

Keycloak Integration

```
docker run -d  
--name keycloak  
-p 8080:8080  
-e KEYCLOAK_ADMIN=admin  
-e KEYCLOAK_ADMIN_PASSWORD=admin  
quay.io/keycloak/keycloak:latest  
start-dev
```

Access the admin console at <http://localhost:8080> and log in with
admin/admin .

Create a Realm

- Hover over "master" in the top-left → "Create Realm"
- Give it a name, e.g. company — this becomes your <realm> placeholder

Create a Client

- Go to Clients → Create client
- Client ID: e.g. spring-boot-app
- Client authentication: ON (this gives you a client secret)
- Authorization: ON (optional)
- Valid redirect URIs: http://localhost:*
- Save → go to **Credentials** tab to copy the **client secret**

Create client

Clients are applications and services that can request authentication of a user.

1 General settings

Root URL ⓘ

http://localhost:8081

2 Capability config

Home URL ⓘ

http://localhost:8081

3 Login settings

Valid redirect URIs ⓘ

http://localhost:8081/login/oauth2/code/*

+ Add valid redirect URIs



Valid post logout

redirect URIs ⓘ

http://localhost:8081

+ Add valid post logout redirect URIs



Web origins ⓘ

+

+ Add web origins



Back

Save

Cancel

Keycloak has generated the secret after saving:

spring-boot-app OpenID Connect

Clients are applications and services that can request authentication of a user.

Settings

Keys

Credentials

Roles

Client scopes

Authorization

Service account roles

Sessions

Advanced

Events

Client Authenticator

Client Id and Secret

?

Save

Client Secret

.....



Regenerate

Registration access
token ?

Regenerate

Copy the **Client Secret** value and ensure it is in your project's properties:
`spring.security.oauth2.client.registration.keycloak.client-secret=YOUR_COPIED_SECRET`

Creating User:

The screenshot shows the Keycloak administration interface under the 'Current realm'. The left sidebar has a dark theme with white text and includes links for 'Manage realms', 'Clients', 'Client scopes', 'Realm roles', 'Groups', 'Sessions', 'Events', and 'Configure'. The 'Users' link is highlighted in blue, indicating the current section. The main content area is titled 'User details' for 'testuser'. It shows the following fields:

- ID ***: 67656c18-bd1d-484b-bad2-3f5179b47eb7
- Created at ***: 2/20/2026, 8:55:10 PM
- Required user actions**: A dropdown menu labeled 'Select action' with an 'X' icon.
- Email verified**: A toggle switch set to 'On'.
- General** section:
 - Username ***: testuser
 - Email**: test@company.com
 - First name**: test
 - Last name**: user

At the bottom are two buttons: a blue 'Save' button and a grey 'Revert' button. A vertical sidebar on the right lists sections: General, Groups, Credentials, Role mapping, Groups, Consents, Identity provider links, Sessions, and Events. The 'General' section is currently selected.

Once created, set the password

Create the Realm Role, such as user, admin, etc. and then add them to the user in role-mapping