
OXID
esales
GRAPHQL IN DER PRAXIS 🔮

Who am I?

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OXID + GraphQL + React + TypeScript = 😍

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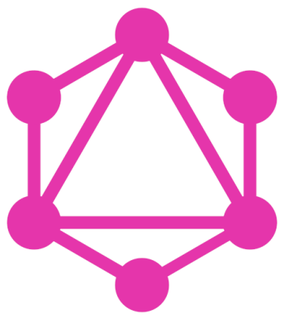

GraphQL and **TypeScript** have been widely used in recent years and when both are used in combination with ***React***, they create an ideal developers experience.

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Why GraphQL + TypeScript?

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A **GraphQL API** is required to be **strongly typed** 💪, and the data is served from a **single endpoint** 🔗.

By calling a **`POST request`** 📣 on this endpoint, the client can receive a fully self-documented representation of the backend.

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Home | Shop's start page | Logout

ESHOP ADMIN

- Master Settings
- Shop Settings
- Extensions
- Administer Products
- Administer Users
- Administer Orders
- Customer Info
- Service
- GraphQL
  - Graph/QL
  - Inspect queries
  - Inspect mutations
- History
- Favorites [edit]

Type List

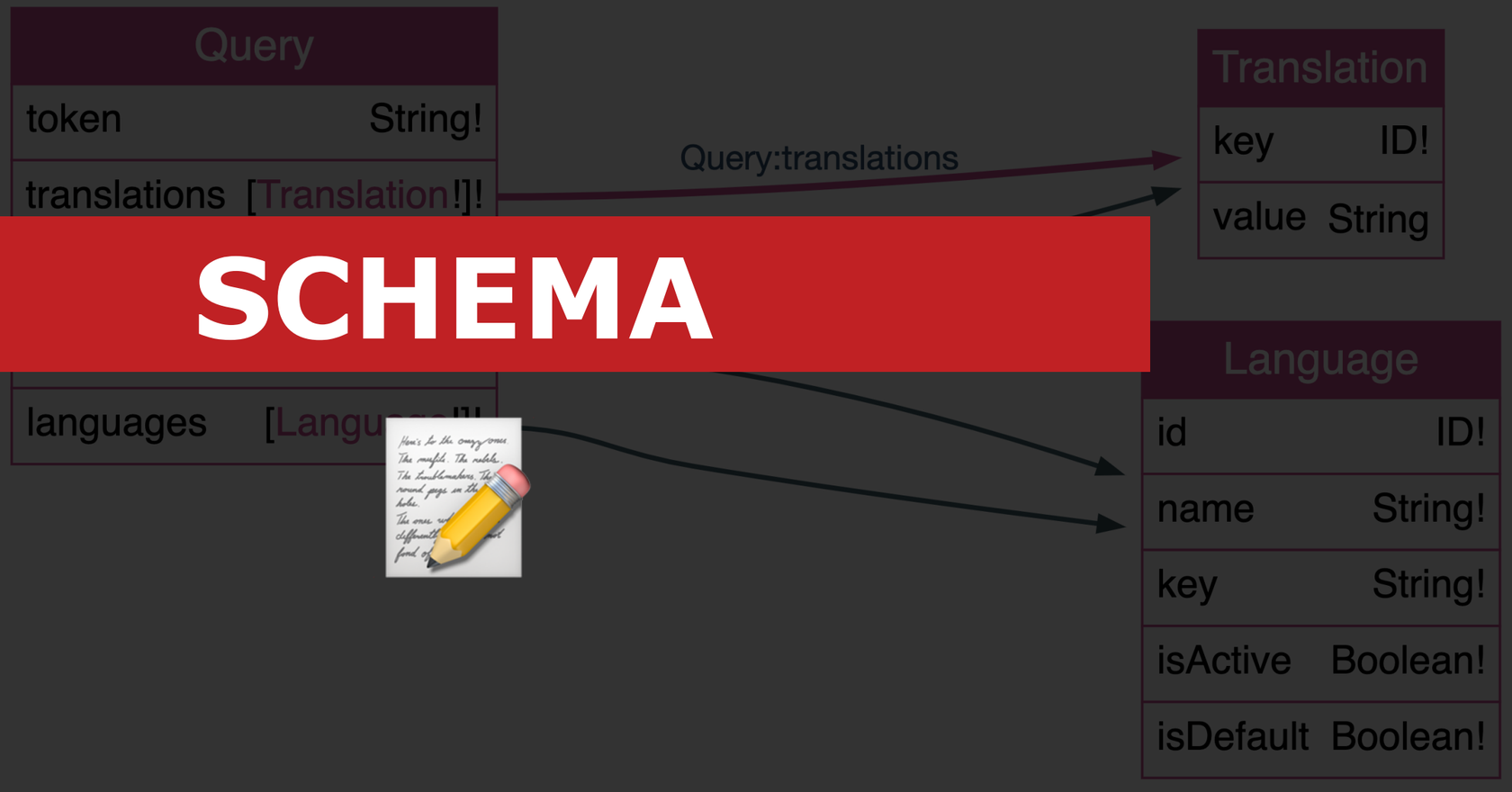
Search Schema...

