



# Data Flow Manager

## User Guide

# TABLE OF CONTENTS

- 1. Components of DFM**
- 2. Dashboard**
  - 2.1. Quick Insights
  - 2.2. Flow Metrics
- 3. Cluster**
  - 3.1. How to log in to a specific cluster?
  - 3.2. View node details of a cluster
  - 3.3. Perform different actions on the logged-in cluster
  - 3.4. How to add a new cluster?
  - 3.5. How to log out of a cluster?
  - 3.6. Use filters to sort the cluster list
- 4. Process Group**
  - 4.1. View process group details
  - 4.2. How to deploy a process group?
  - 4.3. How to upgrade a process group?
  - 4.4. How to schedule the deployment of a process group?
  - 4.5. How to schedule the upgrade of a process group?
  - 4.6. Edit parameter contexts and variables of a process group while deploying or upgrading it
  - 4.7. Configure local controller services for a process group while deploying or upgrading it
  - 4.8. Attach an existing external controller service to a process group while deploying or upgrading it
  - 4.9. Add a new external controller service to a process group while deploying or upgrading it
- 5. Schedule Deployment**
  - 5.1. Filter the list of process groups scheduled for deployment
- 6. User Management**
- 7. Roles and Permissions**
  - 7.1. Add a new user role
  - 7.2. Edit a user role

- 7.3. Delete a user role
- 7.4. DFM Role Management
- 7.5. Cluster Management
- 8. Activity History**
  - 8.1. Filter the activity history based on the entity
  - 8.2. Filter the activity history based on the event
  - 8.3. Filter the activity history based on the status
- 9. LDAP Configuration**
- 10. Controller Service**
  - 10.1. Add a new controller service
  - 10.2. Update the properties of an existing controller service
  - 10.3. Enable or Disable a controller service
- 11. Settings**

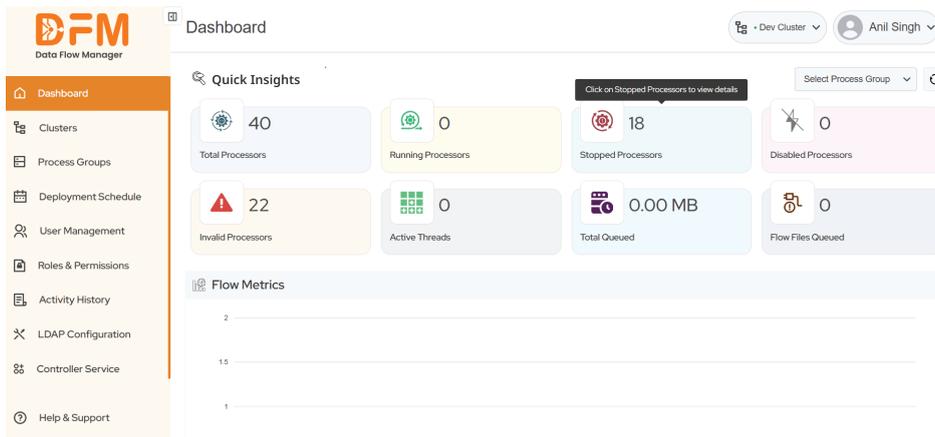
## 1. Components of Data Flow

Data Flow Manager consists of the following components:

- **Dashboard:** The home page showing system insights.
- **Clusters:** Manage and monitor clusters.
- **Process Groups:** Organize and manage process groups.
- **Deployment Schedule:** Manage scheduling for deployment workflows.
- **User Management:** Handle user access and permissions.
- **Roles & Permissions:** Configure roles and permissions for users.
- **Activity History:** View logs or history of system activities.
- **LDAP Configuration:** Manage LDAP integration for authentication.
- **Controller Service:** Configure and manage controller services.

### Header Section

- **Cluster Name:** Displays the current cluster (e.g., "Dev Cluster") the user is working on.
- **User Information:** Displays the logged-in user.



## 2. Dashboard

The dashboard provides an overview of the system's operational state and allows navigation for detailed configuration and management.

### 2.1. Quick Insights

- **Total Processors:** The total number of processors configured in the system.
- **Running Processors:** The number of processors actively running.
- **Stopped Processors:** The number of processors currently stopped. You can click to view detailed information about them.
- **Disabled Processors:** The processors that are disabled and not operational.

- **Invalid Processors:** Processors that are invalid, likely due to incorrect configuration or missing resources.
- **Active Threads:** The number of active threads currently in use.
- **Total Queued:** The total size of data (in MB) queued in the processors.
- **Flow Files Queued:** The total number of flow files queued in the system.

## 2.2. Flow Metrics

A visual graph (not fully displayed in this section) likely shows metrics related to data flow over time.

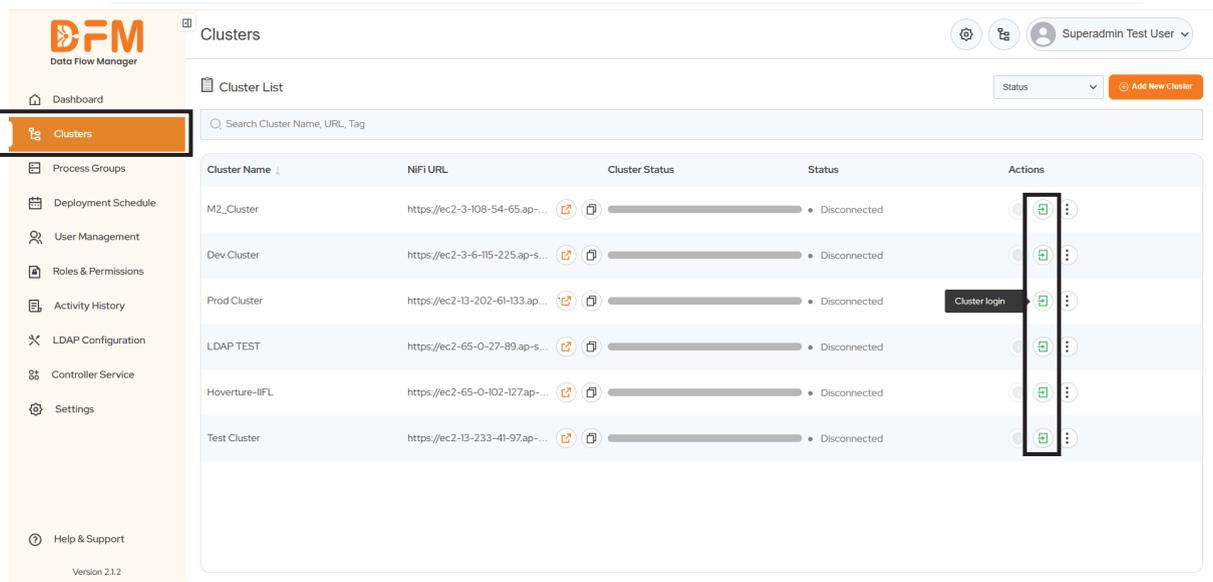
## 3. Clusters

Under the **Clusters** tab, you'll find a list of clusters from your NiFi instance. To deploy or upgrade data flows, you first need to log in to the respective clusters. However, if the required cluster is not available in the cluster list, you need to onboard it first.

It is important to note that if a user has only view access to the **Clusters** tab, they can only view the clusters. Users with write access can add, delete, or edit clusters.

### 3.1. How to log in to a specific cluster?

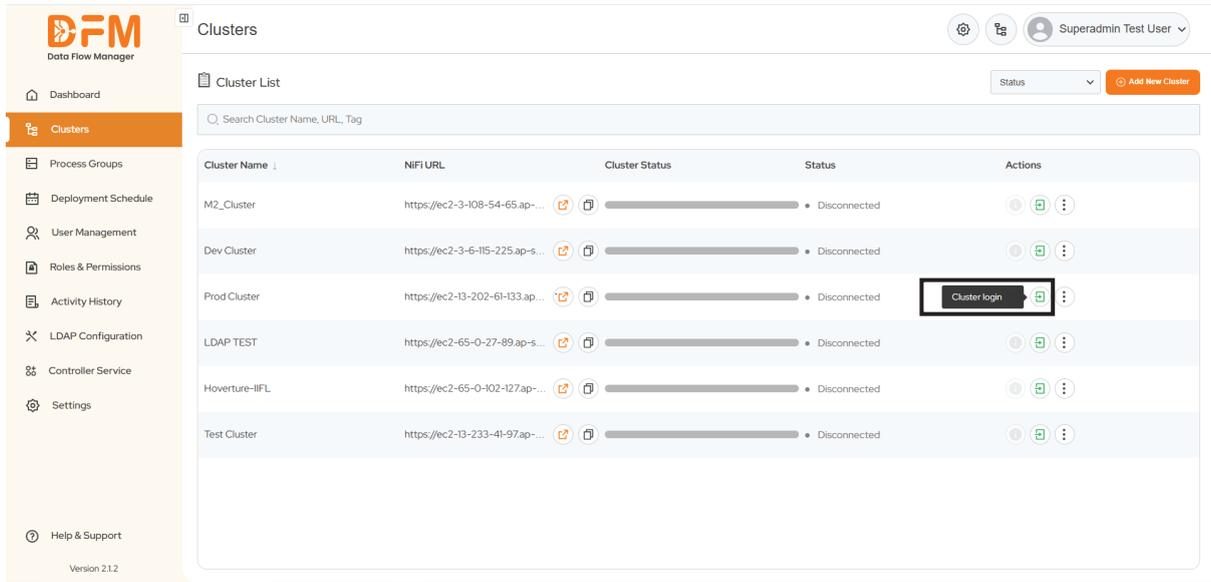
- Click on the **Clusters** tab to view the list of clusters.
- On the right side of each cluster, you'll find a green arrow indicating the option to log in to that specific cluster.



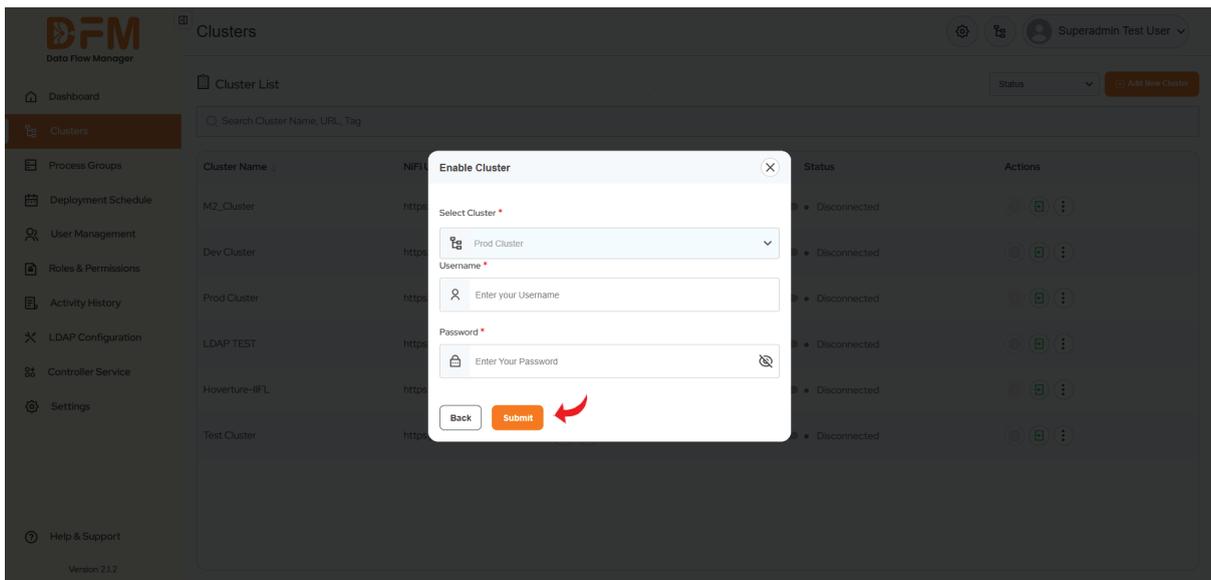
The screenshot displays the 'Clusters' tab in the Data Flow Manager interface. The 'Cluster List' table contains the following data:

Cluster Name	NiFi URL	Cluster Status	Status	Actions
M2_Cluster	https://ec2-3-108-54-65.ap-...		Disconnected	
Dev Cluster	https://ec2-3-6-115-225.ap-s-...		Disconnected	
Prod Cluster	https://ec2-13-202-61-133.ap-...		Disconnected	
LDAP-TEST	https://ec2-65-0-27-89.ap-s-...		Disconnected	
Hoverture-HFL	https://ec2-65-0-102-127.ap-...		Disconnected	
Test Cluster	https://ec2-13-233-41-97.ap-...		Disconnected	

- Click the green arrow for the cluster you need to log in to. Here, we will log in to the **ProdCluster**.



- Enter the valid credentials and click **Submit**.



We've successfully logged into the cluster. The **Cluster Status** has changed to green.

**Clusters**

Cluster List

Search Cluster Name, URL, Tag

Cluster Name	NIFI URL	Cluster Status	Status	Actions
M2_Cluster	https://ec2-3-108-54-65.a...		Disconnected	
Dev Cluster	https://ec2-3-6-115-225.ap...		Disconnected	
<b>Prod Cluster</b>	https://ec2-13-202-61-133.a...		Connected	
LDAP TEST	https://ec2-65-0-27-89.ap...		Disconnected	
Hoverture-IIFL	https://ec2-65-0-102-127.a...		Disconnected	
Test Cluster	https://ec2-13-233-41-97a...		Disconnected	

You can log in to as many clusters as you want.

### 3.2. View node details of a cluster

Once you log into the cluster, check the number of total nodes and connected nodes. Under the **Actions** tab, click the info icon to view the node details of the cluster.

**Clusters**

Cluster List

Search Cluster Name, URL, Tag

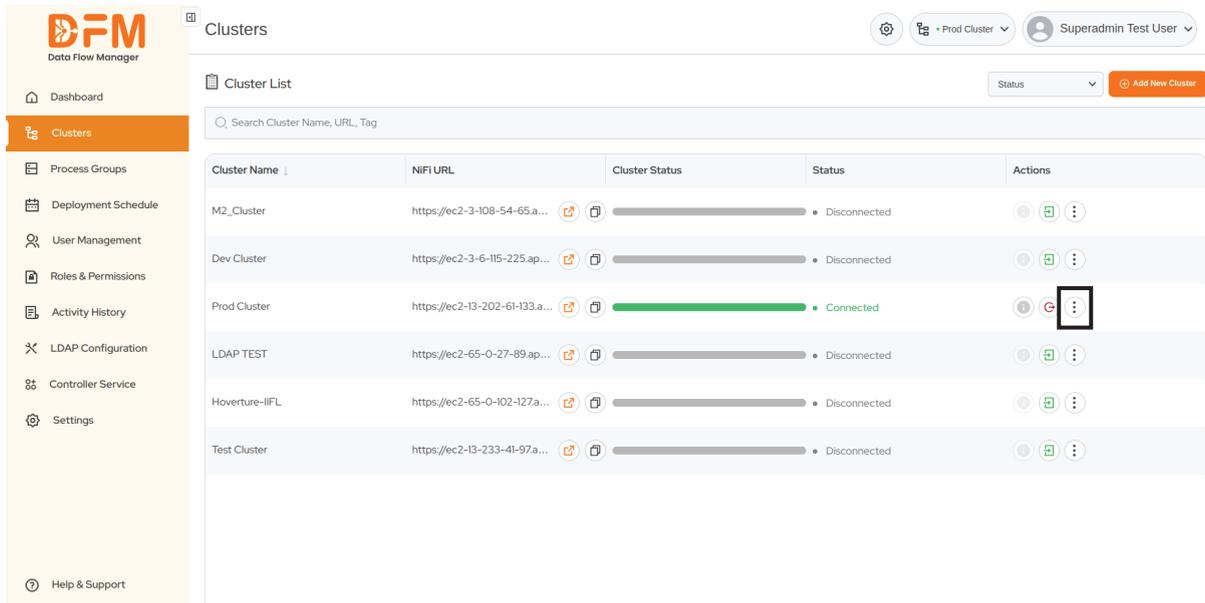
Cluster Name	NIFI URL	Cluster Status	Status	Actions
M2_Cluster	https://ec2-3-108-54-65.a...		Disconnected	
Prod Cluster	https://ec2-13-202-61-133.a...		Connected	
LDAP TEST	https://ec2-65-0-27-89.ap...		Disconnected	
Hoverture-IIFL	https://ec2-65-0-102-127.a...		Disconnected	
DEV cluster	https://ec2-3-6-115-225.ap...		Disconnected	
Test Cluster	https://ec2-13-233-41-97a...		Disconnected	

**Cluster Details**

- Connected Nodes: 1
- Total Nodes: 1

### 3.3. Perform different actions on the logged-in cluster

Once you're logged into a cluster, you can perform various operations, such as viewing and editing cluster details and deactivating the cluster. Find these options from the vertical ellipsis present on the right side of the cluster.



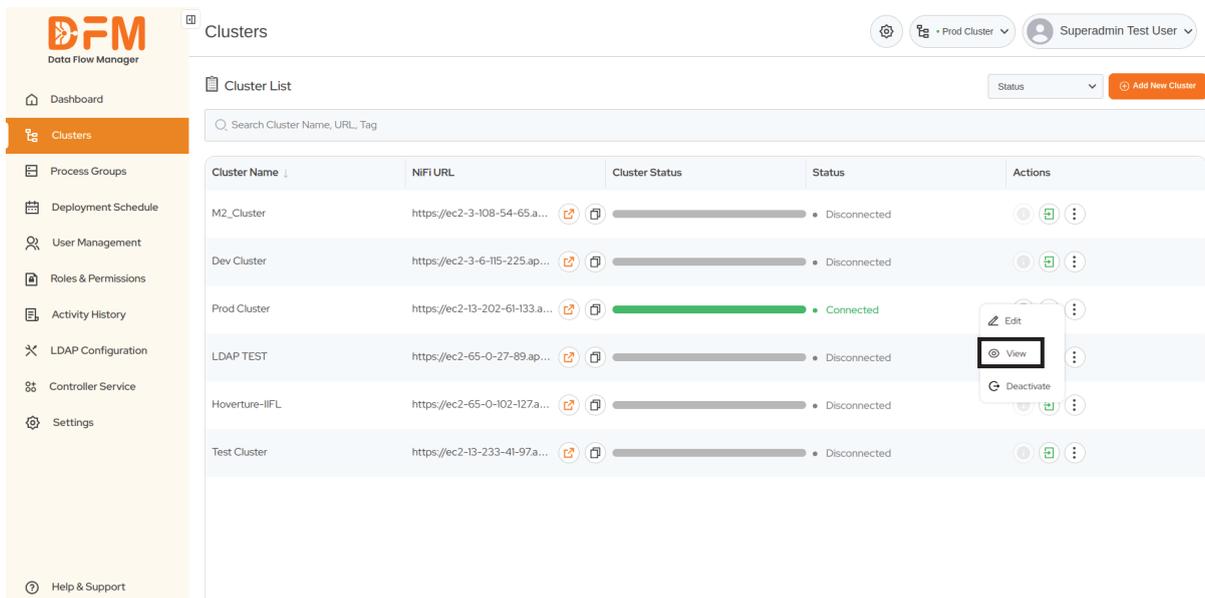
**Note:** Deactivating the cluster refers to soft delete. It will remove your cluster from the list, but underlying data and configurations remain intact.

Let us now see how to perform different actions on the cluster.

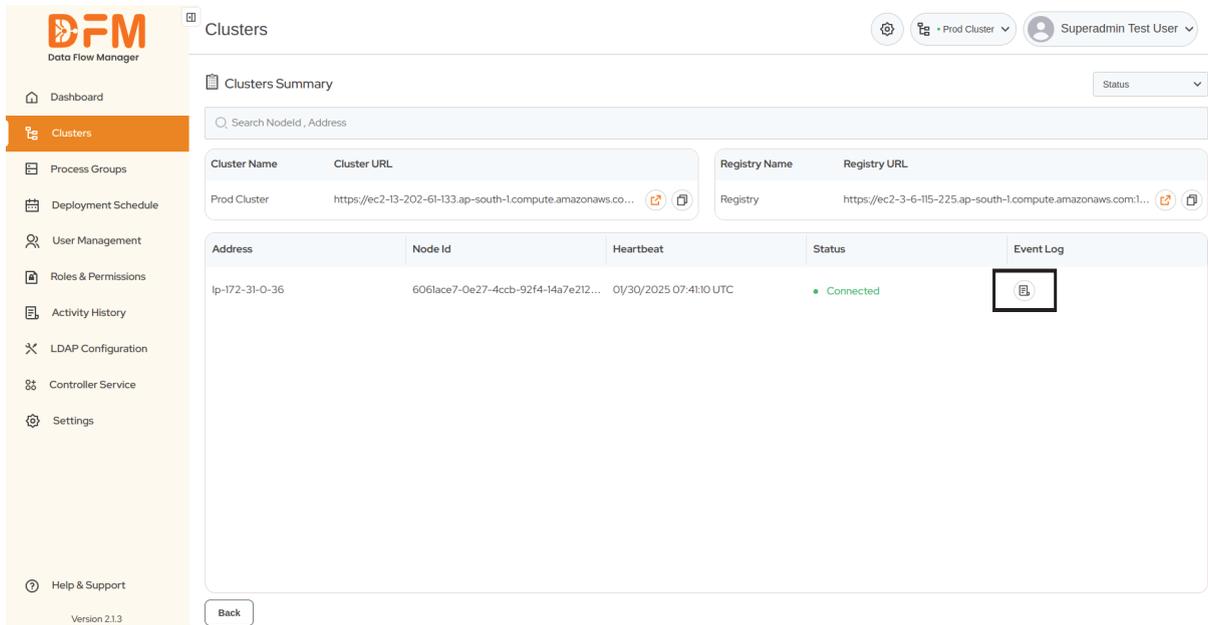
### a. How to view the cluster details?

To view the cluster details:

- Click on the vertical ellipsis. Select the **View** option.

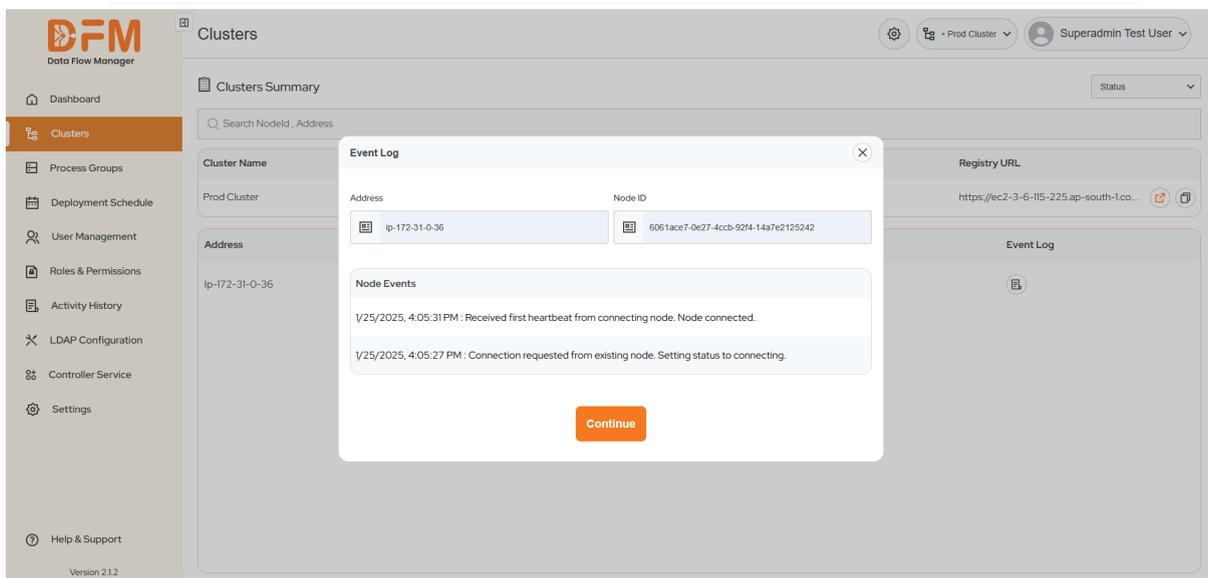


- You will find the details of the clusters, such as the cluster name, cluster URL, registry name, registry URL, address, node ID, heartbeat, status, and event log.



The screenshot shows the 'Clusters' page in the Data Flow Manager (DFM) interface. The page title is 'Clusters' and the user is 'Superadmin Test User'. The main content area is titled 'Clusters Summary' and contains a search bar for 'NodeId, Address'. Below the search bar, there are two summary cards: 'Cluster Name' (Prod Cluster) and 'Cluster URL' (https://ec2-13-202-61-133.ap-south-1.compute.amazonaws.co...), and 'Registry Name' (Registry) and 'Registry URL' (https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com.1...). Below these cards is a table with columns: Address, Node Id, Heartbeat, Status, and Event Log. The first row shows the node 'ip-172-31-0-36' with Node ID '6061ace7-0e27-4ccb-92f4-14a7e212...' and a heartbeat of '01/30/2025 07:41:10 UTC'. The status is 'Connected'. A box highlights the event log icon in the 'Event Log' column for this node.

- To access the event log, click on the icon mentioned. You'll get a list of node events with address and node ID.



The screenshot shows the 'Clusters' page with an 'Event Log' modal window open. The modal window has a title 'Event Log' and a close button. It displays the 'Cluster Name' (Prod Cluster) and 'Node ID' (6061ace7-0e27-4ccb-92f4-14a7e2125242). Below this, there are two event entries:
 

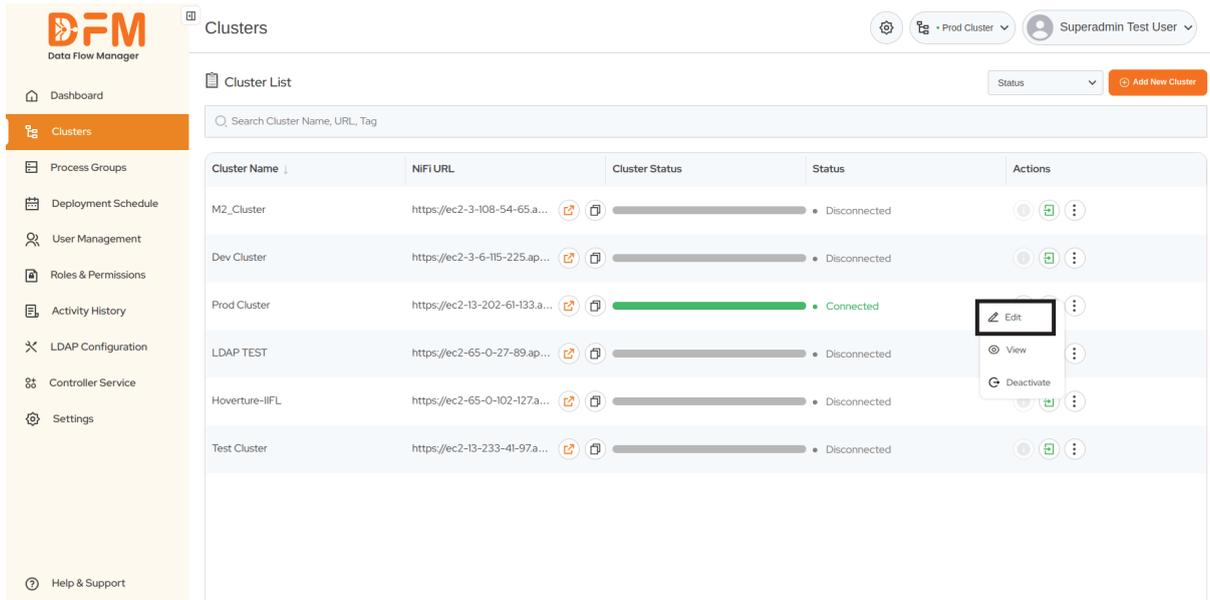
- 1/25/2025, 4:05:31 PM : Received first heartbeat from connecting node. Node connected.
- 1/25/2025, 4:05:27 PM : Connection requested from existing node. Setting status to connecting.

 At the bottom of the modal is a 'Continue' button.

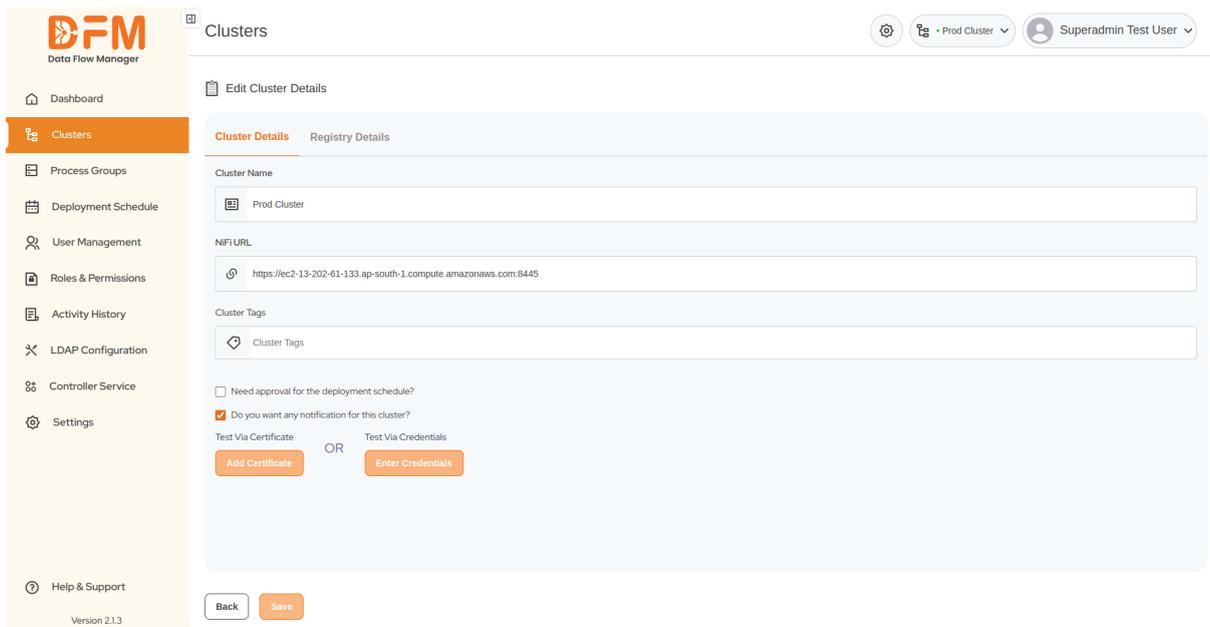
## b. How to edit the cluster details?

To edit the cluster details:

- From the vertical ellipsis menu present on the right side of the cluster, click **Edit**.



- You can modify the cluster and registry details.

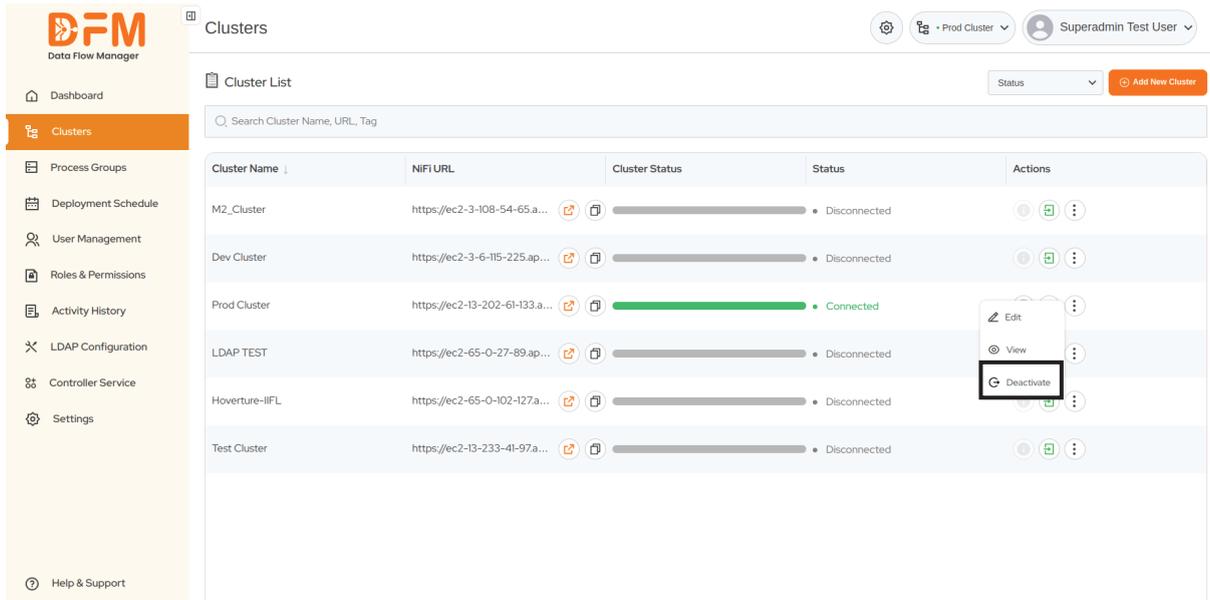


- Once done, click **Save** and continue.

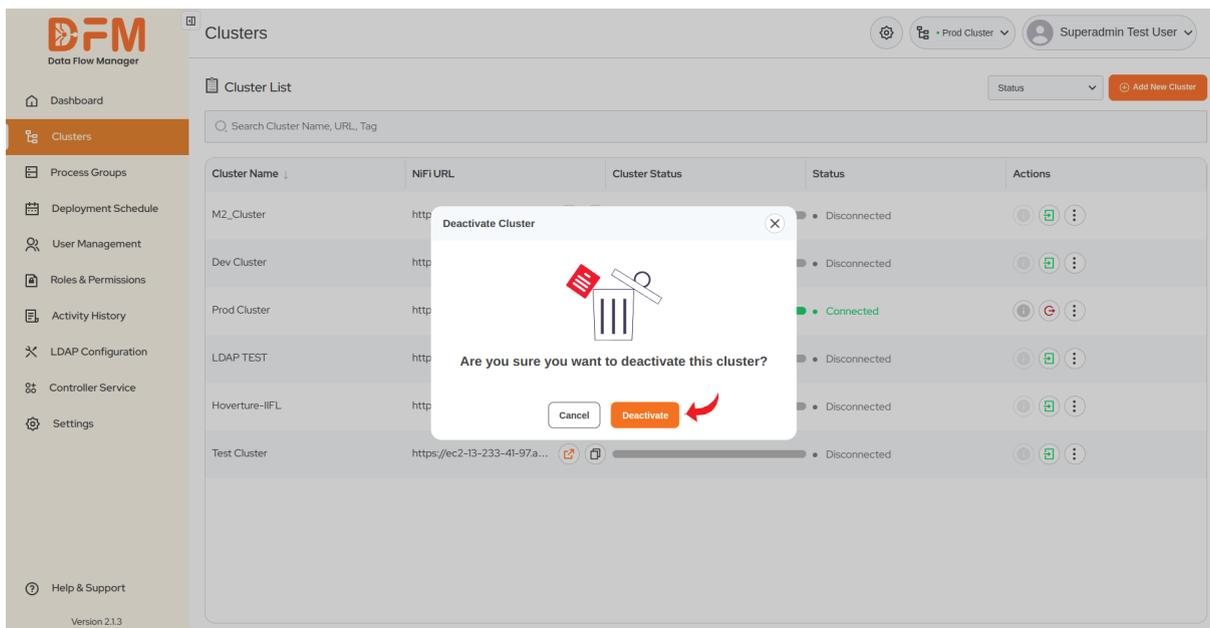
### c. How to deactivate the cluster?

To activate the cluster:

- Click on the vertical ellipsis menu of that cluster and choose **Deactivate**.



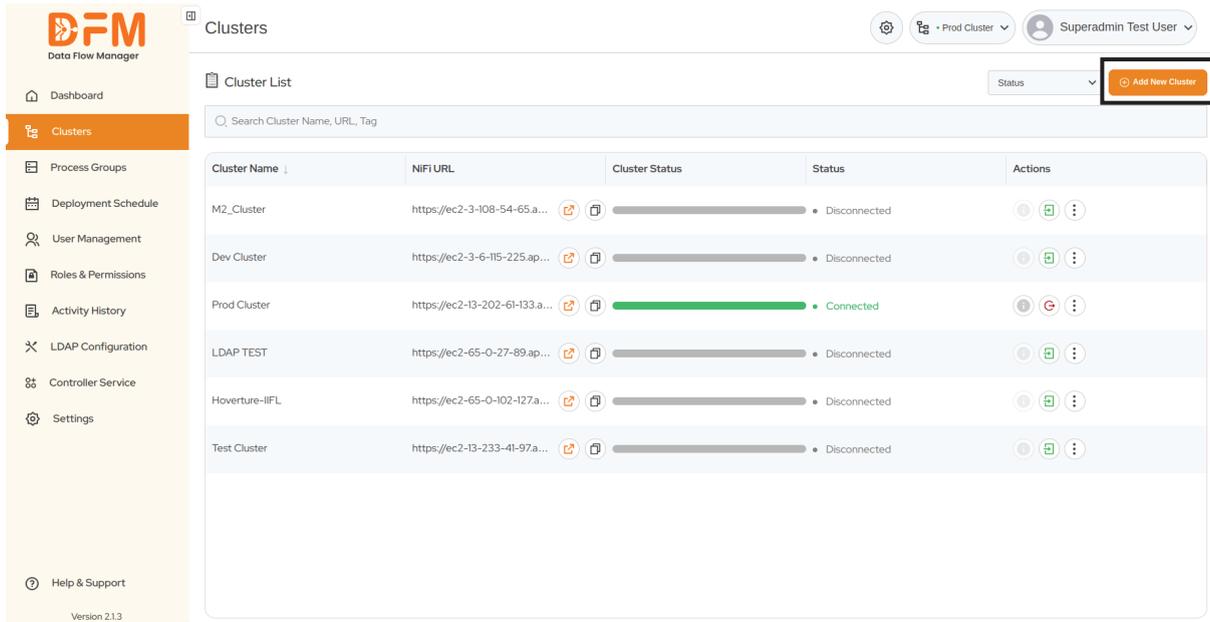
- Confirm whether you want to deactivate by clicking **Deactivate**.



