1.

Importance of Namenode in Hadoop cluster

Namenode is the centerpiece of HDFS. It does not store the data ,it only stores metadata (No of Blocks, On Which Rack which DataNode the data is stored and other details)  and it manages data between the datanodes like dividing the data into blocks and sending it to the different nodes ,replications to the different racks which ensures fault tolerance of Hadoop. NameNode knows the list of the blocks and its location for any given file in HDFS.

And it is first point of client contact to access the files of the HDFS , while reading operations it asks for access then namenode first validate the access and gives the file locations to the clients .While “write” ,it asks for locations to write the data then HDFS gives the location addresses . Number of parallel operations are done while “write” operations that depends on Replication factor

It also executes file system operations such as renaming, closing, and opening files and directories.It stores LOGDATA also

2

