

# Continuous Integration Dashboard

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## CI tools:

- **Jenkins**
- **Travis**
- GoCD
- Bamboo
- Gitlab CI
- CircleCI
- 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.

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



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

- LDAP communication

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

- Created user

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

- Last build (Travis/Private)

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

- Last build (Jenkins/Public)

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

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

Thank You For Your Attention !