

The screenshot shows a PostgreSQL database management interface with the following details:

Database Explorer (Left Panel):

- Connected to **postgres@localhost**.
- Selected database: **lab2**.
- Tables listed under **tables 10**: airline, airport, baggage, baggage_check, boarding_pass, booking, booking_flight, flights, passengers, security_check.
- Public schema listed under **public**.

Console 5 (Top Right):

- Current connection: **console_5**.
- Table: **airport**.
- Toolbar icons: DDL, Tx: Auto, Playground.
- SQL Editor content:

```
1 ✓ ALTER TABLE passengers
2 ADD CONSTRAINT chk_age CHECK (AGE(date_of_birth) >= INTERVAL '10 years');
```
- Right sidebar shows **postgres.lab2** and **Scratches**.

Services (Bottom Left):

- Tx toolbar: +, ⏪, ⏴, ⏵, ⏷, ⏸.
- Database list:
 - Database node.
 - Selected connection: **postgres@localhost**.
 - Consoles: **console_5** (509 ms), **airport** (392 ms).

Logs (Bottom Right):

- Log output:

```
[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
[2025-10-14 23:55:34]          ADD CONSTRAINT chk_age CHECK (AGE(date_of_birth) >= INTERVAL '10 years')
[2025-10-14 23:55:34] completed in 19 ms
```

Bottom Status Bar:

- Database Consoles > postgres@localhost > **console_5**.
- File status: 2:74 LF UTF-8 4 spaces.

The screenshot shows a PostgreSQL database management interface with the following components:

- Top Bar:** Includes tabs for "Lab 2 DB" and "Version control", and icons for database management.
- Database Explorer:** Shows the database structure for "postgres@localhost". The "passengers" table is currently selected.
- Console:** The "console_5" tab is active, displaying the following SQL command:

```
ALTER TABLE booking
ADD CONSTRAINT chk_ticket_price CHECK (ticket_price <= 50000 AND ticket_price >= 0);
```
- Services:** A log window showing the execution of the command and other related operations.
- Bottom Status:** Displays the current session details: "Database Consoles > postgres@localhost > console_5", and system status: "2:18 LF UTF-8 4 spaces".

Log output from the Services panel:

```
[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
```

The screenshot shows a PostgreSQL database management interface with the following details:

Database Explorer (Left Panel):

- Connected to **postgres@localhost**.
- Current schema: **Lab 2 DB**.
- Tables listed under **passengers**: **columns** (10), **keys** (1), **indexes** (1), **checks** (1).
- Other objects: **booking**, **booking_flight**, **flights**, **public**, **Database Objects**, **Server Objects**.

Console 5 (Top Right):

```
1 ✓ ALTER TABLE baggage
2 ADD CONSTRAINT chk_baggage_weight CHECK (weight_in_kg >= 1 AND weight_in_kg <= 23);
```

Output (Bottom Right):

```
[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
```

Services (Bottom Left):

- Transactions: **Tx**
- Connections: **postgres@localhost** (selected), **console_5** (14 ms).

Bottom Status Bar:

Database Consoles > postgres@localhost > console_5 2:84 LF UTF-8 4 spaces

The screenshot shows a PostgreSQL database management interface with the following details:

Database Explorer (Left Panel):

- Connected to `postgres@localhost` (1 of 5)
- Selected schema: `lab2`
- Tables under `lab2`: `airline`, `airport`, `baggage`, `baggage_check`, `boarding_pass`, `booking`, `booking_flight`, `flights`, `passengers` (highlighted), and `columns` (10).

Console 5 (Top Right):

- Query history:
 - 1 ✓ `ALTER TABLE airport`
 - 2 `ADD CONSTRAINT chk_airport_name_length CHECK (LENGTH(airport_name) >= 8);`
- Status bar: `Tx: Auto`, `Playground`, `postgres.lab2`.

Services (Bottom Left):

- Transactions: `+ (1)`
- Connected to `postgres@localhost`
- Selected session: `console_5` (15 ms)

Logs (Bottom Center):

```
[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
```

Bottom Status Bar:

Database Consoles > postgres@localhost > console_5 2:72 LF UTF-8 4 spaces

The screenshot shows a PostgreSQL database management interface with the following details:

Database Explorer (Left Panel):

- Selected connection: `postgres@localhost`
- Schemas:
 - `public`
 - `lab2` (selected)
 - `airline`
 - `airport`
 - `baggage`
 - `baggage_check`
 - `boarding_pass`
 - `booking`
 - `booking_flight`
 - `flights`
 - `passengers`
 - `security_check`
- Tables: `airline`, `passenger`, `booking`, `flight`, `booking_flight`, `boarding_pass`

Console 5 (Top Right):

- Query Editor:
 - SQL tab selected
 - DDL tab selected
 - Text area shows 17 SQL statements for adding unique constraints to tables `airline`, `passenger`, `booking`, `flight`, `booking_flight`, and `boarding_pass`.
- Toolbars: Tx, Undo, Redo, Copy, Paste, Run, Stop, Tx: Auto, Playground.
- Right sidebar: `postgres.lab2` dropdown, `Lab 2 DB` folder, `Scratches` folder.

