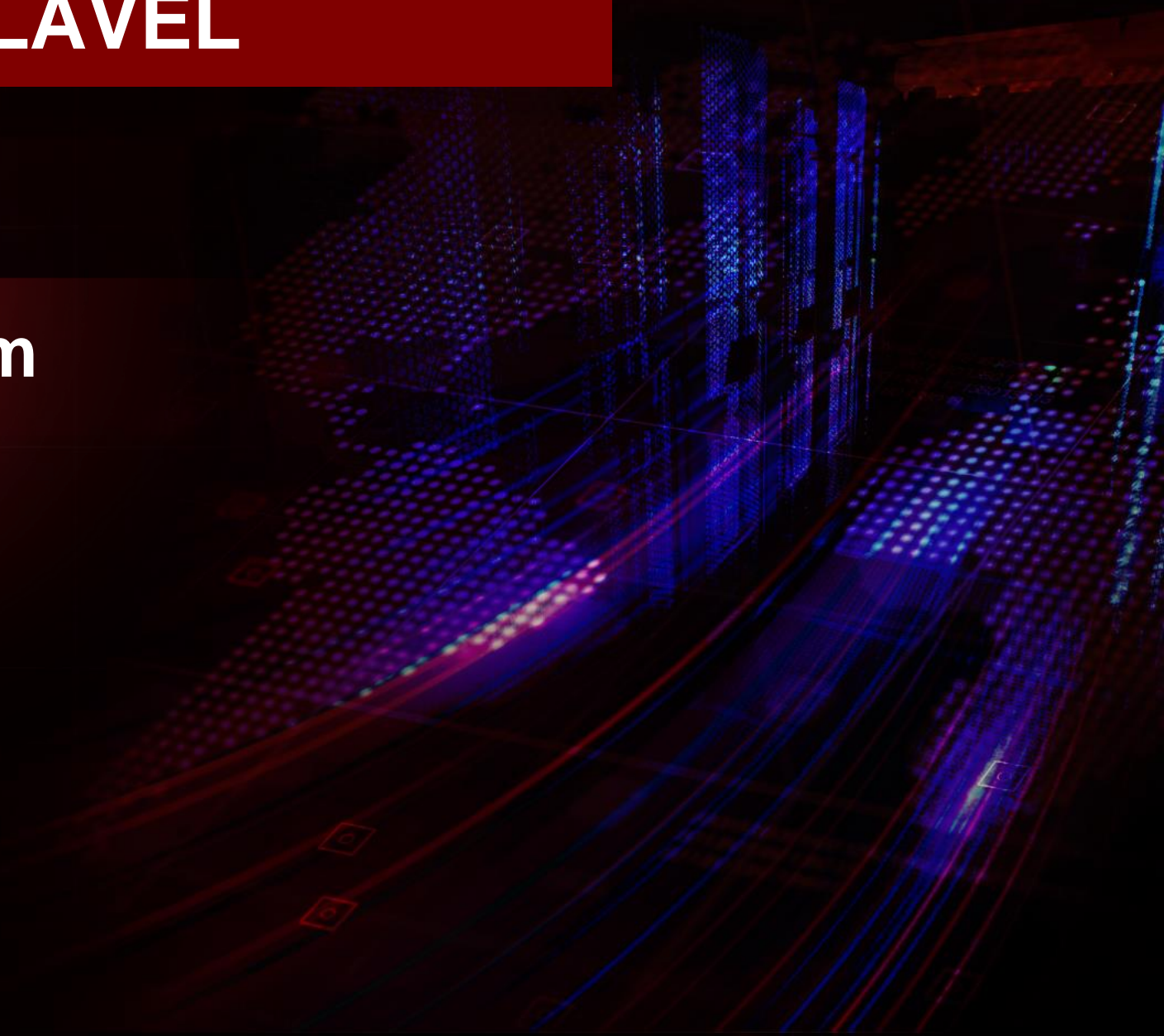


# COMPUTAÇÃO ESCALÁVEL

## Deploy de Aplicações com OpenShift



# ROTEIRO

- Criar Projeto
- Acesso ao Console Web
- Deploy de Aplicação
- Acessar Aplicação



# CRIAR PROJETO

Para criar o projeto temos que logar no cluster com o usuário developer

Coloque para login e senha: **developer**

**oc login**

Authentication required for  
<https://127.0.0.1:8443> (openshift)

**Username: developer**

**Password: developer**

Login successful.