Query root
No Description

Language
No Description

Translation
No Description

SCHEMA



Powered by GraphQL Voyager

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RESET

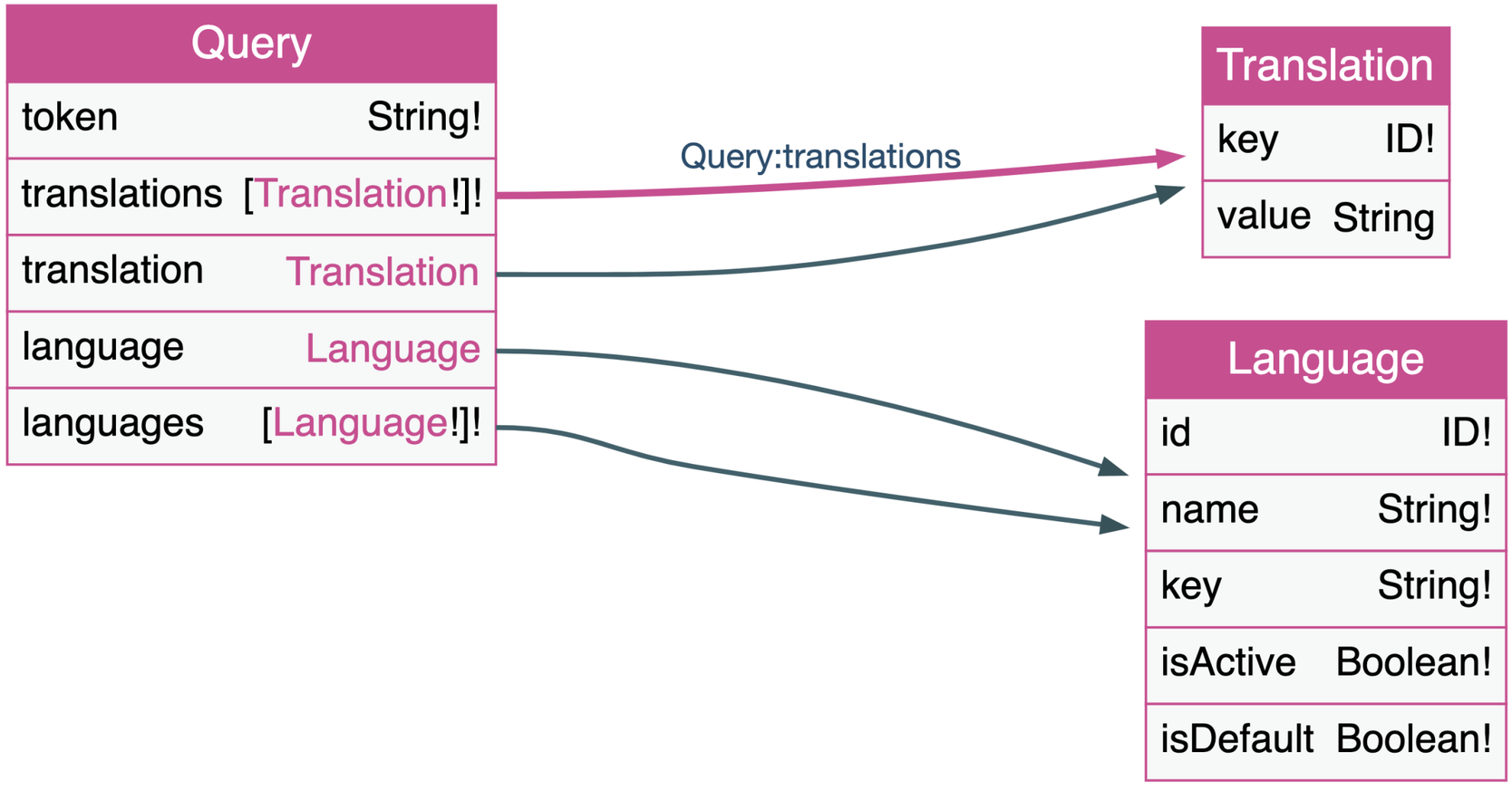
Type List

Search Schema...