### 3.4. How to add a new cluster?

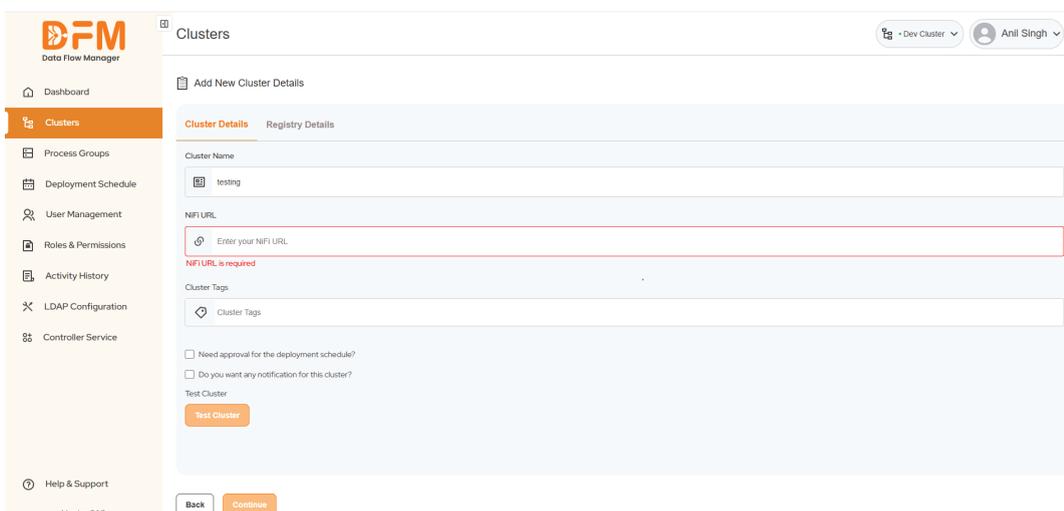
You can add as many clusters as you want from your NiFi instance to Data Flow Manager. To add a new cluster:

- Go to the **Clusters** tab.
- Click the button '**Add New Cluster**' from the top-right corner.



The screenshot shows the 'Clusters' page in the Data Flow Manager. The left sidebar contains navigation options: Dashboard, Clusters (selected), Process Groups, Deployment Schedule, User Management, Roles & Permissions, Activity History, LDAP Configuration, Controller Service, and Settings. The main content area displays a 'Cluster List' table with columns for Cluster Name, NiFi URL, Cluster Status, Status, and Actions. The table lists several clusters, including 'M2\_Cluster', 'Dev Cluster', 'Prod Cluster' (which is 'Connected'), 'LDAP TEST', 'Hoverture-IIFL', and 'Test Cluster'. A red box highlights the 'Add New Cluster' button in the top right corner.

- The first step is to enter the cluster details as follows:
  - **Cluster Name:** Enter the name of the cluster in this Input field.
  - **NiFi URL:** Enter the NiFi URL in this input field.
  - **Cluster Type:** Add cluster tags.
  - **Checkbox for approval of scheduled deployment:** This checkbox specifies if approval is required before the scheduled deployment is finalized. If selected, the scheduled deployment will not proceed until an authorized user approves it.
  - **Checkbox to receive notifications for the cluster:** This checkbox allows you to opt in to receive notifications related to the cluster you are onboarding. This could include alerts, status updates, and other relevant information about the cluster's operation. Enable this checkbox to receive cluster notifications; leave it unchecked to opt-out.
  - **Add Certificate:** You can test the cluster by adding certificates or credentials.

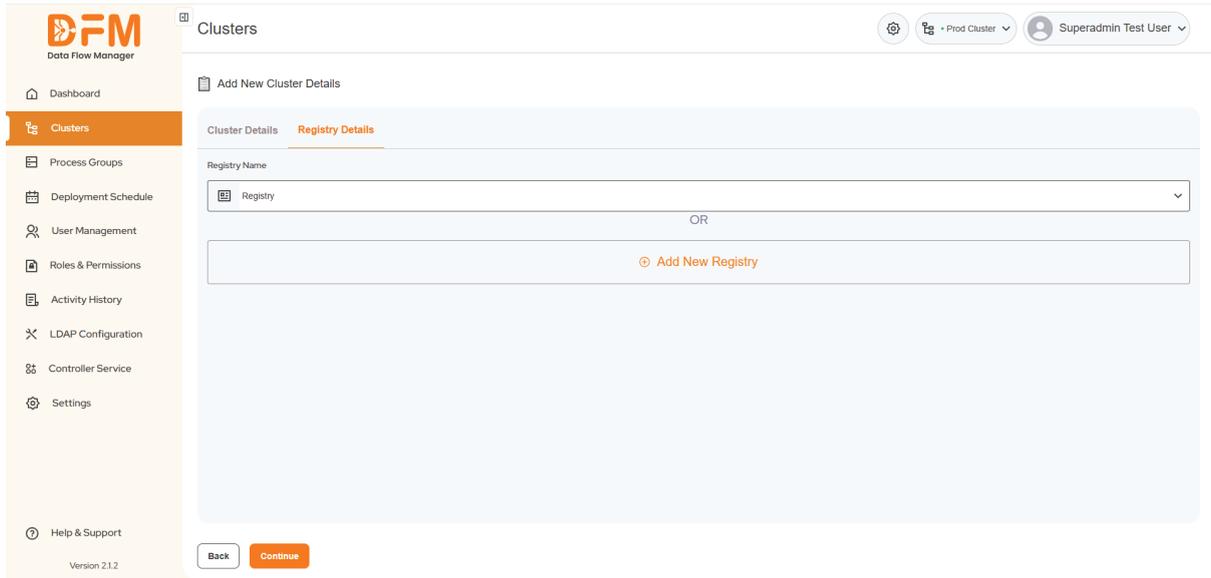


The screenshot shows the 'Add New Cluster Details' form in the Data Flow Manager. The left sidebar is the same as in the previous screenshot. The main content area is titled 'Add New Cluster Details' and has two tabs: 'Cluster Details' (selected) and 'Registry Details'. The form includes the following fields and options:
 

- Cluster Name:** A text input field containing the value 'testing'.
- NiFi URL:** A text input field with a red border and a red error message below it: 'NiFi URL is required'.
- Cluster Tags:** A text input field containing the value 'Cluster Tags'.
- Need approval for the deployment schedule?
- Do you want any notification for this cluster?
- Test Cluster:** A section with a 'Test Cluster' button.

 At the bottom of the form are 'Back' and 'Continue' buttons. The top right of the page shows the user 'Anil Singh' and the cluster 'Dev Cluster'.

- After validation, your cluster is added to the system. The successful onboarding of the cluster displays a confirmation dialog or success message.
- Click on "**Continue**" to proceed with registry details.



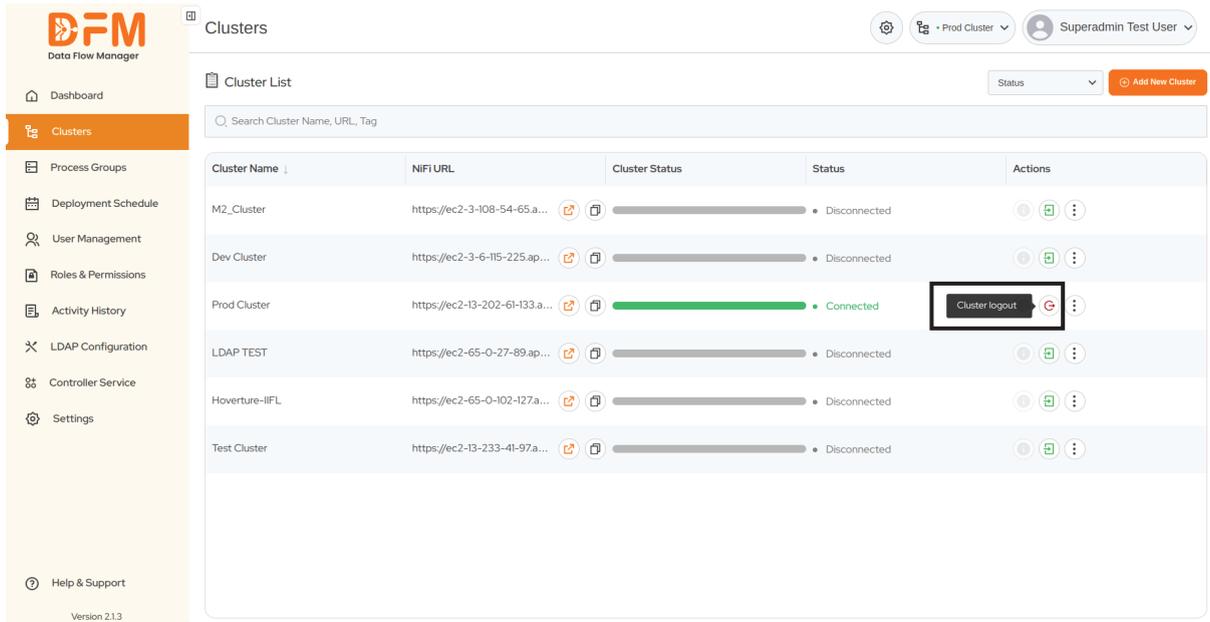
- You can either select an existing registry or add a new registry. Once you've entered the required information, click on **Save** to save the cluster details.

**Note:** You can easily edit the cluster and registry details even after onboarding it to Data Flow Manager.

### 3.5. How to log out of a cluster?

Logging out of a cluster is as simple as logging in.

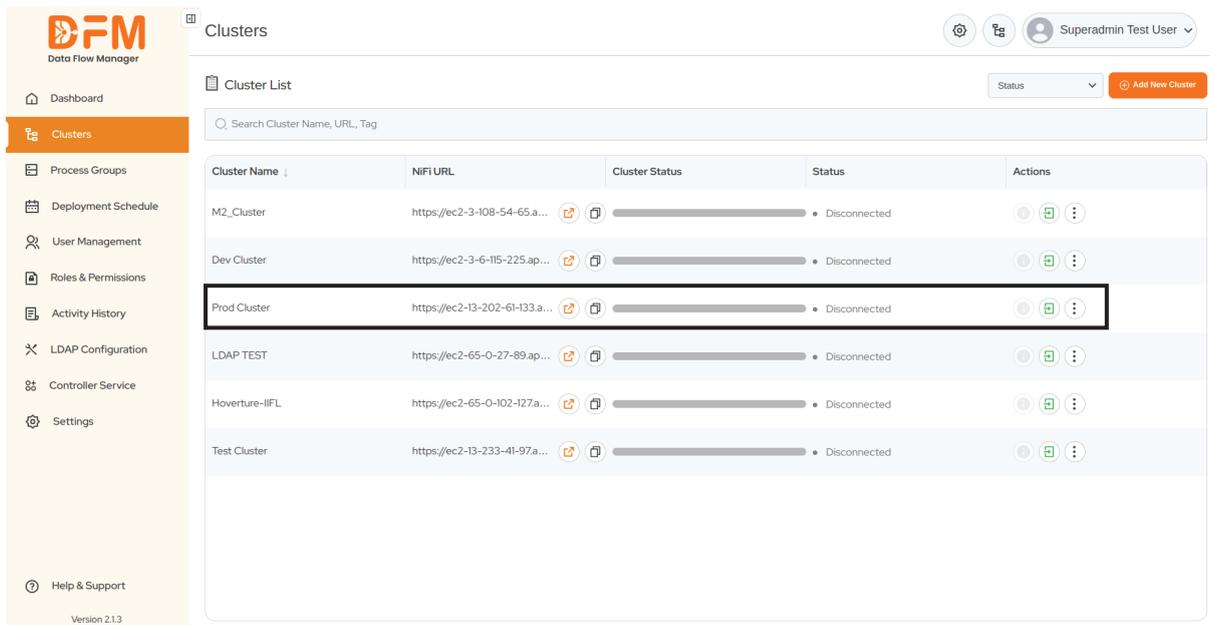
- Go to the **Clusters** tab.
- Navigate to the cluster from which you want to log off.
- Under the **Actions** column, click the second icon with a red color to log out from the cluster.



The screenshot shows the 'Clusters' page in Data Flow Manager. The 'Prod Cluster' row is highlighted, and the 'Cluster logout' button in the 'Actions' column is circled in black. The table below shows the status of various clusters.

Cluster Name	NIFI URL	Cluster Status	Status	Actions
M2_Cluster	https://ec2-3-108-54-65.a...		Disconnected	
Dev Cluster	https://ec2-3-6-115-225.ap...		Disconnected	
Prod Cluster	https://ec2-13-202-61-133.a...		Connected	<b>Cluster logout</b>
LDAP TEST	https://ec2-65-0-27-89.ap...		Disconnected	
Hoverture-IIFL	https://ec2-65-0-102-127.a...		Disconnected	
Test Cluster	https://ec2-13-233-41-97.a...		Disconnected	

- Once you click it, you get a message displaying **“Your cluster is now disconnected”**.



The screenshot shows the 'Clusters' page in Data Flow Manager. The 'Prod Cluster' row is highlighted with a black box. The table below shows the status of various clusters.

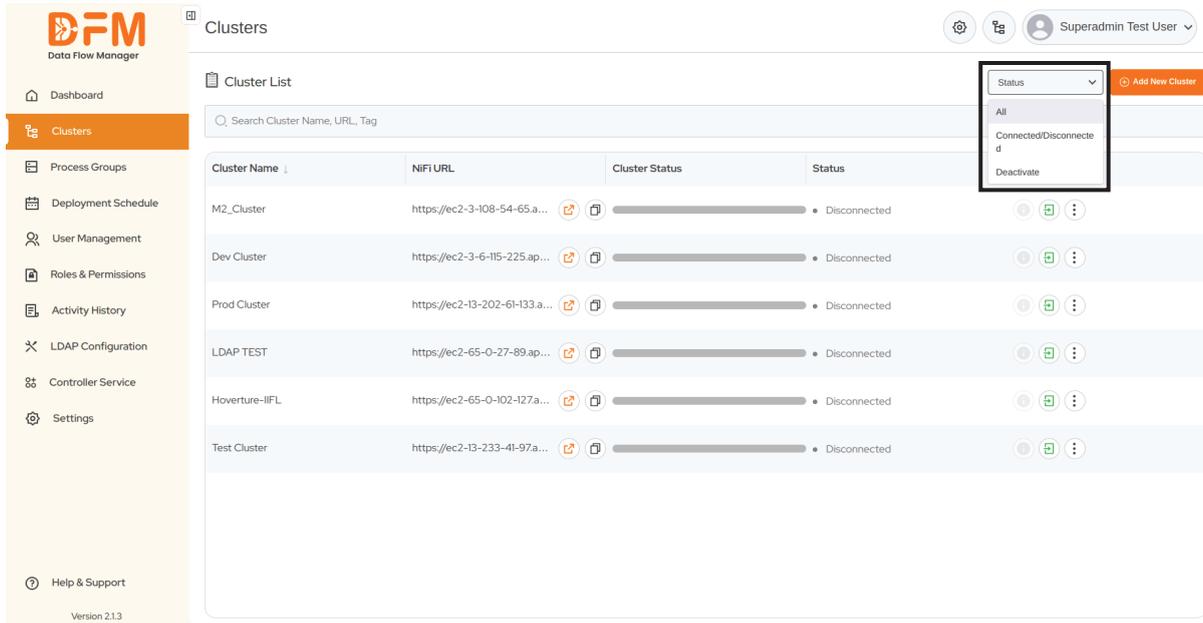
Cluster Name	NIFI URL	Cluster Status	Status	Actions
M2_Cluster	https://ec2-3-108-54-65.a...		Disconnected	
Dev Cluster	https://ec2-3-6-115-225.ap...		Disconnected	
Prod Cluster	https://ec2-13-202-61-133.a...		Disconnected	
LDAP TEST	https://ec2-65-0-27-89.ap...		Disconnected	
Hoverture-IIFL	https://ec2-65-0-102-127.a...		Disconnected	
Test Cluster	https://ec2-13-233-41-97.a...		Disconnected	

### 3.6. Use filters to sort the cluster list

It becomes overwhelming to find a particular cluster from a list of many. You can filter this list based on the cluster status - **Connected/Disconnected and Deactivate**.

To filter the cluster list,

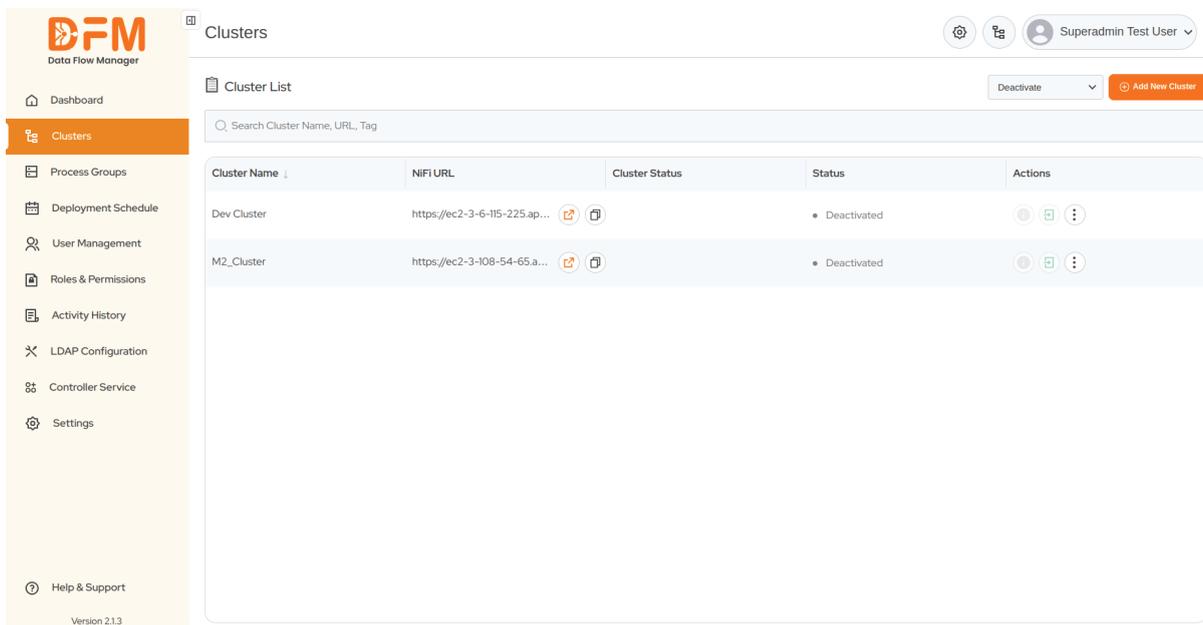
- Go to the dropdown with the name **Status** in the top-right corner.



The screenshot shows the DFM Clusters page. A dropdown menu is open, showing options: All, Connected/Disconnected, and Deactivate. The table below lists several clusters, all with a status of 'Disconnected'.

Cluster Name	NIFI URL	Cluster Status	Status
M2_Cluster	https://ec2-3-108-54-65.a...	Disconnected	Disconnected
Dev Cluster	https://ec2-3-6-115-225.ap...	Disconnected	Disconnected
Prod Cluster	https://ec2-13-202-61-133.a...	Disconnected	Disconnected
LDAP TEST	https://ec2-65-0-27-89.ap...	Disconnected	Disconnected
Hoverture-IIFL	https://ec2-65-0-102-127.a...	Disconnected	Disconnected
Test_Cluster	https://ec2-13-233-41-97.a...	Disconnected	Disconnected

- Choose the status so that the list contains the clusters accordingly. If you choose **Deactivated**, the list will contain only deactivated clusters.



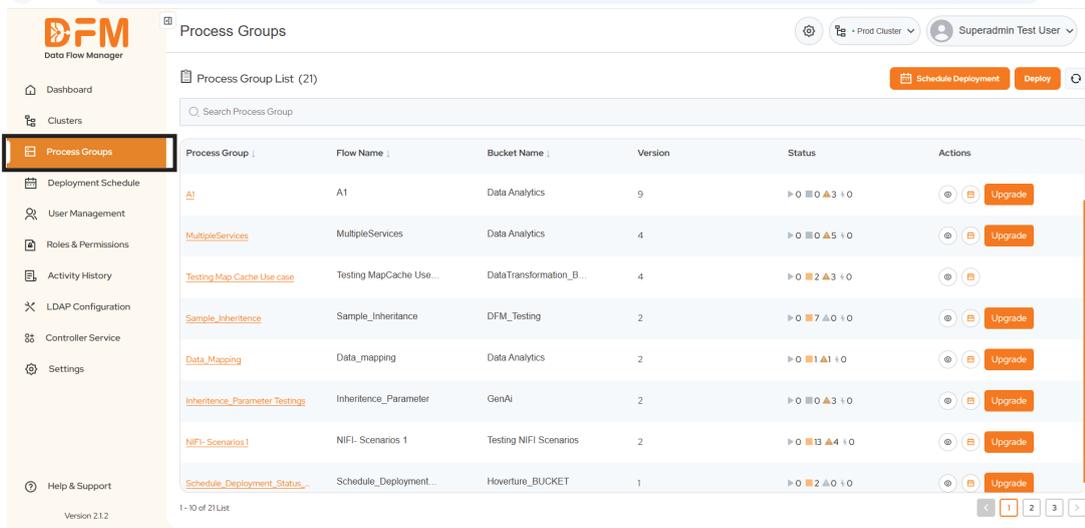
The screenshot shows the DFM Clusters page with the status filter set to 'Deactivated'. The table below lists only the deactivated clusters.

Cluster Name	NIFI URL	Cluster Status	Status	Actions
Dev Cluster	https://ec2-3-6-115-225.ap...	Deactivated	Deactivated	[Refresh] [Stop] [More]
M2_Cluster	https://ec2-3-108-54-65.a...	Deactivated	Deactivated	[Refresh] [Stop] [More]

## 4. Process Groups

The **Process Groups** tab lists all process groups in clusters you are currently logged in to. With the point-and-click interface, you can easily deploy & upgrade your

process groups instantly or schedule them in advance. This is possible only for users with write access to the **Process Groups** tab.



Process Group	Flow Name	Bucket Name	Version	Status	Actions
<a href="#">AI</a>	A1	Data Analytics	9	▶ 0 ■ 0 ▲ 3 1 0	👁️ ⚙️ Upgrade
<a href="#">MultipleServices</a>	MultipleServices	Data Analytics	4	▶ 0 ■ 0 ▲ 5 1 0	👁️ ⚙️ Upgrade
<a href="#">Testing Map Cache Use case</a>	Testing MapCache Use...	DataTransformation_B...	4	▶ 0 ■ 2 ▲ 3 1 0	👁️ ⚙️
<a href="#">Sample_Inheritance</a>	Sample_Inheritance	DFM_Testing	2	▶ 0 ■ 7 ▲ 0 1 0	👁️ ⚙️ Upgrade
<a href="#">Data_Mapping</a>	Data_mapping	Data Analytics	2	▶ 0 ■ 1 ▲ 1 1 0	👁️ ⚙️ Upgrade
<a href="#">Inheritance_Parameter Testings</a>	Inheritance_Parameter	GenAI	2	▶ 0 ■ 0 ▲ 3 1 0	👁️ ⚙️ Upgrade
<a href="#">NIFI_Scenarios 1</a>	NIFI_Scenarios 1	Testing NIFI Scenarios	2	▶ 0 ■ 13 ▲ 4 1 0	👁️ ⚙️ Upgrade
<a href="#">Schedule_Deployment_Status...</a>	Schedule_Deployment...	Hoverture_BUCKET	1	▶ 0 ■ 2 ▲ 0 1 0	👁️ ⚙️ Upgrade

In addition, you can access the details of each process group, edit parameter contexts and variables, and configure controller services.

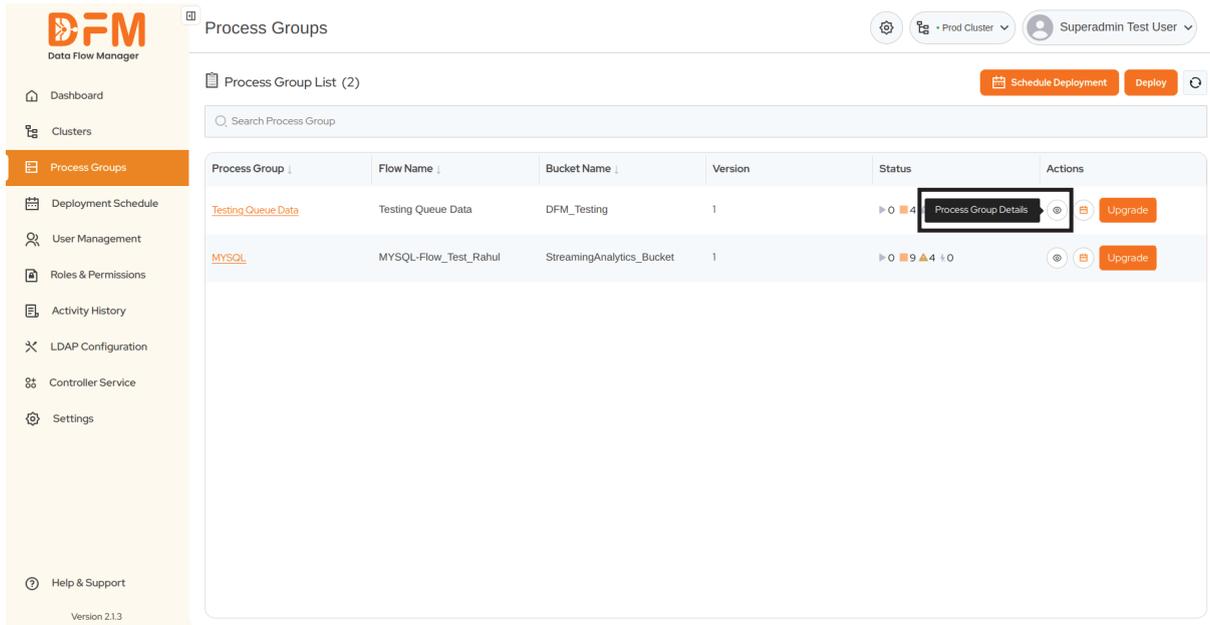
## 4.1. View process group details

Each process group is listed with the flow name, bucket name, version, status, and actions to view details and upgrade the process group instantly and in advance.

The status column displays 4 major parameters of the process group - **running flows, stopped flows, invalid flows, and disabled flows** – providing real-time visibility into flow states.

To view the details of a specific process group,

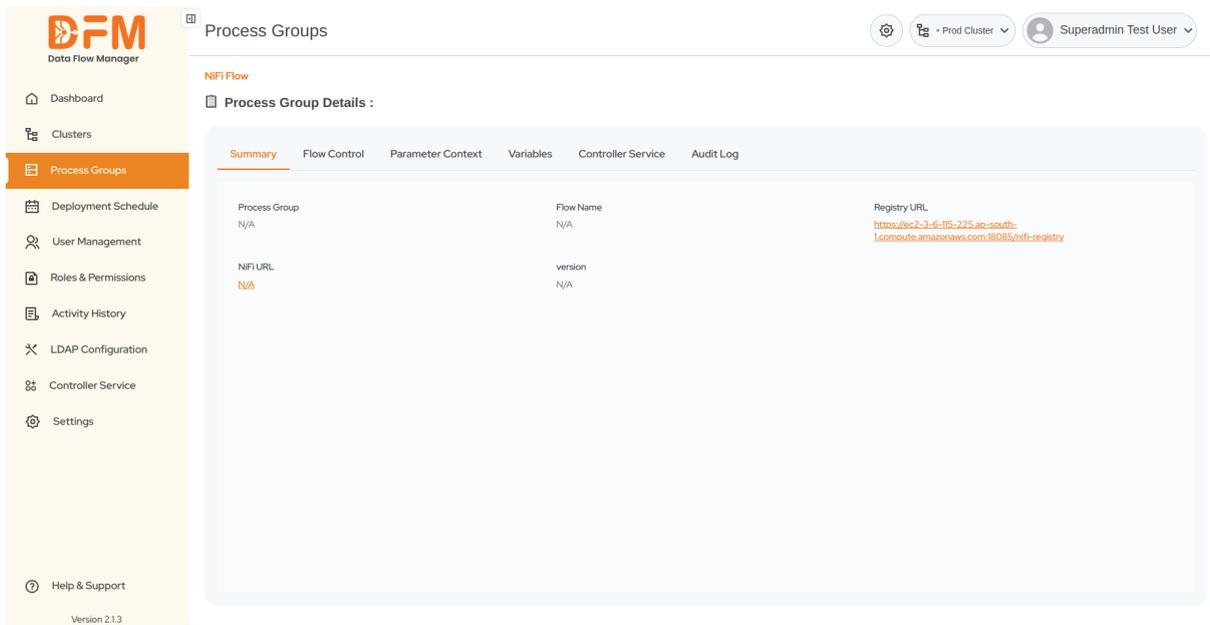
- Under the **Actions** column, click the eye icon.



The screenshot shows the 'Process Groups' page in the Data Flow Manager. The left sidebar contains navigation options: Dashboard, Clusters, Process Groups (selected), Deployment Schedule, User Management, Roles & Permissions, Activity History, LDAP Configuration, Controller Service, and Settings. The main content area displays a 'Process Group List (2)' with a search bar and buttons for 'Schedule Deployment', 'Deploy', and a refresh icon. The table below lists two process groups:

Process Group	Flow Name	Bucket Name	Version	Status	Actions
<a href="#">Testing Queue Data</a>	Testing Queue Data	DFM_Testing	1	▶ 0 ▲ 4	Process Group Details, Upgrade
<a href="#">MYSQL</a>	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	1	▶ 0 ▲ 9 ▲ 4 ▲ 0	Upgrade

- You'll get all the details of the process group, such as summary, flow control, parameter context, variables, controller service, and audit log.



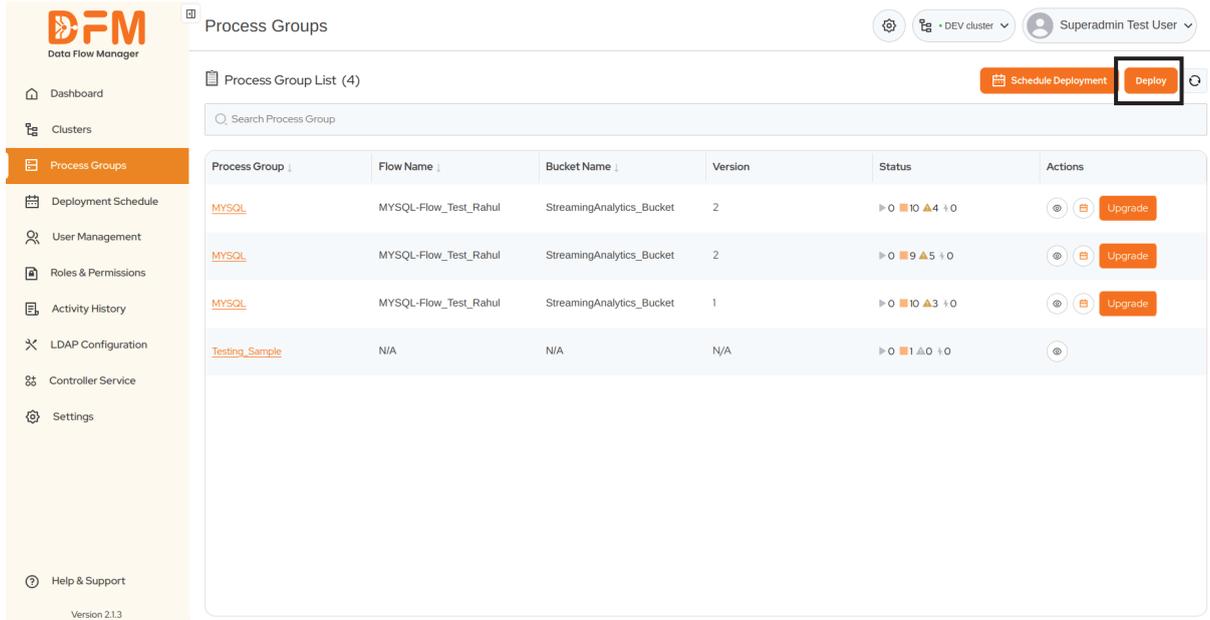
The screenshot shows the 'Process Group Details' page for the 'Testing Queue Data' process group. The left sidebar is the same as in the previous screenshot. The main content area has a 'NIFI Flow' header and a 'Process Group Details' section with tabs for Summary, Flow Control, Parameter Context, Variables, Controller Service, and Audit Log. The 'Summary' tab is active, showing the following details:

Property	Value
Process Group	N/A
Flow Name	N/A
Registry URL	<a href="https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:8085/nifi-registry">https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:8085/nifi-registry</a>
NIFI URL	N/A
version	N/A

## 4.2. How to deploy a process group?

To deploy a process group:

- Click the **Deploy** button on the top-right corner.



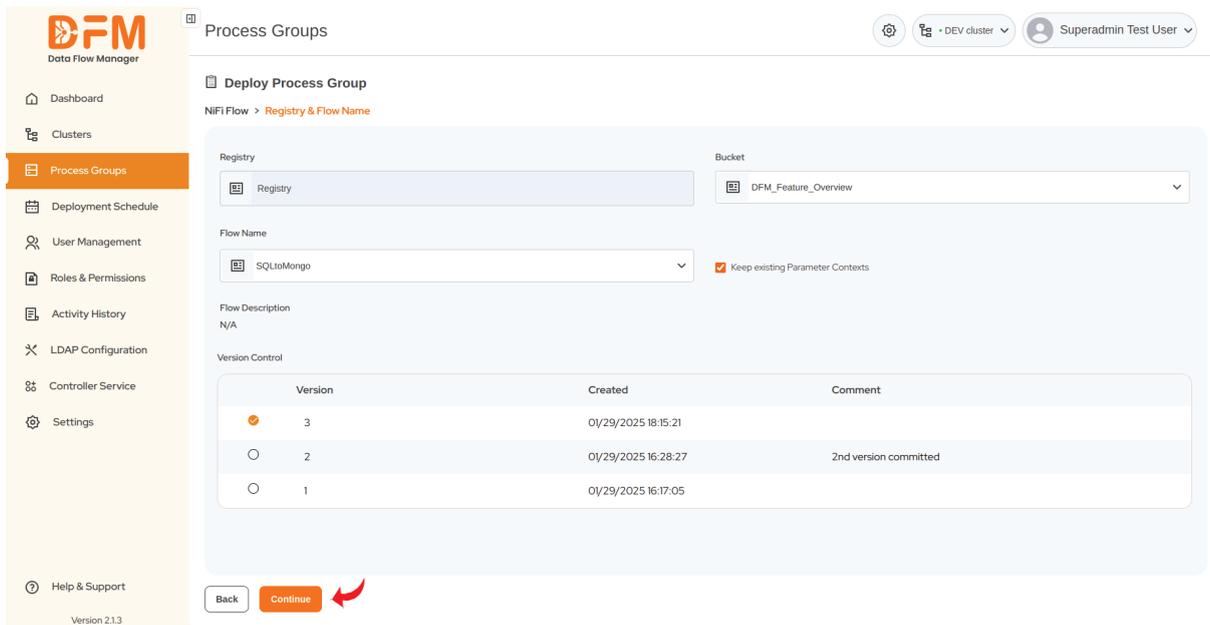
Process Groups

Process Group List (4)

Search Process Group

Process Group	Flow Name	Bucket Name	Version	Status	Actions
MYSQL	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	2	▶ 0 ▲ 10 ▲ 4 ◀ 0	⊙ ⊞ Upgrade
MYSQL	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	2	▶ 0 ▲ 9 ▲ 5 ◀ 0	⊙ ⊞ Upgrade
MYSQL	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	1	▶ 0 ▲ 10 ▲ 3 ◀ 0	⊙ ⊞ Upgrade
Testing_Sample	N/A	N/A	N/A	▶ 0 ▲ 1 ▲ 0 ◀ 0	⊙

- Select **Bucket** and **Flow Name**.
- Mark the checkbox to keep existing parameter contexts. Otherwise, unmark it.
- Select the flow version you want to deploy and click **Continue**.



Process Groups

Deploy Process Group

NiFi Flow > Registry & Flow Name

Registry: Registry

Bucket: DFM\_Feature\_Overview

Flow Name: SQLtoMongo

Keep existing Parameter Contexts

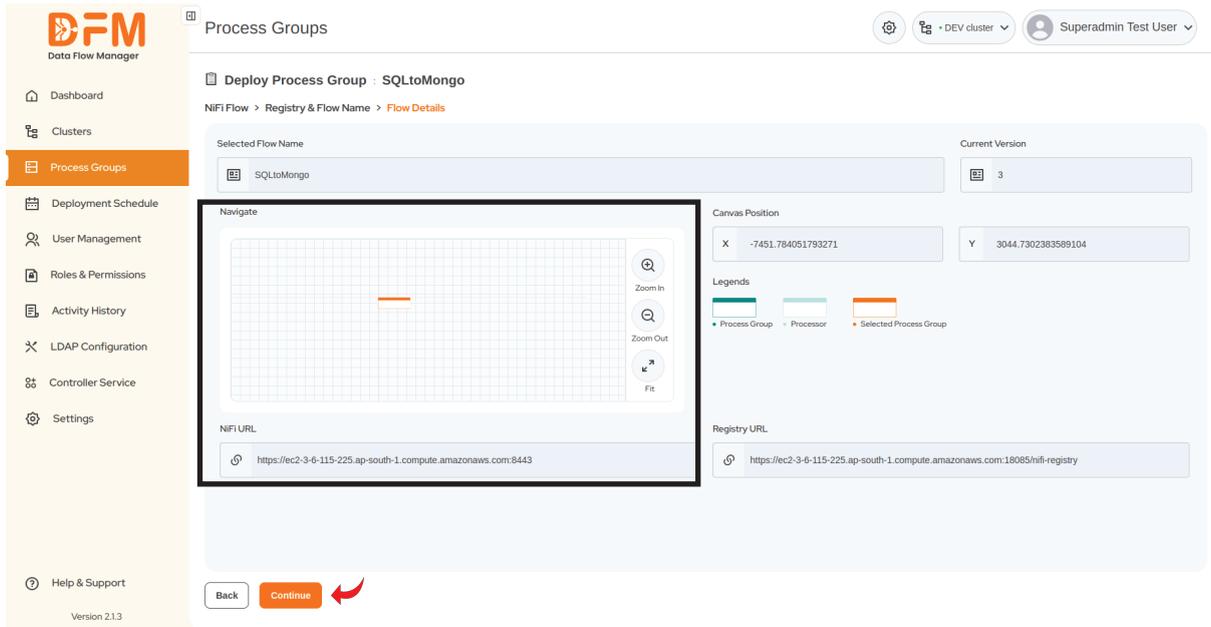
Flow Description: N/A

Version Control

Version	Created	Comment
<input checked="" type="radio"/> 3	01/29/2025 18:15:21	
<input type="radio"/> 2	01/29/2025 16:28:27	2nd version committed
<input type="radio"/> 1	01/29/2025 16:17:05	

Back Continue

- Set the canvas position where your process group will be displayed on the NiFi UI.
- Drag your process group left, right, up, or down to set its position and click **Continue**.