You have one project on this server:

"myproject"

Using project "myproject".

# CRIAR PROJETO

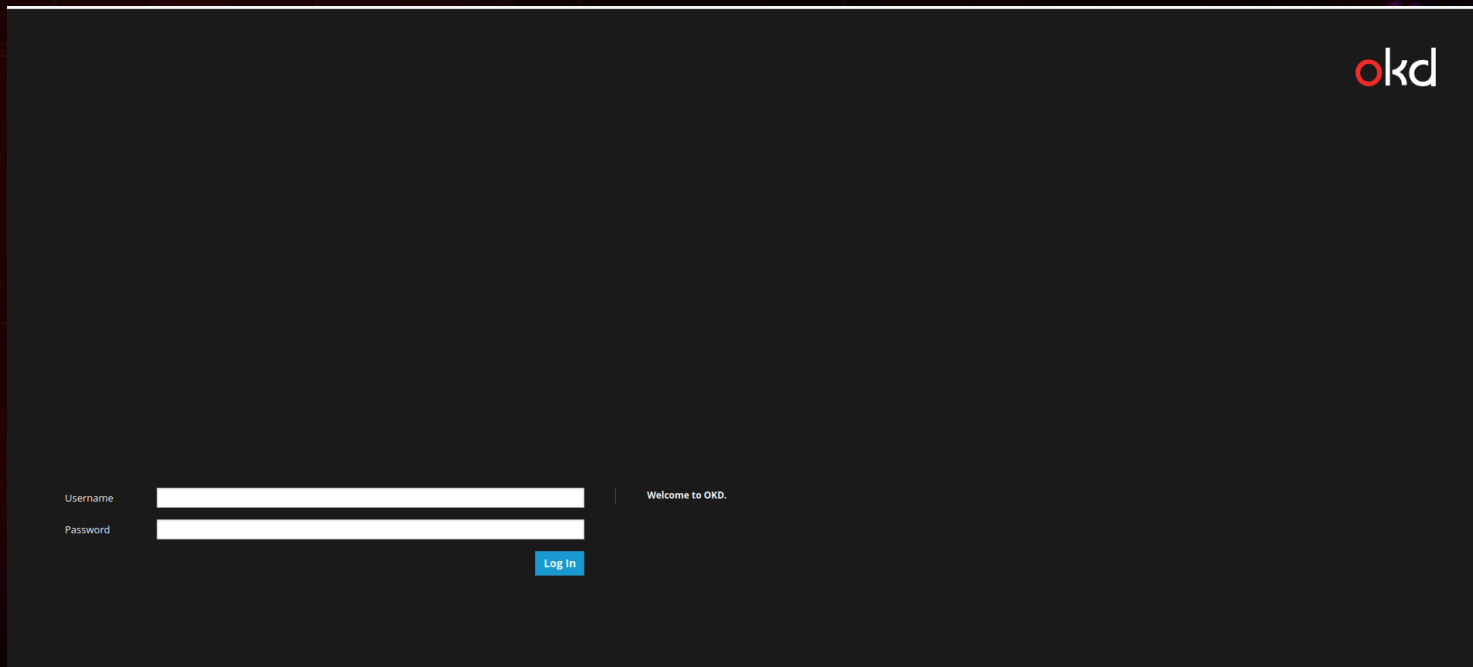
Comando para a criação de um projeto:

```
oc new-project dev --display-name="Project -  
Dev" --description="My Project"
```

