

# **MLFM** | Machine Learning Flow Manager

**User Manual**

MLFM Version 3.0

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# Overview

This document is meant to be the essential documentation as a user manual for MLFM installer v3.0, it provides useful information about the bundle, health check commands, debugging commands, and a step by step guide to install the MLFM platform. Also, it provides a scope about the version.

# 1. MLFM Installation

## 1.1. Install A New Version

### Shared artifacts

1. A `.run` file (**shared via SecuFEx**) is a self extracting Unix script including all the batteries needed to power and manage an MLFM installation.
2. `DEPLOY_KEY_USERNAME` and `DEPLOY_KEY_PASSWORD` (**shared via Mail or SecuFEx**) are the access credentials used to pull secured MLFM resources.

### Prerequisites

To run MLFM smoothly, you need to have the following

#### ***Minimum Requirements:***

- Memory: 6 GBvm
- Storage: 80 GB
- CPU: 2 cores
- Virtualbox 6.1 (Incase virtualization is used instead of bare metal)

#### ***Recommended Requirements:***

- Memory: 8 GB
- Storage: 100 GB
- CPU: 4 cores
- Virtualbox 6.1 (Incase virtualization is used instead of bare metal)

### Virtual machine provisioning steps

1. Download and install Virtualbox 6.1
2. Download [Ubuntu 18.04](#) or [Ubuntu 20.04](#) iso image (other distros could be tried as well)
3. Create a new Linux 64bit VM from Virtualbox
4. Change resources allocated to the VM (memory, cpu, storage) as per requirements mentioned above
5. Start installing Linux distro (Ubuntu) by inserting downloaded iso from step 2
6. On Ubuntu once installation is complete, we'd need to install Guest additions
7. Setup a shared folder between host and guest VM (this is where MLFM `.run` (**Will be shared via SecuFEx**) shall be placed)

## Step by step guide

To run the installer, follow the following steps, and make sure you satisfy the prerequisites.

Installation could typically take up to 45 mins, but it varies depending on hardware specs and internet bandwidth. The reason behind the long installation time is that the bundle typically orchestrates 32 k8s pods, which takes a while to create and orchestrate.

1. Download MLFM .run file (**Will be shared via SecuFEx**) and place it in the shared folder on your host machine
2. Open a terminal window in the guest VM using the GUI, or using the following shortcut: CTRL + ALT + T
3. cd into the shared folder where MLFM .run file resides
4. Make sure the .run file is executable by running `chmod +x ./MLFM_Installer_<version>.run`
5. Run in the terminal to start the installation process
  1. `export DEPLOY_KEY_USERNAME={Paste the DELPOY_KEY_USERNAME that is shared via SecuFEx or Mail}`
  2. `export DEPLOY_KEY_PASSWORD={Paste the DELPOY_KEY_PASSWORD that is shared via SecuFEx or Mail}`
  3. `export VERBOSE=1`
  4. `./MLFM_Installer_<version>.run`
6. During the installation prompt for root password might be required

## Start MLFM

- Just open your browser and Enter <http://mlfm.siemens.local> in the url box

## MLFM built-in users

- admin user
  - email : [csp-r8\\_dadmin@mentor.com](mailto:csp-r8_dadmin@mentor.com)
  - password : Test12345
- workflow creator user (this user has 2 roles workflow creator and plugin manager)
  - email : [creator@siemens.com](mailto:creator@siemens.com)
  - password : Test12345
- operator user
  - email : [basic@siemens.com](mailto:basic@siemens.com)
  - password : Test12345
- documenter user
  - email : [documenter@siemens.com](mailto:documenter@siemens.com)
  - password : Test12345

## Expected outcomes of the installation

If the installation finishes successfully, there are expected outcomes (logs).

You can check the readiness of the pods using the following command

- `mlfman kubectI get pods -A`

In case you found some pods are running, and others have problems initializing (for ex : ImagePullBackOff), you can do the following steps to help installation continue successfully

- You can try to restart the virtual machine, sometimes this helps refresh kubernetes resource orchestration and restarts the pod initialization .

Note that the previous tips are optional, typically if you just wait long enough, all the pods eventually will be initialized, because kubernetes retries to initialize all the failed containers periodically, but restarting proved to be accelerating that process in this situation.

In case you reboot the vm, please run the following command after 15 mins of the reboot : `mlfman kubectI get pods -A` make sure that the all the pods status now are in "Running" state, if not, please wait for other 15 mins, then re-run the command.



## 1.2. Useful commands

MLFM is a very resource exhaustive set of applications, running in a K8s cluster, so you are expected to face high CPU utilization sometimes, this is only normal, specially while an experiment takes place.

Sometimes you would need the following commands while running the platform on your host or your virtual machine, each command will be described with an example if possible.

## 1.3. K8s resource monitoring

- Check online pods and all existing resource status- `mlfman kubectrl get pods -A`
- Get service cluster ip (example, get the ip of pipelines ui)- `mlfman kubectrl get svc -A`

You can also specify kubeflow namespace using `-n kubeflow` instead of `-A` if your cluster has many existing namespaces

## 1.4. Uninstall MLFM

Run the following command `mlfman uninstall`

## 1.5. Update MLFM

Currently the update process is to uninstall the older version of MLFM and install the new one.

Seek [1.4. Uninstall MLFM](#) for uninstall steps and [Step by step guide](#) for installation steps

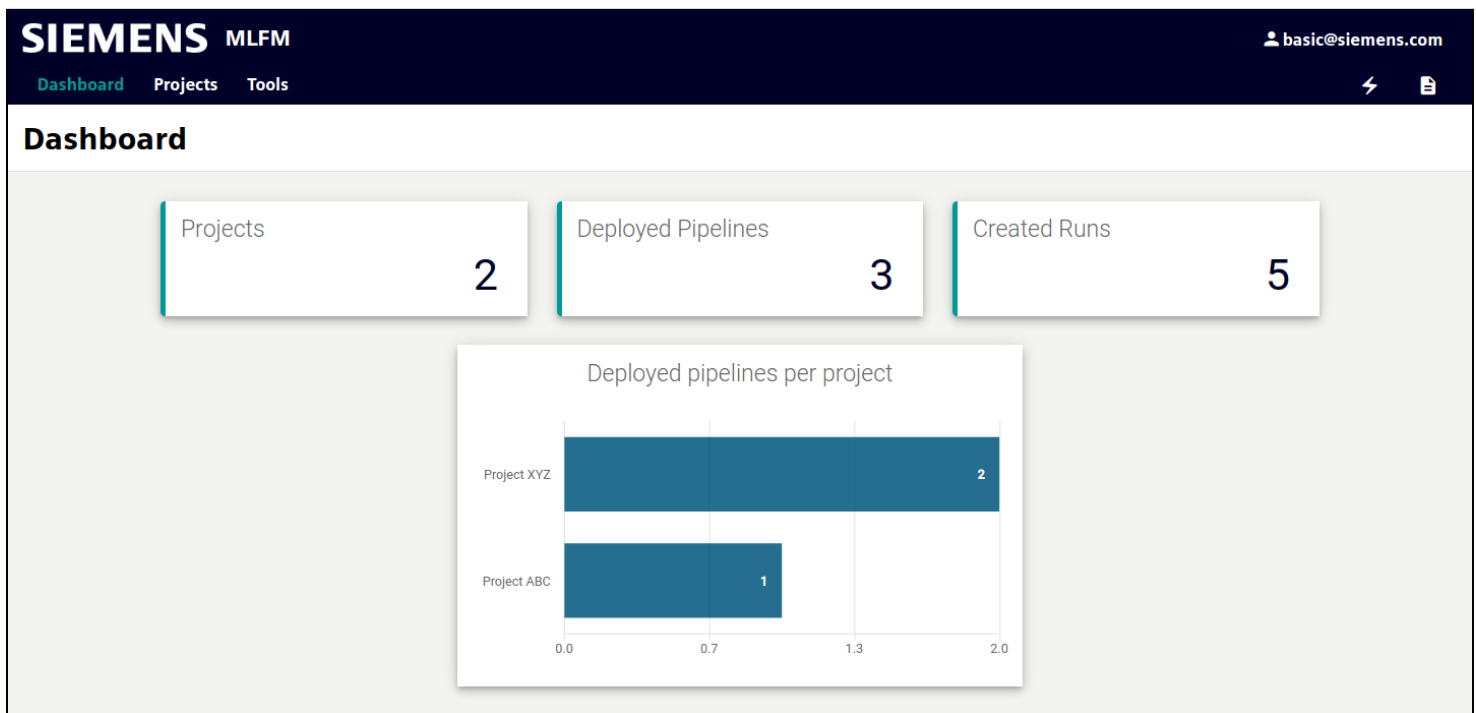
## 2. User Stories

### 2.1. Basic User

#### 2.1.1. Dashboard Page

The dashboard is the entry point for the MLFM portal. It has a navigation bar for quick routing for other pages (Projects, Tools and Documentation)

The dashboard contains some statistics about the user activities (created projects, deployed pipelines, and runs). It gives an overview for the user about the system in general.

