# Continuous Integration Dashboard

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## Introduction



#### CI tools:

- Jenkins
- Travis
- GoCD
- Bamboo
- Gitlab Cl
- CircleCl
- Codeship
- Buildbot
- Integrity
- etc.

### Use-case example:

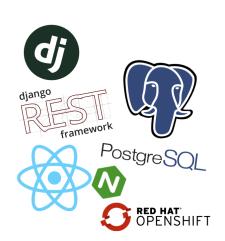
- Team consists of a large number of small sub-teams.
- Each team owns at least one CI tool.
- Result increased control requirements

To improve coordination and strengthen control over each process, it is enough to have a dashboard with up-to-date information about each needed tool/job/build.

# Technology stack



- Backend Django (rest\_framework)
- Frontend React
- Database PostgreSQL
- Web server Nginx
- Containerization Openshift



## Backend prototype design



### Aims of prototype design and implementation were:

- Try chosen backend technology
- Try LDAP authentication process
- Try to communicate with public (Jenkins) CI tool without access token
- Try to communicate with private (Travis) CI tool with access token

### During design were prepared:

- Use case diagram
- Entity relationship diagram
- Database scheme
- Deployment diagram

## Backend Prototype results



#### LDAP communication

```
[18/Jan/2021 22:41:21] "GET /api-auth/log in/?next=/api/user/ HTTP/1.1" 200 2710 Initiating TLS search s('DC=redhat,DC=com', 2, '(uid=%(u ser)s)<sup>-</sup>) returned 1 objects: uid=mabramov ,ou=users ,dc=redhat ,dc=com Creating Django user mabramov Populating Django user mabramov
```

### Last build (Travis/Private)

```
"name": "VUT-IZV",
"buildNumber": "16",
"buildStatus": "SUCCESS",
"buildUrl": "https://travis-ci.com.
"jobUrl": "https://travis-ci.com.
```

#### Created user

```
"username": "mabramov",
"first_name": "Mikhail",
"last_name": "Abramov",
"email": "mabramov@redhat.com",
```

### Last build (Jenkins/Public)

```
"name": "vscode-camelk-pipeline",
"buildNumber": "309",
"buildStatus": "SUCCESS",
"buildUrl": "https://master-jenkins
"jobUrl": "https://master-jenkins
```

## What to do next?



- Deepdiving in the frontend
- Research deployment technologies
- Prepare deployment automation
- Expand interactions with CI tools

Thank You For Your Attention!