COMPONENTS OF HADOOP 1.X

The components are

1.namenode

2.datanode

3.job tracker

4.task tracker

NAME NODE

It consists of the metadata of files and the hadoop filesystem tree.

It contains of details of which block is stored in which data node.

There can be only one name node.

It acts like the master node.

It does not store any data.

If the name node fails the entire cluster fails.

SECONDARY NAMENODE

It performs checkpoints on the metadata in namenode.

It does not act as a name node even if name node fails.

It just helps the name nodes.

DATANODE

It stores the actual data of the hadoop filesystem.

It notifies the name of the data it holds

It signals name nodes when it starts processing its data.

The signals are sent often to indicate it is active.

Those signals are known as heartbeat.

It acts like the slave.

It performs the works assigned to it from the name node.

JOBTRACKER

It controls the execution of map reduce jobs.

TASKTRACKER

It runs individual map-reduce jobs on datanodes.

Periodically communicates with the jobtracker to give updates and receive instructions.