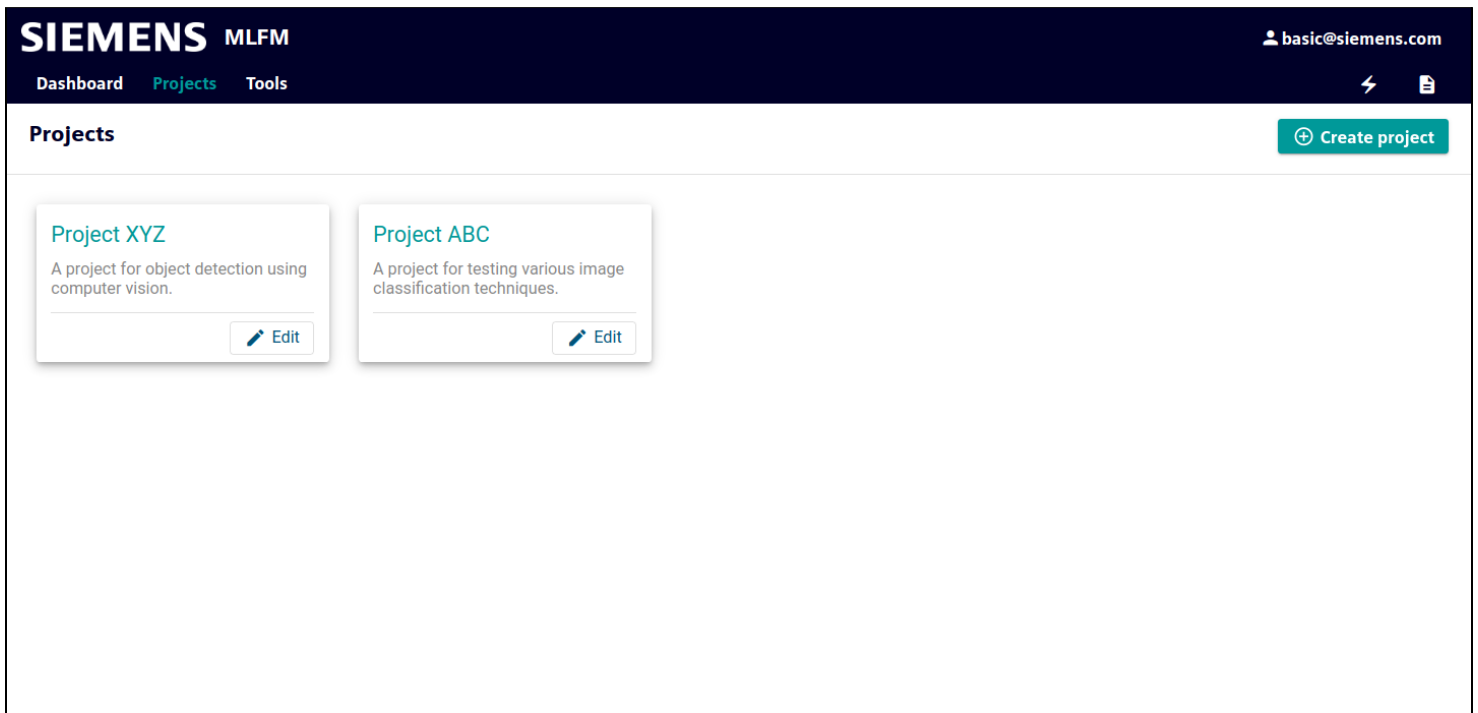


#### 2.1.2. Projects Page

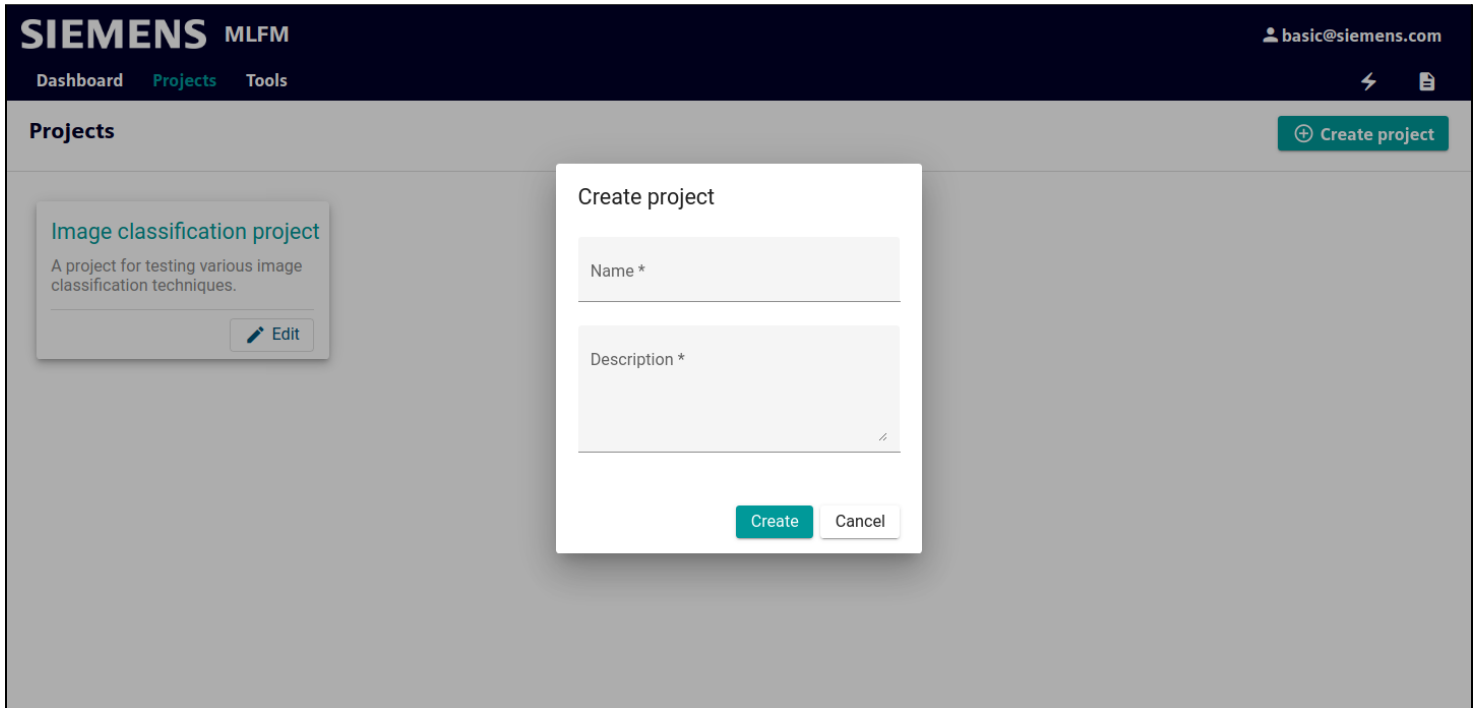
A project in MLFM is the key for pipelines and “runs”. Every pipeline must be linked with a project. So project creation is the first step for cloning and running pipelines.

