Prisma Database ORM toolkit

CONCEPTS

Since Prisma 7 the CLI no longer runs generate or seed for you after migrate dev, migrate reset or db push. Run them explicitly.

Edit schema.prisma models, relations
↓ changes
migrate dev SQL file + apply
↓ then
generate typed client
↓ commit, ship
migrate deploy CI and production

Typical development loop

The database URL lives in prisma.config.ts (usually read from DATABASE_URL), not in the schema. Commands that touch the database need that file.

SETUP

npx prisma init
Create schema, config and .env

npx prisma init --datasource-provider *<provider>*
Pick the database provider

npx prisma init --url *<url>*
Set a custom datasource URL

npx prisma init --with-model
Add a sample User model

npx prisma version
CLI, client and engine versions

GENERATE

npx prisma generate
Generate the client from the schema

npx prisma generate --watch
Regenerate on schema changes

npx prisma generate --no-engine
Client without an engine (Accelerate, edge)

SCHEMA TOOLING

npx prisma validate
Check the schema for errors

npx prisma format
Format schema.prisma

SCHEMA TOOLING (cont.)

npx prisma format --check
Fail if the schema is unformatted

npx prisma *<command>* **--schema** *<path>*
Use a schema in another location

npx prisma *<command>* **--config** *<path>*
Use another prisma.config.ts

MIGRATE

npx prisma migrate dev
Apply schema changes in development

npx prisma migrate dev --name *<name>*
Name the new migration

npx prisma migrate dev --create-only
Write the SQL, do not apply it

npx prisma migrate deploy
Apply pending migrations (prod, CI)

npx prisma migrate status
Compare migrations with the database

npx prisma migrate reset
Drop data and reapply all migrations

npx prisma migrate reset --force
Reset without the prompt

npx prisma migrate resolve --applied *<migration>*
Mark a migration as applied

npx prisma migrate resolve --rolled-back *<migration>*
Mark a failed migration as rolled back

npx prisma migrate diff --from-*<src>* **--to-***<src>*
Compare two schema states

npx prisma migrate diff --from-config-datasource --to-schema *<file>* **--script**
SQL to move DB to schema

DATABASE

npx prisma db push
Sync schema to DB without migrations

DATABASE (cont.)

npx prisma db push --accept-data-loss
Proceed despite data loss

npx prisma db push --force-reset
Reset the database first

npx prisma db pull
Introspect DB into the schema

npx prisma db pull --print
Print the schema, do not write

npx prisma db seed
Run the configured seed script

npx prisma db execute --file *<file.sql>*
Run a SQL file on the database

STUDIO AND DEV DB

npx prisma studio
Open the data browser

npx prisma studio --port *<port>*
Change the port (default 5555)

npx prisma studio --browser none
Do not open a browser

npx prisma dev
Start a local Prisma Postgres

ENVIRONMENT

DATABASE_URL=*<url>*
Connection string, read by prisma.config.ts

RECIPES

New project on Postgres

```
npm install -D prisma
npx prisma init --datasource-provider postgresql
# set DATABASE_URL in .env, add models
npx prisma migrate dev --name init
npx prisma generate
```

Adopt an existing database

```
npx prisma init --url <url>
npx prisma db pull
npx prisma generate
```

Deploy step in CI

```
npx prisma migrate deploy
npx prisma generate
# fail the build on drift:
npx prisma migrate status
```