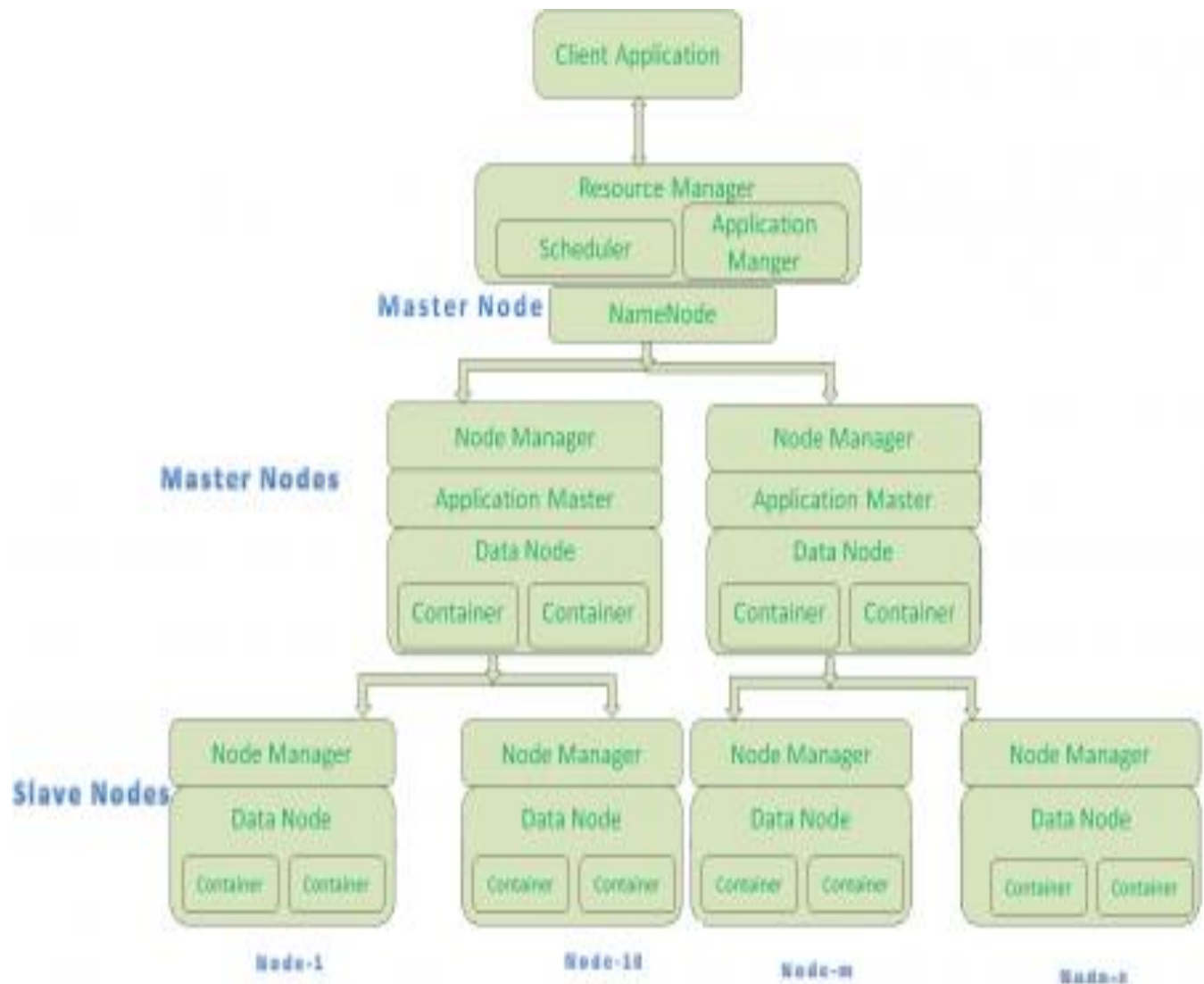


COMPONENTS OF HADOOP 2.x

- Diagram depicting the Hadoop 2.x architecture:



Hadoop 2.x In-Detail Architecture

- **Components of Hadoop 2.x:**

1. **Resource Manager:**

Resource Manager is a Per-Cluster Level Component.

Resource Manager is again divided into two components:

Scheduler

Application Manager

Resource Manager's Scheduler is :

Responsible to schedule required resources to Applications (that is Per-Application Master).

It does only scheduling.

It does care about monitoring or tracking of those Applications.

2. **Application Master:**

Application Master is a per-application level component. It is responsible for:

Managing assigned Application Life cycle.

It interacts with both Resource Manager's Scheduler and Node Manager

It interacts with Scheduler to acquire required resources.

It interacts with Node Manager to execute assigned tasks and monitor those task's status.

3. **Node Manager:**

Node Manager is a Per-Node Level component. It is responsible for:

Managing the life-cycle of the Container.

Monitoring each Container's Resources utilization.

4. **Container:**

Each Master Node or Slave Node contains set of Containers. In this diagram, Main Node's Name Node is not showing the Containers. However, it also contains a set of Containers.

Container is a portion of Memory in HDFS (Either Name Node or Data Node).