### 2.1.2.1. Create project

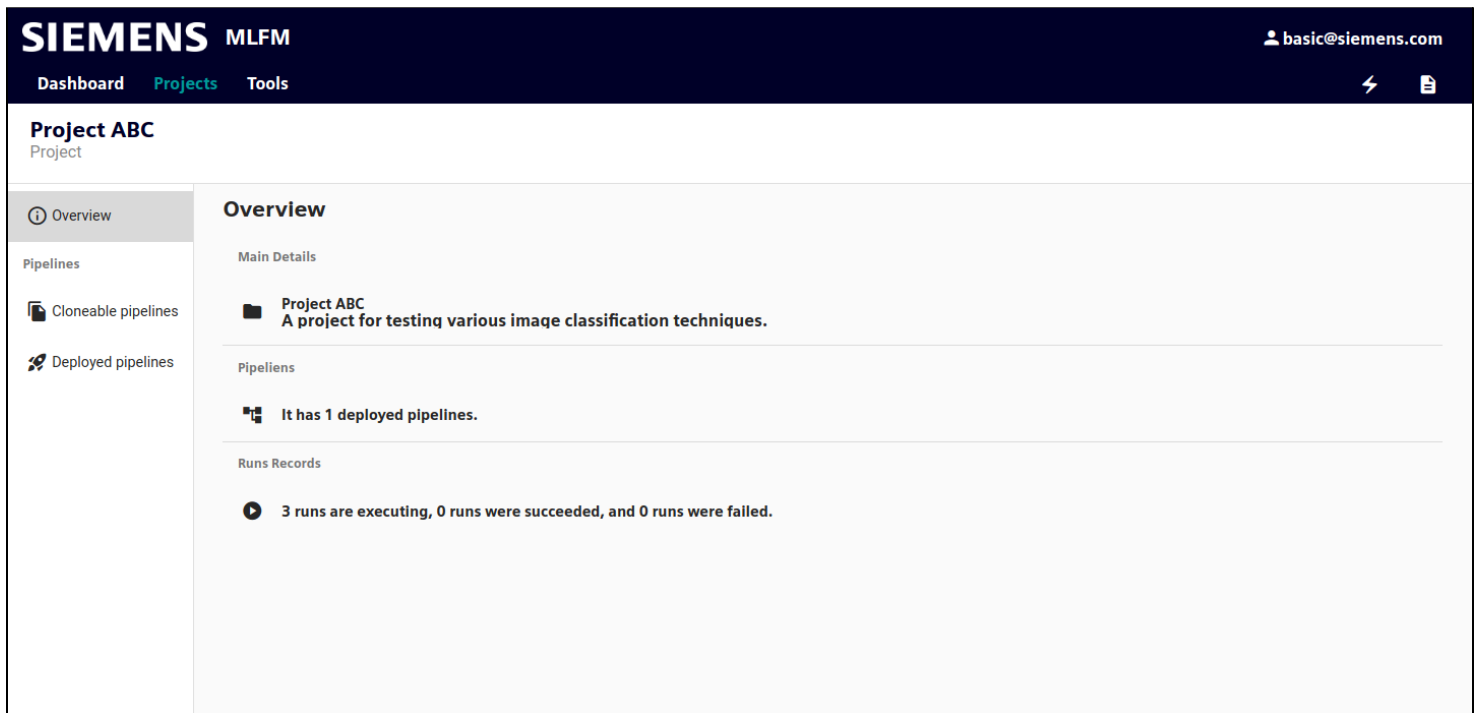
In the projects page, we can see a top-right button for project creation.



The create new project button will pop-up a form that requires project details (name and description).



After project creation, the project will be added to the projects board and can be accessed by the user to see project details and clone pipelines.



In the project details page, you can find:

1. Overview: an overview of the project, like the number of deployed pipelines, and some statistics about the “runs” in this project.
2. Cloneable pipelines: a list of the pipelines that can be cloned and deployed.
3. Deployed pipelines: a list of the deployed pipelines in this project.

2.1.2.2. Clone pipeline

From the project details page, click on “Cloneable pipelines”. You will find a list of the pipelines that can be cloned.

SIEMENS MLFM

basic@siemens.com

DashboardProjectsTools

Project ABC

Project

Overview

Pipelines

Cloneable pipelines

Deployed pipelines

Cloneable pipelines

Name	Description	Tags	Created On	Action
Meta Image classification	sample	Image classification	May 26, 2022, 12:45:13 PM	Clone
Sample pipeline	sample	Processing	May 26, 2022, 12:43:55 PM	Clone

Click on “Clone”.

SIEMENS MLFM

basic@siemens.com

DashboardProjectsTools

Pipeline Editor

DeployDeploy & Run

Bucket Data Ingest

Adapter

Rotation Augmentation

Archive Data Egest

Left-click on a plugin to edit its configuration.

The screenshot shows the Siemens MLFM Pipeline Editor interface. The top navigation bar includes the Siemens MLFM logo, a user profile icon for 'basic@siemens.com', and navigation links for Dashboard, Projects, and Tools. The main workspace is a grid where a pipeline is built using four plugins: 'Bucket Data Ingest', 'Adapter', 'Rotation Augmentation', and 'Archive Data Egest'. The 'Bucket Data Ingest' plugin is selected, and its configuration parameters are shown in a sidebar on the right. The parameters are: 'endpoint' (localhost:8000, string), 'access\_key' (minioadmin, string), 'secret\_key' (minioadmin, string), 'session\_token' (empty, string), and a checked 'secure' checkbox. A 'bucket\_name' field is partially visible at the bottom.

**SIEMENS MLFM** basic@siemens.com

Dashboard Projects Tools

**Pipeline Editor**

**Configuration Parameters**

- endpoint: localhost:8000 (string)
- access\_key: minioadmin (string)
- secret\_key: minioadmin (string)
- session\_token: (string)
- ☒ secure
- bucket\_name: (string)

Left-click on a free area on the grid to close the configuration form.

When done, you can deploy, or deploy and run the pipeline, using the buttons on the top-right corner.

The screenshot shows the Siemens MLFM Pipeline Editor interface with the configuration form closed. The pipeline remains the same, consisting of 'Bucket Data Ingest', 'Adapter', 'Rotation Augmentation', and 'Archive Data Egest' plugins. In the top-right corner of the editor, there are two buttons: 'Deploy' and 'Deploy & Run'.

**SIEMENS MLFM** basic@siemens.com

Dashboard Projects Tools

**Pipeline Editor**

Deploy Deploy & Run

When you click “Deploy”, the pipeline will be deployed, and you will be taken to the deployed pipeline page.

SIEMENS MLFM

basic@siemens.com

⚡

📄

Dashboard

Projects

Tools

pipeline\_4238b3a4-12c7-46d4-916c-8ab17d842512

Deployed pipeline

Pipeline

Runs

Pipeline Editor

Run

Bucket Data Ingest

input

output

Adapter

input

output

Rotation Augmentation

input

output

Archive Data Egest

input

output

The screenshot displays the Siemens MLFM Pipeline Editor interface. The top navigation bar includes the Siemens MLFM logo, a user profile for 'basic@siemens.com', and navigation links for 'Dashboard', 'Projects', and 'Tools'. The main content area shows a deployed pipeline with the ID 'pipeline\_4238b3a4-12c7-46d4-916c-8ab17d842512'. On the left, a sidebar contains 'Pipeline' and 'Runs' tabs. The central 'Pipeline Editor' workspace features a grid with four stages connected sequentially: 'Bucket Data Ingest' (top left), 'Adapter' (middle left), 'Rotation Augmentation' (middle right), and 'Archive Data Egest' (bottom right). Each stage has an 'input' and 'output' port. A 'Run' button is located in the top right corner of the editor workspace.

Click on “Runs” on the left side to view the list of “runs” of this deployed pipeline. Here you can see the status of each run, and you can view the run on “Kubeflow”

SIEMENS MLFM

Dashboard

Projects

Tools

basic@siemens.com

pipeline\_4238b3a4-12c7-46d4-916c-8ab17d842512

Deployed pipeline

Pipeline

Runs

Runs

Name	Status	Created On	
run_dfac80c9-8b70-49fc-ac45-52f9951cca31	Running	May 26, 2022, 12:50:30 PM	Kubeflow
run_e3389b25-4111-4e74-bffc-2dc5e54b0d62	Running	May 26, 2022, 12:49:16 PM	Kubeflow
run_8c2abf86-0fa9-48d0-a617-85817a13d65f	Running	May 26, 2022, 12:50:43 PM	Kubeflow



### 2.1.2.3. Run pipeline

You can create a new “run” for a deployed pipeline, from the deployed pipeline’s page.

