BIG DATA HADOOP CHEAT SHEET

Big Data

Comprises of large datasets that cannot be processed using traditional computing techniques, which includes huge volumes, high velocity and extensible variety of data.

Hadoop

An Apache open source framework written in JAVA which allows distributed processing of large datasets across clusters of computers using simple programming models.

Hadoop Common

These are the JAVA libraries and utilities required by other Hadoop modules which contains the necessary scripts and files required to start Hadoop

Hadoop YARN

A framework used for job scheduling and managing the cluster resources

Hadoop Distributed File System

A Java based file system that provides scalable and reliable data storage and it provides high throughput access to the application data

Hadoop MapReduce

A software framework, which is used for writing the applications easily which process big amount of data in parallel on large clusters

Apache hive

An infrastructure for data warehousing for Hadoop

Apache oozie

An application in Java responsible for scheduling Hadoop jobs

Apache Pig

A data flow platform that is responsible for the execution of the MapReduce jobs

Apache Spark

An open source framework used for cluster computing

Flume

An open source aggregation service responsible for collection and transport of data from source to destination

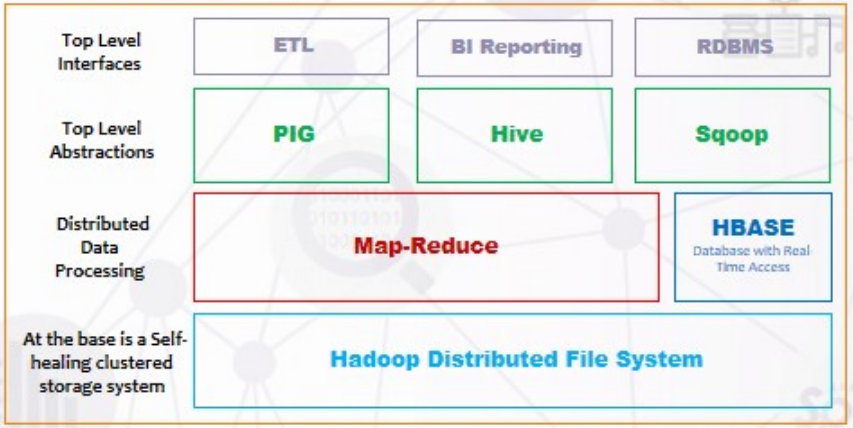
Hbase

A column-oriented database of Hadoop that stores big data in a scalable way

Sqoop

An interface application that is used to transfer data between Hadoop and relational database through commands

Different components of Hadoop Architecture involves:



Hadoop File Automation Commands

Commands	Task	Syntax
cat	Used to copy the source path to the destination or the standard output	hdfsdfs –cat URI [URI- – -]
chgrp	Used to change the group of the files	hdfsdfs –chgrp [-R] GROUP URI [URI—]
chmod	Used to change the permissions of the file	hdfsdfs –chmod [-R] <MODE[,MODE]- – -: OCTALMODE> URI [URI – – -]
chown	Used to change the owner of the file	hdfsdfs –chown [-R][OWNER][:[GROUP]]URI[URI]
count	Used to count the number of directories	hdfs dfs –count [-q] <paths>
cp	Used to copy one or more than one files from the source to destination path	hdfsdfs –cp URI[URI – – -]<dest>
Du	Used to display the size of directories or files	hdfsdfs –du [-s][-h]URI [URI – – -]
get	Used to copy files to the local file system	hdfs dfs –get[-ignorecrc][-crc]<src><localdst>
ls	Used to display the statistics of any file or directory	hdfsdfs –ls <args>
mkdir	Used to create one or more directories	hdfsdfs –mkdir<path>
mv	Used to move one or more files from one location to other	hdfs dfs –mv URI[URI – – -]<dest>
put	Used to read from one file system to other	hdfsdfs –put<localsrc>- – -<dest>
rm	Used to delete one or more than one files	hdfsdfs –rmr[-skipTrash]URI[URI- – –]
stat	Used to display the information of any specific path	hdfsdfs –stat URI[URI – – -]
help	Used to display the usage information of the command	help<cmd-name>

Hadoop Administration Comm

Commands	Task
Balancer	To run
daemonlog	To get
dfsadmin	To run
Datanode	To run
mradmin	To run operat
Jobtracker	To run
Namenode	To run
Tasktracker	To run
Secondary namenode	To run