01' AND ticket_discount = 5) OR

(created_at <= '2024-01-01' AND ticket_discount = 10)

)

[2025-10-15 01:40:14] completed in 5 ms

Database Consoles

postgres@localhost

console_5

6:3

LF

UTF-8

4 spaces