**Process Groups**

Deploy Process Group : SQLtoMongo

NIFI Flow > Registry & Flow Name > Flow Details

Selected Flow Name: SQLtoMongo | Current Version: 3

Canvas Position: X: -7451.784051793271, Y: 3044.7302383589104

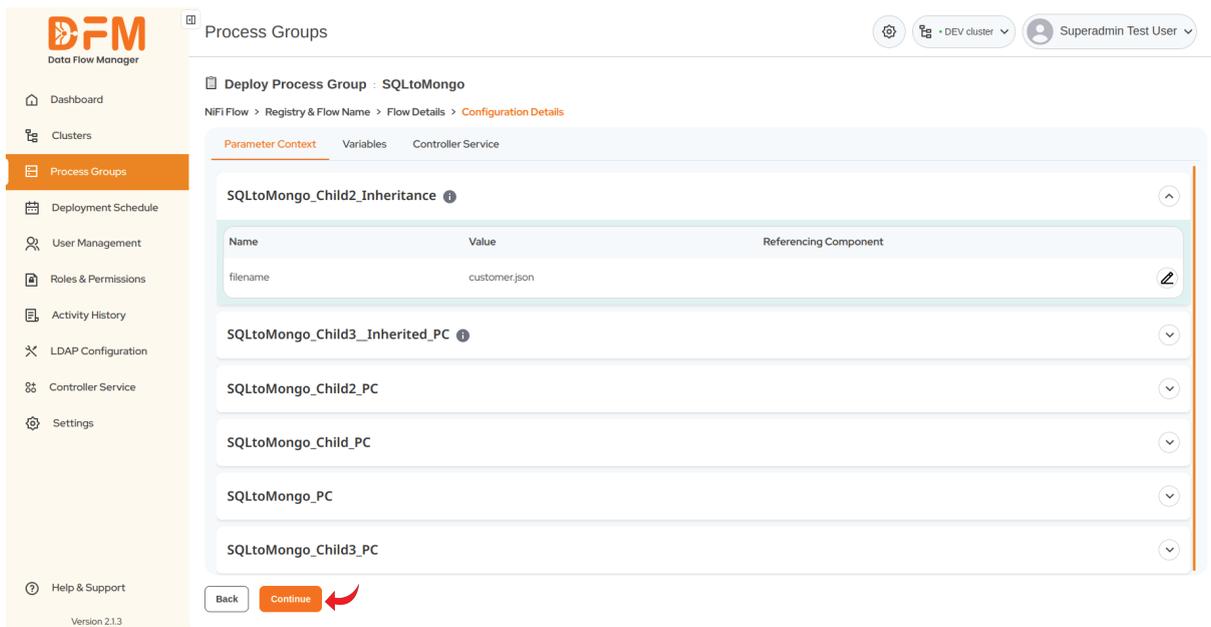
Legends: Process Group (Blue), Processor (Light), Selected Process Group (Orange)

NIFI URL: https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:8443

Registry URL: https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:18085/nifi-registry

Buttons: Back, Continue

- Visual indicators to identify your current process group:
  - **Blue Shade:** A processor that is highlighted with a blue shade indicates that it is currently active or selected.
  - **Light Shade:** A processor with a light shade represents one that is not selected or not actively being edited.
  - **Orange Shade:** A process group highlighted in orange implies that it is being deployed.
- Edit parameter context or variables with the necessary configurations. Additionally, you can view any inherited parameters by referencing the component.



**Process Groups**

Deploy Process Group : SQLtoMongo

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details

Parameter Context | Variables | Controller Service

SQLtoMongo\_Child2\_Inheritance

Name	Value	Referencing Component
filename	customer.json	

SQLtoMongo\_Child3\_Inherited\_PC

SQLtoMongo\_Child2\_PC

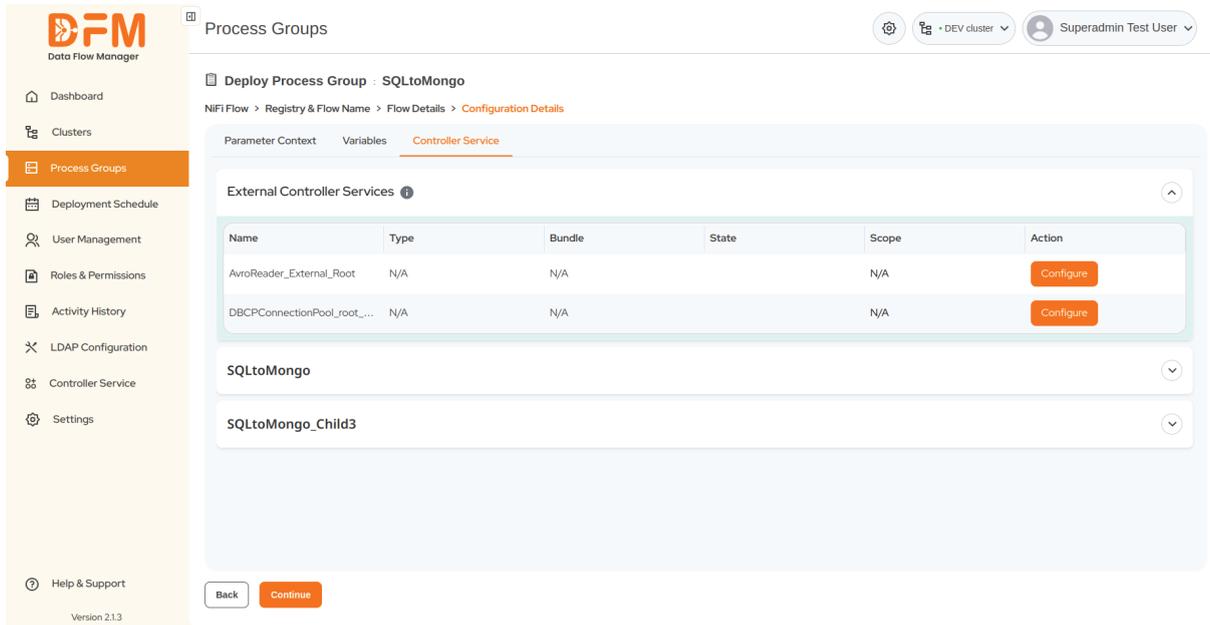
SQLtoMongo\_Child\_PC

SQLtoMongo\_PC

SQLtoMongo\_Child3\_PC

Buttons: Back, Continue

- View all the controller services available within the process group. Configure the required ones.



Process Groups

Deploy Process Group : SQLtoMongo

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details

Parameter Context Variables **Controller Service**

External Controller Services

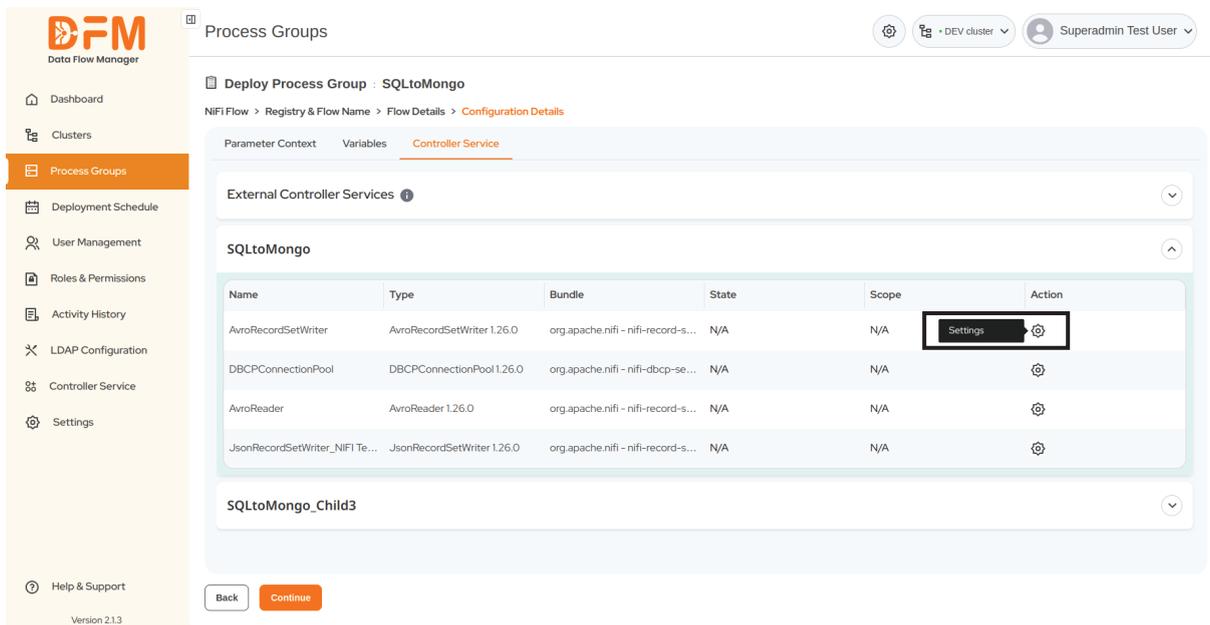
Name	Type	Bundle	State	Scope	Action
AvroReader_External_Root	N/A	N/A		N/A	Configure
DBCPConnectionPool_root_...	N/A	N/A		N/A	Configure

SQLtoMongo

SQLtoMongo\_Child3

Back Continue

- If needed, you can edit the properties of the controller services through the settings option and continue.



Process Groups

Deploy Process Group : SQLtoMongo

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details

Parameter Context Variables **Controller Service**

External Controller Services

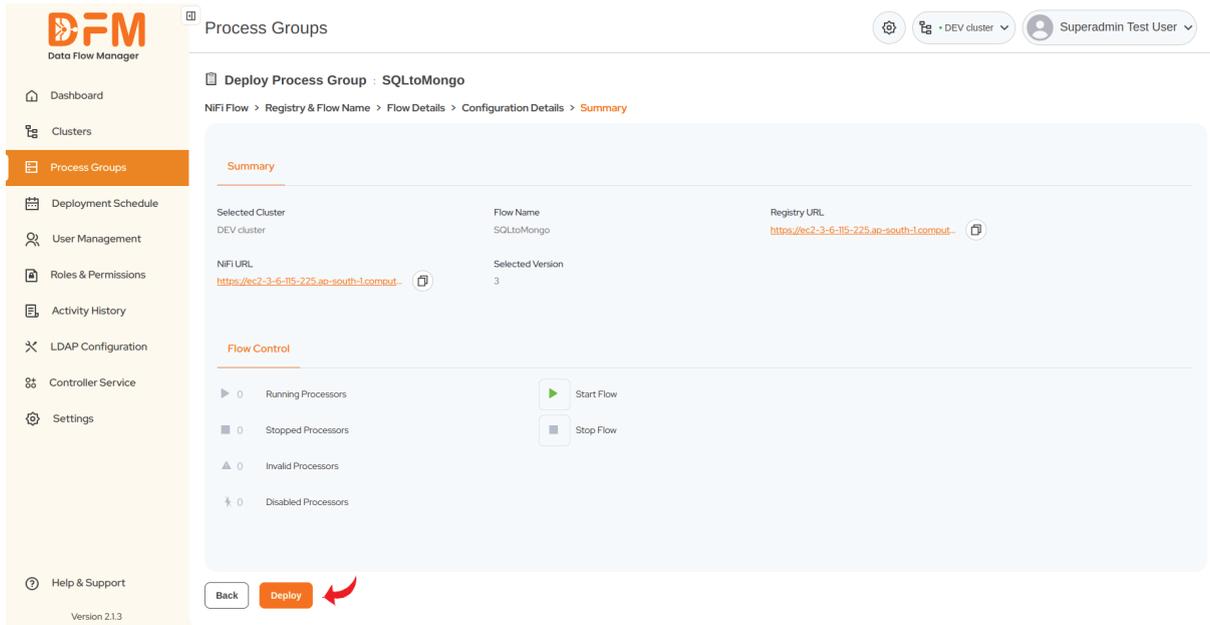
SQLtoMongo

Name	Type	Bundle	State	Scope	Action
AvroRecordSetWriter	AvroRecordSetWriter 1.26.0	org.apache.nifi - nifi-record-s...	N/A	N/A	Settings
DBCPConnectionPool	DBCPConnectionPool 1.26.0	org.apache.nifi - nifi-dbcp-se...	N/A	N/A	
AvroReader	AvroReader 1.26.0	org.apache.nifi - nifi-record-s...	N/A	N/A	
JsonRecordSetWriter_NIFI Te...	JsonRecordSetWriter 1.26.0	org.apache.nifi - nifi-record-s...	N/A	N/A	

SQLtoMongo\_Child3

Back Continue

- You will be redirected to the summary page. Verify the details of the process group.
- Ensure that you start the flow and click **Deploy**.



The screenshot shows the DFM interface for configuring a process group. The left sidebar contains navigation options: Dashboard, Clusters, Process Groups (highlighted), Deployment Schedule, User Management, Roles & Permissions, Activity History, LDAP Configuration, Controller Service, and Settings. The main content area is titled 'Process Groups' and shows the configuration for 'SQLtoMongo'. The 'Summary' section displays the following details:

Selected Cluster	Flow Name	Registry URL
DEV cluster	SQLtoMongo	<a href="https://ec2-3-6-115-225.ap-south-1.comput-">https://ec2-3-6-115-225.ap-south-1.comput-</a>
NIFI URL	Selected Version	
<a href="https://ec2-3-6-115-225.ap-south-1.comput-">https://ec2-3-6-115-225.ap-south-1.comput-</a>	3	

The 'Flow Control' section shows the status of processors:

- Running Processors: 0
- Stopped Processors: 0
- Invalid Processors: 0
- Disabled Processors: 0

At the bottom, there are 'Back' and 'Deploy' buttons. A red arrow points to the 'Deploy' button.

- After clicking **Deploy**, you get a confirmation message about the successful deployment of your process group. If there are any errors, the message provides the details, allowing you to take the necessary actions.

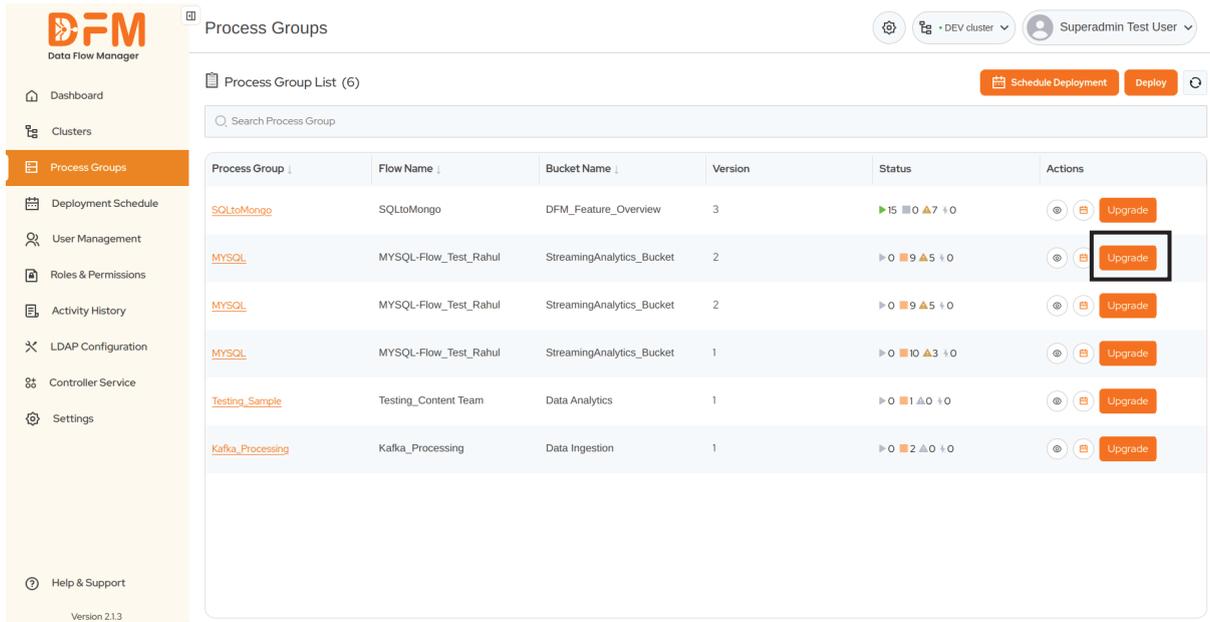
### 4.3. How to upgrade a process group?

Upgrading a process group means deploying the latest version of the flow to the target cluster. Let's say you made changes to the process group and committed to the registry, which will create version 2 of the process group. To deploy version 2, you can simply upgrade the process group.

If you choose to deploy it, Data Flow Manager will create a new copy of the process group on the target cluster, leaving the original version unchanged.

To upgrade a process group:

- Navigate to the process group under the **Process Group** tab.
- From the Actions column, click the **Upgrade** button.



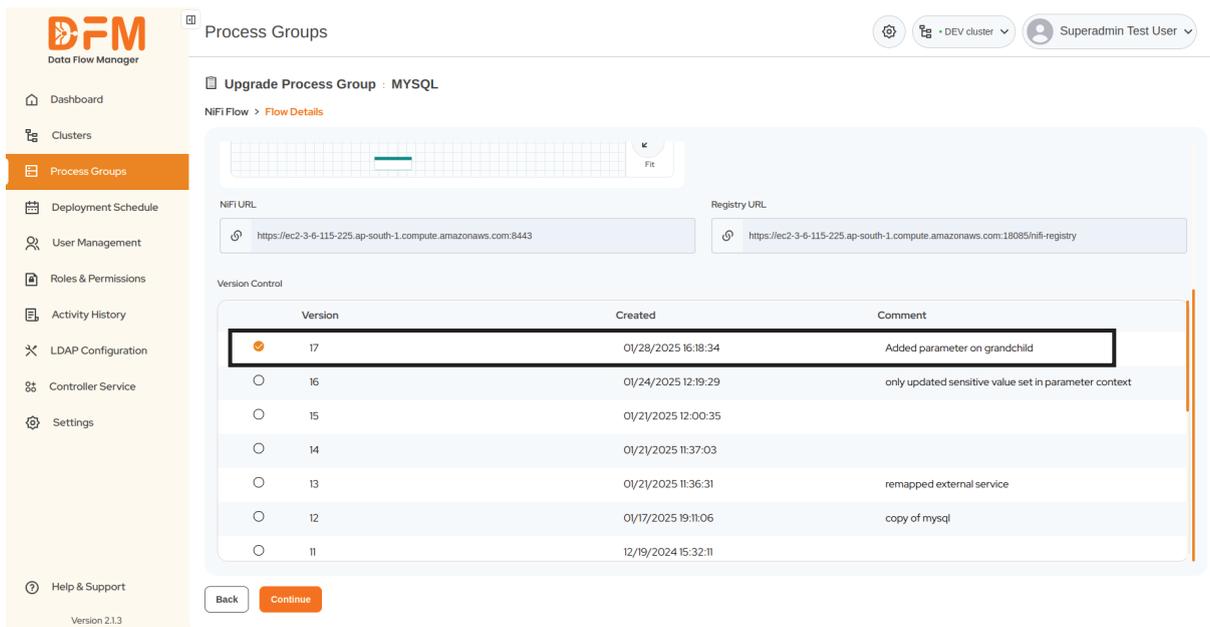
Process Groups

Process Group List (6)

Search Process Group

Process Group	Flow Name	Bucket Name	Version	Status	Actions
SQLtoMongo	SQLtoMongo	DFM_Feature_Overview	3	▶ 15 ▯ 0 ▲ 7 + 0	⊙ ⊞ Upgrade
MYSQL	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	2	▶ 0 ▯ 9 ▲ 5 + 0	⊙ ⊞ Upgrade
MYSQL	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	2	▶ 0 ▯ 9 ▲ 5 + 0	⊙ ⊞ Upgrade
MYSQL	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	1	▶ 0 ▯ 10 ▲ 3 + 0	⊙ ⊞ Upgrade
Testing_Sample	Testing_Content Team	Data Analytics	1	▶ 0 ▯ 1 ▲ 0 + 0	⊙ ⊞ Upgrade
Kafka_Processing	Kafka_Processing	Data Ingestion	1	▶ 0 ▯ 2 ▲ 0 + 0	⊙ ⊞ Upgrade

- Choose the flow version that you want to deploy and **Continue**.



Process Groups

Upgrade Process Group - MYSQL

NIFI Flow > Flow Details

NIFI URL: https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:8443

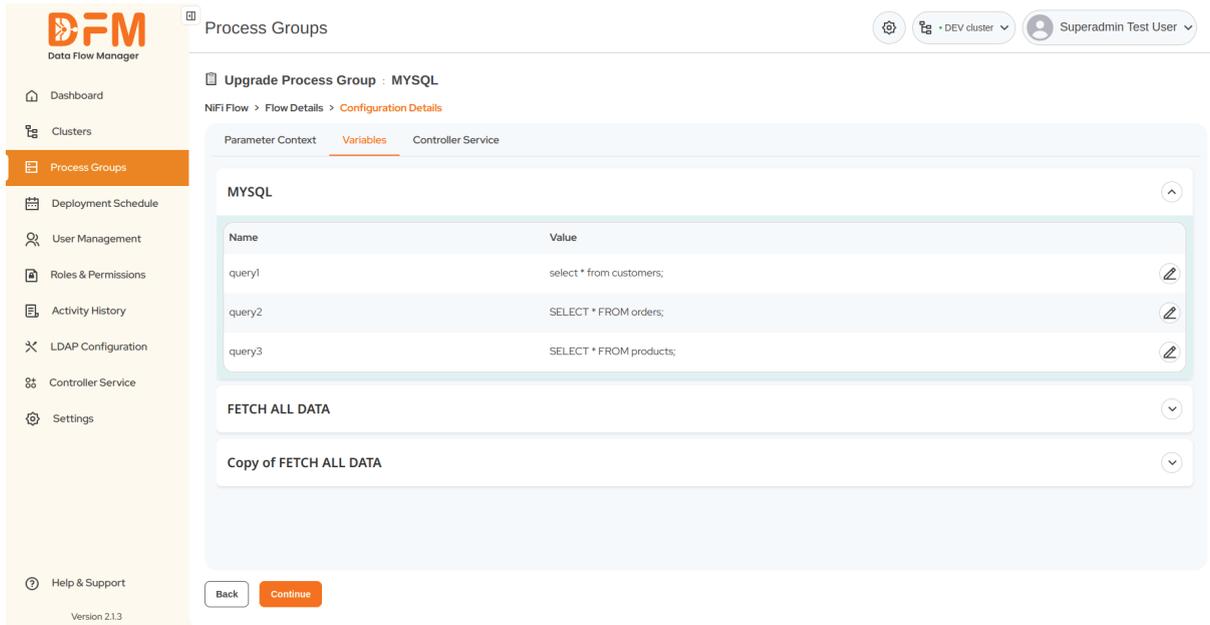
Registry URL: https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:18085/nifi-registry

Version Control

Version	Created	Comment
<input checked="" type="radio"/> 17	01/28/2025 16:18:34	Added parameter on grandchild
<input type="radio"/> 16	01/24/2025 12:19:29	only updated sensitive value set in parameter context
<input type="radio"/> 15	01/21/2025 12:00:35	
<input type="radio"/> 14	01/21/2025 11:37:03	
<input type="radio"/> 13	01/21/2025 11:36:31	remapped external service
<input type="radio"/> 12	01/17/2025 19:11:06	copy of mysql
<input type="radio"/> 11	12/19/2024 15:32:11	

Back Continue

- Edit parameter contexts or variables, configure the controller service, and continue.



Process Groups

Upgrade Process Group : MYSQL

NIFI Flow > Flow Details > Configuration Details

Parameter Context Variables Controller Service

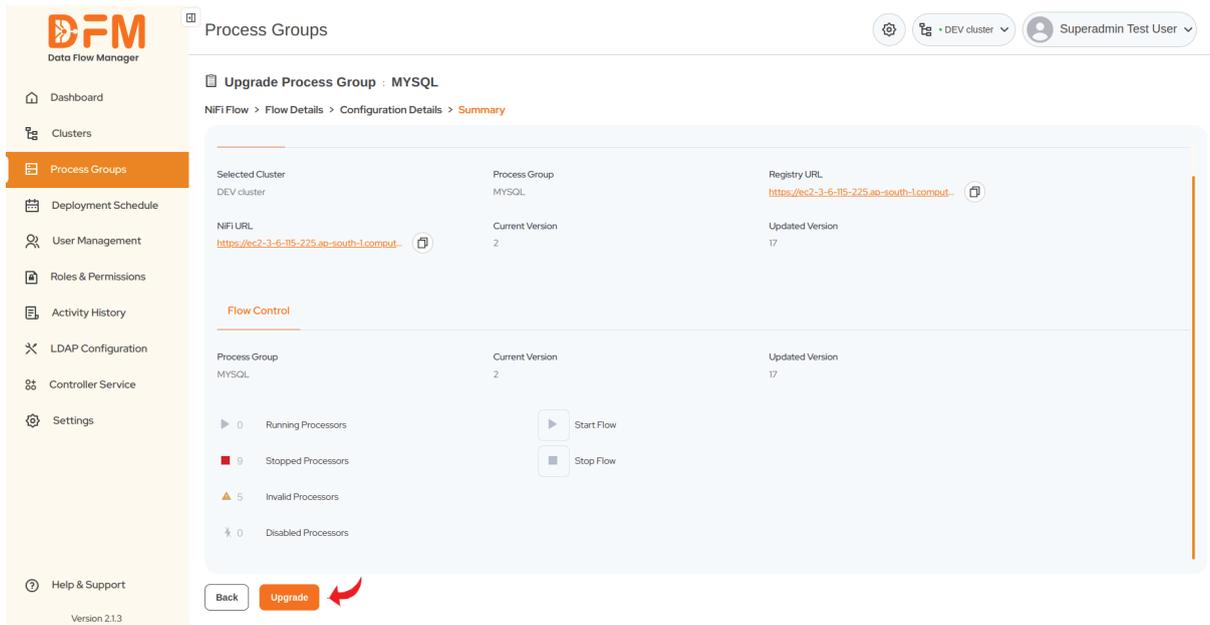
Name	Value
query1	select * from customers;
query2	SELECT * FROM orders;
query3	SELECT * FROM products;

FETCH ALL DATA

Copy of FETCH ALL DATA

Back Continue

- Verify the process group details, choose whether to start or stop the flow, and click **Upgrade**.



Process Groups

Upgrade Process Group : MYSQL

NIFI Flow > Flow Details > Configuration Details > Summary

Selected Cluster	Process Group	Registry URL
DEV cluster	MYSQL	<a href="https://ec2-3-6-115-225.ap-south-1.comout-">https://ec2-3-6-115-225.ap-south-1.comout-</a>

NIFI URL	Current Version	Updated Version
<a href="https://ec2-3-6-115-225.ap-south-1.comout-">https://ec2-3-6-115-225.ap-south-1.comout-</a>	2	17

Flow Control

Process Group	Current Version	Updated Version
MYSQL	2	17

▶ 0 Running Processors Start Flow

■ 0 Stopped Processors Stop Flow

▲ 5 Invalid Processors

⚡ 0 Disabled Processors

Back Upgrade

- You get a confirmation message about the successful upgrade of the flow version.

#### 4.4. How to schedule the deployment of a process group?

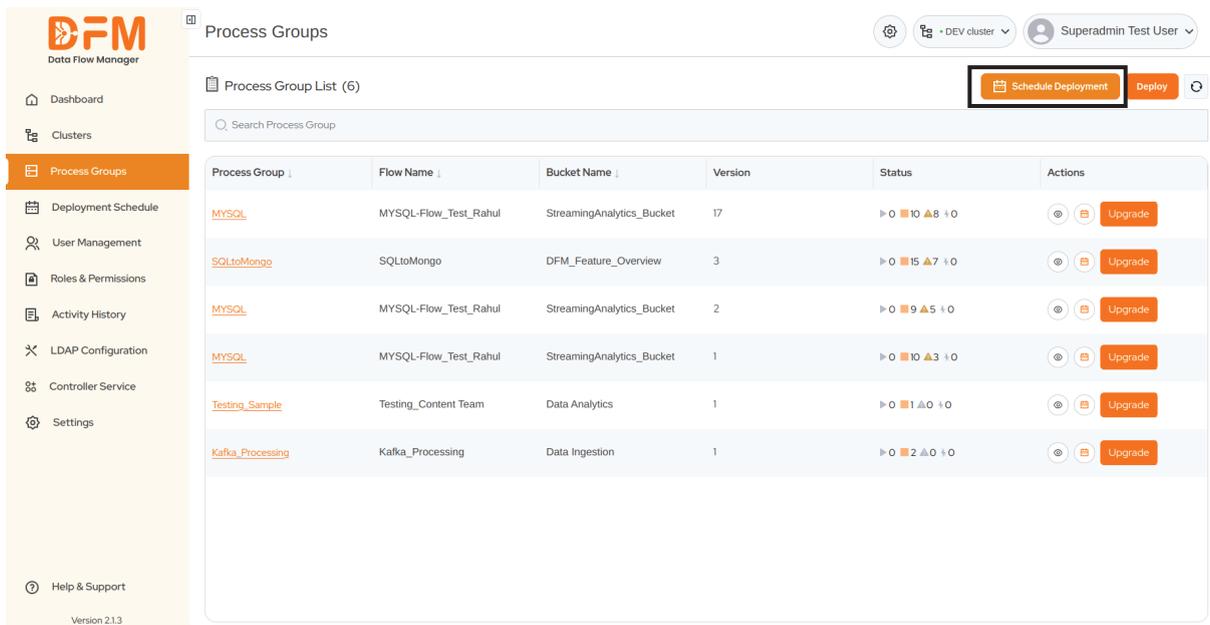
Scheduling the deployment of a process group at a specific time enables you to automate rollouts during off-peak hours. This minimizes disruptions to critical

operations and ensures a seamless deployment of process groups, reducing manual interventions and the risk of errors.

However, the scheduled process group deploys only if the admin or manager approves it. If it is not approved within the scheduled time, the process group will not get deployed. You can reschedule the deployment for a later time.

To schedule the deployment of a process group:

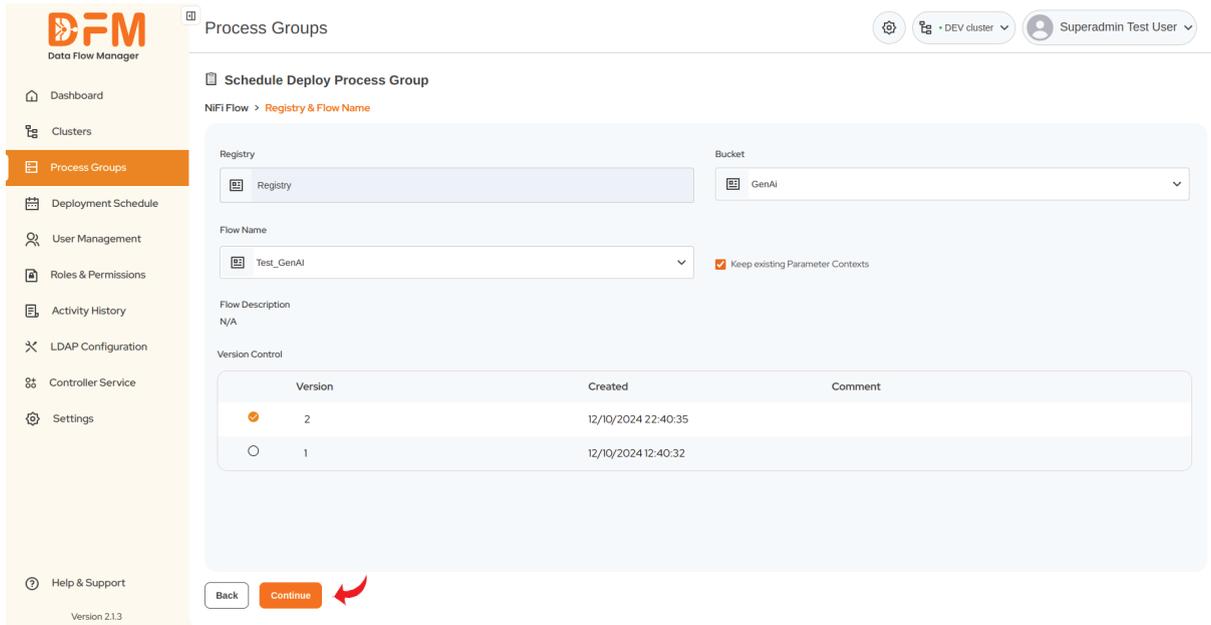
- Click the **Schedule Deployment** button on the top-right corner under the **Process Groups** tab.



The screenshot shows the DFM (Data Flow Manager) interface. The left sidebar contains navigation options: Dashboard, Clusters, Process Groups (selected), Deployment Schedule, User Management, Roles & Permissions, Activity History, LDAP Configuration, Controller Service, Settings, and Help & Support. The main content area is titled 'Process Groups' and shows a 'Process Group List (6)'. A search bar is present. In the top right corner of the main area, there are buttons for 'Schedule Deployment' (highlighted with a red box) and 'Deploy'. Below this is a table with the following data:

Process Group	Flow Name	Bucket Name	Version	Status	Actions
<a href="#">MYSQL</a>	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	17	▶ 0 ▲ 10 ▲ 8 ▼ 0	⊙ ⊞ Upgrade
<a href="#">SQLtoMongo</a>	SQLtoMongo	DFM_Feature_Overview	3	▶ 0 ▲ 15 ▲ 7 ▼ 0	⊙ ⊞ Upgrade
<a href="#">MYSQL</a>	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	2	▶ 0 ▲ 9 ▲ 5 ▼ 0	⊙ ⊞ Upgrade
<a href="#">MYSQL</a>	MYSQL-Flow_Test_Rahul	StreamingAnalytics_Bucket	1	▶ 0 ▲ 10 ▲ 3 ▼ 0	⊙ ⊞ Upgrade
<a href="#">Testing_Sample</a>	Testing_Content Team	Data Analytics	1	▶ 0 ▲ 1 ▲ 0 ▼ 0	⊙ ⊞ Upgrade
<a href="#">Kafka_Processing</a>	Kafka_Processing	Data Ingestion	1	▶ 0 ▲ 2 ▲ 0 ▼ 0	⊙ ⊞ Upgrade

- Next, choose Bucket and Flow Name, and decide whether to keep the existing parameter contexts.
- Choose the flow version and click **Continue**.



**Process Groups**

**Schedule Deploy Process Group**

NIFI Flow > Registry & Flow Name

Registry: Registry

Bucket: GenAI

Flow Name: Test\_GenAI

Keep existing Parameter Contexts

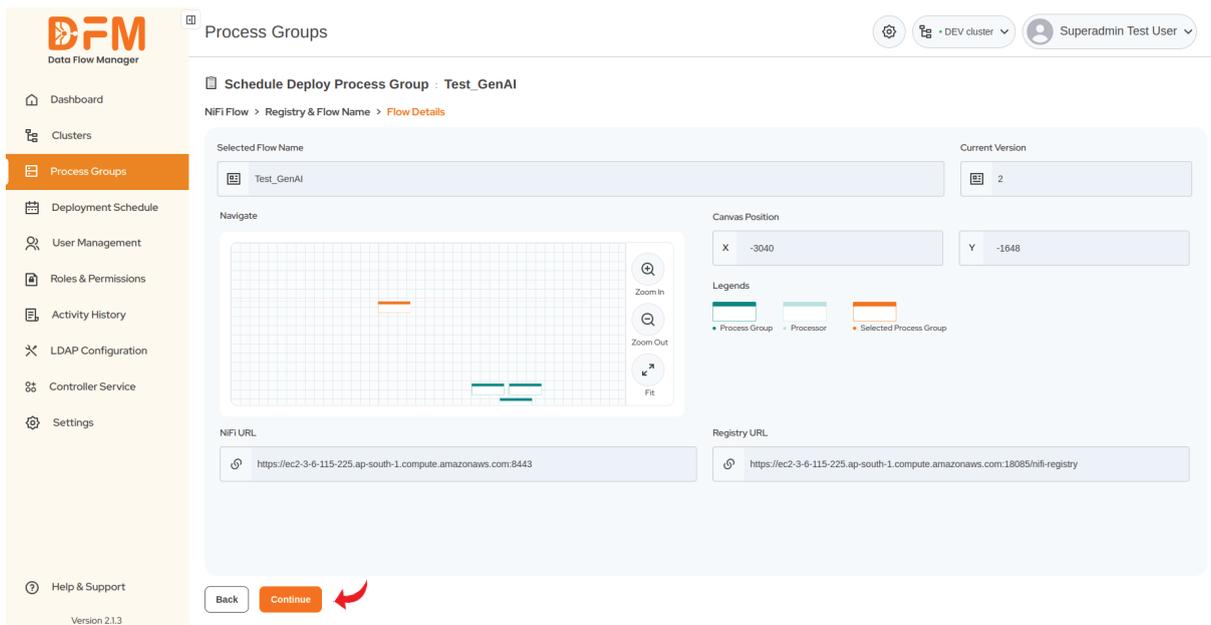
Flow Description: N/A

Version Control

Version	Created	Comment
<input checked="" type="radio"/> 2	12/10/2024 22:40:35	
<input type="radio"/> 1	12/10/2024 12:40:32	

Back Continue

- Set the canvas position for the process group and continue.



**Process Groups**

**Schedule Deploy Process Group : Test\_GenAI**

NIFI Flow > Registry & Flow Name > Flow Details

Selected Flow Name: Test\_GenAI

Current Version: 2

Canvas Position: X: -3040, Y: -1648

Legends: Process Group, Processor, Selected Process Group

NIFI URL: https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:8443

Registry URL: https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:18085/nifi-registry

Back Continue

- Now, set the desired deployment time.
- Edit the parameter context and variables and configure the required external controller services.
- Ensure to start the flow and click continue.

