

SDL FIRST PRODUCTS

Parallelizing Product Development with GraphQL

@CHRISBISCARDI



honeycomb.io



Coffee



@chrisbiscardi



biscarch

SCHEMA DEFINITION LANGUAGE

blog schema

```
type Post {  
  id: String!  
  title: String!  
  publishedAt: DateTime!  
  likes: Int! @default(value: 0)  
  blog: Blog @relation(name: "Posts")  
}  
  
type Blog {  
  id: String!  
  name: String!  
  description: String,  
  posts: [Post!]! @relation(name: "Posts")  
}
```

SCENARIO 1

A New Product



prisma init

→ `prisma init full-03`

? How to set up a new Prisma service?

Minimal setup: database-only

› GraphQL server/fullstack boilerplate (recommended)

prisma init

→ `prisma init full-03`

? How to set up a new Prisma service?

Running `$ graphql create ...`

? Choose GraphQL boilerplate project:

> node-basic	Basic GraphQL server (incl. database)
node-advanced	GraphQL server (incl. database & authentication)
typescript-basic	Basic GraphQL server (incl. database)
typescript-advanced	GraphQL server (incl. database & authentication)
react-fullstack-basic	React app + GraphQL server (incl. database)

prisma deploy

```
[graphql create] Running boilerplate install script...  
Running $ prisma deploy...
```

```
? Please choose the cluster you want to deploy "full-03@dev" to
```

```
  prisma-eu1      Public development cluster (hosted in EU on Prisma Cloud)  
  prisma-us1      Public development cluster (hosted in US on Prisma Cloud)  
> local           Local cluster (requires Docker)
```

```
Log in or create new account on Prisma Cloud
```

```
Note: When not logged in, service deployments to Prisma Cloud expire after 7 days.  
You can learn more about deployment in the docs: http://bit.ly/prisma-graphql-deployment
```

prisma deploy

```
Please choose the cluster you want to deploy "full-03@dev" to
Added cluster: local to prisma.yml
Creating stage dev for service full-03 ✓
Deploying service `full-03` to stage `dev` on cluster `local` 201ms
```

Changes:

```
Post (Type)
+ Created type `Post`
+ Created field `id` of type `GraphQLID!`
+ Created field `isPublished` of type `Boolean!`
+ Created field `title` of type `String!`
+ Created field `text` of type `String!`
+ Created field `updatedAt` of type `DateTime!`
+ Created field `createdAt` of type `DateTime!`
```

Applying changes 1.1s

Hooks:

Importing seed dataset from `seed.graphql` 498ms

Your GraphQL database endpoint is live:

```
HTTP: http://localhost:4466/full-03/dev
WS:   ws://localhost:4466/full-03/dev
```

Checking, if schema file changed 180ms

Writing database schema to `src/generated/prisma.graphql` 0ms

tree . -I node_modules

```
→ tree . -I node_modules
.
├── README.md
├── database
│   ├── datamodel.graphql
│   ├── prisma.yml
│   └── seed.graphql
├── package.json
├── src
│   ├── generated
│   │   └── prisma.graphql
│   ├── index.js
│   └── schema.graphql
└── yarn.lock

3 directories, 9 files
```

Schema

```
type Post {  
  id: ID! @unique  
  isPublished: Boolean! @default(value: false)  
  title: String!  
  text: String!  
}
```