Services (Bottom Left):

- Tx toolbar: Tx, +, ⌘, ⌘+, ⌘-, ⌘X.
- Database tree:
 - Database node expanded
 - `postgres@localhost` node expanded
 - `console_5` node selected (9 ms)
- Log pane (Right):
 - Timestamped log entries for each constraint creation statement.
 - Example log entries:
 - [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

Bottom Status Bar: Database Consoles > `postgres@localhost` > `console_5` | 16:26 LF UTF-8 4 spaces

The screenshot shows a PostgreSQL database interface with the following details:

Database Explorer (Left Panel):

- Connected to `postgres@localhost` (1 of 5)
- Selected schema: `lab2`
- Tables under `lab2`: `airline`, `airport`, `baggage`, `baggage_check`, `boarding_pass`, `booking`, `booking_flight`, `flights`, `passengers`.
- Selected table: `passengers`
- Columns under `passengers`: `passenger_id` (integer), `first_name` (varchar(50))

Console Tab (Top Right):

- Query ID: 1 ✓
- Query:

```
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);
```

Output Tab (Bottom Right):

- Table: `postgres.lab2.passengers`
- Columns: `passenger_id`, `first_name`, `last_name`, `gender`, `date_of_birth`
- Row count: 0 rows

Services Tab (Bottom Left):

- Transactions (Tx): `console_5` (335 ms)
- Databases: `postgres@localhost` (passengers 404 ms)

Bottom Status Bar:

- Database Consoles > `postgres@localhost` > `console_5`
- 4:74 LF UTF-8 4 spaces

The screenshot shows a PostgreSQL database management interface with the following details:

Database Explorer (Left Panel):

- Connected to `postgres@localhost`.
- Selected database: `lab2`.
- Tables under `lab2`: `airline`, `airport`, `baggage`, `baggage_check`, `boarding_pass`, `booking`, `booking_flight`, `flights`, `passengers`.
- Selected table: `passengers`.
- Columns under `passengers`: `passenger_id` (integer), `first_name` (varchar(50)).

Console 5 (Top Right):

```
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 );
```

An error message is displayed in a red bar:

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

Services (Bottom Left):

- Connected to `postgres@localhost`.
- Selected database: `postgres.lab2`.
- Table: `passengers`.

Output (Bottom Right):

```
[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
```

Bottom Status Bar:

Database Consoles > postgres@localhost > console_5

1:1 LF UTF-8 4 spaces

The screenshot shows a PostgreSQL database management interface with the following details:

Database Explorer (Left Panel):

- Connected to `postgres@localhost`.
- Selected database: `lab2`.
- Tables under `lab2`: `airline`, `airport`, `baggage`, `baggage_check`, `boarding_pass`, `booking`, `booking_flight`, `flights`.
- Selected table: `passengers`.
- Columns under `passengers`: `passenger_id` (integer), `first_name` (varchar(50)).

Console 5 (Top Right):

- Query: `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')`.
- Status: 1 of 5 rows affected.

Services (Bottom Left):

- Transactions (Tx): `+ X`
- Database: `Database` (selected), `postgres@localhost`, `passengers` (404 ms), `console_5` (19 ms).

Output (Bottom Right):

- Timestamp: [2025-10-15 01:39:45]
- Session: `postgres.lab2>`
- Query: `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')`.
- Completion: `)`
- Timing: completed in 5 ms.

Bottom Status Bar:

- Database Consoles > `postgres@localhost` > `console_5`
- File Encoding: LF
- Character Set: UTF-8
- Spaces: 4 spaces

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- Connected to `postgres@localhost` (1 of 5)
- Selected database: `lab2`
- Tables under `lab2`: `airline`, `airport`, `baggage`, `baggage_check`, `boarding_pass`, `booking`, `booking_flight`, `flights`, `passengers`.
- Selected table: `passengers`
- Columns under `passengers`: `passenger_id` (integer), `first_name` (varchar(50))

Console 5 (Top Right):

- Query ID: 1 ✓
- Query: `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 (Bottom Left):

- Transactions (Tx): `+ ⊕ ⊖ ⊖ X`
- Selected transaction: `postgres@localhost passengers` (404 ms)
- Other transactions: `console_5` (17 ms)

Output (Bottom Right):

- Timestamp: [2025-10-15 01:40:14]
- Query: `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)`
- Completion: [2025-10-15 01:40:14] completed in 5 ms

Bottom Status Bar:

- Database Consoles > `postgres@localhost` > `console_5`
- File Format: LF
- Character Encoding: UTF-8
- Spaces: 4 spaces