SIEMENS MLFM

basic@siemens.com

Dashboard

Projects

Tools

pipeline\_4238b3a4-12c7-46d4-916c-8ab17d842512

Deployed pipeline

Pipeline

Runs

Pipeline Editor

Run

Bucket Data Ingest

input

output

Adapter

input

output

Rotation Augmentation

input

output

Archive Data Egest

input

output

```
graph LR; A[Bucket Data Ingest] -- output --> B[Adapter]; B -- output --> C[Rotation Augmentation]; C -- output --> D[Archive Data Egest];
```

Configure the pipeline. Left-click on the plugin you want to edit its configuration. When done, left-click on a free area of the grid to close the configuration form.

The screenshot displays the Siemens MLFM Pipeline Editor interface. The top navigation bar includes the Siemens MLFM logo, a user profile icon for 'basic@siemens.com', and navigation links for 'Dashboard', 'Projects', and 'Tools'. The main header shows the pipeline ID 'pipeline\_4238b3a4-12c7-46d4-916c-8ab17d842512' and its status 'Deployed pipeline'.

The left sidebar contains a 'Pipeline' tab and a 'Runs' section. The main workspace is the 'Pipeline Editor', which shows a visual representation of the pipeline on a grid. The pipeline consists of four steps: 'Bucket Data Ingest', 'Adapter', 'Rotation Augmentation', and 'Archive D'. The 'Bucket Data Ingest' step is currently selected, and its configuration parameters are displayed in a panel on the right.

The 'Configuration Parameters' panel for the selected step includes the following fields:

- endpoint**: A text input field containing 'localhost:8080'.
- access\_key**: A text input field containing 'minioadmin'.
- secret\_key**: A text input field containing 'minioadmin'.
- session\_token**: A text input field.
- secure**: A checkbox that is checked.
- bucket\_name**: A text input field.

When you finish configuring the pipeline, click on “Run” on the top-right corner to create a new run with the new configuration.


### 2.1.3. Tools Page

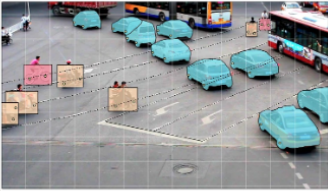
Contains the shipped tools with MLFM. MLFM is open for integration with other tools that can be used in ML activities. For now it is integrated only with the Computer Vision Annotation Tool (CVAT).

**SIEMENS** MLFM basic@siemens.com

Dashboard Projects **Tools**

## Tools

**CVAT**  
Annotation Tool

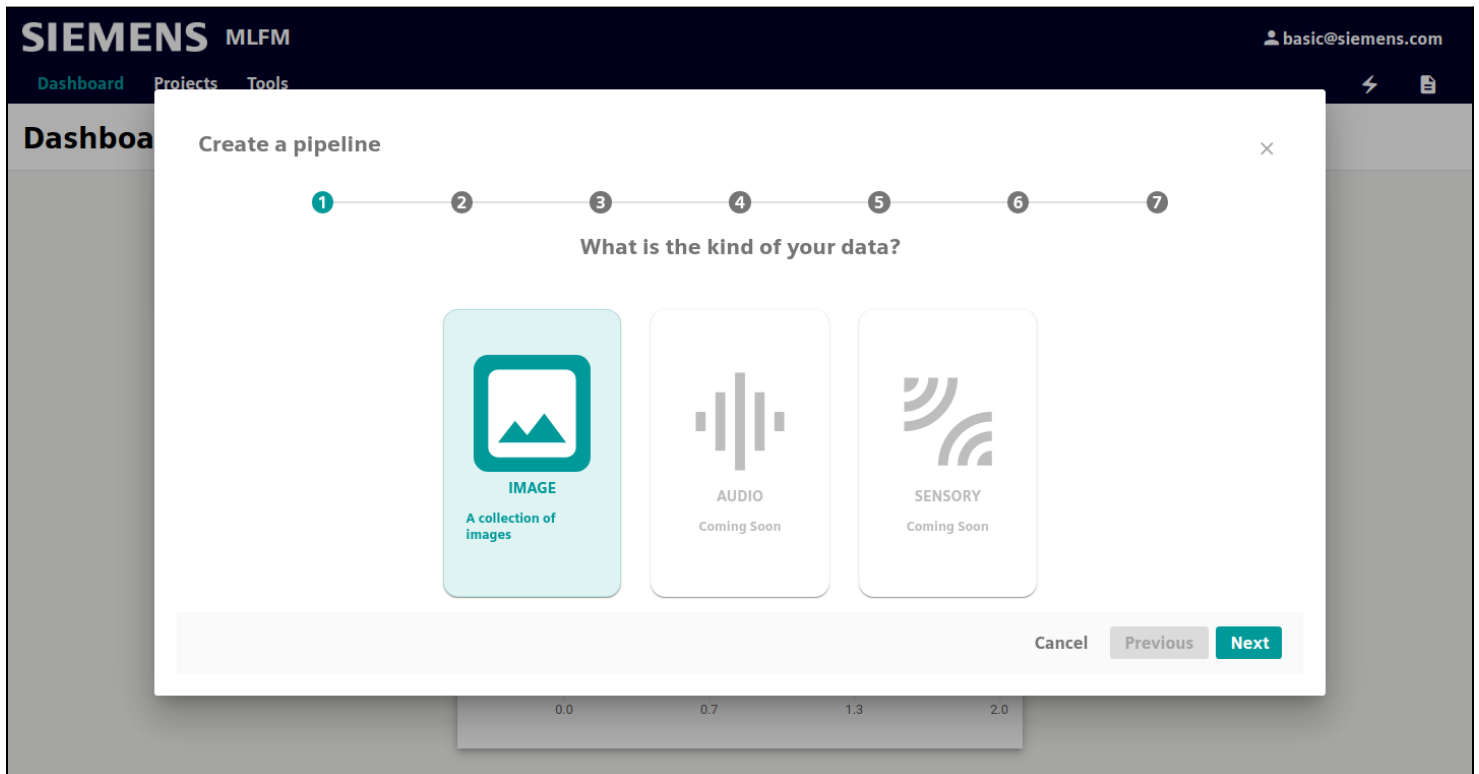


CVAT is free, online, interactive video and image annotation tool for computer vision. It is being used by our team to annotate million of objects with different properties. Many UI and UX decisions are based on feedbacks from professional data annotation team.

[Launch](#) [GitHub](#)

#### 2.1.4. Quick start

Quick start button allows you to create a pipeline in a simple and quick way by answering some questions about the problem that you want to solve using ML.