**DFM** Data Flow Manager

Process Groups

Schedule Deploy Process Group : Test\_GenAI

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details

Schedule Details | Parameter Context | Variables | Controller Service

Deploy Time \*

January 31, 2025 6:00 PM

January 2025

Su	Mo	Tu	We	Th	Fr	Sa	Time
							5:15 PM
							5:30 PM
							5:45 PM
							6:00 PM
							6:15 PM
							6:30 PM
							6:45 PM

Start Flow

Stop Flow

Back Continue

- You'll be redirected to the summary page. Verify the flow details and scheduled time. Click **Schedule**.

**DFM** Data Flow Manager

Process Groups

Schedule Downgrade Process Group : Test\_GenAI

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details > Summary

Summary

Selected Cluster DEV cluster	Flow Name Test_GenAI	Registry URL <a href="https://ec2-3-6-15-225.ap-south-1.comput-">https://ec2-3-6-15-225.ap-south-1.comput-</a>
NIFI URL <a href="https://ec2-3-6-15-225.ap-south-1.comput-">https://ec2-3-6-15-225.ap-south-1.comput-</a>	Selected Version 2	

Deployment Schedule

Scheduled Time 01/31/25, 06:00:00 PM	Flow state after deploy RUNNING
---	------------------------------------

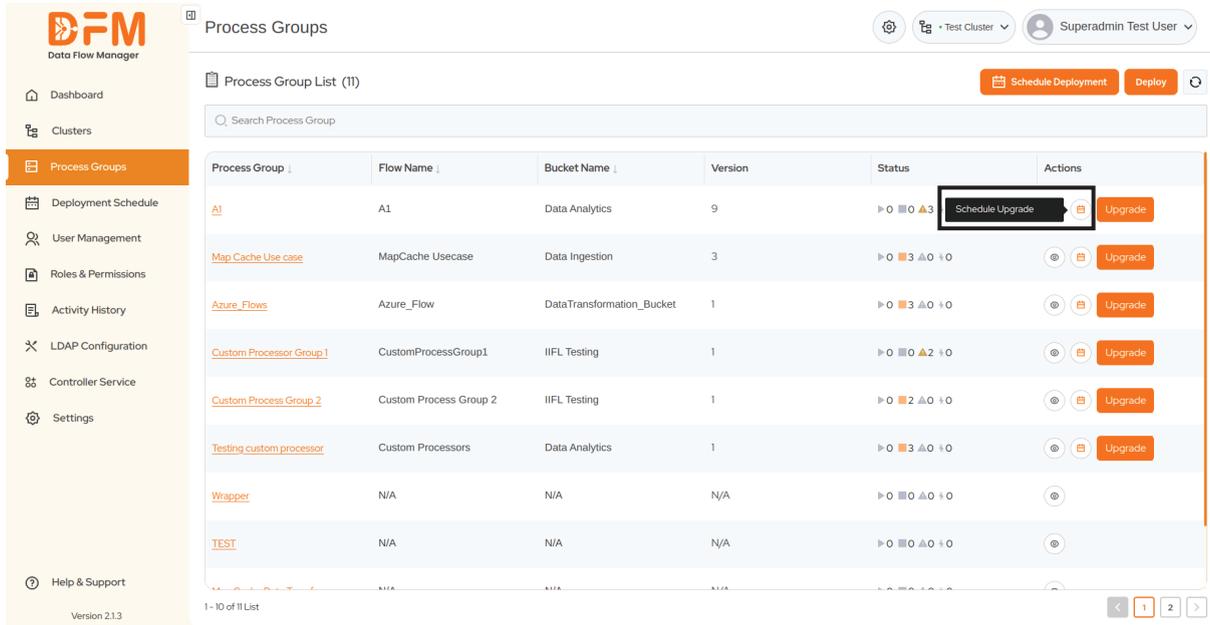
Back Schedule

Your process group will be successfully deployed at the scheduled time.

## 4.5. How to schedule the upgrade of a process group?

To schedule the upgrade of a process group:

- Go to the **Process Groups** tab where you will find the list of process groups from the clusters you are currently logged in to.
- Decide the process group that you want to schedule for an upgrade. Click the calendar icon from the Actions column of the selected process group.



**Process Groups**

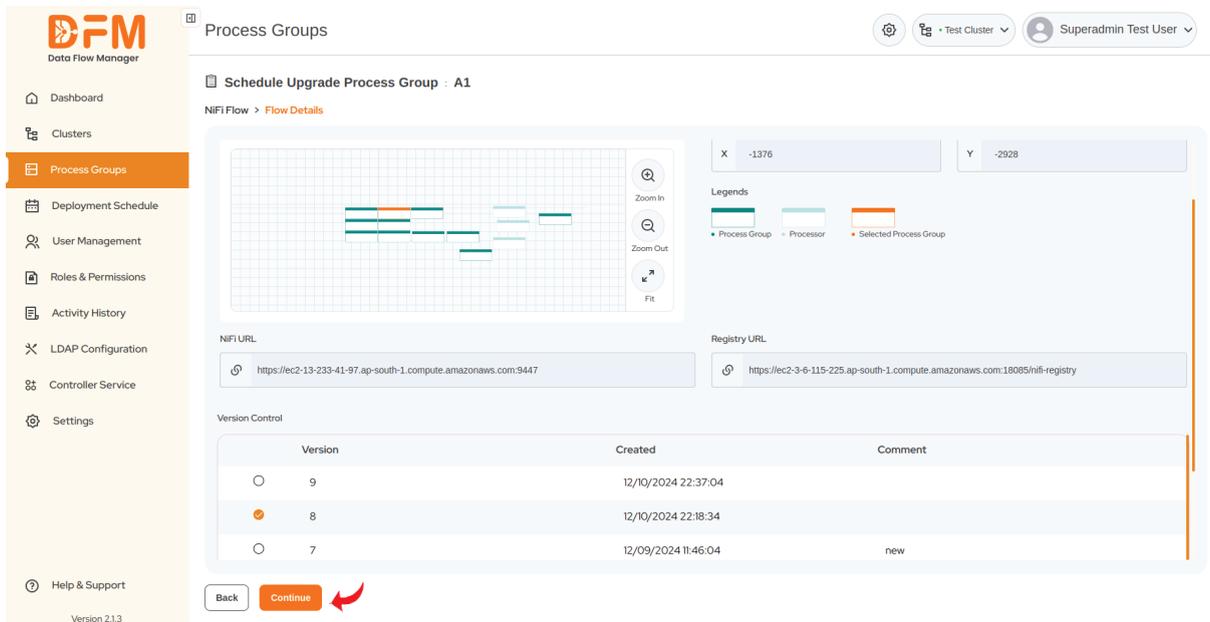
Process Group List (11)

Search Process Group

Process Group	Flow Name	Bucket Name	Version	Status	Actions
A1	A1	Data Analytics	9	▶ 0 ▶ 0 ▶ 3	Schedule Upgrade Upgrade
MapCache Use case	MapCache Usecase	Data Ingestion	3	▶ 0 ▶ 3 ▶ 0 ▶ 0	Upgrade
Azure_Flows	Azure_Flow	DataTransformation_Bucket	1	▶ 0 ▶ 3 ▶ 0 ▶ 0	Upgrade
Custom Processor Group 1	CustomProcessGroup1	IIFL_Testing	1	▶ 0 ▶ 0 ▶ 2 ▶ 0	Upgrade
Custom Process Group 2	Custom Process Group 2	IIFL_Testing	1	▶ 0 ▶ 2 ▶ 0 ▶ 0	Upgrade
Testing custom processor	Custom Processors	Data Analytics	1	▶ 0 ▶ 3 ▶ 0 ▶ 0	Upgrade
Wrapper	N/A	N/A	N/A	▶ 0 ▶ 0 ▶ 0 ▶ 0	
TEST	N/A	N/A	N/A	▶ 0 ▶ 0 ▶ 0 ▶ 0	

1 - 10 of 11 List

- Select the flow version and continue.



**Schedule Upgrade Process Group : A1**

NIFI Flow > Flow Details

NIFI URL: <https://ec2-13-233-41-97.ap-south-1.compute.amazonaws.com:9447>

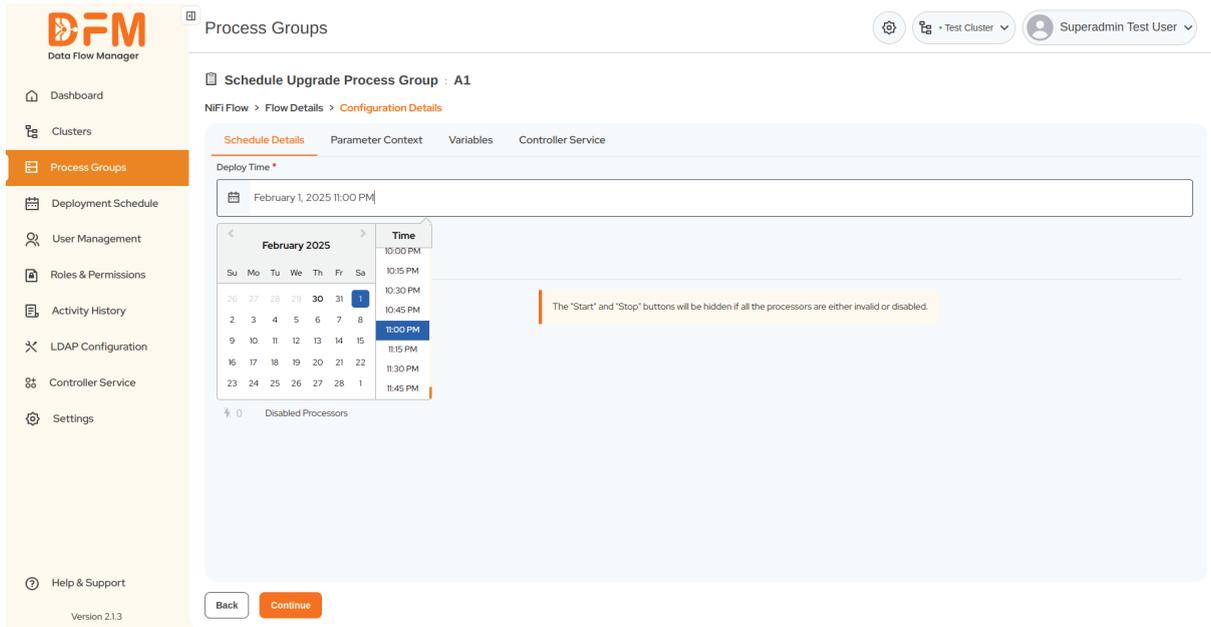
Registry URL: <https://ec2-3-6-115-225.ap-south-1.compute.amazonaws.com:18085/nifi-registry>

Version Control

Version	Created	Comment
<input type="radio"/> 9	12/10/2024 22:37:04	
<input checked="" type="radio"/> 8	12/10/2024 22:18:34	
<input type="radio"/> 7	12/09/2024 11:46:04	new

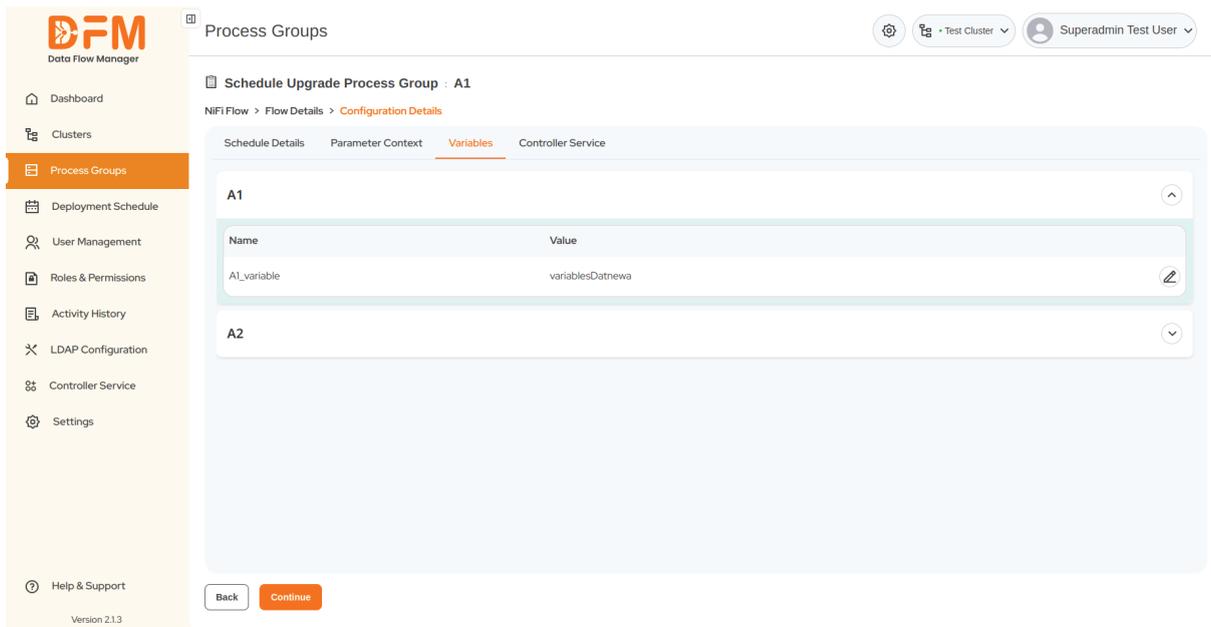
Back Continue

- Set the date and time for the upgrade. Choose to start the flow, if needed.



The screenshot shows the 'Schedule Details' tab for the 'Schedule Upgrade Process Group - A1'. The 'Deploy Time' field is set to 'February 1, 2025 11:00 PM'. A calendar and time picker are visible, with the time set to 11:00 PM. A message states: 'The "Start" and "Stop" buttons will be hidden if all the processors are either invalid or disabled.' There are 'Back' and 'Continue' buttons at the bottom.

- Edit the parameter contexts and variables, if required.

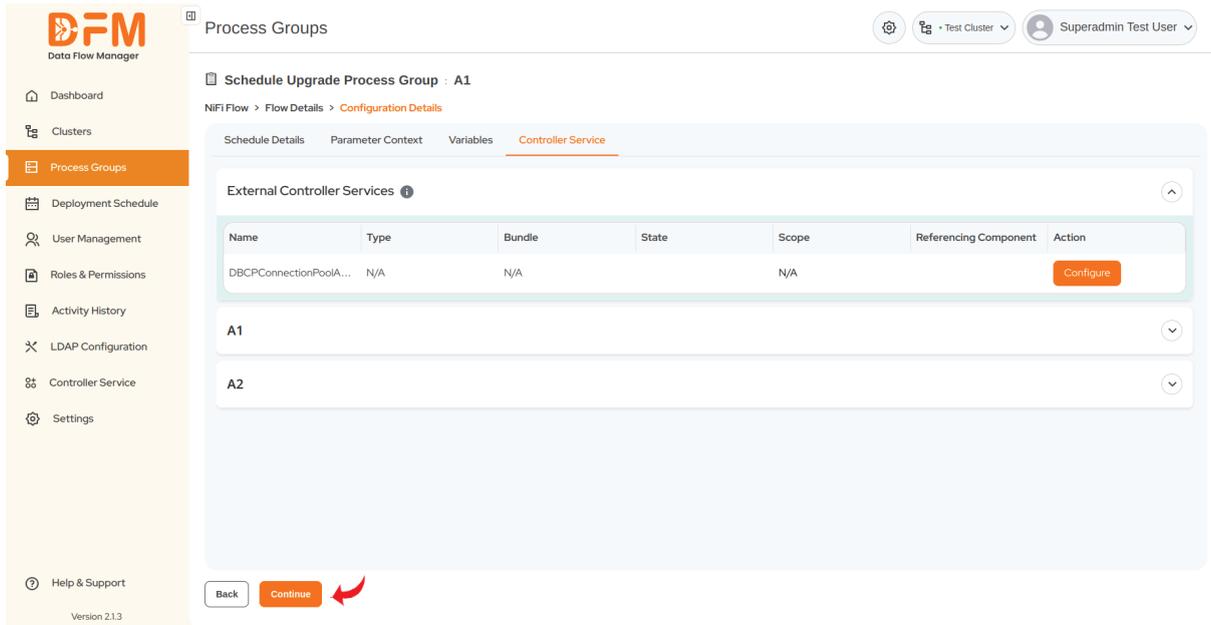


The screenshot shows the 'Variables' tab for the 'Schedule Upgrade Process Group - A1'. It displays a table with two variables:

Name	Value
A1_variable	variablesDatnewa
A2	

There are 'Back' and 'Continue' buttons at the bottom.

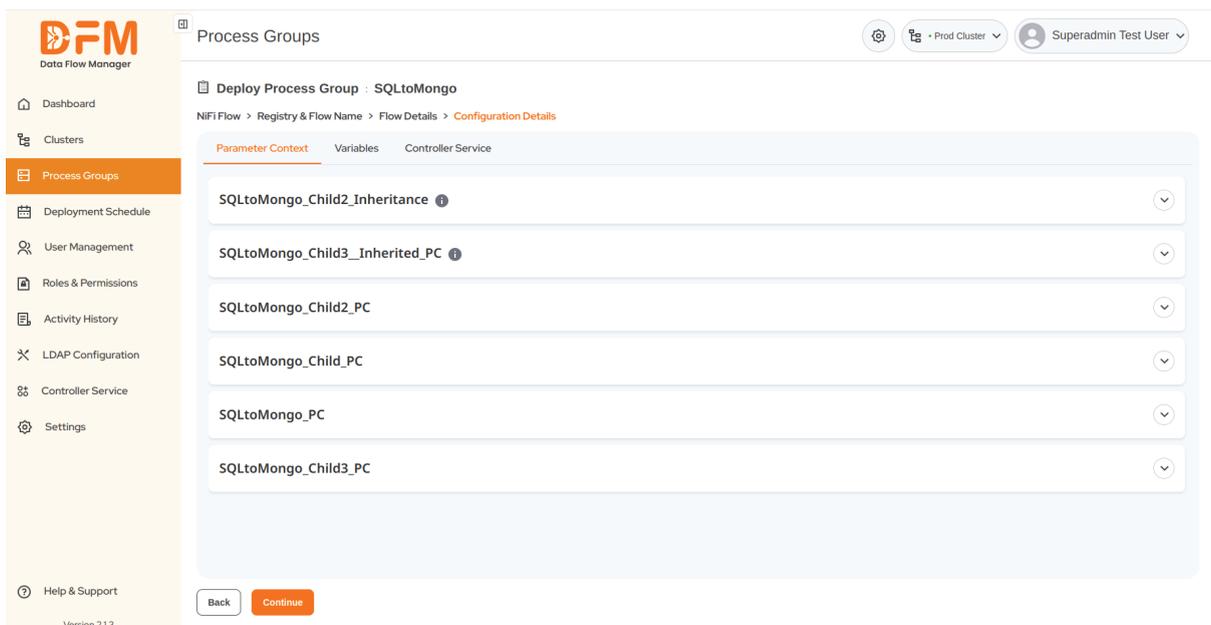
- Configure the required controller services.



- Click **Continue**. You'll be directed to the summary page containing the flow details and the scheduled time. Verify them and schedule the upgrade.

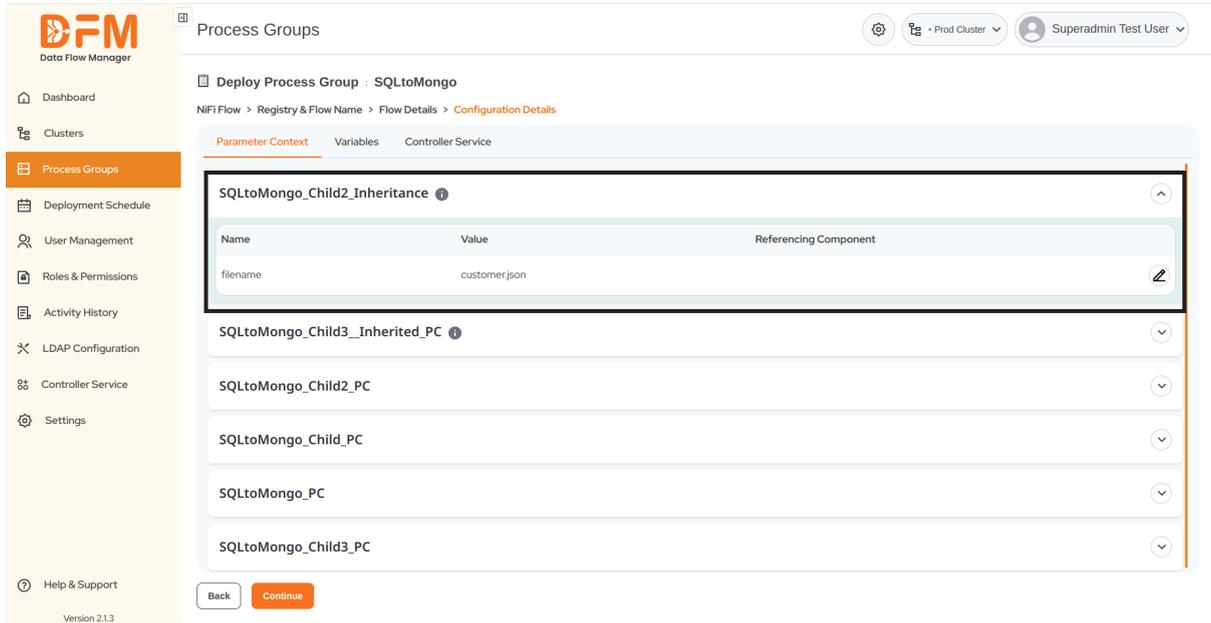
## 4.6. Edit parameter contexts and variables of a process group while deploying or upgrading it

You can edit parameter contexts and variables while deploying a process group. After you select the Bucket and Flow name, choose the flow version, and set the canvas position, you get the list of parameter contexts and variables used by the process group you are currently deploying or upgrading.

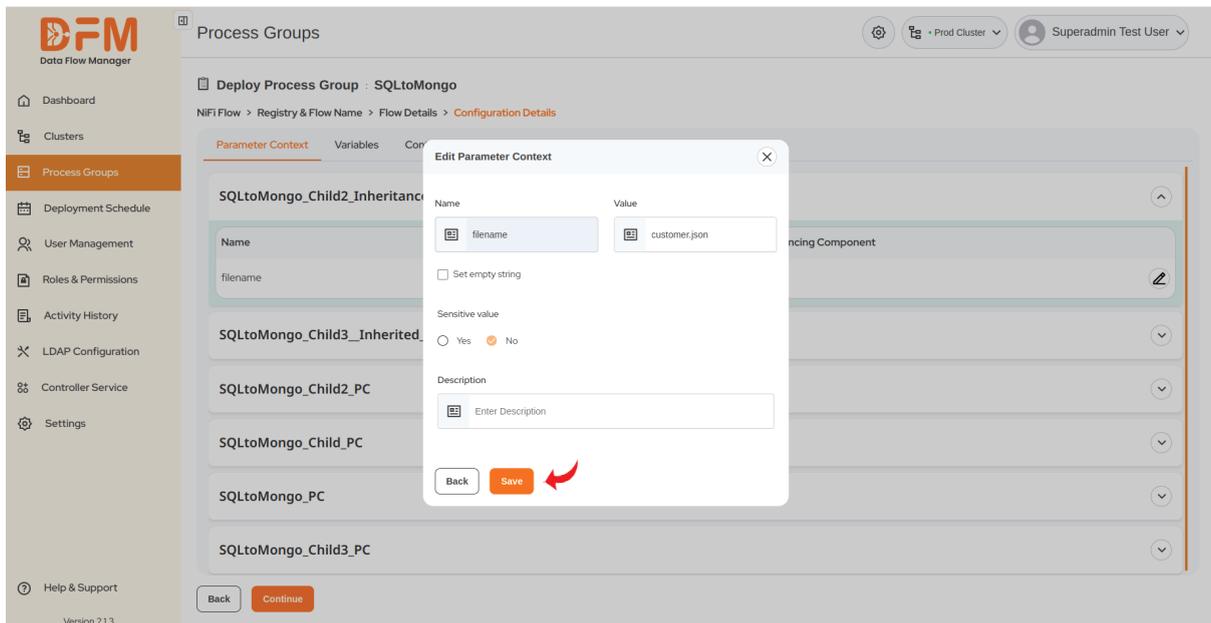


To edit the parameter context,

- Choose the one that you want to edit. Click on the edit icon next to the parameter content.

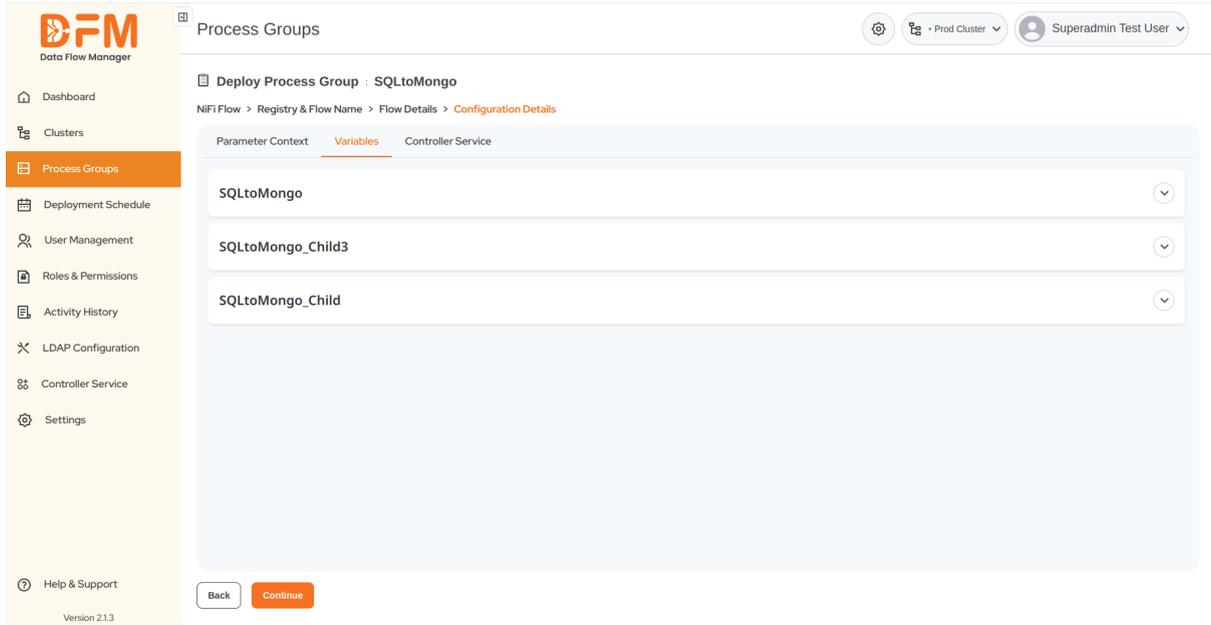


- Add the description and click **Save**.



To edit variables:

- Go to the Variables tab. You'll see all variables used by the process group.

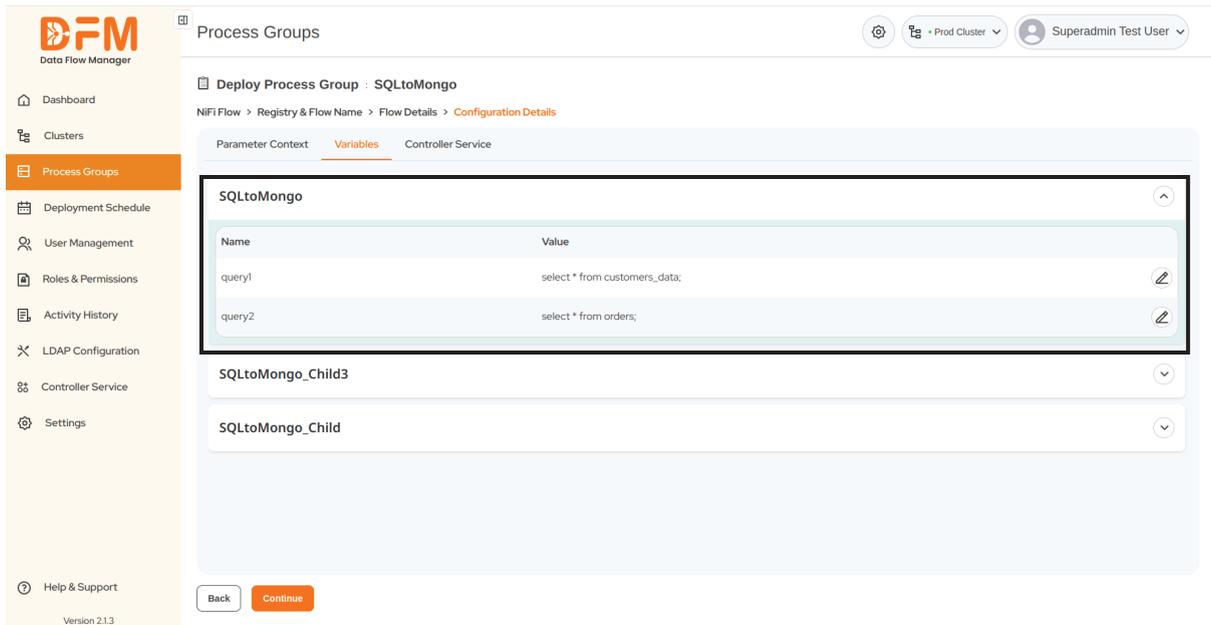


The screenshot shows the 'Process Groups' configuration page in the Data Flow Manager. The breadcrumb trail is 'NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details'. The 'Variables' tab is selected, showing a list of variables for the 'SQLtoMongo' process group:

Parameter Context	Variables	Controller Service
	SQLtoMongo	
	SQLtoMongo_Child3	
	SQLtoMongo_Child	

At the bottom of the configuration area, there are 'Back' and 'Continue' buttons.

- Choose the one that you want to edit and click the edit icon.

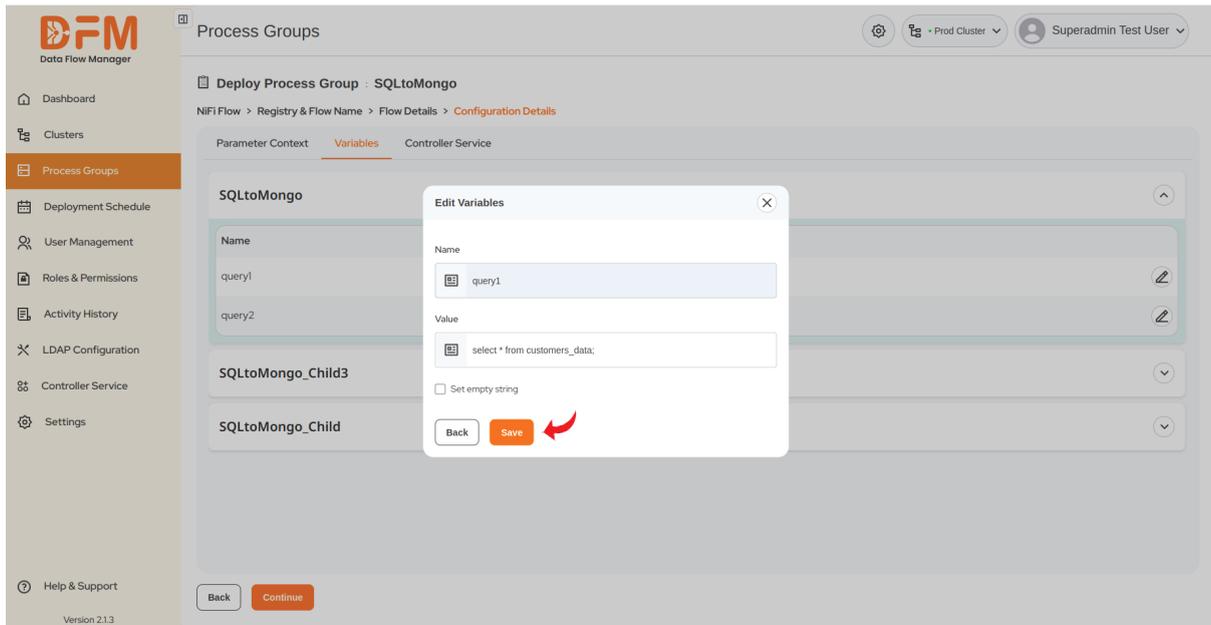


This screenshot shows the 'Variables' tab expanded for the 'SQLtoMongo' process group. A table with two columns, 'Name' and 'Value', is displayed. The 'query1' and 'query2' rows are highlighted with a black border, and their respective edit icons (pencil) are visible. The 'query1' value is 'select \* from customers\_data;' and the 'query2' value is 'select \* from orders;'.

Name	Value	
query1	select * from customers_data;	
query2	select * from orders;	

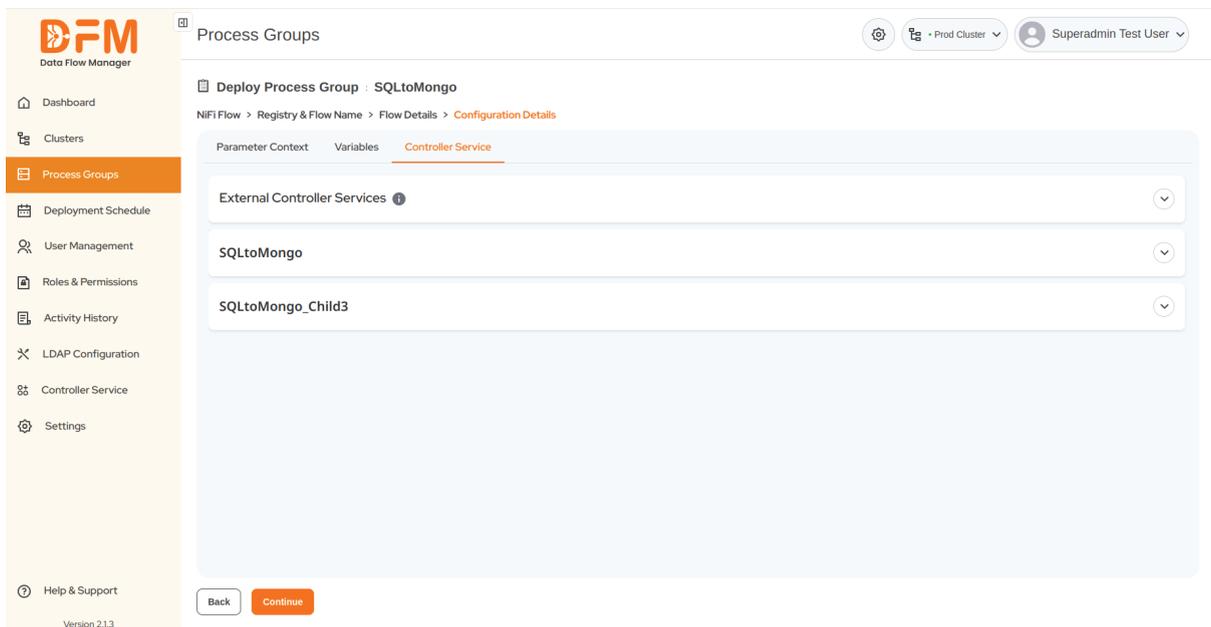
Below the table, the 'SQLtoMongo\_Child3' and 'SQLtoMongo\_Child' process groups are listed with expandable arrows.

- Modify the value of the variables and click **Save**.



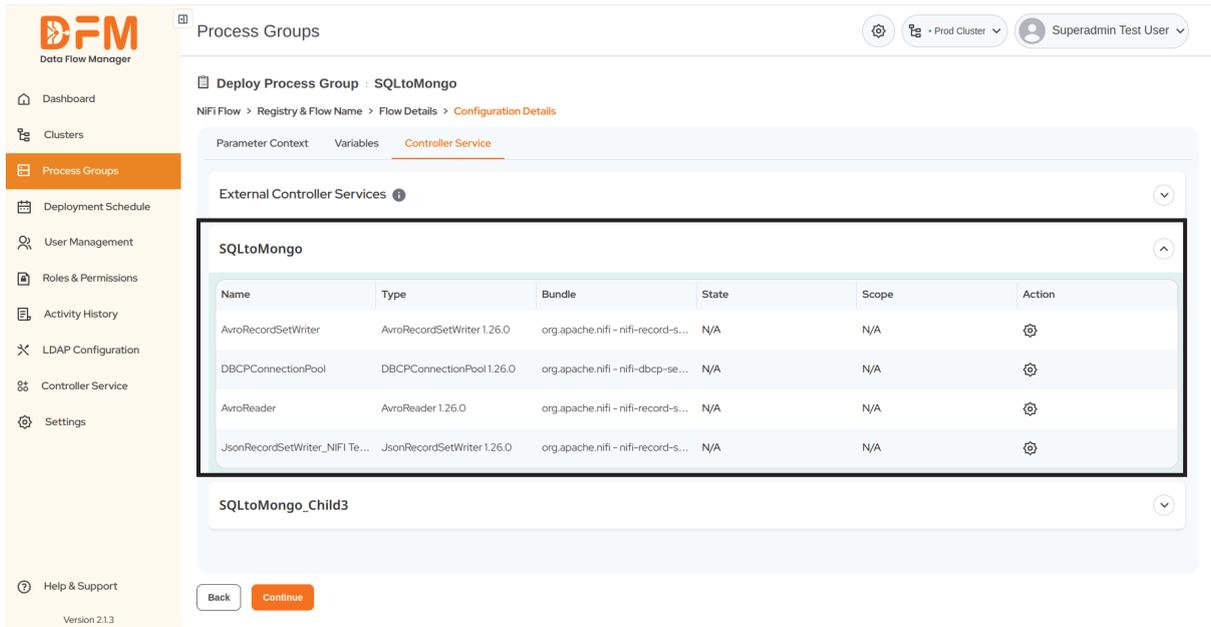
## 4.7. Configure local controller services for a process group while deploying or upgrading it

Along with parameter contexts and variables tabs, find the controller services tab. It lists all external and local controller services of a process group you're deploying.