# ACESSO AO CONSOLE WEB

Para acessar o console Web do OpenShift basta digitar no browser  
<https://localhost:8443>

Utilize como login e senha: **developer**

The image shows the OpenShift Web Console login interface. It has a dark grey background. In the top right corner, the 'okd' logo is displayed. On the left side, there are two white input fields for 'Username' and 'Password'. Below the password field is a blue 'Log in' button. To the right of the input fields, the text 'Welcome to OKD.' is visible.

okd

Username

Password

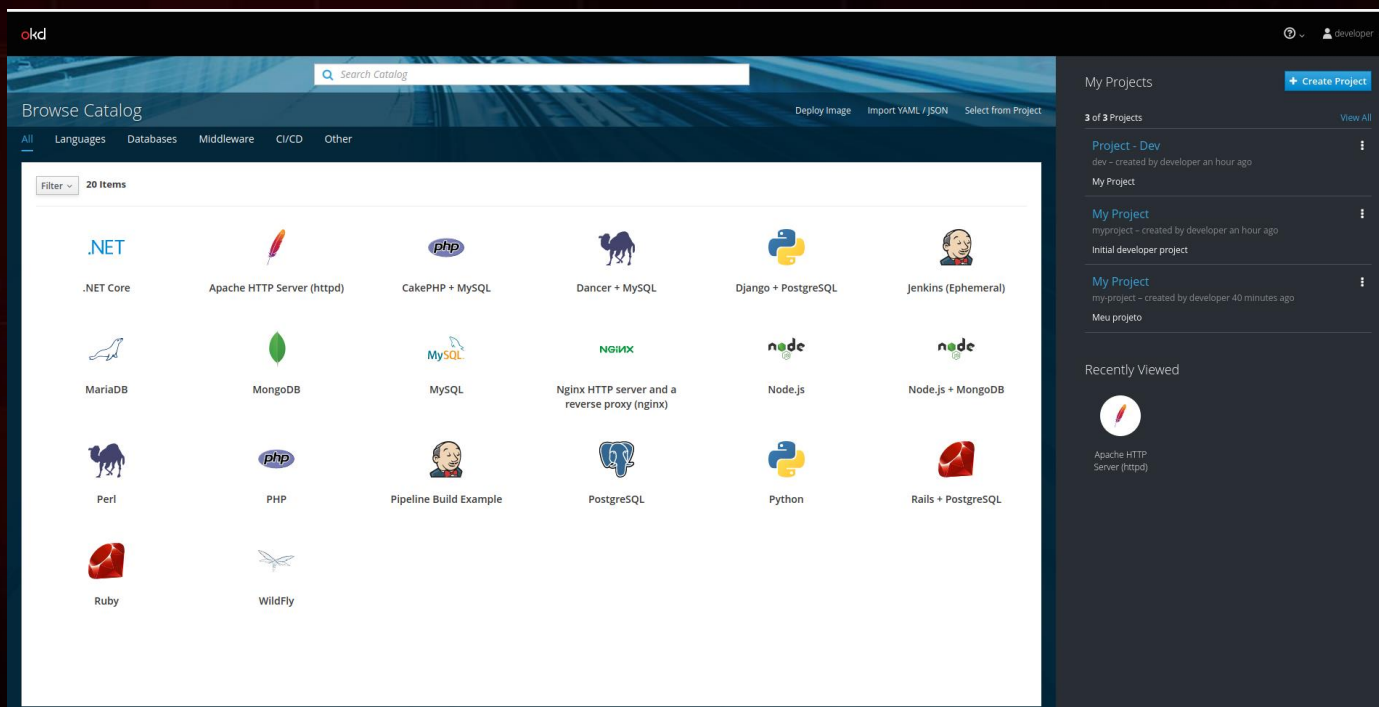
Welcome to OKD.