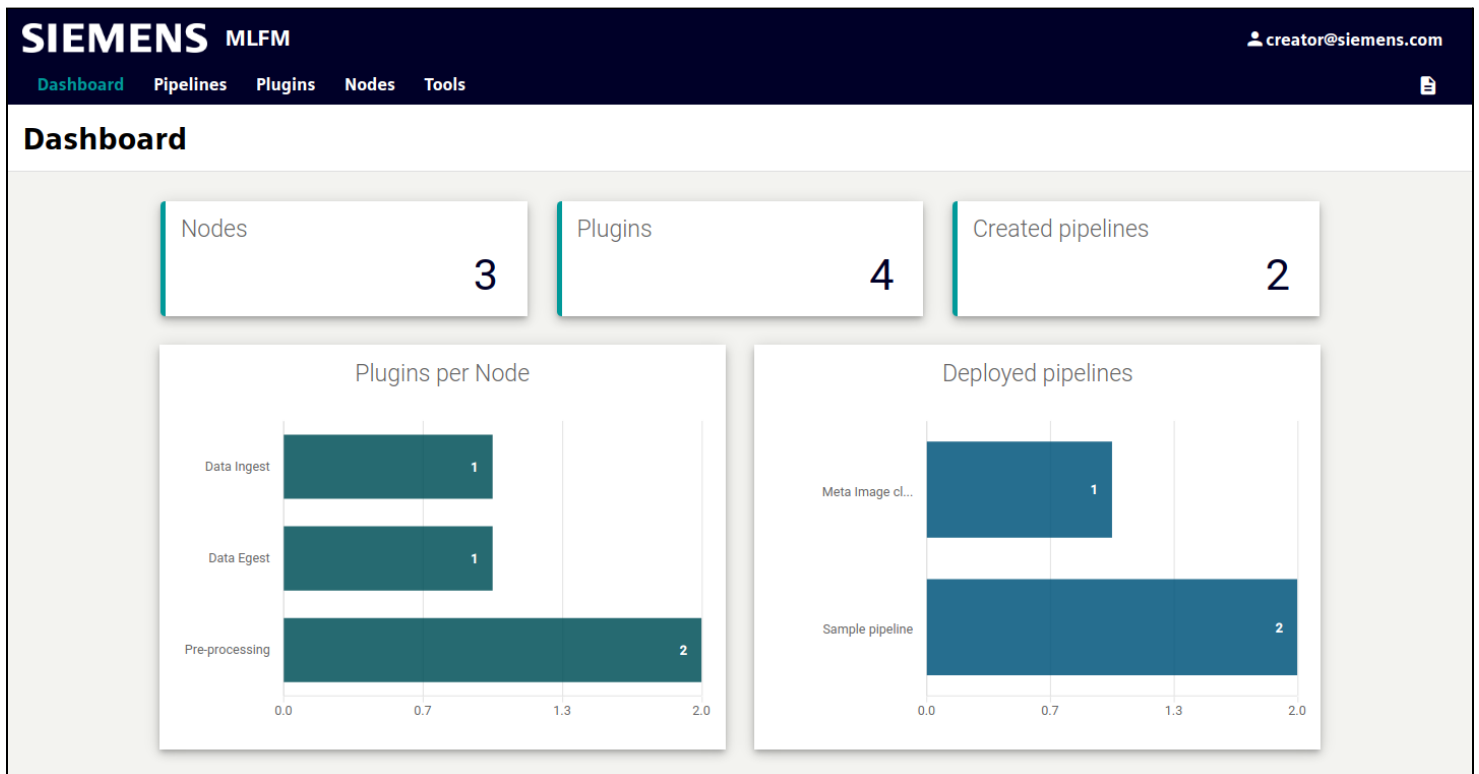
#### 2.1.5. Documentation Page

The last page that can be accessed by the basic user is the 'Documentation' page, and it contains documentation about MLFM and functionalities that the user can use for guidance or to check steps for a specific task.

## 2.2. Workflow Creator User

### 2.2.1. Dashboard Page

Contains different charts to show some statistics about the user activities (created pipelines, nodes and plugins). It gives an overview for the user about the system in general.



2.2.2. Pipelines Page

2.2.2.1. Pipelines List

Contains the list of created pipelines. Clicking on a pipeline will open the pipeline details.

SIEMENS MLFM

creator@siemens.com

DashboardPipelinesPluginsNodesTools

Pipelines

Created pipelines

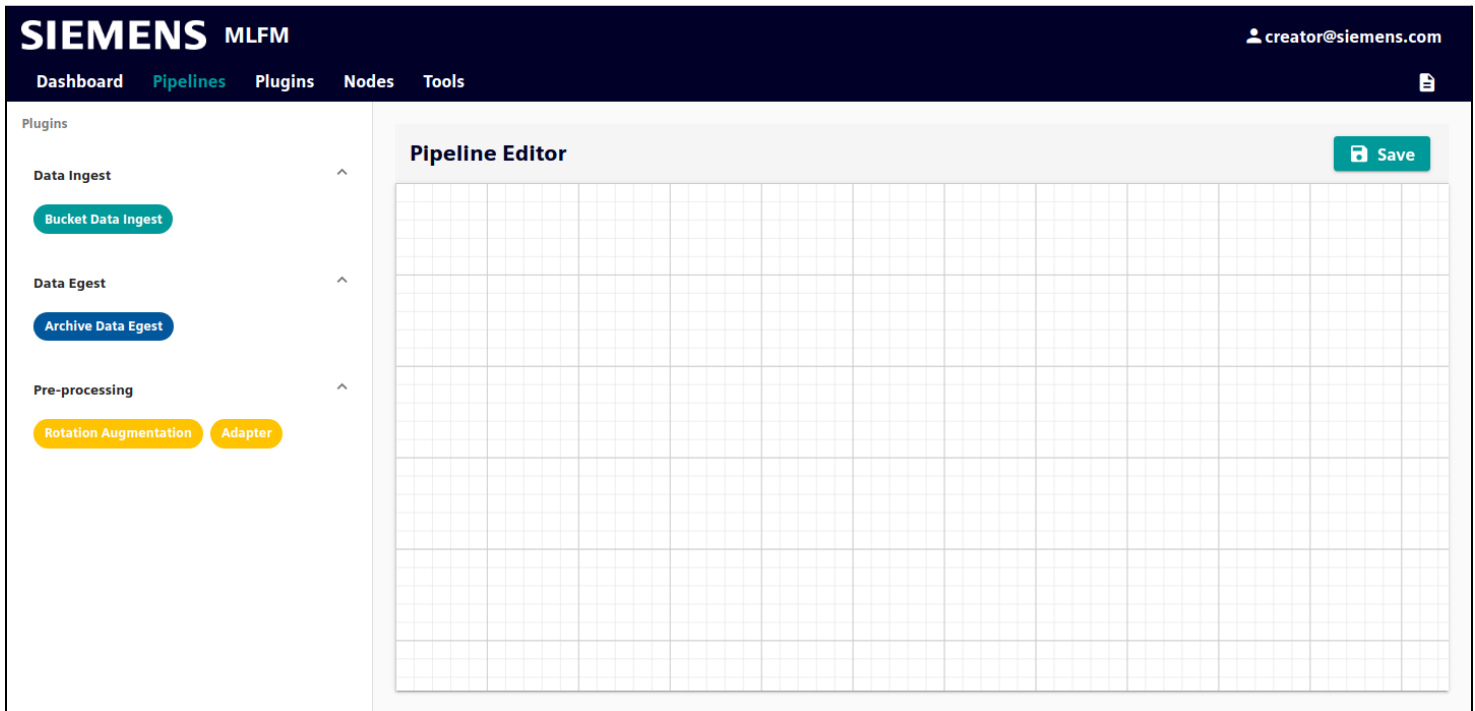
Created pipelines

Create pipeline

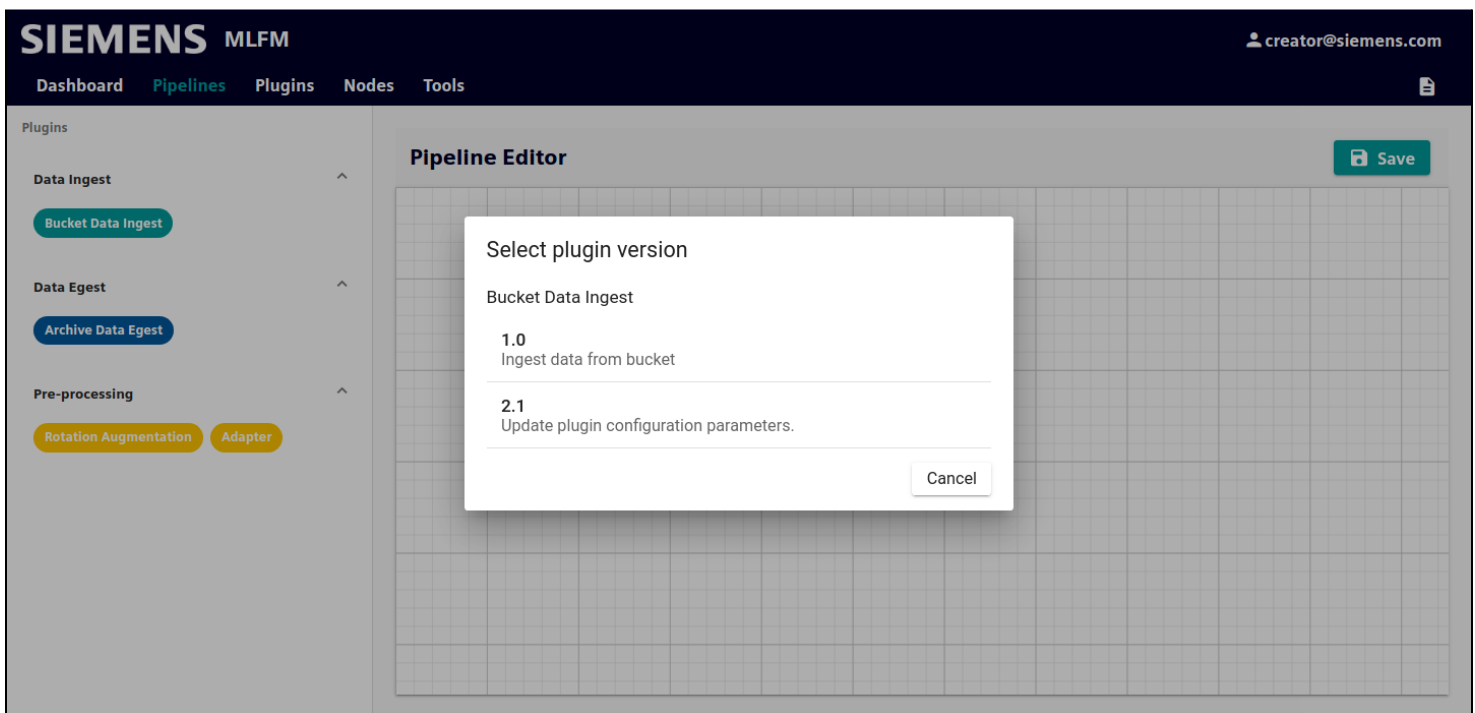
Name	Description	Tags	Created On
Meta Image classification	sample	Image classification	May 26, 2022, 12:45:13 PM
Sample pipeline	sample	Processing	May 26, 2022, 12:43:55 PM