Query root
No Description

Language
No Description

Translation
No Description



RESET

1. alejandro@oxid-esales: ~(fish)

```
$ curl https://oxideshop.local/graphql
-H Content-Type: application/json
{"query":"query {__schema {types {name}}}"
$ {
    "_queryType": "Query",
    "_mutationType": "Mutation",
    "_subscriptionType": null,
    "_typeMap": {
        "Query": "Query",
        "String": "String",
        "ID": "ID",
more...
```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schema.graphql

```
type Mutation {
  translationUpdate(
    languageKey: ID!
    translation: TranslationInput!
  ): Translation!
  translationReset(languageKey: ID!, key: ID!): Translation!
  translationResetAll(languageKey: ID!): Boolean!
}

type Query {
  translations(languageKey: ID!): [Translation!]!
  translation(languageKey: ID!, key: ID!): Translation
}
```


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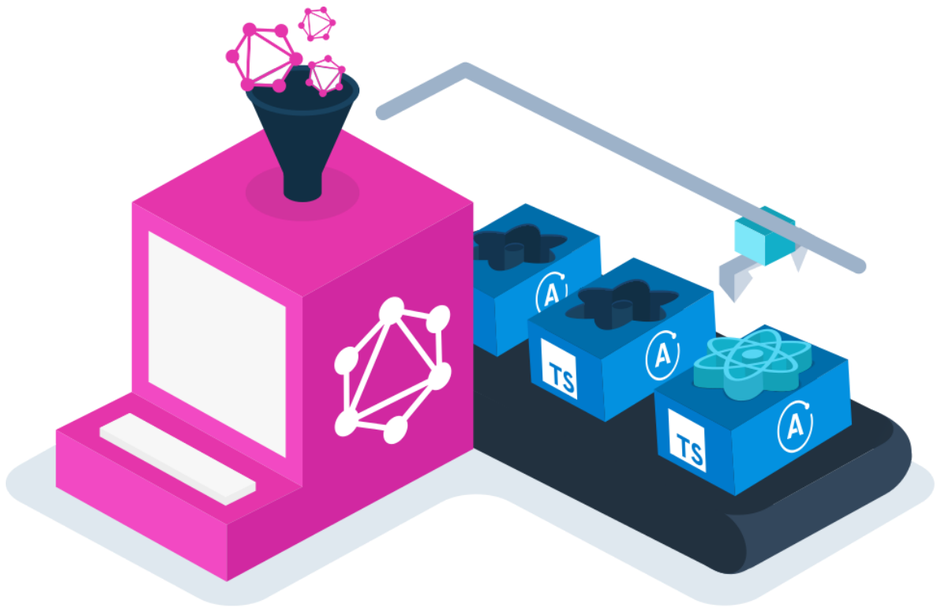

{ GraphQL }
code generator

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With the **GraphQL Code Generator**, we get the '**`props`**' of our React components **typed automatically** ✨ and **for free** 🤑. This leads to fewer bugs 🐛 and a much faster iteration speed on your modules.

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2. alejandro@oxid-esales: ~(fish)

```
$ graphql-codegen
✔ Parse configuration
    ❯ Generate outputs
    ❯ Generate src/graphql/generated/graphql.tsx
        ✔ Load GraphQL schemas
        ✔ Load GraphQL documents
        ⠸ Generate
✔ Parse configuration
✔ Generate outputs
✨  Done in 13.73s.
```


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graphql.tsx

```
export type Language = {
  __typename?: 'Language',
 id: Scalars['ID'],
 name: Scalars['String'],
 key: Scalars['String'],
 isActive: Scalars['Boolean'],
 isDefault: Scalars['Boolean'],
};

export type Mutation = {
  __typename?: 'Mutation',
 translationUpdate: Translation,
 translationReset: Translation,
 translationResetAll: Scalars['Boolean'],
};
```


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QUERIES & TYPES

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GraphiQL ▶ Prettify History

```graphql
query Languages {
  languages {
    id
    name
    key
    isActive
    isDefault
  }
}

query Translations($languageKey: ID!) {
  translations(languageKey: $languageKey) {
    key
    value
  }
}

query TranslationByKey($languageKey: ID!, $key: ID!) {
  translation(languageKey: $languageKey, key: $key) {
    value
  }
}

mutation TranslationUpdate($languageKey: ID!, $translation: TranslationInput!) {
  translationUpdate(translation: $translation, languageKey: $languageKey) {
    key
    value
  }
}
```