To configure the controller service local to the process group:

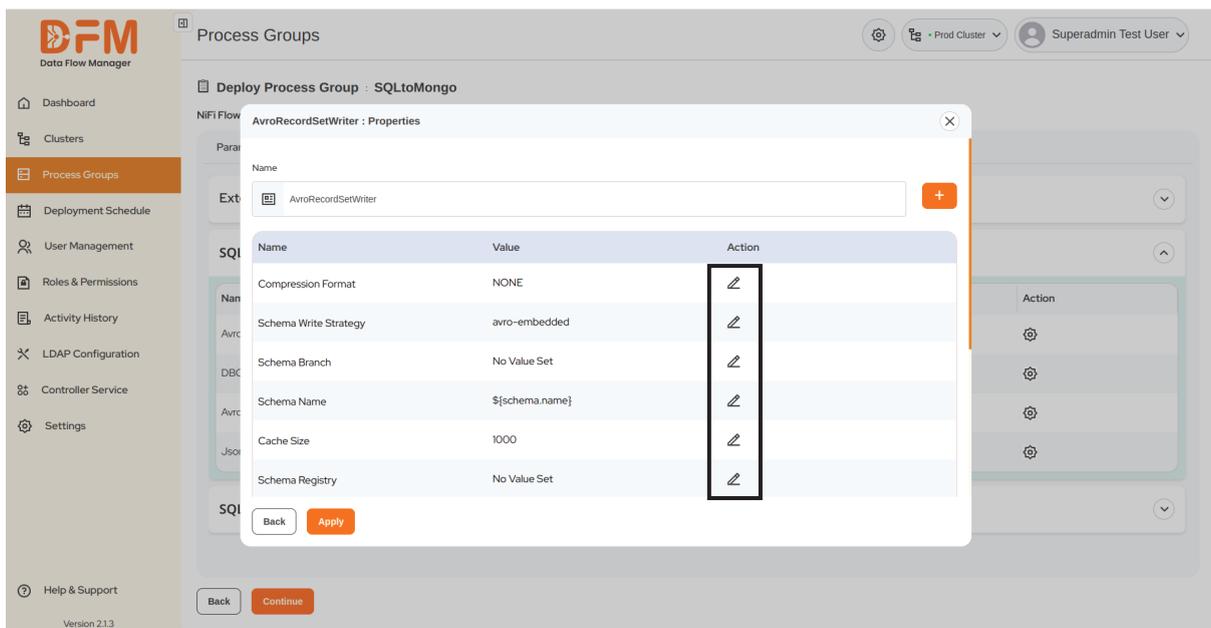
- Choose the local controller service and click the settings icon.



The screenshot shows the 'External Controller Services' section in the DFM interface. A table lists the following services:

Name	Type	Bundle	State	Scope	Action
AvroRecordSetWriter	AvroRecordSetWriter 1.26.0	org.apache.nifi - nifi-record-s...	N/A	N/A	[Action Icon]
DBCPConnectionPool	DBCPConnectionPool 1.26.0	org.apache.nifi - nifi-dbcp-se...	N/A	N/A	[Action Icon]
AvroReader	AvroReader 1.26.0	org.apache.nifi - nifi-record-s...	N/A	N/A	[Action Icon]
JsonRecordSetWriter_NIFI Te...	JsonRecordSetWriter 1.26.0	org.apache.nifi - nifi-record-s...	N/A	N/A	[Action Icon]

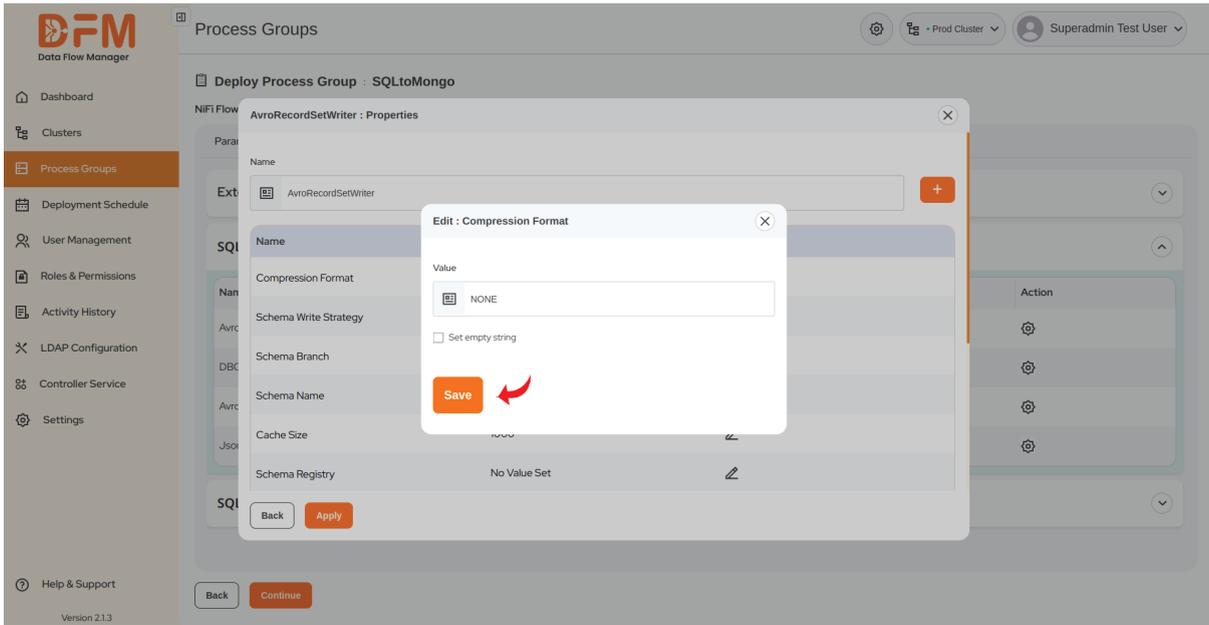
- You'll see a list of properties with their names and values.



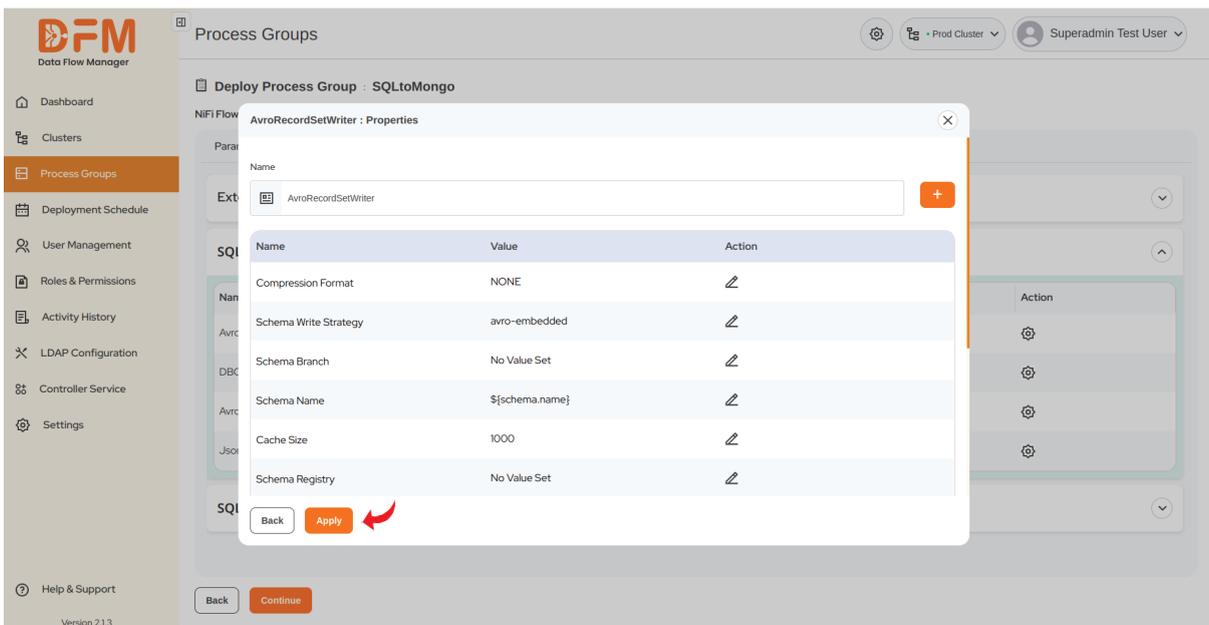
The screenshot shows the 'AvroRecordSetWriter : Properties' dialog box. It contains a table of properties with edit icons in the 'Action' column:

Name	Value	Action
Compression Format	NONE	[Edit Icon]
Schema Write Strategy	avro-embedded	[Edit Icon]
Schema Branch	No Value Set	[Edit Icon]
Schema Name	`\${schema.name}`	[Edit Icon]
Cache Size	1000	[Edit Icon]
Schema Registry	No Value Set	[Edit Icon]

- Click the edit icon to change the value of properties. After changing the value, click **Save**.



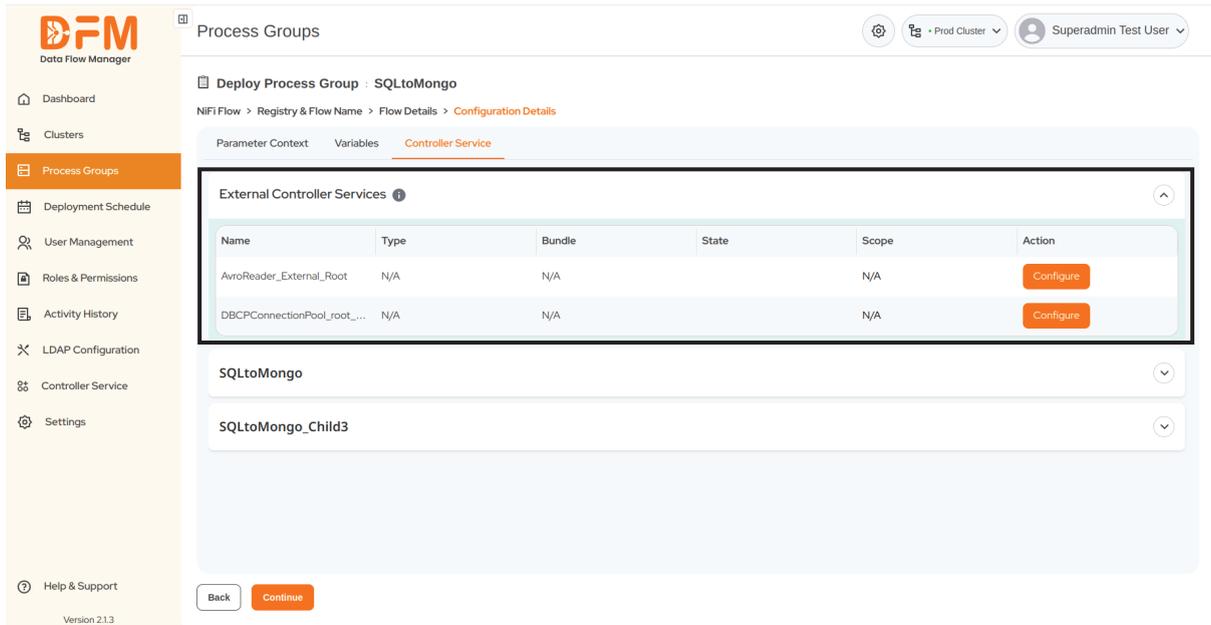
- Once done, click **Apply**.



#### 4.8. Attach an existing external controller service to a process group while deploying or upgrading it

Under the same controller service tab,

- Choose **External Controller Services** and click **Configure**.



Process Groups

Deploy Process Group : SQLtoMongo

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details

Parameter Context Variables **Controller Service**

External Controller Services

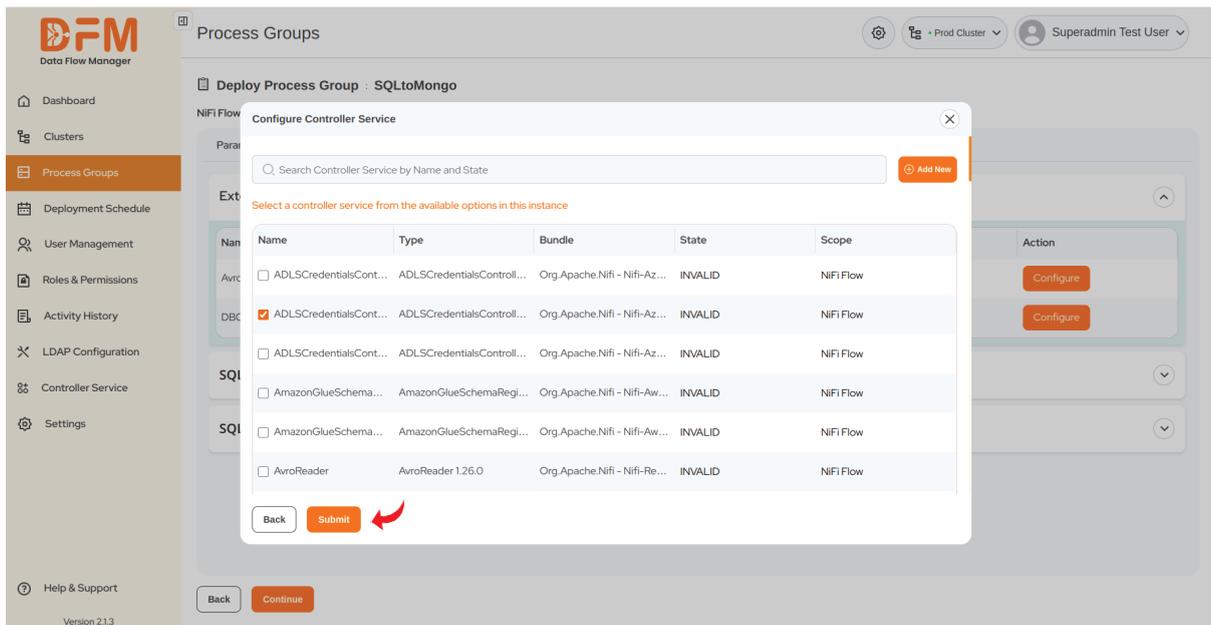
Name	Type	Bundle	State	Scope	Action
AvroReader_External_Root	N/A	N/A		N/A	Configure
DBCPConnectionPool_root,...	N/A	N/A		N/A	Configure

SQLtoMongo

SQLtoMongo\_Child3

Back Continue

- A pop-up appears where you can select the controller service you want to attach. Search it by its name or state. Mark the check box and click **Submit**.



Process Groups

Deploy Process Group : SQLtoMongo

NIFI Flow

Configure Controller Service

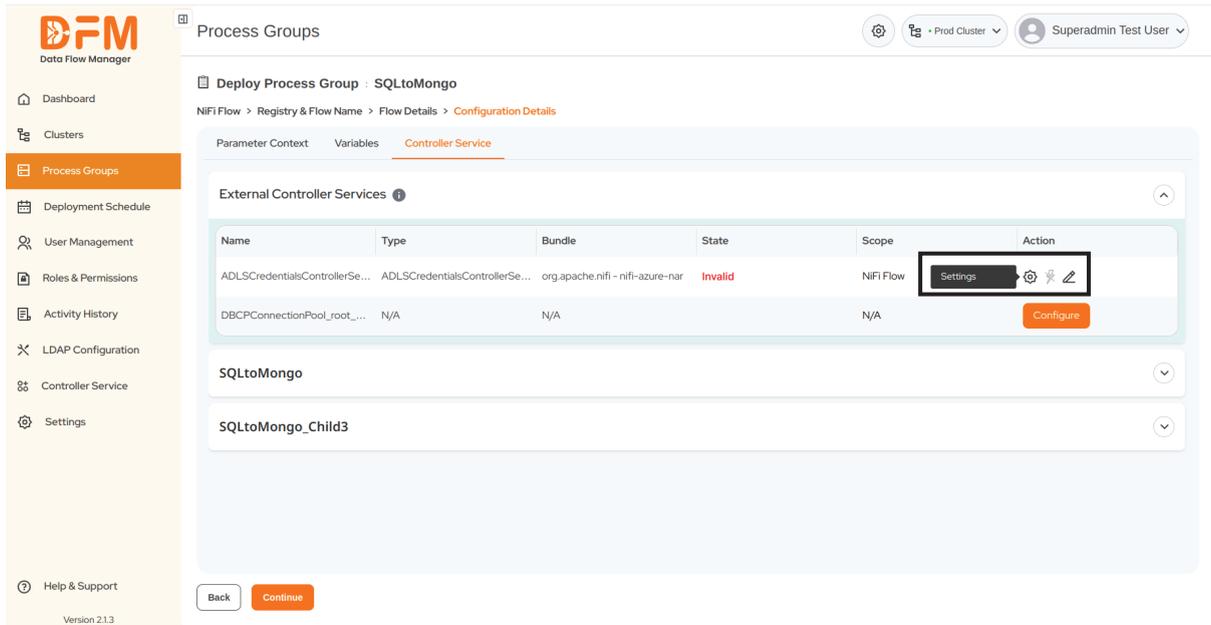
Search Controller Service by Name and State

Select a controller service from the available options in this instance

Name	Type	Bundle	State	Scope
<input type="checkbox"/> ADLSCredentialsCont...	ADLSCredentialsControll...	Org.Apache.Nifi - Nifi-Az...	INVALID	NIFI Flow
<input checked="" type="checkbox"/> ADLSCredentialsCont...	ADLSCredentialsControll...	Org.Apache.Nifi - Nifi-Az...	INVALID	NIFI Flow
<input type="checkbox"/> ADLSCredentialsCont...	ADLSCredentialsControll...	Org.Apache.Nifi - Nifi-Az...	INVALID	NIFI Flow
<input type="checkbox"/> AmazonGlueSchema...	AmazonGlueSchemaRegi...	Org.Apache.Nifi - Nifi-Aw...	INVALID	NIFI Flow
<input type="checkbox"/> AmazonGlueSchema...	AmazonGlueSchemaRegi...	Org.Apache.Nifi - Nifi-Aw...	INVALID	NIFI Flow
<input type="checkbox"/> AvroReader	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Re...	INVALID	NIFI Flow

Back Submit

- Now, go to **Settings** located on the right side of the chosen controller service.



Process Groups

Deploy Process Group: SQLtoMongo

NIFI Flow > Registry & Flow Name > Flow Details > Configuration Details

Parameter Context Variables **Controller Service**

External Controller Services

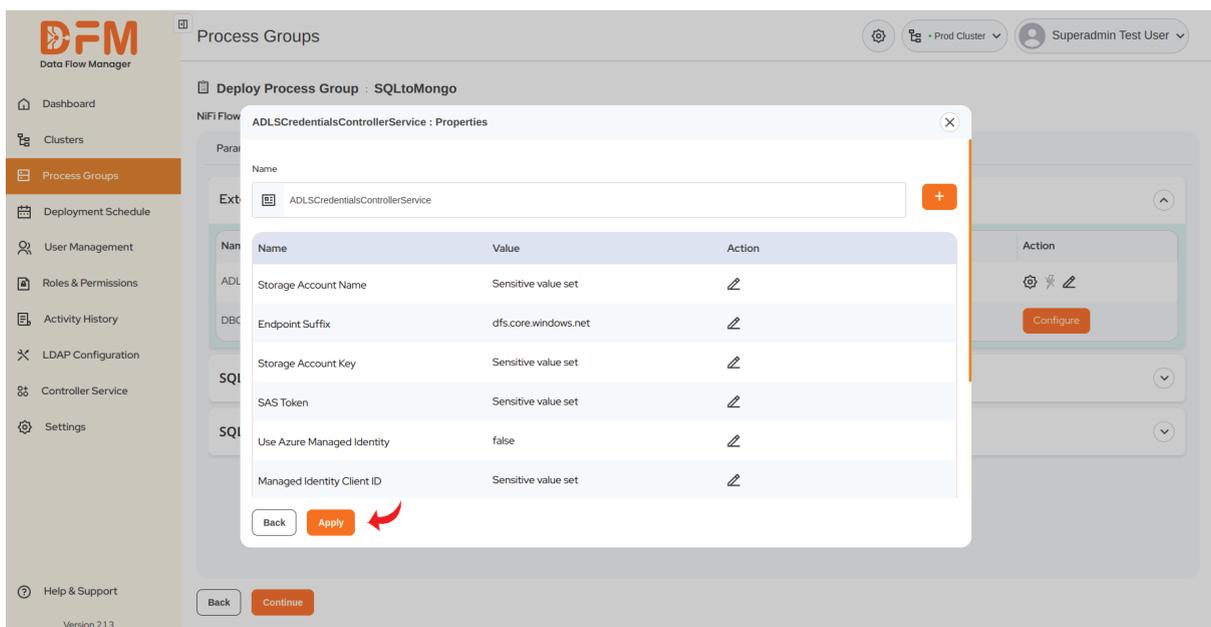
Name	Type	Bundle	State	Scope	Action
ADLSCredentialsControllerSe...	ADLSCredentialsControllerSe...	org.apache.nifi - nifi-azure-nar	Invalid	NIFI Flow	Settings
DBCPConnectionPool_root_...	N/A	N/A		N/A	Configure

SQLtoMongo

SQLtoMongo\_Child3

Back Continue

- Fill in the values of all the fields, and finally click **Apply**.



Process Groups

Deploy Process Group: SQLtoMongo

NIFI Flow

ADLSCredentialsControllerService: Properties

Name

Ext ADLSCredentialsControllerService

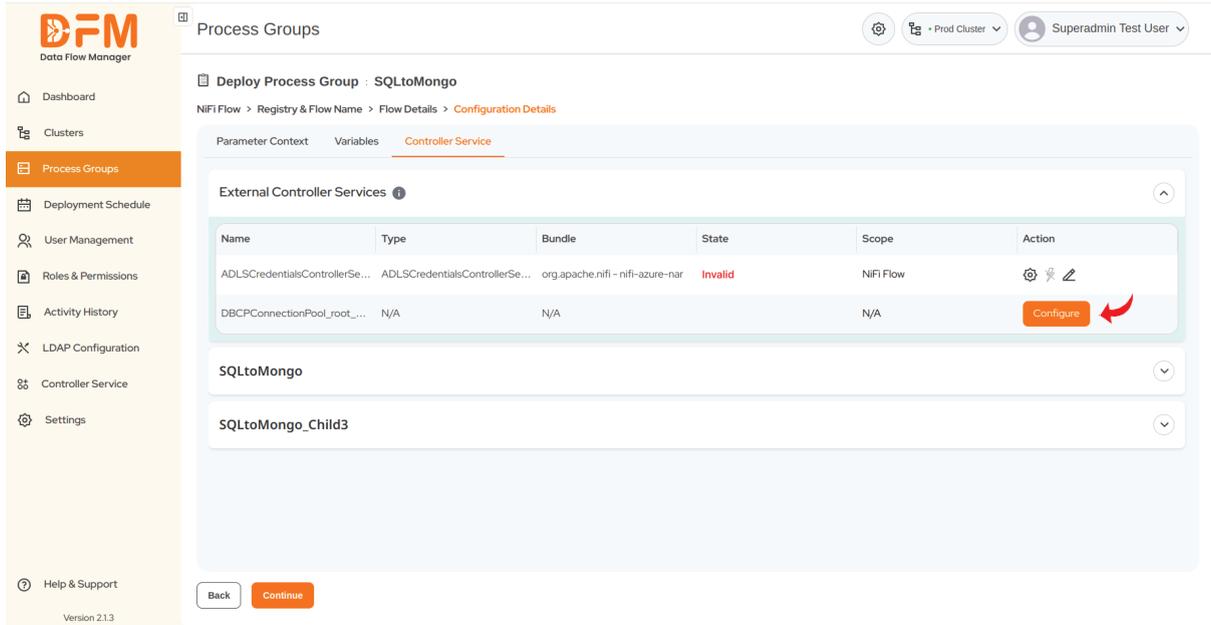
Name	Value	Action
Storage Account Name	Sensitive value set	
Endpoint Suffix	dfs.core.windows.net	
Storage Account Key	Sensitive value set	
SAS Token	Sensitive value set	
Use Azure Managed Identity	false	
Managed Identity Client ID	Sensitive value set	

Back Apply

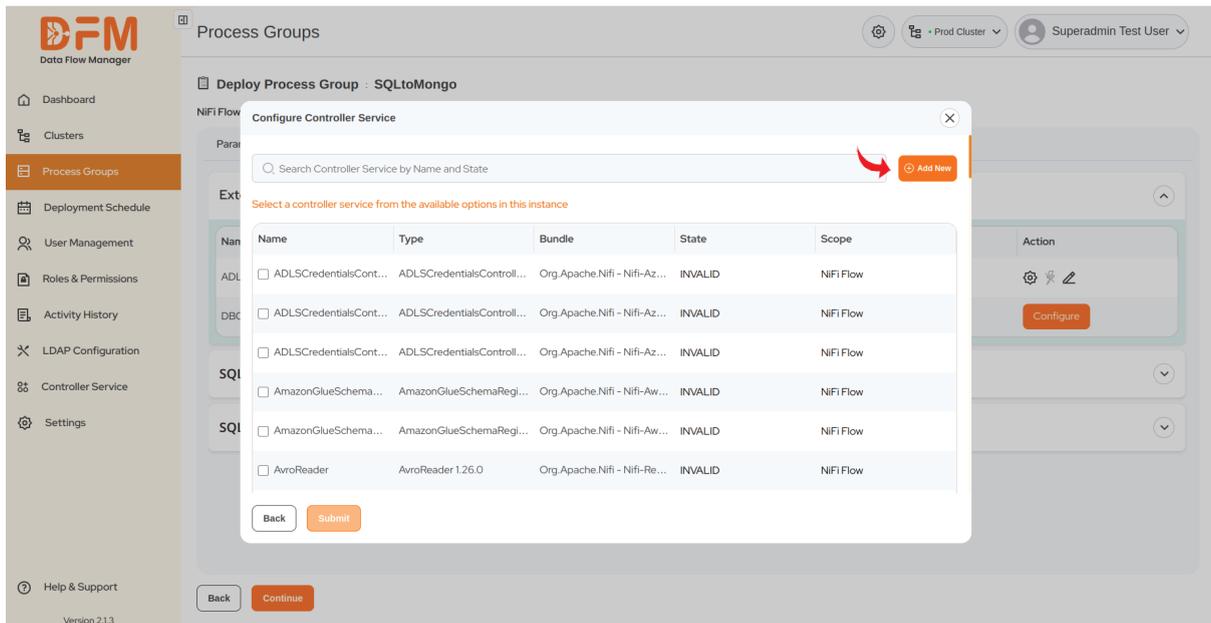
## 4.9. Add a new external controller service to a process group while deploying or upgrading it

Under the same Controller Service tab:

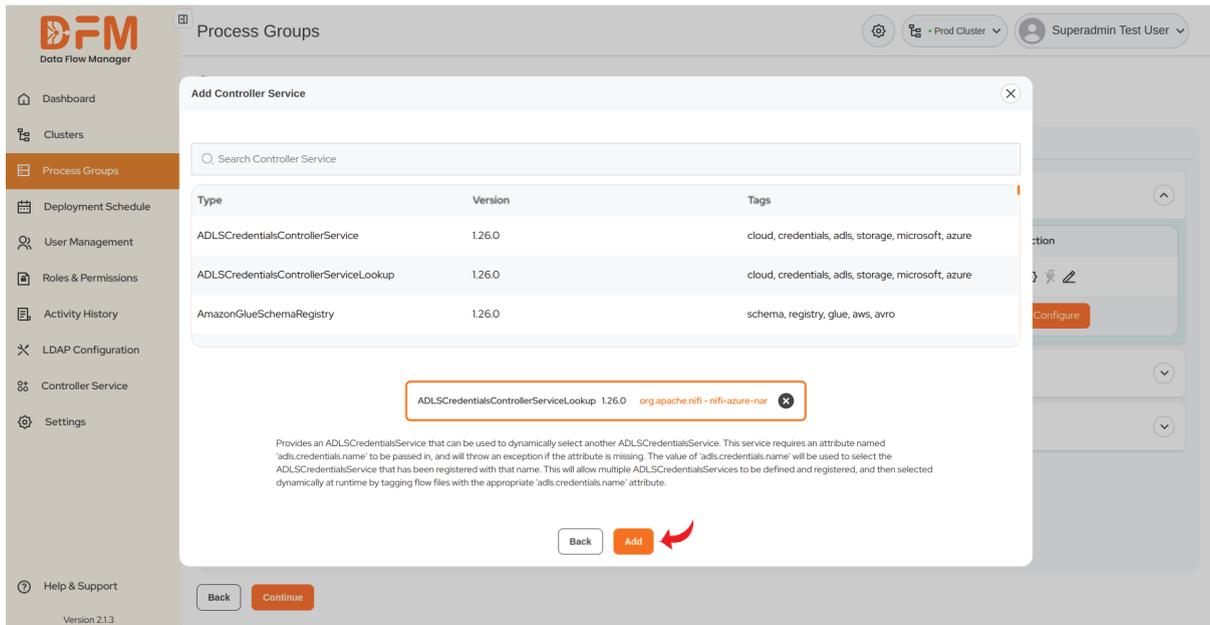
- Go to External Controller Services, and click on **Configure**.



- A pop-up appears where you can find an option to add a new external controller service.



- Choose the external controller service from the given list and click **Add**.

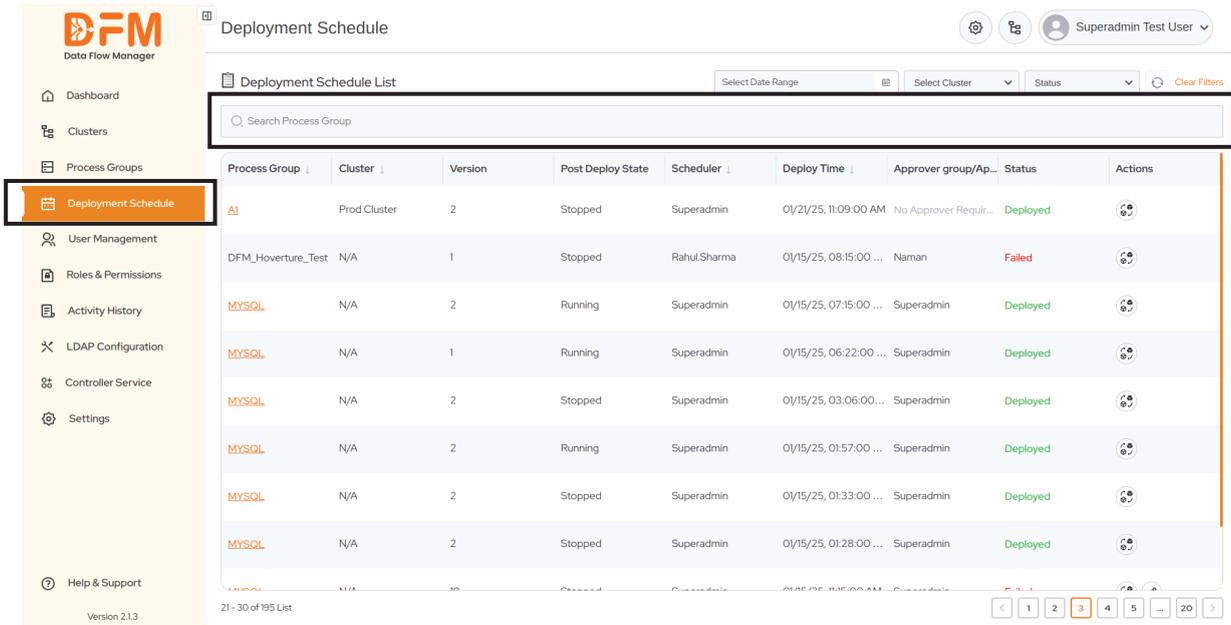


## 5. Deployment Schedule

The **Deployment Schedule** tab lists all process groups scheduled for deployments or upgrades. You can view the key details for each process group, such as:

- **Cluster name:** The cluster containing the process group.
- **Flow version:** The version of the process group scheduled for deployment or upgrade.
- **Post-deploy state:** It indicates whether the flow is running or stopped.
- **Scheduler:** The role of a person who scheduled the deployment or upgrade.
- **Deploy time:** The time at which the deployment or upgrade is scheduled.
- **Approver:** The role of a person who approved the deployment or upgrade.
- **Status:** It indicates the status of the scheduled process groups, such as Approved, Not Approved, Failed, Pending, Rejected, Stopped, and Time Lapsed.
- **Actions:** Provides information about the process group's parameter contexts, variables, and controller services.

Moreover, you can search any process group by entering its name in the search bar given.



**Deployment Schedule**

Deployment Schedule List

Select Date Range | Select Cluster | Status | Clear Filters

Search Process Group

Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
AI	Prod Cluster	2	Stopped	Superadmin	01/21/25, 11:09:00 AM	No Approver Requir...	Deployed	
DFM_Hoverture_Test	N/A	1	Stopped	Rahul.Sharma	01/15/25, 08:15:00 ...	Naman	Failed	
MYSQL	N/A	2	Running	Superadmin	01/15/25, 07:15:00 ...	Superadmin	Deployed	
MYSQL	N/A	1	Running	Superadmin	01/15/25, 06:22:00 ...	Superadmin	Deployed	
MYSQL	N/A	2	Stopped	Superadmin	01/15/25, 03:06:00...	Superadmin	Deployed	
MYSQL	N/A	2	Running	Superadmin	01/15/25, 01:57:00 ...	Superadmin	Deployed	
MYSQL	N/A	2	Stopped	Superadmin	01/15/25, 01:33:00 ...	Superadmin	Deployed	
MYSQL	N/A	2	Stopped	Superadmin	01/15/25, 01:28:00 ...	Superadmin	Deployed	

21 - 30 of 195 List

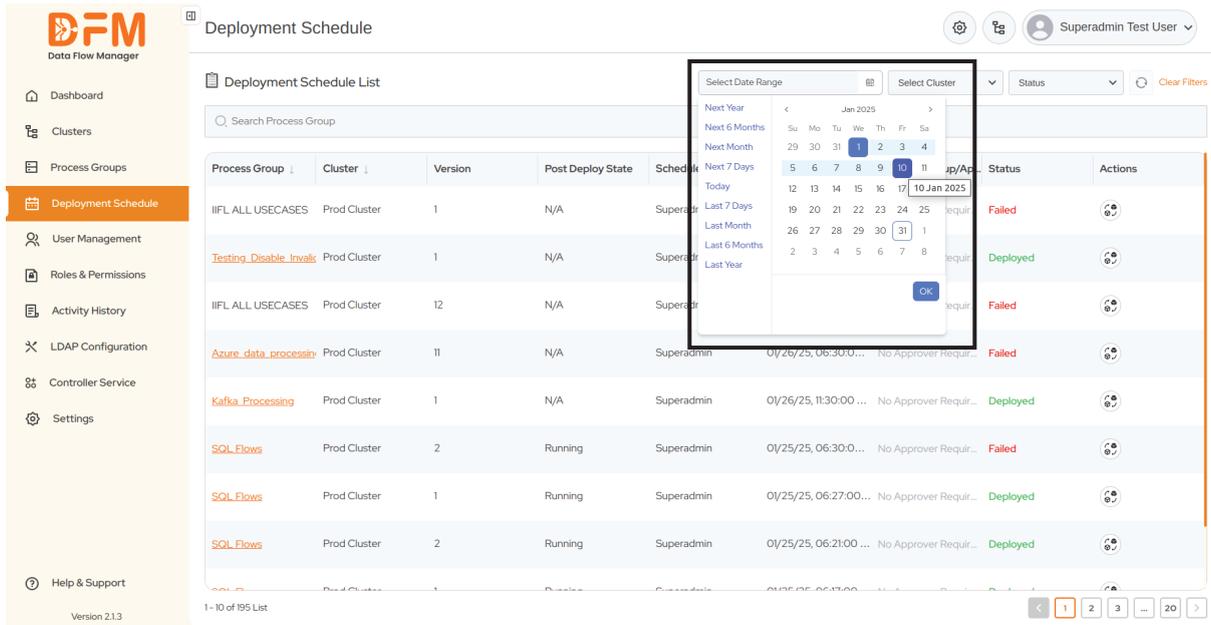
## 5.1. Filter the list of process groups scheduled for deployment

You can filter the list of process groups scheduled for deployment based on the deployment date, cluster, and deployment status.

### a. Deployment Date

Under the **Scheduled Deployment** tab:

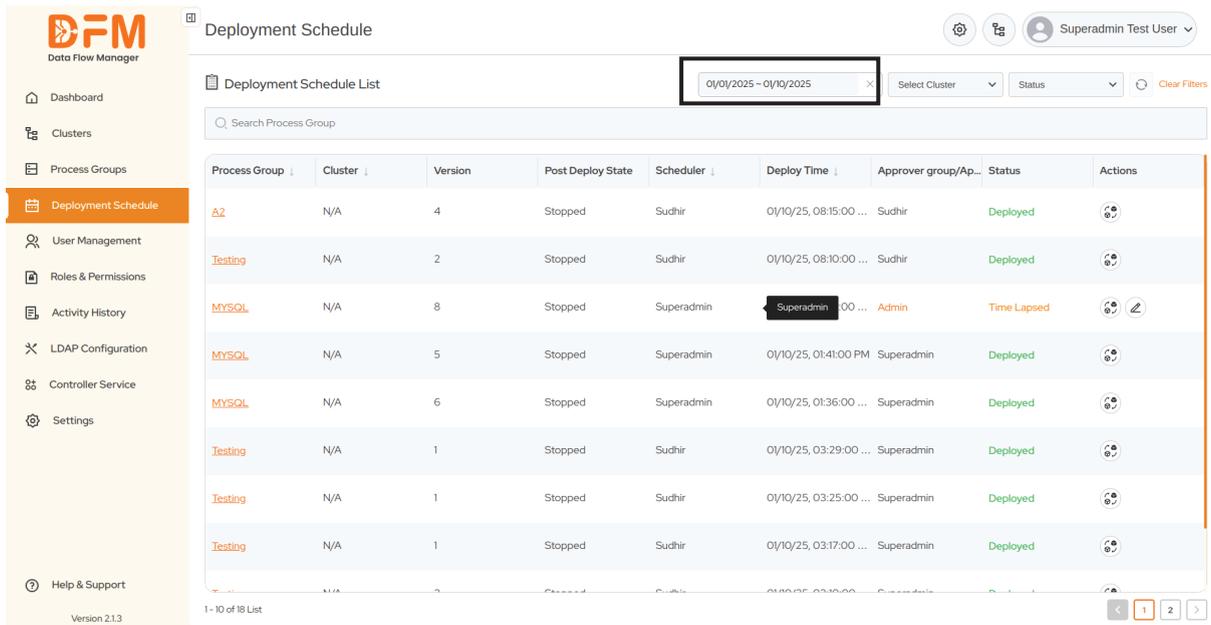
- Click on **Select Date Range**.
- Choose the date range (for instance, 1 January 2025 to 10 January 2025).
- Hit **Ok**.