### 2.2.2.2. Create new pipeline

When the user clicks on create new pipeline, a new page will be rendered containing a board for pipeline creation and the creator will be able to see available plugins to use from the left side menu.



To add a plugin to the pipeline, drag the plugin you want from the left side and drop it on the grid. A dialog that contains the list of versions of that plugin will appear.



Select the version you want to add, and it will be added to the pipeline.

The screenshot shows the Siemens MLFM Pipeline Editor interface. On the left, a sidebar lists plugins under three categories: Data Ingest (with 'Bucket Data Ingest'), Data Egest (with 'Archive Data Egest'), and Pre-processing (with 'Rotation Augmentation' and 'Adapter'). The main area is a grid titled 'Pipeline Editor' with a 'Save' button in the top right. A 'Bucket Data Ingest' plugin node is placed on the grid, showing 'input' and 'output' ports and 'v2.1' at the bottom.

To configure the plugin, left-click on the plugin to select it, and the configuration will appear on the right side. Left-click on any free area on the grid to deselect the plugin, and hide the configuration form.

This screenshot shows the same Pipeline Editor interface, but the 'Bucket Data Ingest' plugin is now selected, indicated by a dashed red border and a red 'x' icon. On the right side, a 'Configuration Parameters' panel is open, displaying the following settings: 'endpoint' (localhost:8080, string), 'access\_key' (minioadmin, string), 'secret\_key' (minioadmin, string), 'session\_token' (empty, string), and a checked 'secure' checkbox. Each text input field has a refresh icon to its right.



After adding all the plugins and connecting them, click on “Save”.

The screenshot shows the Siemens MLFM Pipeline Editor interface. On the left, there is a 'Plugins' sidebar with categories: Data Ingest (Bucket Data Ingest), Data Egest (Archive Data Egest), and Pre-processing (Rotation Augmentation, Adapter). The main area is the 'Pipeline Editor' canvas, which displays a workflow: 'Bucket Data Ingest' (v2.1) connects to 'Rotation Augmentation' (v1.0), which then connects to 'Archive Data Egest' (v1.0). A 'Save' button is located in the top right corner of the editor canvas.

A form will appear on the right side, enter the pipeline details (like name and description), then click “Submit” to save the pipeline.

This screenshot shows the same Pipeline Editor interface as before, but with the 'Pipeline Details' form open on the right side. The form contains fields for 'Name', 'Description', 'Version No.' (with a value of '1.0'), and 'Pipeline Tags'. A 'Submit' button is at the bottom of the form. The pipeline diagram in the center remains the same.

You can see the created pipeline in the [pipelines list](#).

### 2.2.3. Plugins Page

The plugin in MLFM is an entity for workflow, so workflow consists of some plugins connected with links. So to create a pipeline (workflow), you have to have plugins for that.

#### 2.2.3.1. Plugins list

Plugins list contains all created/imported plugins. This is also where you can import a new plugin.

**SIEMENS** MLFM

creator@siemens.com

Dashboard Pipelines **Plugins** Nodes Tools

Created Plugins

Create plugin

Name	Status
Rotation Augmentation	Ready to use
Archive Data Egest	Ready to use
Bucket Data Ingest Ingest data from bucket	Ready to use
Adapter	Ready to use

Click on a plugin to view the plugin versions, and the details of each version. Here you can also create a new version of that plugin.

**SIEMENS** MLFM creator@siemens.com

[Dashboard](#) [Pipelines](#) [Plugins](#) [Nodes](#) [Tools](#)

**Bucket Data Ingest** [+ Create version](#)

Pipeline versions

1.0


2.1

**Version 2.1**

Description

Ingest data from bucket

Image URL

10.43.169.85:5000/bucket\_data\_ingest:50e226be-5c34-4dd9-a68e-643076e525d9 

Status

Ready to use

Created On

Mar 24, 2022, 2:30:00 PM

Configuration Schema

[<>](#)

Created By

Workflow Creator

#### 2.2.3.2. Create new plugin

To import a plugin into MLFM, you must have the URL of the plugin's container image.

Note: to build the plugin's container image, you need to use "MLFM SDK" and "MLFM CLI".

When you have the URL of the plugin's container image, go to the "Plugins" page. Click on the "Create plugin" button in the top-right corner, and a dialog will appear.

Enter the plugin's details, like name, description, and image URL, then click "Create".

The screenshot shows the Siemens MLFM interface with a 'Create Plugin' modal open. The modal contains the following fields and options:

- Plugin Name \***: A text input field.
- Plugin Description \***: A text area with a slash icon at the bottom right.
- Select Node Type \***: A dropdown menu.
- Version**: A text input field containing '1.0'.
- Image URL \***: A text input field.
- Needs Credentials?**: A checkbox.
- Create** and **Cancel** buttons at the bottom right.

In the background, the 'Created Plugins' section is visible, listing:

- Rotation Augmentation**
- Archive Data Egest**
- Bucket Data Ingest** (with subtext 'Ingest data from bucket')
- Adapter**

The top navigation bar includes 'Dashboard', 'Pipelines', 'Plugins' (active), 'Nodes', and 'Tools'. The user profile 'creator@siemens.com' is in the top right.

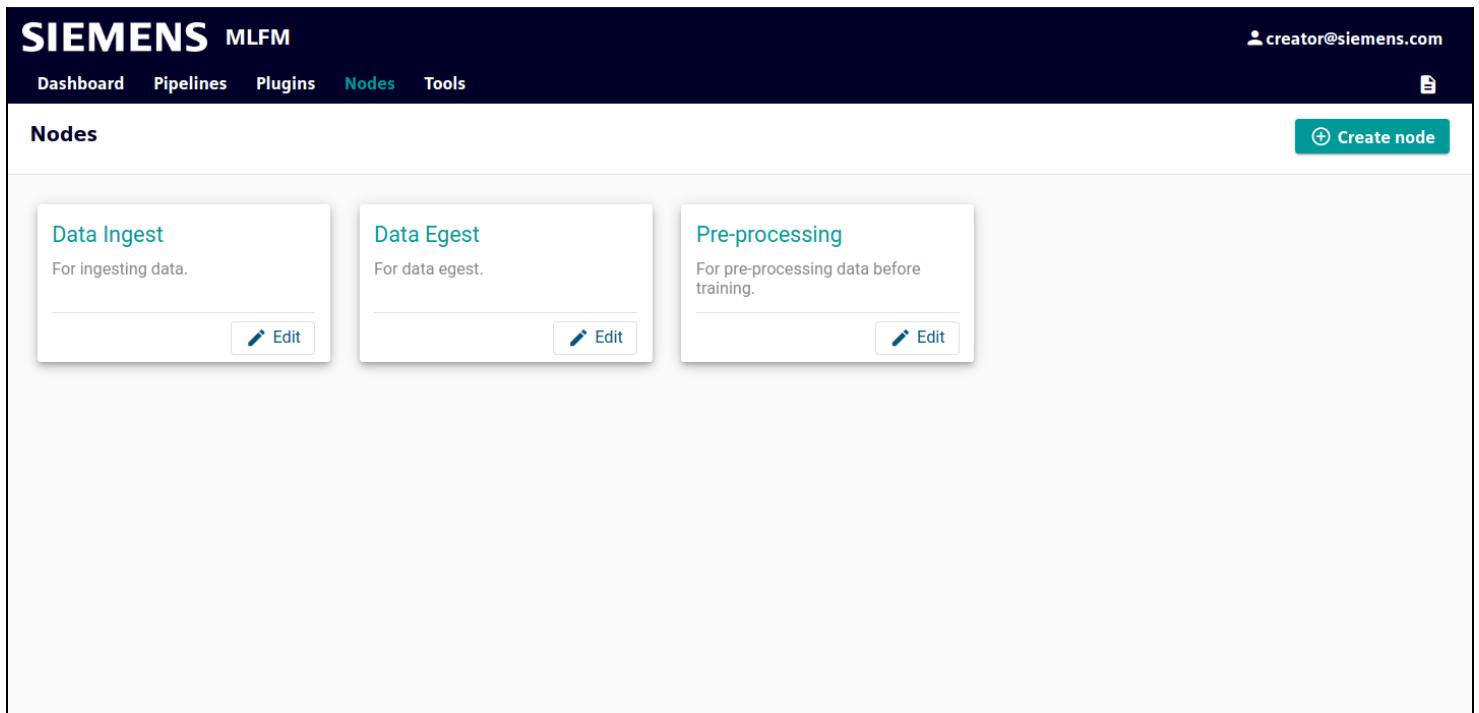
The plugin will be imported into MLFM, and once it's ready, it can be used when creating a new pipeline.

