# Install Social media service

The Social Media service is required to publish content from censhare to social networks (Twitter, Facebook, YouTube). The service connects to the social media apps via the respective APIs.

## Prerequisites

- JDK 11.0.6 or higher must be installed on the host machine.
- As entry point, a proxy such as HAProxy must be installed. Usually, this is part of the censhare RPM package.
- Developer accounts for each social network.
- A Social media application for each social network. For a quick reference see the Create censhare social media applications below.

## Introduction

The Social Media service is required to publish content from censhare to a social network. The Social Media service connects to the APIs of the social networks, authenticates the user, and publishes the desired content to the selected profile. From the social networks, the Social media service retrieves reactions to the posts. These reactions are displayed in the corresponding social media post assets in censhare.

To use the Social media service in censhare, you must create and configure the respective application in each social network to which you want to publish. This is done in the developer area of the social network.

The Social media service can be installed on the same host as the censhare Server, or on a dedicated host.

# Create social media applications

Before you can set up the Social media service in censhare, you must register your censhare application in each Social network to which you want to publish content. The registration is done in the developer area of the respective network.

As operator of the censhare platform, you are held responsible towards the operator of the Social network for the conformity of your application as well as content published through the application with their respective terms and conditions.

The registration process, terms and conditions, as well as the published/retrieved data are subject to change.

### Facebook

Note: You can only publish content to a Facebook page. Before you create your app, you need a Facebook page to which your content is published. Posts on a user timeline are not allowed.

1. Go to https://developers.facebook.com/apps and create an app with the following Settings:

Settings - Basic	Value	Description
App ID	generated automatically	You need this value for the configuration of the Social media service.
App Secret	generated automatically	You need this value for the configuration of the Social media service.
Display name	[YOUR_APP]	This value displays as publisher of a post: "Published by [YOUR_APP]"
Contact Email	[YOUR_EMAIL]	Enter a valid e-mail address.
Settings - Advanced		
Upgrade API Version	v7.0	Make sure to use API v7.0 for both settings.

2. Add Facebook Login product with the following settings:

Client OAuth Settings	Value	Description
Client OAuth Login	Yes	Enables the token flow. See also the <b>Valid OAuth redirect URIs</b> setting below.
Web OAuth Login	Yes	Required to log in from censhare Web.
Valid OAuth Redirect URIs	https://[YOUR_DOMAIN]/signin /facebook	The <b>/signin</b> context path must be configured as passing request entry in the pr oxy configuration.

3. To connect from censhare Web to your app, the respective permissions must be requested and approved by Facebook. To request permissions and initiate the review process, click **Requests** in the left menu and add the following permissions:

Permissions and Features	Action	Description
pages_manage_posts	request	These are the minimal required permissions. Other permissions can be requested, if desired.
pages_read_engagement	request	

4. Copy or note the APP ID and the APP Secret. You need the values to configure the censhare Social Media Service. To display the APP Secret as plain text, Facebook asks you to enter your credentials.

#### Twitter

1. Got to https://apps.twitter.com, register as developer and create a new app with the following parameters:

App details	Value	Description
Website URL	https://[YOUR_DOMAIN]/	To create an app, register as developer and add a new app in your personal account.
App Name	[YOUR_APPLICATION]	The app name does not display in the tweet.
Callback URL	[YOUR_DOMAIN]/signin/twitter	The URL handles the authentication and must be accessible externally.

2. Go to the Permissions tab and set the following permissions:

Permissions	Value

Access permissions Read and Write

- 3. Go to the Key and tokens tab and copy the following parameters. You need these to configure the censhare Social media service:
  - API key
  - API secret key

## YouTube

YouTube is part of the Google universe. To create a YouTube app, log in to the Google developer console. In Google, apps are called projects. This section takes you through the setup and registration process for your app.

Important note: YouTube offers quotas for API requests. By default, an app gets a free quota of 10,000 points per day. Uploading a video via your app costs 1600 points. Other API requests have their respective quotas. For more information, see the YouTube API Quota Calculator.

