

## Flow Management Overview

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# Contents

<b>What is Apache NiFi.....</b>	<b>4</b>
<b>What is Apache NiFi Registry.....</b>	<b>4</b>
<b>Cloudera Manager integration.....</b>	<b>4</b>

## What is Apache NiFi

Cloudera Flow Management (CFM) includes two primary components, NiFi and NiFi Registry.

Apache NiFi is the core data ingestion engine that has a no-code graphical user interface and supports processors for connectivity, transformation, and content routing.

If you want to know more about the core concepts of Apache NiFi, see the *Apache NiFi Overview* in the Apache NiFi documentation.



**Important:** The Apache NiFi documentation is available both online and in the NiFi UI. The online documentation always shows the latest version of the NiFi documentation. There may be differences in the content compared to the version of NiFi you are using. You can access the documentation corresponding to the NiFi version you are using directly from the NiFi UI.

1. Launch the NiFi UI.
2. From the Global Menu, select **Help Documentation**.

### Related Information

[Apache NiFi Overview](#)

## What is Apache NiFi Registry

The Cloudera product includes two primary components, NiFi and NiFi Registry.

Apache NiFi Registry, a companion to Apache NiFi, enables DevOps style development and deployment of flow files. It also supports flow versioning, promoting flows from one environment into another, and flow deployment.

If you want to know more about the core concepts of Apache NiFi Registry, see the *Getting Started with Apache NiFi Registry* in the Apache NiFi Registry documentation.



**Important:** The Apache NiFi Registry documentation is available both online and in the NiFi Registry UI. The online documentation always shows the latest version of the NiFi Registry documentation. There may be differences in the content compared to the version of NiFi Registry you are using. You can access the documentation corresponding to the NiFi Registry version you are using directly from the NiFi Registry UI.

1. Launch the NiFi Registry UI.
2. From the Global Menu, select **Help Documentation**.

### Related Information

[Getting Started with Apache NiFi Registry](#)

## Cloudera Manager integration

The NiFi service of Cloudera Flow Management (CFM) is integrated with Cloudera Manager on CDP Private Cloud Base.

### Cloudera Manager monitoring

Cloudera Manager is retrieving monitoring data from NiFi by calling the below endpoint:

```
/nifi-api/flow/metrics/json?rootFieldName=beans&sampleName=.*_jvm_.*&sampleLabelValue=RootProcessGroup
```

Metrics and graphs for the NiFi service are available starting with version CFM 2.1.4 and it requires Cloudera Manager 7.4.5 or higher.

This endpoint is called by the Cloudera Manager agent running on each NiFi node and the identity of the node is used to make the call. If Ranger is used for authorization, the calls are authorized as the nodes belong to the nifi group.

### Cloudera Manager alerting

Multiple health checks are configured out of the box for the NiFi service in Cloudera Manager:

- **NiFi node connection**

It checks if the NiFi node is disconnected or not from the NiFi cluster. This can help to detect cluster instability in case the NiFi node is up and running but the node is not part of the NiFi cluster. The check executes the NiFi CLI `get-nodes` command on each NiFi node, which calls the corresponding NiFi API. If Ranger is used for authorization, the health check is authorized as the nodes belong to the nifi group.

- **NiFi Content repository usage**

It is used to check how much disk space is used on the Content repository.

- **NiFi Provenance repository usage**

It is used to check how much disk space is used on the Provenance repository.

- **NiFi FlowFile repository usage**

It is used to check how much disk space is used on the FlowFile repository.