#### 2.2.4. Nodes Page

The node in MLFM means a plugin type, so each plugin must have a node.

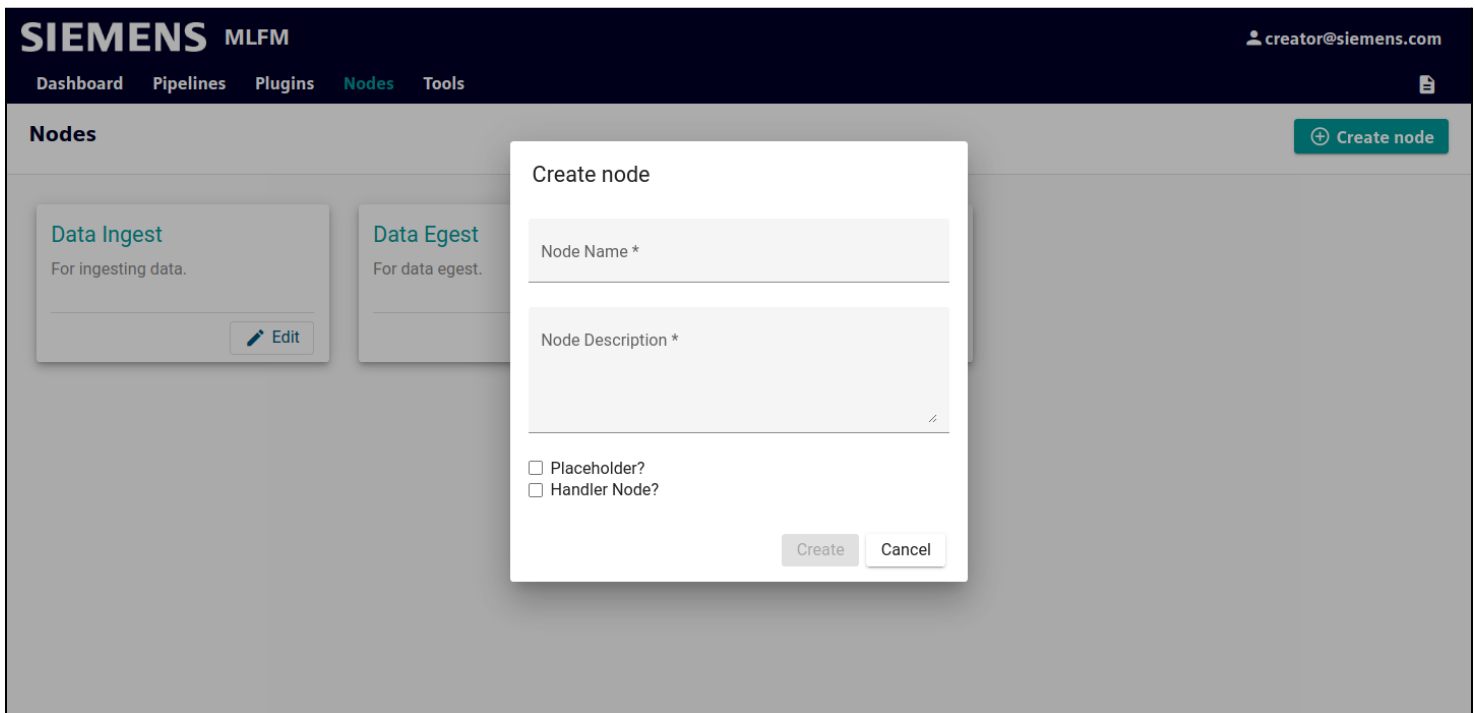
### 2.2.4.1. Nodes dashboard

Nodes dashboard contains all created plugin types (nodes) with the ability to edit them, and add new nodes.



#### 2.2.4.2. Create new node

To create a new node you have to provide node details to the details form which will appear by clicking on the “Create node” button.



The screenshot shows the Siemens MLFM interface. At the top, there is a dark blue header with the 'SIEMENS MLFM' logo on the left and a user profile 'creator@siemens.com' on the right. Below the header is a navigation bar with links: 'Dashboard', 'Pipelines', 'Plugins', 'Nodes' (highlighted in blue), and 'Tools'. The main content area is titled 'Nodes' and contains two cards: 'Data Ingest' (For ingesting data.) and 'Data Egest' (For data egest.). A green '+ Create node' button is located in the top right corner of the main area. A modal window titled 'Create node' is open in the center. It contains two text input fields: 'Node Name \*' and 'Node Description \*'. Below these fields are two checkboxes: 'Placeholder?' and 'Handler Node?'. At the bottom of the modal are two buttons: 'Create' and 'Cancel'.

Once created, you can create plugins under this node.

