

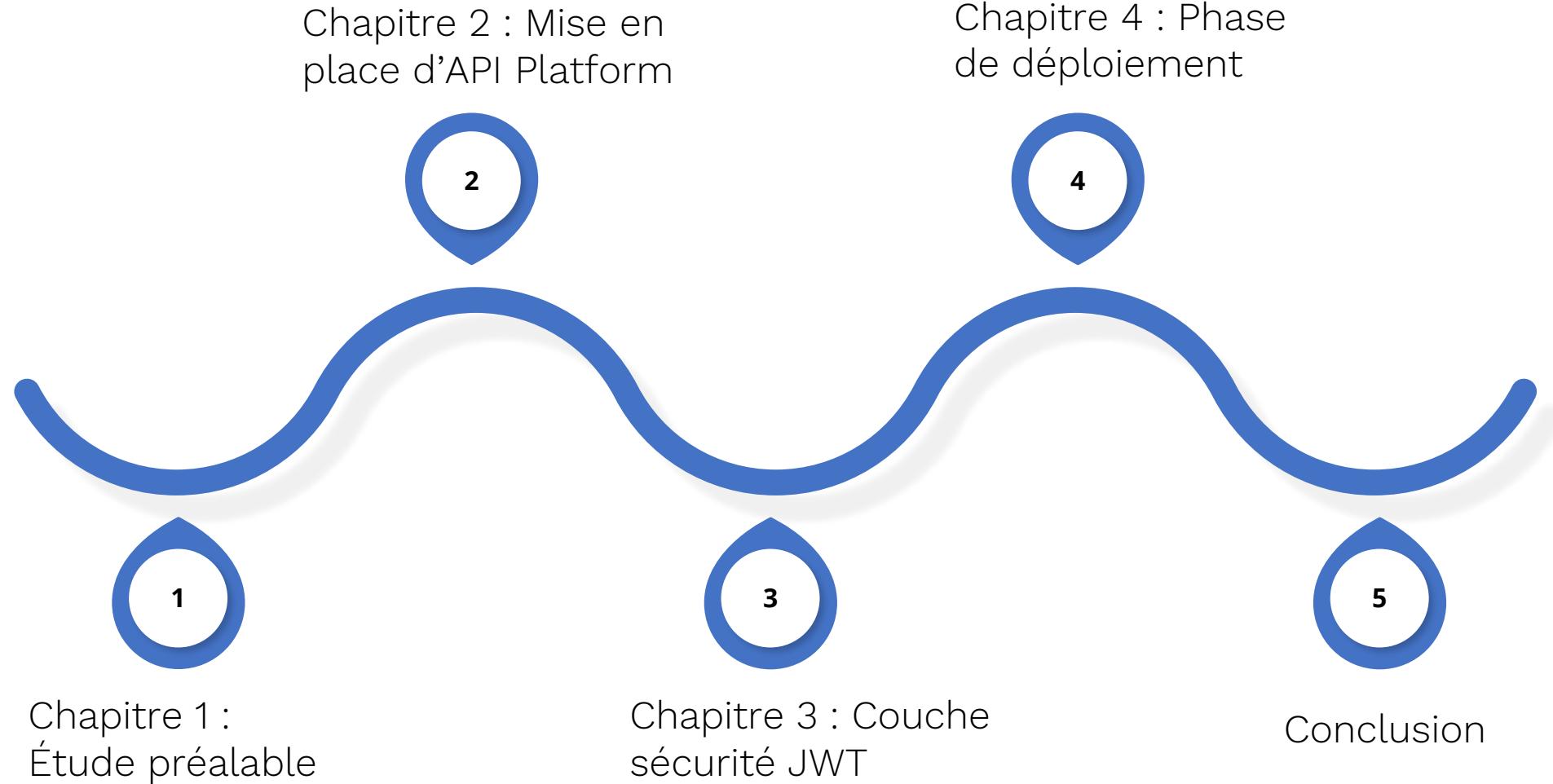


Présentation API

Période de stage : 08/04 au 14/06

Mise en place d'une stratégie API

Sommaire

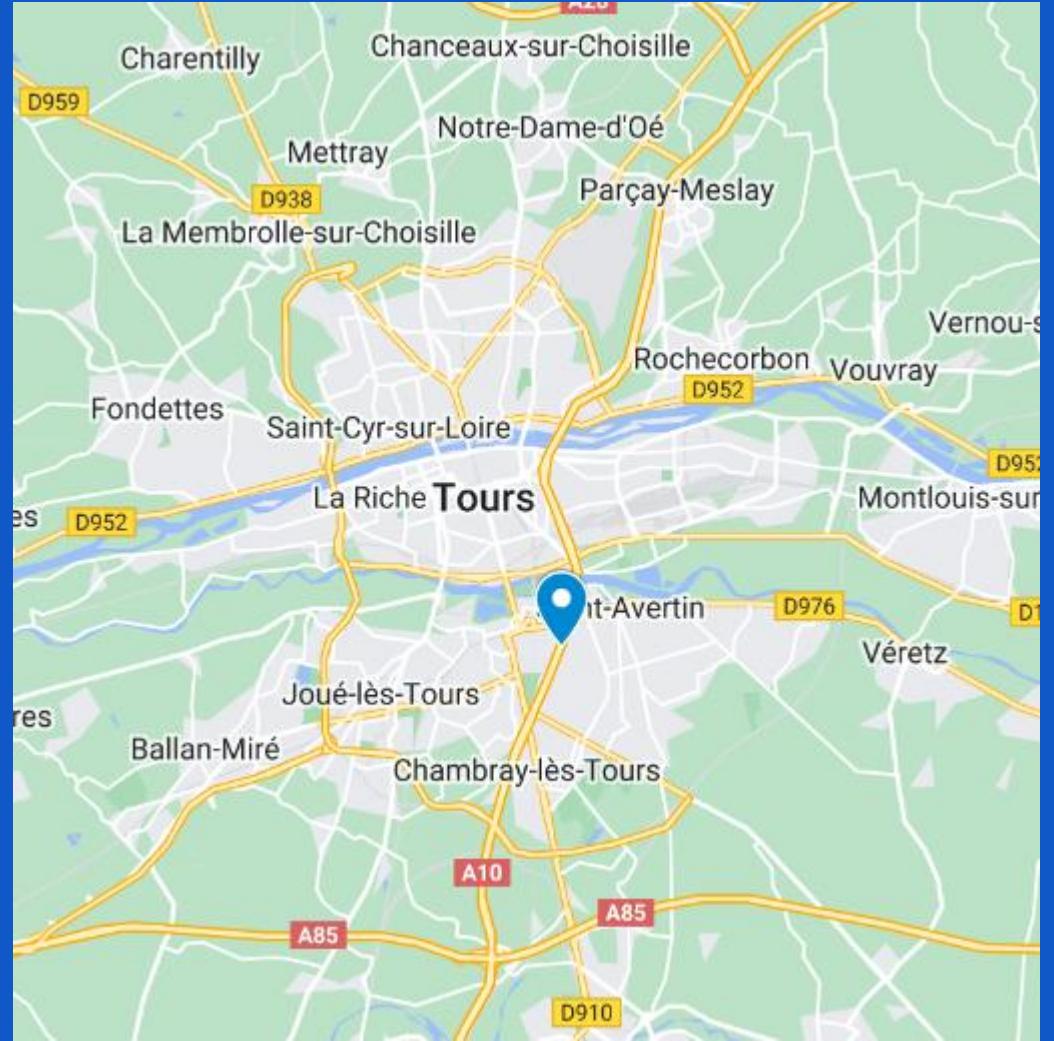


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Étude préalable