The screenshot shows the 'Deployment Schedule' page in the DFM interface. A date range selector is open, showing a calendar for January 2025. The date range is set to '01/25/2025 - 01/26/2025'. Below the calendar, a table lists the deployment schedule for various process groups.

Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
IIFL ALL USECASES	Prod Cluster	1	N/A	Superadmin	01/26/25, 06:30:00...	No Approver Requir...	Failed	⚙️
Testing_Disable_Invali	Prod Cluster	1	N/A	Superadmin	01/26/25, 06:30:00...	No Approver Requir...	Deployed	⚙️
IIFL ALL USECASES	Prod Cluster	12	N/A	Superadmin	01/26/25, 06:30:00...	No Approver Requir...	Failed	⚙️
Azure_data_processing	Prod Cluster	11	N/A	Superadmin	01/26/25, 06:30:00...	No Approver Requir...	Failed	⚙️
Kafka_Processing	Prod Cluster	1	N/A	Superadmin	01/26/25, 11:30:00...	No Approver Requir...	Deployed	⚙️
SQL_Flows	Prod Cluster	2	Running	Superadmin	01/25/25, 06:30:00...	No Approver Requir...	Failed	⚙️
SQL_Flows	Prod Cluster	1	Running	Superadmin	01/25/25, 06:27:00...	No Approver Requir...	Deployed	⚙️
SQL_Flows	Prod Cluster	2	Running	Superadmin	01/25/25, 06:21:00...	No Approver Requir...	Deployed	⚙️

The list of process groups scheduled for deployment during the specified date range will appear.



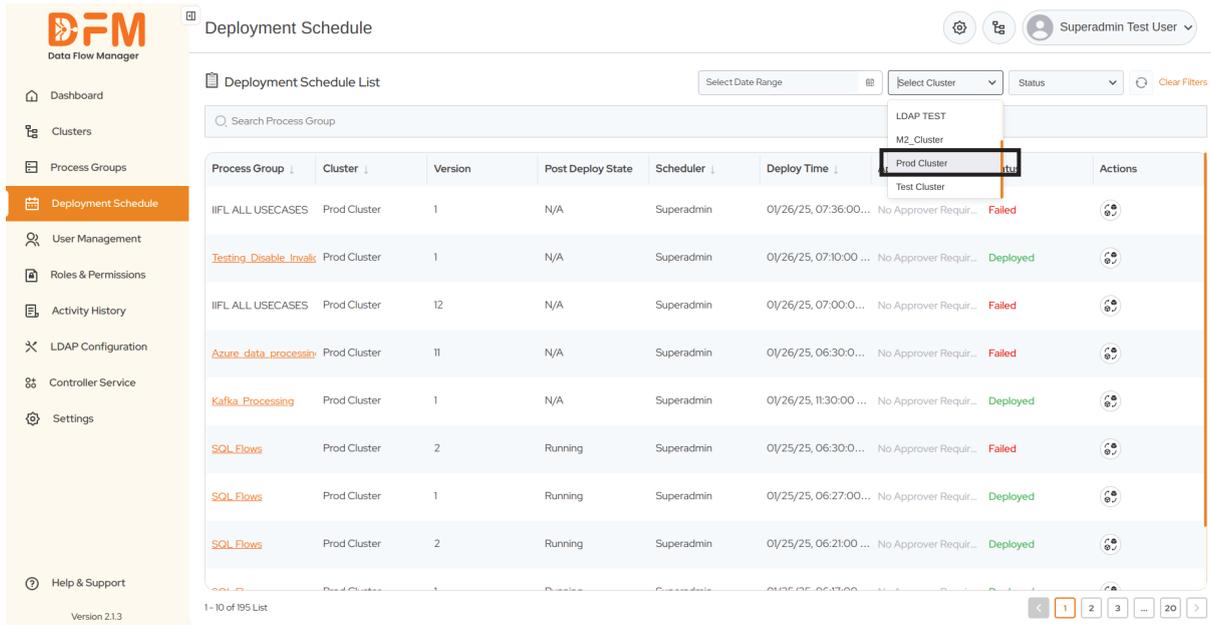
The screenshot shows the 'Deployment Schedule' page in the DFM interface. The date range selector is set to '01/01/2025 - 01/10/2025'. Below the calendar, a table lists the deployment schedule for various process groups.

Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
A2	N/A	4	Stopped	Sudhir	01/10/25, 08:15:00 ...	Sudhir	Deployed	⚙️
Testing	N/A	2	Stopped	Sudhir	01/10/25, 08:10:00 ...	Sudhir	Deployed	⚙️
MYSQL	N/A	8	Stopped	Superadmin	01/10/25, 00:00:00 ...	Admin	Time Lapsed	⚙️
MYSQL	N/A	5	Stopped	Superadmin	01/10/25, 01:41:00 PM	Superadmin	Deployed	⚙️
MYSQL	N/A	6	Stopped	Superadmin	01/10/25, 01:36:00 ...	Superadmin	Deployed	⚙️
Testing	N/A	1	Stopped	Sudhir	01/10/25, 03:29:00 ...	Superadmin	Deployed	⚙️
Testing	N/A	1	Stopped	Sudhir	01/10/25, 03:25:00 ...	Superadmin	Deployed	⚙️
Testing	N/A	1	Stopped	Sudhir	01/10/25, 03:17:00 ...	Superadmin	Deployed	⚙️

## b. Cluster

On the same tab:

- Go to the **Select Cluster** dropdown present in the top-right corner.
- Select the cluster whose process groups you want to display. We have chosen **ProdCluster**.



**Deployment Schedule**

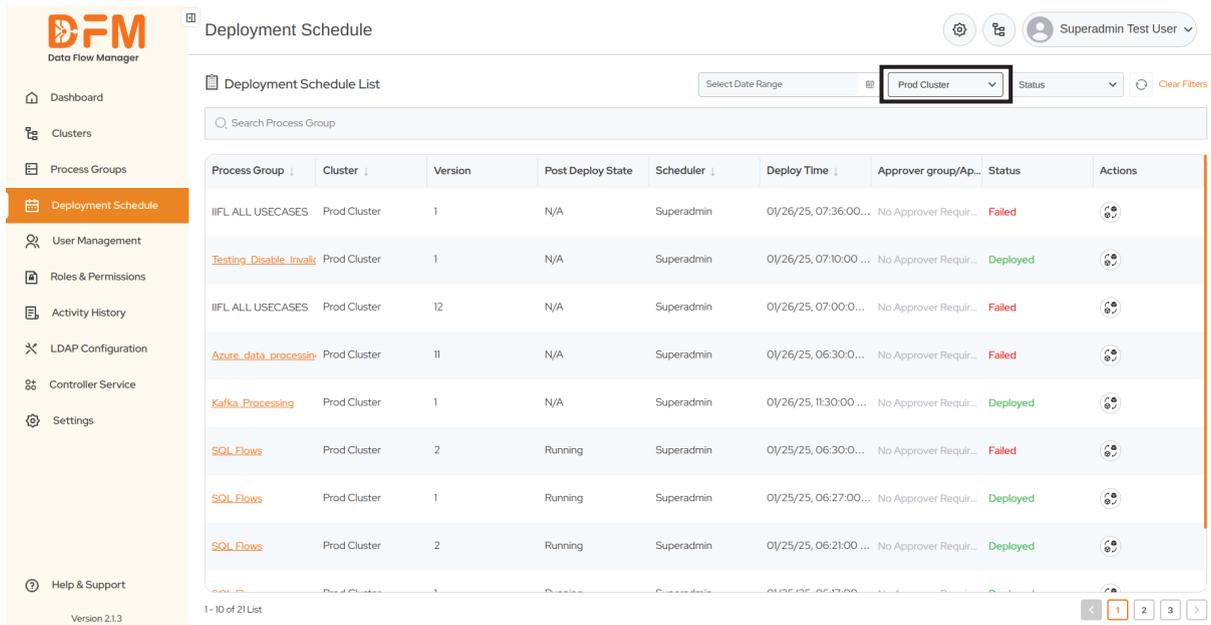
Select Date Range | Select Cluster | Status | Clear Filters

Search Process Group

Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
IFL ALL USECASES	Prod Cluster	1	N/A	Superadmin	01/26/25, 07:36:00...	No Approver Requir...	Failed	
<a href="#">Testing_Disable_Invalk</a>	Prod Cluster	1	N/A	Superadmin	01/26/25, 07:10:00 ...	No Approver Requir...	Deployed	
IFL ALL USECASES	Prod Cluster	12	N/A	Superadmin	01/26/25, 07:00:0...	No Approver Requir...	Failed	
<a href="#">Azure_data_processin</a>	Prod Cluster	11	N/A	Superadmin	01/26/25, 06:30:0...	No Approver Requir...	Failed	
<a href="#">Kafka_Processing</a>	Prod Cluster	1	N/A	Superadmin	01/26/25, 11:30:00 ...	No Approver Requir...	Deployed	
<a href="#">SQL_Flows</a>	Prod Cluster	2	Running	Superadmin	01/25/25, 06:30:0...	No Approver Requir...	Failed	
<a href="#">SQL_Flows</a>	Prod Cluster	1	Running	Superadmin	01/25/25, 06:27:00...	No Approver Requir...	Deployed	
<a href="#">SQL_Flows</a>	Prod Cluster	2	Running	Superadmin	01/25/25, 06:21:00 ...	No Approver Requir...	Deployed	

1 - 10 of 195 List

- The entire list of process groups in that cluster appears.



**Deployment Schedule**

Select Date Range | Prod Cluster | Status | Clear Filters

Search Process Group

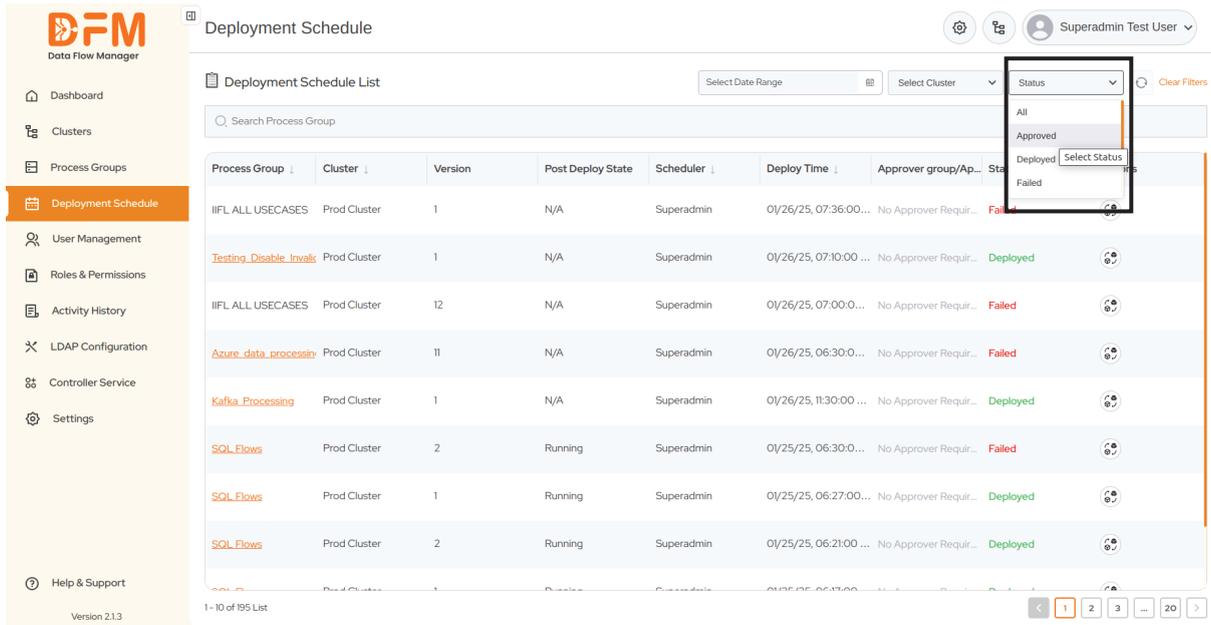
Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
IFL ALL USECASES	Prod Cluster	1	N/A	Superadmin	01/26/25, 07:36:00...	No Approver Requir...	Failed	
<a href="#">Testing_Disable_Invalk</a>	Prod Cluster	1	N/A	Superadmin	01/26/25, 07:10:00 ...	No Approver Requir...	Deployed	
IFL ALL USECASES	Prod Cluster	12	N/A	Superadmin	01/26/25, 07:00:0...	No Approver Requir...	Failed	
<a href="#">Azure_data_processin</a>	Prod Cluster	11	N/A	Superadmin	01/26/25, 06:30:0...	No Approver Requir...	Failed	
<a href="#">Kafka_Processing</a>	Prod Cluster	1	N/A	Superadmin	01/26/25, 11:30:00 ...	No Approver Requir...	Deployed	
<a href="#">SQL_Flows</a>	Prod Cluster	2	Running	Superadmin	01/25/25, 06:30:0...	No Approver Requir...	Failed	
<a href="#">SQL_Flows</a>	Prod Cluster	1	Running	Superadmin	01/25/25, 06:27:00...	No Approver Requir...	Deployed	
<a href="#">SQL_Flows</a>	Prod Cluster	2	Running	Superadmin	01/25/25, 06:21:00 ...	No Approver Requir...	Deployed	

1 - 10 of 21 List

### c. Deployment Status

To filter the process group list based on the deployment status:

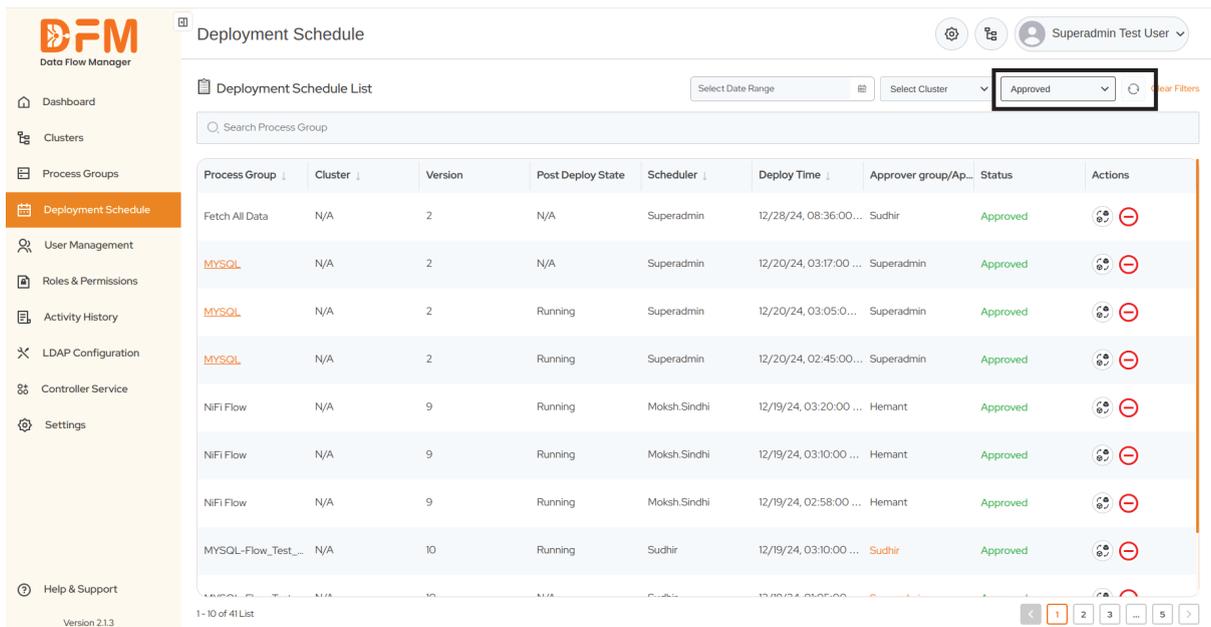
- Go to the dropdown named **Status** in the top-right corner of the **Deployment Schedule** tab.
- Choose one from the deployment status – Approved, Not Approved, Failed, Pending, Rejected, Stopped, and Time Lapsed.



The screenshot shows the 'Deployment Schedule' page in the Data Flow Manager. A dropdown menu for 'Status' is open, showing options: 'All', 'Approved', 'Deployed', and 'Failed'. The 'Approved' option is highlighted. The table below shows various process groups with their current status.

Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
IIFL ALL USECASES	Prod Cluster	1	N/A	Superadmin	01/26/25, 07:36:00...	No Approver Requir...	Failed	🔍 ⚙️
Testing_Disable_Invalk	Prod Cluster	1	N/A	Superadmin	01/26/25, 07:10:00 ...	No Approver Requir...	Deployed	🔍 ⚙️
IIFL ALL USECASES	Prod Cluster	12	N/A	Superadmin	01/26/25, 07:00:0...	No Approver Requir...	Failed	🔍 ⚙️
Azure_data_processing	Prod Cluster	11	N/A	Superadmin	01/26/25, 06:30:0...	No Approver Requir...	Failed	🔍 ⚙️
Kafka_Processing	Prod Cluster	1	N/A	Superadmin	01/26/25, 11:30:00 ...	No Approver Requir...	Deployed	🔍 ⚙️
SQL_Flows	Prod Cluster	2	Running	Superadmin	01/25/25, 06:30:0...	No Approver Requir...	Failed	🔍 ⚙️
SQL_Flows	Prod Cluster	1	Running	Superadmin	01/25/25, 06:27:00...	No Approver Requir...	Deployed	🔍 ⚙️
SQL_Flows	Prod Cluster	2	Running	Superadmin	01/25/25, 06:21:00 ...	No Approver Requir...	Deployed	🔍 ⚙️

Here, we've chosen the **Approved** status.



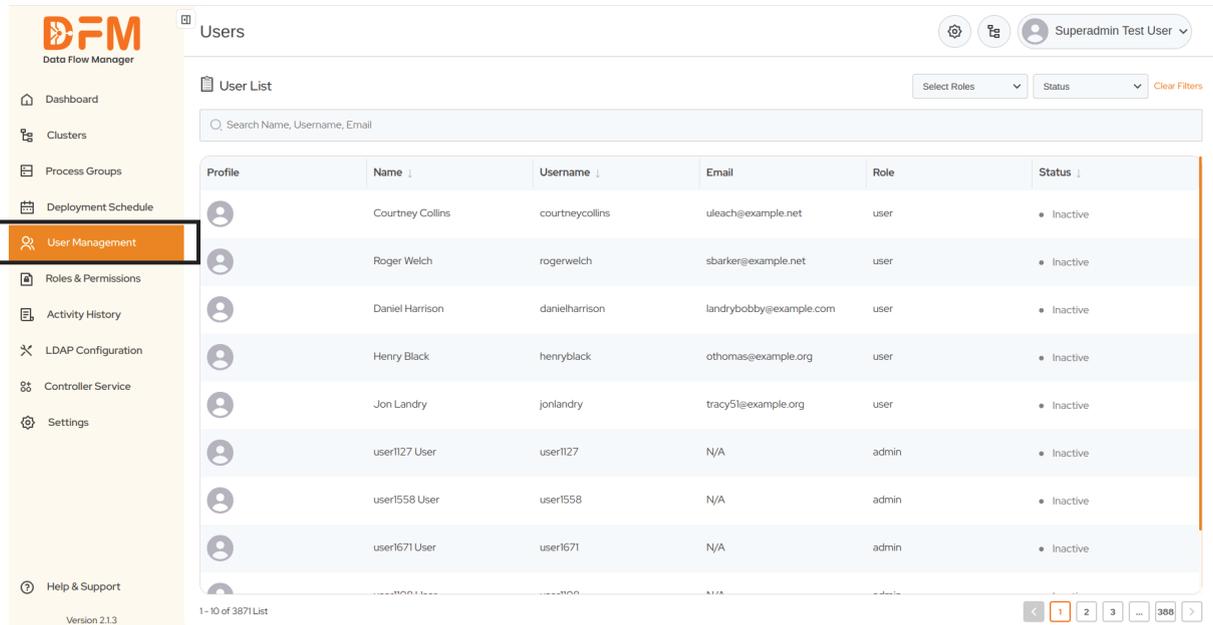
The screenshot shows the 'Deployment Schedule' page with the 'Status' dropdown set to 'Approved'. The table displays only the approved entries.

Process Group	Cluster	Version	Post Deploy State	Scheduler	Deploy Time	Approver group/Ap...	Status	Actions
Fetch All Data	N/A	2	N/A	Superadmin	12/28/24, 08:36:00...	Sudhir	Approved	🔍 ⚙️
MYSQL	N/A	2	N/A	Superadmin	12/20/24, 03:17:00 ...	Superadmin	Approved	🔍 ⚙️
MYSQL	N/A	2	Running	Superadmin	12/20/24, 03:05:0...	Superadmin	Approved	🔍 ⚙️
MYSQL	N/A	2	Running	Superadmin	12/20/24, 02:45:00...	Superadmin	Approved	🔍 ⚙️
NIFI Flow	N/A	9	Running	Moksh.Sindhi	12/19/24, 03:20:00 ...	Hemant	Approved	🔍 ⚙️
NIFI Flow	N/A	9	Running	Moksh.Sindhi	12/19/24, 03:10:00 ...	Hemant	Approved	🔍 ⚙️
NIFI Flow	N/A	9	Running	Moksh.Sindhi	12/19/24, 02:58:00 ...	Hemant	Approved	🔍 ⚙️
MYSQL-Flow_Test_...	N/A	10	Running	Sudhir	12/19/24, 03:10:00 ...	Sudhir	Approved	🔍 ⚙️

**Note:** You can use all three filters simultaneously to narrow down your search. Ensure to clear the filter every time when you use it so that you can apply another filter.

## 6. User Management

The **User Management** section contains a list of users, along with details like name, username, email, role, and status, that are synchronized with LDAP.

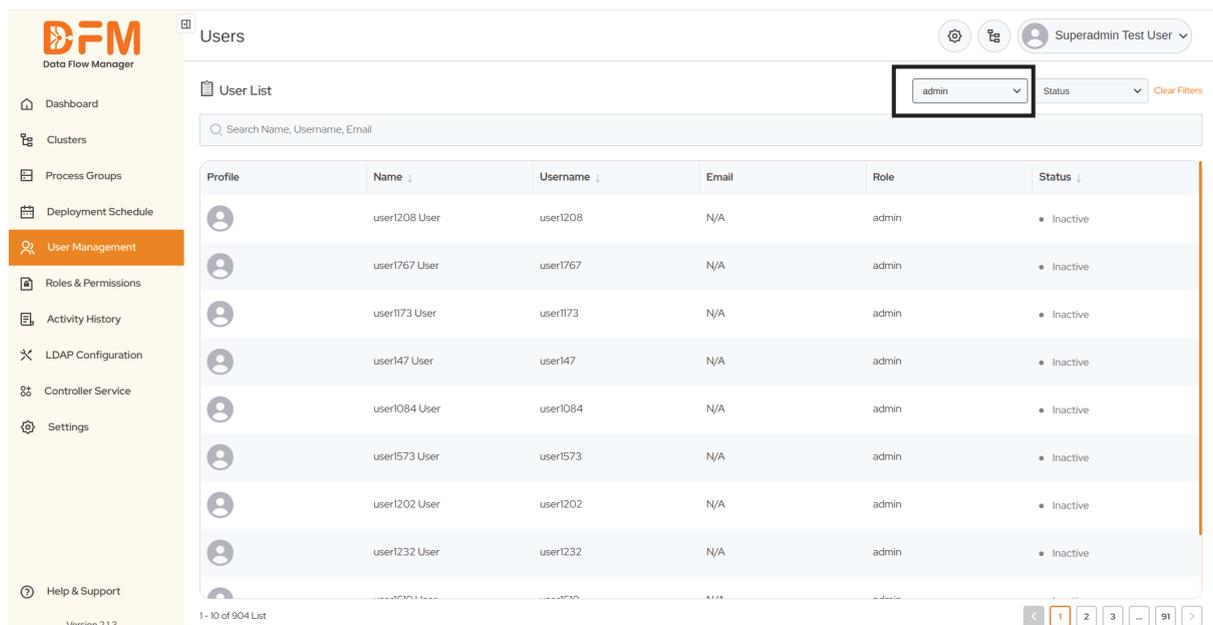


The screenshot shows the 'Users' section of the Data Flow Manager. The left sidebar has 'User Management' highlighted. The main area displays a 'User List' table with columns for Profile, Name, Username, Email, Role, and Status. A search bar and filters for 'Select Roles' and 'Status' are visible at the top of the table. The table lists several users, including Courtney Collins, Roger Welch, Daniel Harrison, Henry Black, Jon Landry, and several generic users (user1127, user1558, user1671). The status for all listed users is 'Inactive'.

Profile	Name	Username	Email	Role	Status
	Courtney Collins	courtneycollins	uleach@example.net	user	Inactive
	Roger Welch	rogerwelch	sbarker@example.net	user	Inactive
	Daniel Harrison	danielharrison	landrybobby@example.com	user	Inactive
	Henry Black	henryblack	othomas@example.org	user	Inactive
	Jon Landry	jonlandry	tracy51@example.org	user	Inactive
	user1127 User	user1127	N/A	admin	Inactive
	user1558 User	user1558	N/A	admin	Inactive
	user1671 User	user1671	N/A	admin	Inactive

You can search for any user by entering their name, username, and email address. Additionally, you can leverage filters to sort the user list based on

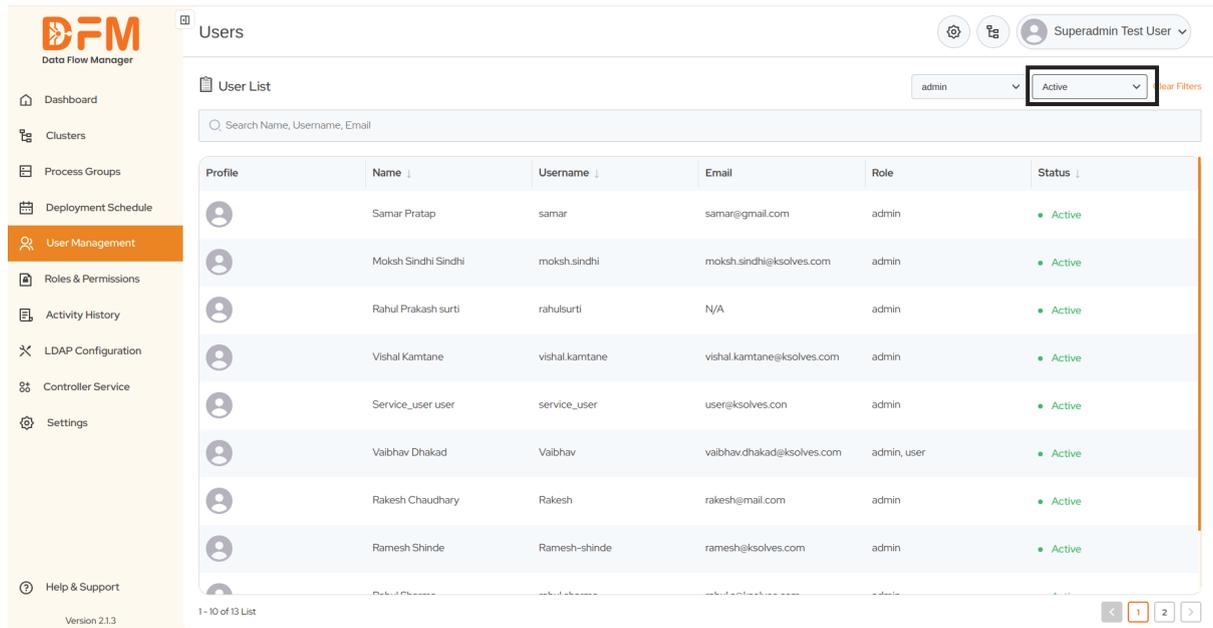
### User Role



The screenshot shows the 'Users' section of the Data Flow Manager with the 'Role' filter set to 'admin'. The 'User List' table now displays only users with the 'admin' role. The search bar and filters are visible at the top of the table. The table lists several generic users (user1208, user1767, user1173, user147, user1084, user1573, user1202, user1232). The status for all listed users is 'Inactive'.

Profile	Name	Username	Email	Role	Status
	user1208 User	user1208	N/A	admin	Inactive
	user1767 User	user1767	N/A	admin	Inactive
	user1173 User	user1173	N/A	admin	Inactive
	user147 User	user147	N/A	admin	Inactive
	user1084 User	user1084	N/A	admin	Inactive
	user1573 User	user1573	N/A	admin	Inactive
	user1202 User	user1202	N/A	admin	Inactive
	user1232 User	user1232	N/A	admin	Inactive

## Status (Active & Inactive)



**Users**

admin | Active | Clear Filters

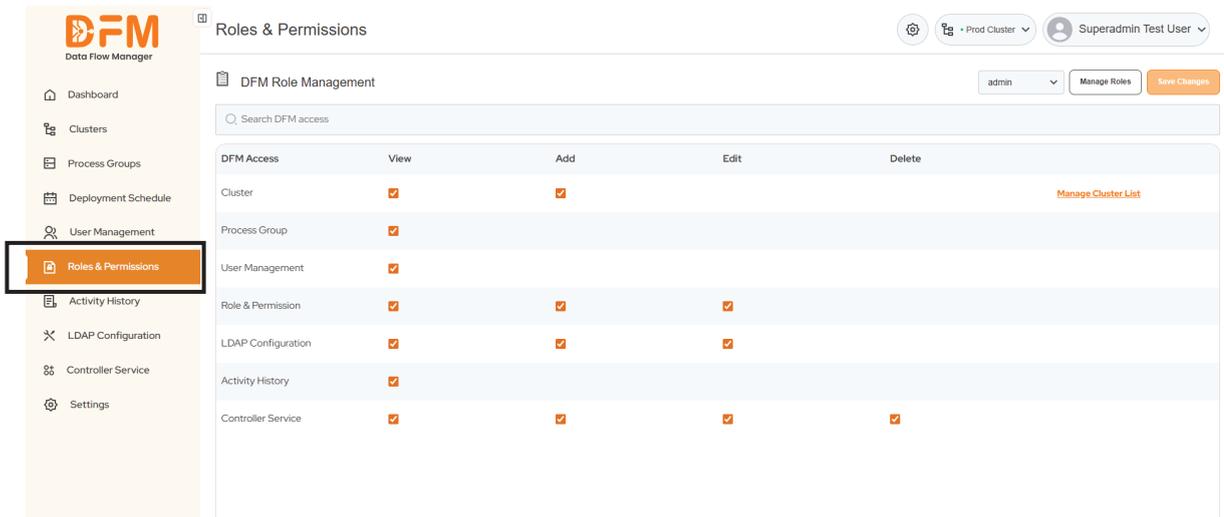
Search Name, Username, Email

Profile	Name ↓	Username ↓	Email	Role	Status ↓
	Samar Pratap	samar	samar@gmail.com	admin	Active
	Moksh Sindhi Sindhi	moksh.sindhi	moksh.sindhi@ksolves.com	admin	Active
	Rahul Prakash surti	rahulsurti	N/A	admin	Active
	Vishal Kamtane	vishal.kamtane	vishal.kamtane@ksolves.com	admin	Active
	Service_user user	service_user	user@ksolves.com	admin	Active
	Vaibhav Dhakad	Vaibhav	vaibhav.dhakad@ksolves.com	admin_user	Active
	Rakesh Chaudhary	Rakesh	rakesh@mail.com	admin	Active
	Ramesh Shinde	Ramesh-shinde	ramesh@ksolves.com	admin	Active

1 - 10 of 13 List

## 7. Roles and Permissions

Create new roles and assign different roles and permissions to users, ensuring that they have appropriate read or write access to Data Flow Manager's certain menus as well as clusters.



**Roles & Permissions**

admin | Manage Roles | Save Changes

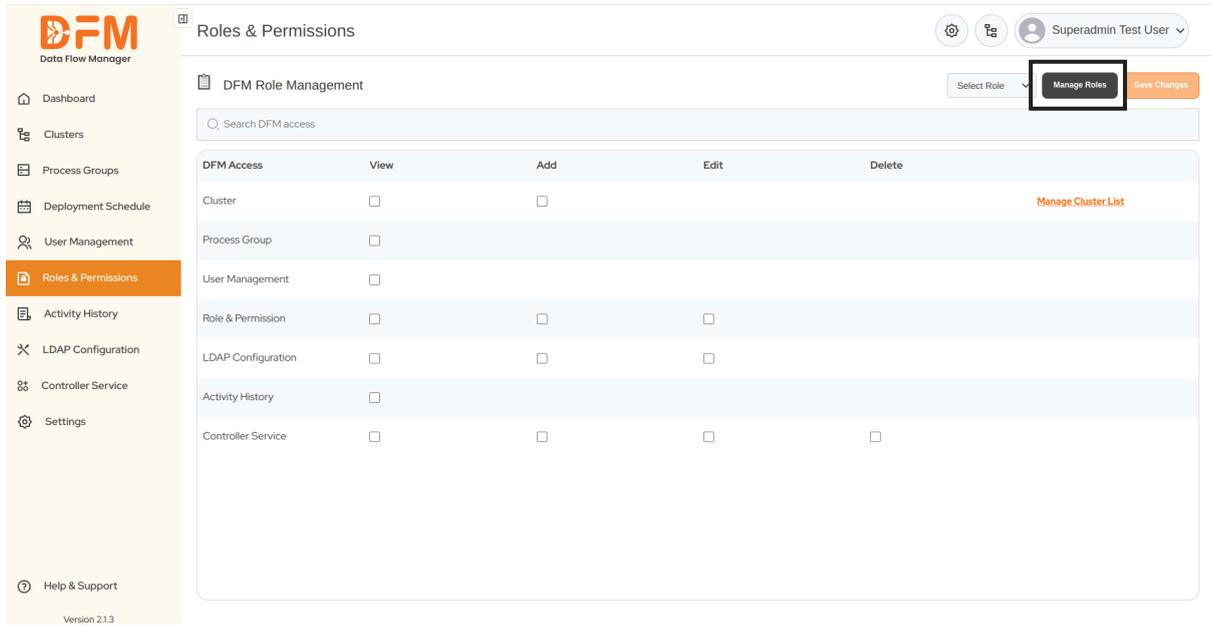
Search DFM access

DFM Access	View	Add	Edit	Delete
Cluster	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<a href="#">Manage Cluster List</a>
Process Group	<input checked="" type="checkbox"/>			
User Management	<input checked="" type="checkbox"/>			
Role & Permission	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
LDAP Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Activity History	<input checked="" type="checkbox"/>			
Controller Service	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

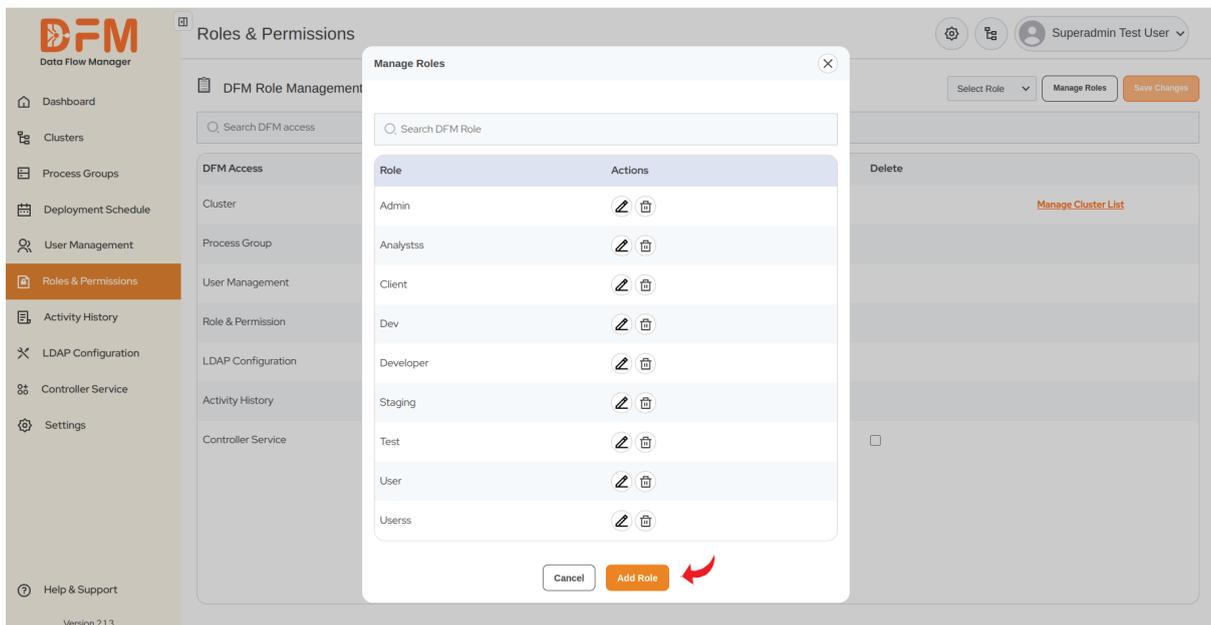
### 7.1. Add a new user role

To add a new user role:

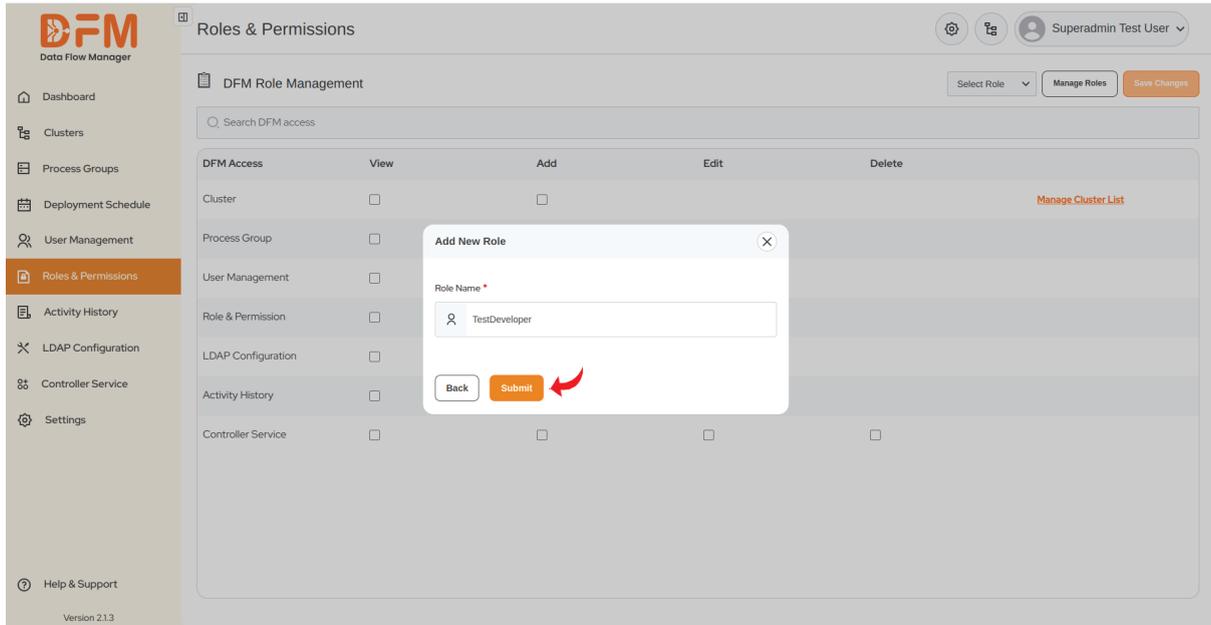
- Go to **Manage Roles** present in the top right corner of the Roles & Permissions tab.