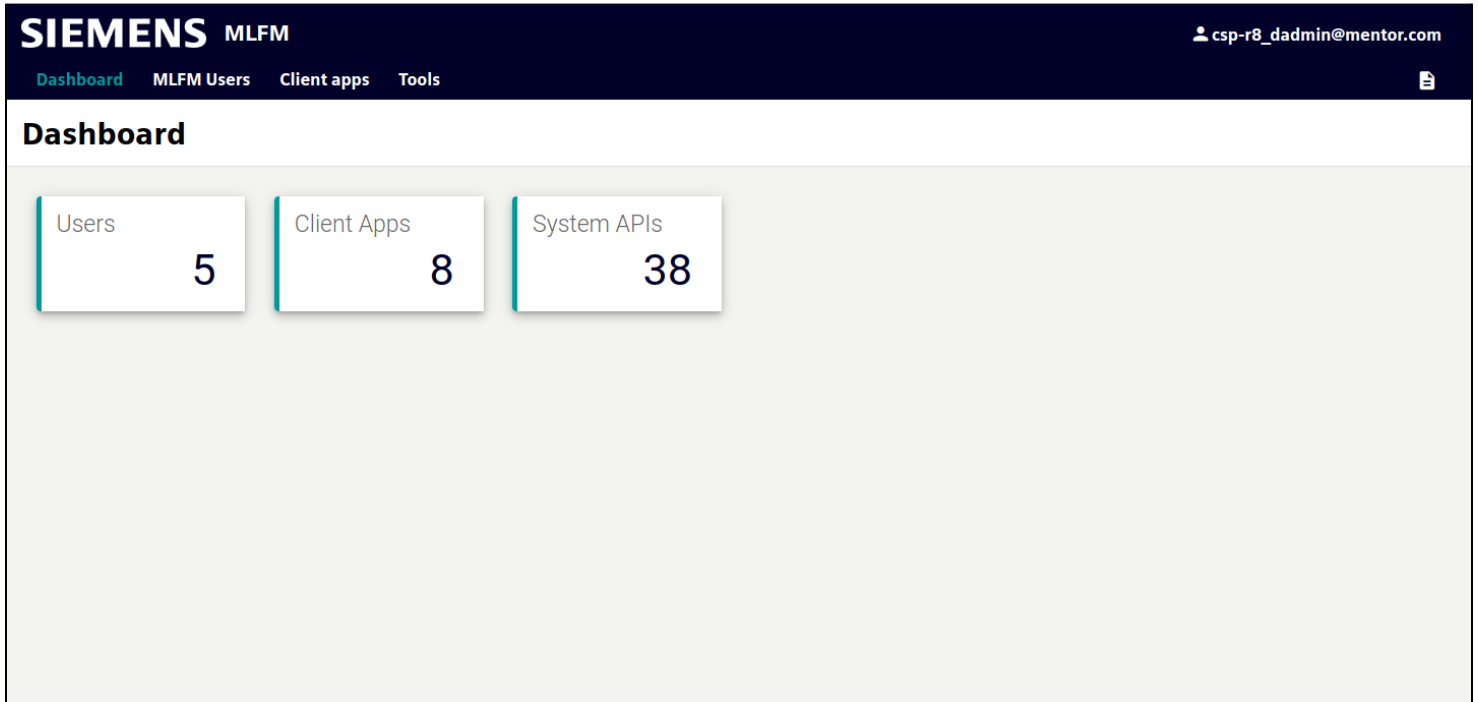
#### 2.2.5. Documentation Page

The last page is the ‘Documentation’ page, and it contains documentation about MLFM and functionalities that the workflow creator can use for guidance or to check steps for a specific task.

## 2.3. Admin User

### 2.3.1. Dashboard Page

Contains different widgets to show some statistics about system users, APIs and client apps. Also a navigation bar to navigate to the user management page, client apps page, and documentation page.



### 2.3.2. User Management Page

#### 2.3.2.1 User Management Board

The user details table shows the created users, their emails and status. Also the admin user is able to add new users to the system by clicking on the create new user button.

**SIEMENS MLFM**csp-r8\_dadmin@mentor.com

DashboardMLFM UsersClient appsTools

**MLFM Users**+ Add user

Name	Email	Status	Creation Date
dadmin	csp-r8_dadmin@mentor.com	active	
m3-basic_user	basic@siemens.com	active	Sep 25, 2020
m3-datasetmanager	datasetmanager@siemens.com	active	Aug 23, 2021
m3-creator_user	creator@siemens.com	active	Sep 25, 2020
m3-documenter	documenter@siemens.com	active	Apr 22, 2021

### 2.3.2.2 Create new user

On clicking on the “Add user” button, there is a pop-up to enter user’s details (name, role, email, address and phone)

**SIEMENS MLFM**csp-r8\_dadmin@mentor.com

DashboardMLFM UsersClient appsTools

**MLFM Users**+ Add user

Add new user

First Name \*

Last Name \*

Email \*

Role \*▼

Address \*

Add

Cancel

Name	Email	Status	Creation Date
dadmin	csp-r8_dadmin@mentor.com	active	
m3-basic_user	basic@siemens.com	active	Sep 25, 2020
m3-datasetmanager	datasetmanager@siemens.com	active	Aug 23, 2021
m3-creator_user	creator@siemens.com	active	Sep 25, 2020
m3-documenter	documenter@siemens.com	active	Apr 22, 2021



By filling the form and clicking on the “Add” button, a new user will be created and added to the users table.

2.3.3. Client Apps Page

2.3.3.1 Client Apps Board

The client apps details table shows the created client apps, their info and URI. Also the admin user is able to add/create new client apps by clicking on the “Add client app” button.

SIEMENS MLFM

csp-r8\_dadmin@mentor.com

DashboardMLFM UsersClient appsTools

Client apps

+ Add client app

Name	Info	URI
Sample app	sample	http://example.com

### 2.3.3.2 Create new client app

On clicking on the “Add client app” button, there is a pop-up to enter the client app’s details (name, info and uri)

The screenshot shows the Siemens MLFM interface. The header is dark blue with the Siemens MLFM logo on the left and the user 'csp-r8\_dadmin@mentor.com' on the right. Below the header is a navigation bar with 'Dashboard', 'MLFM Users', 'Client apps' (highlighted in green), and 'Tools'. The main content area is titled 'Client apps' and features a table with one row: 'Sample app' (Name), 'sample' (Info), and 'http://example.com' (URI). An 'Add client app' button is in the top right corner.

Name	Info	URI
Sample app	sample	http://example.com

By filling the form and clicking on the save button, a new client app will be created and added to the client apps table.

### 2.3.3.3 Client app details

It is a page that is shown when the user clicks on a client app from the table. It contains a tab for general information about the created client app and its app and secret keys, and another tab for subscribed APIs and another tab for instructions on

how to use the created keys to integrate with MLFM.

SIEMENS MLFM

csp-r8\_dadmin@mentor.com

DashboardMLFM UsersClient appsTools

Sample app

Client apps > Sample app

Overview

Subscriptions

Help

Overview

App key

3c228038-2e8b-4178-b1fd-2ecf8bc0e

Secret key

.....

### 2.3.3.4 APIs Subscription

To add an API subscription to a client app, click on “Subscriptions” on the left side, then click on the “Add subscription” button in the top-right corner.

**SIEMENS** MLFMcsp-r8\_dadmin@mentor.com

DashboardMLFM UsersClient appsTools

**Sample app**  
Client apps > Sample app

Overview

Subscriptions

Help

Subscriptions

⊕ Add subscription

API name	Package	Method	Public URI	Start date
Get projects	Gold - Monthly	GET	/mlfm/v1/user/{userId}/projects	May 26, 2022, 2:14:00 PM
Add new project	Gold - Monthly	POST	/mlfm/v1/user/{userId}/project	May 26, 2022, 2:13:31 PM
Add new run	Gold - Monthly	POST	/mlfm/v1/experiment/{experimentId}/run	May 26, 2022, 2:13:43 PM

By clicking on that button a pop-up will appear with the available APIs that the user can subscribe to. The user will be able

to choose the required API and click on the save button.

The screenshot shows the Siemens MLFM dashboard. The top navigation bar includes 'Dashboard', 'MLFM Users', 'Client apps', and 'Tools'. The user is logged in as 'csp-r8\_dadmin@mentor.com'. The main content area is titled 'Sample app' and shows a 'Subscriptions' table. A modal window titled 'Add subscription' is open, displaying a list of subscription options. The modal has a close button in the top right corner and 'Add' and 'Cancel' buttons at the bottom.

**SIEMENS MLFM** csp-r8\_dadmin@mentor.com

Dashboard MLFM Users Client apps Tools

**Sample app**  
Client apps > Sample app

Overview Subscriptions Help

API name	Package
Get projects	Gold - Monthly
Add new project	Gold - Monthly
Add new run	Gold - Monthly

**Add subscription**

- Add artifact  
POST
- Add graph  
POST
- Add new experiment  
POST
- Add new node  
POST
- Add new project  
POST
- Add new run  
POST
- Configure and Deploy Pipeline  
POST
- Create new plugin

Add Cancel

**Subscriptions**

Start date
May 26, 2022, 2:14:00 PM
May 26, 2022, 2:13:31 PM
May 26, 2022, 2:13:43 PM

[+ Add subscription](#)

## 2.4. Documenter User

### 2.4.1. Dashboard Page

Contains a widget that shows some statistics about system documentation. Also a navigation bar to navigate to the user documentation page.



## 2.4.2. Documentation Page

### 2.4.2.1 Documentations List

It contains all system documentation. The user will be able to view the documentation and also has the ability to edit and create new documentation as well.

**SIEMENS** MLFM

documenter@siemens.com

Dashboard Documentation

Documentation

Create article

Articles

Introduction

Plugins

Select an article to view, or [create](#) a new article.

#### 2.4.2.2 Add new documentation

On clicking the “Create article” button, there is another page to enter the article’s title and content.

The content can be written in the “markdown” editor on the left side, and a live-preview is visible on the right side.

**SIEMENS** MLFM

documenter@siemens.com

[Dashboard](#) [Documentation](#)







### Create article

Documentation > Create article

✕ Discard

Save

Title \*

B I H      

1

When done, click “Save” to save the new article.