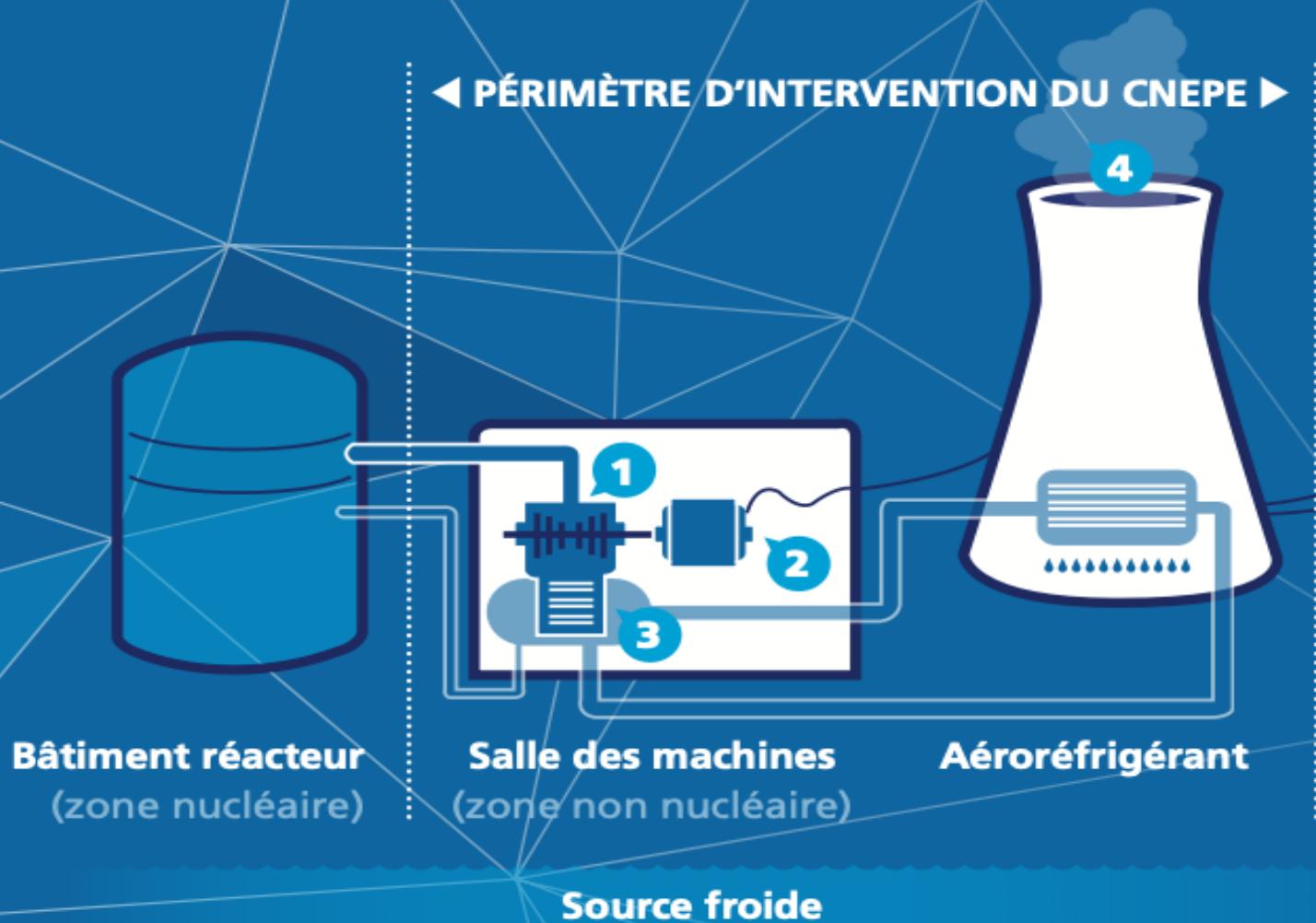
CNEPE

Centre National d'Equipements de Production d'Electricité





PÉRIMÈTRE D'INTERVENTION DU CNEPE



- 1 Turbine
 - 2 Alternateur
 - 3 Condenseur
 - 4 Vapeur d'eau
- Et aussi :**
- Transformateur
 - Station de pompage
 - Installations électriques de surveillance

Besoins fonctionnels

Côté Utilisateur

- Visualisation des données
- Interface simple d'utilisation
- Requêtes GraphQL (GET)