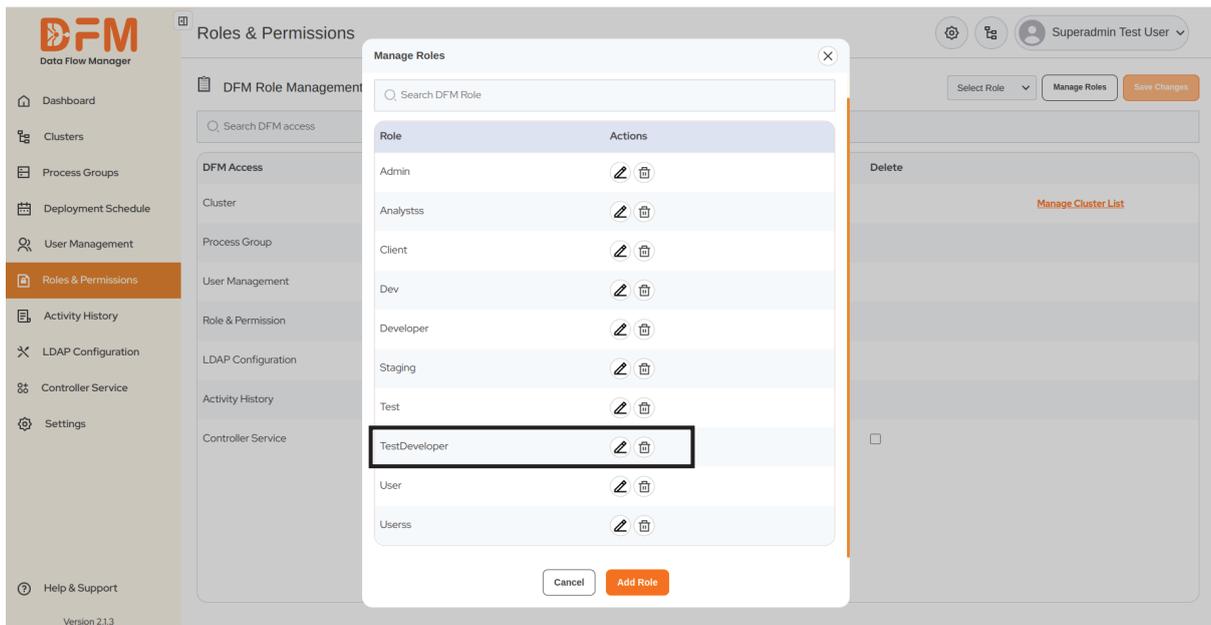
- Click the **Add Role** button.



- Enter the role name and click **Submit**.



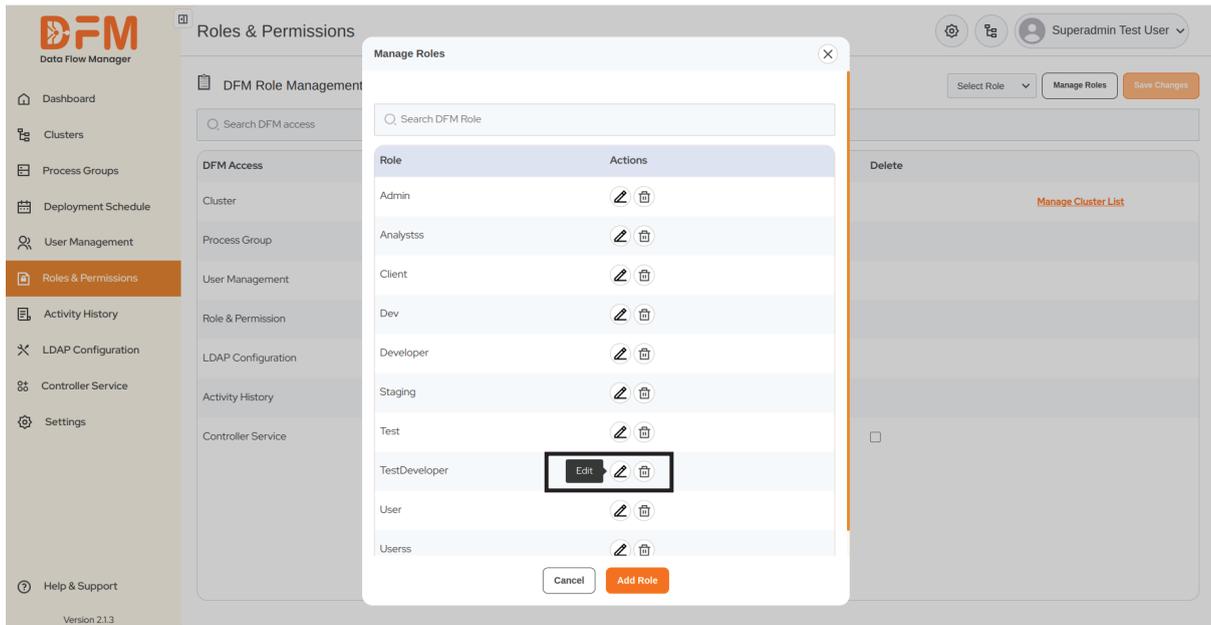
- The new role will be added to the list.



## 7.2. Edit a user role

You can edit the name of the user role. To do this:

- Go to **Manage Role** under the **Roles & Permissions** tab.
- Click on the edit icon for the role you want to edit.

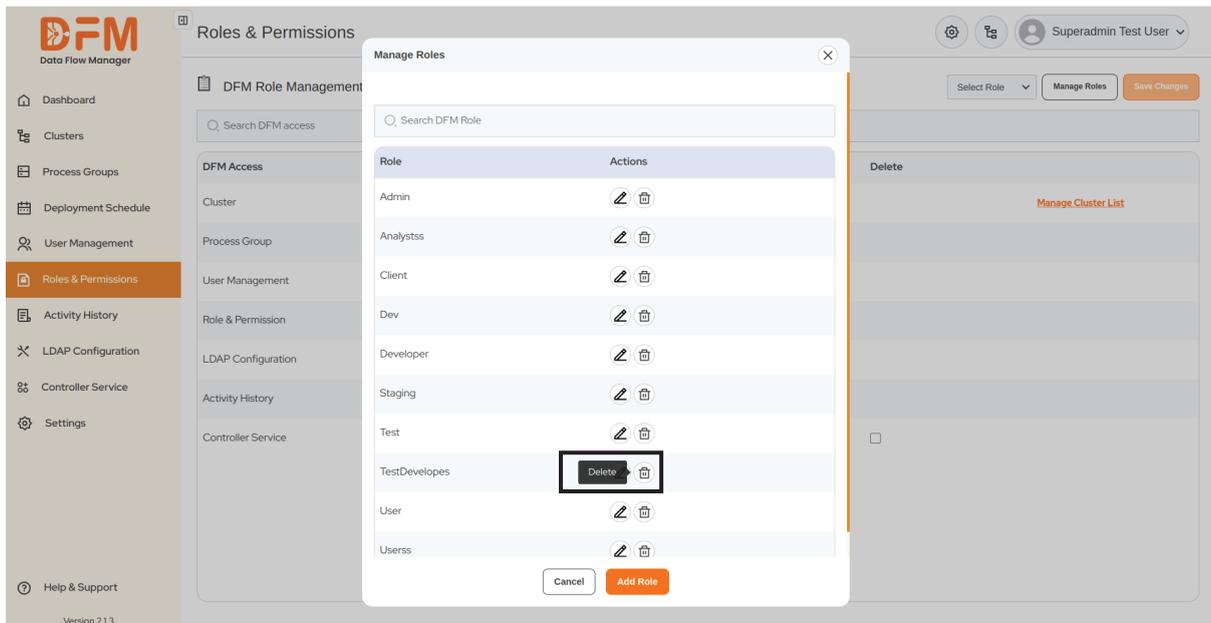


- Change the role name and **Submit**. You will receive a message indicating that the role has been edited successfully.

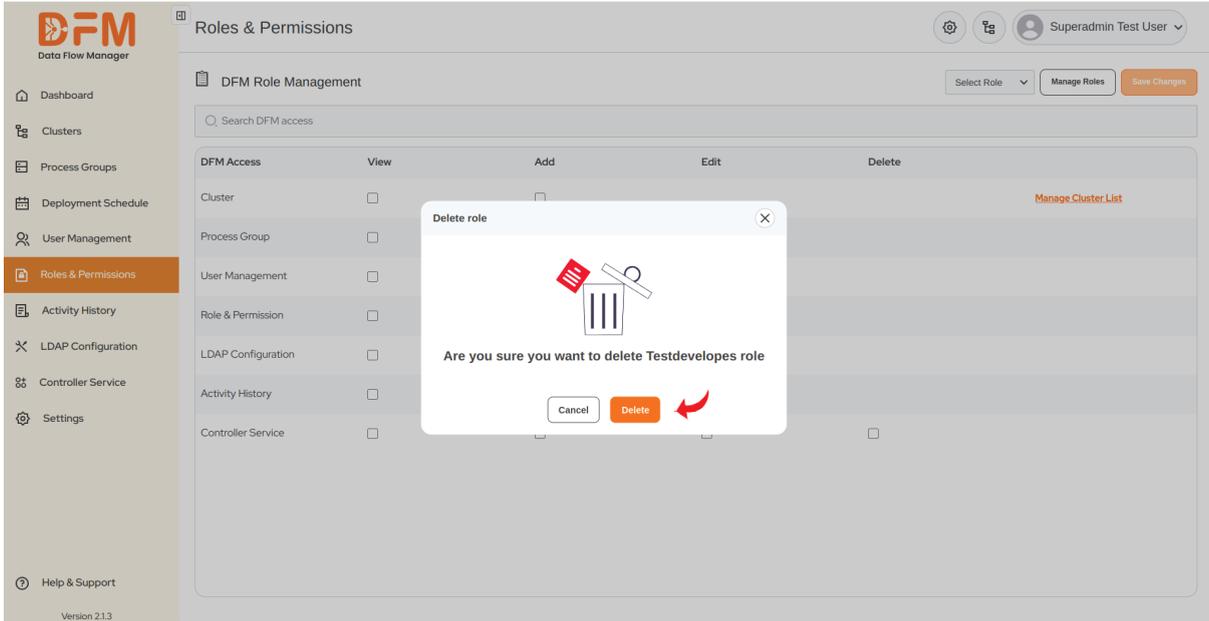
### 7.3. Delete a user role

To delete a user role:

- Navigate to **Manage Role** under the **Roles & Permissions** tab.
- Click on the bin icon to delete the desired role.



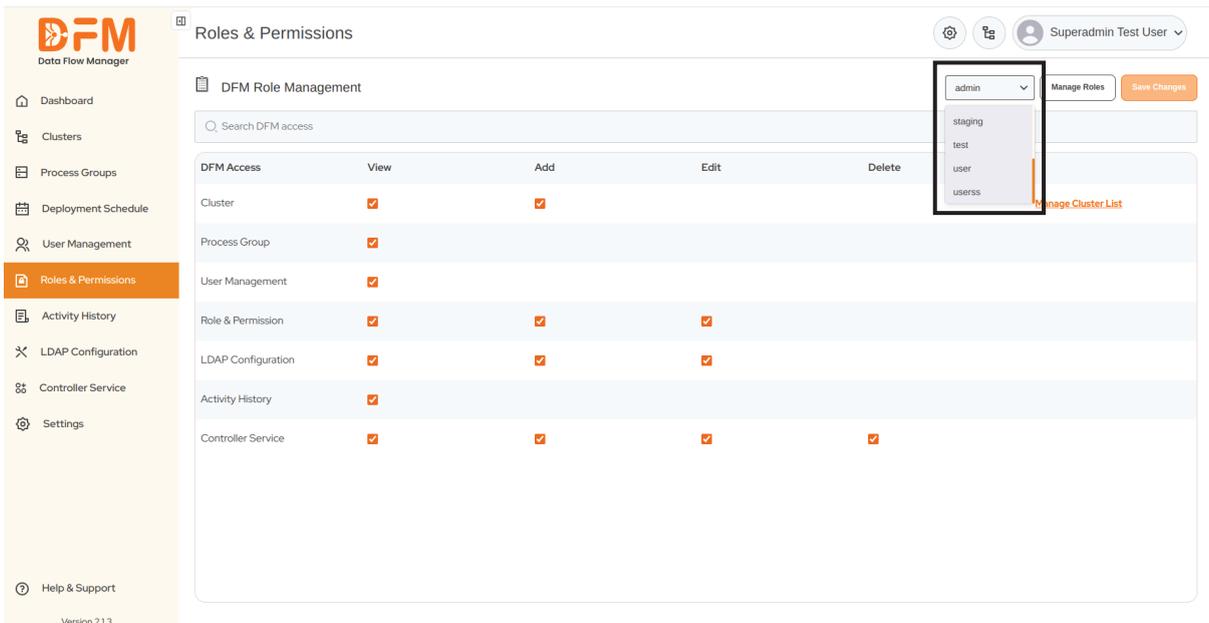
- A pop appears to confirm whether you want to delete the role or not. Click Delete to delete the user role. A confirmation message appears conveying that the role has been edited successfully.



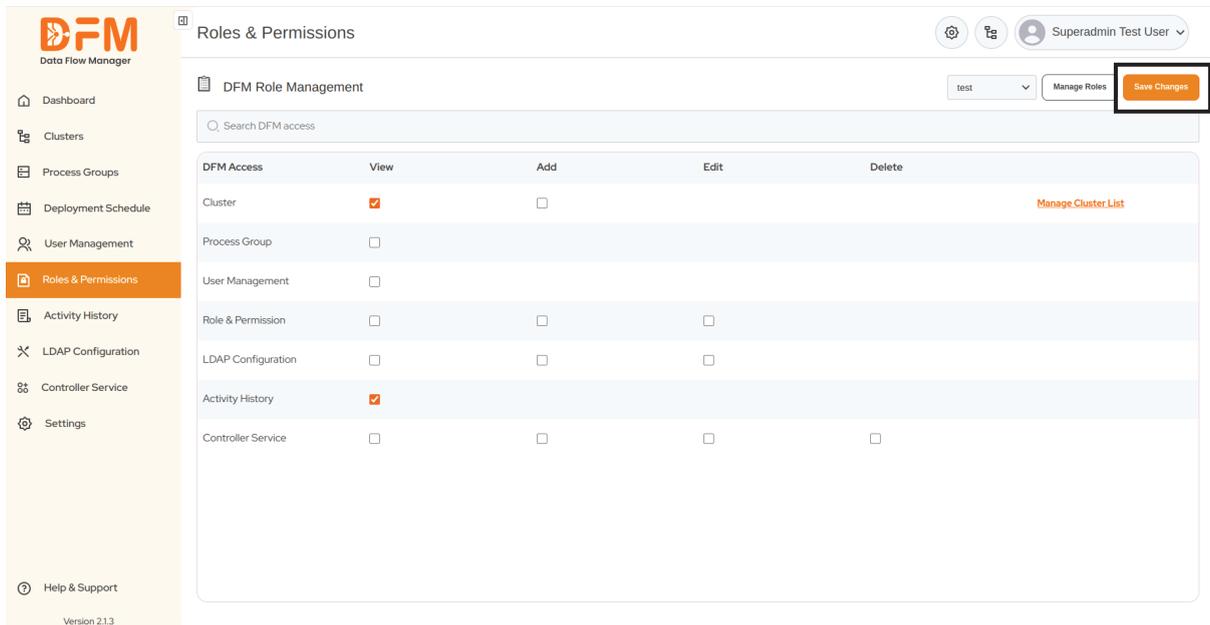
## 7.4. DFM Role Management

NiFi admins have the right to restrict user access to a few tabs of Data Flow Manager.

- Under the **Roles & Permissions** tab, select the role from the dropdown.



- Mark the checkbox to grant access rights to users under the selected role based on their responsibilities.



**DFM**  
Data Flow Manager

Roles & Permissions

DFM Role Management

test Manage Roles **Save Changes**

Search DFM access

DFM Access	View	Add	Edit	Delete
Cluster	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<a href="#">Manage Cluster List</a>
Process Group	<input type="checkbox"/>			
User Management	<input type="checkbox"/>			
Role & Permission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LDAP Configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Activity History	<input checked="" type="checkbox"/>			
Controller Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

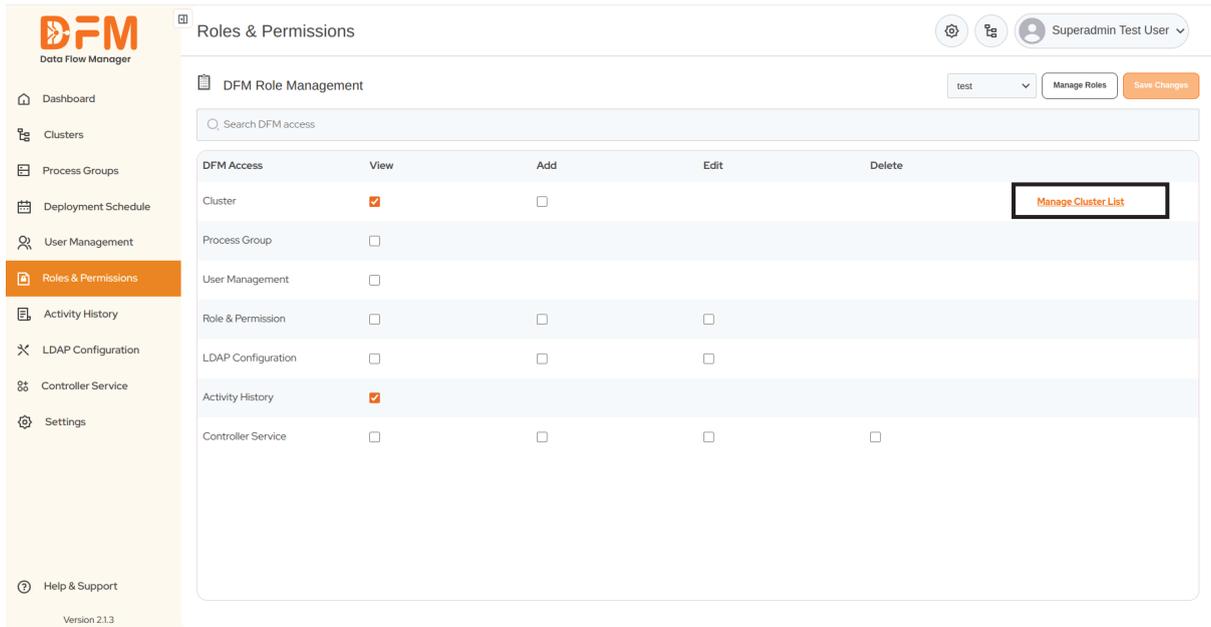
Version 21.3

- Once done, click **Save Changes**. You'll receive a confirmation message that the role access has been saved successfully.

## 7.5. Cluster Management

To manage access rights to clusters,

- Click **Manage Cluster List**.



**Roles & Permissions**

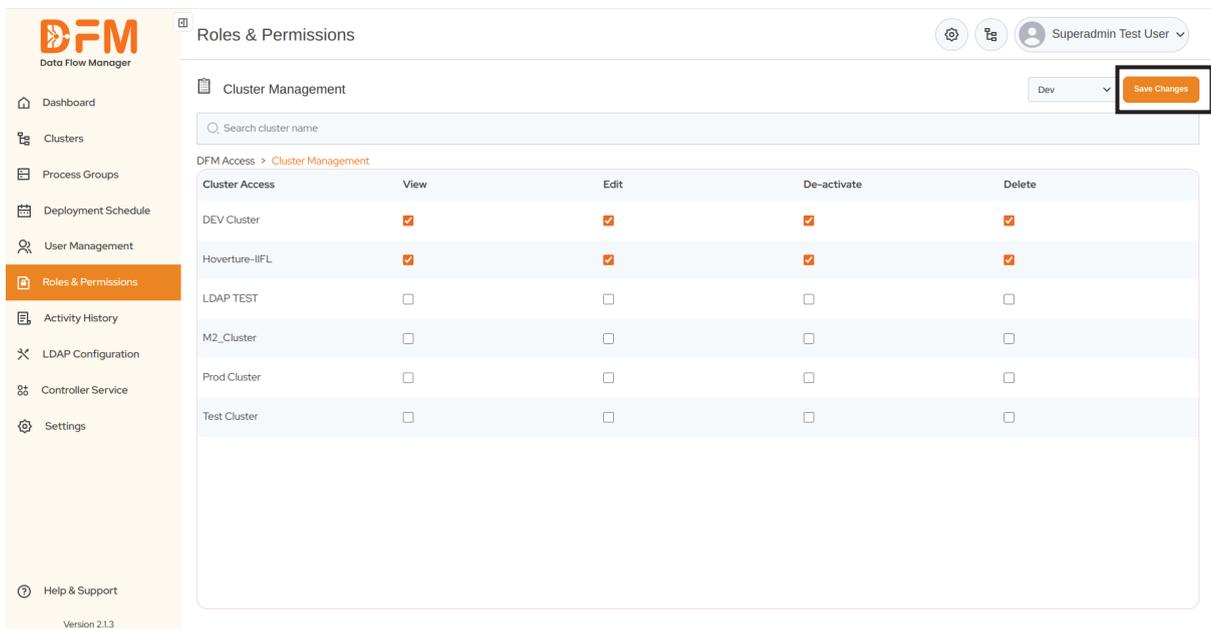
DFM Role Management

test Manage Roles Save Changes

Search DFM access

DFM Access	View	Add	Edit	Delete
Cluster	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<a href="#">Manage Cluster List</a>
Process Group	<input type="checkbox"/>			
User Management	<input type="checkbox"/>			
Role & Permission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LDAP Configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Activity History	<input checked="" type="checkbox"/>			
Controller Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- You'll be redirected to the cluster list. Select the user role from the dropdown.
- Mark the checkbox for permissions you want to grant to the selected role – view, edit, delete, & deactivate for the clusters mentioned.
- Finally, click **Save Changes**.



**Roles & Permissions**

Cluster Management

Dev Save Changes

Search cluster name

DFM Access > Cluster Management

Cluster Access	View	Edit	De-activate	Delete
DEV Cluster	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hoverture-IIFL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
LDAP TEST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M2_Cluster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prod Cluster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Test Cluster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 8. Activity History

The **Activity History** tab provides a detailed history of user actions on various entities, including the cluster, process group, registry, and controller service. It

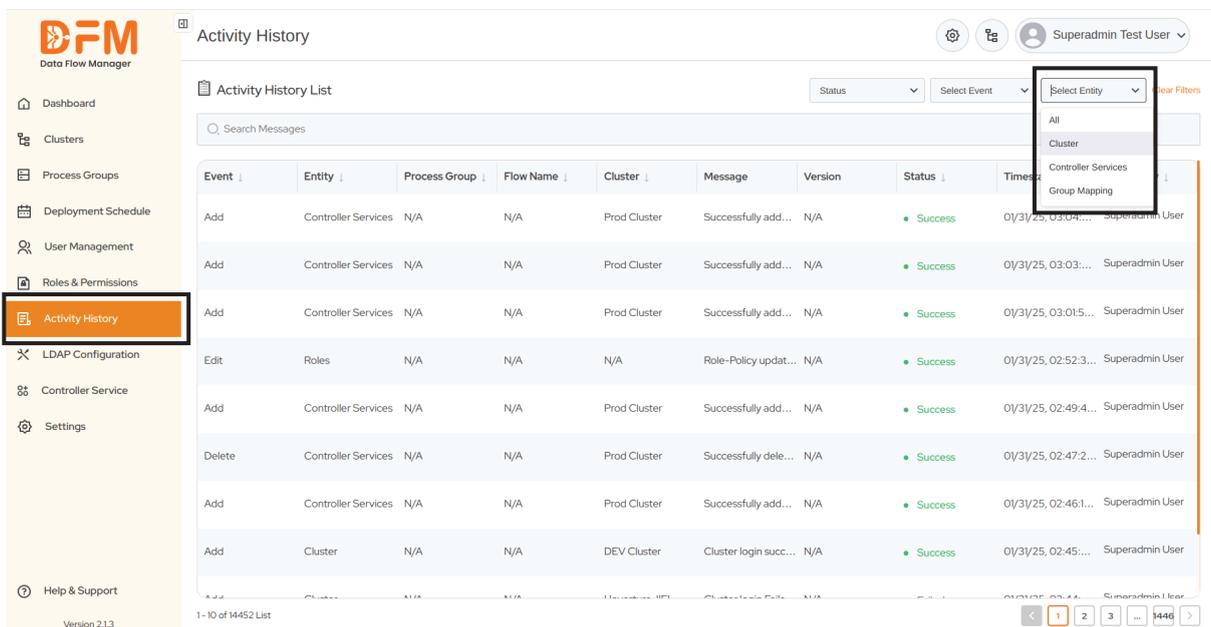
includes details such as the action performed on the entity, associated messages, timestamps, status, and the name of the user who performed it.

Data Flow Manager lets you filter the activity history based on 3 parameters – Entity, Event, & Status.

## 8.1. Filter the activity history based on the entity

Here, the entities are clusters, process groups, registries, controller services, and users. To filter the activity history based on these entities:

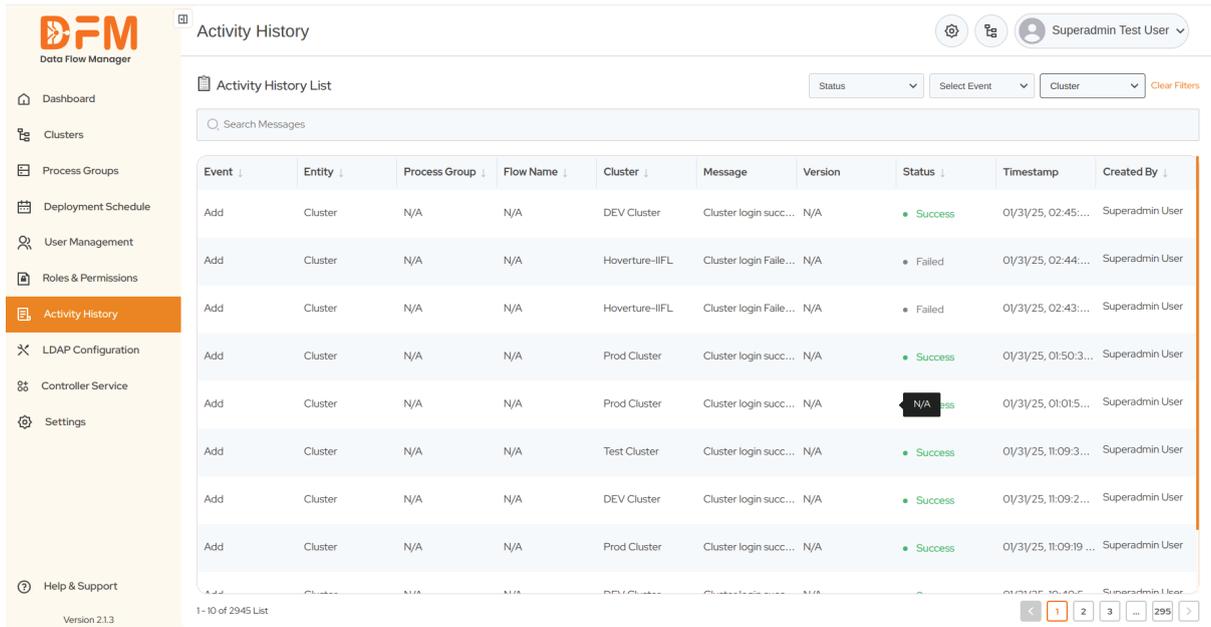
- Go to the **Select Entity** dropdown present in the top-right corner.



The screenshot shows the 'Activity History' page in Data Flow Manager. The left sidebar has 'Activity History' highlighted. The main area shows a table with the following data:

Event	Entity	Process Group	Flow Name	Cluster	Message	Version	Status	Time	User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:03:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:03:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:01:5...	Superadmin User
Edit	Roles	N/A	N/A	N/A	Role-Policy updat...	N/A	Success	01/31/25, 02:52:3...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 02:49:4...	Superadmin User
Delete	Controller Services	N/A	N/A	Prod Cluster	Successfully dele...	N/A	Success	01/31/25, 02:47:2...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 02:46:1...	Superadmin User
Add	Cluster	N/A	N/A	DEV Cluster	Cluster login succ...	N/A	Success	01/31/25, 02:45:...	Superadmin User

- Choose the required entity to get the activity history accordingly.



**Activity History**

Activity History List

Search Messages

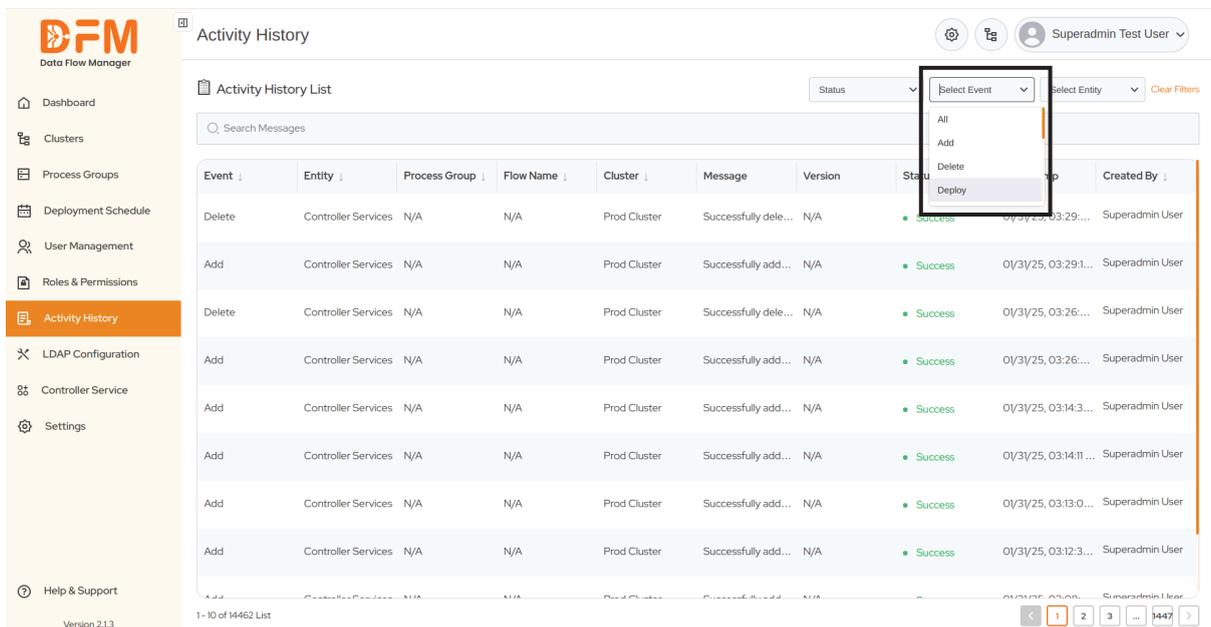
Event	Entity	Process Group	Flow Name	Cluster	Message	Version	Status	Timestamp	Created By
Add	Cluster	N/A	N/A	DEV Cluster	Cluster login succ...	N/A	Success	01/31/25, 02:45:...	Superadmin User
Add	Cluster	N/A	N/A	Hoverture-IIFL	Cluster login Falle...	N/A	Failed	01/31/25, 02:44:...	Superadmin User
Add	Cluster	N/A	N/A	Hoverture-IIFL	Cluster login Falle...	N/A	Failed	01/31/25, 02:43:...	Superadmin User
Add	Cluster	N/A	N/A	Prod Cluster	Cluster login succ...	N/A	Success	01/31/25, 01:50:3...	Superadmin User
Add	Cluster	N/A	N/A	Prod Cluster	Cluster login succ...	N/A	N/A	01/31/25, 01:01:5...	Superadmin User
Add	Cluster	N/A	N/A	Test Cluster	Cluster login succ...	N/A	Success	01/31/25, 11:09:3...	Superadmin User
Add	Cluster	N/A	N/A	DEV Cluster	Cluster login succ...	N/A	Success	01/31/25, 11:09:2...	Superadmin User
Add	Cluster	N/A	N/A	Prod Cluster	Cluster login succ...	N/A	Success	01/31/25, 11:09:19...	Superadmin User

1-10 of 2945 List

## 8.2. Filter the activity history based on the event

Filter the activity history by actions, like add, delete, deploy, upgrade, etc.

- Go to the **Select Event** dropdown.



**Activity History**

Activity History List

Search Messages

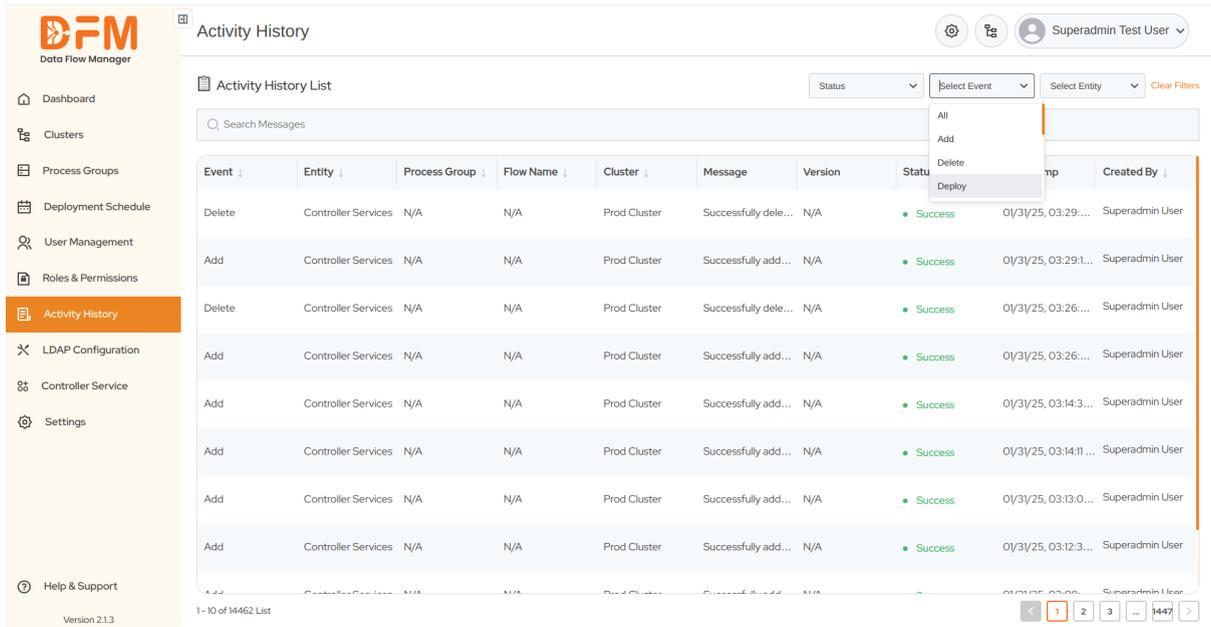
Select Event

- All
- Add
- Delete
- Deploy

Event	Entity	Process Group	Flow Name	Cluster	Message	Version	Status	Timestamp	Created By
Delete	Controller Services	N/A	N/A	Prod Cluster	Successfully dele...	N/A	Success	01/31/25, 03:29:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:29:1...	Superadmin User
Delete	Controller Services	N/A	N/A	Prod Cluster	Successfully dele...	N/A	Success	01/31/25, 03:26:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:26:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:14:3...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:14:11...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:13:0...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:12:3...	Superadmin User

1-10 of 14462 List

- Click the desired event to get the filtered activity history.

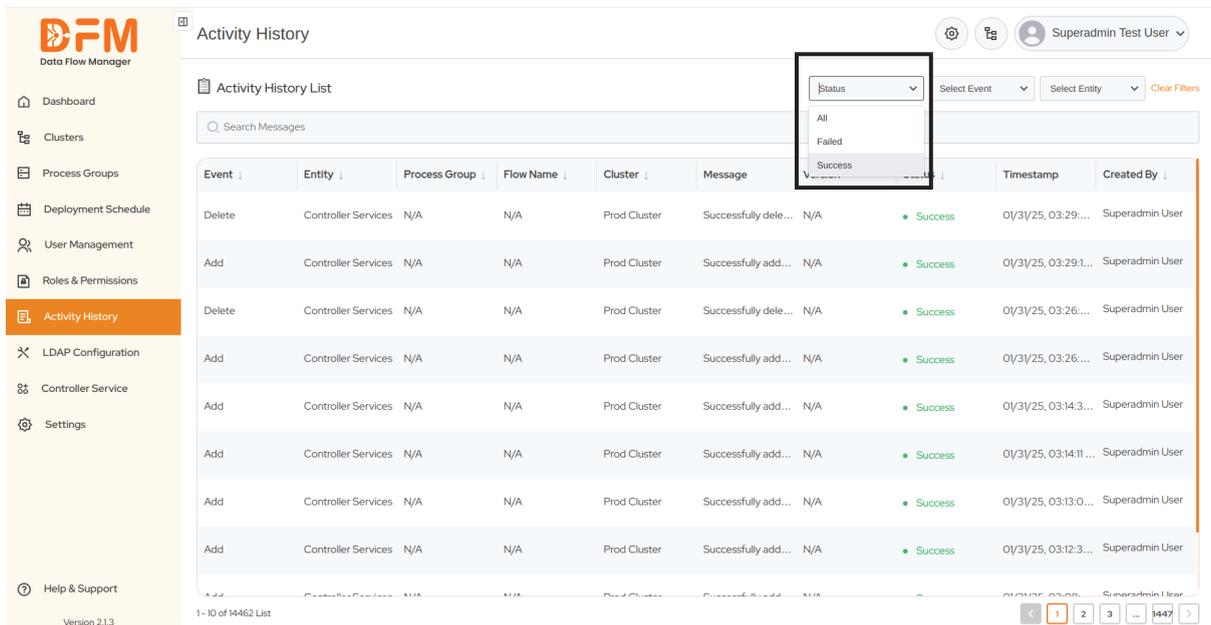


The screenshot shows the 'Activity History' page in the Data Flow Manager (DFM) interface. The page title is 'Activity History' and the user is logged in as 'Superadmin Test User'. The main content is an 'Activity History List' table. The table has columns for Event, Entity, Process Group, Flow Name, Cluster, Message, Version, Status, Timestamp, and Created By. The Status column is highlighted with a dropdown menu that is open, showing options: All, Add, Delete, and Deploy. The table contains several rows of activity logs, all with a 'Success' status. The page also includes a search bar for messages and pagination controls at the bottom.