1. Go to https://console.developers.google.com/apis/credentials and create a new project with the following parameters:

Project info	Value	Description
Project name	[YOUR_APP_NAME]	The name cannot be changed later.
Project ID	[YOUR_APP_ID]	You can use the same ID as the name, or enter a different ID. The ID cannot be changed later.
Project number	generated automatically	

- 2. After you have created your project, the project dashboard displays. In the APIs widget, click Go to APIs overview, and then ENABLE APIS AND SERVICES.
- 3. Select YouTube Data API v3 and click Enable.
- 4. Click CREATE CREDENTIALS and set the following parameters:

Add credentials	Value
Which API are you using?	YouTube Data API v3
Where will you be calling the API from?	Web server
What data will you be accessing?	User data

5. Click What credentials do I need? and in the dialog, click SET UP CONSENT SCREEN. The configuration dialog opens in a new tab. Do not close the Add credentials to your project dialog. You need to complete this configuration later.

6. Click **CREATE** and set up the OAuth consent screen as follows:

Note: If you use **G-Suite**, we recommend to select the user type **Internal**. This makes the app registration process easier, as internal apps do not require review by Google.

OAuth consent screen	Value	Description
Application name	[YOUR_APP]	Enter the name of your censhare platform.
Application logo	[YOUR_LOGO]	Add an optional logo that is shown in your app.

Support email	selected automatically	If you have registered multiple emails, you can select the desired address.
Scopes for Google APIs	email	Default. This value is preselected and cannot be changed.
	profile	Default. This value is preselected and cannot be changed.
	openid	Default. This value is preselected and cannot be changed.
<b>Add scope</b> - Click and enable the following scopes, then click ADD to save:		
/auth/youtube.force-ssl	enable	
/auth/youtube.upload	enable	
Authorized domains	[YOUR_CENSHAR E_WEB_DOMAIN]	We recommend that you always enter an authorized domain to ensure that the app can only be accessed from your censhare Web domain.

7. Go back to the Credentials dialog and complete the configuration as follows:

Add credentials to your project	Value	Description
Name	[YOUR_CLIENT]	Enter a client name.
Authorized redirect URIs	https://[YOUR_DOMAIN] /signin/google	After successful authorization, the Google server redirects to this URL. The URL must be accessible externally.

8. Click Create OAuth client ID. If the button does not display at the bottom of the page, click Refresh first.

 Click Download to save your credentials to your computer in a JSON file. From this file, you need the client\_id and the client\_secret values to configure the proxy of the Social media service.

# Configure the reverse proxy

The authentication and communication between the censhare Server, the Social media service, and the social networks APIs require a reverse proxy for the censhare Server. The reverse proxy must be accessible from external locations and requires a valid SSL certificate.

censhare is delivered with NGINX as default reverse proxy. Any other proxy such as Apache, HAProxy or LB5 can be used.

Following, we provide the parameters that must be added to the configuration of NGINX. If you are using a different reverse proxy in your censhare environment, configure the proxy accordingly:

- 1. On the host of the proxy service, go to the location of the configuration file. The default location for the NGINX configuration is **/etc/nginx /nginx.conf**.
- 2. Open the configuration file in an external editor, and add the following lines:

```
# SOCIAL MICRO-SERVICE: BEGIN
    location /connect/ {
        proxy_pass http://localhost:7056;
    }
    location /signin/ {
        proxy_pass http://localhost:7056;
    }
    location /api/social/ {
        proxy_pass http://localhost:7056;
    }
    # optional for debugging
    # location /h2-console/ {
        # proxy pass http://localhost:7056;
    # }
# SOCIAL MICRO-SERVICE: END
```

3. Save your changes and restart the proxy.

### Install the Social media service

The Social media service can be installed on the same host as the censhare Server, or any other host. The Social media service is provided as RPM package. It runs with **censhare Web** and **censhare WP**.