Côté Administrateur

- CRUD
- Interface simple d'utilisation
- Requêtes GraphQL

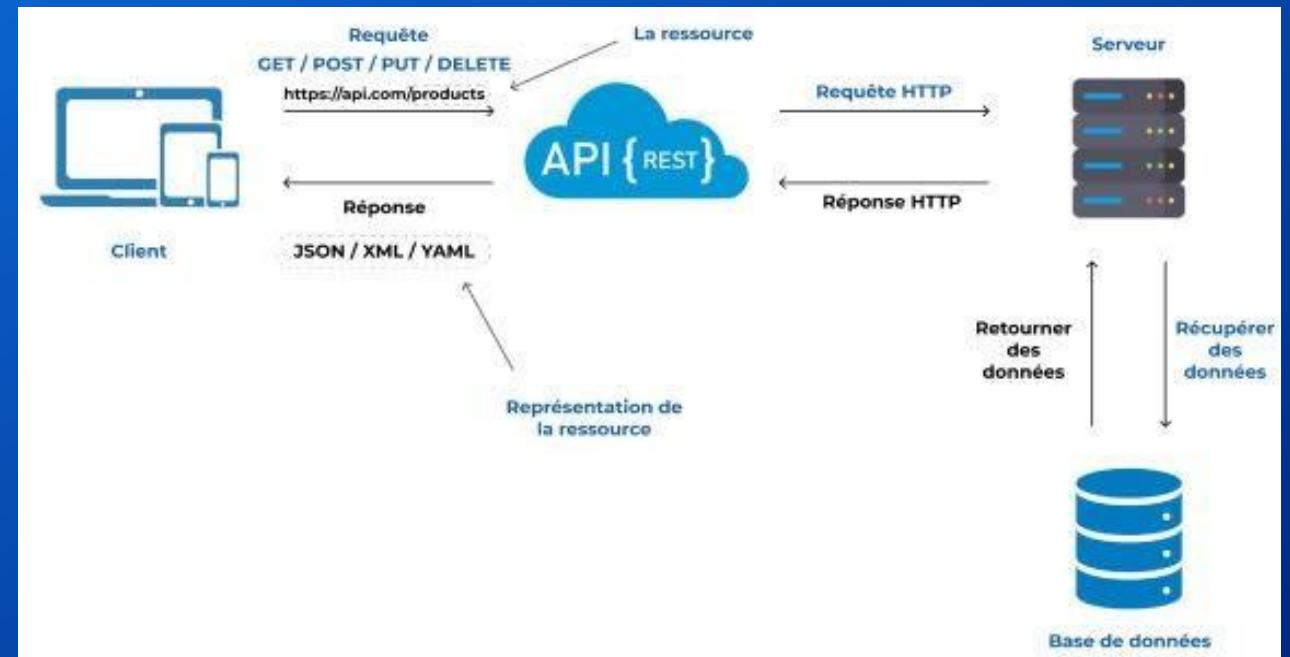
Besoins non fonctionnels



Architecture système (MVC)

4 actions primitives :