# ACESSO AO CONSOLE WEB

No lado direito da tela, clique no botão Create Project

- **Name: my-project**
- **Display Name: Meu Projeto**
- **Description: Meu primeiro projeto**



# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- Logar com usuário e senha: developer

➤ *oc login*

```
authentication required for https://127.0.0.1:8443 (openshift)
Username: developer
Password:
Login successful.
You have access to the following projects and can switch between them
with 'oc project ':
  * dev
    my-project
    myproject
Using project "dev".
```



# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Ainda no terminal digite:*

➤ ***oc project my-project***

Now using project "my-project" on server "https://127.0.0.1:8443".

- **Para ver o status do projeto**

➤ ***oc status***

In project My Project (my-project) on server https://127.0.0.1:8443  
You have no services, deployment configs, or build configs.  
Run 'oc new-app' to create an application.



# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- Deploy da aplicação

➤ *oc my-project deployment-example*

```
--> Found image da61bb2 (4 years old) in image stream "my-project/deployment-example" under tag
"latest" for "deployment-example"
  * This image will be deployed in deployment config "deployment-example"
  * Port 8080/tcp will be load balanced by service "deployment-example"
  * Other containers can access this service through the hostname "deployment-example"
  * WARNING: Image "my-project/deployment-example:latest" runs as the 'root' user which may not be
permitted by your cluster administrator
--> Creating resources ...
    deploymentconfig.apps.openshift.io "deployment-example" created
    service "deployment-example" created
--> Success
    Application is not exposed. You can expose services to the outside world by executing one or more
of the commands below:
    'oc expose svc/deployment-example'
    Run 'oc status' to view your app.
```

# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Status do Deploy*

➤ **oc status**

```
In project My Project (my-project) on server https://your-server-  
ip:8443  
svc/deployment-example - 172.30.87.146:8080  
  dc/deployment-example deploys istag/deployment-example:latest  
    deployment #1 deployed 36 seconds ago - 1 pod  
2 infos identified, use 'oc status --suggest' to see details.
```



# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Status do serviço*

➤ *oc get svc*

NAME		TYPE	CLUSTER-IP	EXTERNAL-IP
deployment-example	1m	ClusterIP	172.30.87.146	8080/TCP

# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Informações em detalhes para o serviço*

```
Name: deployment-example
Namespace: my-project
Labels: app=deployment-example
Annotations: openshift.io/generated-by=OpenShiftNewApp
Selector: app=deployment-example,deploymentconfig=deployment-example
Type: ClusterIP
IP: 172.30.87.146
Port: 8080-tcp 8080/TCP
TargetPort: 8080/TCP
Endpoints: 172.17.0.10:8080
Session Affinity: None
Events:
```



# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Verificar os pods*

➤ *oc get pods*

NAME			READY
STATUS	RESTARTS	AGE	
deployment-example-1-b9prf			1/1
Running	0	2m	

# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Exportar a aplicação para acesso externo*

➤ ***oc expose service/deployment-example***

```
route.route.openshift.io/deployment-example exposed
```



# DEPLOY DE APLICAÇÃO

## PASSO A PASSO

- *Informações de rota*

➤ **oc** *get routes*

NAME	HOST/PORT	PATH
SERVICES	PORT	TERMINATION WILDCARD
deployment-example	deployment-example-my-project.your-server-ip.nip.io	
deployment-example	8080-tcp	

# ACESSAR APLICAÇÃO

ABRA O BROWSER COM UM IP COMO ESTE

<http://172.30.106.225:8080/>



# BIBLIOGRAFIA

1. <https://www.okd.io/#getting-started>
2. <https://pensandolinux.com.br/2021/02/14/openshift-iniciando-os-estudos-red-hat-codeready-containers/>
3. <https://www.ibm.com/br-pt/cloud/openshift/openshift-tutorials>
4. <https://www.howtoforge.com/how-to-install-and-configure-openshift-origin-paas-server-on-ubuntu-2004/>
5. <https://redhatbsb.gitbook.io/workshop-openshift/parte-2-openshift>