Seeds

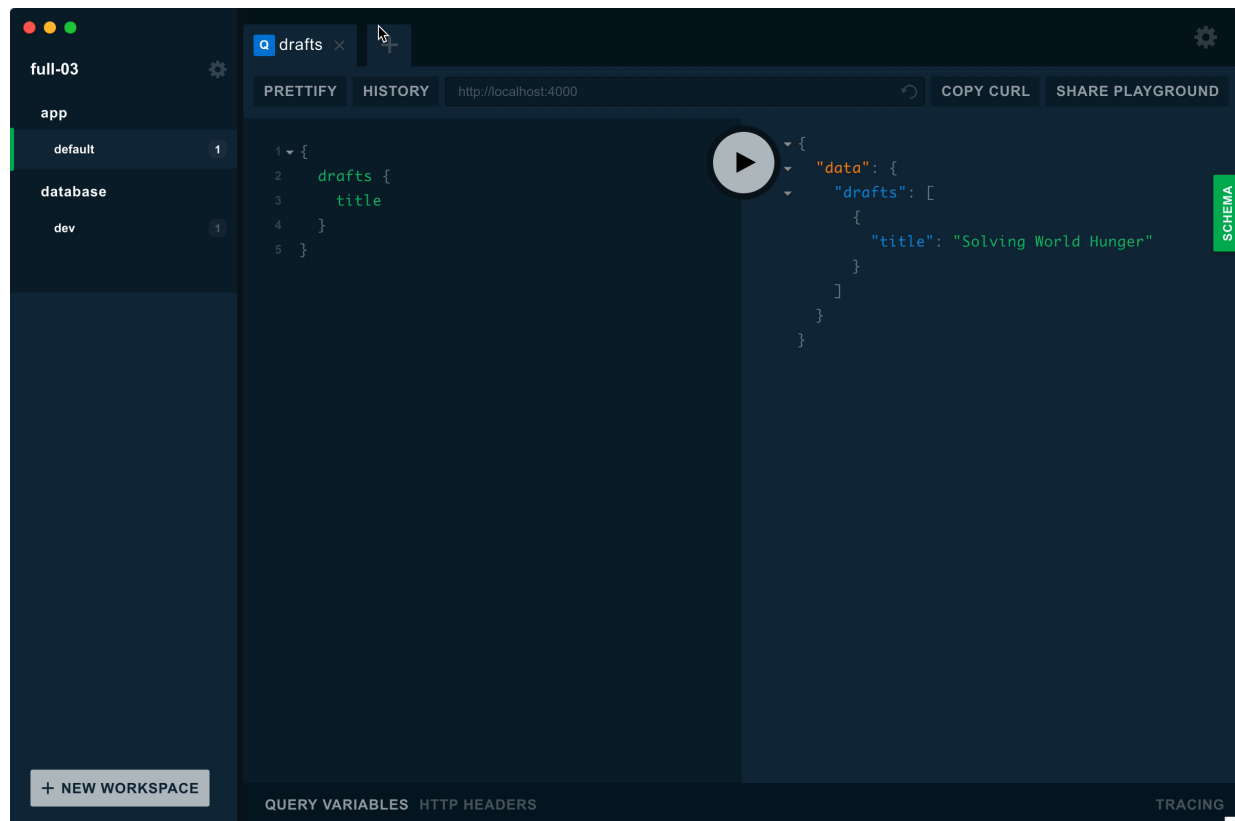
```
mutation {  
  first: createPost(data: {  
    title: "Hello World"  
    text: "This is my first blog post ever!"  
    isPublished: true  
  }) {  
    id  
  }  
  
  second: createPost(data: {  
    title: "My Second Post"  
    text: "My first post was good, but this one is better!"  
    isPublished: true  
  }) {  
    id  
  }  
  
  third: createPost(data: {  
    title: "Solving World Hunger"  
    text: "This is a draft..."  
    isPublished: false  
  }) {  
    id  
  }  
}
```

playground

```
→ yarn playground  
yarn run v1.3.2  
$ graphql playground  
Serving playground at http://localhost:3000/playground
```

playground

```
brew cask install graphql-playground
```



Updating

```
type Post {  
  id: ID! @unique  
  isPublished: Boolean! @default(value: false)  
  title: String! @deprecated  
  title2: String  
  text: String!  
}
```

Updating

```
→ yarn prisma deploy
yarn run v1.3.2
$ prisma deploy
Deploying service `full-03` to stage `dev` on cluster `local` 176ms
```

Changes:

```
Post (Type)
+ Created field `title2` of type `String`
```

Applying changes 1.1s

Your GraphQL database endpoint is live:

```
HTTP: http://localhost:4466/full-03/dev
WS:   ws://localhost:4466/full-03/dev
```

Hooks:

```
Checking, if schema file changed 178ms
Writing database schema to `src/generated/prisma.graphql` 0ms
Running $ graphql prepare...
🌟 Done in 6.29s.
```

SCENARIO 2

Frontend Needs More

A **P** **O** **L** **L** **O**

Apollo Boost

- apollo-client
- apollo-cache-inmemory
- apollo-link-http
- apollo-link-error
- apollo-link-state
- graphql-tag

link-state

```
import { withClientState } from 'apollo-link-state';

// This is the same cache you pass into new ApolloClient
const cache = new InMemoryCache(...);

const stateLink = withClientState({
  cache,
  resolvers: {
    Mutation: {
      updateNetworkStatus: (_, { isConnected }, { cache }) => {
        const data = {
          networkStatus: {
            __typename: 'NetworkStatus',
            isConnected
          },
        };
        cache.writeData({ data });
        return null
      },
    },
  },
});
```

Q & A