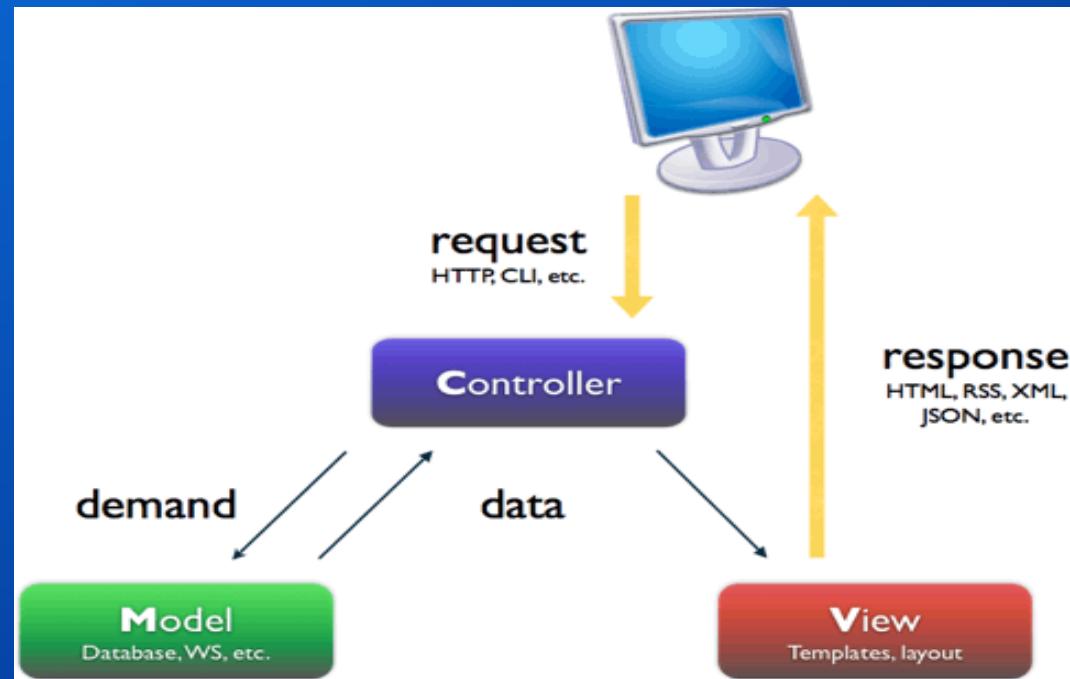
- ❖ GET
- ❖ POST
- ❖ PUT
- ❖ DELETE



Architecture MVC

3 catégories :

- ❖ Modèle
- ❖ Vue
- ❖ Contrôleur



Principales technologies utilisées

IDE : PHP Storm
(JetBrains)



Interactivité

- GitLab
- Teams

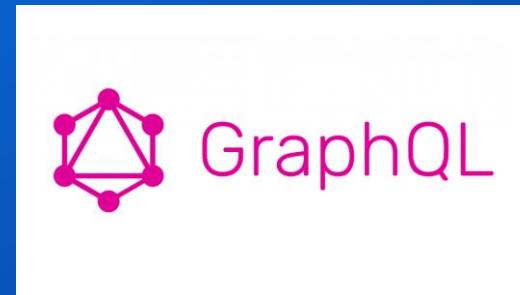
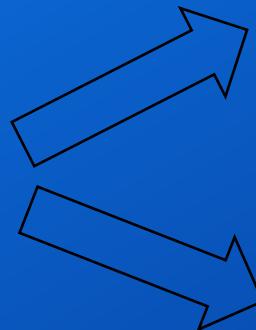
Langage de développement

- PHP
- Twig
- JavaScript

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Mise en place d'API Platform

API Platform



API Platform

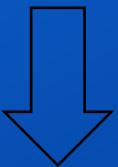
The screenshot shows the API Platform interface running at 127.0.0.1:36051/api. The top navigation bar includes a back button, refresh button, home button, and a status bar showing 127.0.0.1:36051/api. The title bar features the API Platform logo and the text "0.0.0 OAS3". The main content area is divided into sections:

- Reservation**:
 - GET /api/carbooking/reservations: Retrieves the collection of Reservation resources.
 - POST /api/carbooking/reservations: Creates a Reservation resource.
 - GET /api/carbooking/reservations/{id}: Retrieves a Reservation resource.
 - PUT /api/carbooking/reservations/{id}: Replaces the Reservation resource.
 - DELETE /api/carbooking/reservations/{id}: Removes the Reservation resource.
- Settings**:
 - GET /api/carbooking/settings: Retrieves the collection of Settings resources.
 - POST /api/carbooking/settings: Creates a Settings resource.
 - GET /api/carbooking/settings/{id}: Retrieves a Settings resource.
 - PUT /api/carbooking/settings/{id}: Replaces the Settings resource.
 - DELETE /api/carbooking/settings/{id}: Removes the Settings resource.
- Vehicle**:
 - 200 @ api_entrypoint: 997 ms 20.0 MB 28 41 1312 in 9.90 ms bilal 2 ms 1 in 0.84 ms

A sidebar on the right contains a cartoon character and a "Authorize" button. The bottom right corner shows the version 5.4.39.

GraphQL

```
31 | mutation {
32 |   createCategory(input: {
33 |     title: "Nouvelle catégorie",
34 |     htmlColor: "#FFFFFF"
35 |   }) {
36 |     category {
37 |       id
38 |       title
39 |       htmlColor
40 |     }
41 |   }
42 | }
43 |
44 | }
```



```
{
  "data": {
    "createCategory": {
      "category": {
        "id": "/api/cartosi/categories/38",
        "title": "Nouvelle catégorie",
        "htmlColor": "#FFFFFF"
      }
    }
  }
}
```

3

Couche sécurité JWT

Aspect Sécurité des API :



Création d'un Api User + JWT

ApiUser
- id
- username
- hashPassword
- createdAt
- createdBy
- updatedAt
- updatedBy
- expireAt (3 mois)