To install the service, proceed as follows:

- 1. Add the repository and install the package as described in Install and configure censhare WP. The package is part of the censhare Server repository.
- 2. Run the installation command:

yum install censhare-social-media-service

The installation creates the /opt/censer/social-media directory on the host server with the following content:

- social-media.jar executable JAR to run the Social media service.
  application.yml configuration file for the Social medial service.

#### 3. Go to the social-media directory and create the $\boldsymbol{db}$ and $\boldsymbol{dump}$ subdirectories:

cd /opt/censer/social-media mkdir db mkdir dump

#### 4. Open the **application.yml** file and configure the service as follows:

Parameter	Value	Comment
server.port	7056	To use another port, change the default value to the desired port.
client.spring-social- customizer.connect- controller-application- url	[CENSHARE _BASE_URL]	
client.spring-social- customizer.sign-in- controller-application- url	[CENSHARE _BASE_URL]	
client.spring-social- customizer.sign-in- controller-sign-up-url	/api/social /signup	To pass requests, the <b>/api/social</b> path must be added in the proxy configuration.
spring.h2.console. enabled	false	Only enable for testing and development purposes. In production environments must be set to <b>fal se</b> .
censhare. microservices. standalone-web-server. host	[CENSHARE _BASE_URL]	Enter the base URL of your censhare instance.
censhare. microservices. standalone-web-server. username	[USER_NAM E]	Enter the system user to access the REST API of the censhare Server. Ensure that the system user has access to domains in which the published content (images, videos) is located. For example, the <b>Media</b> domain of the censhare Dedicated solutions.
censhare. microservices. standalone-web-server. password	[PASSWOR D]	Enter the password of the system user to access the REST API of the censhare Server. (1)
censhare. microservices. standalone-web-server. timeout-ms	5000	Timeout limit in milliseconds. If necessary, change the value.
censhare. microservices. standalone-web-server. temp-download-folder	[DIRECTOR Y_NAME]	Create a directory for temporary storage item downloads from censhare. Default directory is <b>dump</b> .
client.access-control- allow-origins	[CENSHARE _BASE_URL ],	Enter a comma separated list of hosts that can connect to the Social media service. The host of your censhare instance must be part of the list. Other hosts are optional.
client.signup-info- redirect-url	/	If you use a proxy service (for example: NGINX), redirect to the root directory.
client.signin-context	/signin/	If you change this value, you must change the callback/redirect URLs in your social media applications accordingly.
spring.social.facebook. app-id	\${CS_SOC_ FACEBOOK _APP_ID}	Enter the IDs and secrets of each social media app here. If you do not want to use a social media app, enter dummy values for the respective ID and secret. Alternatively, you can declare these as environment variables in an <b>.env</b> file. In this case, leave the placeholders as is.

spring.social.facebook. app-secret	\${CS_SOC_ FACEBOOK _APP_SECR ET}	
spring.social.twitter. app-id	\${CS_SOC_ TWITTER_A PP_ID}	
spring.social.twitter. app-secret	\${CS_SOC_ TWITTER_A PP_SECRET}	
spring.social.linkedin. app-id	\${CS_SOC_ LINKEDIN_A PP_ID}	
spring.social.linkedin. app-secret	\${CS_SOC_ LINKEDIN_A PP_SECRET}	
spring.social.youtube. app-id	\${CS_SOC_ GOOGLE_A PP_ID}	
spring.social.youtube. app-secret	\${CS_SOC_ GOOGLE_A PP_SECRET}	
logging.level.org. apache.http.client. protocol. ResponseProcessCook ies	ERROR	Determines the level of details written into the log files.
logging.level.org. springframework.social. google	INFO	
logging.level.com. censhare	INFO	

5. To start the service, execute the following command:

systemctl start censhare-social-media

If the server is already running, use the restart parameter. To stop the server use the stop parameter

# Result

The Social Media service is running in the censhare environment. This is a prerequisite to use authenticate at the social media apps from censhare Web, and to publish content through the Social Media Publishing wizard.

# Next steps

Configure social Networks module