

Rethink Real Time

Lab1 – Setting up Diffusion

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What will you learn ?

Installation & setting up a topic:

1. Several options:
 - a. Docker
 - b. Locally
 - c. Diffusion Cloud
2. Setting up a topic in the console



Docker

Installation – Docker

Pull the latest version of the Diffusion® image:

```
docker pull pushtechology/docker-diffusion:6.9.0
```

Run the image (**image_id** is the ID of the image to run):

```
docker run -p 8080:8080 image_id
```

To find a valid **image_id** you can:

```
docker images
```

Diffusion® is now running in a container on your system!

Installation - Locally

To install Diffusion on your local machine, download the free trial version from <https://www.diffusiondata.com/try-diffusion-on-premise>

Make sure you have one of the following compatible versions of Java installed:

1. Java 8 JDK (1.8.0_131-b11 or higher)
2. Java 11 JDK (11.0.3 GA or higher, Hotspot JVM)

Run the **diffusion-installer-6.x.x.jar** file you just downloaded.

You can select which Diffusion® components to install. The defaults are fine.

Installation - Locally

Once Diffusion® is installed, navigate to the directory where you installed it and run the startup script.

You should see Diffusion®'s startup logs in the terminal.

By default, Diffusion®'s web console will now be running at **localhost:8080** with admin credentials set to **admin / password**.

Installation - Locally

On macOS or Linux, from the terminal, run either:

```
sh bin/diffusion.sh
```

```
sh bin/diffusion_java11.sh
```

On Windows, either from Windows Explorer, Windows Powershell or the Command Terminal, run either:

```
bin\diffusion.bat
```

```
bin\diffusion_java11.bat
```

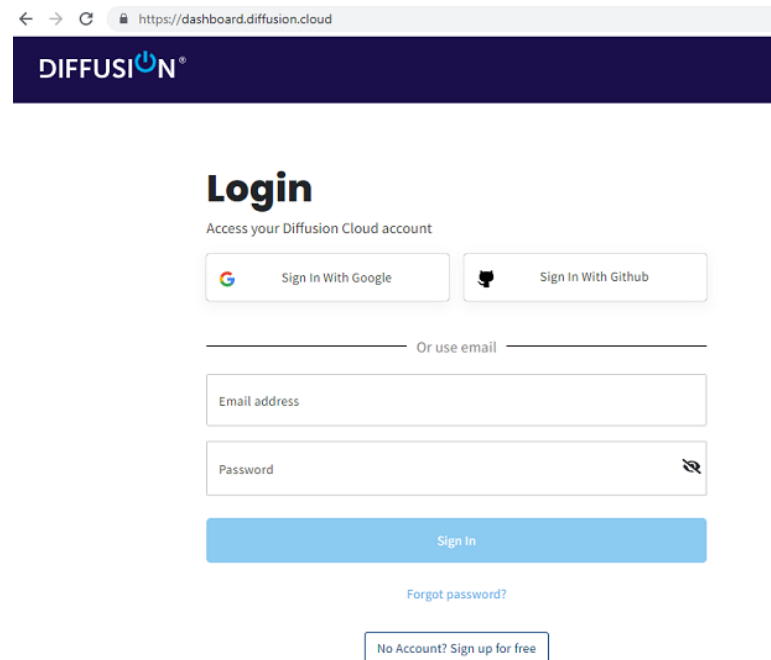


Cloud

Creating a Diffusion Cloud Account

To create an account:

1. Go to <https://dashboard.diffusion.cloud>
2. Sign up for a free Diffusion® Cloud account, or login using your Google™ or GitHub account. (This may have changed since this was written)



The screenshot shows the login page of the Diffusion Cloud dashboard. At the top, there is a dark blue header with the 'DIFFUSION' logo. Below the header, the page title 'Login' is displayed, followed by the subtitle 'Access your Diffusion Cloud account'. There are two buttons for social login: 'Sign In With Google' and 'Sign In With Github'. Below these, there is a section for email login with the text 'Or use email'. This section contains two input fields: 'Email address' and 'Password'. A blue 'Sign In' button is located below the password field. At the bottom of the login section, there is a link for 'Forgot password?'. At the very bottom, there is a button that says 'No Account? Sign up for free'.



Create a Topic

On-Premise - Topics

Creating a new topic:

1. Click the + icon.
2. Choose a path: /test
3. Choose a type, set JSON for this.

Topics

The topic browser allows you to manage and inspect topics and permissions in the Diffusion topic space

Focus ⓘ Start typing a topic path to focus...

Root topics + ↻

▼ foo

counter binary

Fetch page size ⓘ 25 / page ▼

×

Add topic

Path

Type

JSON

Add property

Tidy on unsubscribe ▼

By default, if a session unsubscribes from a topic, it will receive any updates for that topic that were previously queued but not sent.

Discard queued updates when unsubscribing.

Discard queued updates when unsubscribing.

+ Add

Cancel

OK

On-Premise - Topics

Setting topic value:

1. Click the **Edit** button.
2. Set some JSON, remember that keys are wrapped in double quotes (“”).
3. Click **Save**.

Subscribing to topic:

1. Click **Subscribe to topic**.
2. The subscription appears in the **Topic Subscriptions** window.

To be useful, we'll need a code based client!

test

test json Topic Permissions

Current value Last refreshed 4 minutes ago (refresh)

No value

Clear Edit

Properties ⓘ
This topic has no properties set.

Delete topic Subscribe to topic Subscribe to topic and descendants

test

test json Topic Permissions

Current value Last refreshed 15 minutes ago (refresh)

{ "value":100 }

Cancel Save

Properties ⓘ
This topic has no properties set.

Delete topic Subscribe to topic Subscribe to topic and descendants

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Q & A ?

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Thank You !