Dashboard

NNI : <monNNI>

Pass : <motdepasse>

Générer Enregistrer

User

ID	Roles	Username	Password
46	ROLE_USER	API_USER_TEST	\$2y\$13\$MWk1pywKNrekldgib1ycwuSvo9bz4T09i5ycyUaw0S6EJyKIMP3ZW

OneToOne

User (CPO)
NNI

Utilisation des API

Scénario Utilisateur

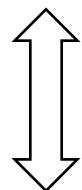
- Vérification BDD
- Requête POST

Interface Connexion API

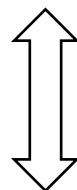
NNI : <monNNI>

Pass : <monmotdepasse>

Valider

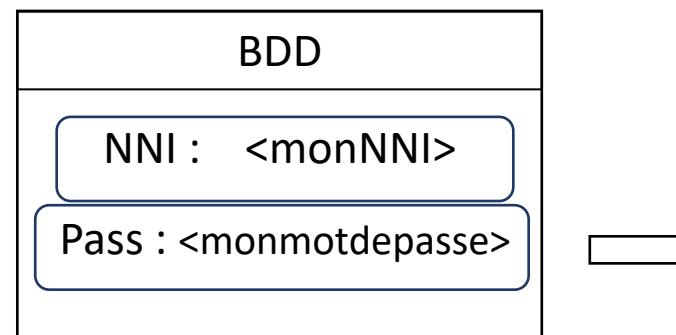


Déblocage des API



Accès API Platform

Données JSON



Response body

```
{  
    "@context": "/api/v1/contexts/Category",  
    "@id": "/api/v1/categories",  
    "@type": "hydra:Collection",  
    "hydra:member": [  
        {  
            "@id": "/api/v1/categories/11",  
            "@type": "Category",  
            "id": 11,  
            "title": "omnis",  
            "htmlColor": "#aceb4f"  
        },
```

Generate new JWT Token

[Example](#) [Value](#) [Schema](#)

```
{  
    "username": "NNI",  
    "password": "Mot de passe"  
}
```

Code

Details

401

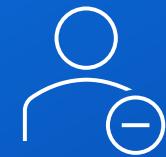
[Undocumented](#)

Error: Unauthorized

Response body

```
{  
    "code": 401,  
    "message": "Identifiants invalides."  
}
```

Couche sécurité



Administration CPO

Rechercher

bilel

Créer ApiUser

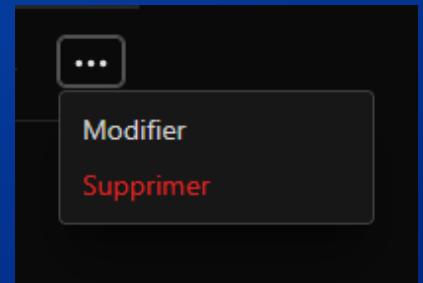
ApiUser

ID Nom d'utilisateur Jwt Token Roles Email Expire At

ID	Nom d'utilisateur	Jwt Token	Roles	Email	Expire At
1	bilel	eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJpYXQiOjE3MTc0MjMwMTMsIm...	ROLE_ADMIN, ROLE_USER, ROLE_API_USER, ROLE_API_ADMIN	bilel.chebbi@edf.fr	3 sept. 2024

1 résultat

Interface admin : CPO



Couche sécurité



<input type="checkbox"/>	39	ROLE_USER	IIR951	Grenier	Hortense	GRENIER	Hortense.Grenier@edf.fr	Aucun(e)	75757684	...
<input type="checkbox"/>	40	ROLE_USER	RHZOA7BI	Mace	Monique	MACE	Monique.Mace@edf.fr	Aucun(e)	44600155	...
<input type="checkbox"/>	41	ROLE_USER	P9TPPXQK	Barthelemy	Marine	BARTHELEMY	Marine.Barthelemy@edf.fr	Aucun(e)	63562100	...
<input type="checkbox"/>	42	ROLE_ADMIN, ROLE_USER	ZNJMI1OA	Pichon	Patricia	PICHON	Patricia.Pichon@edf.fr	Aucun(e)	27257207	...
<input type="checkbox"/>	43	ROLE_ADMIN, ROLE_USER	W5BJ5W	Lombard	Louise	LOMBARD	Louise.Lombard@edf.fr	Aucun(e)	89245623	...
<input type="checkbox"/>	45	ROLE_USER	TRANSFO_CHART_ADMIN_TEST	Charrier	Christelle	Aucun(e)	Christelle.Charrier@edf.fr	Aucun(e)	Aucun(e)	...
<input type="checkbox"/>	46	ROLE_ADMIN, ROLE_USER	bilel	Aucun(e)	Aucun(e)	Aucun(e)	bilel.chebbi@edf.fr	Aucun(e)	Aucun(e)	...