### 8.3. Filter the activity history based on the status

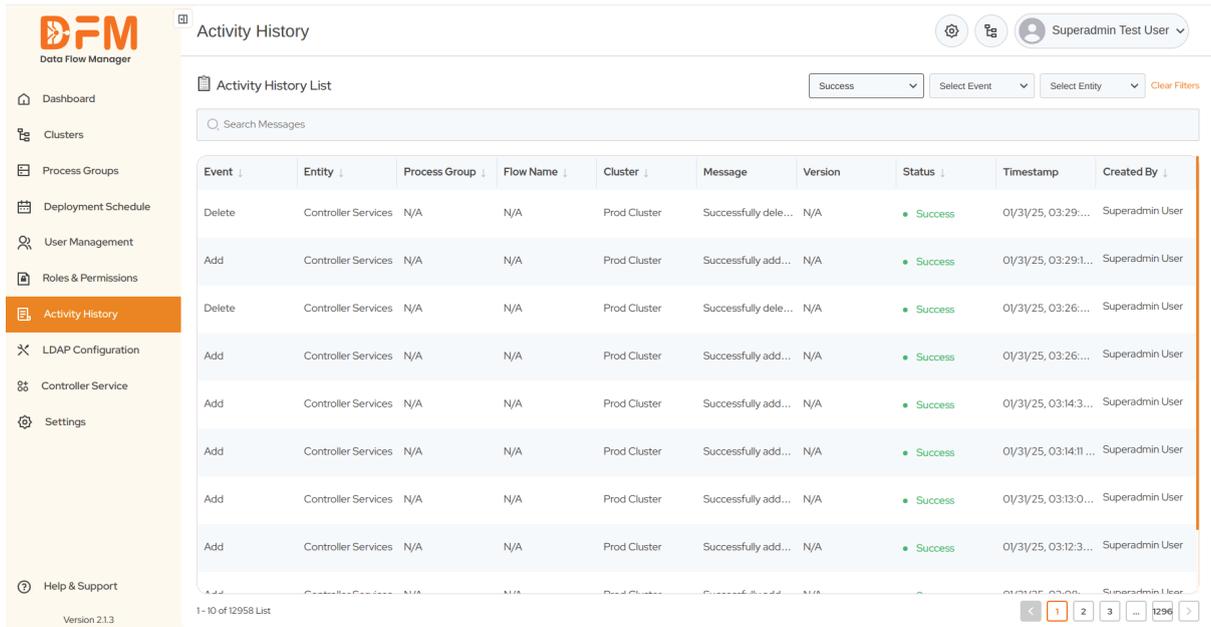
Filter activities based on the event's status - Success, Failed, or All.

- Go to the Status dropdown.



This screenshot is similar to the previous one, showing the 'Activity History' page. However, the 'Status' dropdown menu is highlighted with a red rectangular box. The dropdown menu is open, showing the options: All, Failed, and Success. The table below the dropdown shows the same activity history data as in the previous screenshot.

- Choose whether you want to track activities based on the **Failed** or **Success** status.



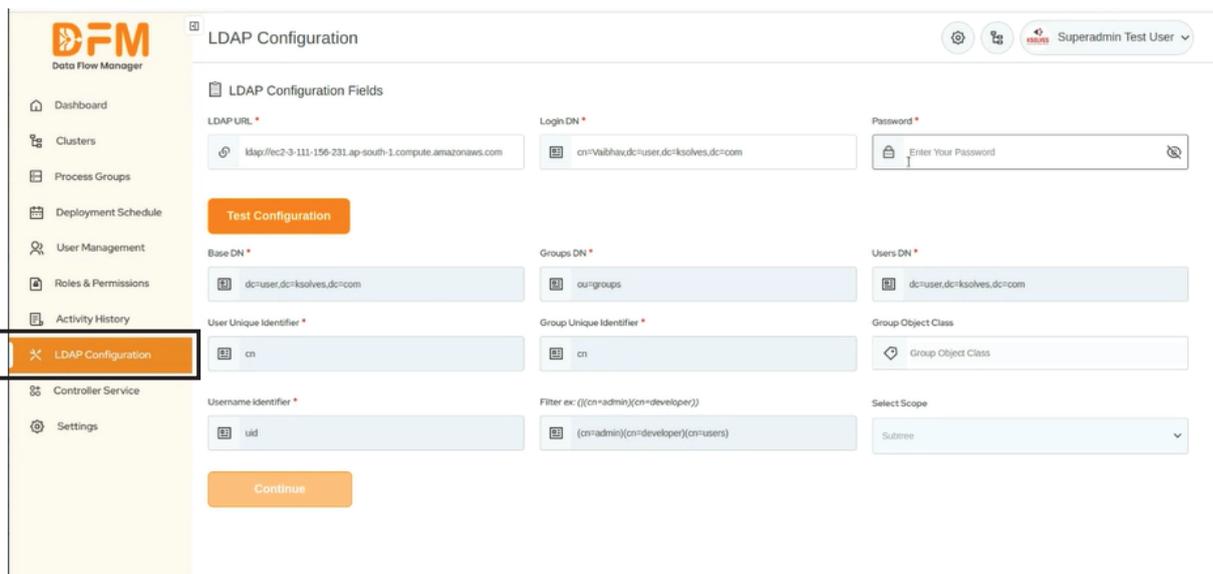
The screenshot shows the 'Activity History' page in the DFM interface. It features a sidebar with navigation options like Dashboard, Clusters, Process Groups, etc. The main content area displays a table of activity logs. The table has columns for Event, Entity, Process Group, Flow Name, Cluster, Message, Version, Status, Timestamp, and Created By. The status for all entries is 'Success'.

Event	Entity	Process Group	Flow Name	Cluster	Message	Version	Status	Timestamp	Created By
Delete	Controller Services	N/A	N/A	Prod Cluster	Successfully dele...	N/A	Success	01/31/25, 03:29:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:29:1...	Superadmin User
Delete	Controller Services	N/A	N/A	Prod Cluster	Successfully dele...	N/A	Success	01/31/25, 03:26:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:26:...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:14:3...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:14:11...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:13:0...	Superadmin User
Add	Controller Services	N/A	N/A	Prod Cluster	Successfully add...	N/A	Success	01/31/25, 03:12:3...	Superadmin User

## 9. LDAP Configuration

Go to the LDAP Configuration tab and perform the following steps:

- Add the **LDAP URL** and enter the **Login DN** along with the password to establish the LDAP connection.
- Once you've entered the details, test the configuration. If successful, you will see a success dialog box.
- After the successful test, add any required configurations and click **Continue**.



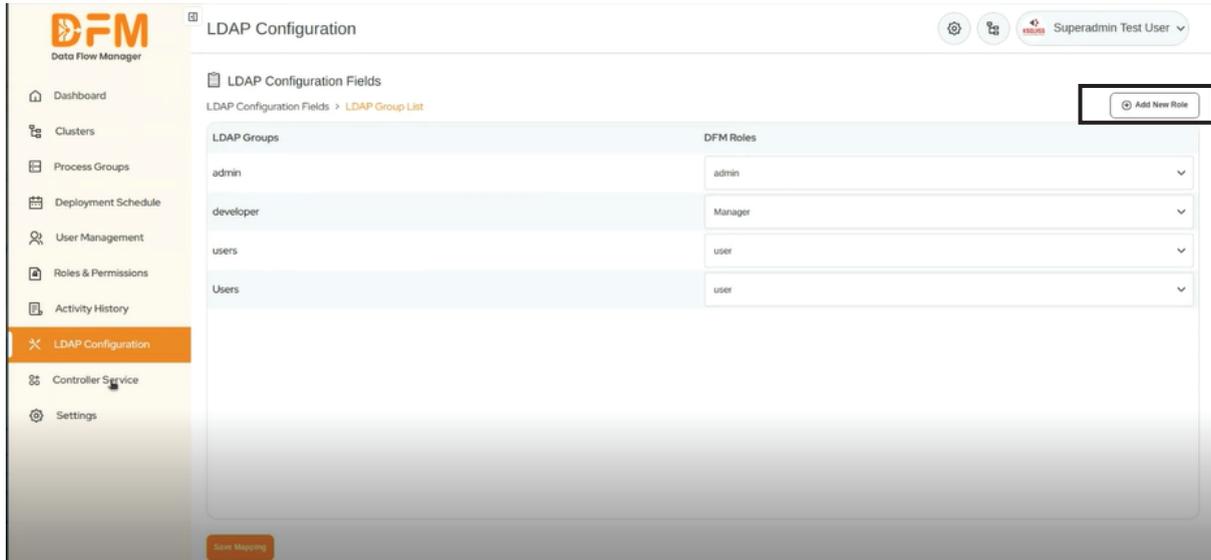
The screenshot shows the 'LDAP Configuration' page in the DFM interface. The 'LDAP Configuration Fields' section contains the following fields:

- LDAP URL**: ldap://ec2-3-111-156-231.ap-south-1.compute.amazonaws.com
- Login DN**: cn=vaibhav,dc=user,dc=ksolves,dc=com
- Password**: Enter Your Password
- Base DN**: dc=user,dc=ksolves,dc=com
- Groups DN**: ou=groups
- Users DN**: dc=user,dc=ksolves,dc=com
- User Unique Identifier**: cn
- Group Unique Identifier**: cn
- Group Object Class**: Group Object Class
- Username Identifier**: uid
- Filter ex:** ((cn=admin)(cn=developer))
- Select Scope**: Subtree

A 'Test Configuration' button is visible below the LDAP URL field, and a 'Continue' button is at the bottom of the form.

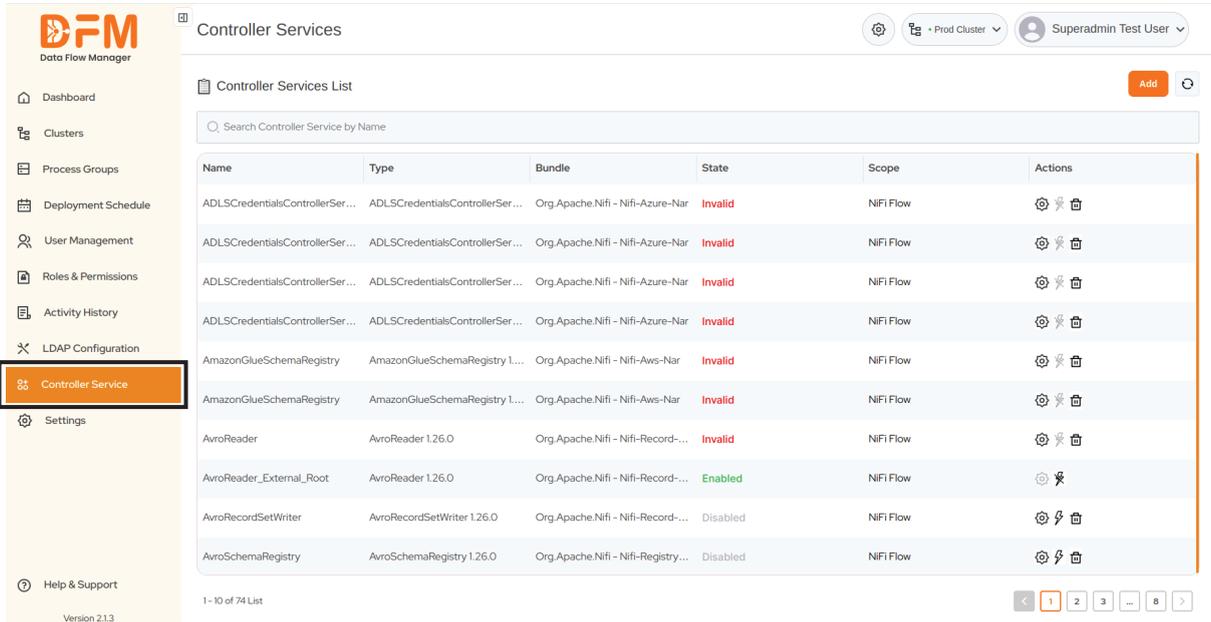
- You can now assign DFM roles to the respective LDAP roles.

- To create a new role, use the **Add New Role** button in the top-right corner. This will create a new role in DFM.



## 10. Controller Service

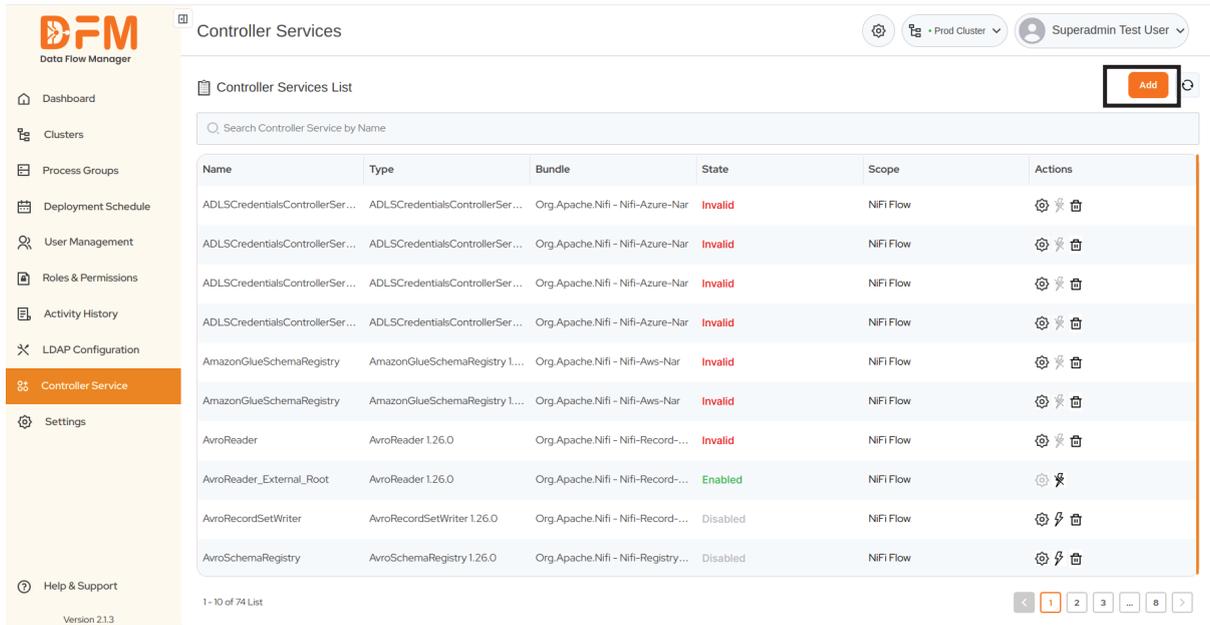
The **Controller Service** tab lists all controller services with their name, type, bundle, state, scope, and actions.



### 10.1. Add a new controller service

Under the **Controller Service** tab,

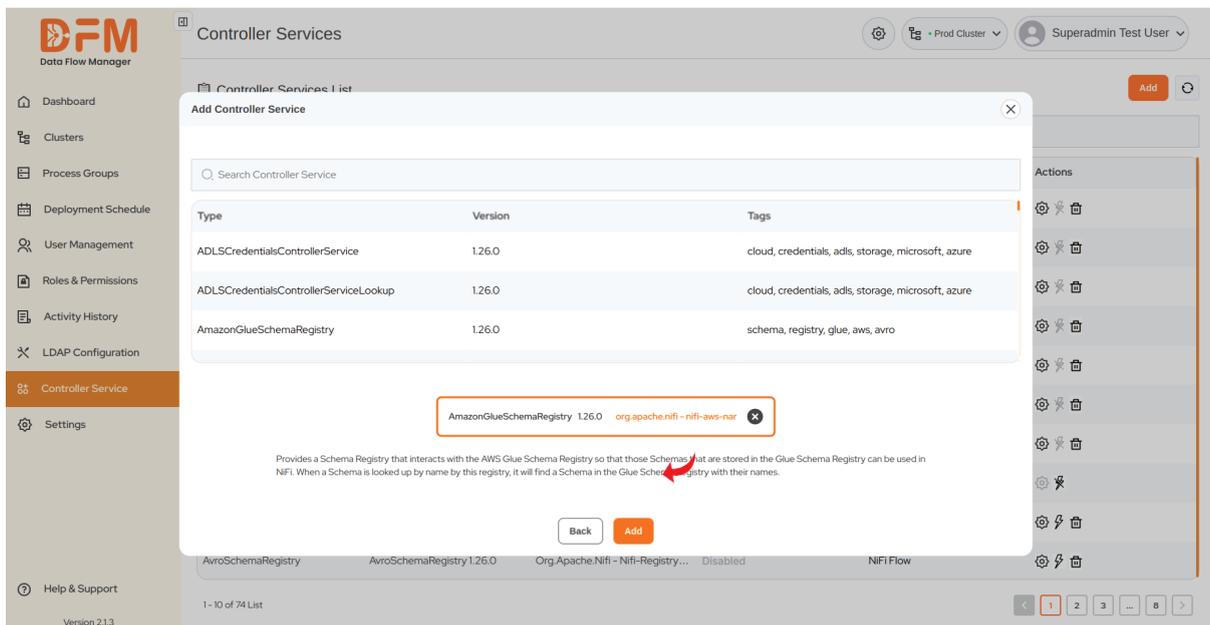
- Click the Add button in the top-right corner.



The screenshot shows the 'Controller Services' page in the Data Flow Manager (DFM) interface. The page title is 'Controller Services' and the user is 'Superadmin Test User'. The main content is a 'Controller Services List' table with columns: Name, Type, Bundle, State, Scope, and Actions. The table contains several entries, most with a state of 'Invalid'. An 'Add' button is highlighted in a red box in the top right corner of the table area.

Name	Type	Bundle	State	Scope	Actions
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
AmazonGlueSchemaRegistry	AmazonGlueSchemaRegistry 1...	Org.Apache.Nifi - Nifi-Aws-Nar	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
AmazonGlueSchemaRegistry	AmazonGlueSchemaRegistry 1...	Org.Apache.Nifi - Nifi-Aws-Nar	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
AvroReader	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Invalid	NIFI Flow	[Settings] [Refresh] [Delete]
AvroReader_External_Root	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Enabled	NIFI Flow	[Settings] [Refresh] [Delete]
AvroRecordSetWriter	AvroRecordSetWriter 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Disabled	NIFI Flow	[Settings] [Refresh] [Delete]
AvroSchemaRegistry	AvroSchemaRegistry 1.26.0	Org.Apache.Nifi - Nifi-Registry...	Disabled	NIFI Flow	[Settings] [Refresh] [Delete]

- Search for the controller service using the search bar or click one from the list. Finally, hit the **Add** button.



The screenshot shows the 'Controller Services' page with the 'Add Controller Service' dialog box open. The dialog box has a search bar and a table of search results. The search results table has columns: Type, Version, and Tags. The search results show three entries: ADLSCredentialsControllerService, ADLSCredentialsControllerServiceLookup, and AmazonGlueSchemaRegistry. The 'AmazonGlueSchemaRegistry' entry is highlighted, and its details are shown below the table. The details include the name 'AmazonGlueSchemaRegistry', version '1.26.0', and bundle 'org.apache.nifi - nifi-aws-nar'. Below the details is a description: 'Provides a Schema Registry that interacts with the AWS Glue Schema Registry so that those Schemas that are stored in the Glue Schema Registry can be used in NIFI. When a Schema is looked up by name by this registry, it will find a Schema in the Glue Schema Registry with their names.' There are 'Back' and 'Add' buttons at the bottom of the dialog box.

Type	Version	Tags
ADLSCredentialsControllerService	1.26.0	cloud, credentials, adis, storage, microsoft, azure
ADLSCredentialsControllerServiceLookup	1.26.0	cloud, credentials, adis, storage, microsoft, azure
AmazonGlueSchemaRegistry	1.26.0	schema, registry, glue, aws, avro

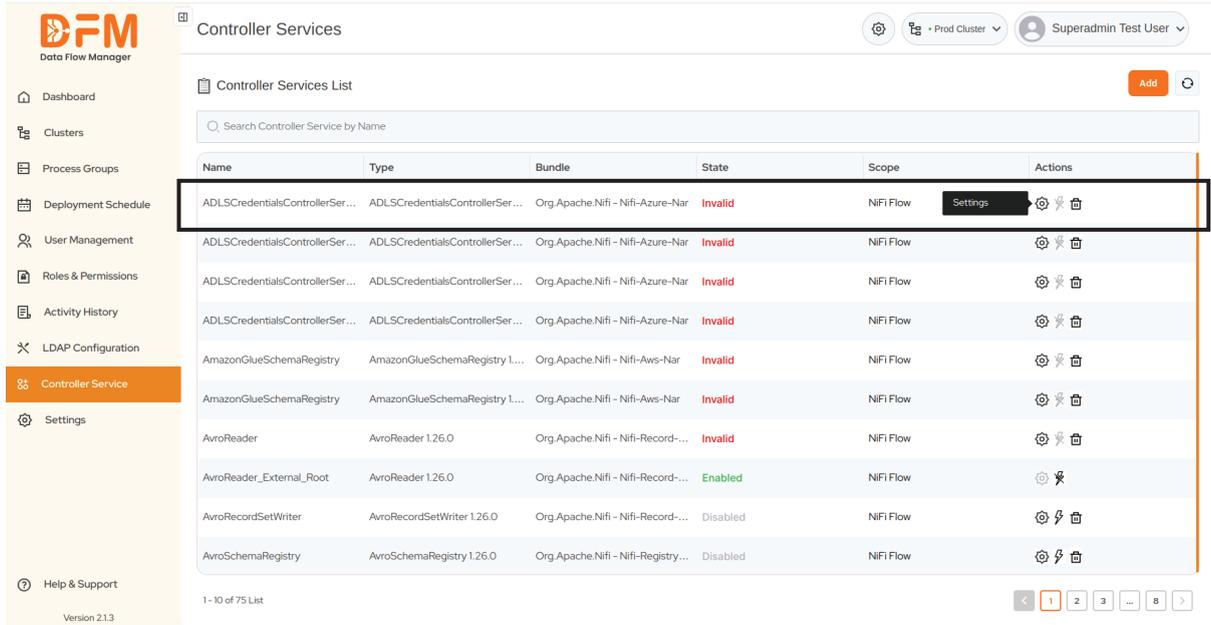
AmazonGlueSchemaRegistry 1.26.0 org.apache.nifi - nifi-aws-nar [Close]

Provides a Schema Registry that interacts with the AWS Glue Schema Registry so that those Schemas that are stored in the Glue Schema Registry can be used in NIFI. When a Schema is looked up by name by this registry, it will find a Schema in the Glue Schema Registry with their names.

## 10.2. Update the properties of an existing controller service

To update the properties of a controller service:

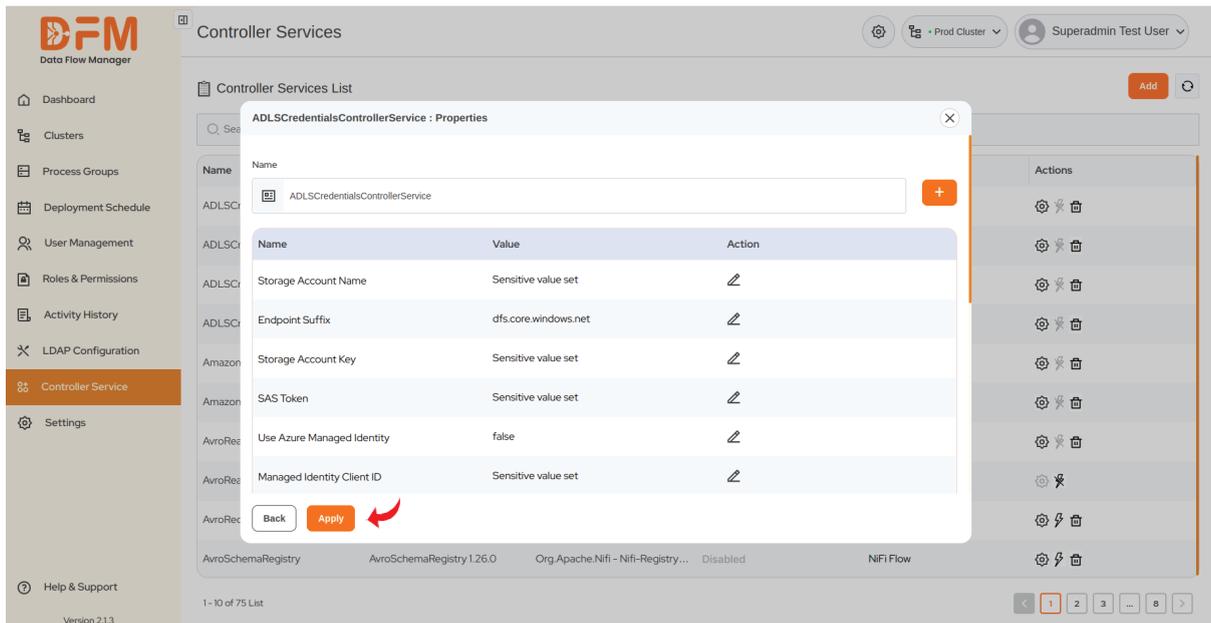
- Click the corresponding **Settings** icon under the **Actions** columns.



The screenshot shows the 'Controller Services' page in the Data Flow Manager. A table lists various services with columns for Name, Type, Bundle, State, Scope, and Actions. The first row, 'ADLSCredentialsControllerSer...', is highlighted with a black box, and its 'Settings' icon is clicked.

Name	Type	Bundle	State	Scope	Actions
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	Settings, Edit, Delete
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	Edit, Delete
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	Edit, Delete
AmazonGlueSchemaRegistry	AmazonGlueSchemaRegistry 1...	Org.Apache.Nifi - Nifi-Aws-Nar	Invalid	NIFI Flow	Edit, Delete
AmazonGlueSchemaRegistry	AmazonGlueSchemaRegistry 1...	Org.Apache.Nifi - Nifi-Aws-Nar	Invalid	NIFI Flow	Edit, Delete
AvroReader	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Invalid	NIFI Flow	Edit, Delete
AvroReader_External_Root	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Enabled	NIFI Flow	Edit, Delete
AvroRecordSetWriter	AvroRecordSetWriter 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Disabled	NIFI Flow	Edit, Delete
AvroSchemaRegistry	AvroSchemaRegistry 1.26.0	Org.Apache.Nifi - Nifi-Registry...	Disabled	NIFI Flow	Edit, Delete

- Edit the values of the properties by clicking on the edit icon, and hit the **Apply** button.

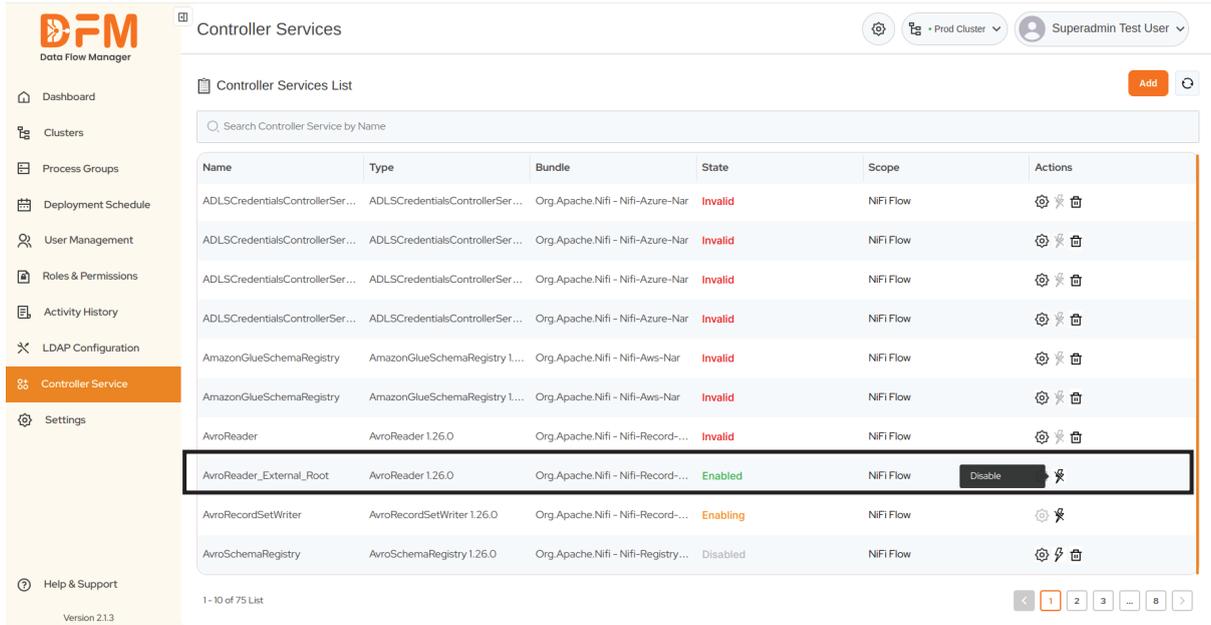


The screenshot shows the 'Controller Services' page with a modal dialog box titled 'ADLSCredentialsControllerService : Properties' open. The dialog contains a table of properties with columns for Name, Value, and Action. The 'Apply' button at the bottom of the dialog is highlighted with a red arrow.

Name	Value	Action
Storage Account Name	Sensitive value set	Edit
Endpoint Suffix	dfs.core.windows.net	Edit
Storage Account Key	Sensitive value set	Edit
SAS Token	Sensitive value set	Edit
Use Azure Managed Identity	false	Edit
Managed Identity Client ID	Sensitive value set	Edit

### 10.3. Enable or Disable a controller service

To enable or disable a controller service, click on the lightning icon. The controller service will be enabled or disabled accordingly.



**Controller Services**

Prod Cluster Superadmin Test User

Controller Services List

Search Controller Service by Name

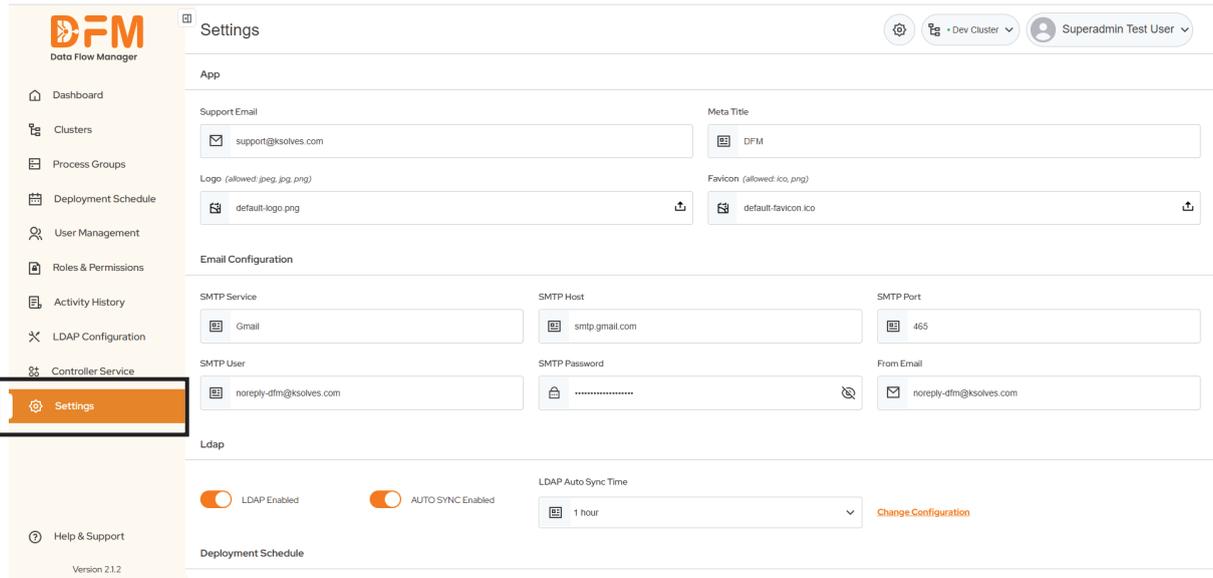
Name	Type	Bundle	State	Scope	Actions
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	
ADLSCredentialsControllerSer...	ADLSCredentialsControllerSer...	Org.Apache.Nifi - Nifi-Azure-Nar	Invalid	NIFI Flow	
AmazonGlueSchemaRegistry	AmazonGlueSchemaRegistry 1...	Org.Apache.Nifi - Nifi-Aws-Nar	Invalid	NIFI Flow	
AmazonGlueSchemaRegistry	AmazonGlueSchemaRegistry 1...	Org.Apache.Nifi - Nifi-Aws-Nar	Invalid	NIFI Flow	
AvroReader	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Invalid	NIFI Flow	
AvroReader_External_Root	AvroReader 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Enabled	NIFI Flow	<b>Disable</b>
AvroRecordSetWriter	AvroRecordSetWriter 1.26.0	Org.Apache.Nifi - Nifi-Record-...	Enabling	NIFI Flow	
AvroSchemaRegistry	AvroSchemaRegistry 1.26.0	Org.Apache.Nifi - Nifi-Registry...	Disabled	NIFI Flow	

1 - 10 of 75 List

## 11. Settings

All settings can be managed and customized through the Settings Tab, providing you with easy access to configuration options.

- To customize the icon, use the **favicon** setting. This allows you to choose the icon you want.
- By enabling **LDAP Auto-sync**, the system will automatically sync LDAP users. This ensures that the user data is up-to-date.



**DFM** Data Flow Manager

Settings

App

Support Email: support@ksolves.com

Meta Title: DFM

Logo (allowed: jpeg, jpg, png): default-logo.png

Favicon (allowed: ico, png): default-favicon.ico

Email Configuration

SMTP Service: Gmail

SMTP Host: smtp.gmail.com

SMTP Port: 465

SMTP User: noreply-dfm@ksolves.com

SMTP Password: [Masked]

From Email: noreply-dfm@ksolves.com

Ldap

LDAP Enabled:

AUTO SYNC Enabled:

LDAP Auto Sync Time: 1 hour

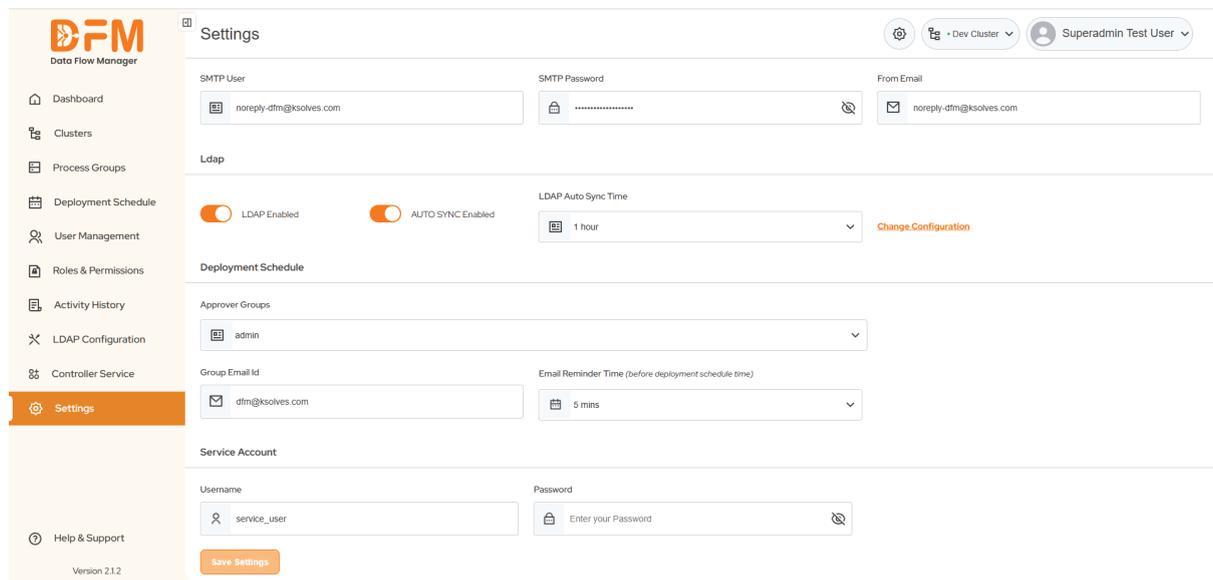
Change Configuration

Deployment Schedule

Help & Support

Version 2.1.2

- The Admin Group includes all users with administrative privileges. Members of this group will receive email notifications regarding scheduled deployments.
- An email reminder will be sent before the scheduled deployment. You can set the time for the reminder.
- You can manage and control the **Service Account** details. This account has full permissions on **NiFi**, allowing it to perform necessary administrative tasks.



**DFM** Data Flow Manager

Settings

SMTP User: noreply-dfm@ksolves.com

SMTP Password: [Masked]

From Email: noreply-dfm@ksolves.com

Ldap

LDAP Enabled:

AUTO SYNC Enabled:

LDAP Auto Sync Time: 1 hour

Change Configuration

Deployment Schedule

Approver Groups: admin

Group Email Id: dfm@ksolves.com

Email Reminder Time (before deployment schedule time): 5 mins

Service Account

Username: service\_user

Password: Enter your Password

Save Settings

Help & Support

Version 2.1.2