

Cloudera DataFlow for Data Hub 7.2.17

# Planning Your Flow Management Deployment

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## Flow Management cluster definitions

There are six Flow Management cluster definitions available for deploying Apache NiFi and Apache NiFi Registry in CDP Public Cloud. Before you select your cluster definition, it is crucial to consider your cloud provider and operational objectives.

Available cluster definitions:

- Flow Management Light Duty for AWS
- Flow Management Light Duty for Azure
- Flow Management Light Duty for GCP
- Flow Management Heavy Duty for AWS
- Flow Management Heavy Duty for Azure
- Flow Management Heavy Duty for GCP

These cluster definitions facilitate the installation of Flow Management clusters that run Apache NiFi and Apache NiFi Registry.

With Flow Management templates, you can address crucial enterprise use cases, offering high-scale data ingestion, transformation, and management across diverse environments. It supports tasks such as data movement, continuous data ingestion, log data processing, and acquiring various streaming data types, including social, mobile, clickstream, and IoT data.

## Flow Management cluster layout

The Data Hub service provides two default Flow Management cluster definitions: Flow Management: Light Duty and Flow Management: Heavy Duty. Understanding the layout, capacity, and components of these definitions is essential for effective deployment.

### Flow Management: Light Duty cluster layout

The Flow Management: Light Duty cluster definition is suitable for development, testing, or proof of concept scenarios.



**Note:** When you create a Flow Management Light Duty cluster, a non-HA external RDS instance is provisioned and used by NiFi Registry and Schema Registry.

Each cluster node comprises the following components:

- NiFi and ZooKeeper are co-located on all instances.
- Specifications for nodes hosting NiFi and ZooKeeper:
  - AWS: m5.2xlarge
  - Azure: D8\_v3
  - GCE: e2-standard-8
- Storage requirements per NiFi node:
  - AWS: 4 x 500GB EBS ST1
  - Azure 4 x 500GB Standard SSD
  - GCE: 4 x 500GB PD-Standard

- Each NiFi node hosts:
  - FlowFile repository
  - Content repository
  - Provenance repository
  - Log and Database repository

For more information, see the *Instance types* and *Storage information* specific to your cloud provider.

### Flow Management: Heavy Duty cluster layout

The Flow Management: Heavy Duty cluster definition is intended for production scenarios.



**Note:** When you create a Flow Management Heavy Duty cluster, an HA external RDS instance is provisioned and used by NiFi Registry and Schema Registry.

Each cluster node comprises the following components:

- NiFi and ZooKeeper run on separate nodes.
- NiFi nodes scale independently of ZooKeeper.
- Specifications for each ZooKeeper node:
  - AWS: m5.2xlarge
  - Azure: D8\_v3
  - GCE: e2-standard-8
- Specifications for each NiFi node:
  - AWS: m5.2xlarge
  - Azure: F16sv2
  - GCE: e2-standard-8
- Storage requirements per NiFi node:
  - AWS: 4x 1TB EBS GP2
  - Azure: 4x 1TB Premium SSD
  - GCE: 4x 1TB PD-SSD
- Each NiFi node hosts:
  - FlowFile repository
  - Content repository
  - Provenance repository
  - Log and Database repository

For more information, see the *Instance types* and *Storage information* specific to your cloud provider.

### Related Information

[AWS instance types](#)

[Azure instance types](#)

[AWS storage information](#)

[Azure storage information](#)