46 résultats

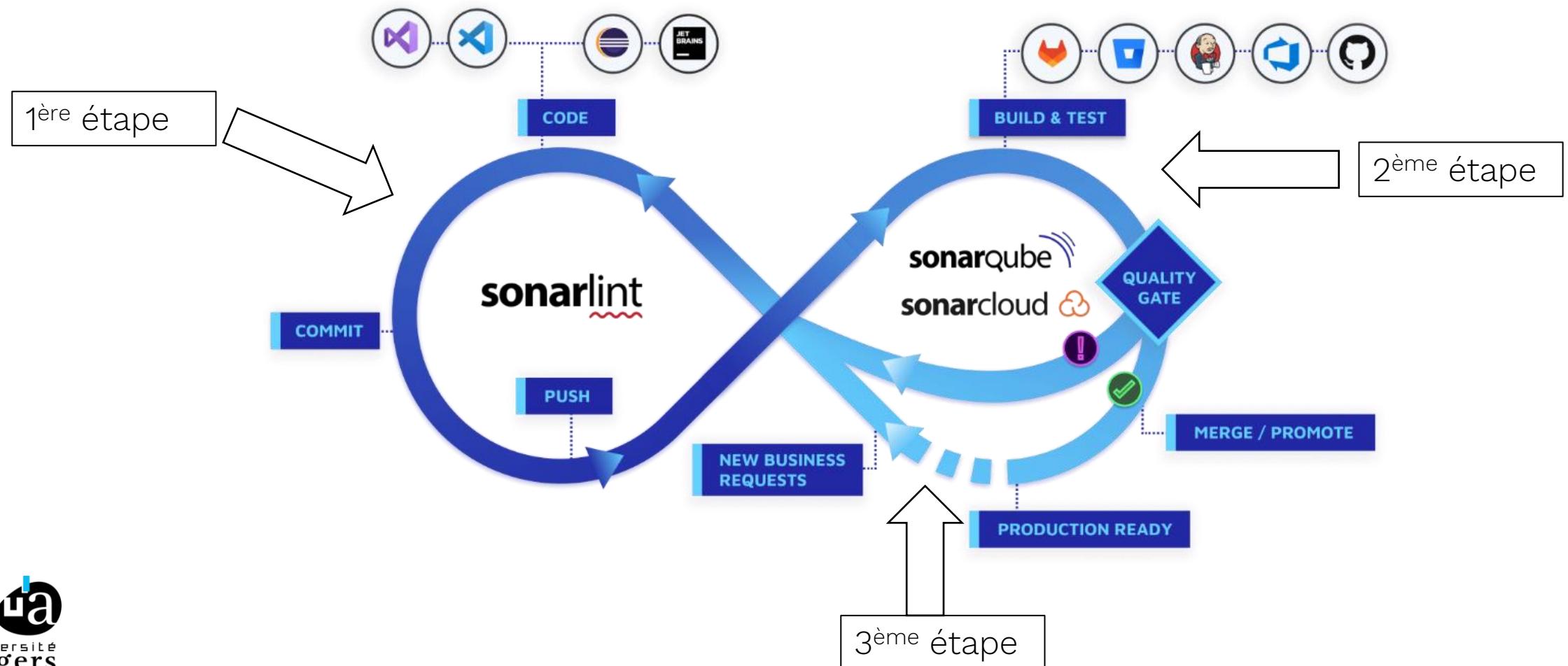
< Précédent 1 2 3 Suivant

Autorisation API
Modifier
Supprimer

4

Phase de déploiement

Phase de déploiement



Merci de votre
écoute

Des questions ?

Bibliographie

- **EDF**
- **API Platform**
- **Hubvisory**
- **Weenesta**