QUERY VARIABLES

```json
{
  "languageKey": "es",
  "translation": {
    "key": "SEARCH",
    "value": "¿Que necesitas hoy?"
  }
}
```


```json
{
  "data": {
    "translations": [
      {
        "key": "ACCESSORIES",
        "value": "Accesorios"
      },
      {
        "key": "ACCOUNT",
        "value": "Cuenta"
      },
      {
        "key": "ACCOUNT_INFORMATION",
        "value": "Información de la cuenta"
      },
      {
        "key": "ADD",
        "value": "agregar"
      },
      {
        "key": "ADDITIONAL_INFO",
        "value": "Información adicional"
      },
      {
        "key": "ADDRESS",
        "value": "Dirección"
      },
      {
        "key": "ADDRESSES",
        "value": "Direcciones"
      },
      {
        "key": "ADD_TAGS",
        "value": "Agregar etiquetas"
      },
      {
        "key": "ADD_THIS_PAGE_TO",
        "value": "Agregar esta página a"
      },
      {
        "key": "ADD_TO_CART",
        "value": "Agregar al carrito"
      },
      {
        "key": "ADD_TO_GIFT_REGISTRY",
        "value": "Agregar al registro de regalos"
      },
      {
        "key": "ADD_TO_LISTMANIA_LIST",
        "value": "Agregar a listmania"
      },
      {
        "key": "ADD_TO_WISH_LIST",
        "value": "Agregar a lista de deseados"
      },
      {
        "key": "ADD_WRAPPING",
        "value": "Agregar envoltura de regalos"
      },
      {
        "key": "ADD_YOUR_COMMENTS",
        "value": "Agregar tus comentarios"
      },
```


Schema | Query

Search Query...

No Description

FIELDS

token(username: String!, password: String!): String!

retrieve a JWT for authentication of further requests

translations(languageKey: ID!): [Translation!]!

translation(languageKey: ID!, key: ID!): Translation

language(id: ID!): Language

Retrun a language object by ID

languages: [Language!]!

Returns all the languages available in the shop

GraphQL utilizes a **declarative data fetching** 🧞. We can **write queries** ✍️ that live alongside the components that use them, and the **UI** is able to **request exactly** 🎯 what it needs to render.

graphql.tsx

```
export const TranslationsDocument = gql"
  query Translations($languageKey: ID!) {
    translations(languageKey: $languageKey) {
      key
      value
    }
  }";
```


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TranslationsTable.tsx

```
import * from "react";
import { useTranslationsQuery} from
"../../graphql/generated/graphql";

export default TranslationsTable: React.FC<Props> = () => {
    const { loading, error, data } = useTranslationsQuery({
      variables: { languageKey }
    });

    return (
      <MaterialTable
          isLoading={loading}
          data={data}
        />
    );
};
```


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MASTER SETTINGS

Languages

ADD LANGUAGE

OVERVIEW | TRANSLATIONS

Español

Search

Field	Translation	Actions
ACCESSORIES	Accesorios	
ACCOUNT		
ACCOUNT_INFORM		
ADD		
ADDITIONAL_INFO	Información adicional	
ADDRESS	Dirección	
ADDRESSES	Direcciones	
ADD_TAGS	Agregar etiquetas	
ADD_THIS_PAGE_TO	Agregar esta página a	
ADD_TO_CART	Agregar al carrito	

10 rows | 1-10 of 766

ESHOP ADMIN

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ADD LANGUAGE

OVERVIEW TRANSLATIONS

Español

Search

Field	Translation	Actions
ACCESSORIES	Accesorios	
ACCOUNT	Cuenta	
ACCOUNT_INFORMATION	Información de la cuenta	
ADD	agregar	
ADDITIONAL_INFO	Información adicional	
ADDRESS	Dirección	
ADDRESSES	Direcciones	
ADD_TAGS	Agregar etiquetas	
ADD_THIS_PAGE_TO	Agregar esta página a	
ADD_TO_CART	Agregar al carrito	

10 rows 1-10 of 766

1. alejandro@oxid-esales: ~(fish)

```
$ cat source/Application/translations/es/extra_lang.php
...
<?php

    $sLangName  = "Español";

    $aLang = [
            "charset"      => "UTF-8",
            "HOME"         => "Inicio",
    ];
```


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Questions?

https://github.com/OXIDprojects/GraphQL-translations
https://github.com/OXIDprojects/React-translations
https://github.com/OXID-eSales/graphql-base-module
https://github.com/OXID-eSales/graphql-developer-module/

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